

### **ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS (SUMMARY SHEETS)**

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This attachment contains the summary sheets from the laboratory analytical reports prepared by Laucks and CAS. Complete analytical reports are available upon request.

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL35**

**JULY 6, 2007**



**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL35  
Date of Report: July 6, 2007

**SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

**Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-21-5	JPL35-001	VOA/MET/INO
MW-21-4	JPL35-002	VOA/MET/INO
MW-21-3	JPL35-003	VOA/MET/INO
MW-21-2	JPL35-004	VOA/MET/INO
MW-21-1	JPL35-005	VOA/MET/INO
DUPE-1-2Q07	JPL35-006	VOA/MET/INO
EB-1-6/12/07	JPL35-007	VOA/MET/INO
TB-1-6/12/07	JPL35-008	VOA

**Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

**Sample Receipt Comments:**

There were no discrepancies noted upon receipt of the samples.

**GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

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### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factors was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 ( $r$  values greater than 0.995) and were therefore compliant.

#### Quality Control Analyses:

Analysis of the blank spike S061907MVOWM1 yielded recovery for cis-1,3-dichloropropene which slightly exceeded the control limit. Because the recovery value was within the allowable marginal exceedance limits, no action was taken.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

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### SPECIFIC REMARKS ON INORGANIC ANALYSES:

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

#### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

#### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

#### ICP-MS Metals:

Client requested analytes arsenic, chromium, and lead analyzed by EPA method 200.8 and analytes calcium, iron, potassium, magnesium, and sodium analyzed by EPA method 200.7. Due to the ICP-Trace instrument being out of production, all analytes for samples and quality control samples for this SDG were analyzed by method 200.8 on an ICP-MS instrument (Elan 6100).

Samples in this SDG were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate recoveries and serial dilutions apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL36 or the raw data provided.

The matrix spike duplicate sample percent recovery of sodium was outside of the established control limits of 70-130% for sample MW-19-1 for JPL36. The LCSW recovery was within these control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and V.

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The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-19-1 for JPL36. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

### **Miscellaneous Inorganics:**

For run sequence R018693, the matrix spike recovery was outside the established control limits for the sulfate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,

  
Mike Baxter  
Project Manager

6 July 2007  
(DATE)

  
Harry Romberg  
Quality Assurance Officer

7/6/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies



**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)
JPL35-001	06/13/2007 08:30 AM	06/12/2007 07:54 AM	MW-21-5	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-002	06/13/2007 08:30 AM	06/12/2007 08:38 AM	MW-21-4	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-003	06/13/2007 08:30 AM	06/12/2007 09:17 AM	MW-21-3	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-004	06/13/2007 08:30 AM	06/12/2007 09:54 AM	MW-21-2	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-005	06/13/2007 08:30 AM	06/12/2007 10:56 AM	MW-21-1	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-006	06/13/2007 08:30 AM	06/12/2007 12:00 AM	DUPE-1-2007	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-007	06/13/2007 08:30 AM	06/12/2007 10:43 AM	EB-1-6/12/07	A-	A-	IN	IN	A+	IN	IN	IN
JPL35-008	06/13/2007 08:30 AM	06/12/2007 12:00 AM	TB-1-6/12/07								IN

Approved By: 

On: 

Notes: Samples identified with a '\*' client has requested QC for

**LEGEND: -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged**

**FORM LTL-PM-8.0**



**Cooler Receipt Form**  
**Laucks Testing Laboratories, Inc.**

SDG: JPL35 Taken By: CLIENT  
Cooler: AAP005 Transferred: FED EX  
COC #: 42857  
Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 6/13/2007  
Date cooler was opened: 6/13/2007 8:30AM

**A. PRELIMINARY EXAMINATION PHASE:**

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES  
if YES, record carrier name and airbill number: 8592 6190 4218
2. Were custody seals unbroken and intact at the date and time of arrival? ..... INTACT  
Date On Custody Seal: Custody Seals Description: TWO IN FRONT AND BACK.
3. Were custody papers sealed in a plastic bag and taped inside to the lid? ..... YES
4. Did you screen samples for radioactivity using the Geiger Counter? ..... NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES
6. Did you sign custody papers in the appropriate place? ..... YES
7. If required, was enough cooling material present? ..... YES
8. Have designated person initial here to acknowledge receipt of cooler:     *W*

**B. LOG-IN PHASE:**

Date samples were logged-in: 6/13/2007 8:40AM

Logged-in by Zoriah Weith (sign) *[Signature]*

9. Describe type of packing in cooler:
10. Were all bottles sealed in separate plastic bags? ..... NO
11. Were labels in good condition? ..... YES
12. Were all bottle labels complete (ID,date,time signature,preservative,etc.)? ..... YES
13. Did all bottle labels agree with custody papers? ..... YES
14. Were correct containers used for the tests indicated? ..... YES
15. Were the correct pHs observed? ..... YES
16. Was a sufficient amount of sample sent for tests indicated? ..... YES
17. Were bubbles absent in VOA samples? ..... YES
18. Temperatures: 5.9

DISCREPANCIES:

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL35  
Cooler: AAP005  
Temperatures: 5.9  
COC #: 42857

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL35-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-007	0001	1000 mL cylinder, poly	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL35

Cooler: AAP005

Temperatures: 5.9

COC #: 42857

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL35-008	0001	40 ml OTWS, clear glass, HCl	N/C	None
	0002	40 ml OTWS, clear glass, HCl	N/C	None

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

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**ATTACHMENT B**

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**Battelle**

**SDG No.: JPL35**

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Completed and checked by:

Jenni Grass

Date:

7/6/07

**SAMPLE DATA**

SDG JPL35

VOLATILES ANALYSIS



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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-5

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-001  
 Lab File ID: M0619017.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 16:26  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	5.6	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.33	J
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL35-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 16:26

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	3.4	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-5

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-001  
 Lab File ID: M0619017.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 16:26  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

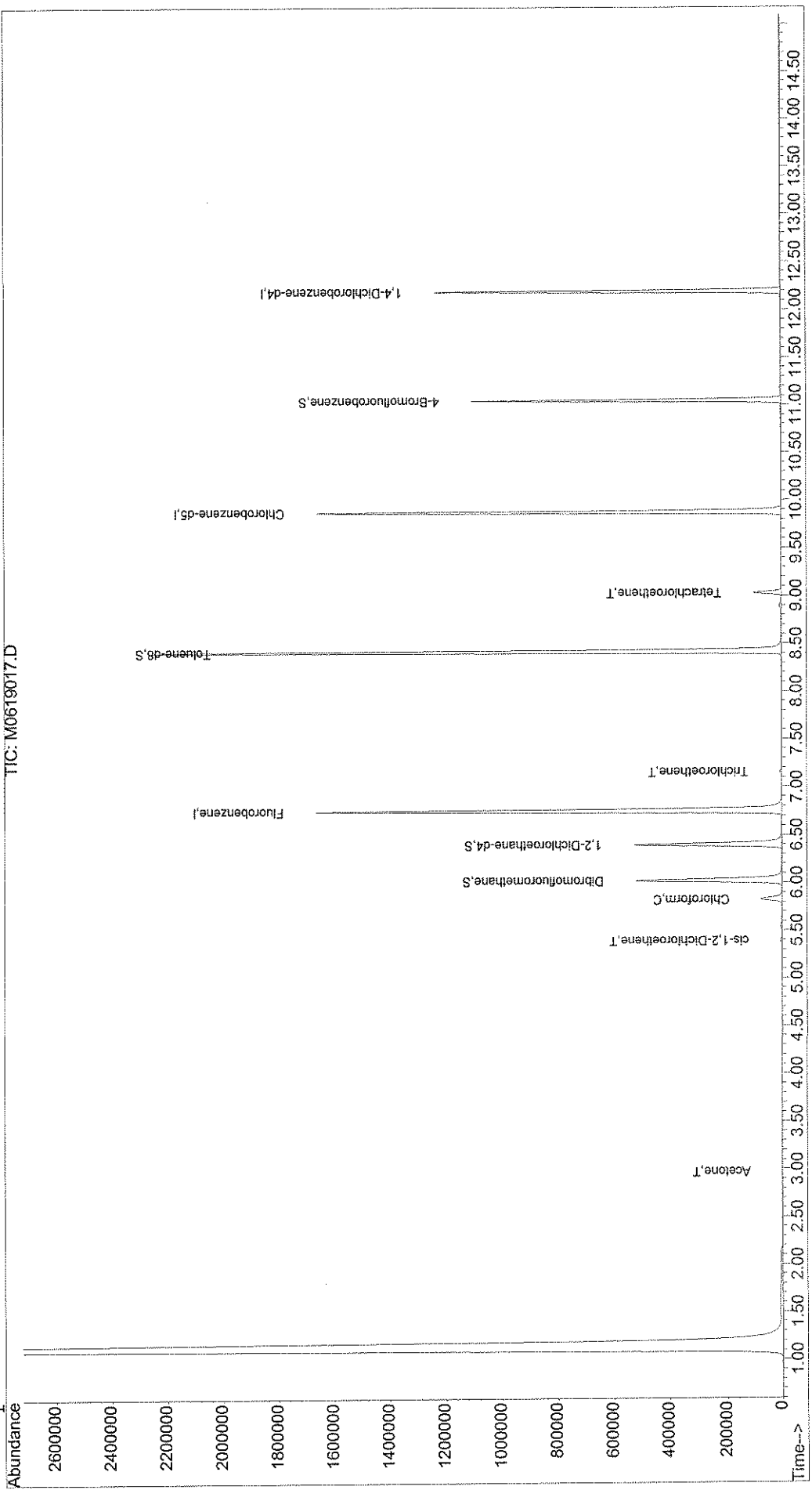
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619017.D Vial: 58  
Acq On : 19 Jun 2007 16:26 Operator: DGA  
Sample : JPL35-001 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:54 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619017.D  
 Acq On : 19 Jun 2007 16:26  
 Sample : JPL35-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:54 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1675706	50.00	ug/l	0.00	99.65%
54) Chlorobenzene-d5	9.88	117	988044	50.00	ug/l	0.00	99.57%
74) 1,4-Dichlorobenzene-d4	12.19	152	341860	50.00	ug/l	0.00	88.36%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	396716	52.26	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.52%	
40) 1,2-Dichloroethane-d4	6.40	65	425187	51.77	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.54%	
55) Toluene-d8	8.42	98	1551705	50.84	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.68%	
76) 4-Bromofluorobenzene	11.04	95	361450	56.26	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	112.52%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.88	96	77	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.97	43	4553m	2.47	ug/l #	81
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	126	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.38	43	204	N.D.		
18) Methylene Chloride	3.49	84	496	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.90	73	245	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

*S. J. 6/25/07*

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619017.D  
 Acq On : 19 Jun 2007 16:26  
 Sample : JPL35-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:54 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	2987	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	5.39	96	4242	0.50	ug/l	94
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.81	41	138	N.D.		
34) Chloroform	5.83	83	74485	5.57	ug/l	98
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	6.17	117	142	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.42	78	843	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.	d	
45) Trichloroethene	7.16	130	2929	0.33	ug/l #	47
46) Methylcyclohexane	7.30	83	56	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.74	83	473	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.48	92	414	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	9.03	97	132	N.D.		
60) Tetrachloroethene	9.03	166	32689	3.42	ug/l	95
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	8.98	43	126	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.87	91	2300	N.D.		
66) Chlorobenzene	9.91	112	410	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619017.D M8260W.M Mon Jun 25 12:55:02 2007

*g out of range*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619017.D  
 Acq On : 19 Jun 2007 16:26  
 Sample : JPL35-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:54 2007

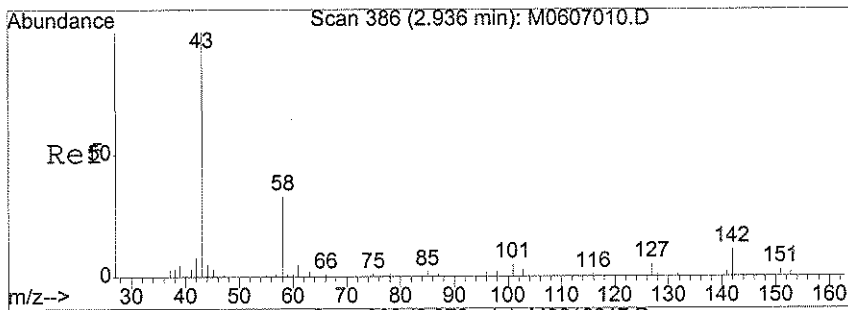
Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

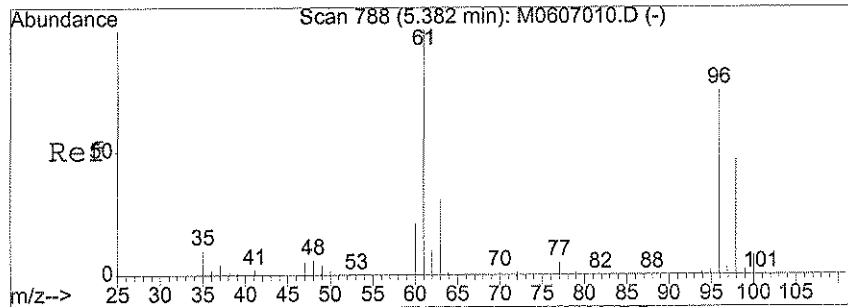
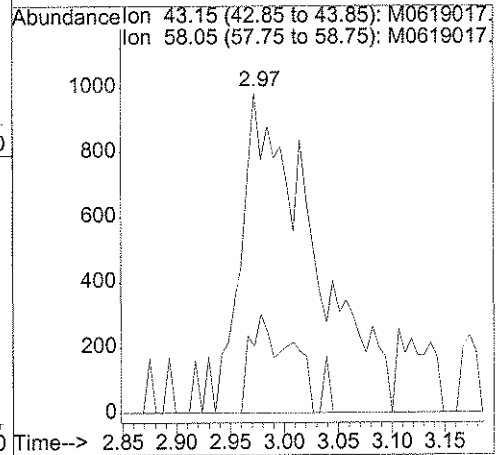
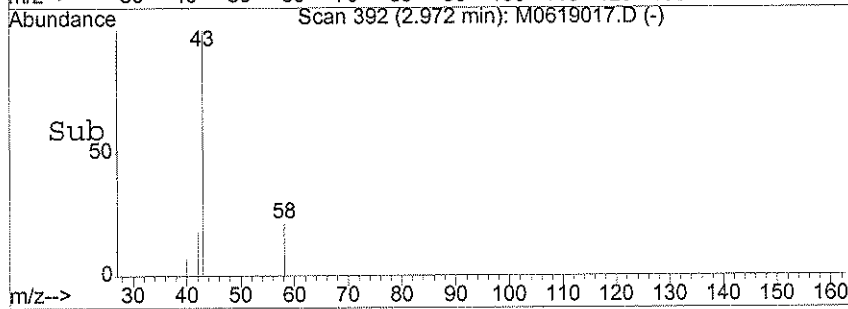
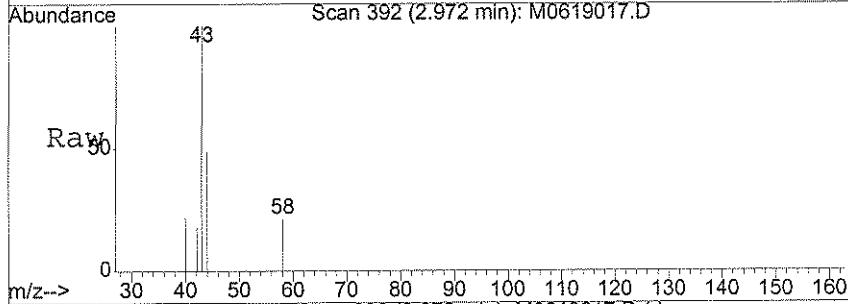
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	609		N.D.	
69) m,p-Xylene	10.11	106	549		N.D.	
70) o-xylene	10.50	106	63		N.D.	
71) Styrene	10.53	104	55		N.D.	
72) Bromoform	10.75	173	230		N.D.	
73) Isopropylbenzene	10.87	105	438		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	872		N.D.	
81) 2-Chlorotoluene	11.37	91	350		N.D.	
82) 4-Chlorotoluene	11.50	91	372		N.D.	
83) 1,3,5-Trimethylbenzene	11.44	105	310		N.D.	
84) tert-Butylbenzene	11.77	119	317		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	423		N.D.	
86) sec-butylbenzene	11.99	105	511		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	793		N.D.	
88) 4-Isopropyltoluene	12.13	119	575		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	521		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	385		N.D.	
91) n-Butylbenzene	12.54	91	780		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.32	225	218		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration



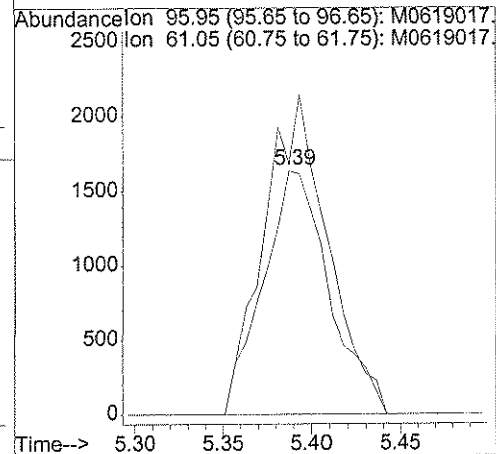
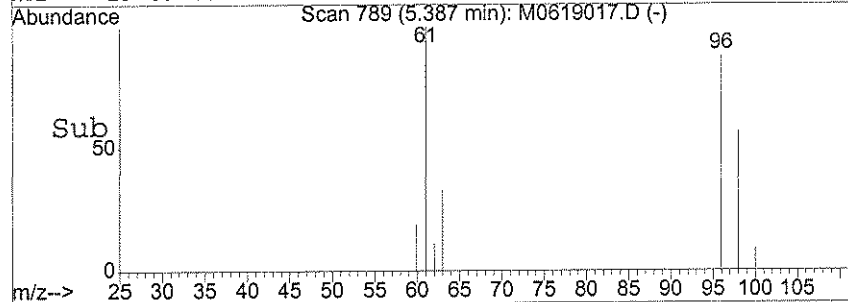
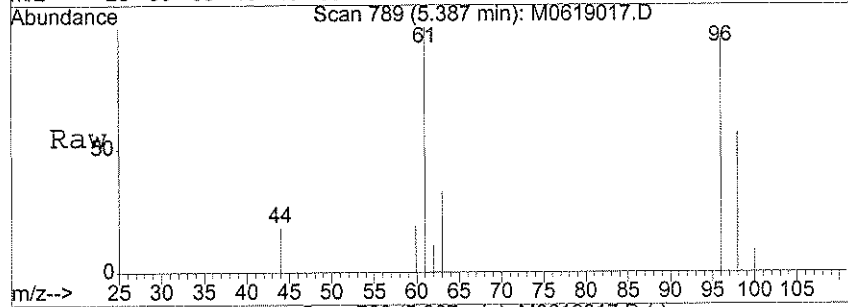
#11  
 Acetone  
 Concen: 2.47 ug/l m  
 RT: 2.97 min Scan# 392  
 Delta R.T. -0.02 min  
 Lab File: M0619017.D  
 Acq: 19 Jun 2007 16:26

Tgt Ion: 43 Resp: 4553  
 Ion Ratio Lower Upper  
 43 100  
 58 10.8 22.0 33.0#



#29  
 cis-1,2-Dichloroethene  
 Concen: 0.50 ug/l  
 RT: 5.39 min Scan# 789  
 Delta R.T. -0.01 min  
 Lab File: M0619017.D  
 Acq: 19 Jun 2007 16:26

Tgt Ion: 96 Resp: 4242  
 Ion Ratio Lower Upper  
 96 100  
 61 126.9 107.4 161.0





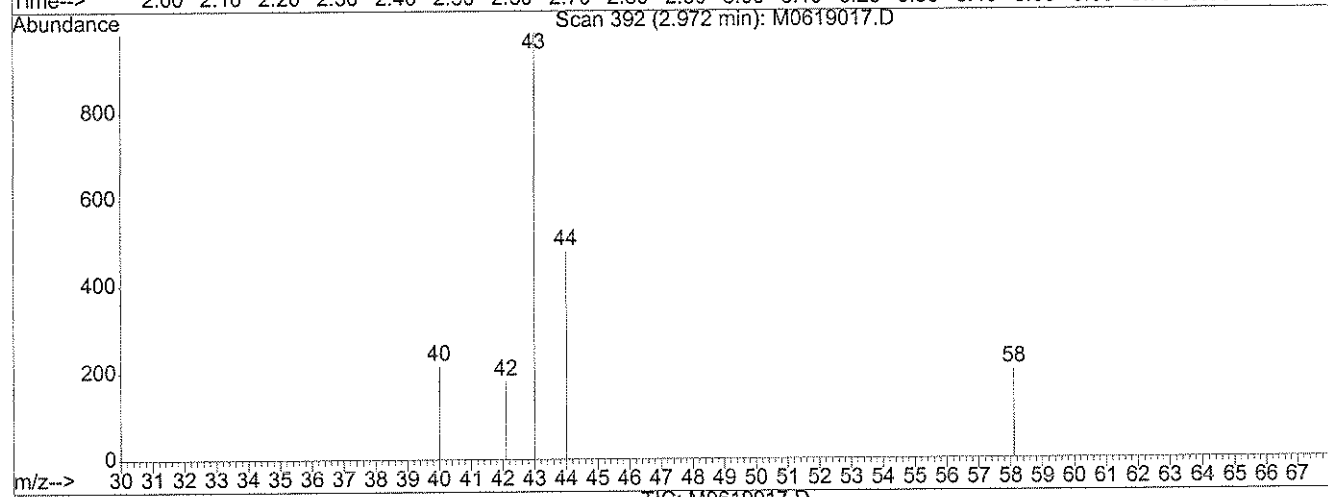
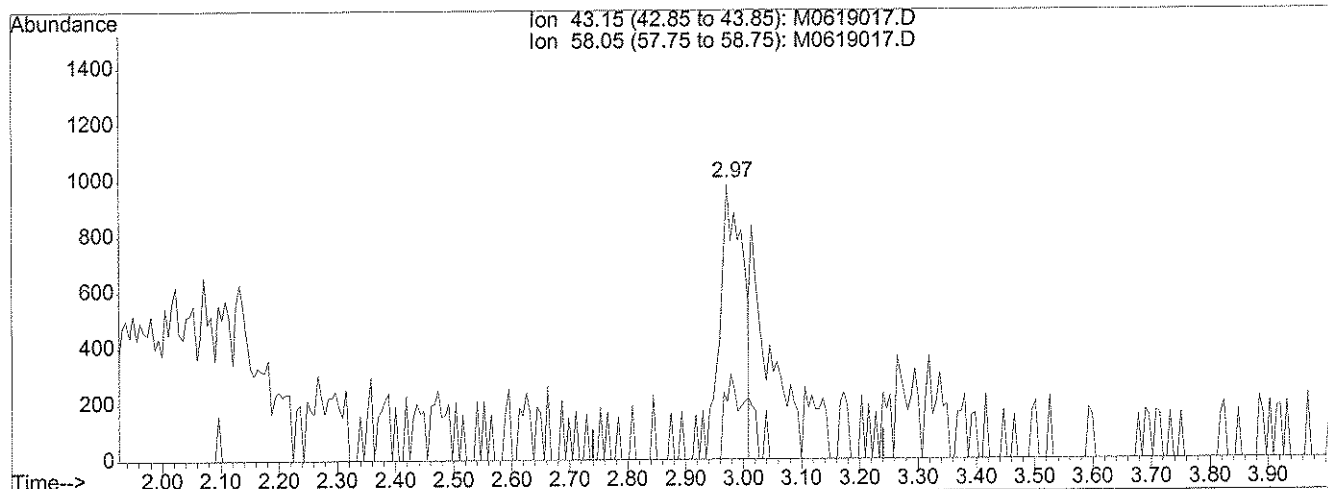
Quantitation Report (Qedit)

Data File : X:\MSVOA\MOBY\061907\M0619017.D  
 Acq On : 19 Jun 2007 16:26  
 Sample : JPL35-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:28 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Multiple Level Calibration



(11) Acetone (T)

2.97min 1.50ug/l

response 2769

Ion	Exp%	Act%
43.15	100	100
58.05	27.50	17.73#
0.00	0.00	0.00
0.00	0.00	0.00

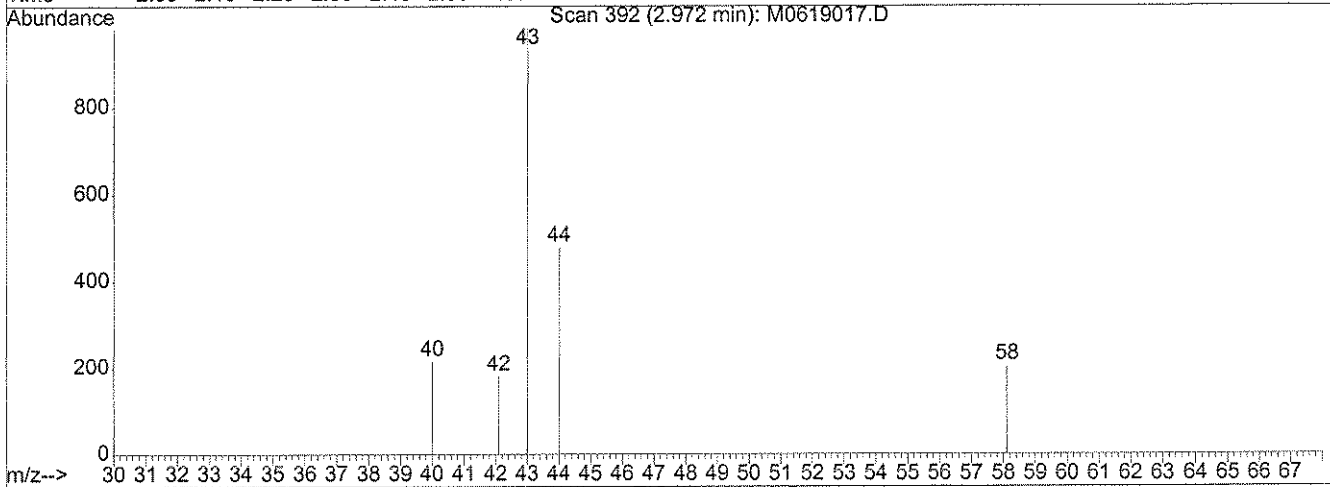
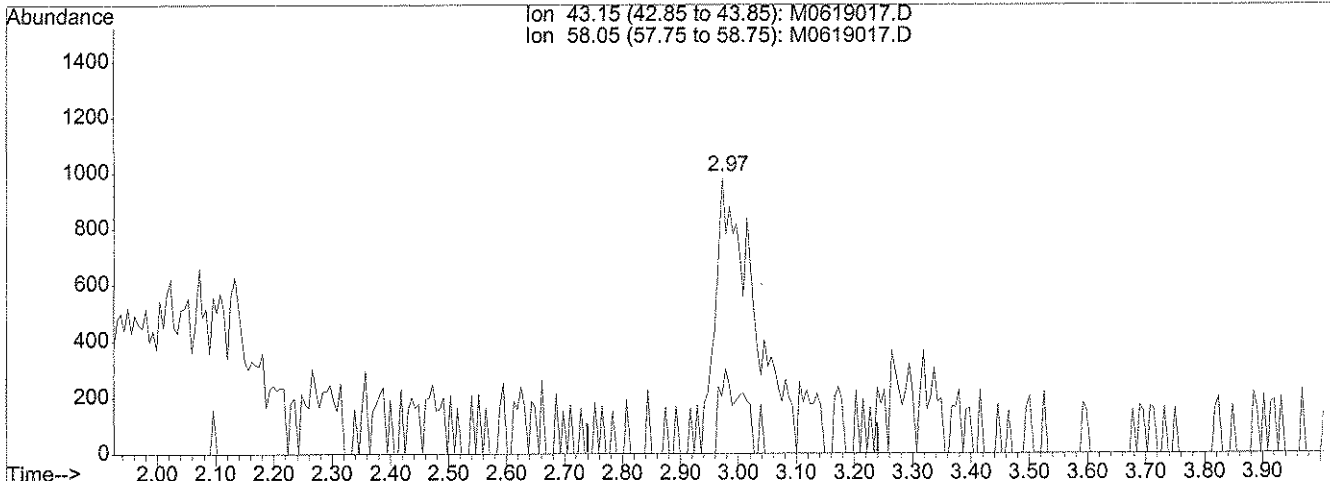
Quantitation Report (Qedit)

Data File : X:\MSVOA\MOBY\061907\M0619017.D  
 Acq On : 19 Jun 2007 16:26  
 Sample : JPL35-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:54 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Multiple Level Calibration



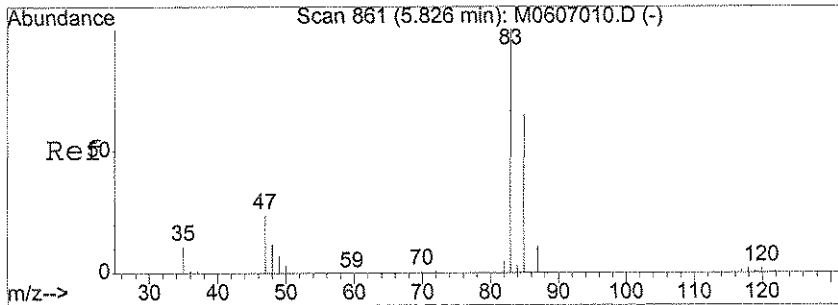
TIC: M0619017.D

(11) Acetone (T)

2.97min 2.47ug/l m

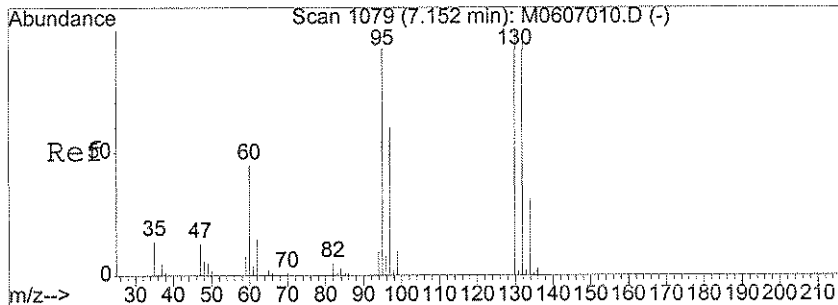
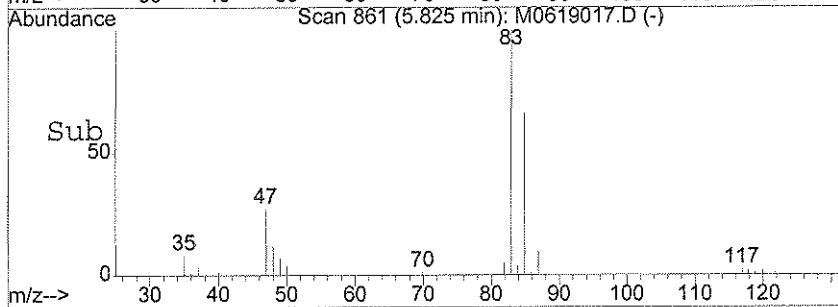
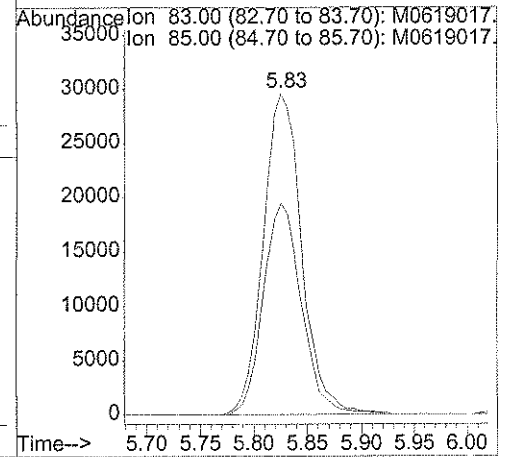
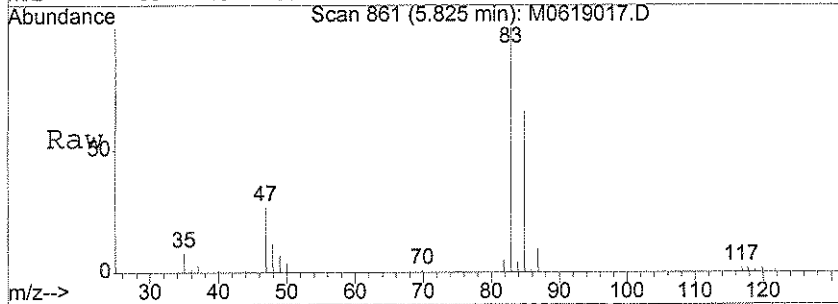
response 4553

Ion	Exp%	Act%
43.15	100	100
58.05	27.50	10.78#
0.00	0.00	0.00
0.00	0.00	0.00



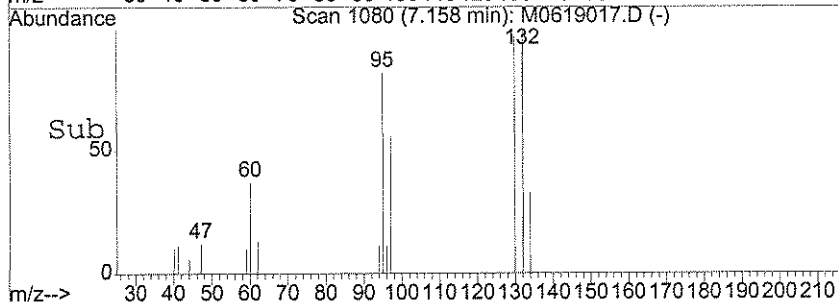
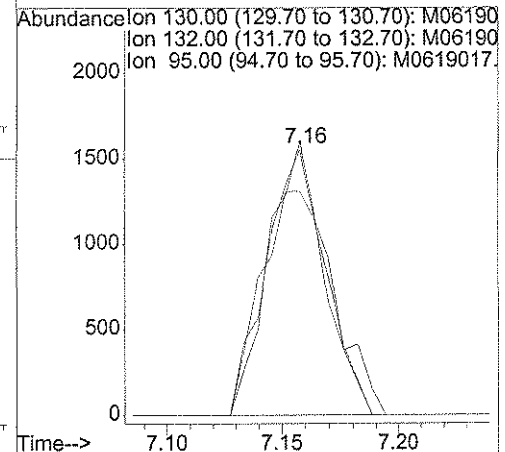
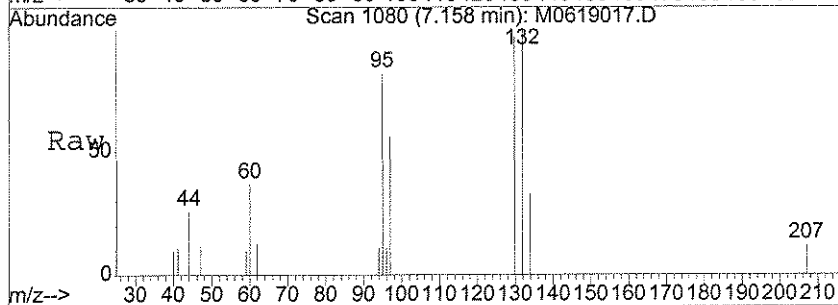
#34  
 Chloroform  
 Concen: 5.57 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. -0.00 min  
 Lab File: M0619017.D  
 Acq: 19 Jun 2007 16:26

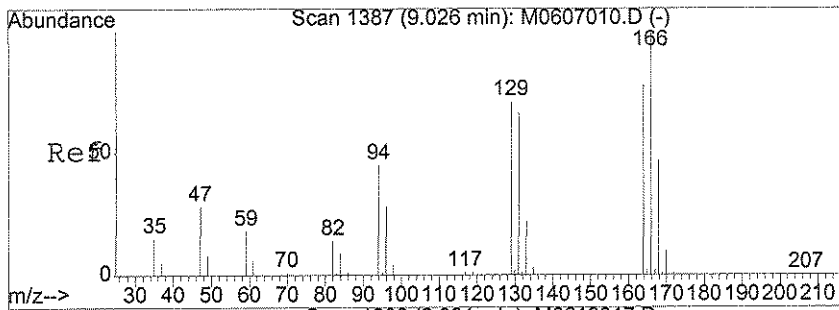
Tgt Ion: 83 Resp: 74485  
 Ion Ratio Lower Upper  
 83 100  
 85 65.3 44.0 84.0



#45  
 Trichloroethene  
 Concen: 0.33 ug/l  
 RT: 7.16 min Scan# 1080  
 Delta R.T. -0.00 min  
 Lab File: M0619017.D  
 Acq: 19 Jun 2007 16:26

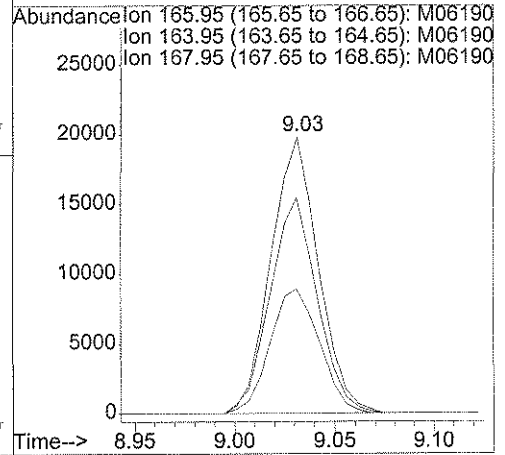
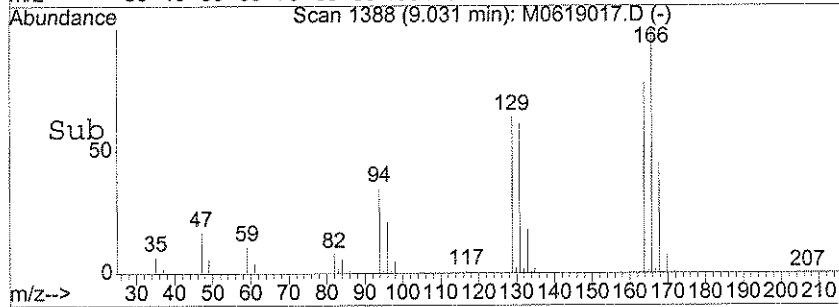
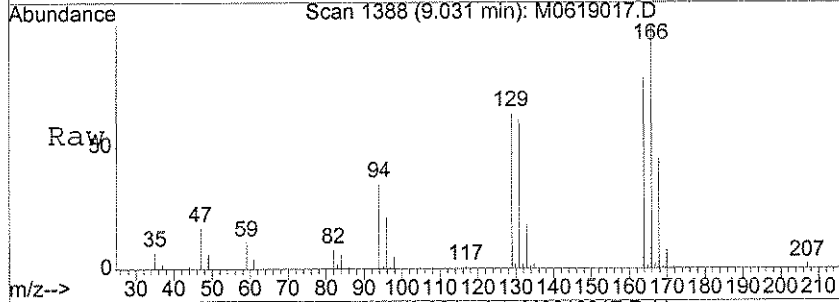
Tgt Ion: 130 Resp: 2929  
 Ion Ratio Lower Upper  
 130 100  
 132 90.2 80.2 120.2  
 95 0.0 75.8 115.8#





#60  
 Tetrachloroethene  
 Concen: 3.42 ug/l  
 RT: 9.03 min Scan# 1388  
 Delta R.T. 0.01 min  
 Lab File: M0619017.D  
 Acq: 19 Jun 2007 16:26

Tgt Ion	Resp	Lower	Upper
166	32689		
166	100		
164	77.7	65.6	98.4
168	46.9	41.1	61.7



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-002  
 Lab File ID: M0619018.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 16:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	4.5	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-4

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL35-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 16:55

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	2.6	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-4
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Lab Name: Laucks Testing Laboratories, Inc.

SDG No.: JPL35

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R018854

Lab Sample ID: JPL35-002

Lab File ID: M0619018.D

Date Collected: 06/12/2007

Date/Time Analyzed: 06/19/2007 16:55

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

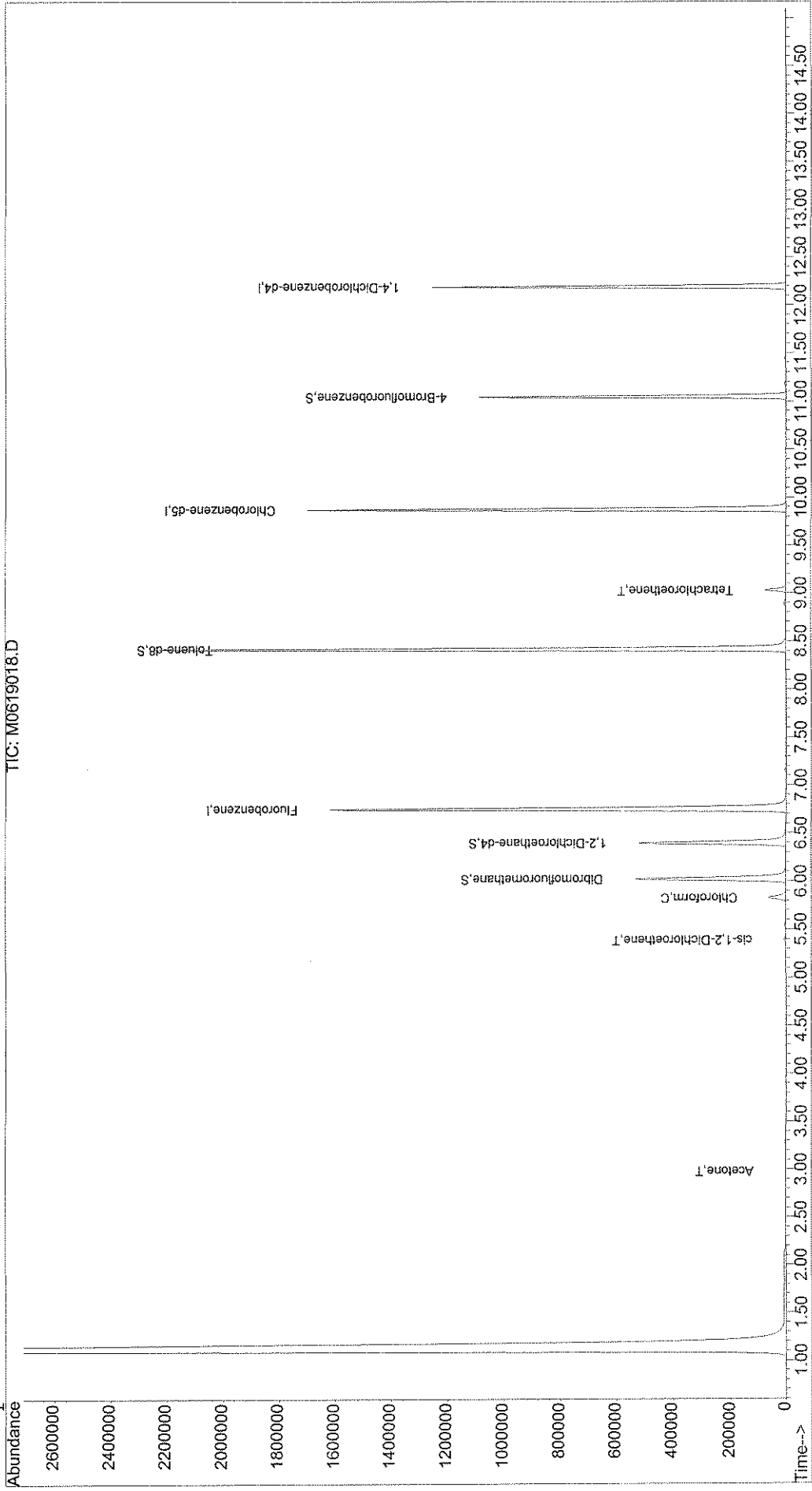
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619018.D  
Acq On : 19 Jun 2007 16:55  
Sample : JPL35-002  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:57 2007  
Vial: 59  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RE5

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619018.D  
 Acq On : 19 Jun 2007 16:55  
 Sample : JPL35-002  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:57 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1668242	50.00	ug/l	0.00 99.21%
54) Chlorobenzene-d5	9.87	117	979608	50.00	ug/l	0.00 98.72%
74) 1,4-Dichlorobenzene-d4	12.19	152	337207	50.00	ug/l	0.00 87.15%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	393823	52.11	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.22%
40) 1,2-Dichloroethane-d4	6.40	65	424839	51.95	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.90%
55) Toluene-d8	8.42	98	1549225	51.20	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	102.40%
76) 4-Bromofluorobenzene	11.05	95	354459	55.93	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	111.86%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.87	96	121	N.D.		
6) Chloroethane	1.97	64	59	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.97	43	5648	3.08	ug/l	97
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	64	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.42	43	459	N.D.		
18) Methylene Chloride	3.50	84	460	N.D.		
19) trans-1,2-Dichloroethene	3.88	96	84	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.94	73	1524	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619018.D M8260W.M Mon Jun 25 12:57:51 2007

*J. [Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619018.D  
 Acq On : 19 Jun 2007 16:55  
 Sample : JPL35-002  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:57 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	1153		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	5.39	96	4243	0.50	ug/l	97
30) 2-Butanone	5.51	43	495		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.66	41	61		N.D.	
34) Chloroform	5.82	83	60290	4.53	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	823		N.D.	
42) 1,2-Dichloroethane	6.41	62	126		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D. d	
45) Trichloroethene	7.15	130	2032		N.D.	
46) Methylcyclohexane	7.30	83	71		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	555		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.49	92	441		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.88	97	75		N.D.	
60) Tetrachloroethene	9.03	166	24373	2.57	ug/l	94
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.15	43	118		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2109		N.D.	
66) Chlorobenzene	9.90	112	320		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0619018.D M8260W.M Mon Jun 25 12:57:52 2007

*D. Dufresne*  
 Page 2

Quantitation Report

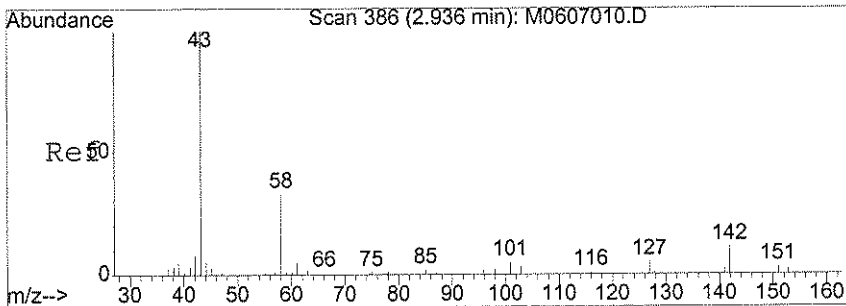
Data File : X:\MSVOA\MOBY\061907\M0619018.D  
 Acq On : 19 Jun 2007 16:55  
 Sample : JPL35-002  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:57 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

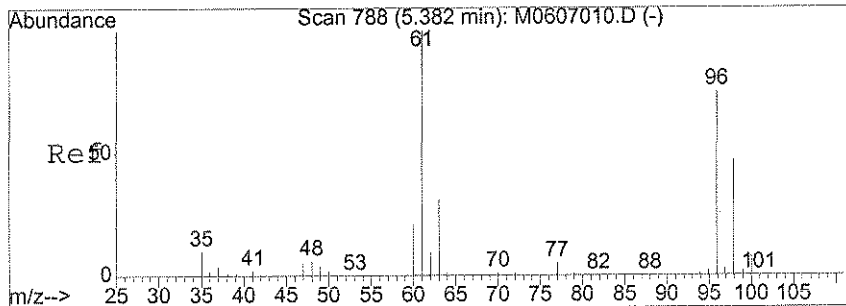
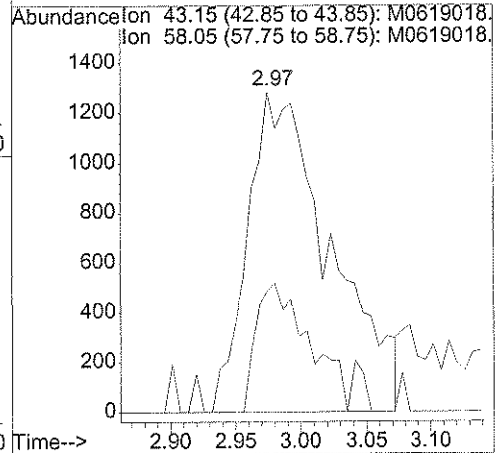
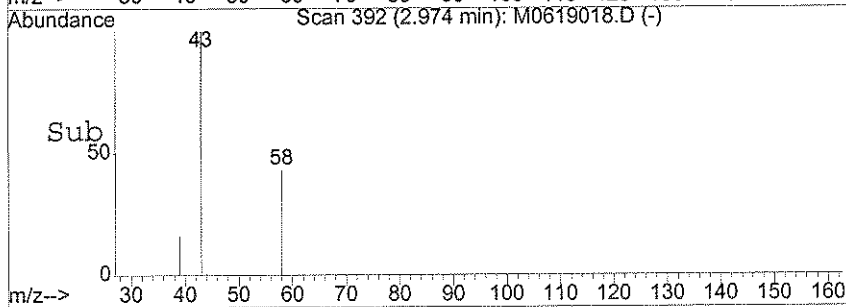
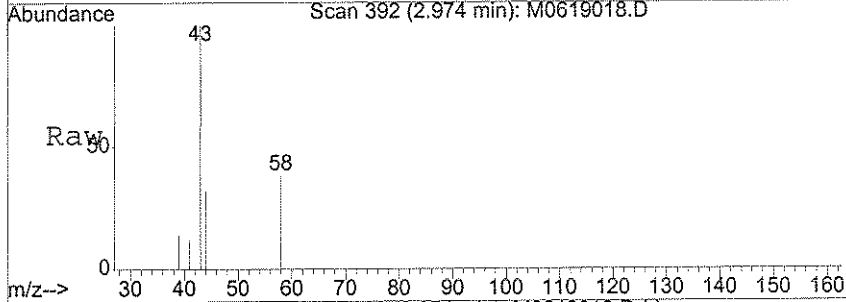
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	669		N.D.	
69) m,p-Xylene	10.12	106	928		N.D.	
70) o-xylene	10.51	106	117		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	220		N.D.	
73) Isopropylbenzene	10.86	105	373		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	864		N.D.	
81) 2-Chlorotoluene	11.37	91	280		N.D.	
82) 4-Chlorotoluene	11.49	91	402		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	428		N.D.	
84) tert-Butylbenzene	11.78	119	220		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	277		N.D.	
86) sec-butylbenzene	11.98	105	537		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	381		N.D.	
88) 4-Isopropyltoluene	12.14	119	545		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	535		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	377		N.D.	
91) n-Butylbenzene	12.54	91	707		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



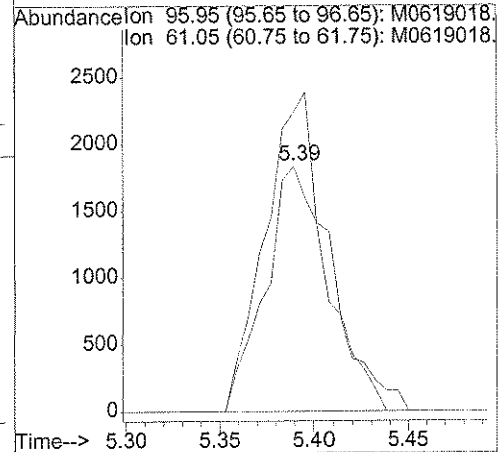
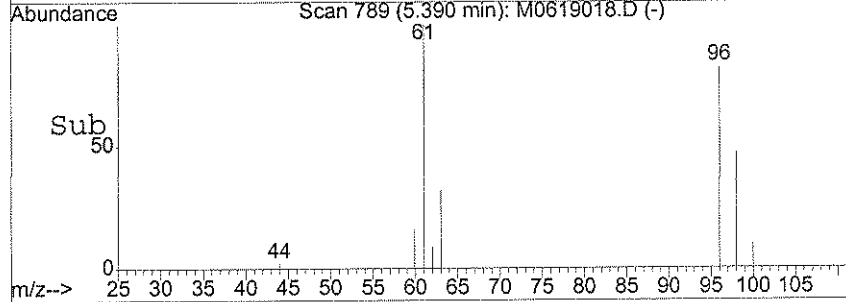
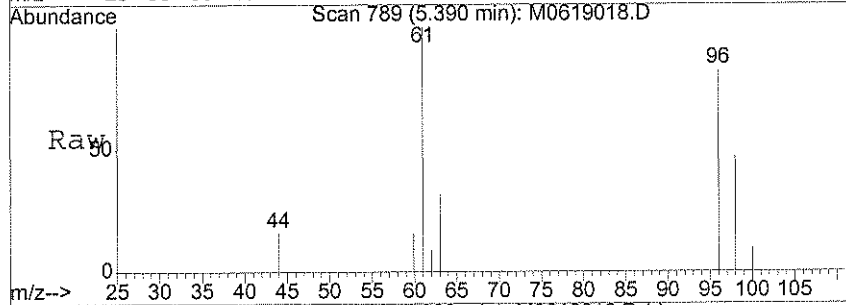
#11  
 Acetone  
 Concen: 3.08 ug/l  
 RT: 2.97 min Scan# 392  
 Delta R.T. -0.02 min  
 Lab File: M0619018.D  
 Acq: 19 Jun 2007 16:55

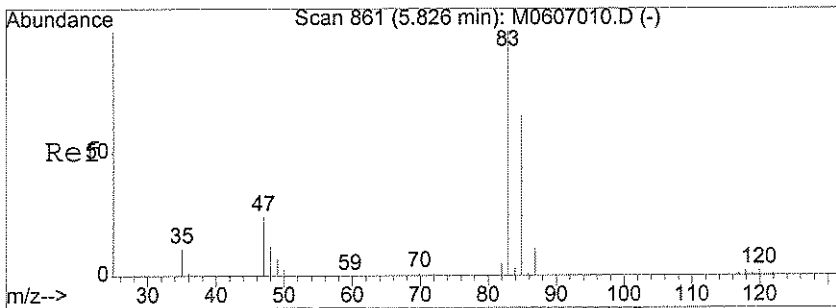
Tgt Ion: 43 Resp: 5648  
 Ion Ratio Lower Upper  
 43 100  
 58 25.9 22.0 33.0



#29  
 cis-1,2-Dichloroethene  
 Concen: 0.50 ug/l  
 RT: 5.39 min Scan# 789  
 Delta R.T. -0.00 min  
 Lab File: M0619018.D  
 Acq: 19 Jun 2007 16:55

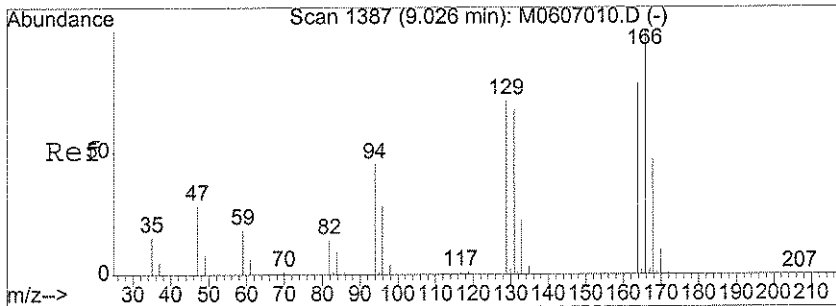
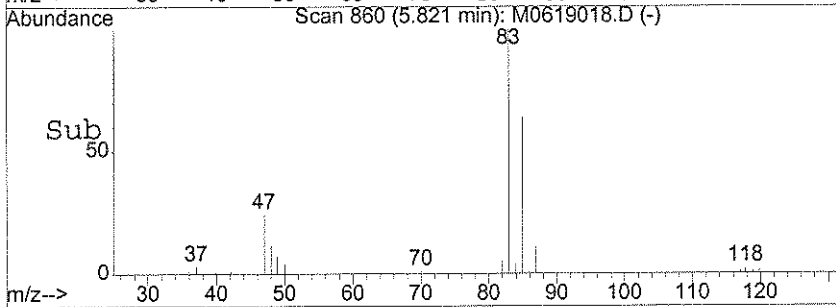
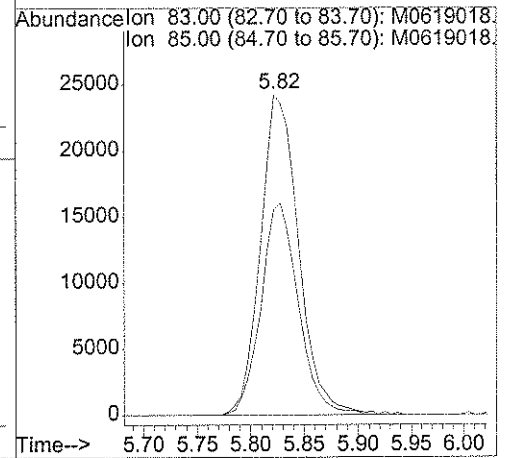
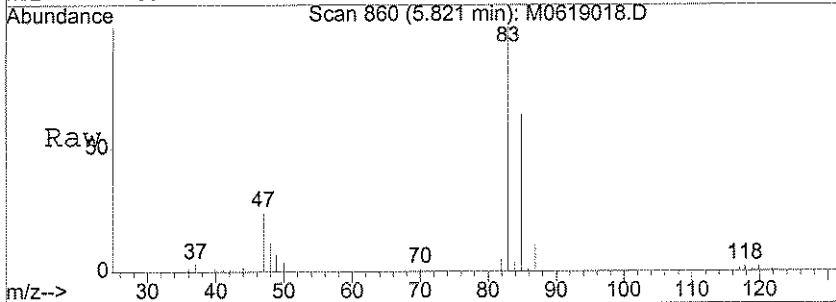
Tgt Ion: 96 Resp: 4243  
 Ion Ratio Lower Upper  
 96 100  
 61 130.8 107.4 161.0





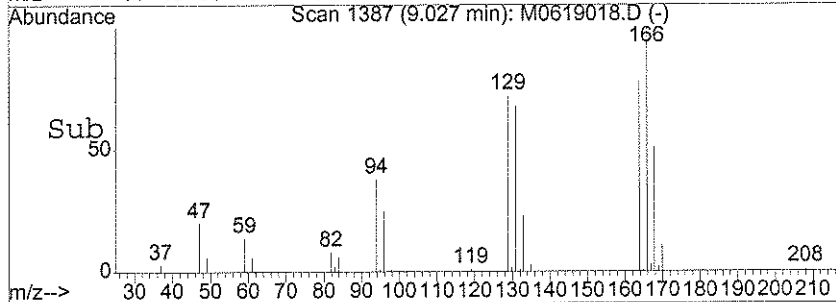
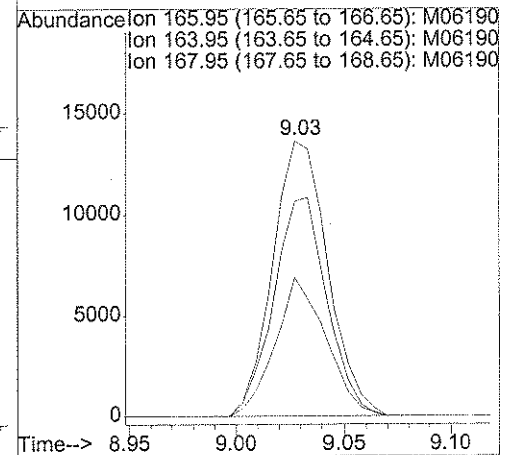
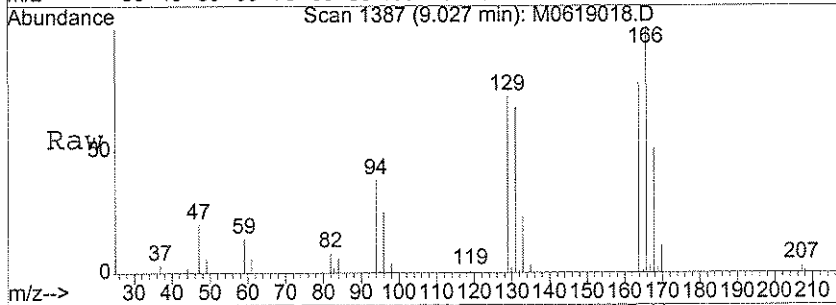
#34  
 Chloroform  
 Concen: 4.53 ug/l  
 RT: 5.82 min Scan# 860  
 Delta R.T. -0.00 min  
 Lab File: M0619018.D  
 Acq: 19 Jun 2007 16:55

Tgt Ion	Resp	Lower	Upper
83	60290		
85	64.8	44.0	84.0



#60  
 Tetrachloroethene  
 Concen: 2.57 ug/l  
 RT: 9.03 min Scan# 1387  
 Delta R.T. 0.00 min  
 Lab File: M0619018.D  
 Acq: 19 Jun 2007 16:55

Tgt Ion	Resp	Lower	Upper
166	24373		
164	76.6	65.6	98.4
168	46.5	41.1	61.7



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-003  
 Lab File ID: M0619019.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 17:33  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.8	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.64	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.4	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.73	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-003  
 Lab File ID: M0619019.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 17:33  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	3.1	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-003  
 Lab File ID: M0619019.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 17:33  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

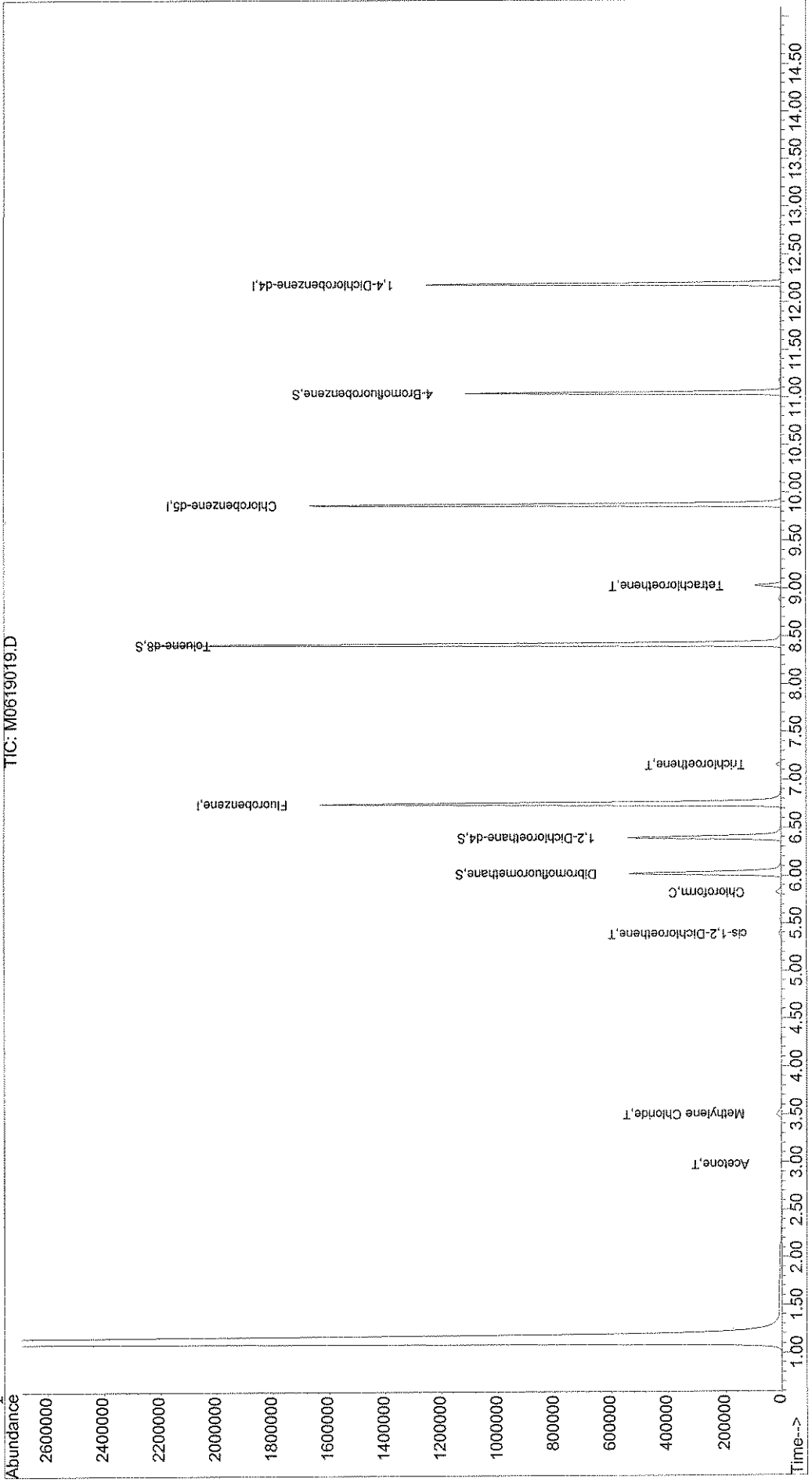
Comments:



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619019.D Vial: 60  
Acq On : 19 Jun 2007 17:33 Operator: DGA  
Sample : JPL35-003 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:59 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619019.D  
 Acq On : 19 Jun 2007 17:33  
 Sample : JPL35-003  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:59 2007

Vial: 60  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1678624	50.00	ug/l	0.00	99.82%
54) Chlorobenzene-d5	9.88	117	1001842	50.00	ug/l	0.00	100.96%
74) 1,4-Dichlorobenzene-d4	12.19	152	346832	50.00	ug/l	0.00	89.64%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	400667	52.69	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.38%	
40) 1,2-Dichloroethane-d4	6.40	65	434462	52.80	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.60%	
55) Toluene-d8	8.42	98	1557986	50.35	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.70%	
76) 4-Bromofluorobenzene	11.04	95	369413	56.67	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	113.34%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.43	50	61	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.86	96	183	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	7054	3.82	ug/l	98
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	683	N.D.		
18) Methylene Chloride	3.51	84	15587	1.76	ug/l	98
19) trans-1,2-Dichloroethene	3.88	96	642	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.93	73	1360	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619019.D M8260W.M Mon Jun 25 12:59:32 2007

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 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619019.D  
 Acq On : 19 Jun 2007 17:33  
 Sample : JPL35-003  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:59 2007

Vial: 60  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.58	63	1921	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	5.39	96	5420	0.64	ug/l	94
30) 2-Butanone	5.51	43	825	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.67	41	62	N.D.		
34) Chloroform	5.83	83	18893	1.41	ug/l	100
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.06	56	68	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.42	78	1059	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.	d	
45) Trichloroethene	7.16	130	6557	0.73	ug/l	97
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.74	83	337	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	8.37	43	334	N.D.		
56) Toluene	8.49	92	1216	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	8.89	97	59	N.D.		
60) Tetrachloroethene	9.03	166	29892	3.08	ug/l	96
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	9.18	43	174	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.87	91	2142	N.D.		
66) Chlorobenzene	9.91	112	383	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619019.D M8260W.M Mon Jun 25 12:59:32 2007

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 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619019.D  
 Acq On : 19 Jun 2007 17:33  
 Sample : JPL35-003  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:59 2007

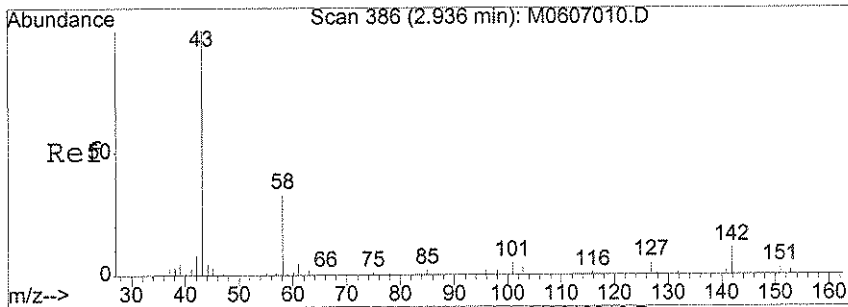
Vial: 60  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

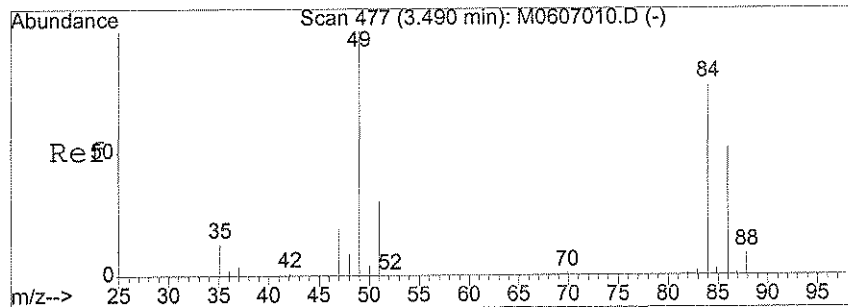
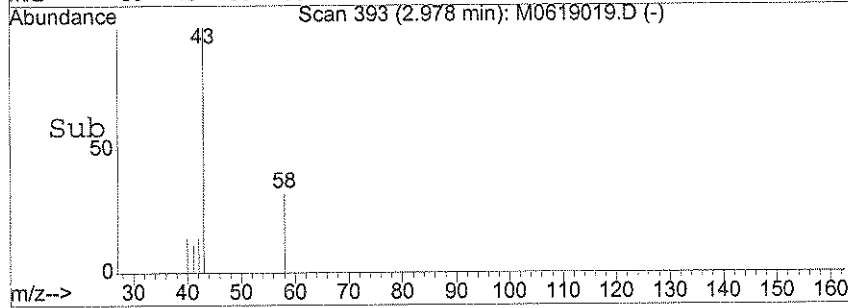
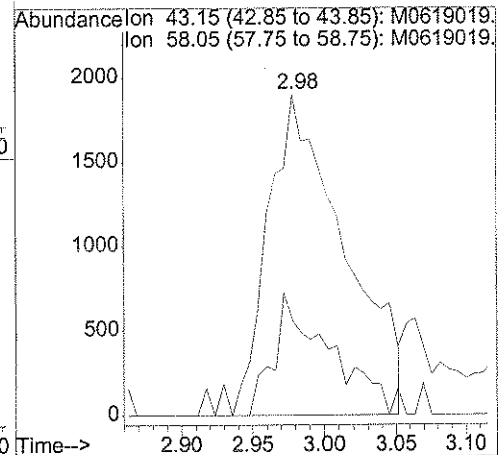
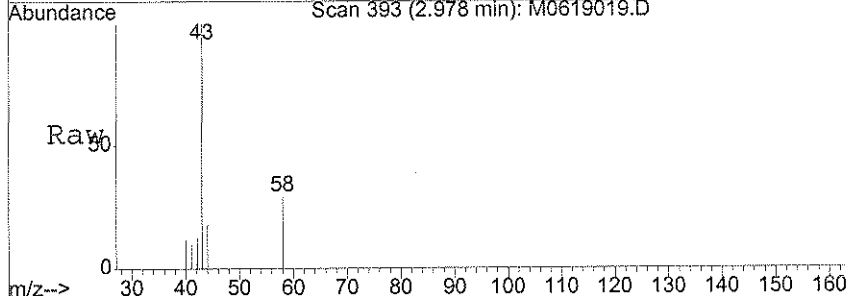
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	999		N.D.	
69) m,p-Xylene	10.11	106	881		N.D.	
70) o-xylene	10.51	106	340		N.D.	
71) Styrene	10.53	104	203		N.D.	
72) Bromoform	10.74	173	277		N.D.	
73) Isopropylbenzene	10.87	105	244		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.06	83	55		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	539		N.D.	
81) 2-Chlorotoluene	11.37	91	61		N.D.	
82) 4-Chlorotoluene	11.49	91	310		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	162		N.D.	
84) tert-Butylbenzene	11.77	119	96		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	249		N.D.	
86) sec-butylbenzene	11.98	105	504		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	327		N.D.	
88) 4-Isopropyltoluene	12.13	119	458		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	243		N.D.	
90) 1,2-Dichlorobenzene	12.60	146	267		N.D.	
91) n-Butylbenzene	12.54	91	591		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	14.34	225	121		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration



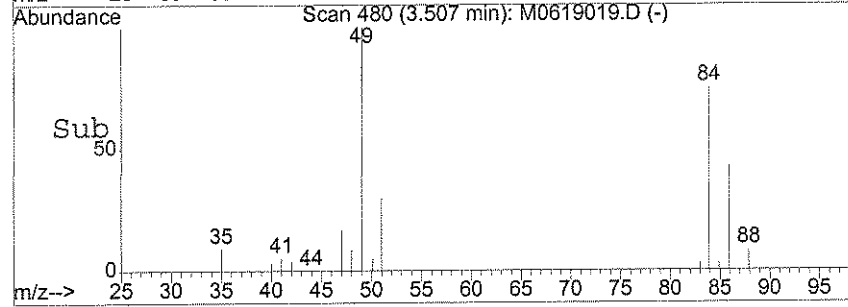
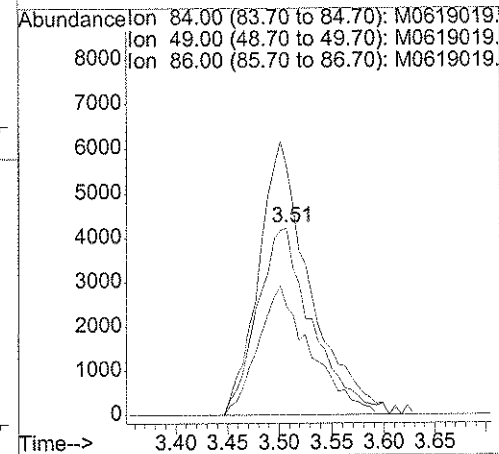
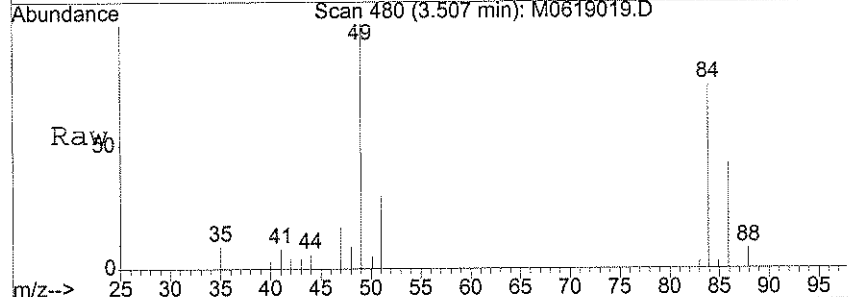
#11  
 Acetone  
 Concen: 3.82 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0619019.D  
 Acq: 19 Jun 2007 17:33

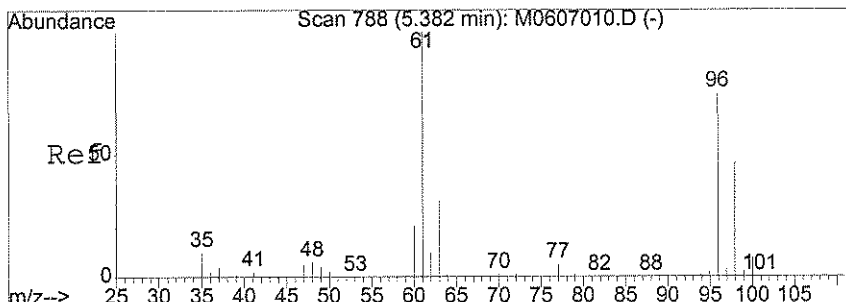
Tgt Ion	Resp	Lower	Upper
43	7054		
58	28.3	22.0	33.0



#18  
 Methylene Chloride  
 Concen: 1.76 ug/l  
 RT: 3.51 min Scan# 480  
 Delta R.T. 0.01 min  
 Lab File: M0619019.D  
 Acq: 19 Jun 2007 17:33

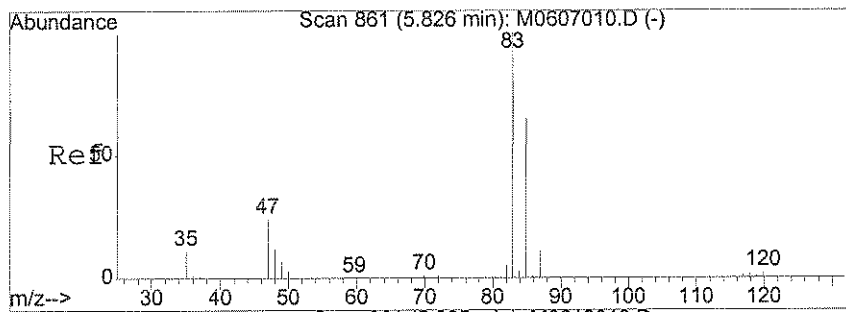
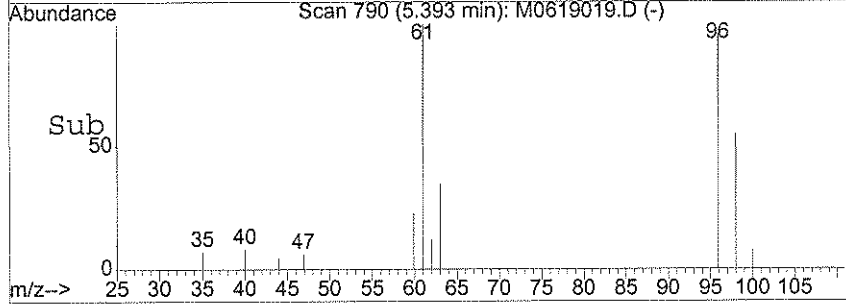
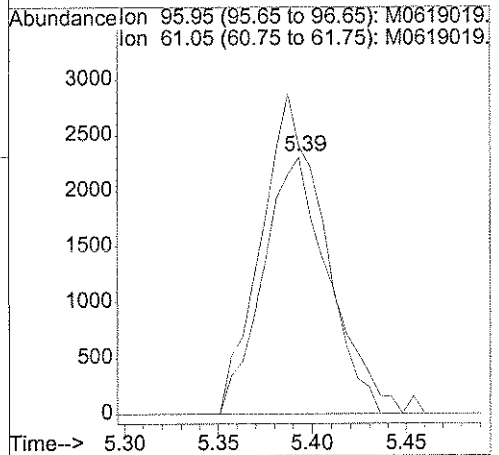
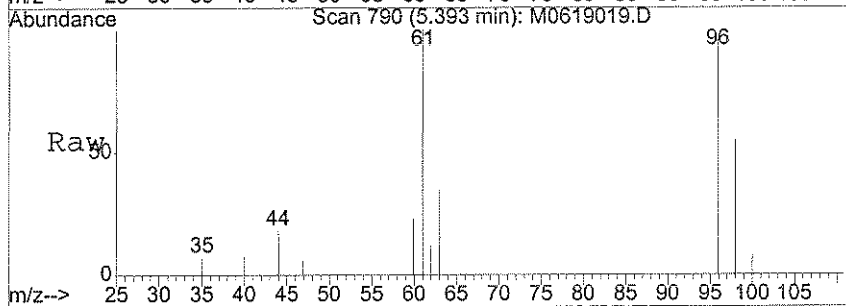
Tgt Ion	Resp	Lower	Upper
84	15587		
49	136.5	113.6	153.6
86	65.7	45.8	85.8





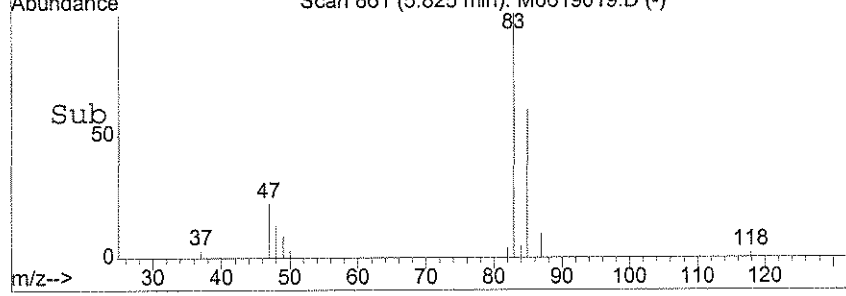
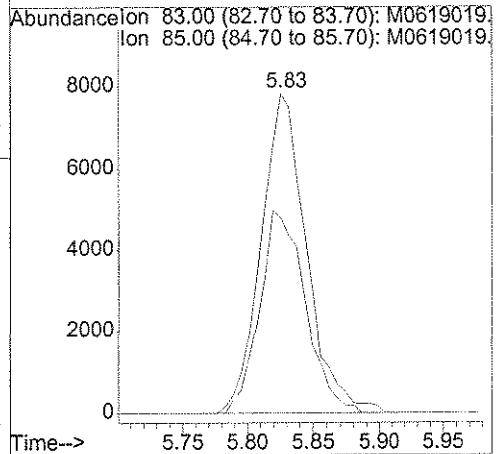
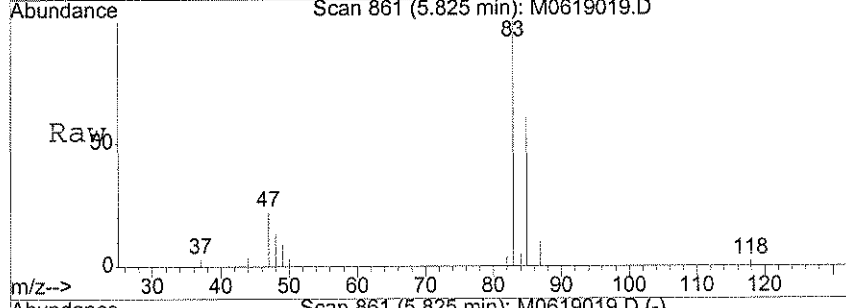
#29  
 cis-1,2-Dichloroethene  
 Concen: 0.64 ug/l  
 RT: 5.39 min Scan# 790  
 Delta R.T. -0.00 min  
 Lab File: M0619019.D  
 Acq: 19 Jun 2007 17:33

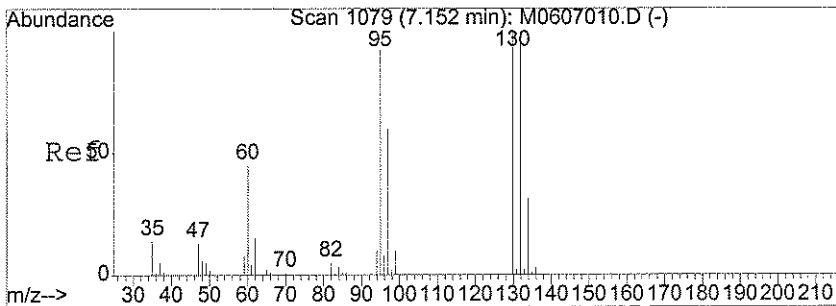
Tgt Ion:	96	Resp:	5420
Ion Ratio	Lower	Upper	
96	100		
61	127.6	107.4	161.0



#34  
 Chloroform  
 Concen: 1.41 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. -0.00 min  
 Lab File: M0619019.D  
 Acq: 19 Jun 2007 17:33

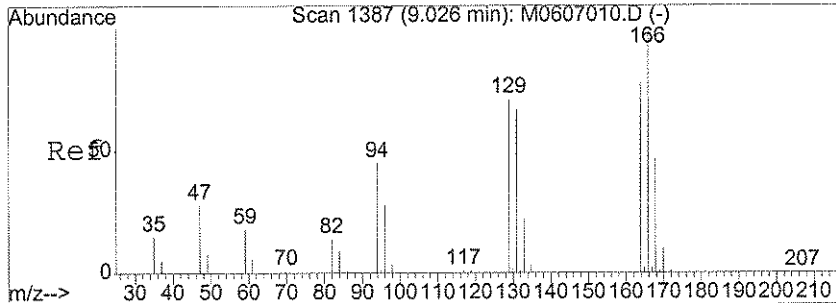
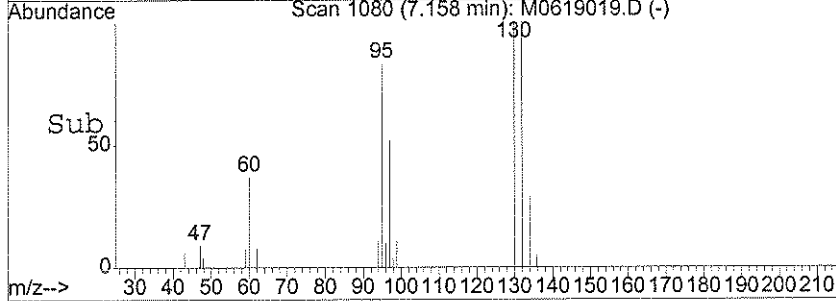
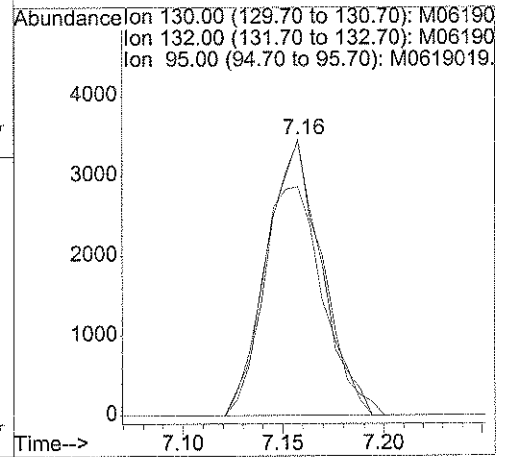
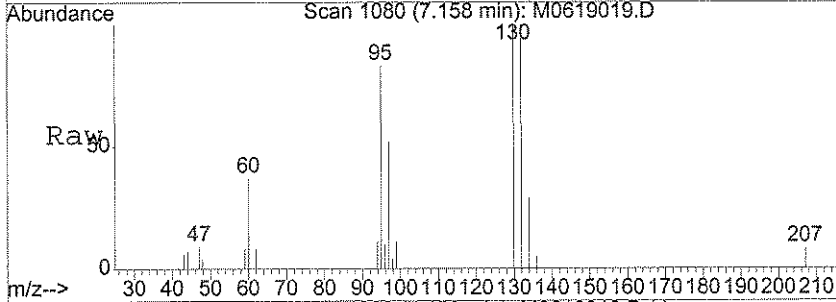
Tgt Ion:	83	Resp:	18893
Ion Ratio	Lower	Upper	
83	100		
85	63.8	44.0	84.0





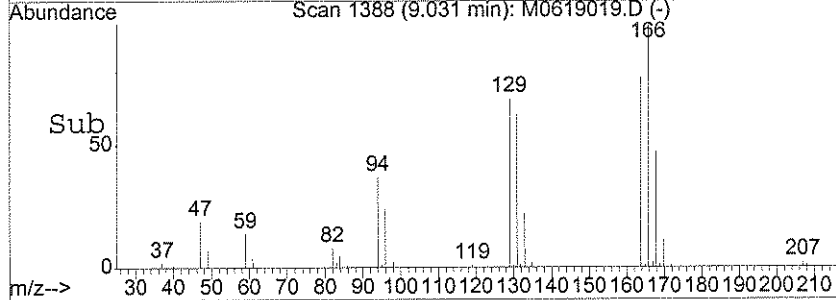
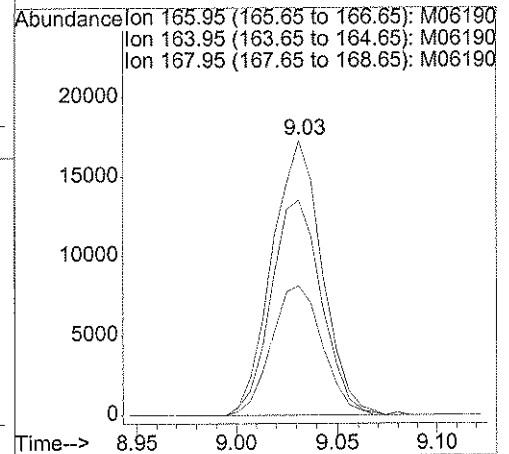
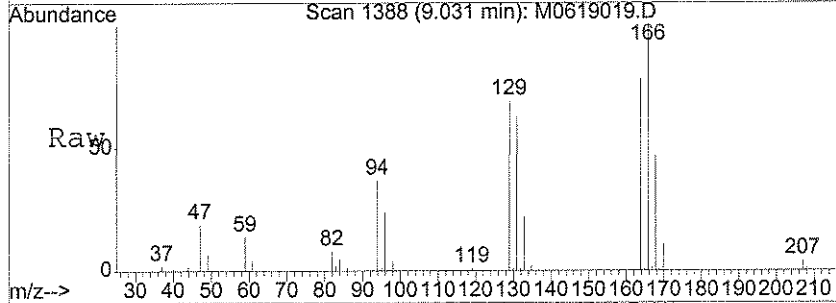
#45  
 Trichloroethene  
 Concen: 0.73 ug/l  
 RT: 7.16 min Scan# 1080  
 Delta R.T. -0.00 min  
 Lab File: M0619019.D  
 Acq: 19 Jun 2007 17:33

Tgt Ion	Resp	Lower	Upper
130	100		
132	98.1	80.2	120.2
95	92.3	75.8	115.8



#60  
 Tetrachloroethene  
 Concen: 3.08 ug/l  
 RT: 9.03 min Scan# 1388  
 Delta R.T. 0.01 min  
 Lab File: M0619019.D  
 Acq: 19 Jun 2007 17:33

Tgt Ion	Resp	Lower	Upper
166	100		
164	78.5	65.6	98.4
168	48.0	41.1	61.7



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-004  
 Lab File ID: M0619020.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 18:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	1.4	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	2.0	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.76	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-004  
 Lab File ID: M0619020.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 18:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	6.5	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-004  
 Lab File ID: M0619020.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 18:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

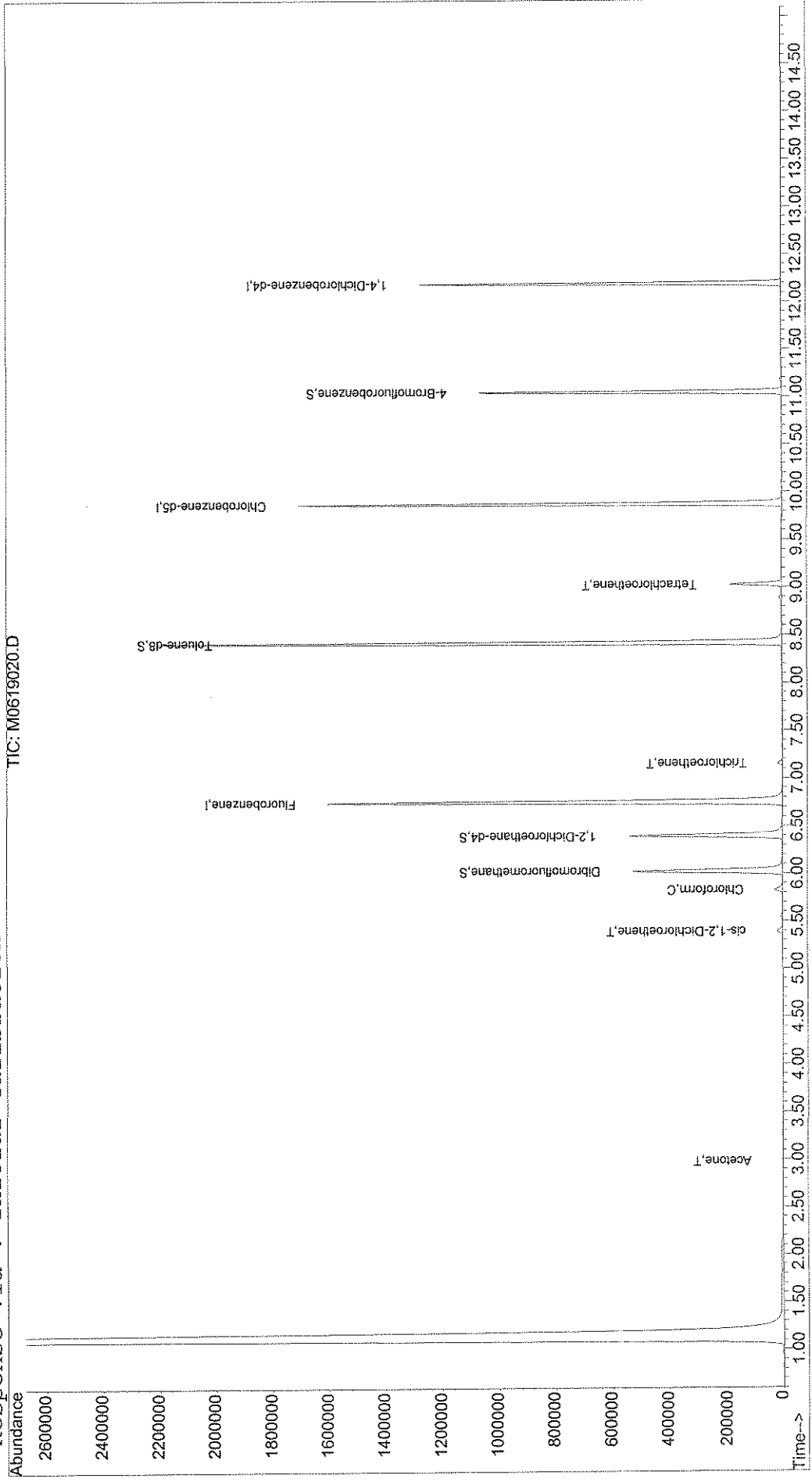
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619020.D Vial: 61  
Acq On : 19 Jun 2007 18:02 Operator: DGA  
Sample : JPL35-004 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 13:00 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619020.D  
 Acq On : 19 Jun 2007 18:02  
 Sample : JPL35-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:00 2007

Vial: 61  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1669332	50.00	ug/l	0.00 99.27%
54) Chlorobenzene-d5	9.87	117	989583	50.00	ug/l	0.00 99.73%
74) 1,4-Dichlorobenzene-d4	12.19	152	339350	50.00	ug/l	0.00 87.71%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	394833	52.21	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.42%
40) 1,2-Dichloroethane-d4	6.39	65	425087	51.95	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.90%
55) Toluene-d8	8.42	98	1544945	50.54	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.08%
76) 4-Bromofluorobenzene	11.04	95	359791	56.42	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	112.84%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.85	96	97	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	4660	2.54	ug/l #	76
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	59	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.49	84	387	N.D.		
19) trans-1,2-Dichloroethene	3.89	96	784	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.91	73	1665	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619020.D M8260W.M Mon Jun 25 13:00:52 2007

*[Handwritten Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619020.D  
 Acq On : 19 Jun 2007 18:02  
 Sample : JPL35-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:00 2007

Vial: 61  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	2108		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	5.39	96	12029	1.43	ug/l	96
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.70	41	70		N.D.	
34) Chloroform	5.83	83	26252	1.97	ug/l	98
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.99	56	64		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	761		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	6.61	43	64		Below Cal	# 1
45) Trichloroethene	7.15	130	6748	0.76	ug/l	96
46) Methylcyclohexane	7.30	83	209		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	365		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	542		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	9.02	97	89		N.D.	
60) Tetrachloroethene	9.03	166	61885	6.46	ug/l	95
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	527		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2189		N.D.	
66) Chlorobenzene	9.90	112	358		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0619020.D M8260W.M Mon Jun 25 13:00:53 2007

*J. Sufita*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619020.D  
 Acq On : 19 Jun 2007 18:02  
 Sample : JPL35-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:00 2007

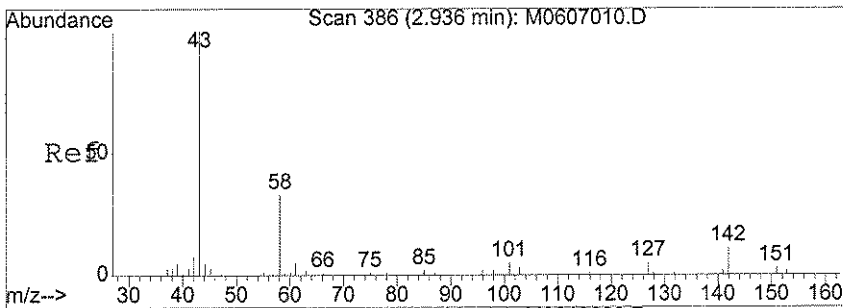
Vial: 61  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

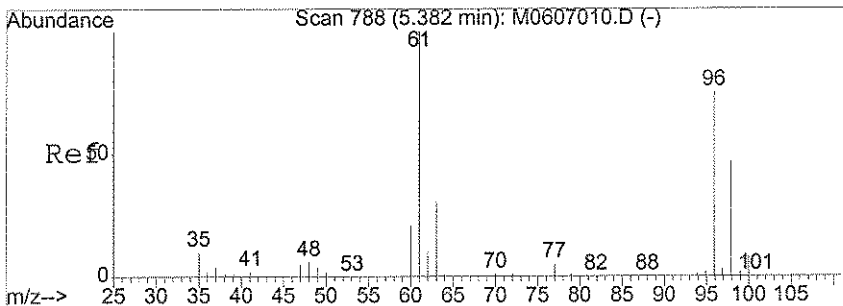
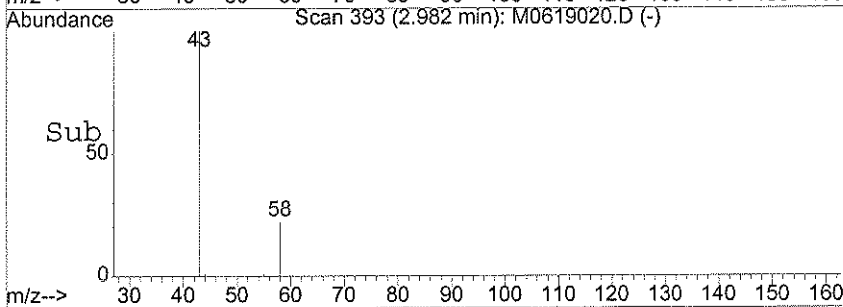
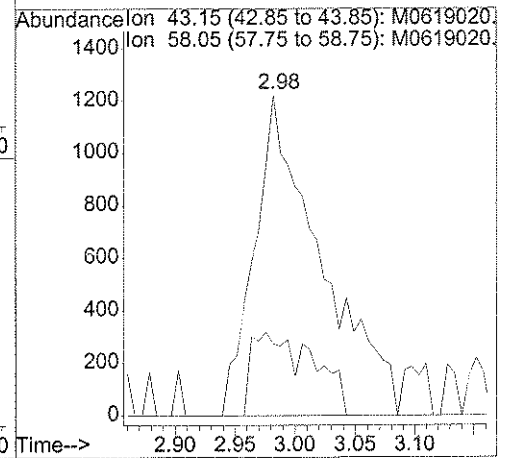
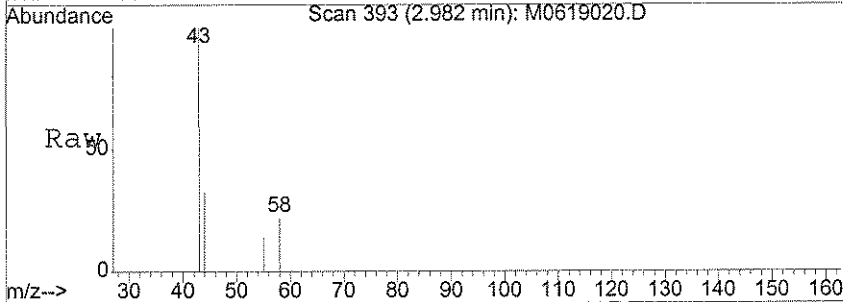
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.01	91	788		N.D.	
69) m,p-Xylene	10.12	106	1032		N.D.	
70) o-xylene	10.51	106	190		N.D.	
71) Styrene	10.54	104	115		N.D.	
72) Bromoform	10.76	173	218		N.D.	
73) Isopropylbenzene	10.87	105	121		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	610		N.D.	
81) 2-Chlorotoluene	11.35	91	56		N.D.	
82) 4-Chlorotoluene	11.48	91	214		N.D.	
83) 1,3,5-Trimethylbenzene	11.44	105	191		N.D.	
84) tert-Butylbenzene	11.77	119	57		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	229		N.D.	
86) sec-butylbenzene	12.00	105	435		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	142		N.D.	
88) 4-Isopropyltoluene	12.13	119	341		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	201		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	73		N.D.	
91) n-Butylbenzene	12.53	91	451		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



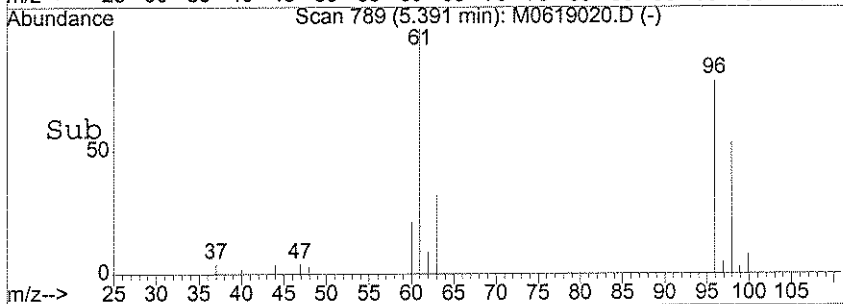
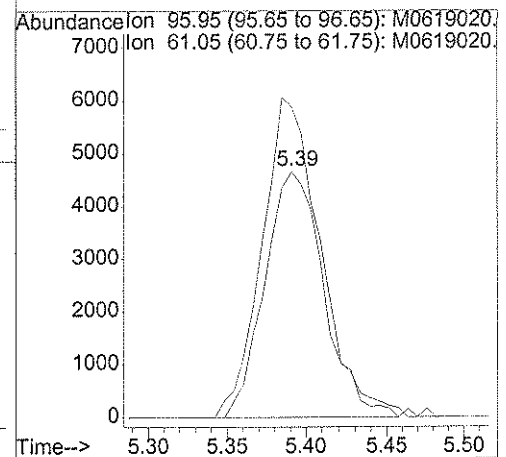
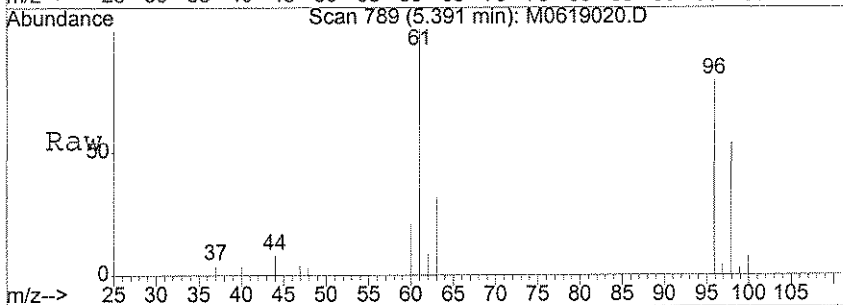
#11  
 Acetone  
 Concen: 2.54 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0619020.D  
 Acq: 19 Jun 2007 18:02

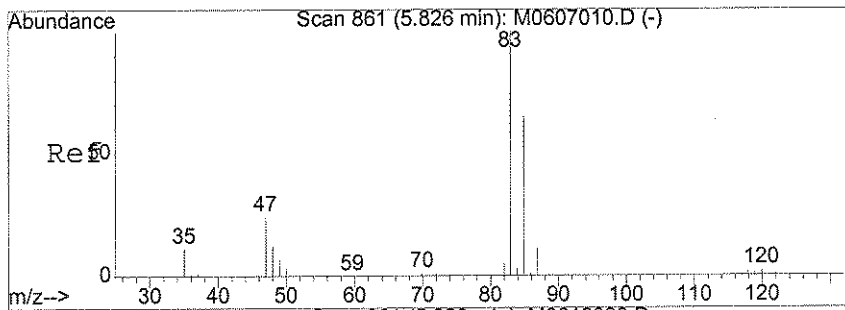
Tgt Ion	Resp	Lower	Upper
43	4660		
58	14.7	22.0	33.0#



#29  
 cis-1,2-Dichloroethene  
 Concen: 1.43 ug/l  
 RT: 5.39 min Scan# 789  
 Delta R.T. -0.00 min  
 Lab File: M0619020.D  
 Acq: 19 Jun 2007 18:02

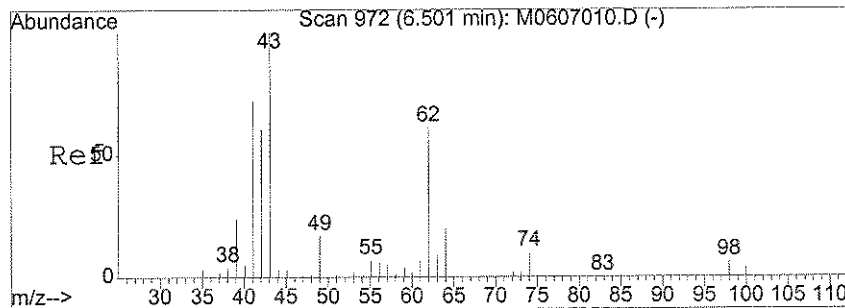
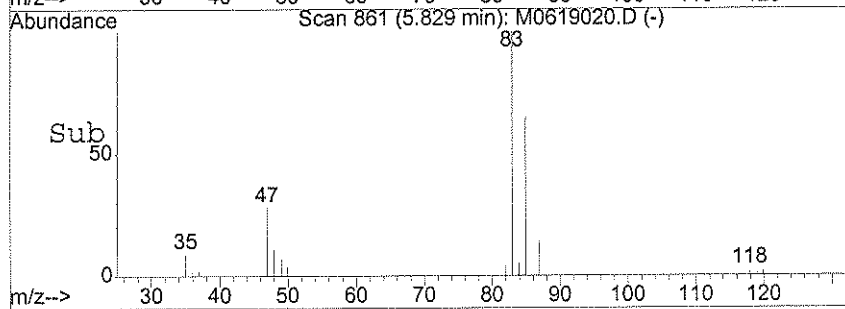
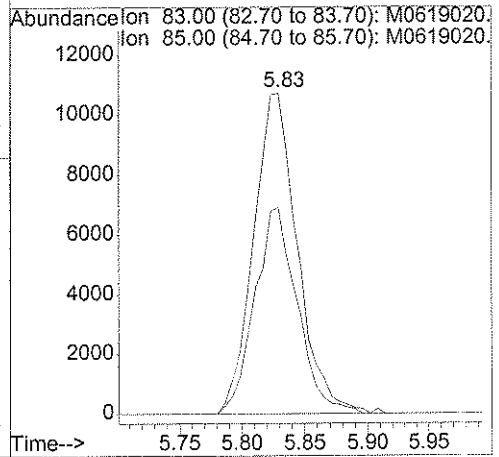
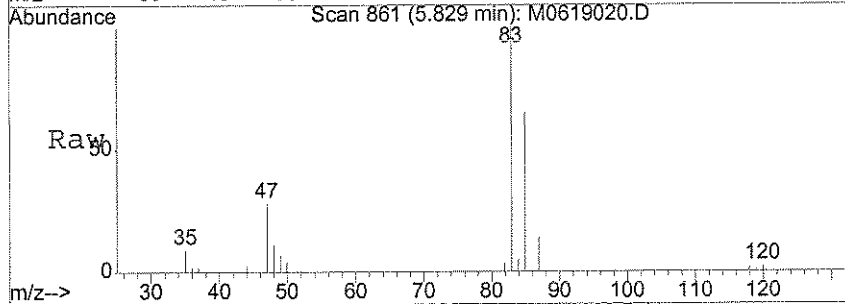
Tgt Ion	Resp	Lower	Upper
96	12029		
61	128.9	107.4	161.0





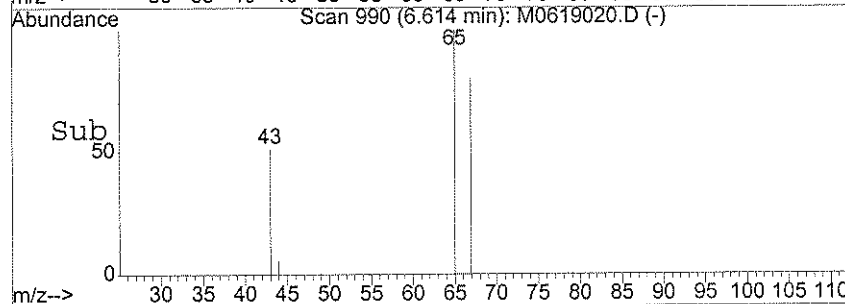
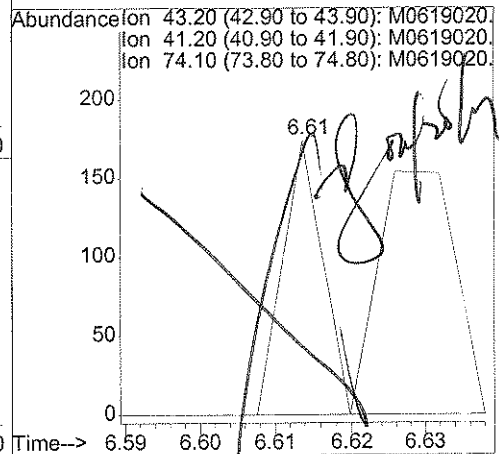
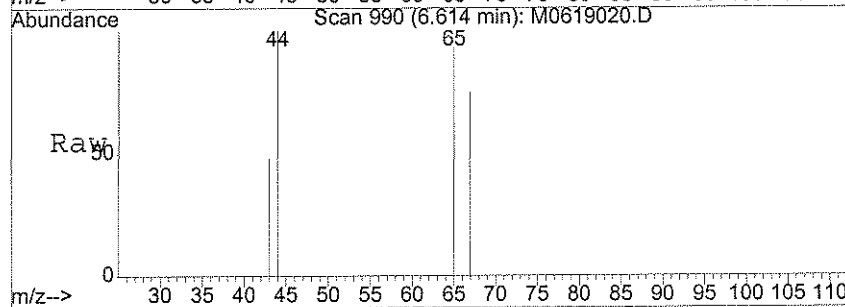
#34  
 Chloroform  
 Concen: 1.97 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. 0.00 min  
 Lab File: M0619020.D  
 Acq: 19 Jun 2007 18:02

Tgt Ion	Resp	Lower	Upper
83	26252		
83	100		
85	62.4	44.0	84.0

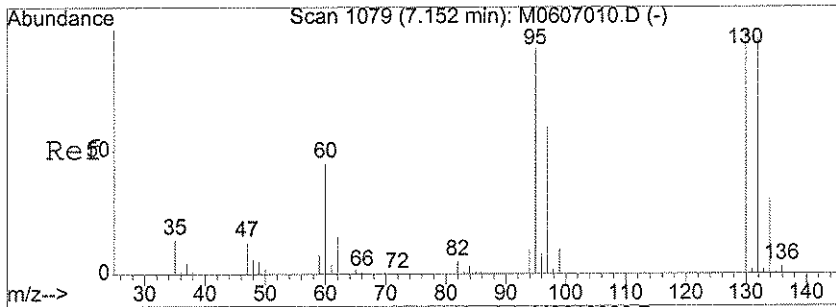


#44  
 Isobutanol  
 Concen: Below Cal  
 RT: 6.61 min Scan# 990  
 Delta R.T. 0.04 min  
 Lab File: M0619020.D  
 Acq: 19 Jun 2007 18:02

Tgt Ion	Resp	Lower	Upper
43	64		
43	100		
41	175.0	57.8	86.8#
74	0.0	10.2	15.2#

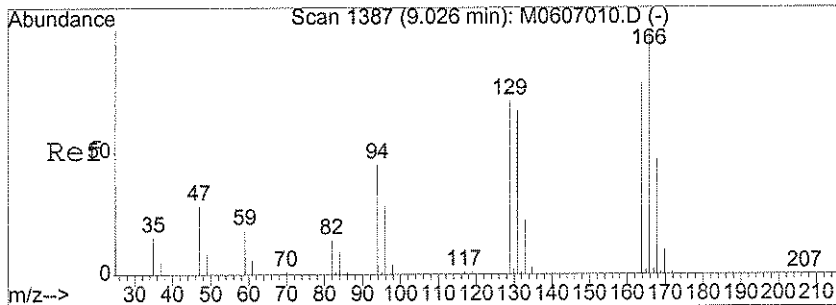
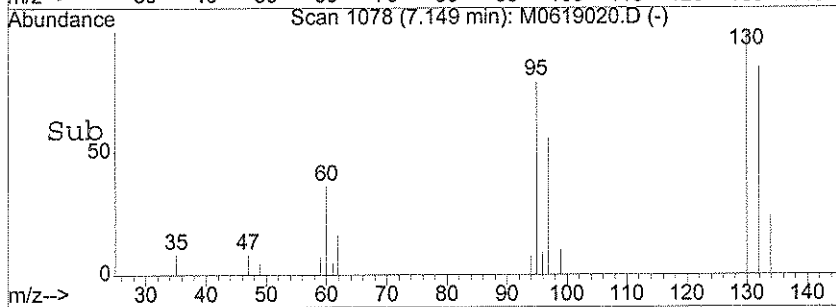
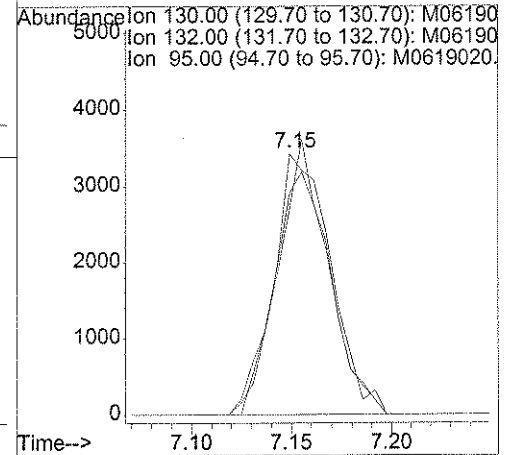
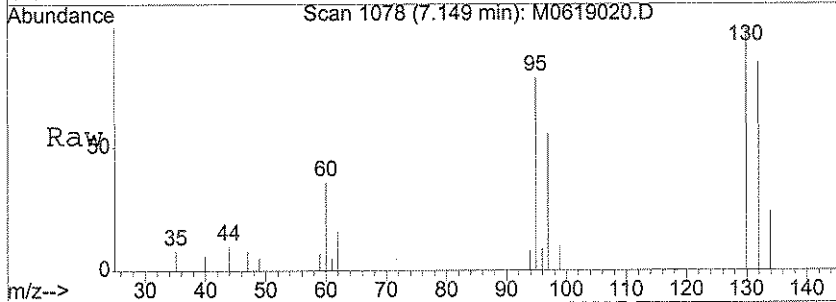






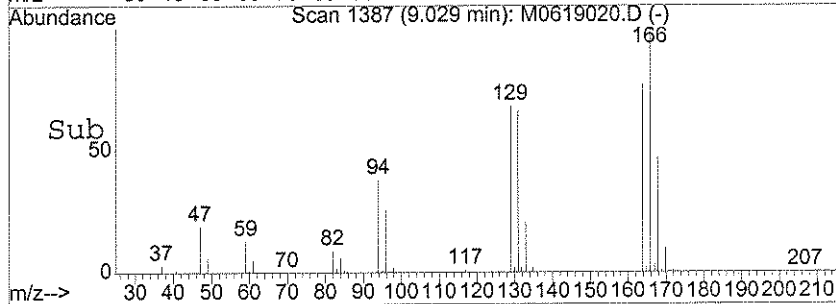
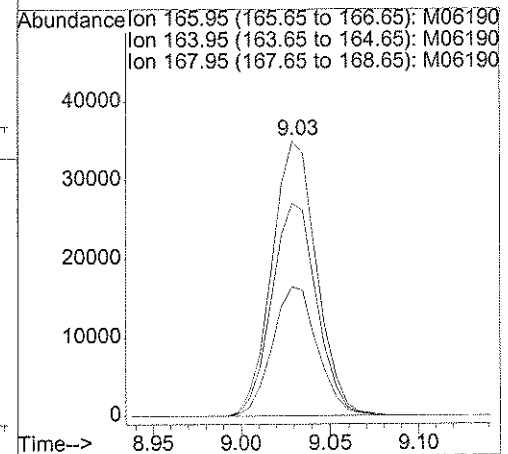
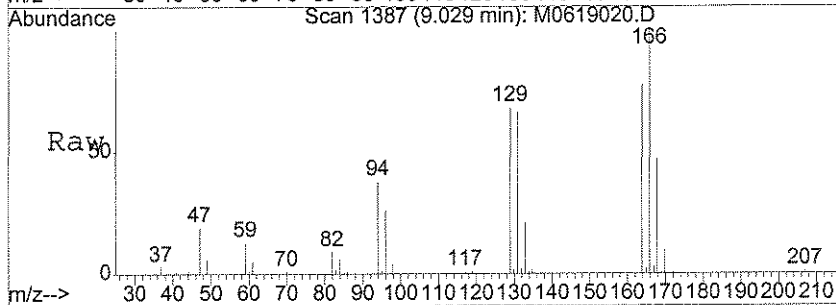
#45  
 Trichloroethene  
 Concen: 0.76 ug/l  
 RT: 7.15 min Scan# 1078  
 Delta R.T. -0.01 min  
 Lab File: M0619020.D  
 Acq: 19 Jun 2007 18:02

Tgt Ion	Resp	Lower	Upper
130	6748		
130	100		
132	93.3	80.2	120.2
95	95.1	75.8	115.8



#60  
 Tetrachloroethene  
 Concen: 6.46 ug/l  
 RT: 9.03 min Scan# 1387  
 Delta R.T. 0.00 min  
 Lab File: M0619020.D  
 Acq: 19 Jun 2007 18:02

Tgt Ion	Resp	Lower	Upper
166	61885		
166	100		
164	77.9	65.6	98.4
168	47.4	41.1	61.7



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-1

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-005  
 Lab File ID: M0619021.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 18:32  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.28	J
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.40	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL35-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 18:32

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-21-1

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-005  
 Lab File ID: M0619021.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 18:32  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

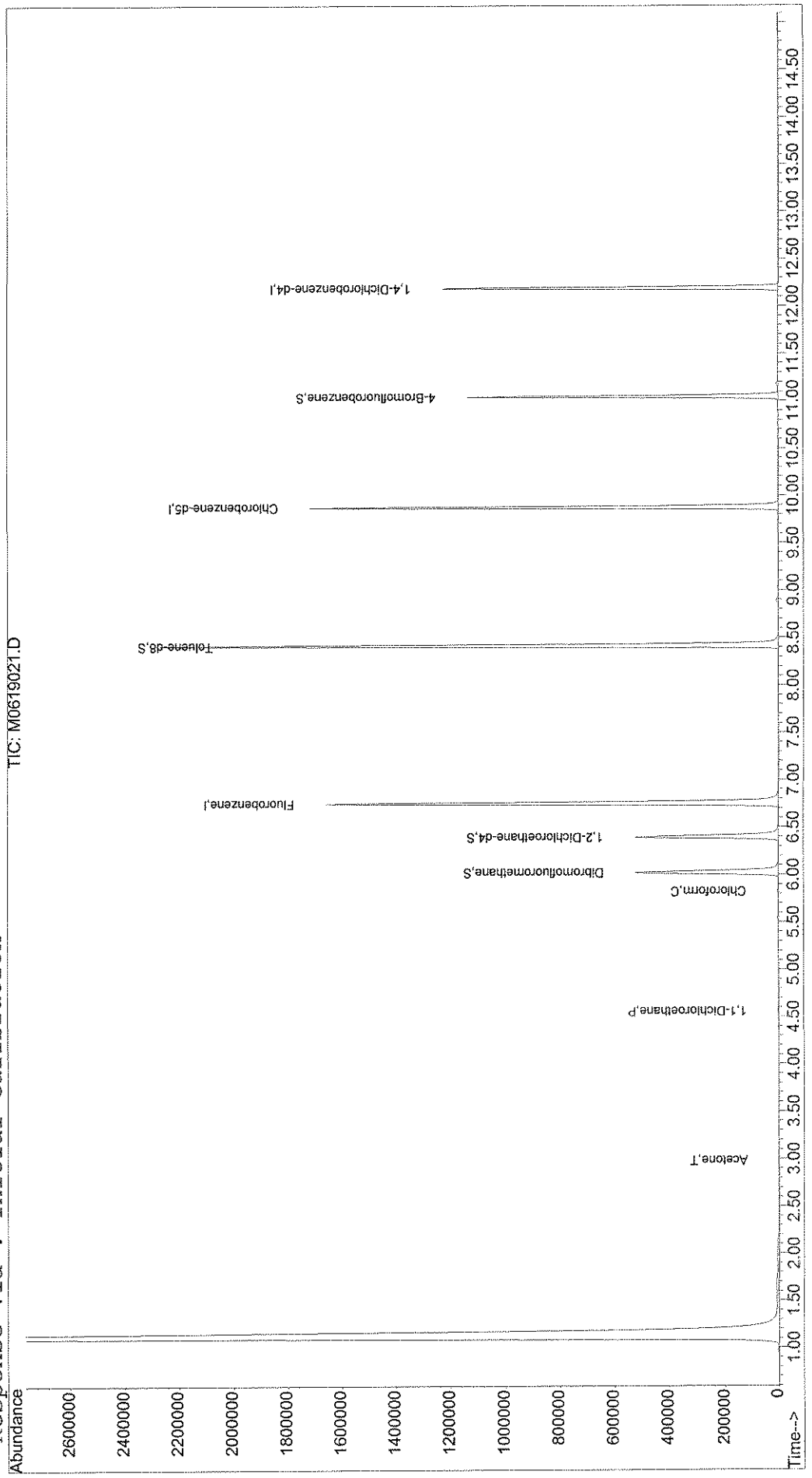
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619021.D  
Acq On : 19 Jun 2007 18:32 Vial: 62  
Sample : JPL35-005 Operator: DGA  
Misc : #2 5ml +IS/SS(524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 25 13:02 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619021.D  
 Acq On : 19 Jun 2007 18:32  
 Sample : JPL35-005  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:02 2007

Vial: 62  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1671309	50.00	ug/l	0.00 99.39%
54) Chlorobenzene-d5	9.88	117	1003434	50.00	ug/l	0.00 101.12%
74) 1,4-Dichlorobenzene-d4	12.19	152	343354	50.00	ug/l	0.00 88.74%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	396473	52.37	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.74%
40) 1,2-Dichloroethane-d4	6.40	65	425840	51.98	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.96%
55) Toluene-d8	8.42	98	1556084	50.21	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.42%
76) 4-Bromofluorobenzene	11.04	95	368682	57.14	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.28%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.85	96	56	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	3128	1.70	ug/l #	86
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.41	43	137	N.D.		
18) Methylene Chloride	3.51	84	283	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.91	73	55	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619021.D M8260W.M Mon Jun 25 13:02:17 2007

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619021.D  
 Acq On : 19 Jun 2007 18:32  
 Sample : JPL35-005  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:02 2007

Vial: 62  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	4294	0.28	ug/l	89
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.70	41	80	N.D.		
34) Chloroform	5.83	83	5338	0.40	ug/l	95
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.01	56	61	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.41	78	740	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.	d	
45) Trichloroethene	7.16	130	1033	N.D.		
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.74	83	291	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.48	92	404	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	9.03	166	1614	N.D.		
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	9.19	43	70	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.87	91	2178	N.D.		
66) Chlorobenzene	9.90	112	236	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619021.D M8260W.M Mon Jun 25 13:02:18 2007

*[Handwritten Signature]*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619021.D  
 Acq On : 19 Jun 2007 18:32  
 Sample : JPL35-005  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:02 2007

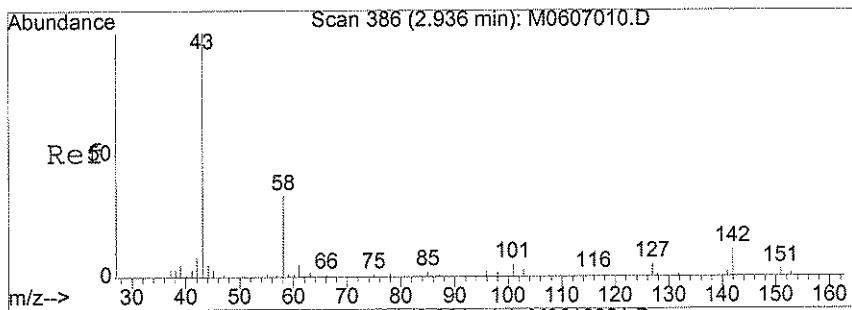
Vial: 62  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

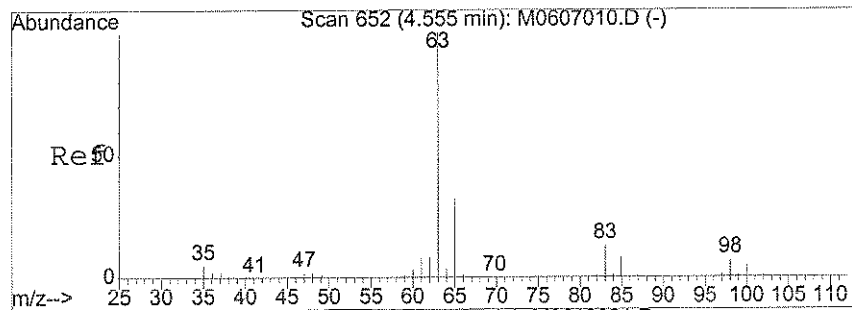
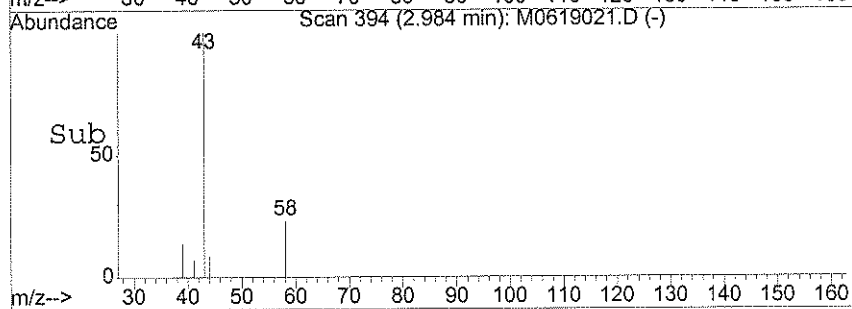
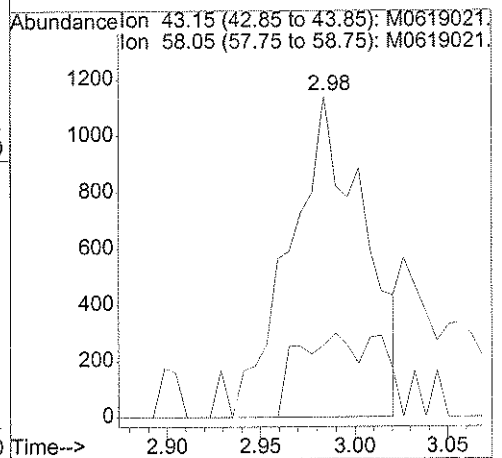
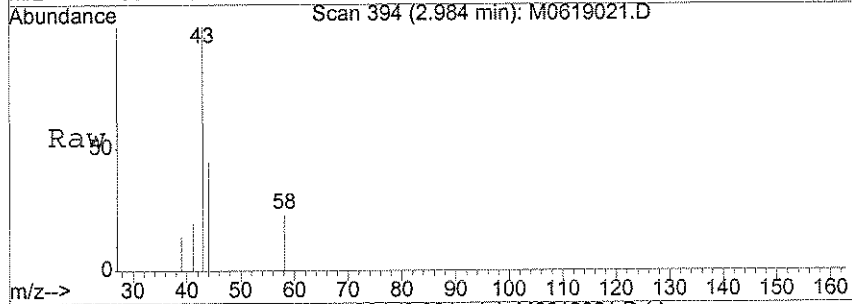
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	424		N.D.	
69) m,p-Xylene	10.11	106	438		N.D.	
70) o-xylene	10.52	106	55		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	227		N.D.	
73) Isopropylbenzene	10.87	105	66		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	472		N.D.	
81) 2-Chlorotoluene	11.39	91	57		N.D.	
82) 4-Chlorotoluene	11.48	91	162		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	205		N.D.	
84) tert-Butylbenzene	11.77	119	238		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	261		N.D.	
86) sec-butylbenzene	11.99	105	351		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	211		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.53	91	440		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	





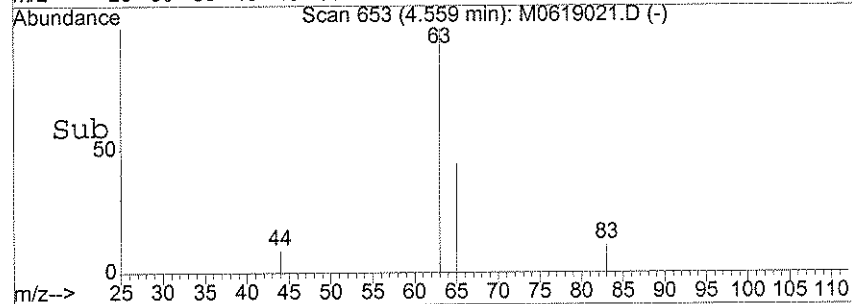
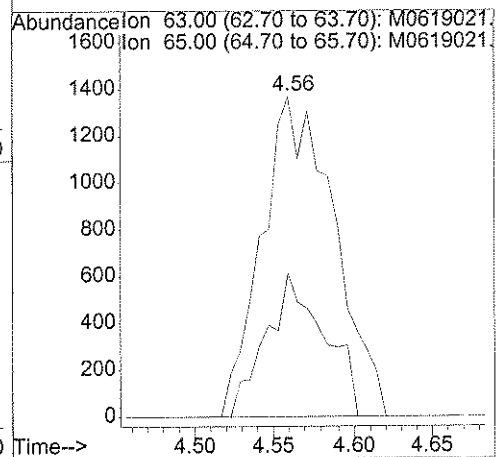
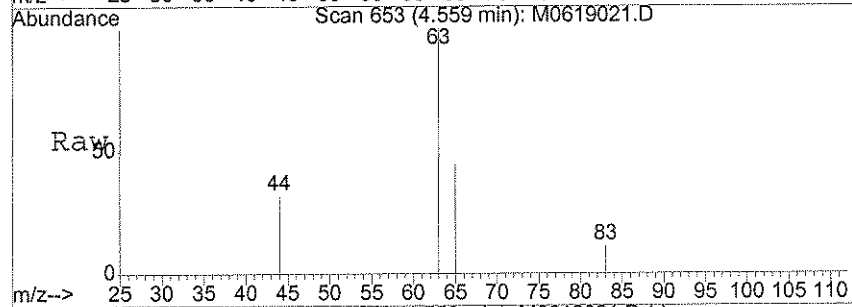
#11  
 Acetone  
 Concen: 1.70 ug/l  
 RT: 2.98 min Scan# 394  
 Delta R.T. -0.01 min  
 Lab File: M0619021.D  
 Acq: 19 Jun 2007 18:32

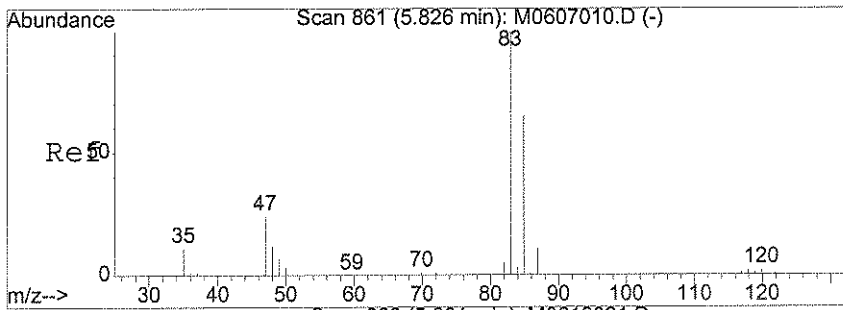
Tgt Ion	Resp	Lower	Upper
43	3128		
58	20.2	22.0	33.0#



#23  
 1,1-Dichloroethane  
 Concen: 0.28 ug/l  
 RT: 4.56 min Scan# 653  
 Delta R.T. -0.01 min  
 Lab File: M0619021.D  
 Acq: 19 Jun 2007 18:32

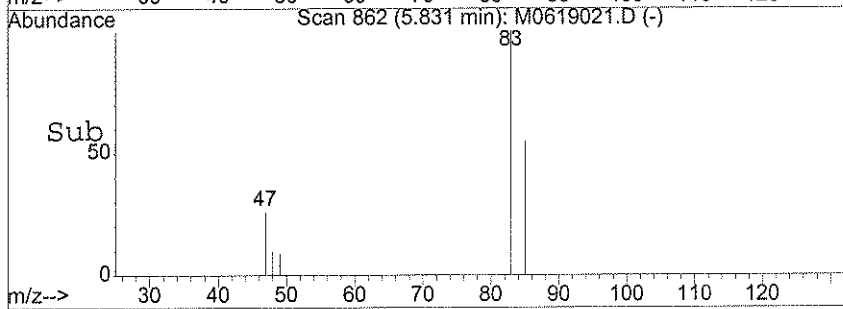
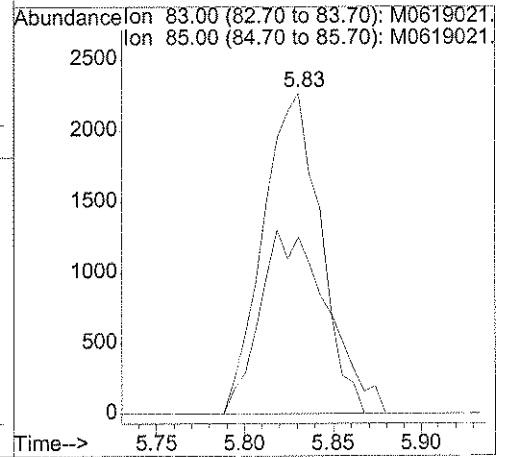
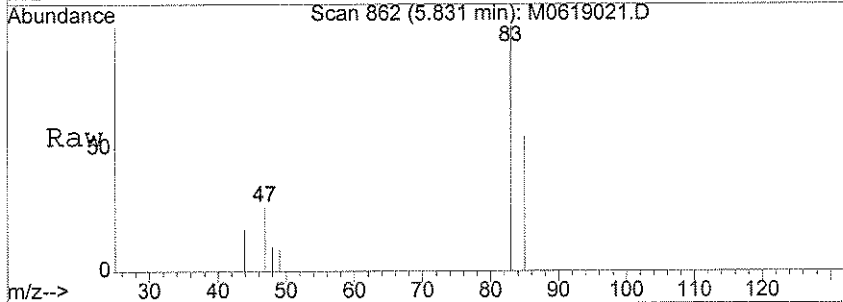
Tgt Ion	Resp	Lower	Upper
63	4294		
65	36.1	10.2	50.2





#34  
 Chloroform  
 Concen: 0.40 ug/l  
 RT: 5.83 min Scan# 862  
 Delta R.T. 0.01 min  
 Lab File: M0619021.D  
 Acq: 19 Jun 2007 18:32

Tgt Ion:	83	Resp:	5338
Ion Ratio	Lower	Upper	
83	100		
85	60.0	44.0	84.0



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-1-2Q07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-006  
 Lab File ID: M0619022.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 19:01  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	1.4	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.9	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.74	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-1-2Q07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-006  
 Lab File ID: M0619022.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 19:01  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	6.3	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-1-2Q07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-006  
 Lab File ID: M0619022.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 19:01  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

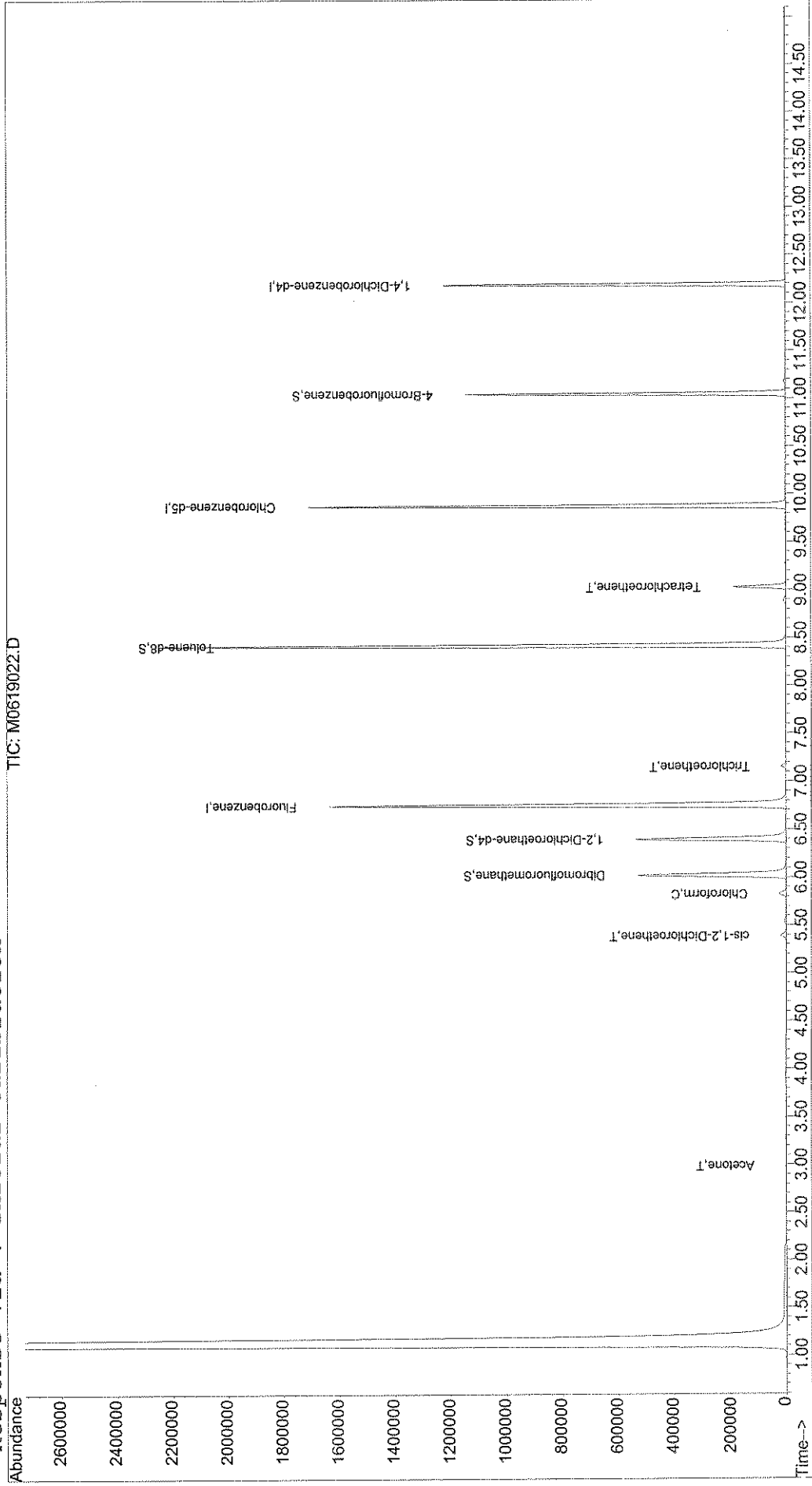
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619022.D  
Acq On : 19 Jun 2007 19:01 Vial: 63  
Sample : JPL35-006 Operator: DGA  
Misc : #4 5ml +IS/SS(524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 25 13:04 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619022.D  
 Acq On : 19 Jun 2007 19:01  
 Sample : JPL35-006  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:04 2007

Vial: 63  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1679682	50.00	ug/l	0.00	99.89%
54) Chlorobenzene-d5	9.88	117	1006702	50.00	ug/l	0.00	101.45%
74) 1,4-Dichlorobenzene-d4	12.19	152	342052	50.00	ug/l	0.00	88.41%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	397615	52.26	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.52%	
40) 1,2-Dichloroethane-d4	6.40	65	430952	52.34	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.68%	
55) Toluene-d8	8.42	98	1567079	50.40	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.80%	
76) 4-Bromofluorobenzene	11.04	95	369712	57.51	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.02%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.92	96	73	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	4705	2.55 ug/l	#	77
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	123	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.42	43	176	N.D.		
18) Methylene Chloride	3.50	84	678	N.D.		
19) trans-1,2-Dichloroethene	3.90	96	236	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.93	73	3843	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619022.D M8260W.M Mon Jun 25 13:04:32 2007

*[Handwritten Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619022.D  
 Acq On : 19 Jun 2007 19:01  
 Sample : JPL35-006  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:04 2007

Vial: 63  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.57	63	2048	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	5.39	96	12209	1.44	ug/l	92
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.84	41	332	N.D.		
34) Chloroform	5.83	83	25846	1.93	ug/l	100
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.00	56	59	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.41	78	954	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.	d	
45) Trichloroethene	7.15	130	6591	0.74	ug/l	98
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.73	83	447	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.48	92	524	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	9.03	97	272	N.D.		
60) Tetrachloroethene	9.03	166	61013	6.27	ug/l	94
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	9.16	43	59	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.87	91	2241	N.D.		
66) Chlorobenzene	9.90	112	449	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619022.D M8260W.M Mon Jun 25 13:04:32 2007

*J. [Signature]*  
 Page 2



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619022.D  
 Acq On : 19 Jun 2007 19:01  
 Sample : JPL35-006  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:04 2007

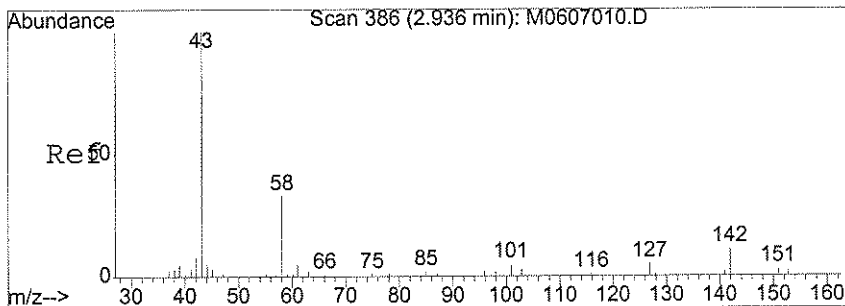
Vial: 63  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

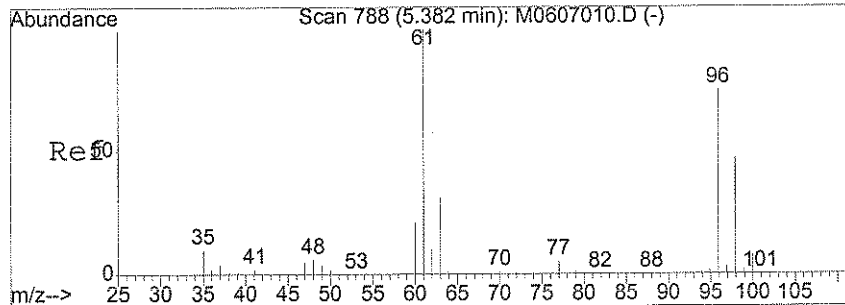
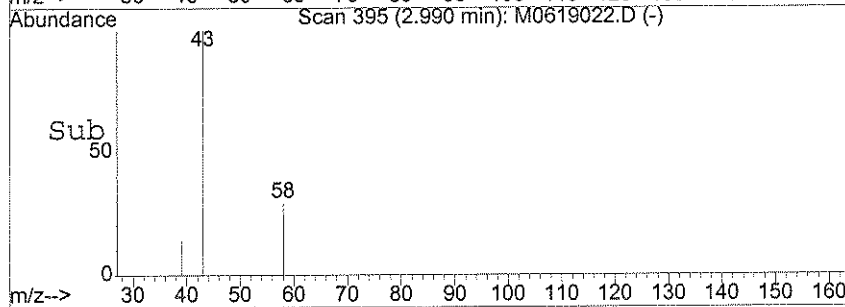
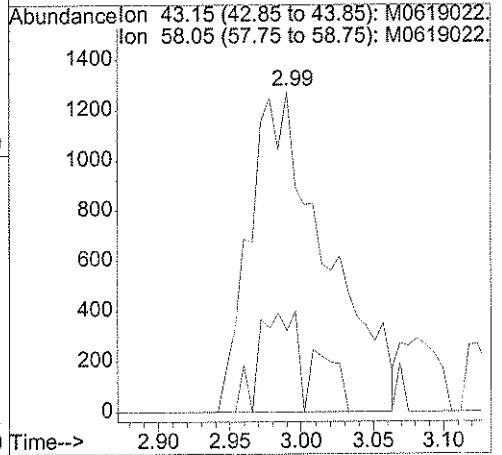
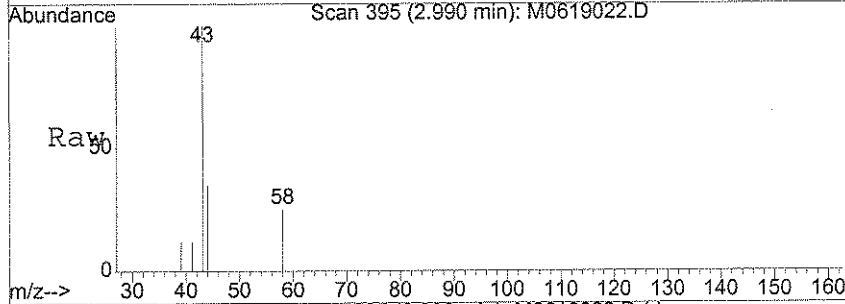
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	659		N.D.	
69) m,p-Xylene	10.11	106	719		N.D.	
70) o-xylene	10.51	106	62		N.D.	
71) Styrene	10.53	104	58		N.D.	
72) Bromoform	10.75	173	244		N.D.	
73) Isopropylbenzene	10.87	105	130		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	588		N.D.	
81) 2-Chlorotoluene	11.28	91	588		N.D.	
82) 4-Chlorotoluene	11.48	91	223		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	135		N.D.	
84) tert-Butylbenzene	11.78	119	104		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	72		N.D.	
86) sec-butylbenzene	11.99	105	347		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	120		N.D.	
88) 4-Isopropyltoluene	12.13	119	338		N.D.	
89) 1,4-Dichlorobenzene	12.12	146	120		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	694		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



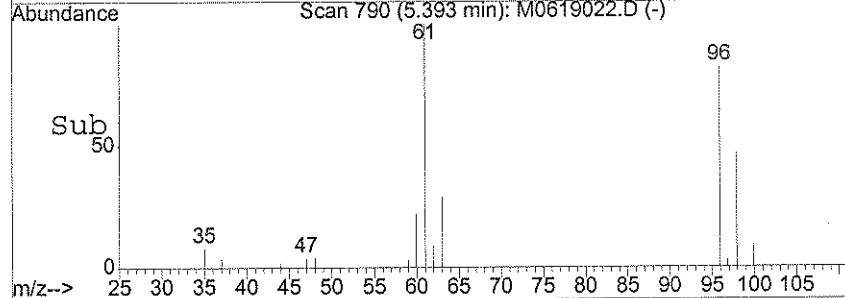
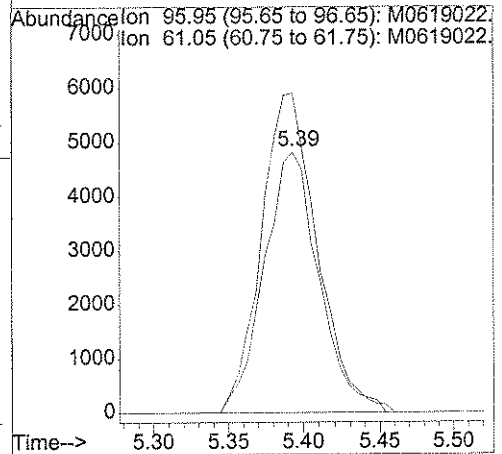
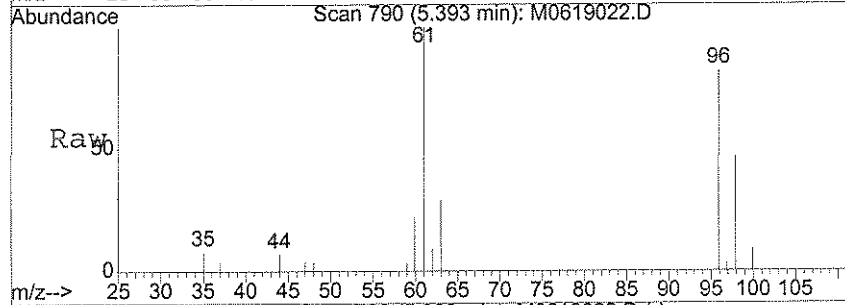
#11  
 Acetone  
 Concen: 2.55 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. -0.00 min  
 Lab File: M0619022.D  
 Acq: 19 Jun 2007 19:01

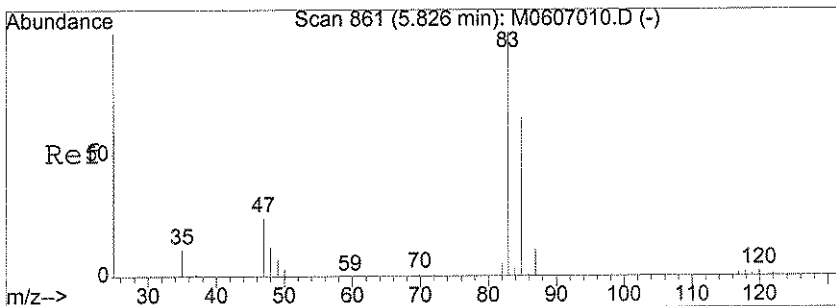
Tgt Ion: 43 Resp: 4705  
 Ion Ratio Lower Upper  
 43 100  
 58 15.5 22.0 33.0#



#29  
 cis-1,2-Dichloroethene  
 Concen: 1.44 ug/l  
 RT: 5.39 min Scan# 790  
 Delta R.T. -0.00 min  
 Lab File: M0619022.D  
 Acq: 19 Jun 2007 19:01

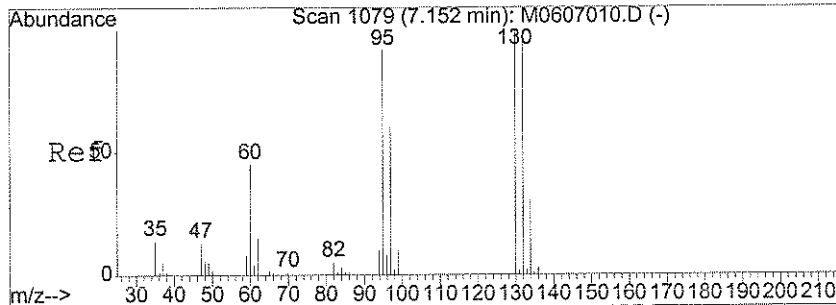
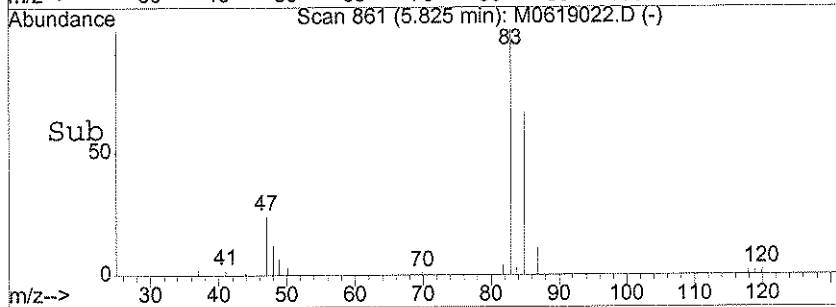
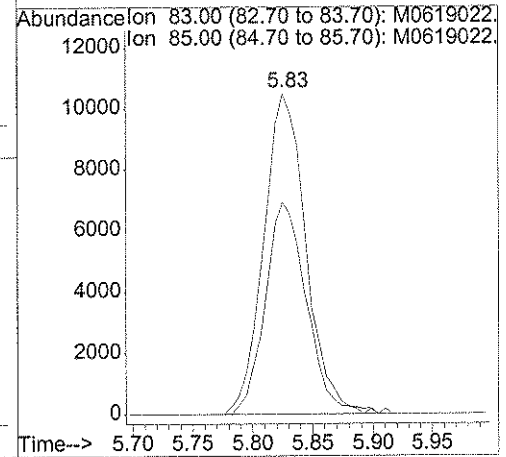
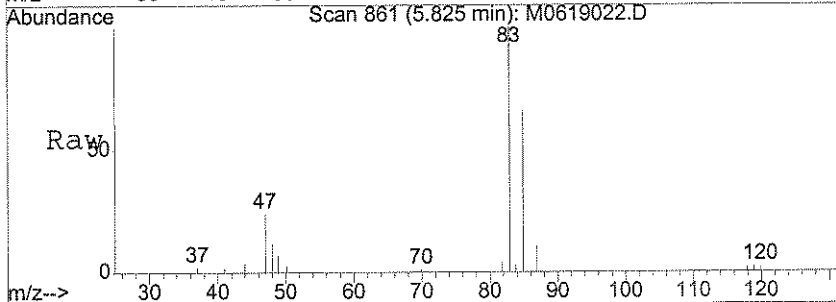
Tgt Ion: 96 Resp: 12209  
 Ion Ratio Lower Upper  
 96 100  
 61 124.8 107.4 161.0





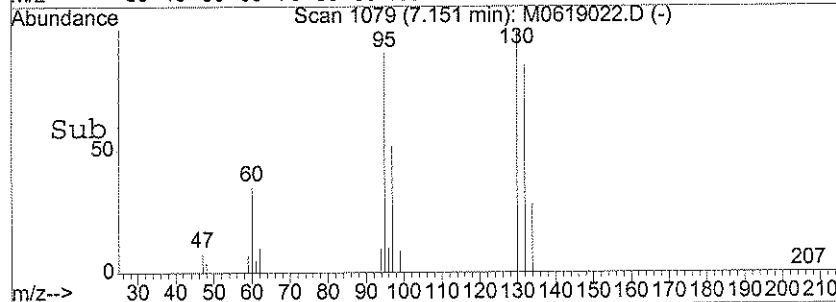
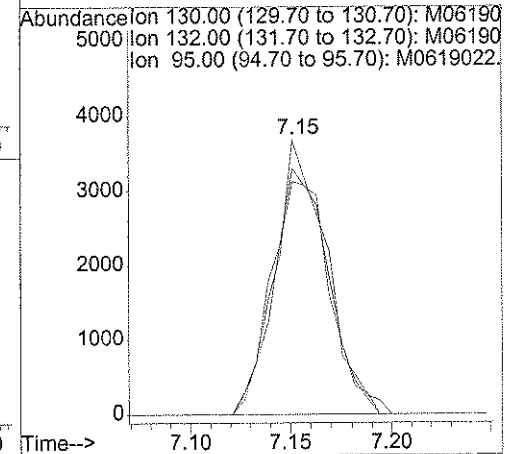
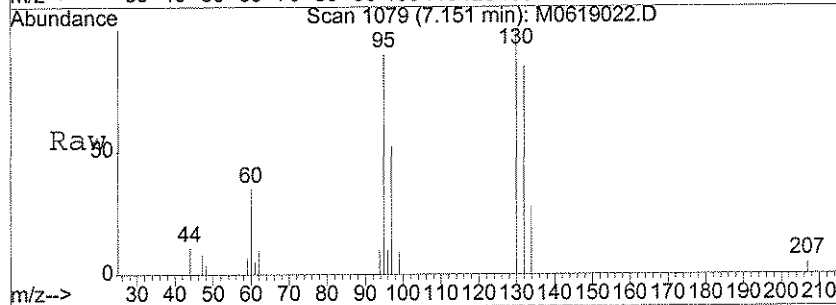
#34  
 Chloroform  
 Concen: 1.93 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. -0.00 min  
 Lab File: M0619022.D  
 Acq: 19 Jun 2007 19:01

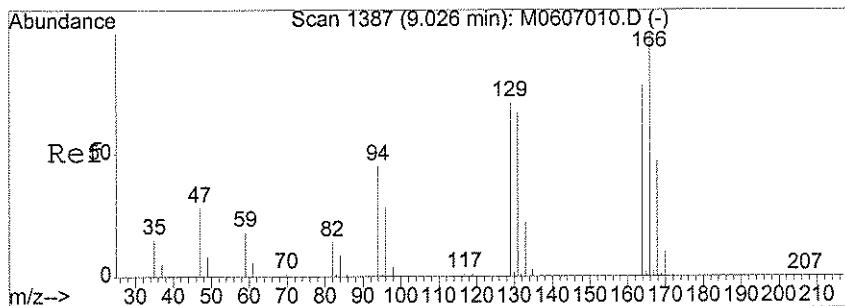
Tgt Ion	Resp	Lower	Upper
83	25846		
85	64.1	44.0	84.0



#45  
 Trichloroethene  
 Concen: 0.74 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.01 min  
 Lab File: M0619022.D  
 Acq: 19 Jun 2007 19:01

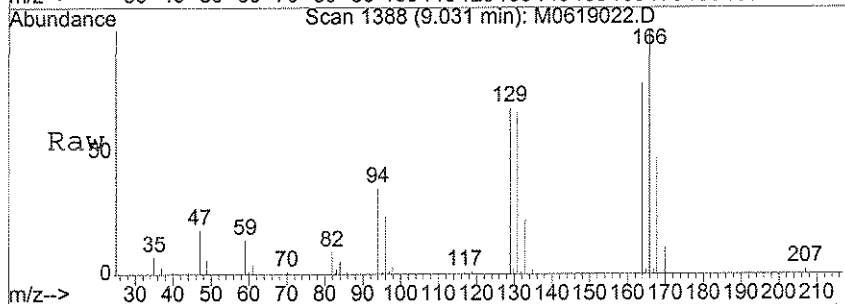
Tgt Ion	Resp	Lower	Upper
130	6591		
132	97.0	80.2	120.2
95	94.2	75.8	115.8



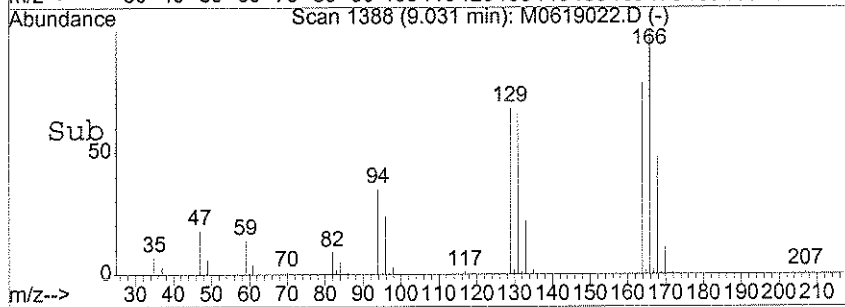
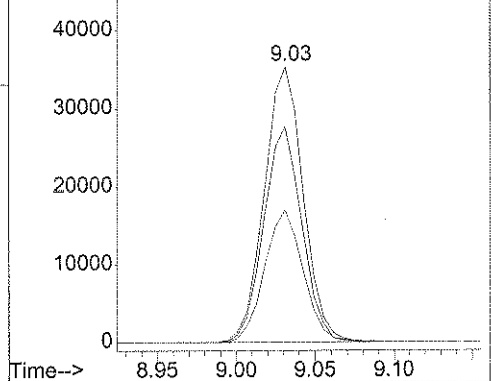


#60  
 Tetrachloroethene  
 Concen: 6.27 ug/l  
 RT: 9.03 min Scan# 1388  
 Delta R.T. 0.01 min  
 Lab File: M0619022.D  
 Acq: 19 Jun 2007 19:01

Tgt Ion	Resp	Lower	Upper
166	61013		
166	100		
164	76.8	65.6	98.4
168	47.5	41.1	61.7



Abundance Ion 165.95 (165.65 to 166.65): M06190  
 Ion 163.95 (163.65 to 164.65): M06190  
 Ion 167.95 (167.65 to 168.65): M06190



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-007  
 Lab File ID: M0619023.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 19:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-007  
 Lab File ID: M0619023.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 19:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-007  
 Lab File ID: M0619023.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 19:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

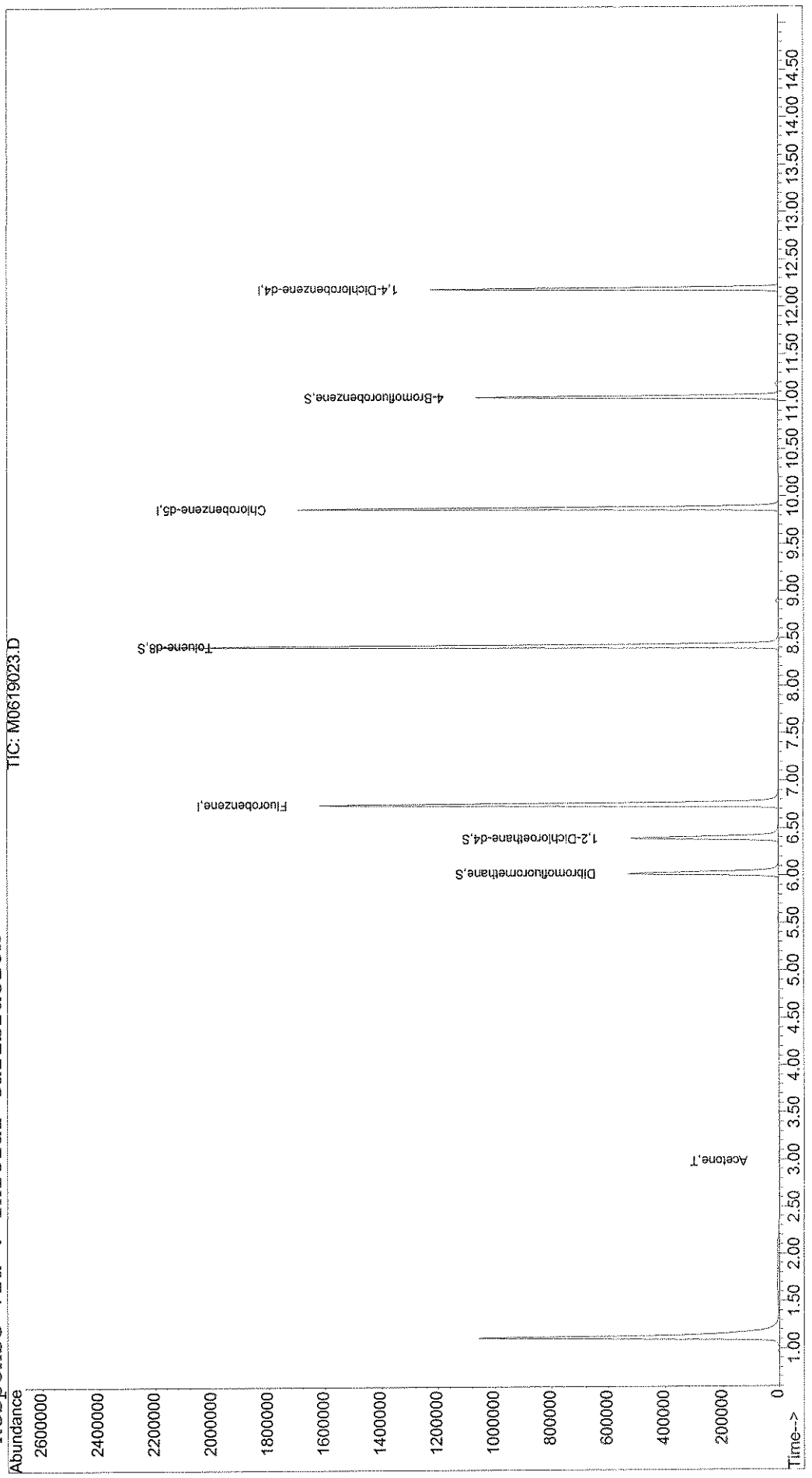
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619023.D  
Acq On : 19 Jun 2007 19:31  
Sample : JPL35-007  
Misc : #3 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 25 13:06 2007  
Vial: 64  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619023.D  
 Acq On : 19 Jun 2007 19:31  
 Sample : JPL35-007  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:06 2007

Vial: 64  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1661996	50.00	ug/l	0.00 98.84%
54) Chlorobenzene-d5	9.87	117	985936	50.00	ug/l	0.00 99.36%
74) 1,4-Dichlorobenzene-d4	12.19	152	337110	50.00	ug/l	0.00 87.13%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	395589	52.54	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.08%
40) 1,2-Dichloroethane-d4	6.39	65	423867	52.03	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.06%
55) Toluene-d8	8.42	98	1540014	50.57	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.14%
76) 4-Bromofluorobenzene	11.05	95	360654	56.93	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	113.86%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.88	96	63	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	2.72	56	57	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	3059	1.67	ug/l	93
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.42	43	197	N.D.		
18) Methylene Chloride	3.49	84	540	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619023.D M8260W.M Mon Jun 25 13:06:37 2007

*[Handwritten signature]*  
 Page 11

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619023.D  
 Acq On : 19 Jun 2007 19:31  
 Sample : JPL35-007  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:06 2007

Vial: 64  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.71	41	73		N.D.	
34) Chloroform	5.83	83	211		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.98	56	56		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	695		N.D.	
42) 1,2-Dichloroethane	6.39	62	150		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.31	83	58		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	8.36	43	504		N.D.	
56) Toluene	8.41	92	222		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	179		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.19	43	208		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2211		N.D.	
66) Chlorobenzene	9.90	112	125		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

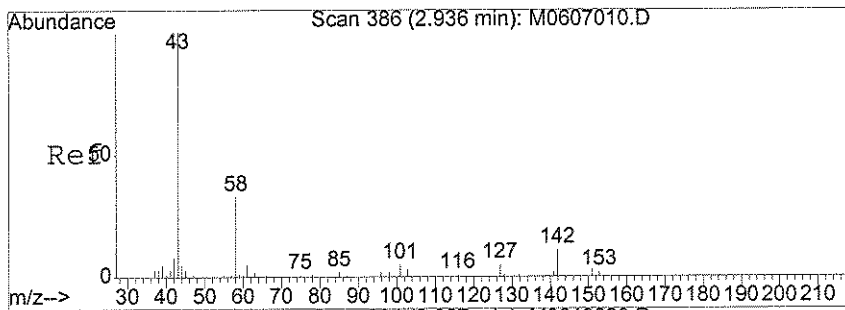
Data File : X:\MSVOA\MOBY\061907\M0619023.D  
 Acq On : 19 Jun 2007 19:31  
 Sample : JPL35-007  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:06 2007

Vial: 64  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

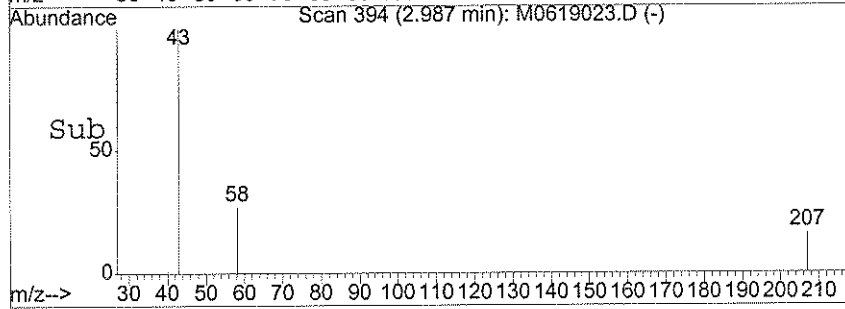
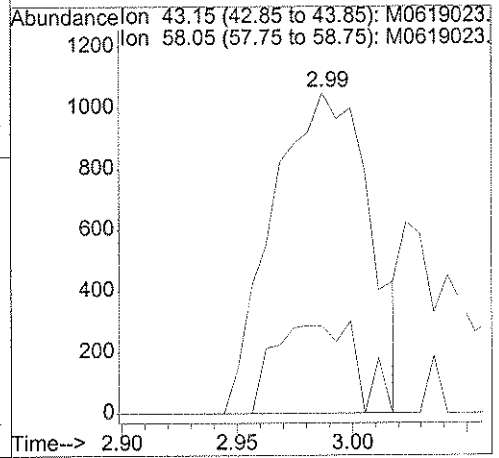
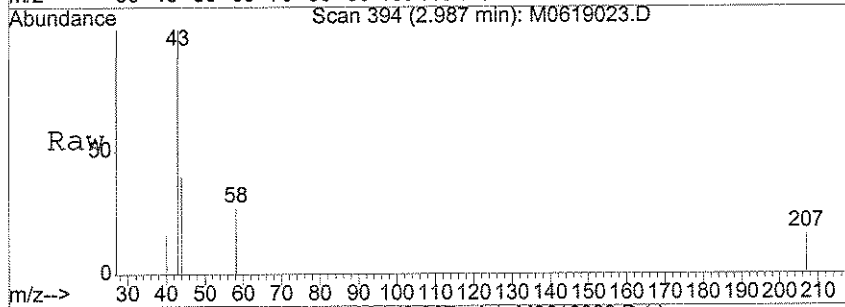
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	465		N.D.	
69) m,p-Xylene	10.11	106	59		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.74	173	214		N.D.	
73) Isopropylbenzene	10.88	105	149		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	340		N.D.	
81) 2-Chlorotoluene	11.38	91	73		N.D.	
82) 4-Chlorotoluene	11.48	91	212		N.D.	
83) 1,3,5-Trimethylbenzene	11.44	105	60		N.D.	
84) tert-Butylbenzene	11.77	119	68		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	123		N.D.	
86) sec-butylbenzene	11.98	105	224		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	232		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	380		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



#11  
 Acetone  
 Concen: 1.67 ug/l  
 RT: 2.99 min Scan# 394  
 Delta R.T. -0.00 min  
 Lab File: M0619023.D  
 Acq: 19 Jun 2007 19:31

Tgt Ion: 43 Resp: 3059  
 Ion Ratio Lower Upper  
 43 100  
 58 23.9 22.0 33.0



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-008  
 Lab File ID: M0619015.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 15:27  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.1	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-008  
 Lab File ID: M0619015.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 15:27  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,1,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL35  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-008  
 Lab File ID: M0619015.D  
 Date Collected: 06/12/2007  
 Date/Time Analyzed: 06/19/2007 15:27  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

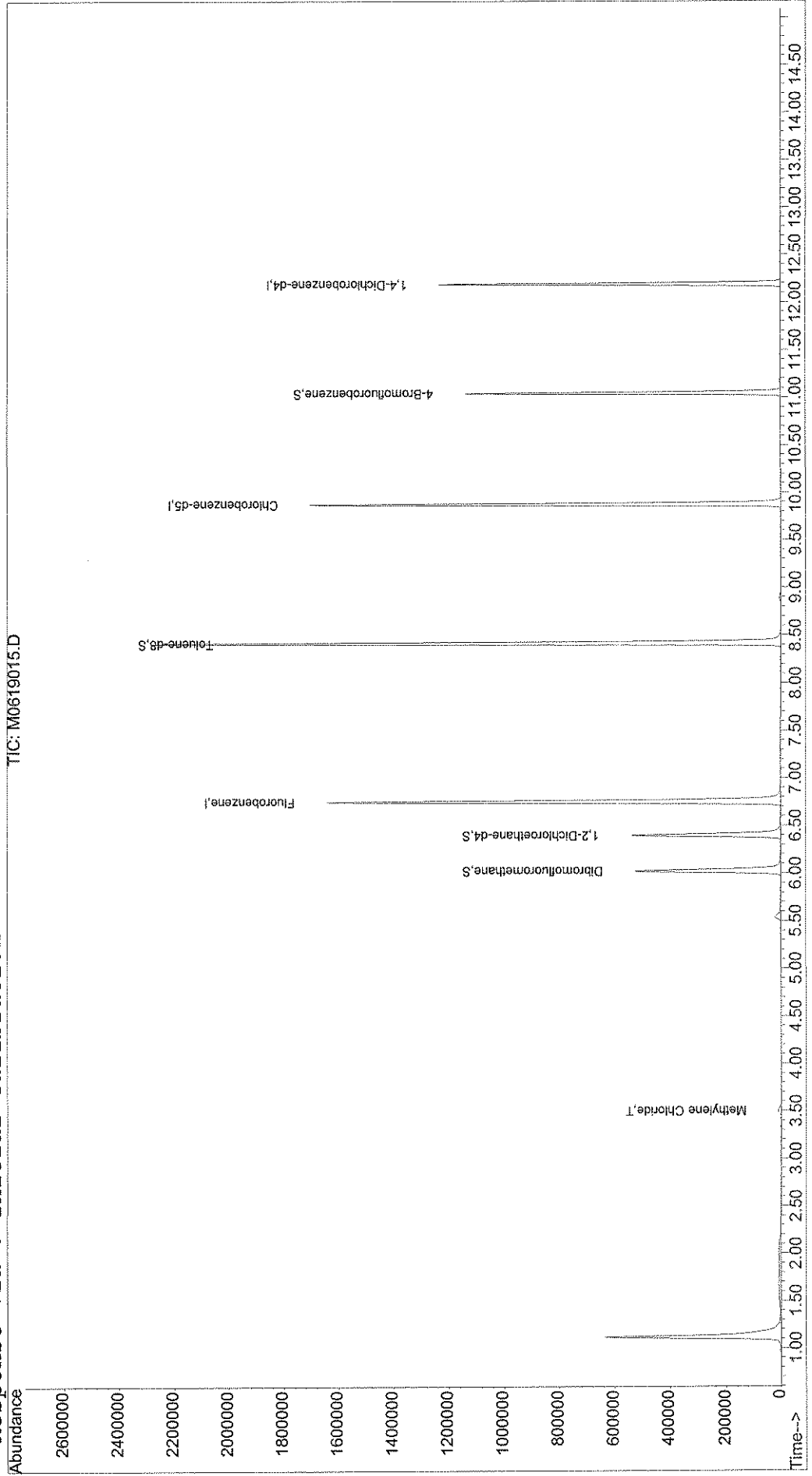
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619015.D Vial: 56  
Acq On : 19 Jun 2007 15:27 Operator: DGA  
Sample : JPL35-008 Inst : MOBY  
Misc : #1 5ml +IS/SS (524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:43 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619015.D  
 Acq On : 19 Jun 2007 15:27  
 Sample : JPL35-008  
 Misc : #1 5ml +IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:43 2007

Vial: 56  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1680588	50.00	ug/l	0.00	99.94%
54) Chlorobenzene-d5	9.88	117	1006684	50.00	ug/l	0.00	101.45%
74) 1,4-Dichlorobenzene-d4	12.19	152	341748	50.00	ug/l	0.00	88.33%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	401983	52.80	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.60%	
40) 1,2-Dichloroethane-d4	6.40	65	426954	51.83	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.66%	
55) Toluene-d8	8.42	98	1576480	50.70	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.40%	
76) 4-Bromofluorobenzene	11.04	95	364782	56.80	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	113.60%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.44	50	266	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.87	96	60	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	319	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	197	N.D.		
18) Methylene Chloride	3.51	84	9612	1.08	ug/l	95
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619015.D  
 Acq On : 19 Jun 2007 15:27  
 Sample : JPL35-008  
 Misc : #1 5ml +IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:43 2007

Vial: 56  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.73	41	61		N.D.	
34) Chloroform	5.83	83	67		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.98	56	60		N.D.	
38) Carbon Tetrachloride	6.16	117	57		N.D.	
39) 1,1-Dichloropropene	6.17	75	214		N.D.	
41) Benzene	6.43	78	1059		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.15	130	66		N.D.	
46) Methylcyclohexane	7.30	83	123		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	877		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	343		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.18	43	58		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2316		N.D.	
66) Chlorobenzene	9.90	112	487		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

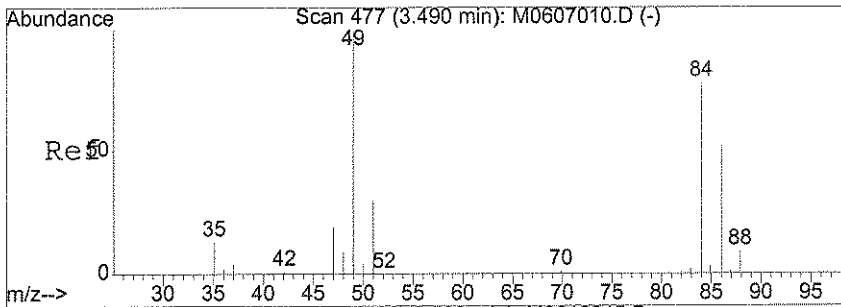
Data File : X:\MSVOA\MOBY\061907\M0619015.D  
 Acq On : 19 Jun 2007 15:27  
 Sample : JPL35-008  
 Misc : #1 5ml +IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:43 2007

Vial: 56  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

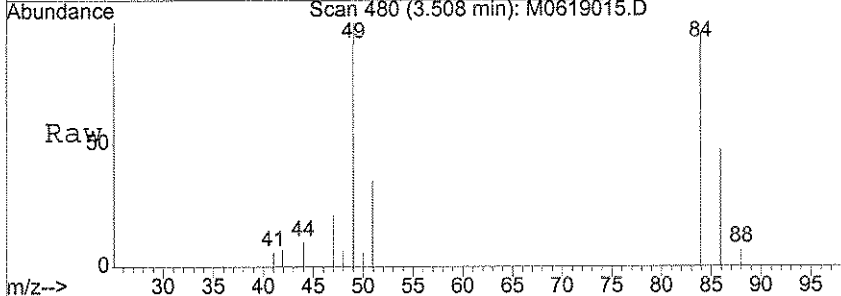
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	783		N.D.	
69) m,p-Xylene	10.11	106	713		N.D.	
70) o-xylene	10.50	106	69		N.D.	
71) Styrene	10.53	104	271		N.D.	
72) Bromoform	10.75	173	137		N.D.	
73) Isopropylbenzene	10.87	105	729		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.19	156	55		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.04	83	69		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1242		N.D.	
81) 2-Chlorotoluene	11.37	91	483		N.D.	
82) 4-Chlorotoluene	11.49	91	802		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	531		N.D.	
84) tert-Butylbenzene	11.78	119	514		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	617		N.D.	
86) sec-butylbenzene	11.99	105	1049		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	277		N.D.	
88) 4-Isopropyltoluene	12.13	119	980		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	566		N.D.	
90) 1,2-Dichlorobenzene	12.58	146	302		N.D.	
91) n-Butylbenzene	12.54	91	1077		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	14.33	225	288		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

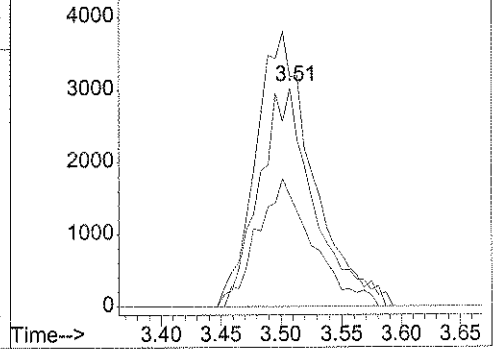
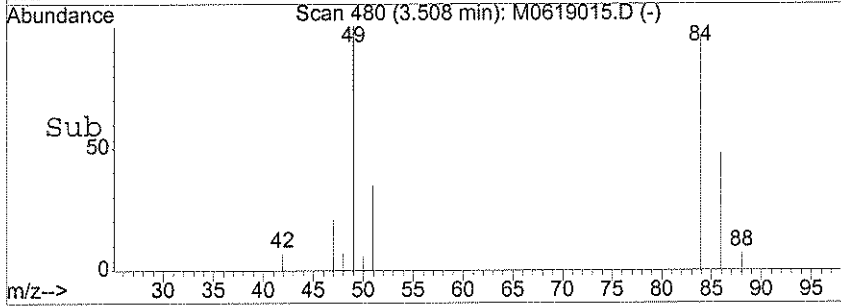


#18  
 Methylene Chloride  
 Concen: 1.08 ug/l  
 RT: 3.51 min Scan# 480  
 Delta R.T. 0.01 min  
 Lab File: M0619015.D  
 Acq: 19 Jun 2007 15:27

Tgt Ion	Resp	Lower	Upper
84	9612		
49	130.5	113.6	153.6
86	58.5	45.8	85.8



Abundance Ion 84.00 (83.70 to 84.70): M0619015;  
 Ion 49.00 (48.70 to 49.70): M0619015;  
 Ion 86.00 (85.70 to 86.70): M0619015;



**TIC FORMS**

SDG JPL35

VOLATILES ANALYSIS

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B061907MVOWM2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL35  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: B061907MVOWM2  
 Lab File ID: M0619014.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/19/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619014.D Vial: 55  
Acq On : 19 Jun 2007 14:57 Operator: DGA  
Sample : B061907MVOWM2 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-38-11) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619014.D M8260W.M Tue Jun 26 10:01:57 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-21-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL35-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/13/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619017.D Vial: 58  
Acq On : 19 Jun 2007 16:26 Operator: DGA  
Sample : JPL35-001 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619017.D M8260W.M Mon Jun 25 12:55:07 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-21-4

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL35-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/13/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619018.D Vial: 59  
Acq On : 19 Jun 2007 16:55 Operator: DGA  
Sample : JPL35-002 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619018.D M8260W.M Mon Jun 25 12:58:06 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-21-3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL35-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 2

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	unknown	3.27	8.8	J
02	unknown	5.54	7.4	J
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619019.D Vial: 60  
 Acq On : 19 Jun 2007 17:33 Operator: DGA  
 Sample : JPL35-003 Inst : MOBY  
 Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
3.27	8.77 ug/l	8147	Fluorobenzene	46463	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Ethylamine	45	C2H7N	000075-04-7	5
2			Ethylamine	45	C2H7N	000075-04-7	5
3			Ethylamine	45	C2H7N	000075-04-7	4
4			Formamide	45	CH3NO	000075-12-7	3
5			Formamide \$\$ Carbamaldehyde \$\$ Meth	45	CH3NO	000075-12-7	3

\*\*\*\*\*  
 Peak Number 2 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.54	7.37 ug/l	6849	Fluorobenzene	46463	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	64
2			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	9
3			Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	4
4			Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	2
5			Formic acid, propyl ester	88	C4H8O2	000110-74-7	2

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-21-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL35  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 1

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-004  
 Lab File ID: M0619020.D  
 Date Collected: 06/12/2007  
 Date Analyzed: 06/19/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	unknown	5.54	9.8	J
02				
03				
04				
05				
06				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619020.D Vial: 61  
 Acq On : 19 Jun 2007 18:02 Operator: DGA  
 Sample : JPL35-004 Inst : MOBY  
 Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.54	9.84 ug/l	13306	Fluorobenzene	67613	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Formamide, N-methylthio	75	C2H5NS	000000-00-0	9
2			Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	9
3			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	9
4			Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	7
5			Ethanethioamide \$\$ Acetamide, thio-	75	C2H5NS	000062-55-5	7

M0619020.D M8260W.M Mon Jun 25 13:01:10 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-21-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL35-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 5

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	unknown	2.14	42	J
02	unknown	5.54	33	J
03	unknown	3.29	8.3	J
04	unknown	3.47	6.1	J
05	unknown	5.53	5.7	J
06				
07				
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619021.D Vial: 62  
 Acq On : 19 Jun 2007 18:32 Operator: DGA  
 Sample : JPL35-005 Inst : MOBY  
 Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
2.14	42.01 ug/l	9094	Fluorobenzene	10823	6.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclopentene-1,2-diol, cis- \$\$ ci	100	C5H8O2	000694-29-1	9
2	Ethanone, 1-(2-pyridinyl)-	121	C7H7NO	001122-62-9	9
3	Ethanone, 1-(2-pyridinyl)-	121	C7H7NO	001122-62-9	9
4	3-Hexyne	82	C6H10	000928-49-4	4
5	3-Methylene-1,6-heptadiene \$\$ 3-Met	108	C8H12	016626-48-5	4

\*\*\*\*\*  
 Peak Number 2 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
3.29	8.29 ug/l	1794	Fluorobenzene	10823	6.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Formamide	45	CH3NO	000075-12-7	4
2	Formamide \$\$ Carbamaldehyde \$\$ Meth	45	CH3NO	000075-12-7	4
3	Ethylamine	45	C2H7N	000075-04-7	3
4	Ethylamine	45	C2H7N	000075-04-7	3
5	Ethylamine	45	C2H7N	000075-04-7	3

\*\*\*\*\*  
 Peak Number 3 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
3.47	6.11 ug/l	1322	Fluorobenzene	10823	6.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Nitrous Oxide \$\$ Nitrogen oxide (N2	44	N2O	010024-97-2	2
2	Nitrous Oxide	44	N2O	010024-97-2	2
3	Ethyne, fluoro- \$\$ Acetylene, fluor	44	C2HF	002713-09-9	2
4	Acetaldehyde \$\$ Acetic aldehyde \$\$	44	C2H4O	000075-07-0	2
5	Acetaldehyde	44	C2H4O	000075-07-0	2

\*\*\*\*\*  
 Peak Number 4 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
------	---------	------	------------------	---------	------



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-1-2Q07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL35  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 1

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL35-006  
 Lab File ID: M0619022.D  
 Date Collected: 06/12/2007  
 Date Analyzed: 06/19/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	unknown	5.55	12	J
02				
03				
04				
05				
06				
07				
08				
09				
10				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619022.D Vial: 63  
 Acq On : 19 Jun 2007 19:01 Operator: DGA  
 Sample : JPL35-006 Inst : MOBY  
 Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.55	12.33 ug/l	15401	Fluorobenzene	62439	6.75

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Silanol, trimethyl-	90	C3H10OSi	001066-40-6	9
2		Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	4
3		Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	4
4		Aminoacetaldehyde dimethyl acetal	105	C4H11NO2	022483-09-6	2
5		Silanol, trimethyl-	90	C3H10OSi	001066-40-6	2

M0619022.D M8260W.M Mon Jun 25 13:04:53 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL35-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 7

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000056-40-6	Glycine	5.54	180	JN
02		unknown	2.14	160	J
03		unknown	5.52	73	J
04	000109-99-9	Furan, tetrahydro- \$\$ Butane	5.846	34	JN
05	001066-40-6	Silanol, trimethyl-	5.548	30	JN
06	001066-40-6	Silanol, trimethyl-	5.548	24	JN
07	000116-11-0	1-Propene, 2-methoxy-	5.84	16	JN
08					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619023.D Vial: 64  
 Acq On : 19 Jun 2007 19:31 Operator: DGA  
 Sample : JPL35-007 Inst : MOBY  
 Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
2.14	164.43 ug/l	5436	Fluorobenzene	1653	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			CH2=CHCH2NHCH3 \$\$ N-Methylallylamin	71	C4H9N	000627-37-2	9
2			1-Heptene, 5-methyl- \$\$ 5-Methyl-1-	112	C8H16	013151-04-7	2
3			2-Hexanamine, 5-methyl- \$\$ Pentylam	115	C7H17N	028292-43-5	2
4			Butanal, 3-hydroxy-	88	C4H8O2	000107-89-1	2
5			2-Butynoic acid \$\$ Tetrollic acid \$\$	84	C4H4O2	000590-93-2	2

\*\*\*\*\*  
 Peak Number 2 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.52	72.74 ug/l	2405	Fluorobenzene	1653	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	7
2			Glycine	75	C2H5NO2	000056-40-6	3
3			Acetohydroxamic Acid	75	C2H5NO2	000546-88-3	3
4			Ethanethioic acid \$\$ Acetic acid, t	76	C2H4OS	000507-09-5	2
5			Glycine	75	C2H5NO2	000056-40-6	2

\*\*\*\*\*  
 Peak Number 3 Glycine Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.54	179.39 ug/l	5931	Fluorobenzene	1653	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Glycine	75	C2H5NO2	000056-40-6	2
2			Formic acid, propyl ester	88	C4H8O2	000110-74-7	1
3			Propane, 1,1-dimethoxy- \$\$ Propiona	104	C5H12O2	004744-10-9	1
4			Formic acid, ethyl ester \$\$ Aregina	74	C3H6O2	000109-94-4	1
5			Glycine	75	C2H5NO2	000056-40-6	1

\*\*\*\*\*  
 Peak Number 4 Silanol, trimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
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5.55 30.24 ug/l 1000 Fluorobenzene 1653 6.75

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Silanol, trimethyl-	90	C3H10OSi	001066-40-6	9
2		Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	4
3		Silanol, trimethyl-	90	C3H10OSi	001066-40-6	4
4		Glycine	75	C2H5NO2	000056-40-6	2
5		Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	2

\*\*\*\*\*  
Peak Number 5 Silanol, trimethyl- Concentration Rank 6

R.T. EstConc Area Relative to ISTD IS Area R.T.  
5.55 23.76 ug/l 786 Fluorobenzene 1653 6.75

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Silanol, trimethyl-	90	C3H10OSi	001066-40-6	9
2		Methanamine, N,N-dimethyl-, N-oxide	75	C3H9NO	001184-78-7	4
3		Silanol, trimethyl-	90	C3H10OSi	001066-40-6	4
4		Glycine	75	C2H5NO2	000056-40-6	2
5		Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	2

\*\*\*\*\*  
Peak Number 6 1-Propene, 2-methoxy- Concentration Rank 7

R.T. EstConc Area Relative to ISTD IS Area R.T.  
5.84 16.18 ug/l 535 Fluorobenzene 1653 6.75

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1-Propene, 2-methoxy-	72	C4H8O	000116-11-0	9
2		Furan, tetrahydro-	72	C4H8O	000109-99-9	7
3		Ethylenimine \$\$ Aziridine \$\$ Azacyc	43	C2H5N	000151-56-4	5
4		1-Propene, 2-methoxy- \$\$ Ether, iso	72	C4H8O	000116-11-0	5
5		Oxirane, ethyl- \$\$ Butane, 1,2-epox	72	C4H8O	000106-88-7	4

\*\*\*\*\*  
Peak Number 7 Furan, tetrahydro- \$\$ Butane . Concentration Rank 4

R.T. EstConc Area Relative to ISTD IS Area R.T.  
5.85 33.76 ug/l 1116 Fluorobenzene 1653 6.75

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Furan, tetrahydro- \$\$ Butane .alpha	72	C4H8O	000109-99-9	83
2		Furan, tetrahydro-	72	C4H8O	000109-99-9	74
3		Furan, tetrahydro-	72	C4H8O	000109-99-9	74
4		Furan, tetrahydro-	72	C4H8O	000109-99-9	74
5		Oxirane, ethyl- \$\$ Butane, 1,2-epox	72	C4H8O	000106-88-7	9

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619015.D Vial: 56  
 Acq On : 19 Jun 2007 15:27 Operator: DGA  
 Sample : JPL35-008 Inst : MOBY  
 Misc : #1 5ml +IS/SS (524) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.54	50.00 ug/l	68298	Fluorobenzene	68298	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Silanol, dimethyl(1,1,2-trimethylpr	160	C8H20OSi	055644-10-5	78
2			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	64
3			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	47
4			Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	47
5			Silanol, ethyldimethyl-	104	C4H12OSi	000000-00-0	39

M0619015.D M8260W.M Mon Jun 25 11:44:25 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-1-6/12/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL35

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL35-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/12/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 1

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		unknown	5.54	50	J
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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Comments:

**Metals Data**

**JPL35**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL35

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-21-5</u>	<u>JPL35-001</u>
<u>MW-21-4</u>	<u>JPL35-002</u>
<u>MW-21-3</u>	<u>JPL35-003</u>
<u>MW-21-2</u>	<u>JPL35-004</u>
<u>MW-21-1</u>	<u>JPL35-005</u>
<u>DUPE-1-2Q07</u>	<u>JPL35-006</u>

Were ICP interelement corrections applied? Yes/No YES

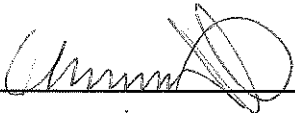
Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Charmine Grand

Date: 07/05/2007

Title: metals Lead

## **Metals Analysis Data Sheets**

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-21-5

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL35Matrix (soil/water): WaterLab Sample ID: JPL35-001Level (low/med): LOWDate Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.38			M	R019127
7440-70-2	Calcium	112000			P	R019216
7440-47-3	Chromium	9.60			M	R019127
7439-89-6	Iron	489			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	34700			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	38400		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-21-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL35

Matrix (soil/water): Water

Lab Sample ID: JPL35-002

Level (low/med): LOW

Date Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.34			M	R019127
7440-70-2	Calcium	99100			P	R019188
7440-47-3	Chromium	9.70			M	R019127
7439-89-6	Iron	820			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	31900			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	34100		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-21-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL35

Matrix (soil/water): Water

Lab Sample ID: JPL35-003

Level (low/med): LOW

Date Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.27			M	R019127
7440-70-2	Calcium	164000			P	R019216
7440-47-3	Chromium	14.2			M	R019127
7439-89-6	Iron	721			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	51100			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	47400		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-21-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL35

Matrix (soil/water): Water

Lab Sample ID: JPL35-004

Level (low/med): LOW

Date Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.25			M	R019127
7440-70-2	Calcium	154000			P	R019216
7440-47-3	Chromium	12.9			M	R019127
7439-89-6	Iron	486			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	51200			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	74300		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
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## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-21-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL35Matrix (soil/water): WaterLab Sample ID: JPL35-005Level (low/med): LOWDate Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.32			M	R019127
7440-70-2	Calcium	164000			P	R019216
7440-47-3	Chromium	9.24			M	R019127
7439-89-6	Iron	639			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	51100			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	37500		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-1-2Q07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL35Matrix (soil/water): WaterLab Sample ID: JPL35-006Level (low/med): LOWDate Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.37			M	R019127
7440-70-2	Calcium	158000			P	R019216
7440-47-3	Chromium	12.4			M	R019127
7439-89-6	Iron	483			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	49800			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	72500		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-1-6/12/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL35

Matrix (soil/water): Water

Lab Sample ID: JPL35-007

Level (low/med): LOW

Date Received: 06/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5000	U		P	R019172
7440-47-3	Chromium	1.00	U		M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	5000	U	*N	P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL35**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL35

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-21-5</u>	<u>JPL35-001</u>
<u>MW-21-5D</u>	<u>JPL35-001D</u>
<u>MW-21-5MS</u>	<u>JPL35-001MS</u>
<u>MW-21-4</u>	<u>JPL35-002</u>
<u>MW-21-3</u>	<u>JPL35-003</u>
<u>MW-21-2</u>	<u>JPL35-004</u>
<u>MW-21-2MS</u>	<u>JPL35-004MS</u>
<u>MW-21-2MSD</u>	<u>JPL35-004MSD</u>
<u>MW-21-1</u>	<u>JPL35-005</u>
<u>DUPE-1-2Q07</u>	<u>JPL35-006</u>
<u>EB-1-6/12/07</u>	<u>JPL35-007</u>

Comments:

---



---



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I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 6-29-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

















**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL36**

**JULY 6, 2007**

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL36  
Date of Report: July 6, 2007

**SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

**Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-19-5	JPL36-001	VOA/MET/INO
MW-19-4	JPL36-002	VOA/MET/INO
MW-19-3	JPL36-003	VOA/MET/INO
MW-19-2	JPL36-004	VOA/MET/INO
MW-19-1	JPL36-005	VOA/MET/INO
EB-2-6/14/07	JPL36-006	VOA/MET/INO
TB-2-6/14/07	JPL36-007	VOA

**Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

**Sample Receipt Comments:**

Two of two VOA vials for TB-2-6/14/07 contained air bubbles < ¼ inch in size.

**GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factors was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 ( $r$  values greater than 0.995) and were therefore compliant.

#### Continuing Calibration Verification (CCV):

In the CCV performed on 06/19/2007 the percent difference value for dichlorodifluoromethane exceeded 30% due to increased response. This analyte was not detected in any associated samples so no further action was taken.

#### Quality Control Analyses:

MS/MSD analyses performed on sample MW-19-1 yielded low recoveries for 2,2-dichloropropane. Corrective action in the form of reanalysis could not be performed due to insufficient sample available.

Analysis of the blank spike performed on 6/20/07 yielded a recovery for dichlorodifluoromethane that exceeded the control limit. Because all other analytes were within the control limits no further action was taken.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."



## LAUCKS TESTING LABORATORIES

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### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

#### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

#### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

### ICP-MS Metals:

The client requested analytes arsenic, chromium, and lead analyzed by EPA method 200.8 and analytes calcium, iron, potassium, magnesium, and sodium analyzed by EPA method 200.7. Due to the ICP-Trace instrument being out of production, all analytes for samples and quality control samples for this SDG were analyzed by method 200.8 on an ICP-MS instrument (Elan 6100).

The matrix spike duplicate sample percent recovery of sodium was outside of the established control limits of 70-130% for sample MW-19-1. The LCSW recovery was within these control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and V.

The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-19-1. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

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*Miscellaneous Inorganics:*

No comments.

## LAUCKS TESTING LABORATORIES

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

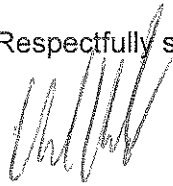
940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

6 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/6/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)
JPL36-001	06/15/2007 08:30 AM	06/14/2007 07:48 AM	MW-19-5	A+	IN	IN	IN	A-	IN	IN	IN
JPL36-002	06/15/2007 08:30 AM	06/14/2007 08:26 AM	MW-19-4	A+	IN	IN	IN	A-	IN	IN	IN
JPL36-003	06/15/2007 08:30 AM	06/14/2007 09:03 AM	MW-19-3	A+	IN	IN	IN	A-	IN	IN	IN
JPL36-004	06/15/2007 08:30 AM	06/14/2007 09:39 AM	MW-19-2	A+	IN	IN	IN	A-	IN	IN	IN
*JPL36-005	06/15/2007 08:30 AM	06/14/2007 10:17 AM	MW-19-1	A+	IN	IN	IN	A-	IN	IN	IN
JPL36-006	06/15/2007 08:30 AM	06/14/2007 10:01 AM	EB-2-6/14/07	A+	IN	IN	IN	A-	IN	IN	IN
JPL36-007	06/15/2007 08:30 AM	06/14/2007 12:00 AM	TB-2-6/14/07								IN

Approved By: *[Signature]*

On: *6/18/07*

Samples identified with a '\*' client has requested QC for

LEGEND: -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0

COMPANY: BATTELLE  
 ADDRESS: 3990 OLD TOWN AVE, C-205  
SAV DIEGO, CA 92110  
 ATTENTION: DAVID COWEN  
 PROJECT NAME: JPL GM MW 2007  
 PROJECT CONTACT: DAVID COWEN  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/PO. NO.: 6486093

CHAIN OF CUSTODY RECORD SDG # \_\_\_\_\_

42855  
 JPL 36  
 WORK ORDER ID# \_\_\_\_\_

PAGE 1 OF 1  
 SUBMITTED AT: \_\_\_\_\_



MATRIX: WATER, SOIL OR SPECIFY

NO. OF CONTAINERS	TESTS TO PERFORM
VOC (524.2)	
TOTAL G (202.5)	
LEAD (300.5)	
ARSENIC (300.5)	
GEN TOX (200.7)	
GEN TOX (214.0)	
GEN TOX (212.1, 300.2, 15.1, 15.1)	

LAB #/AT	SAMPLE ID / LOCATION	DATE	TIME	MATRIX	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
	MW-19-5	6/4/07	748	W	5	X	
	MW-19-4		826	X	X	X	
	MW-19-3		903	X	X	X	
	MW-19-2		939	X	X	X	
	MW-19-1		1017	10	X	X	MS/MSD
	EB-2-61/14/07		1001	5	X	X	EQUIP. BEAVE
	TR-2-61/14/07			2	X		TRIP BEAVE

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE.  
 2. BE SPECIFIC IN TEST REQUESTS.  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE.

RELINQUISHED BY (SIGN AND PRINT): GENARD TOMPKINS  
 NAME: BATTELLE  
 ADDRESS: 505 KING AVE  
 CITY, STATE, ZIP: COLUMBUS, OH 43201

RECEIVED BY (SIGN AND PRINT): \_\_\_\_\_  
 DATE/TIME: \_\_\_\_\_

\* RUSH TURNAROUND IS SUBJECT TO PRIOR LABORATORY APPROVAL

TURNAROUND REQUEST  
 STD. 10-14 WORKING DAYS  
 \* 24-48 HRS. (100% SUR)  
 \* 72 HRS. (75% SUR)  
 \* 5 DAYS (50% SUR)  
 OTHER: \_\_\_\_\_  
 CUSTODY SEAL:  Y  N  NA

Final Report Copy

Financing Charges and/or Collection Fees may be applied to delinquent accounts.





**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL36

Cooler: AAP014

Temperatures: 2.9

COC #: 42855

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL36-001	0001	1000 mL juice, plastic	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL36-002	0001	1000 mL juice, plastic	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL36-003	0001	1000 mL juice, plastic	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL36-004	0001	1000 mL juice, plastic	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL36-005	0001	1000 mL juice, plastic	7	N/A
	0002	1000 mL juice, plastic	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	500 ml cylinder, poly, HNO3	<2	N/A
	0010	500 ml cylinder, poly, HNO3	<2	N/A
JPL36-006	0001	1000 mL juice, plastic	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
 Base Preserved pH pH must be greater than 12  
 NC Not Checked for pH

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL36  
 Cooler: AAP014  
 Temperatures: 2.9  
 COC #: 42855

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL36-007	0001	40 ml OTWS, clear glass, HCl	N/C	None
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**Battelle**

**SDG No.: JPL36**

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Completed and checked by: Judith Ecklund Date: 7/9/07

**SAMPLE DATA**

SDG JPL36

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-5

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-001  
 Lab File ID: M0619024.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 20:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.30	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.25	J
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 20:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	1.7	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,1,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 20:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

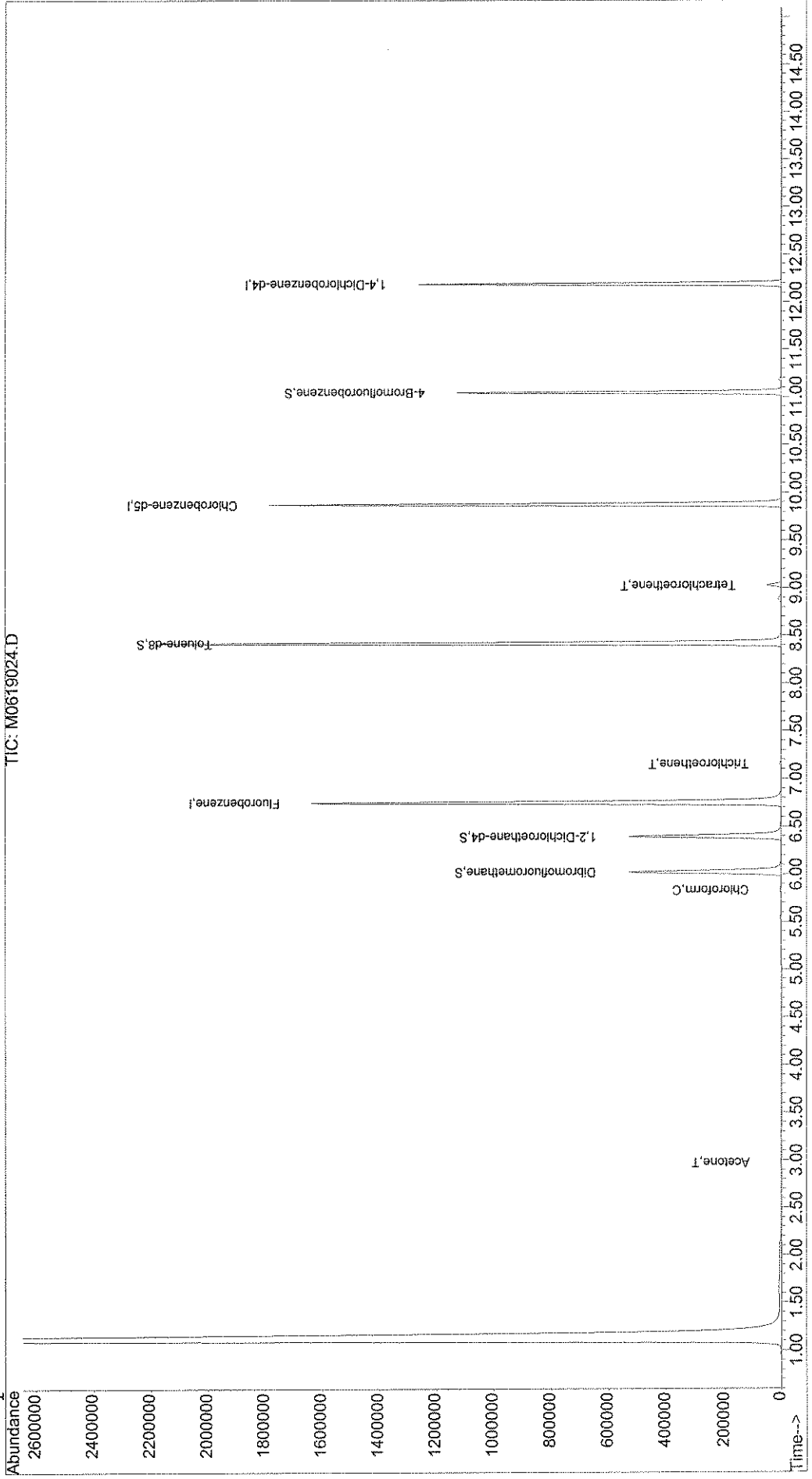
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619024.D  
Acq On : 19 Jun 2007 20:00 Vial: 65  
Sample : JPL36-001 Operator: DGA  
Misc : #4 5ml +IS/SS(524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 25 13:47 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619024.D  
 Acq On : 19 Jun 2007 20:00  
 Sample : JPL36-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:47 2007

Vial: 65  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1684794	50.00	ug/l	0.00	100.19%
54) Chlorobenzene-d5	9.87	117	1017036	50.00	ug/l	0.00	102.49%
74) 1,4-Dichlorobenzene-d4	12.19	152	340413	50.00	ug/l	0.00	87.98%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	401655	52.63	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.26%	
40) 1,2-Dichloroethane-d4	6.39	65	426965	51.70	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.40%	
55) Toluene-d8	8.42	98	1573005	50.07	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.14%	
76) 4-Bromofluorobenzene	11.05	95	373083	58.32	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.64%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.89	96	86	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	5843	3.15	ug/l #	89
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.07	76	65	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	239	N.D.		
18) Methylene Chloride	3.51	84	389	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

*J. 06/25/07*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619024.D  
 Acq On : 19 Jun 2007 20:00  
 Sample : JPL36-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:47 2007

Vial: 65  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.57	63	1097		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D. d	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.75	41	61		N.D.	
34) Chloroform	5.83	83	4035	0.30	ug/l	97
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	1051		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D. d	
45) Trichloroethene	7.15	130	2254	0.25	ug/l #	48
46) Methylcyclohexane	7.31	83	56		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	64		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.49	92	766		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	16621	1.69	ug/l	94
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.12	43	158		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2126		N.D.	
66) Chlorobenzene	9.90	112	321		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619024.D  
 Acq On : 19 Jun 2007 20:00  
 Sample : JPL36-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:47 2007

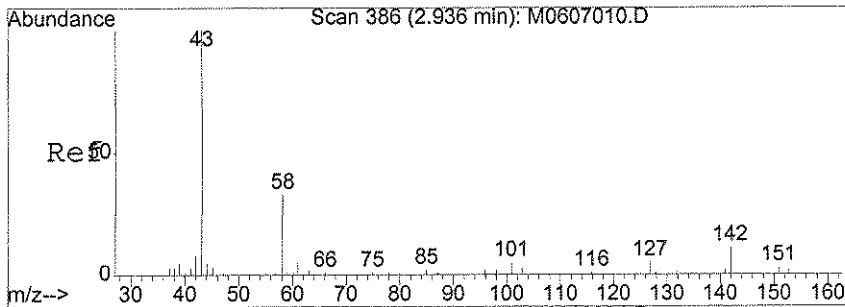
Vial: 65  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

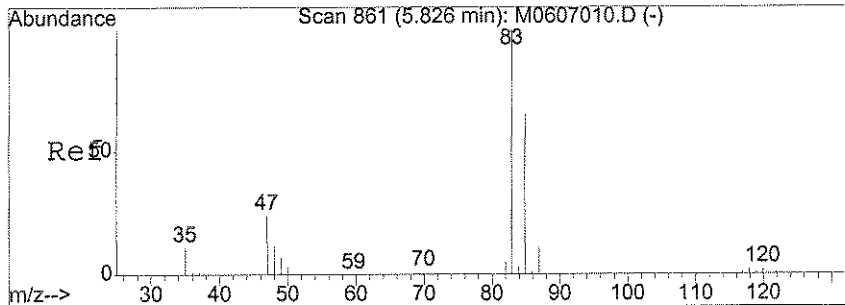
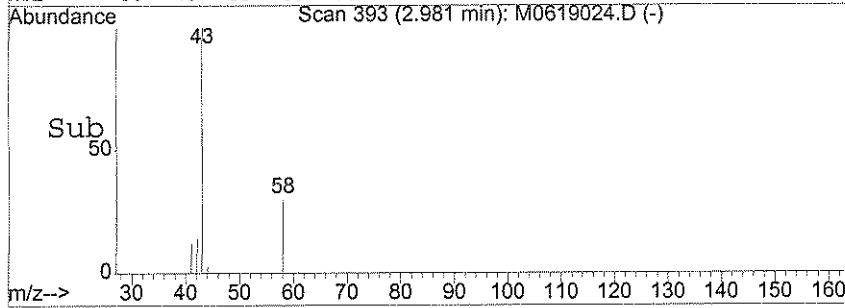
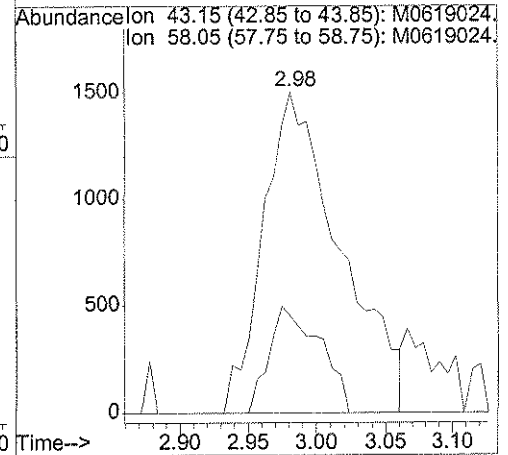
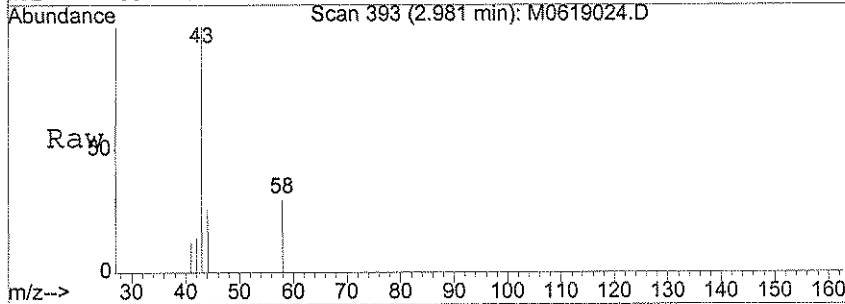
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.12	91	1127		N.D.	
69) m,p-Xylene	10.11	106	497		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.54	104	707		N.D.	
72) Bromoform	10.76	173	251		N.D.	
73) Isopropylbenzene	10.86	105	55		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.04	83	55		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	464		N.D.	
81) 2-Chlorotoluene	11.37	91	182		N.D.	
82) 4-Chlorotoluene	11.49	91	93		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	67		N.D.	
84) tert-Butylbenzene	11.77	119	63		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	216		N.D.	
86) sec-butylbenzene	11.98	105	254		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	426		N.D.	
88) 4-Isopropyltoluene	12.14	119	264		N.D.	
89) 1,4-Dichlorobenzene	12.23	146	261		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	397		N.D.	
91) n-Butylbenzene	12.54	91	417		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



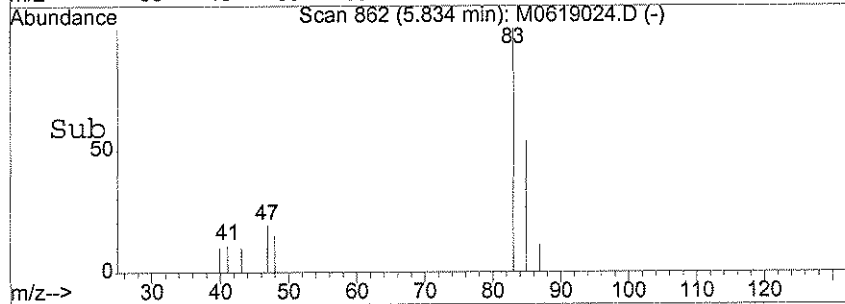
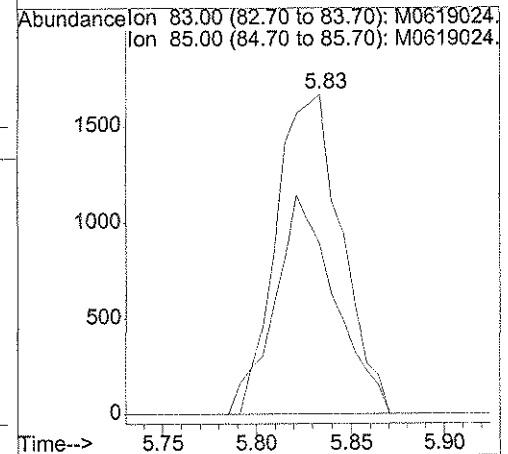
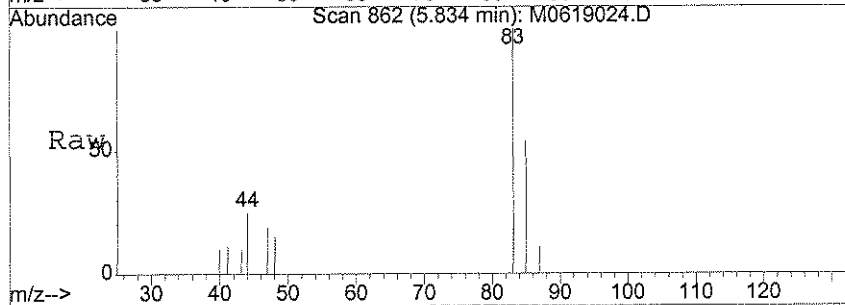
#11  
 Acetone  
 Concen: 3.15 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0619024.D  
 Acq: 19 Jun 2007 20:00

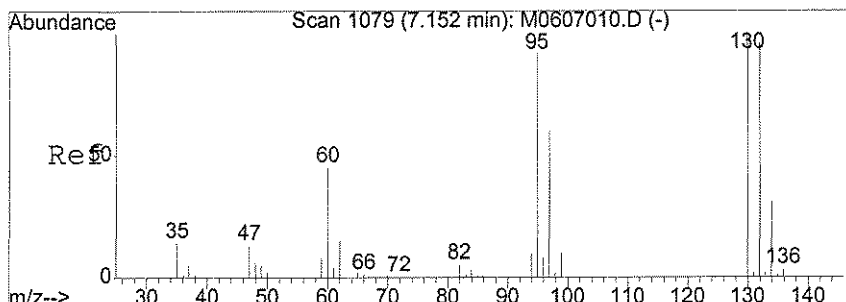
Tgt Ion	Resp	Lower	Upper
43	5843		
58	21.8	22.0	33.0#



#34  
 Chloroform  
 Concen: 0.30 ug/l  
 RT: 5.83 min Scan# 862  
 Delta R.T. 0.01 min  
 Lab File: M0619024.D  
 Acq: 19 Jun 2007 20:00

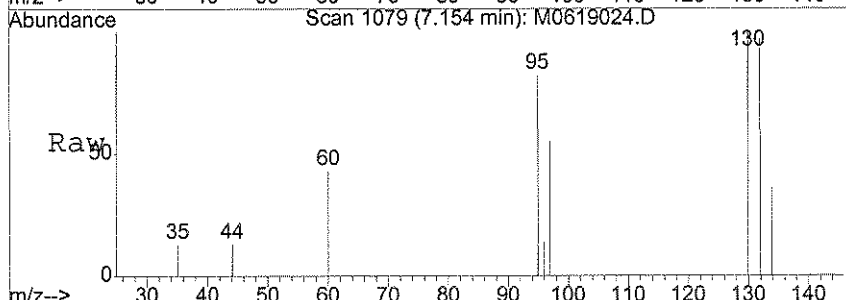
Tgt Ion	Resp	Lower	Upper
83	4035		
85	61.5	44.0	84.0



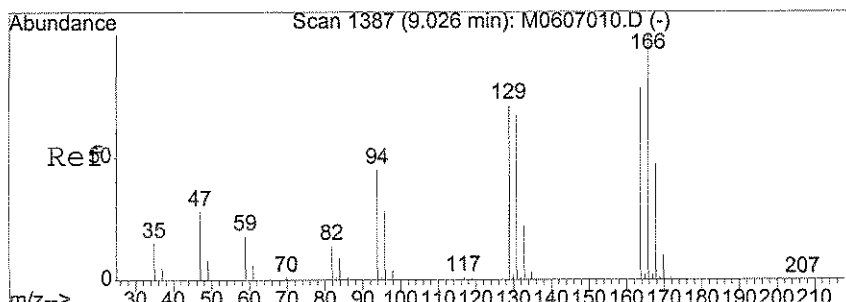
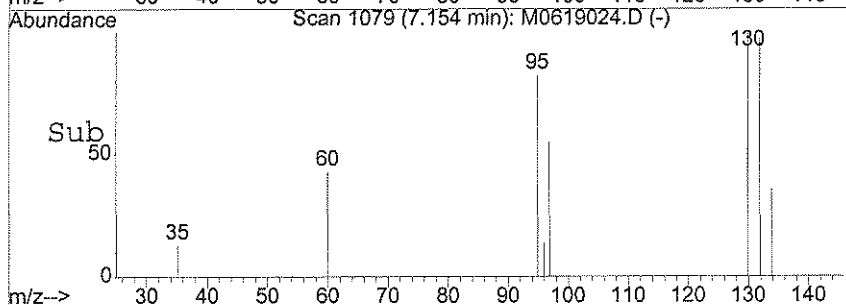
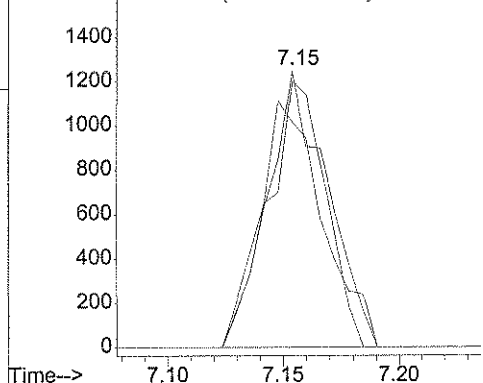


#45  
 Trichloroethene  
 Concen: 0.25 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.00 min  
 Lab File: M0619024.D  
 Acq: 19 Jun 2007 20:00

Tgt Ion	Resp	Lower	Upper
130	2254		
130	100		
132	92.6	80.2	120.2
95	0.0	75.8	115.8#

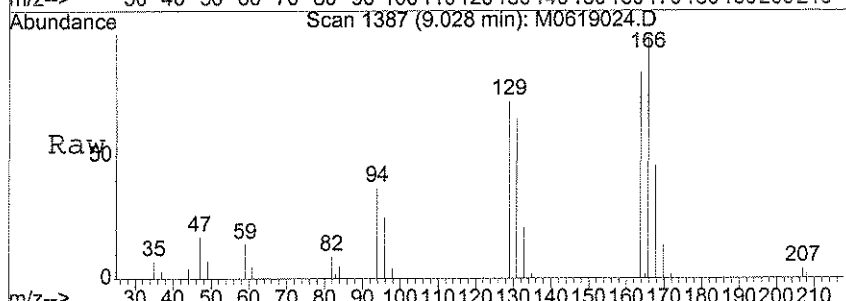


Abundance  
 Ion 130.00 (129.70 to 130.70): M06190  
 Ion 132.00 (131.70 to 132.70): M06190  
 Ion 95.00 (94.70 to 95.70): M0619024.D

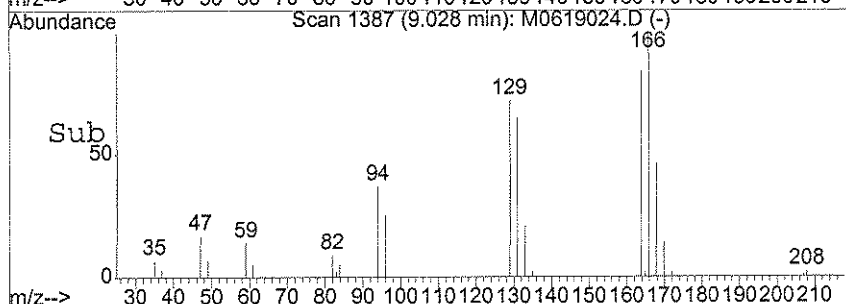
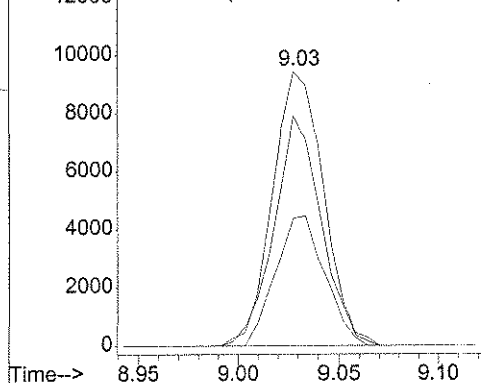


#60  
 Tetrachloroethene  
 Concen: 1.69 ug/l  
 RT: 9.03 min Scan# 1387  
 Delta R.T. 0.00 min  
 Lab File: M0619024.D  
 Acq: 19 Jun 2007 20:00

Tgt Ion	Resp	Lower	Upper
166	16621		
166	100		
164	77.7	65.6	98.4
168	45.5	41.1	61.7



Abundance  
 Ion 165.95 (165.65 to 166.65): M06190  
 Ion 163.95 (163.65 to 164.65): M06190  
 Ion 167.95 (167.65 to 168.65): M06190



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-002  
 Lab File ID: M0619025.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 20:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-002  
 Lab File ID: M0619025.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 20:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.40	J
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-002  
 Lab File ID: M0619025.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 20:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

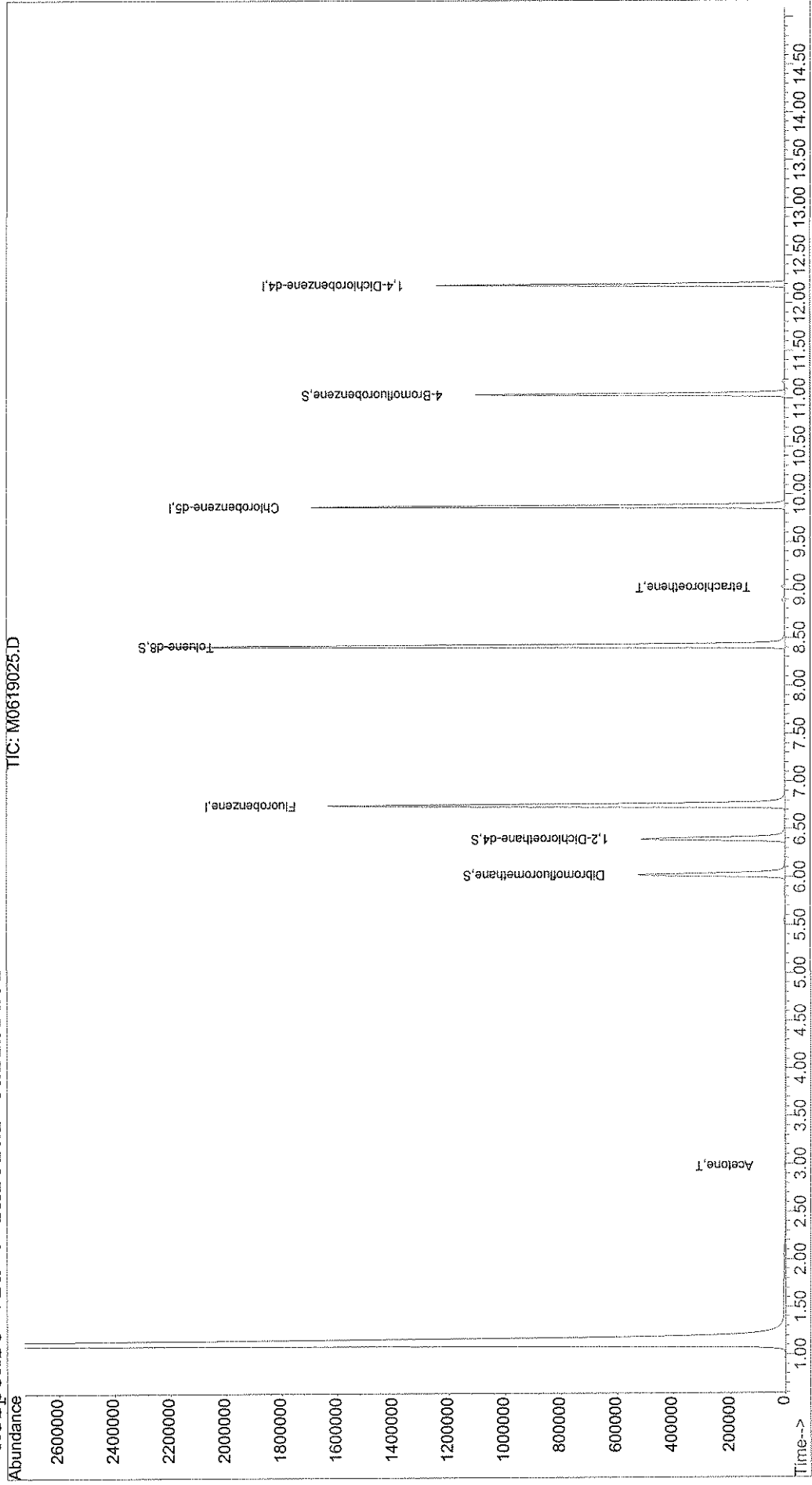
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619025.D Vial: 66  
Acq On : 19 Jun 2007 20:30 Operator: DGA  
Sample : JPL36-002 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 13:49 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619025.D  
 Acq On : 19 Jun 2007 20:30  
 Sample : JPL36-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:49 2007

Vial: 66  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1670822	50.00	ug/l	0.00	99.36%
54) Chlorobenzene-d5	9.87	117	993266	50.00	ug/l	0.00	100.10%
74) 1,4-Dichlorobenzene-d4	12.19	152	339191	50.00	ug/l	0.00	87.67%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	395861	52.30	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.60%	
40) 1,2-Dichloroethane-d4	6.40	65	428071	52.27	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.54%	
55) Toluene-d8	8.42	98	1547409	50.44	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.88%	
76) 4-Bromofluorobenzene	11.05	95	364652	57.20	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.40%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.88	96	65	N.D.		
6) Chloroethane	1.99	64	61	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	7178	3.91	ug/l	98
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	337	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.38	43	273	N.D.		
18) Methylene Chloride	3.50	84	73	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.93	73	55	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619025.D M8260W.M Mon Jun 25 13:49:45 2007

*[Handwritten Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619025.D  
 Acq On : 19 Jun 2007 20:30  
 Sample : JPL36-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:49 2007

Vial: 66  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	973		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	773		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.81	41	59		N.D.	
34) Chloroform	5.83	83	3074		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	996		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.16	130	1376		N.D.	
46) Methylcyclohexane	7.29	83	71		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	468		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	8.35	43	196		N.D.	
56) Toluene	8.49	92	709		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	3840	0.40	ug/l	89
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.14	43	78		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2246		N.D.	
66) Chlorobenzene	9.90	112	259		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0619025.D M8260W.M Mon Jun 25 13:49:45 2007

*[Handwritten Signature]*  
 Page 2

Quantitation Report

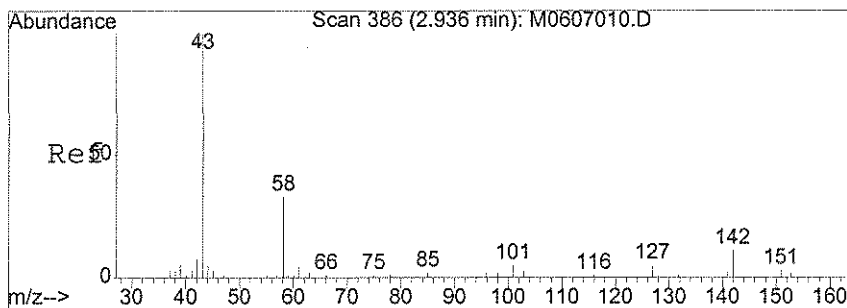
Data File : X:\MSVOA\MOBY\061907\M0619025.D  
 Acq On : 19 Jun 2007 20:30  
 Sample : JPL36-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:49 2007

Vial: 66  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

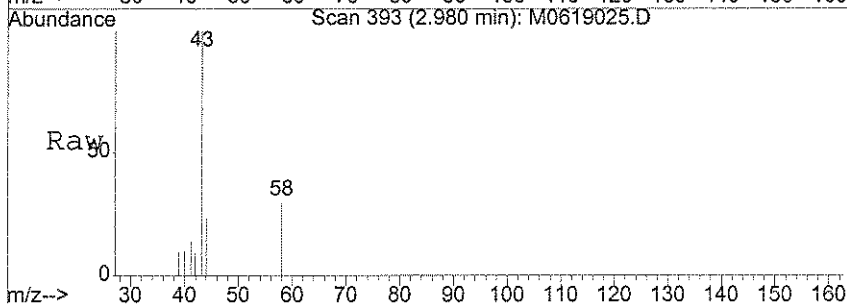
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	426		N.D.	
69) m,p-Xylene	10.11	106	930		N.D.	
70) o-xylene	10.51	106	65		N.D.	
71) Styrene	10.53	104	482		N.D.	
72) Bromoform	10.75	173	238		N.D.	
73) Isopropylbenzene	10.86	105	61		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.05	156	61		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	385		N.D.	
81) 2-Chlorotoluene	11.38	91	129		N.D.	
82) 4-Chlorotoluene	11.49	91	74		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.76	119	61		N.D.	
85) 1,2,4-Trimethylbenzene	11.99	105	278		N.D.	
86) sec-butylbenzene	11.99	105	278		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	411		N.D.	
88) 4-Isopropyltoluene	12.12	119	160		N.D.	
89) 1,4-Dichlorobenzene	12.20	146	290		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	324		N.D.	
91) n-Butylbenzene	12.54	91	458		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

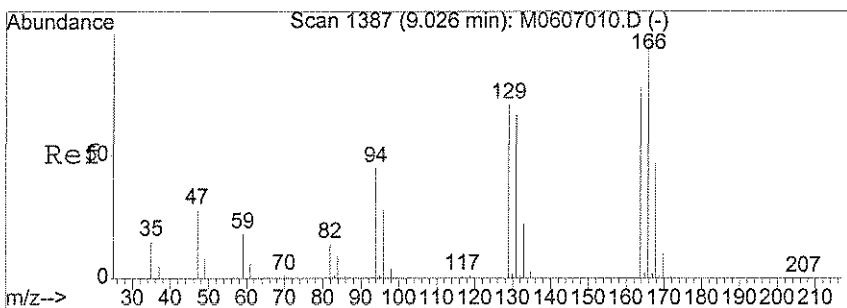
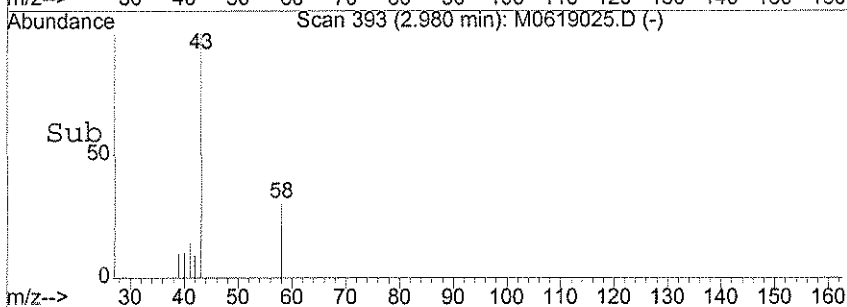
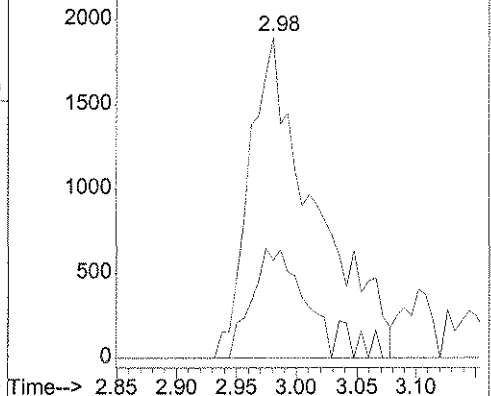


#11  
 Acetone  
 Concen: 3.91 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0619025.D  
 Acq: 19 Jun 2007 20:30

Tgt Ion:	Resp:	Lower	Upper
43	7178		
58	26.6	22.0	33.0

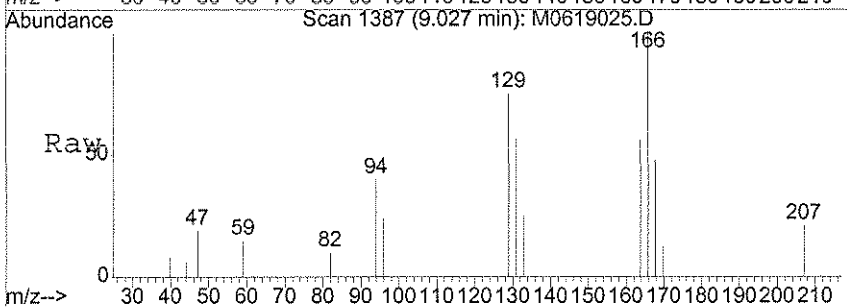


Abundance Ion 43.15 (42.85 to 43.85): M0619025  
 Ion 58.05 (57.75 to 58.75): M0619025

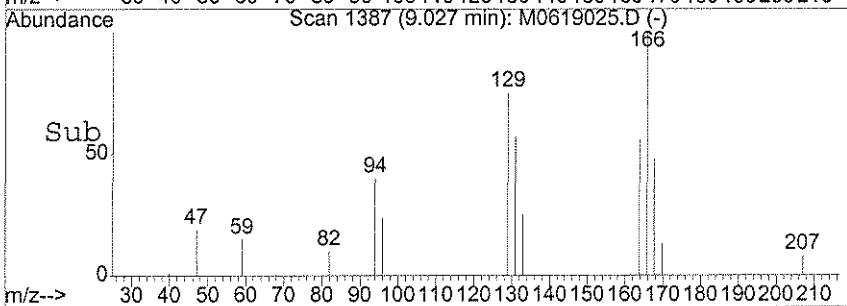
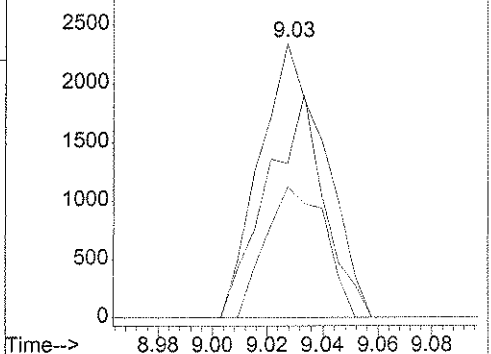


#60  
 Tetrachloroethene  
 Concen: 0.40 ug/l  
 RT: 9.03 min Scan# 1387  
 Delta R.T. 0.00 min  
 Lab File: M0619025.D  
 Acq: 19 Jun 2007 20:30

Tgt Ion:	Resp:	Lower	Upper
166	3840		
164	71.8	65.6	98.4
168	43.7	41.1	61.7



Abundance Ion 165.95 (165.65 to 166.65): M06190  
 Ion 163.95 (163.65 to 164.65): M06190  
 Ion 167.95 (167.65 to 168.65): M06190



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-003  
 Lab File ID: M0619026.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 20:59  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-3

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 20:59

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.37	J
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-003  
 Lab File ID: M0619026.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 20:59  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

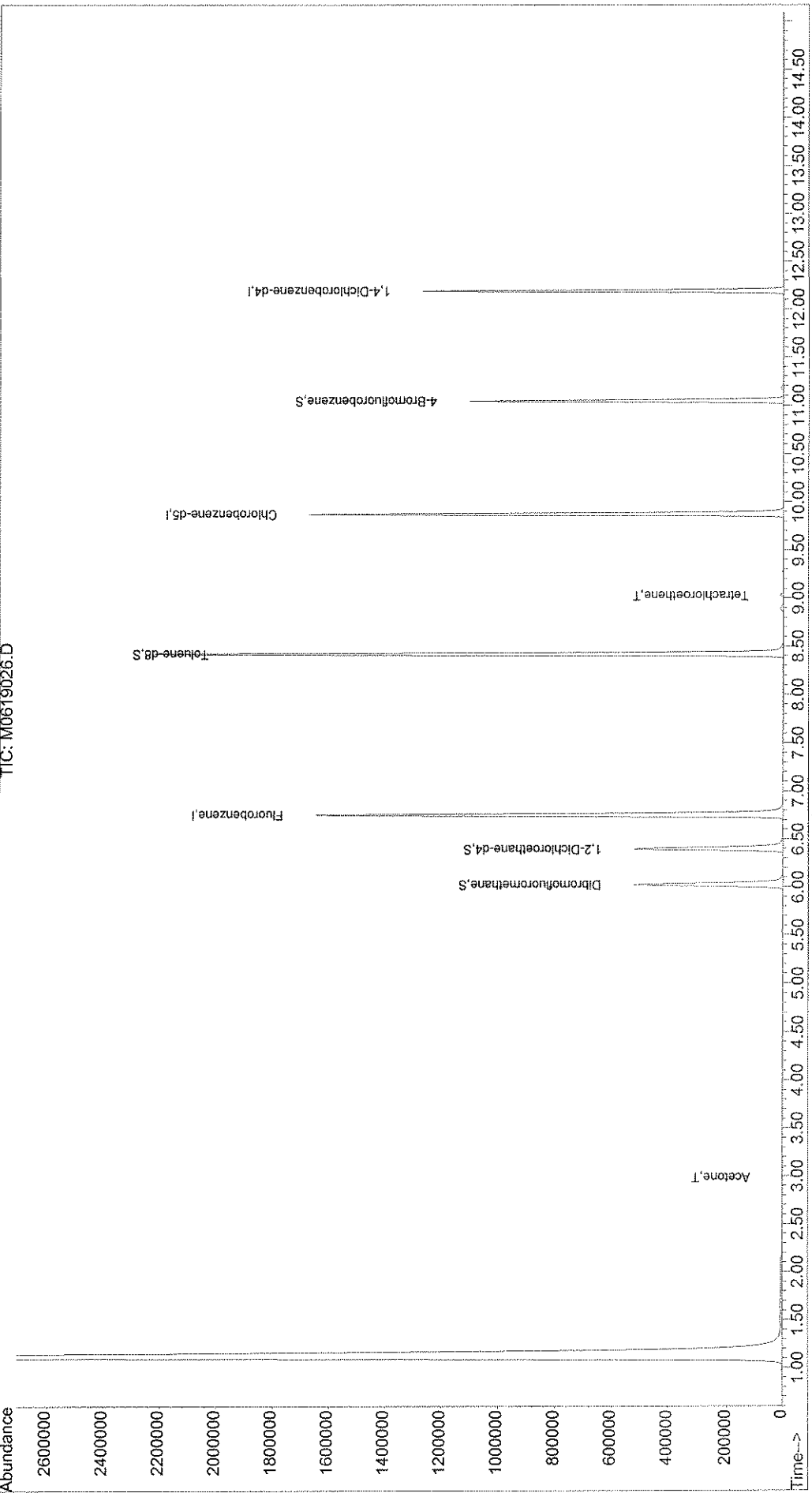
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619026.D Vial: 67  
Acq On : 19 Jun 2007 20:59 Operator: DGA  
Sample : JPL36-003 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 13:52 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619026.D  
 Acq On : 19 Jun 2007 20:59  
 Sample : JPL36-003  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:52 2007

Vial: 67  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1677302	50.00	ug/l	0.00	99.75%
54) Chlorobenzene-d5	9.87	117	1001051	50.00	ug/l	0.00	100.88%
74) 1,4-Dichlorobenzene-d4	12.19	152	337913	50.00	ug/l	0.00	87.34%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	398959	52.51	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.02%	
40) 1,2-Dichloroethane-d4	6.40	65	427010	51.94	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.88%	
55) Toluene-d8	8.42	98	1552333	50.20	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.40%	
76) 4-Bromofluorobenzene	11.05	95	365300	57.52	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.04%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.85	96	68	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	2.78	56	55	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	5309	2.88	ug/l #	68
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	60	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.45	43	208	N.D.		
18) Methylene Chloride	3.49	84	262	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0619026.D M8260W.M Mon Jun 25 13:52:20 2007

*[Handwritten Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619026.D  
 Acq On : 19 Jun 2007 20:59  
 Sample : JPL36-003  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:52 2007

Vial: 67  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	1057		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	5.40	96	1674		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.74	41	243		N.D.	
34) Chloroform	5.83	83	2415		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	873		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	6.62	43	83	Below Cal	#	22
45) Trichloroethene	7.16	130	894		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	431		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	625		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.87	97	61		N.D.	
60) Tetrachloroethene	9.03	166	3609	0.37 ug/l		94
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.12	43	62		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2161		N.D.	
66) Chlorobenzene	9.89	112	77		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0619026.D M8260W.M Mon Jun 25 13:52:20 2007

*[Handwritten signature]*  
 Page 2

Quantitation Report

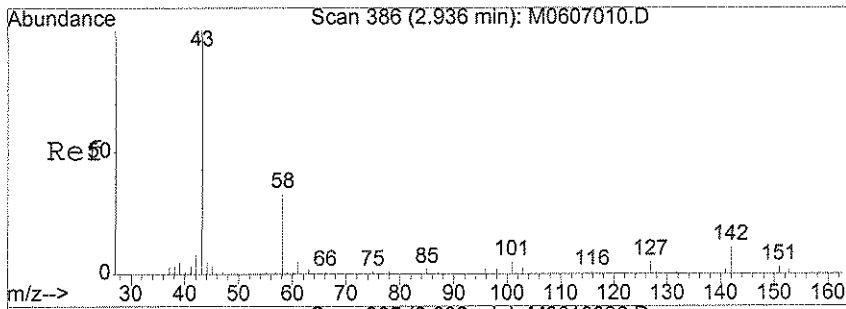
Data File : X:\MSVOA\MOBY\061907\M0619026.D  
 Acq On : 19 Jun 2007 20:59  
 Sample : JPL36-003  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 13:52 2007

Vial: 67  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

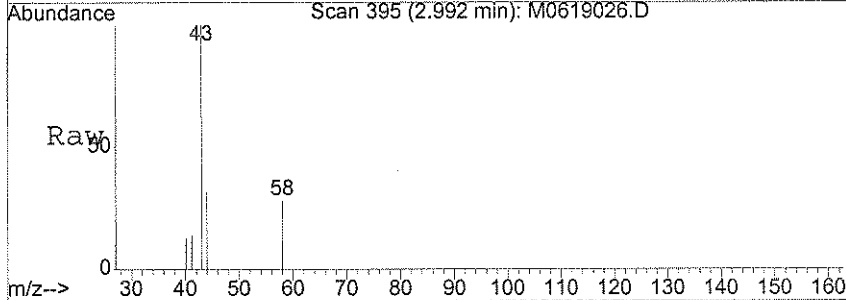
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	489		N.D.	
69) m,p-Xylene	10.11	106	654		N.D.	
70) o-xylene	10.50	106	84		N.D.	
71) Styrene	10.54	104	66		N.D.	
72) Bromoform	10.75	173	295		N.D.	
73) Isopropylbenzene	10.87	105	68		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	315		N.D.	
81) 2-Chlorotoluene	11.28	91	315		N.D.	
82) 4-Chlorotoluene	11.48	91	226		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.78	119	57		N.D.	
85) 1,2,4-Trimethylbenzene	11.98	105	59		N.D.	
86) sec-butylbenzene	11.98	105	59		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	993		N.D.	
88) 4-Isopropyltoluene	12.13	119	153		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	579		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	601		N.D.	
91) n-Butylbenzene	12.54	91	385		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

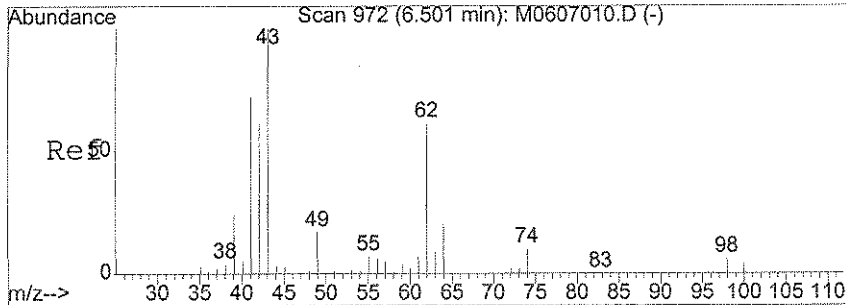
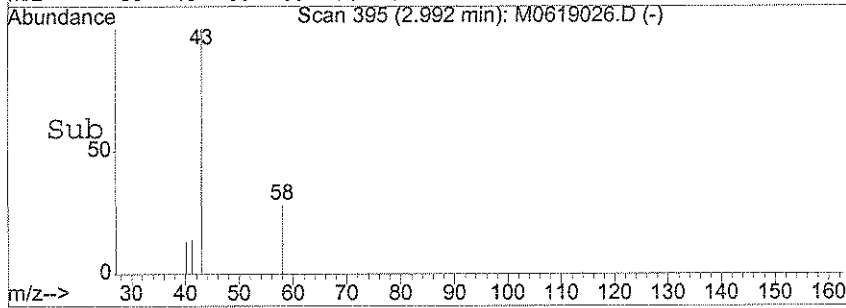
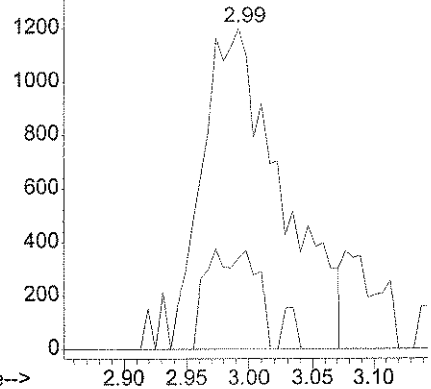


#11  
 Acetone  
 Concen: 2.88 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. 0.00 min  
 Lab File: M0619026.D  
 Acq: 19 Jun 2007 20:59

Tgt Ion: 43 Resp: 5309  
 Ion Ratio Lower Upper  
 43 100  
 58 10.6 22.0 33.0#

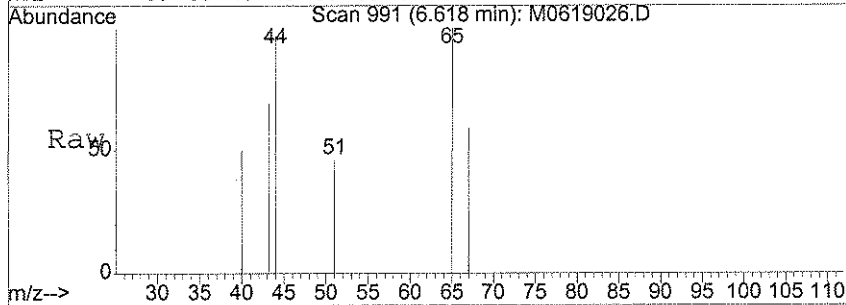


Abundance Ion 43.15 (42.85 to 43.85): M0619026.D  
 1400 Ion 58.05 (57.75 to 58.75): M0619026.D

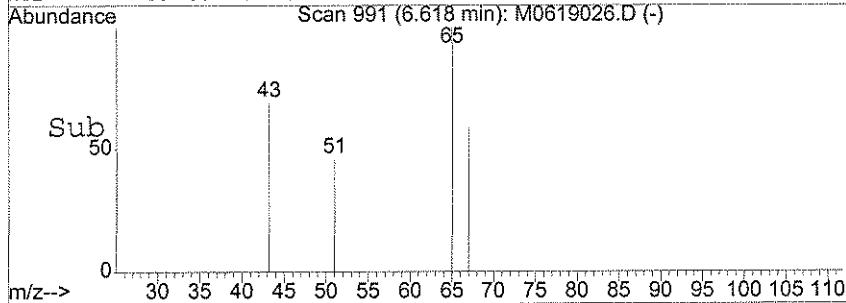
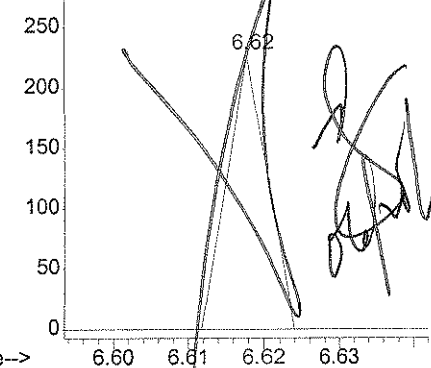


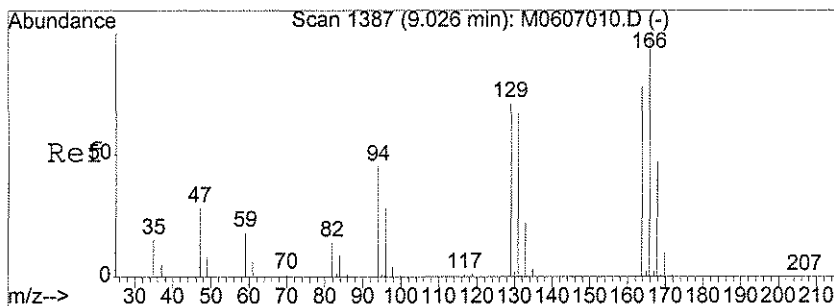
#44  
 Isobutanol  
 Concen: Below Cal  
 RT: 6.62 min Scan# 991  
 Delta R.T. 0.04 min  
 Lab File: M0619026.D  
 Acq: 19 Jun 2007 20:59

Tgt Ion: 43 Resp: 83  
 Ion Ratio Lower Upper  
 43 100  
 41 0.0 57.8 86.8#  
 74 0.0 10.2 15.2#



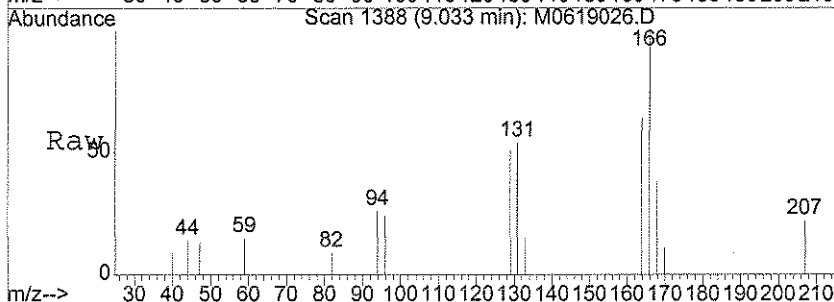
Abundance Ion 43.20 (42.90 to 43.90): M0619026.D  
 300 Ion 41.20 (40.90 to 41.90): M0619026.D  
 Ion 74.10 (73.80 to 74.80): M0619026.D



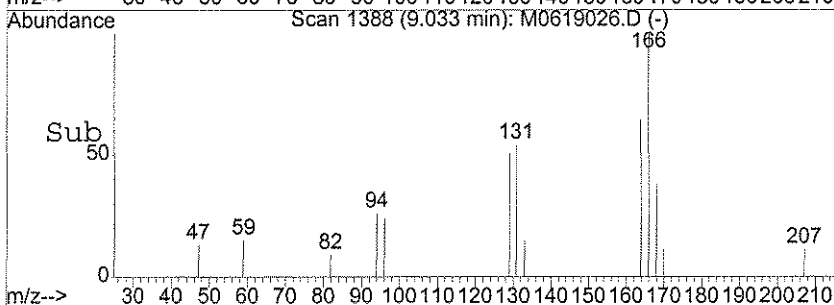
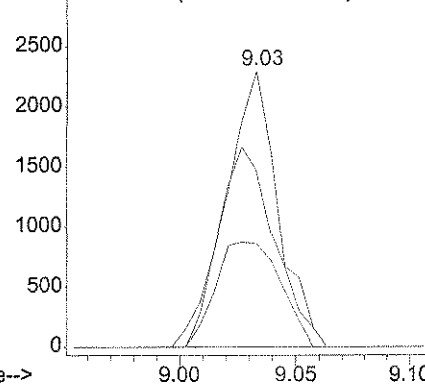


#60  
 Tetrachloroethene  
 Concen: 0.37 ug/l  
 RT: 9.03 min Scan# 1388  
 Delta R.T. 0.01 min  
 Lab File: M0619026.D  
 Acq: 19 Jun 2007 20:59

Tgt Ion	Resp	Lower	Upper
166	3609		
166	100		
164	77.5	65.6	98.4
168	46.9	41.1	61.7



Abundance Ion 165.95 (165.65 to 166.65): M06190  
 Ion 163.95 (163.65 to 164.65): M06190  
 Ion 167.95 (167.65 to 168.65): M06190





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-004  
 Lab File ID: M0620014.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/20/2007 14:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	0.68		J
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.74		
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-2

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 14:54

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-004  
 Lab File ID: M0620014.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/20/2007 14:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

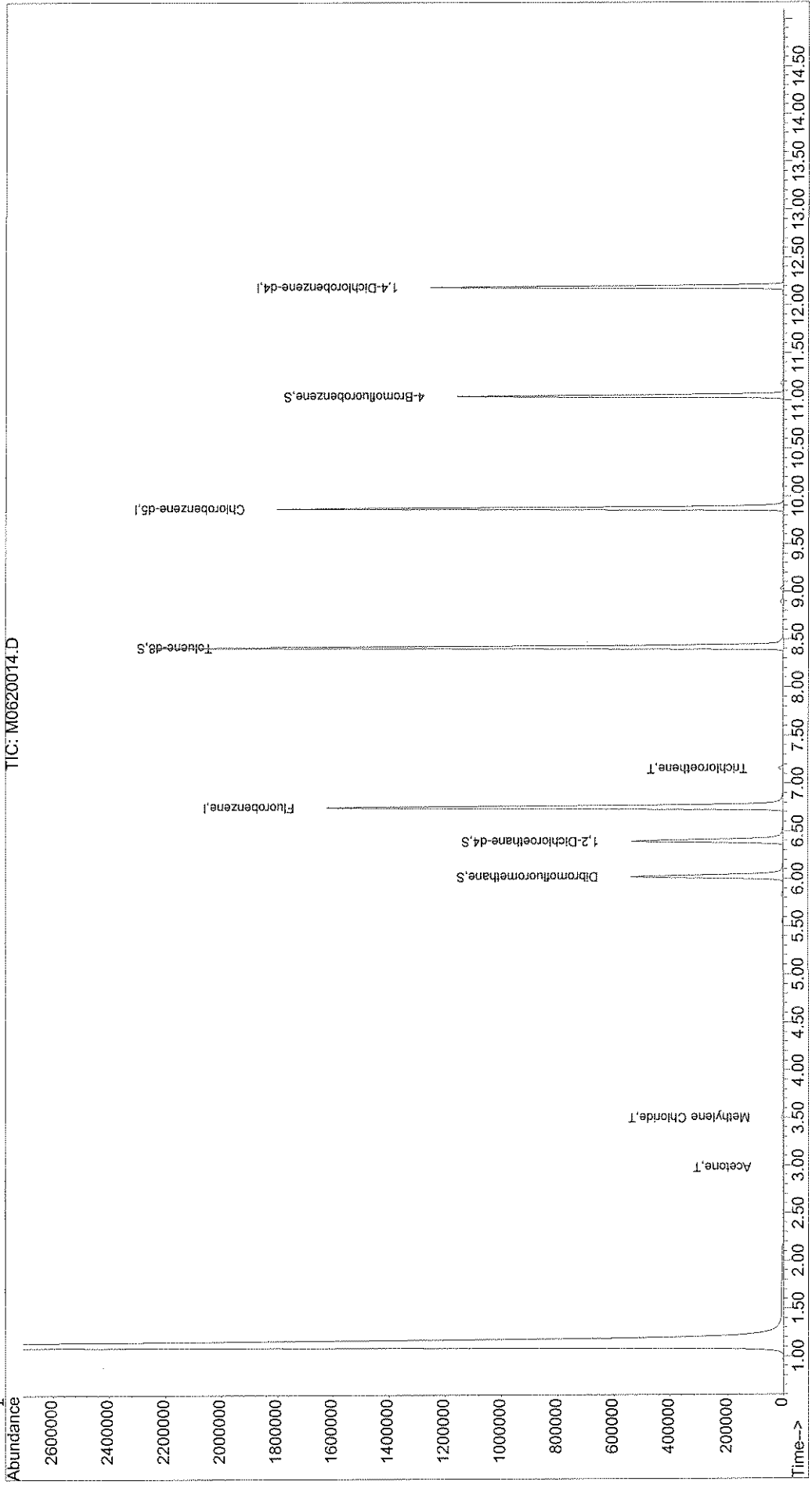
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620014.D Vial: 69  
Acq On : 20 Jun 2007 14:54 Operator: DGA  
Sample : JPL36-004 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 12:50 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620014.D  
 Acq On : 20 Jun 2007 14:54  
 Sample : JPL36-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:50 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1693816	50.00	ug/l	0.00	100.73%
54) Chlorobenzene-d5	9.87	117	1029067	50.00	ug/l	0.00	103.70%
74) 1,4-Dichlorobenzene-d4	12.19	152	351705	50.00	ug/l	0.00	90.90%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	402053	52.40	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.80%	
40) 1,2-Dichloroethane-d4	6.39	65	435435	52.45	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.90%	
55) Toluene-d8	8.42	98	1588951	49.99	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.98%	
76) 4-Bromofluorobenzene	11.05	95	386143	58.42	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.84%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.90	96	59	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	2.23	101	56	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	5126	2.75 ug/l	#	67
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	122	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.40	43	297	N.D.		
18) Methylene Chloride	3.50	84	6091	0.68 ug/l		95
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0620014.D M8260W.M Wed Jun 27 12:50:17 2007

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620014.D  
 Acq On : 20 Jun 2007 14:54  
 Sample : JPL36-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:50 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.58	63	3646	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	5.40	96	1818	N.D.		
30) 2-Butanone	5.54	43	1114	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.68	41	57	N.D.		
34) Chloroform	5.83	83	5760	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.03	56	55	N.D.		
38) Carbon Tetrachloride	6.16	117	159	N.D.		
39) 1,1-Dichloropropene	6.17	75	61	N.D.		
41) Benzene	6.42	78	1415	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.	d	
45) Trichloroethene	7.15	130	6638	0.74	ug/l	88
46) Methylcyclohexane	7.31	83	389	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.73	83	1553	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.48	92	1309	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	8.87	97	75	N.D.		
60) Tetrachloroethene	9.03	166	3923	N.D.		
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	9.28	43	440	N.D.		
63) Dibromochloromethane	9.33	129	365	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.87	91	2363	N.D.		
66) Chlorobenzene	9.90	112	497	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0620014.D M8260W.M Wed Jun 27 12:50:17 2007

*of output*  
 Page 2

Quantitation Report

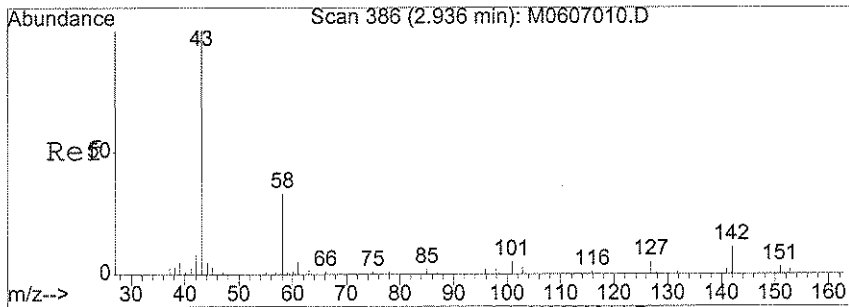
Data File : X:\MSVOA\MOBY\062007\M0620014.D  
 Acq On : 20 Jun 2007 14:54  
 Sample : JPL36-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:50 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

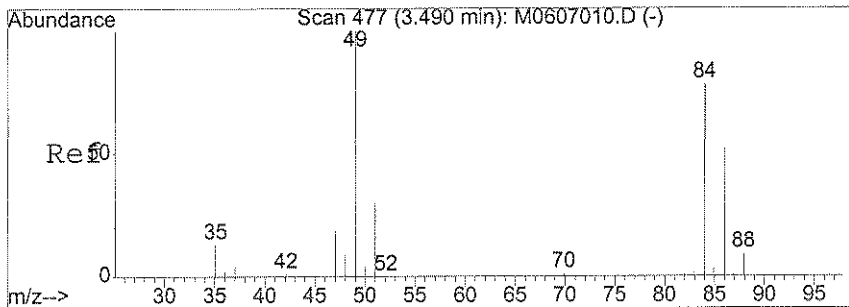
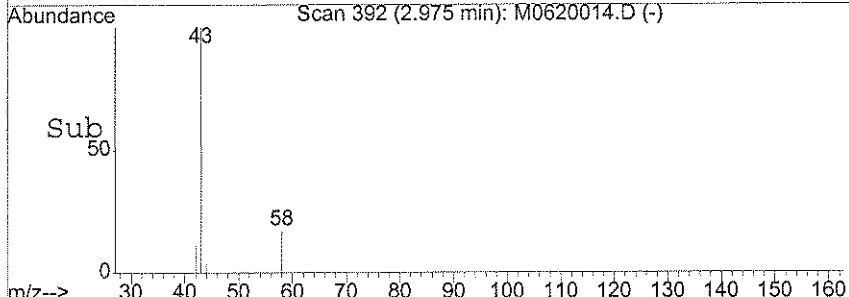
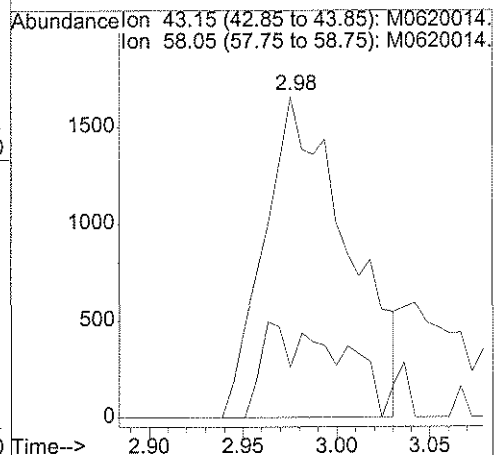
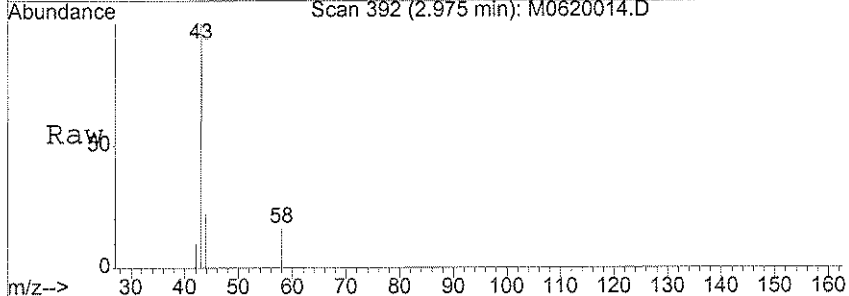
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	927		N.D.	
69) m,p-Xylene	10.11	106	1067		N.D.	
70) o-xylene	10.51	106	311		N.D.	
71) Styrene	10.54	104	137		N.D.	
72) Bromoform	10.75	173	337		N.D.	
73) Isopropylbenzene	10.87	105	437		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	11.04	110	57		N.D.	
80) n-Propylbenzene	11.28	91	909		N.D.	
81) 2-Chlorotoluene	11.36	91	375		N.D.	
82) 4-Chlorotoluene	11.48	91	422		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	477		N.D.	
84) tert-Butylbenzene	11.78	119	133		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	492		N.D.	
86) sec-butylbenzene	11.98	105	501		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	1675		N.D.	
88) 4-Isopropyltoluene	12.14	119	625		N.D.	
89) 1,4-Dichlorobenzene	12.13	146	1675		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	855		N.D.	
91) n-Butylbenzene	12.54	91	841		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.18	180	68		N.D.	
94) Hexachlorobutadiene	14.33	225	93		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d



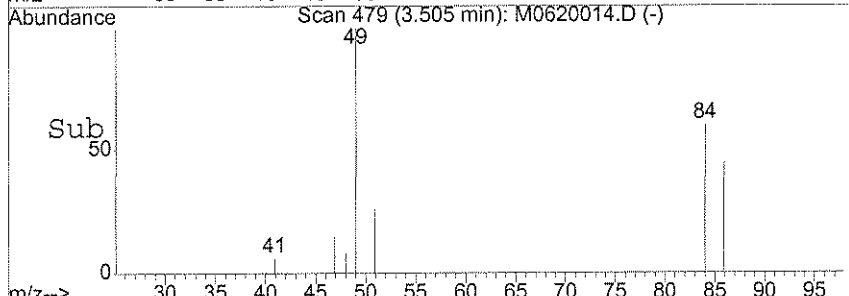
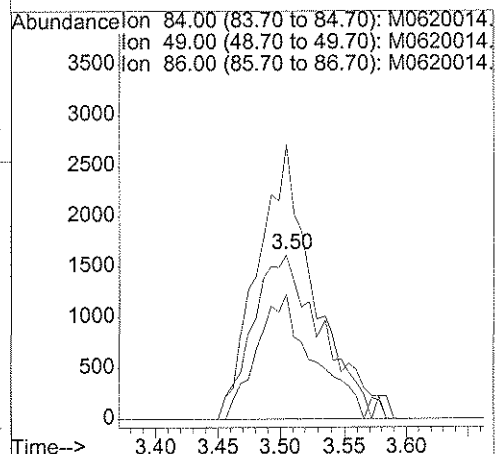
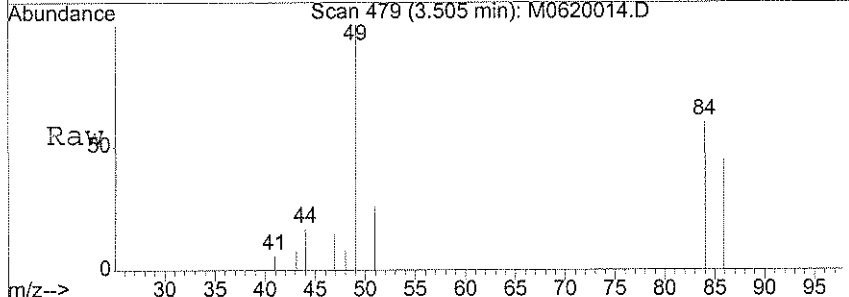
#11  
 Acetone  
 Concen: 2.75 ug/l  
 RT: 2.98 min Scan# 392  
 Delta R.T. -0.02 min  
 Lab File: M0620014.D  
 Acq: 20 Jun 2007 14:54

Tgt Ion:	43	Resp:	5126
Ion Ratio	Lower	Upper	
43	100		
58	10.1	22.0	33.0#

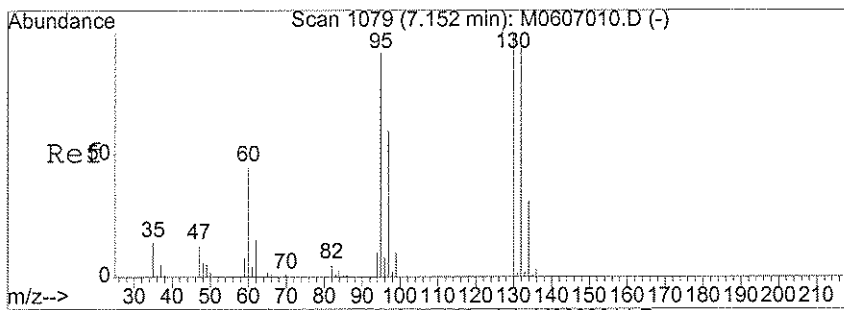


#18  
 Methylene Chloride  
 Concen: 0.68 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0620014.D  
 Acq: 20 Jun 2007 14:54

Tgt Ion:	84	Resp:	6091
Ion Ratio	Lower	Upper	
84	100		
49	140.6	113.6	153.6
86	62.3	45.8	85.8

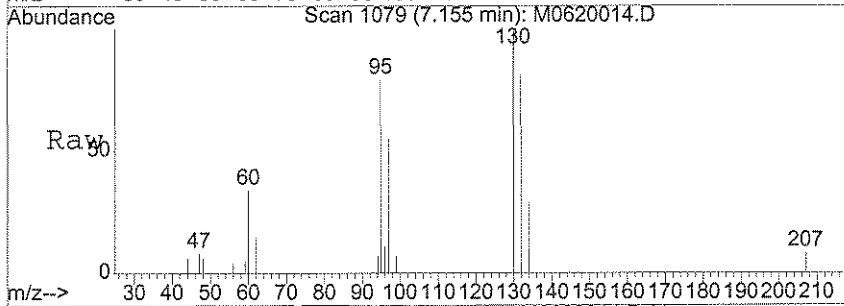




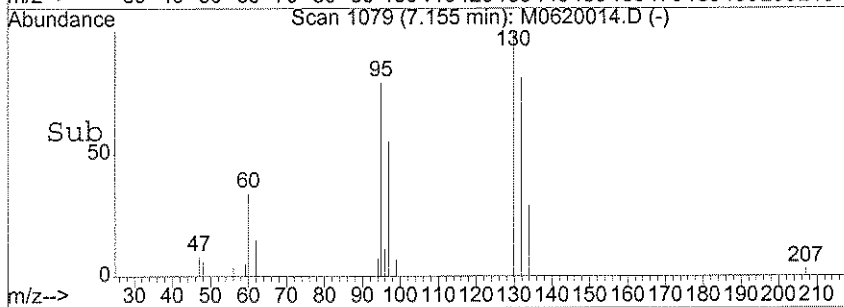
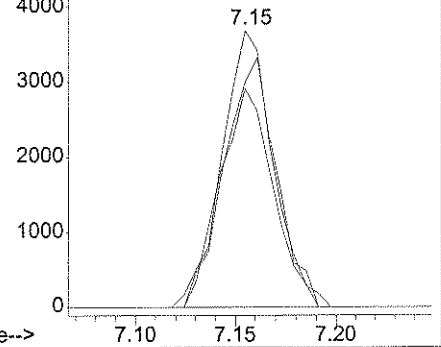


#45  
 Trichloroethene  
 Concen: 0.74 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.00 min  
 Lab File: M0620014.D  
 Acq: 20 Jun 2007 14:54

Tgt Ion	Resp	Lower	Upper
130	6638		
132	91.3	80.2	120.2
95	81.6	75.8	115.8



Abundance  
 Ion 130.00 (129.70 to 130.70): M06200  
 Ion 132.00 (131.70 to 132.70): M06200  
 Ion 95.00 (94.70 to 95.70): M0620014.



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-1

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-005  
 Lab File ID: M0620015.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/20/2007 15:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 15:18

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-19-1

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-005  
 Lab File ID: M0620015.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/20/2007 15:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

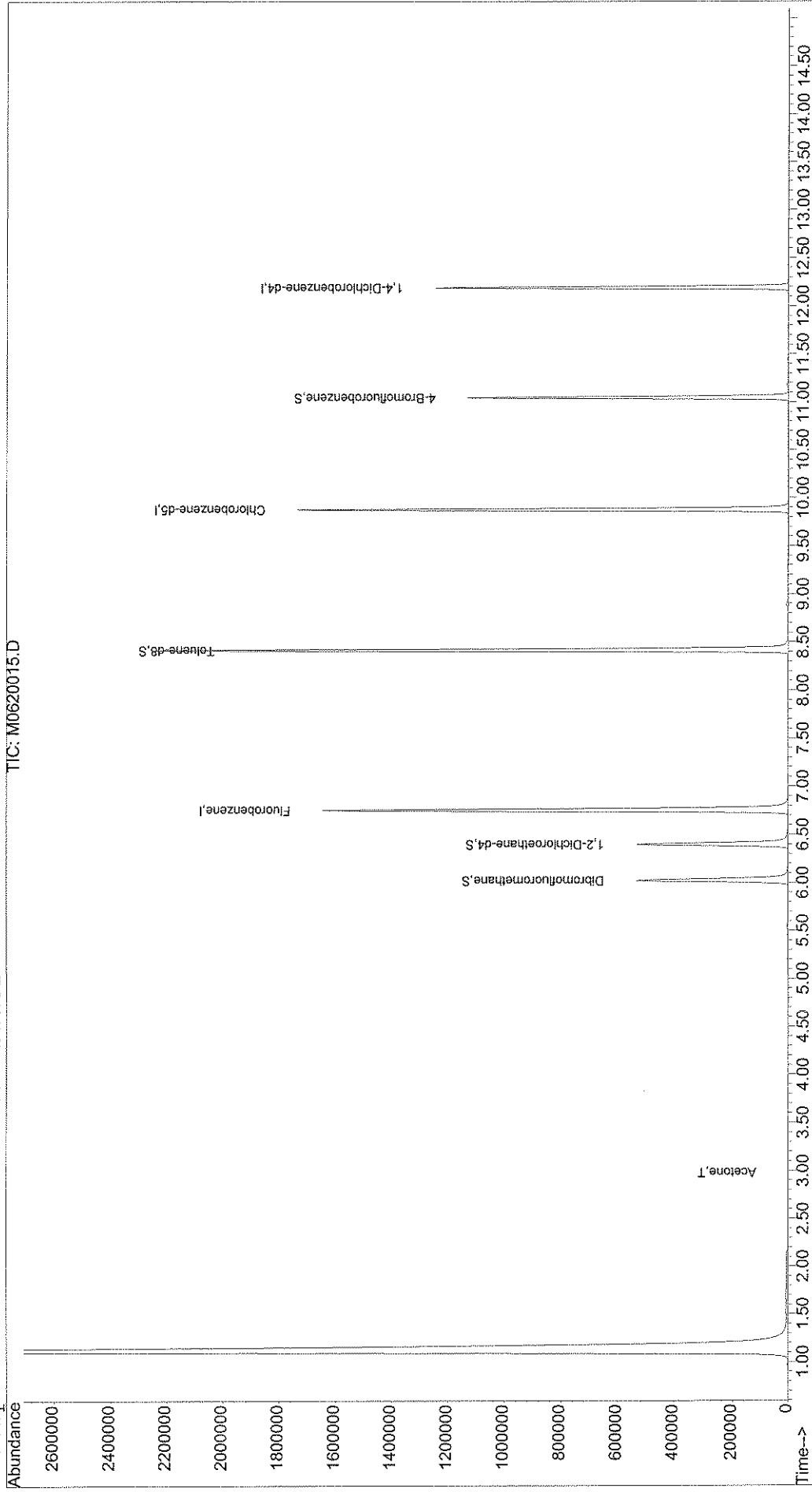
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620015.D  
Acq On : 20 Jun 2007 15:18  
Sample : JPL36-005  
Misc : #5 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 12:52 2007  
Vial: 69  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620015.D  
 Acq On : 20 Jun 2007 15:18  
 Sample : JPL36-005  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:52 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1681082	50.00	ug/l	0.00 99.97%
54) Chlorobenzene-d5	9.88	117	1015627	50.00	ug/l	0.00 102.35%
74) 1,4-Dichlorobenzene-d4	12.19	152	344476	50.00	ug/l	0.00 89.03%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	399454	52.45	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.90%
40) 1,2-Dichloroethane-d4	6.40	65	435795	52.89	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.78%
55) Toluene-d8	8.42	98	1574957	50.20	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.40%
76) 4-Bromofluorobenzene	11.05	95	374412	57.83	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.66%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	1.88	96	55	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	2.70	56	57	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.99	43	4175	2.26 ug/l #	83
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	3.06	76	64	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	3.42	43	139	N.D.	
18) Methylene Chloride	3.50	84	469	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	3.92	73	918	N.D.	
22) Acrylonitrile	0.00	53	0	N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0620015.D M8260W.M Wed Jun 27 12:52:17 2007

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620015.D  
 Acq On : 20 Jun 2007 15:18  
 Sample : JPL36-005  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:52 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	268		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.77	41	58		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	965		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	579		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.04	166	215		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.20	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2053		N.D.	
66) Chlorobenzene	9.91	112	234		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620015.D  
 Acq On : 20 Jun 2007 15:18  
 Sample : JPL36-005  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:52 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

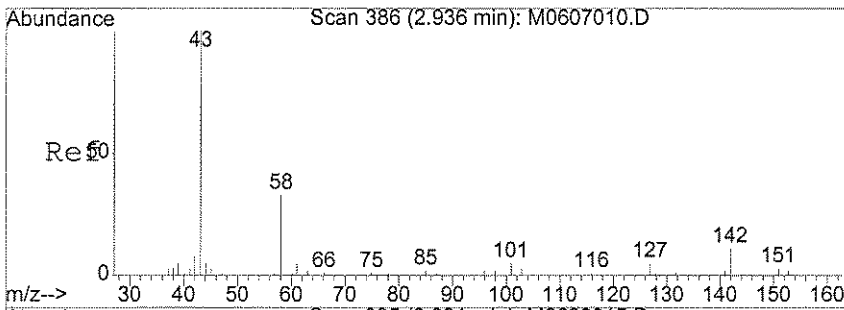
Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	454		N.D.	
69) m,p-Xylene	10.11	106	264		N.D.	
70) o-xylene	10.51	106	60		N.D.	
71) Styrene	10.53	104	77		N.D.	
72) Bromoform	10.75	173	225		N.D.	
73) Isopropylbenzene	10.86	105	372		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	66		N.D.	
80) n-Propylbenzene	11.27	91	529		N.D.	
81) 2-Chlorotoluene	11.37	91	214		N.D.	
82) 4-Chlorotoluene	11.49	91	263		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	212		N.D.	
84) tert-Butylbenzene	11.78	119	152		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	113		N.D.	
86) sec-butylbenzene	11.99	105	266		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	82		N.D.	
88) 4-Isopropyltoluene	12.13	119	255		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	62		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	419		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

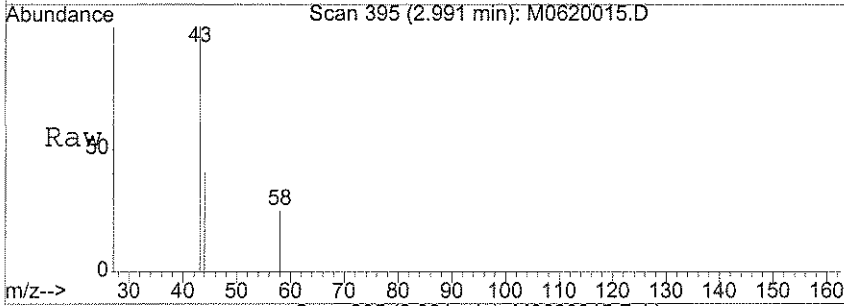
(#) = qualifier out of range (m) = manual integration



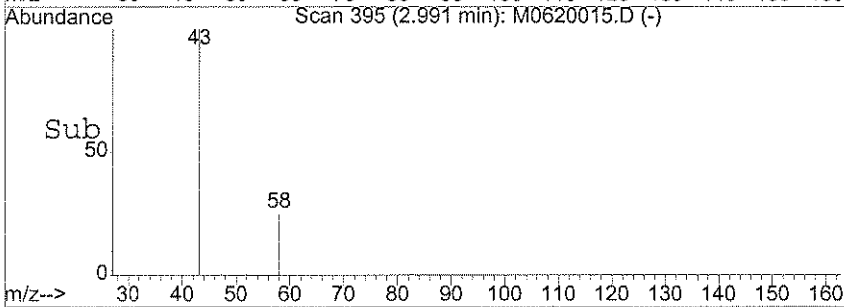
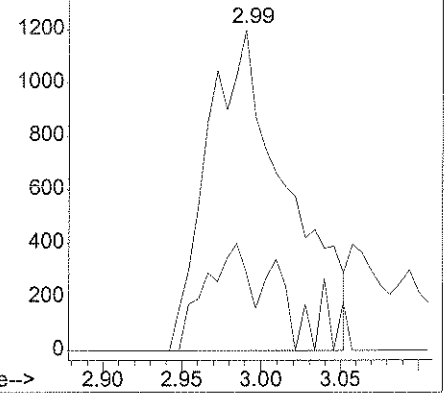


#11  
 Acetone  
 Concen: 2.26 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. 0.00 min  
 Lab File: M0620015.D  
 Acq: 20 Jun 2007 15:18

Tgt Ion: 43 Resp: 4175  
 Ion Ratio Lower Upper  
 43 100  
 58 18.5 22.0 33.0#



Abundance Ion 43.15 (42.85 to 43.85): M0620015  
 1400 Ion 58.05 (57.75 to 58.75): M0620015



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-006  
 Lab File ID: M0620016.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/20/2007 15:42  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-006  
 Lab File ID: M0620016.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/20/2007 15:42  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 15:42

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

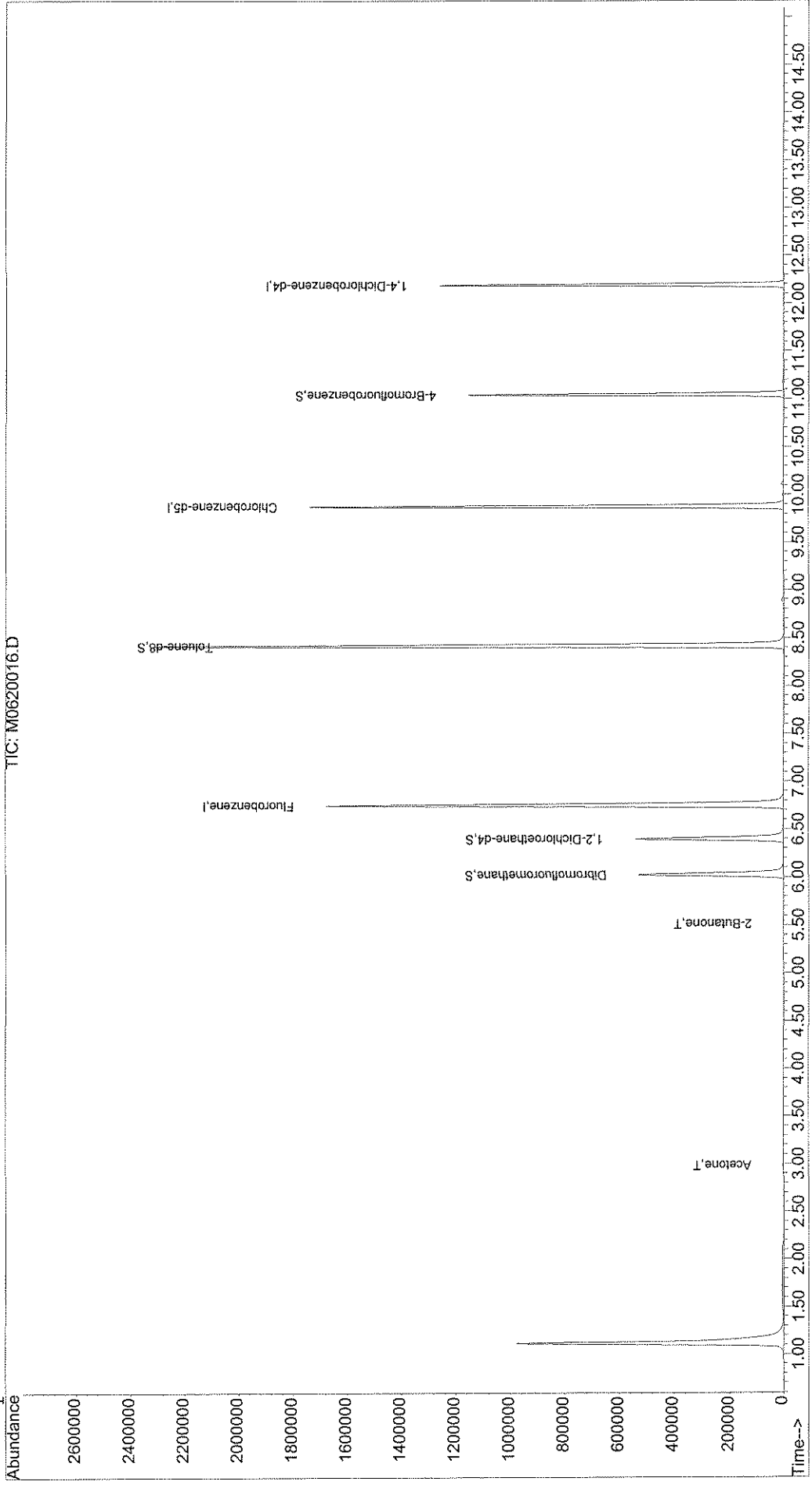
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620016.D Vial: 70  
Acq On : 20 Jun 2007 15:42 Operator: DGA  
Sample : JPL36-006 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:26 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620016.D  
 Acq On : 20 Jun 2007 15:42  
 Sample : JPL36-006  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:26 2007

Vial: 70  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1678132	50.00	ug/l	0.00	99.80%
54) Chlorobenzene-d5	9.88	117	1020991	50.00	ug/l	0.00	102.89%
74) 1,4-Dichlorobenzene-d4	12.19	152	349494	50.00	ug/l	0.00	90.33%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	398226	52.38	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.76%	
40) 1,2-Dichloroethane-d4	6.40	65	432023	52.52	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.04%	
55) Toluene-d8	8.42	98	1573827	49.90	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.80%	
76) 4-Bromofluorobenzene	11.04	95	378738	57.66	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.32%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.83	96	57	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	2.75	56	57	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	7305	3.96	ug/l	99
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	666	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0620016.D M8260W.M Wed Jun 27 13:26:42 2007

*J. G. Smith*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620016.D  
 Acq On : 20 Jun 2007 15:42  
 Sample : JPL36-006  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:26 2007

Vial: 70  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	4365	1.27	ug/l #	83
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	966		N.D.	
34) Chloroform	5.83	83	99		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.99	56	62		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	545		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	115		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	804		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	59		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.20	43	410		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2194		N.D.	
66) Chlorobenzene	9.90	112	205		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0620016.D M8260W.M Wed Jun 27 13:26:42 2007

*J. G. ...*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620016.D  
 Acq On : 20 Jun 2007 15:42  
 Sample : JPL36-006  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:26 2007

Vial: 70  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

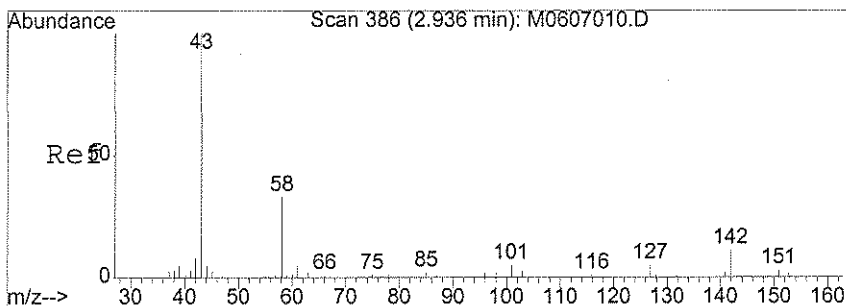
Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	3717		N.D.	
69) m,p-Xylene	10.11	106	2529		N.D.	
70) o-xylene	10.50	106	1183		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	203		N.D.	
73) Isopropylbenzene	10.87	105	129		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	527		N.D.	
81) 2-Chlorotoluene	11.35	91	72		N.D.	
82) 4-Chlorotoluene	11.48	91	266		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	57		N.D.	
84) tert-Butylbenzene	11.77	119	117		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	216		N.D.	
86) sec-butylbenzene	11.99	105	299		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	125		N.D.	
88) 4-Isopropyltoluene	12.13	119	201		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	232		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	294		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

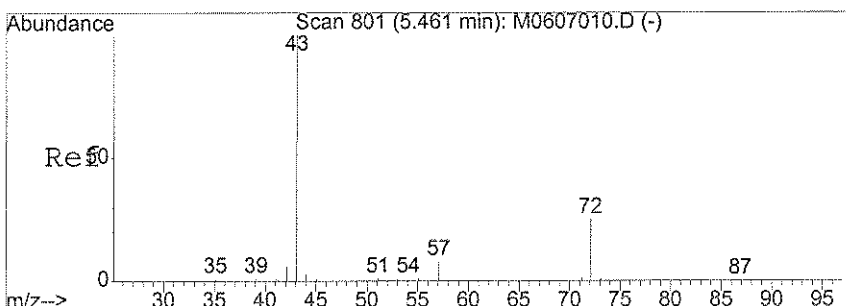
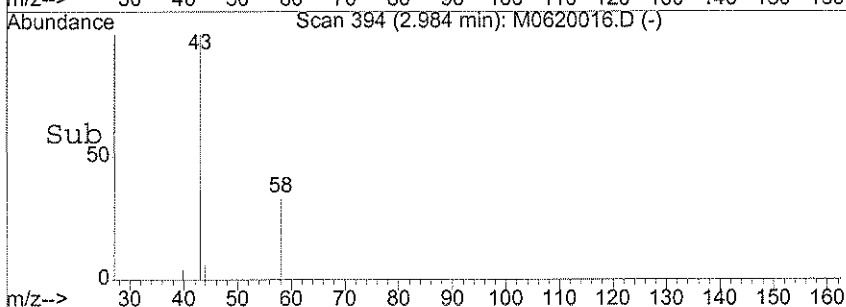
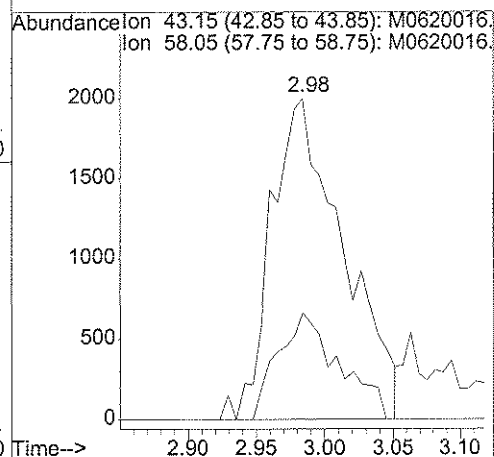
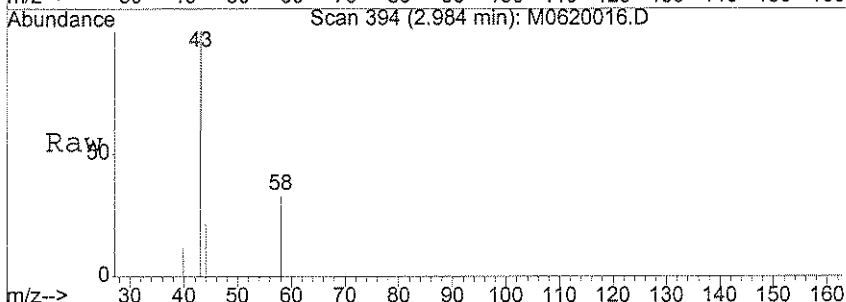
(#) = qualifier out of range (m) = manual integration





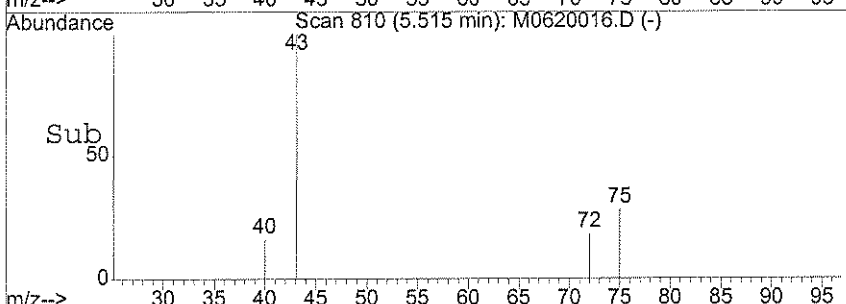
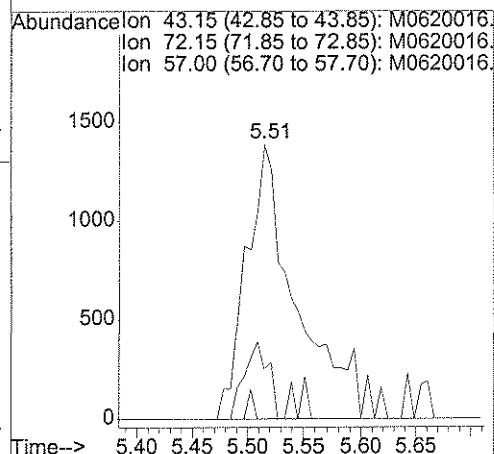
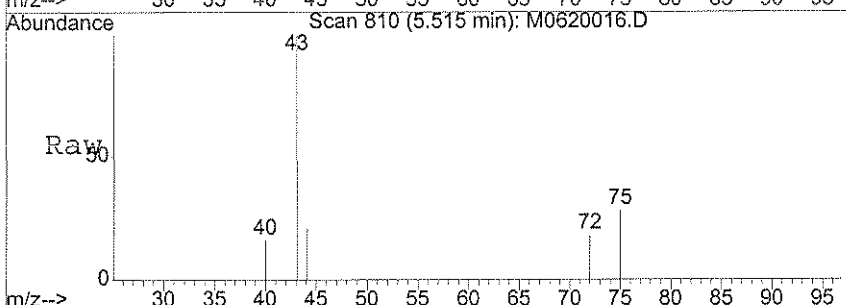
#11  
 Acetone  
 Concen: 3.96 ug/l  
 RT: 2.98 min Scan# 394  
 Delta R.T. -0.01 min  
 Lab File: M0620016.D  
 Acq: 20 Jun 2007 15:42

Tgt Ion: 43 Resp: 7305  
 Ion Ratio Lower Upper  
 43 100  
 58 28.2 22.0 33.0



#30  
 2-Butanone  
 Concen: 1.27 ug/l  
 RT: 5.51 min Scan# 810  
 Delta R.T. 0.01 min  
 Lab File: M0620016.D  
 Acq: 20 Jun 2007 15:42

Tgt Ion: 43 Resp: 4365  
 Ion Ratio Lower Upper  
 43 100  
 72 13.4 16.7 25.1#  
 57 1.3 6.1 9.1#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-007  
 Lab File ID: M0619016.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 15:56  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL36  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-007  
 Lab File ID: M0619016.D  
 Date Collected: 06/14/2007  
 Date/Time Analyzed: 06/19/2007 15:56  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018854

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL36-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/14/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/19/2007 15:56

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

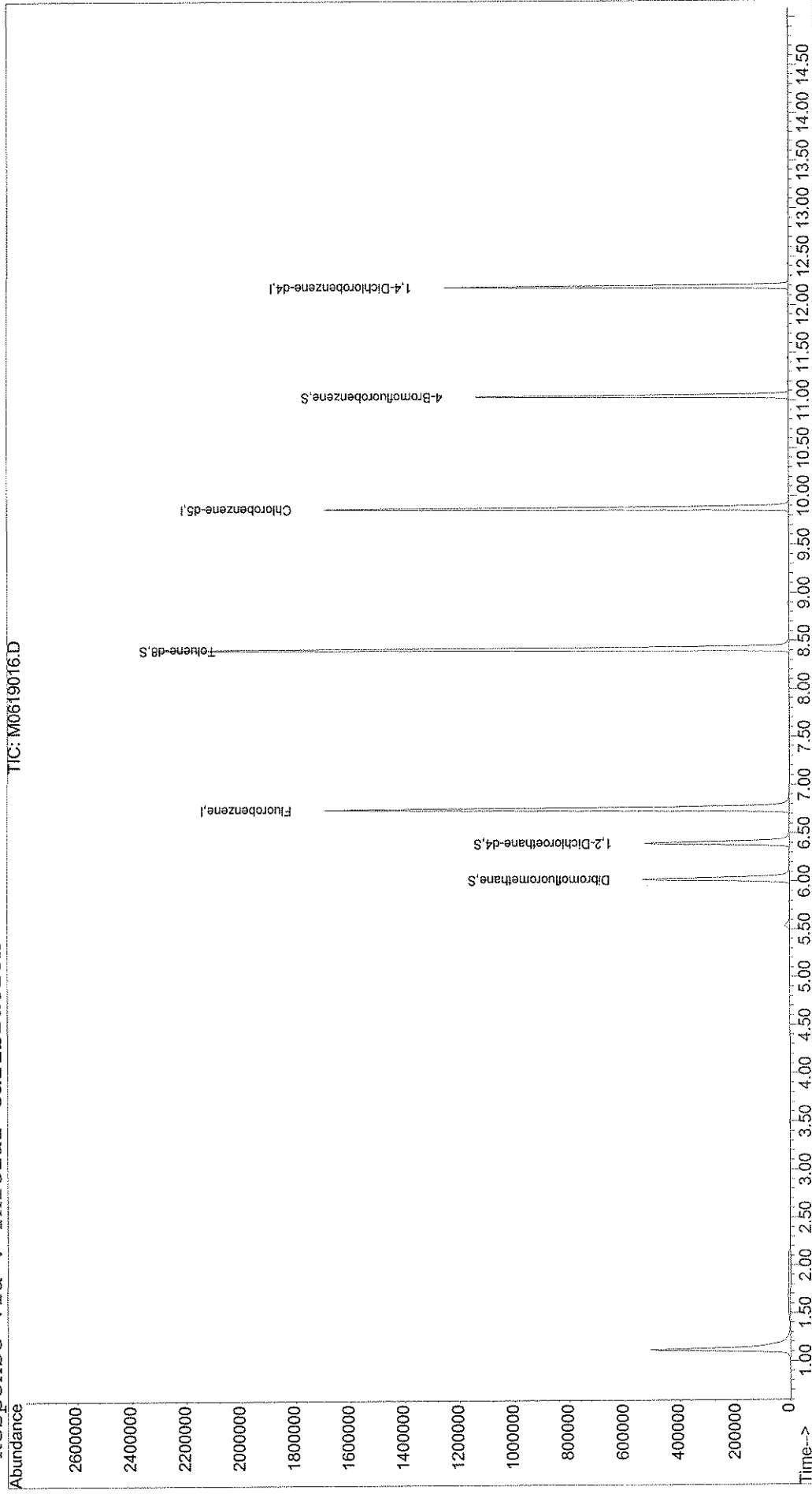
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619016.D  
Acq On : 19 Jun 2007 15:56  
Sample : JPL36-007  
Misc : #2 5ml +IS/SS(524  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:45 2007  
Vial: 57  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619016.D  
 Acq On : 19 Jun 2007 15:56  
 Sample : JPL36-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:45 2007

Vial: 57  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1689900	50.00	ug/l	0.00 100.50%
54) Chlorobenzene-d5	9.88	117	1011820	50.00	ug/l	0.00 101.97%
74) 1,4-Dichlorobenzene-d4	12.19	152	344533	50.00	ug/l	0.00 89.05%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	402632	52.59	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.18%
40) 1,2-Dichloroethane-d4	6.40	65	431134	52.05	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.10%
55) Toluene-d8	8.42	98	1587751	50.80	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.60%
76) 4-Bromofluorobenzene	11.05	95	369763	57.11	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.22%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.43	50	199	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.90	96	61	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	2.70	56	57	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	552	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.42	43	221	N.D.		
18) Methylene Chloride	3.49	84	1109	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619016.D  
 Acq On : 19 Jun 2007 15:56  
 Sample : JPL36-007  
 Misc : #2 5ml +IS/SS(524  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:45 2007

Vial: 57  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.72	41	111		N.D.	
34) Chloroform	5.82	83	61		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.18	75	62		N.D.	
41) Benzene	6.41	78	897		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.16	130	64		N.D.	
46) Methylcyclohexane	7.31	83	128		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.41	92	184		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	399		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.21	43	56		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2396		N.D.	
66) Chlorobenzene	9.90	112	278		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\061907\M0619016.D  
 Acq On : 19 Jun 2007 15:56  
 Sample : JPL36-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:45 2007

Vial: 57  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	948		N.D.	
69) m,p-Xylene	10.11	106	441		N.D.	
70) o-xylene	10.51	106	58		N.D.	
71) Styrene	10.53	104	210		N.D.	
72) Bromoform	10.76	173	288		N.D.	
73) Isopropylbenzene	10.87	105	519		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	58		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	797		N.D.	
81) 2-Chlorotoluene	11.37	91	357		N.D.	
82) 4-Chlorotoluene	11.49	91	588		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	362		N.D.	
84) tert-Butylbenzene	11.77	119	264		N.D.	
85) 1,2,4-Trimethylbenzene	11.84	105	455		N.D.	
86) sec-butylbenzene	11.99	105	680		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	284		N.D.	
88) 4-Isopropyltoluene	12.13	119	727		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	328		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	844		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.34	225	125		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



**TIC FORMS**

SDG JPL36

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B061907MVOWM2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: B061907MVOWM2

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619014.D Vial: 55  
Acq On : 19 Jun 2007 14:57 Operator: DGA  
Sample : B061907MVOWM2 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-38-11) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619014.D M8260W.M Fri Jun 29 06:54:18 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062007MVOWM3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL36  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: B062007MVOWM3  
 Lab File ID: M0620011.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620011.D Vial: 56  
Acq On : 20 Jun 2007 13:18 Operator: DGA  
Sample : B062007MVOWM3 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-38-11) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620011.D M8260W.M Fri Jun 29 06:54:46 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062207MVOWM2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL36  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec.  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 1

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019074  
 Lab Sample ID: B062207MVOWM2  
 Lab File ID: M0622012.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/22/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	unknown	3.5	50	J
02				
03				
04				
05				
06				
07				
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11				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062207\M0622012.D Vial: 56  
 Acq On : 22 Jun 2007 11:09 Operator: DGA  
 Sample : B062207MVOWM2 Inst : MOBY  
 Misc : 5ml PFW+IS/SS(MV8-38-11) Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
3.50	50.00 ug/l	3275	Fluorobenzene	3275	6.75

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Krypton \$\$ Kr \$\$ UN 1056 \$\$ UN 1970	84	Kr	007439-90-9	5
2			Furan, 2,5-dihydro-3-methyl- \$\$ 2,5	84	C5H8O	001708-31-2	4
3			2-Amino-oxazole	84	C3H4N2O	000000-00-0	4
4			2,3,4,5-Tetrahydropyridazine	84	C4H8N2	000694-06-4	4
5			3-Buten-2-one, 3-methyl-	84	C5H8O	000814-78-8	3

M0622012.D M8260W.M Wed Jun 27 14:42:45 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-19-5
---------

Lab Name: Laucks Testing Laboratories, Inc

SDG No.: JPL36

Matrix: (SOIL/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

Contract: JPL Groundwater Monitorin

Run Sequence: R018854

Lab Sample ID: JPL36-001

Lab File ID: M0619024.D

Date Collected: 06/15/2007

Date Analyzed: 06/19/2007

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619024.D Vial: 65  
Acq On : 19 Jun 2007 20:00 Operator: DGA  
Sample : JPL36-001 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619024.D M8260W.M Fri Jun 29 11:30:02 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-19-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL36  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-002  
 Lab File ID: M0619025.D  
 Date Collected: 06/15/2007  
 Date Analyzed: 06/19/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619025.D Vial: 66  
Acq On : 19 Jun 2007 20:30 Operator: DGA  
Sample : JPL36-002 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619025.D M8260W.M Fri Jun 29 11:30:11 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-19-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL36  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018854  
 Lab Sample ID: JPL36-003  
 Lab File ID: M0619026.D  
 Date Collected: 06/15/2007  
 Date Analyzed: 06/19/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619026.D Vial: 67  
Acq On : 19 Jun 2007 20:59 Operator: DGA  
Sample : JPL36-003 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619026.D M8260W.M Fri Jun 29 11:30:19 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-19-2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018875

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL36-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/20/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620014.D Vial: 69  
Acq On : 20 Jun 2007 14:54 Operator: DGA  
Sample : JPL36-004 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620014.D M8260W.M Fri Jun 29 06:45:45 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-19-1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL36  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-005  
 Lab File ID: M0620015.D  
 Date Collected: 06/15/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620015.D Vial: 69  
Acq On : 20 Jun 2007 15:18 Operator: DGA  
Sample : JPL36-005 Inst : MOBY  
Misc : #5 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620015.D M8260W.M Fri Jun 29 06:45:56 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL36  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL36-006  
 Lab File ID: M0620016.D  
 Date Collected: 06/15/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620016.D Vial: 70  
Acq On : 20 Jun 2007 15:42 Operator: DGA  
Sample : JPL36-006 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620016.D M8260W.M Fri Jun 29 06:46:06 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-2-6/14/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL36

Run Sequence: R018854

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL36-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0619016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/19/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\061907\M0619016.D Vial: 57  
Acq On : 19 Jun 2007 15:56 Operator: DGA  
Sample : JPL36-007 Inst : MOBY  
Misc : #2 5ml +IS/SS(524 Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0619016.D M8260W.M Fri Jun 29 11:29:49 2007

**Metals Data**

**JPL36**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
<u>MW-19-5</u>	<u>JPL36-001</u>
<u>MW-19-4</u>	<u>JPL36-002</u>
<u>MW-19-3</u>	<u>JPL36-003</u>
<u>MW-19-2</u>	<u>JPL36-004</u>
<u>MW-19-1</u>	<u>JPL36-005</u>
<u>MW-19-1MS</u>	<u>JPL36-005MS</u>
<u>MW-19-1MSD</u>	<u>JPL36-005MSD</u>
<u>EB-2-6/14/07</u>	<u>JPL36-006</u>

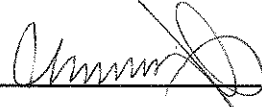
Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Cheronne Oreiro

Date: 07/06/07

Title: Metals Lead

## **Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-19-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

Matrix (soil/water): Water

Lab Sample ID: JPL36-001

Level (low/med): LOW

Date Received: 06/15/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	75600			P	R019188
7440-47-3	Chromium	8.32			M	R019127
7439-89-6	Iron	309			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	38700			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	38100		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-19-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

Matrix (soil/water): Water

Lab Sample ID: JPL36-002

Level (low/med): LOW

Date Received: 06/15/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.43			M	R019127
7440-70-2	Calcium	64000			P	R019188
7440-47-3	Chromium	8.65			M	R019127
7439-89-6	Iron	222			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	30200			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	34800		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-19-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

Matrix (soil/water): Water

Lab Sample ID: JPL36-003

Level (low/med): LOW

Date Received: 06/15/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.36			M	R019127
7440-70-2	Calcium	78800			P	R019188
7440-47-3	Chromium	10.6			M	R019127
7439-89-6	Iron	530			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	29300			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	31200		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-19-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

Matrix (soil/water): Water

Lab Sample ID: JPL36-004

Level (low/med): LOW

Date Received: 06/15/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.27			M	R019127
7440-70-2	Calcium	124000			P	R019216
7440-47-3	Chromium	10.8			M	R019127
7439-89-6	Iron	1220			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	48400			P	R019188
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	39100		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-19-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

Matrix (soil/water): Water

Lab Sample ID: JPL36-005

Level (low/med): LOW

Date Received: 06/15/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	51000			P	R019188
7440-47-3	Chromium	6.70			M	R019127
7439-89-6	Iron	490			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	14900			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	14400		*N	P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-2-6/14/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

Matrix (soil/water): Water

Lab Sample ID: JPL36-006

Level (low/med): LOW

Date Received: 06/15/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5000	U		P	R019172
7440-47-3	Chromium	1.00	U		M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	5000	U	*N	P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL36**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL36

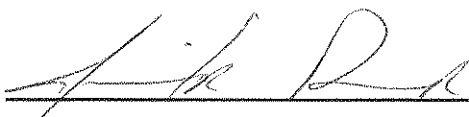
SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-19-5</u>	<u>JPL36-001DL</u>
<u>MW-19-4</u>	<u>JPL36-002DL</u>
<u>MW-19-3</u>	<u>JPL36-003DL</u>
<u>MW-19-3D</u>	<u>JPL36-003Dup</u>
<u>MW-19-2</u>	<u>JPL36-004DL</u>
<u>MW-19-1</u>	<u>JPL36-005</u>
<u>MW-19-1D</u>	<u>JPL36-005D</u>
<u>MW-19-1MS</u>	<u>JPL36-005MS</u>
<u>MW-19-1MSD</u>	<u>JPL36-005MSD</u>
<u>EB-2-6/14/07</u>	<u>JPL36-006</u>
<u>EB-2-6/14/07D</u>	<u>JPL36-006D</u>

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 6-29-07

Title: Inorganics Lead



## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL36  
**Sample Number:** MW-19-5 **Date/Time Collected:** 06/14/2007 07:48  
**Lab Sample ID:** JPL36-001 **Date/Time Received:** 06/15/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.8		0.10	0.10	06/15/2007	06/15/2007	R018760

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	450		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	6.2		2.0	0.55	06/15/2007	06/15/2007	R018734
Sulfate as SO4	14808-79-8	10	76		10	1.7	06/15/2007	06/15/2007	R018734
Chloride	16887-00-6	10	74		10	0.76	06/15/2007	06/15/2007	R018734

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	190		8	8	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	06/20/2007	06/21/2007	R018849

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL36  
**Sample Number:** MW-19-4 **Date/Time Collected:** 06/14/2007 08:26  
**Lab Sample ID:** JPL36-002 **Date/Time Received:** 06/15/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	06/15/2007	06/15/2007	R018760

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	370		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	7.7		2.0	0.55	06/15/2007	06/15/2007	R018734
Sulfate as SO4	14808-79-8	10	49		10	1.7	06/15/2007	06/15/2007	R018734
Chloride	16887-00-6	10	46		10	0.76	06/15/2007	06/15/2007	R018734

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	170		8	8	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2.5	2.5	U	2.5	0.35	06/20/2007	06/21/2007	R018849

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL36  
**Sample Number:** MW-19-3 **Date/Time Collected:** 06/14/2007 09:03  
**Lab Sample ID:** JPL36-003 **Date/Time Received:** 06/15/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	06/15/2007	06/15/2007	R018760

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	440		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	11		2.0	0.55	06/15/2007	06/15/2007	R018734
Sulfate as SO <sub>4</sub>	14808-79-8	10	55		10	1.7	06/15/2007	06/15/2007	R018734
Chloride	16887-00-6	10	55		10	0.76	06/15/2007	06/15/2007	R018734

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO <sub>3</sub> )	3812-32-6	4	8	U	8	8	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO <sub>3</sub> )	71-52-3	4	180		8	8	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2.5	3.8		2.5	0.35	06/20/2007	06/21/2007	R018849

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL36  
**Sample Number:** MW-19-2 **Date/Time Collected:** 06/14/2007 09:39  
**Lab Sample ID:** JPL36-004 **Date/Time Received:** 06/15/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.0		0.10	0.10	06/15/2007	06/15/2007	R018760

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	650		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	15		2.0	0.55	06/15/2007	06/15/2007	R018734
Sulfate as SO4	14808-79-8	10	140		10	1.7	06/15/2007	06/15/2007	R018734
Chloride	16887-00-6	10	97		10	0.76	06/15/2007	06/15/2007	R018734

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	220		8	8	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	5.7		4.0	0.56	06/20/2007	06/21/2007	R018849

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL36  
**Sample Number:** MW-19-1 **Date/Time Collected:** 06/14/2007 10:17  
**Lab Sample ID:** JPL36-005 **Date/Time Received:** 06/15/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.4		0.10	0.10	06/15/2007	06/15/2007	R018760

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	220		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.1		0.20	0.055	06/15/2007	06/15/2007	R018734
Sulfate as SO4	14808-79-8	10	29		10	1.7	06/15/2007	06/15/2007	R018734
Chloride	16887-00-6	10	10		10	0.76	06/15/2007	06/15/2007	R018734

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	160		8	8	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/20/2007	06/21/2007	R018849

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL36  
**Sample Number:** EB-2-6/14/07 **Date/Time Collected:** 06/14/2007 10:01  
**Lab Sample ID:** JPL36-006 **Date/Time Received:** 06/15/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.7		0.10	0.10	06/15/2007	06/15/2007	R018760

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	32		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/15/2007	06/15/2007	R018734
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/15/2007	06/15/2007	R018734
Chloride	16887-00-6	1	1.0	U	1.0	0.076	06/15/2007	06/15/2007	R018734

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/27/2007	06/28/2007	R019077

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL37**

**JULY 6, 2007**



# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL37  
Date of Report: July 6, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-18-5	JPL37-001	VOA/MET/INO
MW-18-4	JPL37-002	VOA/MET/INO
MW-18-3	JPL37-003	VOA/MET/INO
MW-18-2	JPL37-004	VOA/MET/INO
MW-18-1	JPL37-005	VOA/MET/INO
EB-3-6/15/07	JPL37-006	VOA/MET/INO
TB-3-6/15/07	JPL37-007	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

One of two VOA vials for TB-3-6/15/07 was received broken.

Several sample VOA vials were received with air bubbles < 1/4 inch in size. See cooler receipt forms for specific documentation.

## **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factor was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 ( $r$  values greater than 0.995) and were therefore compliant.

#### Continuing Calibration Verification (CCV):

In the CCV performed on 06/19/2007 the percent difference value for dichlorodifluoromethane exceeded 30% due to increased response. This analyte was not detected in any associated samples so no further action was taken.

#### Quality Control Analyses:

Analysis of the blank spike performed on 6/20/07 yielded a recovery for dichlorodifluoromethane that exceeded the control limit. Because all of the other analytes were within the control limits no further action was taken.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

# LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

## ICP Metals:

The preparation blank for metals in soil is calculated to mg/kg by assuming a sample weight of 1.00g/100mL. Total solids of 100% are also assumed.

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

## **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

## ICP Metals:

The client requested analytes arsenic, chromium, and lead analyzed by EPA method 200.8 and analytes calcium, iron, potassium, magnesium, and sodium analyzed by EPA method 200.7. Due to the ICP-Trace instrument being out of production, all analytes for samples and quality control samples for this SDG were analyzed by method 200.8 on an ICP-MS instrument (Elan 6100).

Samples in this SDG were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate recoveries and serial dilutions apply to all

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL36 or the raw data provided.

For sample #MW-18-2, magnesium and sodium were reported from a 5X dilution. The instrument results for these elements were 20,059 ug/L and 20,942 ug/L, respectively, which is slightly over the calibration range of 20,000 ug/L. A linear range study done on 3/8/07 shows linearity for magnesium up to 100,000 ug/L and for sodium up to 50,000 ug/L. No further action was taken and no flagging is necessary for this event.

The matrix spike duplicate sample percent recovery of sodium was outside of the established control limits of 70-130% for sample MW-19-1 for JPL36. The LCSW recovery was within these control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and V.

The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-19-1 for JPL36. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

### Miscellaneous Inorganics:

For run sequence R018823, the matrix spike recovery was outside the established control limits for the sulfate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

## LAUCKS TESTING LABORATORIES

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

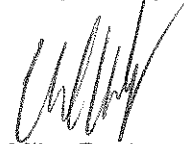
940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

6 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/6/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies



LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)
JPL37-001	06/16/2007 09:20 AM	06/15/2007 08:18 AM	MW-18-5	IN	IN	IN	IN	IN	IN	IN	IN
JPL37-002	06/16/2007 09:20 AM	06/15/2007 09:02 AM	MW-18-4	IN	IN	IN	IN	IN	IN	IN	IN
JPL37-003	06/16/2007 09:20 AM	06/15/2007 09:40 AM	MW-18-3	IN	IN	IN	IN	IN	IN	IN	IN
JPL37-004	06/16/2007 09:20 AM	06/15/2007 10:17 AM	MW-18-2	IN	IN	IN	IN	IN	IN	IN	IN
JPL37-005	06/16/2007 09:20 AM	06/15/2007 10:55 AM	MW-18-1	IN	IN	IN	IN	IN	IN	IN	IN
JPL37-006	06/16/2007 09:20 AM	06/15/2007 10:40 AM	EB-3-6/15/07	IN	IN	IN	IN	IN	IN	IN	IN
JPL37-007	06/16/2007 09:20 AM	06/15/2007 12:00 AM	TB-3-6/15/07								IN

Approved By: *[Signature]*

On: 6/16/07

Samples identified with a '\*' client has requested QC for

LEGEND: -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0





**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL37  
Cooler: AAP001  
Temperatures: 5.1  
COC #: 42854

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL37-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL37-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL37-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL37-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL37-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL37-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL37-007	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL37  
Cooler: AAP001  
Temperatures: 5.1  
COC #: 42854

Sample	Bottle #	Bottle Description	pH	Bubbles
--------	----------	--------------------	----	---------

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**

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**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL37**

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Completed and checked by: Andy Ecklund Date: 7/9/07

**QC SUMMARY**

SDG JPL37

VOLATILES ANALYSIS



2  
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 ( ) #	TOT OUT
(JPL37-006) EB-3-6/15/07	105	117	100		0
(JPL37-005) MW-18-1	106	116	99		0
(JPL37-004) MW-18-2	107	114	100		0
(JPL37-003) MW-18-3	106	115	100		0
(JPL37-002) MW-18-4	106	117	100		0
(JPL37-001) MW-18-5	107	115	99		0
(JPL37-007) TB-3-6/15/07	104	116	99		0
(B062007MVOWM3) B062007MVOWM3	104	118	99		0
(S062007MVOWM2) S062007MVOWM2	106	110	98		0

					QC LIMITS
SMC1	(DCA)	=	1,2-Dichloroethane-d4		60-140
SMC2	(BFB)	=	4-Bromofluorobenzene		60-140
SMC3	(TOL)	=	Toluene-d8		60-140
SMC4	( )	=			

# Column to be used to flag recovery values  
\* Values outside of contract required QC limits

3B  
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Laucks Testing Laboratories, Inc Contract: JPL Groundwater Monitorin

BS Run Sequence: R018875 SDG No.: JPL37

BS Lab Sample ID: S062007MVOWM2

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	70.63	141	*	60-140
Chloromethane	50.0	51.37	103		60-140
Vinyl chloride	50.0	54.36	109		60-140
Bromomethane	50.0	46.62	93		60-140
Chloroethane	50.0	49.72	99		60-140
Trichlorofluoromethane	50.0	54.8	110		60-140
1,1-Dichloroethene	50.0	50.35	101		60-140
Methylene chloride	50.0	41.94	84		60-140
Methyl tert-butyl ether	50.0	49.15	98		60-140
trans-1,2-Dichloroethene	50.0	48.91	98		60-140
1,1-Dichloroethane	50.0	47.84	96		60-140
2,2-Dichloropropane	50.0	50.46	101		60-140
cis-1,2-Dichloroethene	50.0	49.29	99		60-140
2-Butanone	50.0	56.68	113		60-140
Bromochloromethane	50.0	49.03	98		60-140
Chloroform	50.0	49.21	98		60-140
1,1,1-Trichloroethane	50.0	48.32	97		60-140
Carbon tetrachloride	50.0	49.41	99		60-140
1,1-Dichloropropene	50.0	51.33	103		60-140
Benzene	50.0	47.39	95		60-140
1,2-Dichloroethane	50.0	51.67	103		60-140
Trichloroethene	50.0	48.3	97		60-140
1,2-Dichloropropane	50.0	48.09	96		60-140
Dibromomethane	50.0	51.22	102		60-140
Bromodichloromethane	50.0	52.48	105		60-140
cis-1,3-Dichloropropene	50.0	61.97	124		60-140
4-Methyl-2-pentanone	50.0	57.17	114		60-140
Toluene	50.0	44.64	89		60-140
trans-1,3-Dichloropropene	50.0	45.57	91		60-140
1,1,2-Trichloroethane	50.0	47.69	95		60-140
Tetrachloroethene	50.0	44.56	89		60-140
1,3-Dichloropropane	50.0	49.02	98		60-140
Dibromochloromethane	50.0	51.98	104		60-140
1,2-Dibromoethane	50.0	50.02	100		60-140

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 1 out of 62 outside limits

COMMENTS:

3B  
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Laucks Testing Laboratories, Inc Contract: JPL Groundwater Monitorin

BS Run Sequence: R018875 SDG No.: JPL37

BS Lab Sample ID: S062007MVOWM2

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Chlorobenzene	50.0	48.48	97		60-140
Ethylbenzene	50.0	47.14	94		60-140
1,1,1,2-Tetrachloroethane	50.0	48.42	97		60-140
m,p-Xylene	100	97.95	98		60-140
o-Xylene	50.0	48.15	96		60-140
Styrene	50.0	49.24	98		60-140
Bromoform	50.0	49.71	99		60-140
Isopropylbenzene	50.0	47.85	96		60-140
1,1,2,2-Tetrachloroethane	50.0	55.01	110		60-140
n-Propylbenzene	50.0	52.89	106		60-140
Bromobenzene	50.0	50.97	102		60-140
1,2,3-Trichloropropane	50.0	53.47	107		60-140
2-Chlorotoluene	50.0	50.35	101		60-140
1,3,5-Trimethylbenzene	50.0	49.33	99		60-140
4-Chlorotoluene	50.0	50.4	101		60-140
tert-Butylbenzene	50.0	48.93	98		60-140
1,2,4-Trimethylbenzene	50.0	48.55	97		60-140
sec-Butylbenzene	50.0	50.61	101		60-140
4-Isopropyltoluene	50.0	49.15	98		60-140
1,3-Dichlorobenzene	50.0	48.66	97		60-140
1,4-Dichlorobenzene	50.0	48.64	97		60-140
n-Butylbenzene	50.0	48.25	97		60-140
1,2-Dichlorobenzene	50.0	49.13	98		60-140
1,2-Dibromo-3-chloropropane	50.0	50.54	101		60-140
1,2,4-Trichlorobenzene	50.0	48.82	98		60-140
Hexachlorobutadiene	50.0	44.07	88		60-140
Naphthalene	50.0	50.92	102		60-140
1,2,3-Trichlorobenzene	50.0	50.51	101		60-140

# Column to be used to flag recovery and RPD values with an asterisk  
\* Values outside of QC limits

Spike Recovery: 1 out of 62 outside limits

COMMENTS:

4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B062007MVOWM3

Lab Name Laucks Testing Laboratories, Inc. Contract: JPL Groundwater Monitorin  
 SDG No.: JPL37  
 Lab File ID: M0620011.D Lab Sample ID: B062007MVOWM3  
 Date Analyzed: 06/20/2007 Time Analyzed: 13:18  
 GC Column: ZB-624 20m ID: 0.18 (mm) Heated Purge: (Y/N) N  
 Instrument ID: 5973M Moby Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S062007MVOWM2	S062007MVOWM2	M0620008.D	06/20/2007	12:03	R018875
02	TB-3-6/15/07	JPL37-007	M0620012.D	06/20/2007	13:42	R018875
03	MW-18-5	JPL37-001	M0620017.D	06/20/2007	16:11	R018875
04	MW-18-4	JPL37-002	M0620018.D	06/20/2007	16:35	R018875
05	MW-18-3	JPL37-003	M0620019.D	06/20/2007	17:02	R018875
06	MW-18-2	JPL37-004	M0620020.D	06/20/2007	17:34	R018875
07	MW-18-1	JPL37-005	M0620021.D	06/20/2007	17:58	R018875
08	EB-3-6/15/07	JPL37-006	M0620022.D	06/20/2007	18:22	R018875
09						
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COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

BFBM5

Lab Name: Laucks Testing Laboratories, Inc Contract: JPL Groundwater Monitorin  
 Run Sequence: CAL958 SDG No.: JPL37  
 Lab File ID: M0618013.D BFB Injection Date: 06/18/2007  
 Instrument ID: 5973M Moby BFB Injection Time: 10:40  
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18.3
75	30% to 60% of mass 95	46.4
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.7
173	less than 2% of mass 174	0.5()1
174	greater than 50% of mass 95	86.2
175	5% to 9% of mass 17	7.1()1
176	greater than 95%, but less than 101% of mass 174	96.4()1
177	5% to 9% of mass 176	6.3()2

1 - Value is %mass 174

2 - Value is %mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005	VSTD005	M0618022.D	06/18/2007	13:54
02	VSTD010	VSTD010	M0618023.D	06/18/2007	14:24
03	VSTD050	VSTD050	M0618024.D	06/18/2007	14:54
04	VSTD100	VSTD100	M0618025.D	06/18/2007	15:23
05	VSTD200	VSTD200	M0618028.D	06/18/2007	16:52
06	VSTD0.3	VSTD0.3	M0618032.D	06/18/2007	18:50
07	VSTD0.5	VSTD0.5	M0618034.D	06/18/2007	19:49
08	VSTD001	VSTD001	M0618035.D	06/18/2007	20:18
09					
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

BFEM1

Lab Name: Laucks Testing Laboratories, Inc Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875 SDG No.: JPL37  
 Lab File ID: M0620003.D BFB Injection Date: 06/20/2007  
 Instrument ID: 5973M Moby BFB Injection Time: 09:32  
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	17.5
75	30% to 60% of mass 95	48.7
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	7.1
173	less than 2% of mass 174	0.2()1
174	greater than 50% of mass 95	90.7
175	5% to 9% of mass 17	7.1()1
176	greater than 95%, but less than 101% of mass 174	97.6()1
177	5% to 9% of mass 176	6.8()2

1 - Value is %mass 174

2 - Value is %mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050M1	VSTD050M1	M0620004.D	06/20/2007	09:58
02	S062007MVOWM2	S062007MVOWM2	M0620008.D	06/20/2007	12:03
03	B062007MVOWM3	B062007MVOWM3	M0620011.D	06/20/2007	13:18
04	TB-3-6/15/07	JPL37-007	M0620012.D	06/20/2007	13:42
05	MW-18-5	JPL37-001	M0620017.D	06/20/2007	16:11
06	MW-18-4	JPL37-002	M0620018.D	06/20/2007	16:35
07	MW-18-3	JPL37-003	M0620019.D	06/20/2007	17:02
08	MW-18-2	JPL37-004	M0620020.D	06/20/2007	17:34
09	MW-18-1	JPL37-005	M0620021.D	06/20/2007	17:58
10	EB-3-6/15/07	JPL37-006	M0620022.D	06/20/2007	18:22
11					
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## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Laucks Testing Laboratories, Inc. Contract: JPL Groundwater Monitoring  
 Run Sequence: R018875 SDG No.: JPL37  
 Client Sample No. (VSTD050##): VSTD050M1 Date Analyzed: 06/20/2007  
 Lab File ID (Standard): M0620004.D Time Analyzed: 09:58  
 Instrument ID: 5973M Moby Heated Purge: (Y/N) N  
 GC Column: ZB-624 20m ID: 0.18 (mm)

	IS1 (FBZ) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	1767594	6.75	1083602	9.88	394497	12.19
UPPER LIMIT	3535188	6.8	2167204	9.93	788994	12.24
LOWER LIMIT	883797	6.7	541801	9.83	197248.5	12.14
CLIENT SAMPLE NO.						
01 S062007MVOWM2	1729855	6.75	1073205	9.88	383868	12.19
02 B062007MVOWM3	1679076	6.75	1025764	9.88	338946	12.19
03 TB-3-6/15/07	1691850	6.75	1027698	9.88	346202	12.19
04 MW-18-5	1683212	6.75	1022951	9.88	347100	12.19
05 MW-18-4	1678459	6.75	1024898	9.88	345240	12.19
06 MW-18-3	1680962	6.75	1014758	9.88	345171	12.19
07 MW-18-2	1671206	6.75	1018509	9.88	352117	12.19
08 MW-18-1	1652435	6.75	1012578	9.88	345700	12.19
09 EB-3-6/15/07	1676842	6.75	1020525	9.87	342080	12.19
10						
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17						
18						
19						
20						
21						
22						

IS1 (FBZ) = Fluorobenzene  
 IS2 (CBZ) = Chlorobenzene-d5  
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = + 100% of internal standard area  
 AREA LOWER LIMIT = - 50% of internal standard area  
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT  
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits

**SAMPLE DATA**

SDG JPL37

VOLATILES ANALYSIS



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 16:11

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 16:11

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-5

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-001  
 Lab File ID: M0620017.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 16:11  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

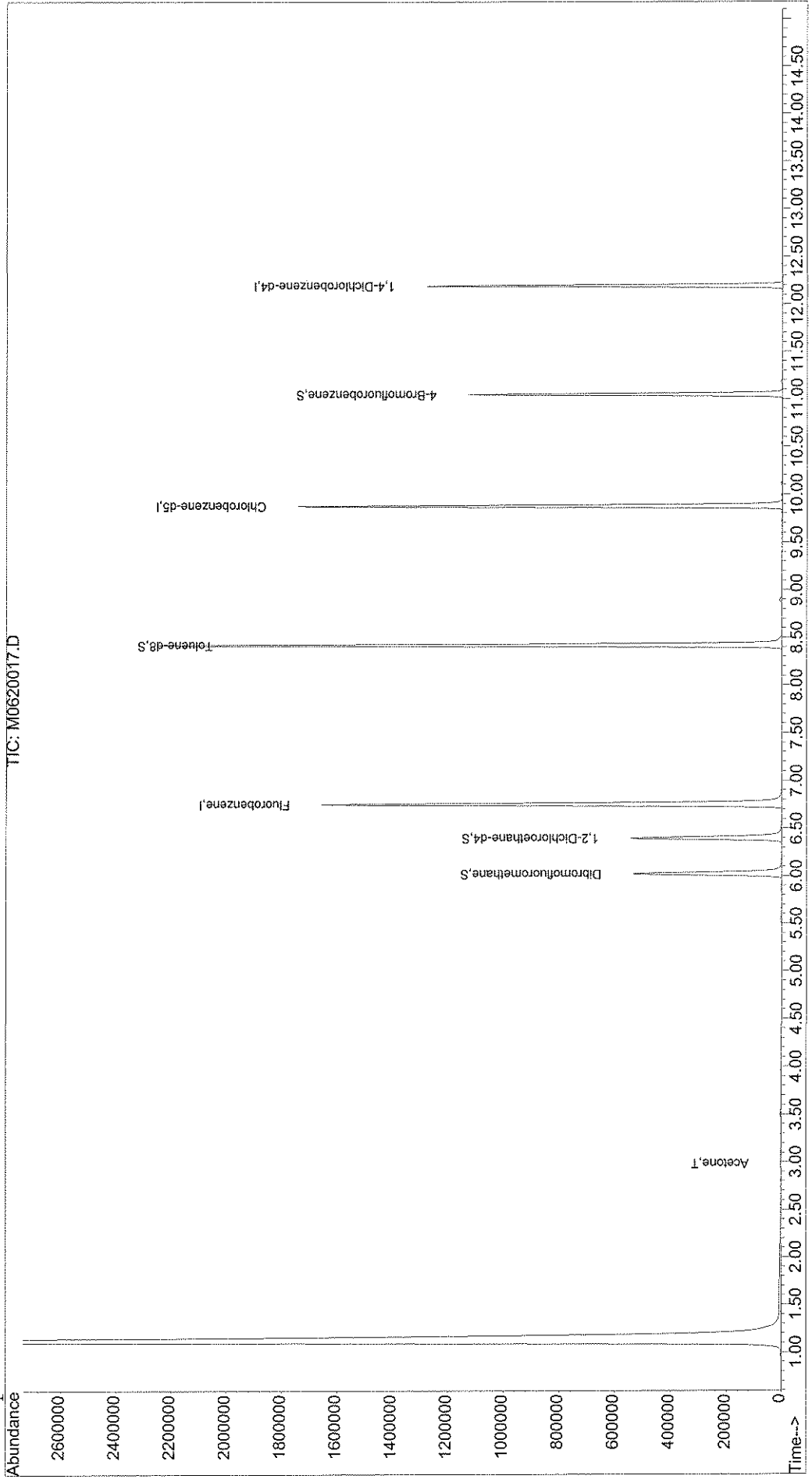
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620017.D Vial: 71  
Acq On : 20 Jun 2007 16:11 Operator: DGA  
Sample : JPL37-001 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:28 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620017.D  
 Acq On : 20 Jun 2007 16:11  
 Sample : JPL37-001  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:28 2007

Vial: 71  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
						Rcv (Ar )
1) Fluorobenzene	6.75	96	1683212	50.00	ug/l	0.00 100.10%
54) Chlorobenzene-d5	9.88	117	1022951	50.00	ug/l	0.00 103.09%
74) 1,4-Dichlorobenzene-d4	12.19	152	347100	50.00	ug/l	0.00 89.71%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	403157	52.87	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.74%
40) 1,2-Dichloroethane-d4	6.40	65	439809	53.31	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.62%
55) Toluene-d8	8.42	98	1567374	49.60	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.20%
76) 4-Bromofluorobenzene	11.04	95	374625	57.43	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.86%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.44	50	68	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	1.88	96	57	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.98	43	5162	2.79 ug/l #	85
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	3.06	76	272	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	3.43	43	325	N.D.	
18) Methylene Chloride	3.50	84	3612	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) Acrylonitrile	0.00	53	0	N.D. d	

(#) = qualifier out of range (m) = manual integration  
 M0620017.D M8260W.M Wed Jun 27 13:28:16 2007

*J. O. [Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620017.D  
 Acq On : 20 Jun 2007 16:11  
 Sample : JPL37-001  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:28 2007

Vial: 71  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	344		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.76	41	65		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	1003		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.32	83	173		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	1598		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.11	43	90		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2212		N.D.	
66) Chlorobenzene	9.91	112	212		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620017.D  
 Acq On : 20 Jun 2007 16:11  
 Sample : JPL37-001  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:28 2007

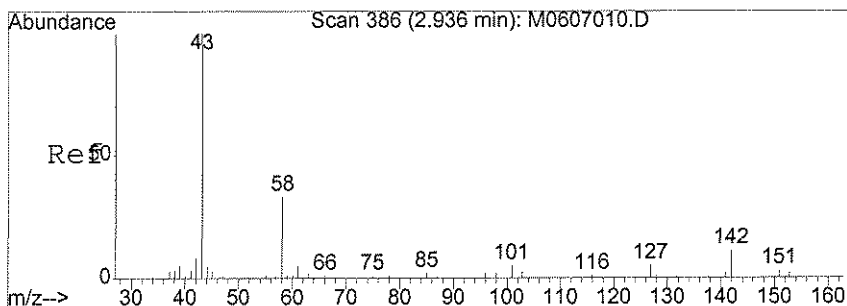
Vial: 71  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

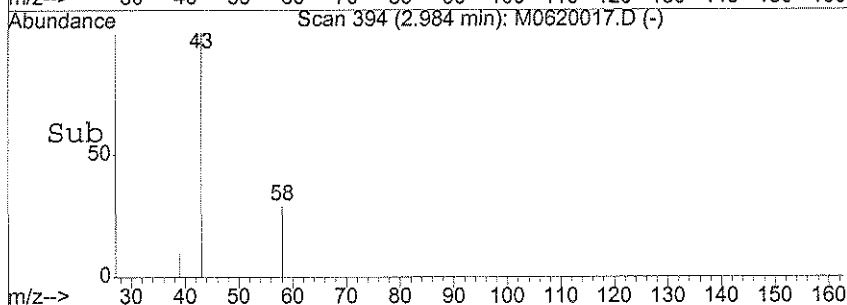
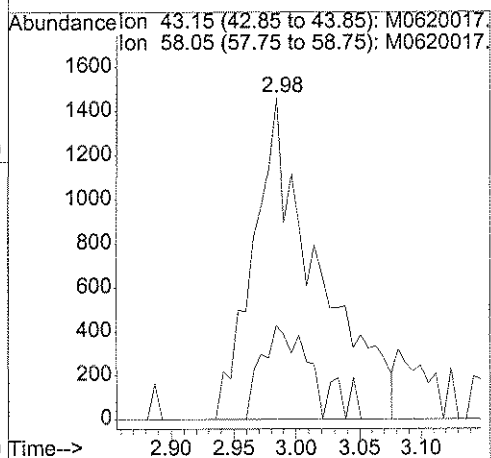
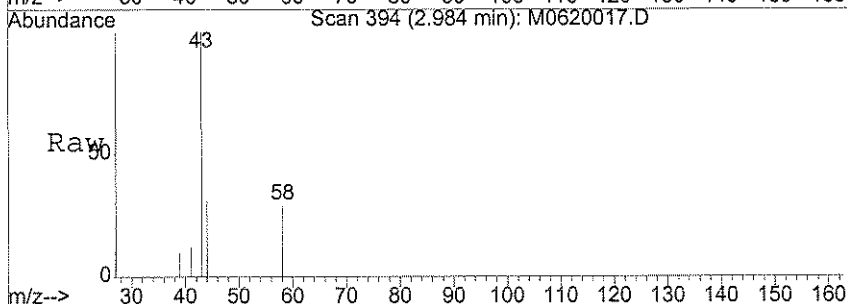
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	1383		N.D.	
69) m,p-Xylene	10.11	106	1480		N.D.	
70) o-xylene	10.51	106	230		N.D.	
71) Styrene	10.53	104	1538		N.D.	
72) Bromoform	10.75	173	220		N.D.	
73) Isopropylbenzene	10.86	105	122		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	544		N.D.	
81) 2-Chlorotoluene	11.37	91	66		N.D.	
82) 4-Chlorotoluene	11.49	91	192		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	62		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	235		N.D.	
86) sec-butylbenzene	11.99	105	270		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	66		N.D.	
88) 4-Isopropyltoluene	12.13	119	291		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	76		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	319		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	72		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



#11  
 Acetone  
 Concen: 2.79 ug/l  
 RT: 2.98 min Scan# 394  
 Delta R.T. -0.01 min  
 Lab File: M0620017.D  
 Acq: 20 Jun 2007 16:11

Tgt Ion: 43 Resp: 5162  
 Ion Ratio Lower Upper  
 43 100  
 58 19.9 22.0 33.0#





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-002  
 Lab File ID: M0620018.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 16:35  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.5	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	5.1	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.88	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-4

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 16:35

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-002  
 Lab File ID: M0620018.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 16:35  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

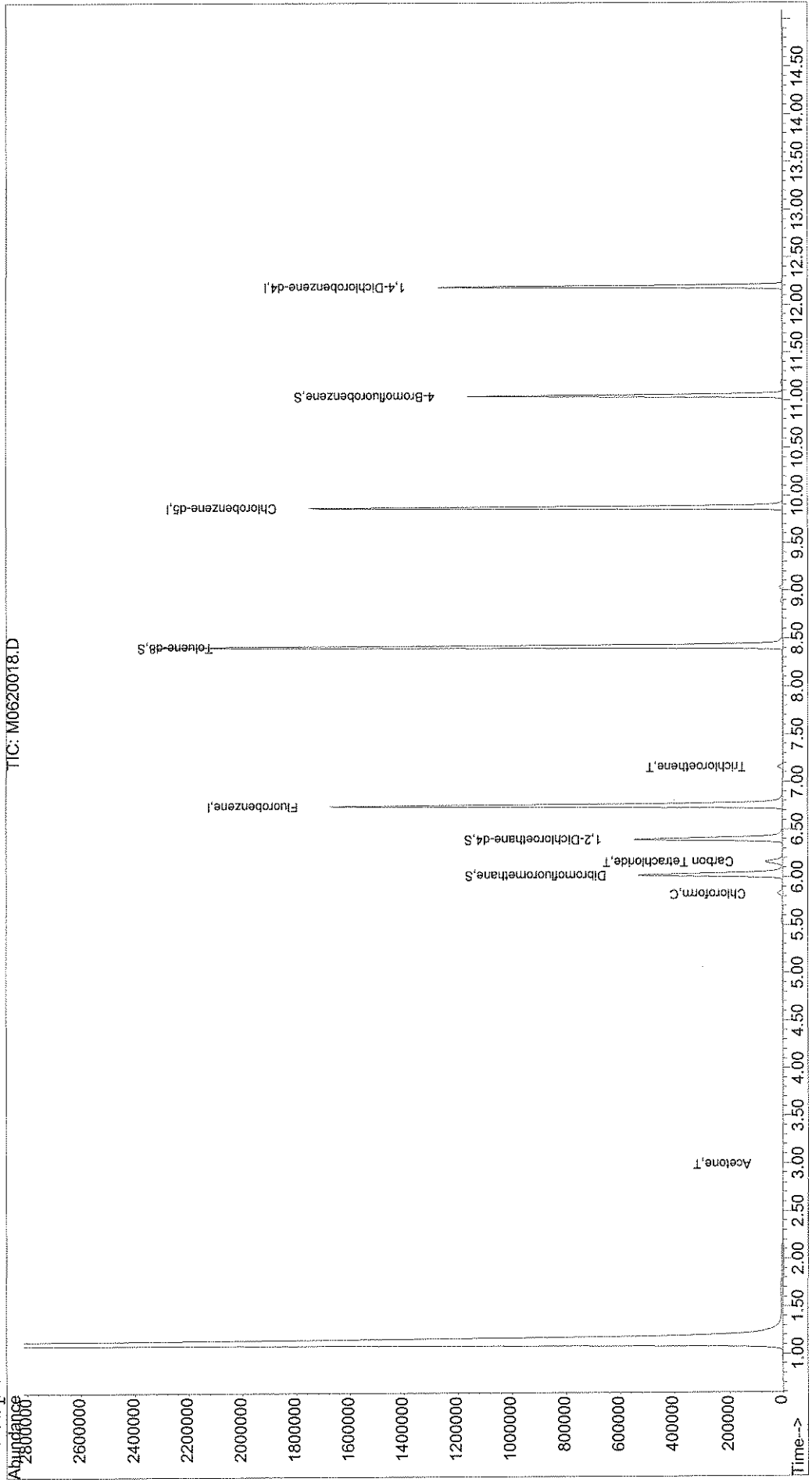
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620018.D Vial: 72  
Acq On : 20 Jun 2007 16:35 Operator: DGA  
Sample : JPL37-002 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:29 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620018.D  
 Acq On : 20 Jun 2007 16:35  
 Sample : JPL37-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:29 2007

Vial: 72  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1678459	50.00	ug/l	0.00 99.81%
54) Chlorobenzene-d5	9.88	117	1024898	50.00	ug/l	0.00 103.28%
74) 1,4-Dichlorobenzene-d4	12.19	152	345240	50.00	ug/l	0.00 89.23%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	402306	52.91	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.82%
40) 1,2-Dichloroethane-d4	6.40	65	435660	52.95	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.90%
55) Toluene-d8	8.42	98	1580878	49.94	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.88%
76) 4-Bromofluorobenzene	11.05	95	380838	58.70	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.40%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	1.84	96	64	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	2.82	101	61	N.D.	
11) Acetone	2.99	43	3483	1.89 ug/l #	71
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	3.07	76	826	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	3.42	43	111	N.D.	
18) Methylene Chloride	3.50	84	469	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) Acrylonitrile	3.96	53	177	N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0620018.D M8260W.M Wed Jun 27 13:29:57 2007

*J 06/27/07*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620018.D  
 Acq On : 20 Jun 2007 16:35  
 Sample : JPL37-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:29 2007

Vial: 72  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.54	43	856		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.81	41	61		N.D.	
34) Chloroform	5.83	83	19708	1.47	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.15	117	53122	5.10	ug/l	95
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	976		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D. d	
45) Trichloroethene	7.16	130	7843	0.88	ug/l	96
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.49	92	940		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	4197		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.98	43	63		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2201		N.D.	
66) Chlorobenzene	9.90	112	134		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0620018.D M8260W.M Wed Jun 27 13:29:58 2007

*J. out of the*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620018.D  
 Acq On : 20 Jun 2007 16:35  
 Sample : JPL37-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:29 2007

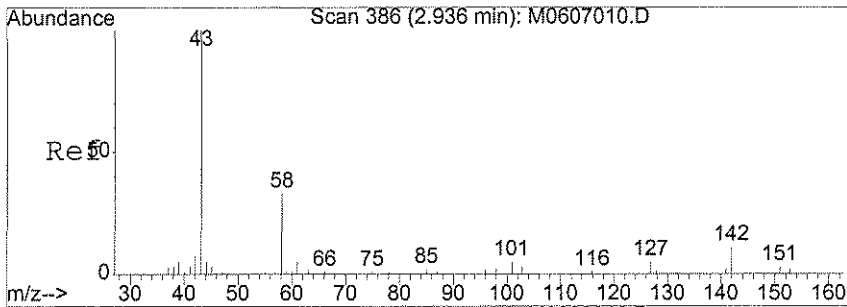
Vial: 72  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

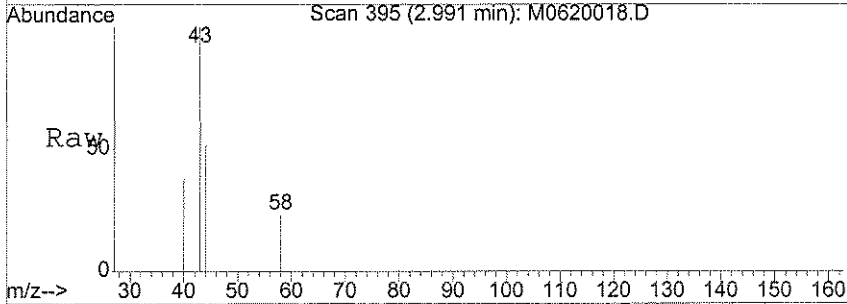
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	918		N.D.	
69) m,p-Xylene	10.11	106	1052		N.D.	
70) o-xylene	10.51	106	265		N.D.	
71) Styrene	10.53	104	67		N.D.	
72) Bromoform	10.76	173	123		N.D.	
73) Isopropylbenzene	10.87	105	72		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	126		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	411		N.D.	
81) 2-Chlorotoluene	11.28	91	411		N.D.	
82) 4-Chlorotoluene	11.50	91	128		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.76	119	66		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	141		N.D.	
86) sec-butylbenzene	11.99	105	287		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	67		N.D.	
88) 4-Isopropyltoluene	12.13	119	259		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	66		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	57		N.D.	
91) n-Butylbenzene	12.54	91	326		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	61		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

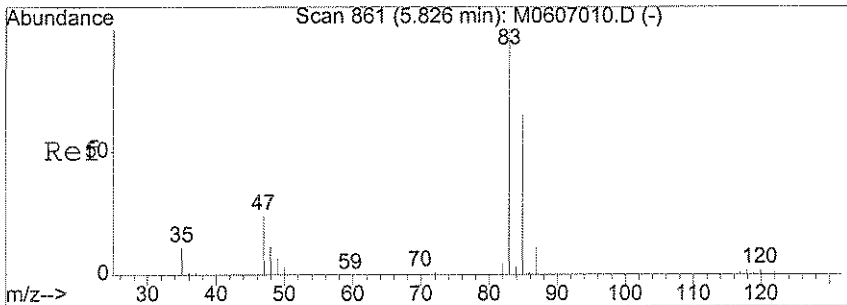
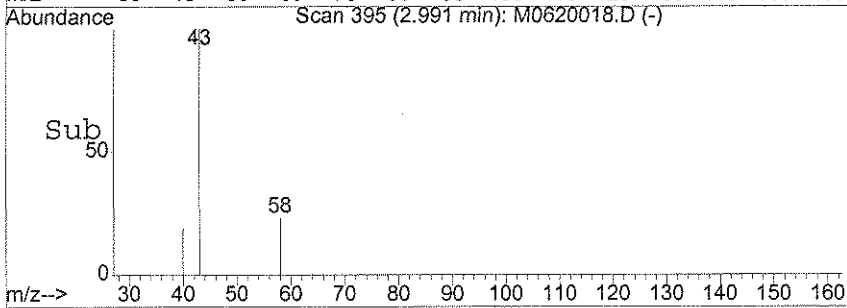
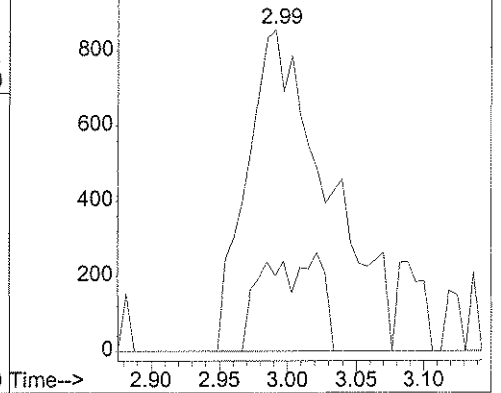


#11  
 Acetone  
 Concen: 1.89 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. 0.00 min  
 Lab File: M0620018.D  
 Acq: 20 Jun 2007 16:35

Tgt Ion: 43 Resp: 3483  
 Ion Ratio Lower Upper  
 43 100  
 58 12.5 22.0 33.0#

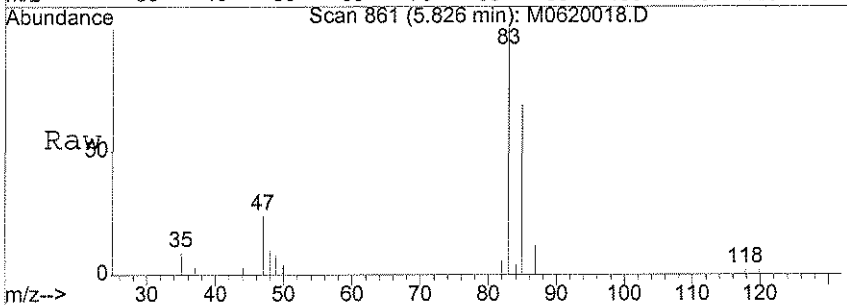


Abundance Ion 43.15 (42.85 to 43.85): M0620018.  
 1000 Ion 58.05 (57.75 to 58.75): M0620018.

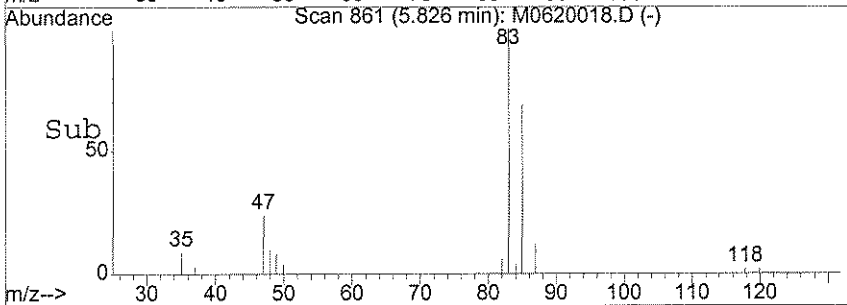
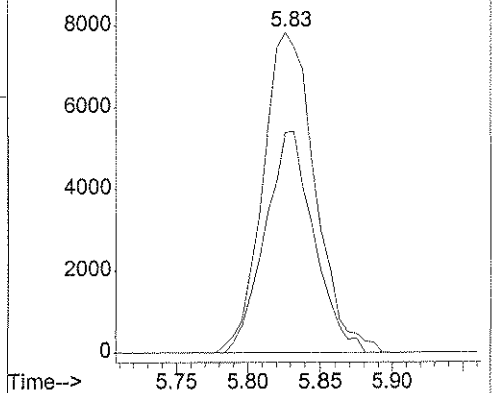


#34  
 Chloroform  
 Concen: 1.47 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. 0.00 min  
 Lab File: M0620018.D  
 Acq: 20 Jun 2007 16:35

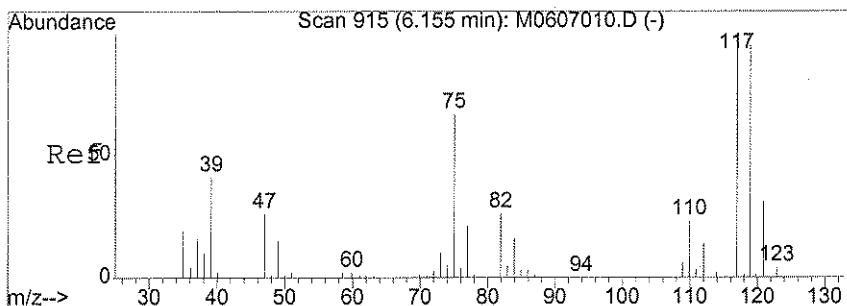
Tgt Ion: 83 Resp: 19708  
 Ion Ratio Lower Upper  
 83 100  
 85 64.5 44.0 84.0



Abundance Ion 83.00 (82.70 to 83.70): M0620018.  
 Ion 85.00 (84.70 to 85.70): M0620018.

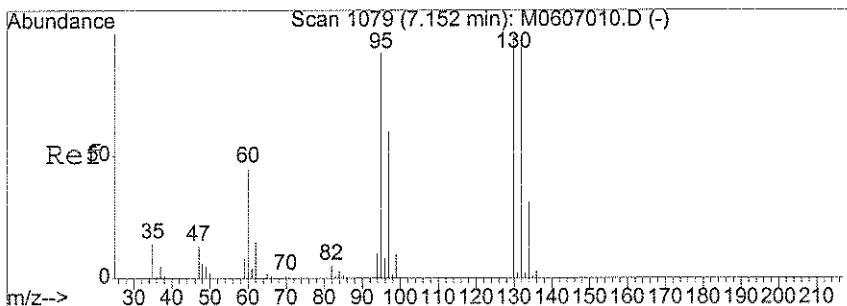
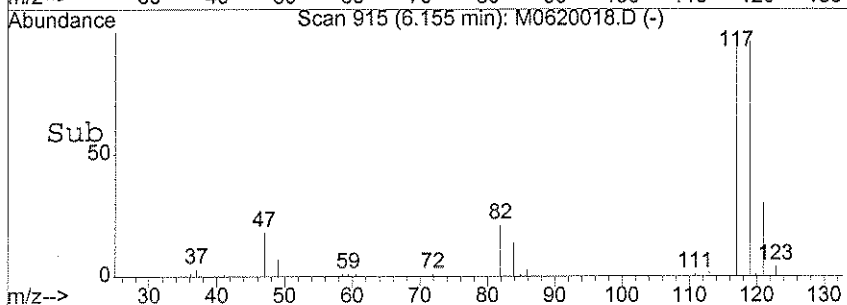
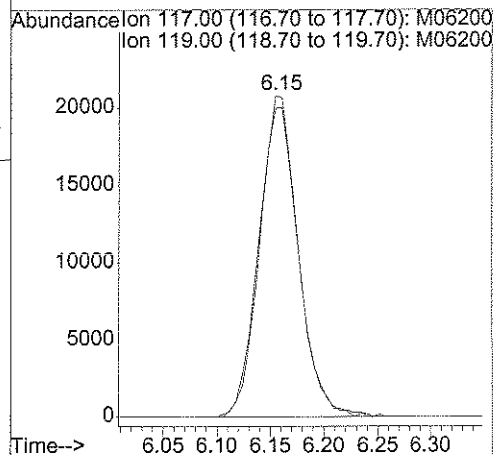
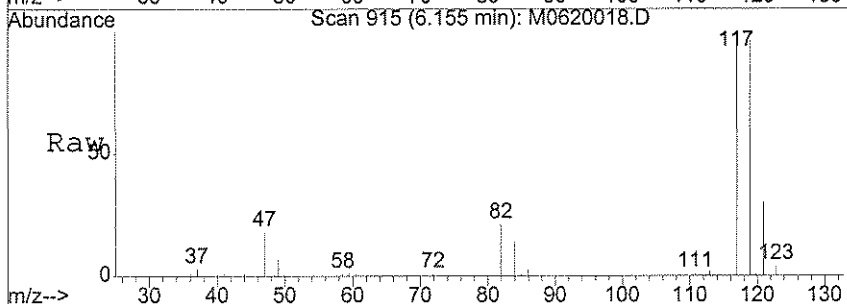






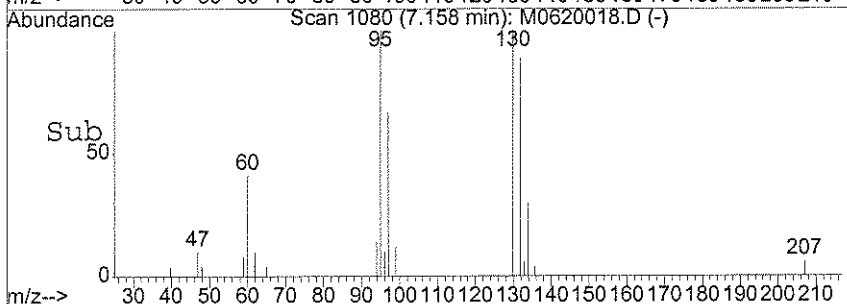
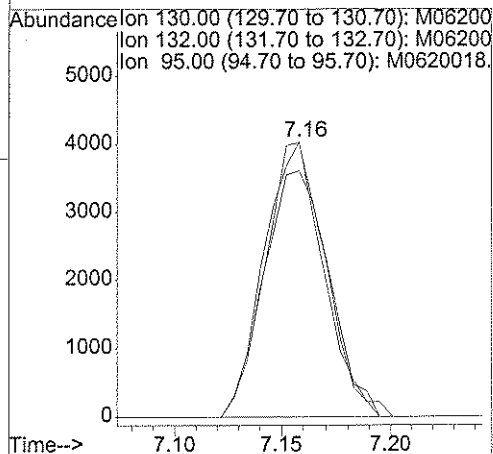
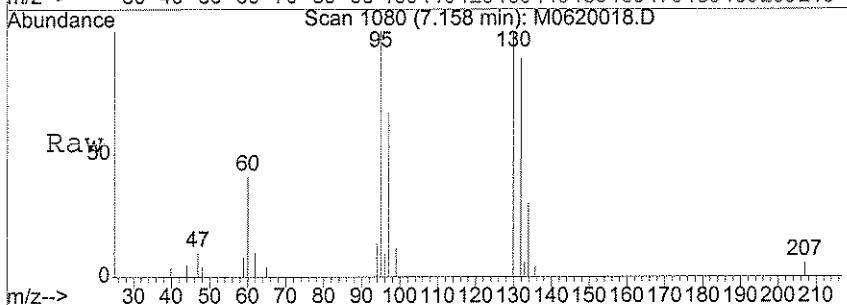
#38  
 Carbon Tetrachloride  
 Concen: 5.10 ug/l  
 RT: 6.15 min Scan# 915  
 Delta R.T. -0.01 min  
 Lab File: M0620018.D  
 Acq: 20 Jun 2007 16:35

Tgt Ion: 117 Resp: 53122  
 Ion Ratio Lower Upper  
 117 100  
 119 96.7 72.2 112.2



#45  
 Trichloroethene  
 Concen: 0.88 ug/l  
 RT: 7.16 min Scan# 1080  
 Delta R.T. 0.00 min  
 Lab File: M0620018.D  
 Acq: 20 Jun 2007 16:35

Tgt Ion: 130 Resp: 7843  
 Ion Ratio Lower Upper  
 130 100  
 132 94.5 80.2 120.2  
 95 97.2 75.8 115.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-003  
 Lab File ID: M0620019.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 17:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.3	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	7.3	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.75	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-003  
 Lab File ID: M0620019.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 17:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-3

Lab Name: Laucks Testing Laboratories, Inc. Contract: JPL Groundwater Monitorin  
 SDG No.: JPL37 Run Sequence: R018875  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL37-003  
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0620019.D  
 Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/15/2007  
 % Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/20/2007 17:02  
 GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

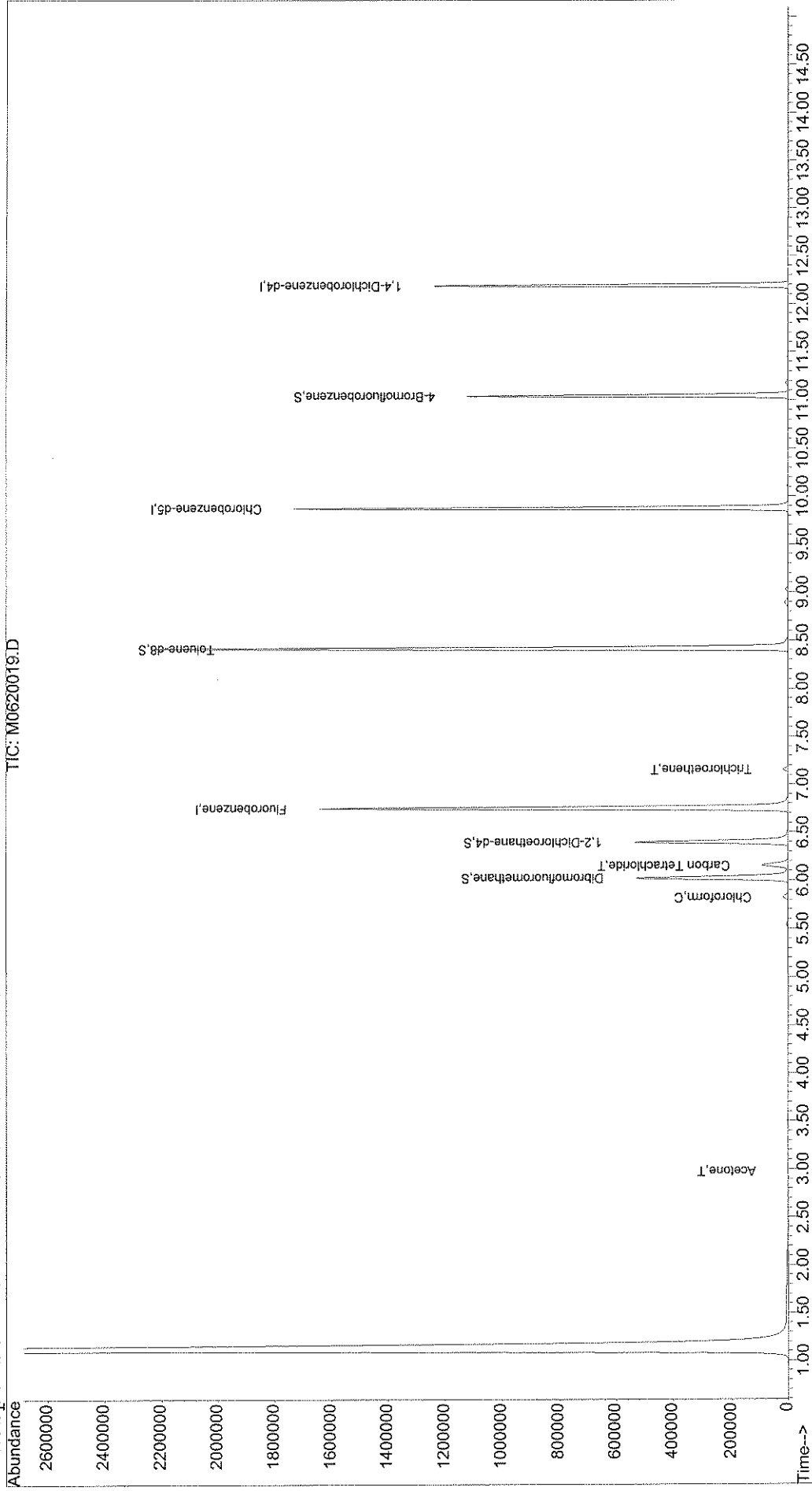
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620019.D Vial: 73  
Acq On : 20 Jun 2007 17:02 Operator: DGA  
Sample : JPL37-003 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:31 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620019.D  
 Acq On : 20 Jun 2007 17:02  
 Sample : JPL37-003  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:31 2007

Vial: 73  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1680962	50.00	ug/l	0.00 99.96%
54) Chlorobenzene-d5	9.88	117	1014758	50.00	ug/l	0.00 102.26%
74) 1,4-Dichlorobenzene-d4	12.19	152	345171	50.00	ug/l	0.00 89.21%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	398904	52.38	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.76%
40) 1,2-Dichloroethane-d4	6.40	65	437683	53.12	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.24%
55) Toluene-d8	8.42	98	1562844	49.86	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.72%
76) 4-Bromofluorobenzene	11.04	95	374155	57.68	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.36%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	2.83	101	169	N.D.		
11) Acetone	2.98	43	3820	2.07	ug/l #	60
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	407	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.42	43	158	N.D.		
18) Methylene Chloride	3.50	84	2783	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0620019.D M8260W.M Wed Jun 27 13:31:43 2007

*J. G. [Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620019.D  
 Acq On : 20 Jun 2007 17:02  
 Sample : JPL37-003  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:31 2007

Vial: 73  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	1111		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.73	41	62		N.D.	
34) Chloroform	5.83	83	17713	1.32	ug/l	100
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.15	117	76669	7.34	ug/l	96
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	782		N.D.	
42) 1,2-Dichloroethane	6.41	62	128		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D. d	
45) Trichloroethene	7.15	130	6683	0.75	ug/l	97
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	399		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.48	92	1138		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.02	166	2468		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.29	43	194		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2037		N.D.	
66) Chlorobenzene	9.91	112	234		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620019.D  
 Acq On : 20 Jun 2007 17:02  
 Sample : JPL37-003  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:31 2007

Vial: 73  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

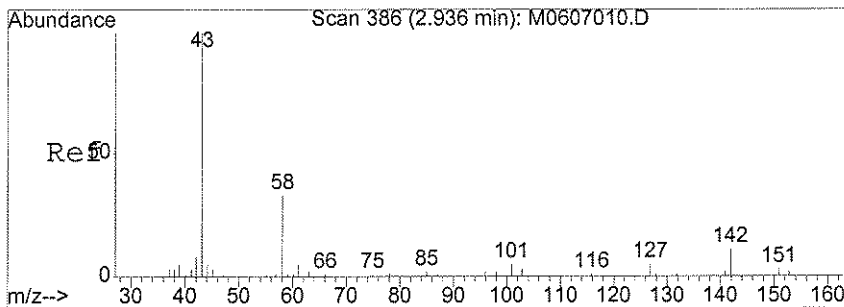
Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.11	91	2072		N.D.	
69) m,p-Xylene	10.11	106	917		N.D.	
70) o-xylene	10.50	106	207		N.D.	
71) Styrene	10.53	104	260		N.D.	
72) Bromoform	10.75	173	241		N.D.	
73) Isopropylbenzene	10.86	105	58		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	472		N.D.	
81) 2-Chlorotoluene	11.37	91	58		N.D.	
82) 4-Chlorotoluene	11.37	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	95		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	118		N.D.	
86) sec-butylbenzene	11.99	105	134		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	65		N.D.	
88) 4-Isopropyltoluene	12.13	119	327		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	209		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	339		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.34	225	66		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

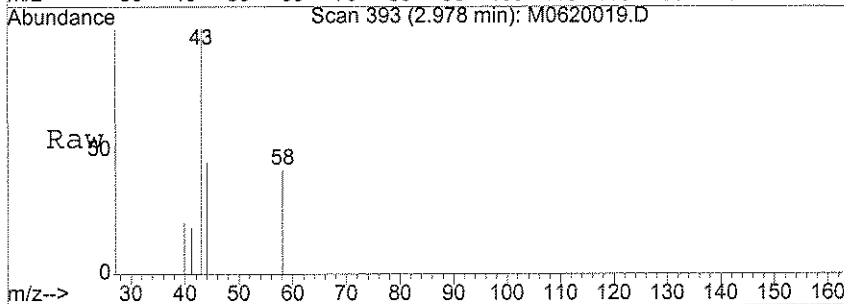
(#) = qualifier out of range (m) = manual integration



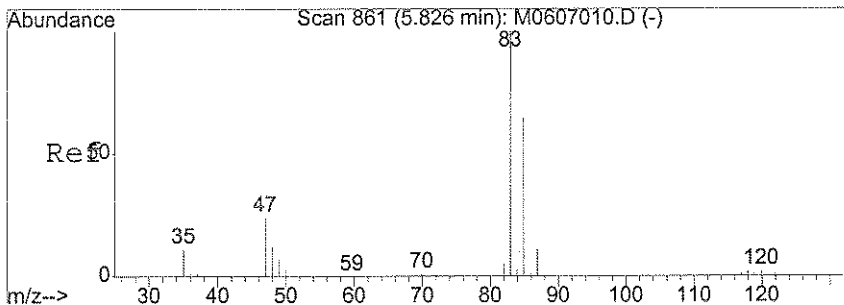
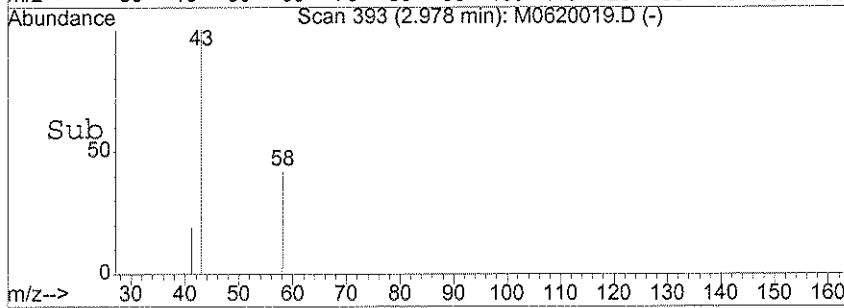
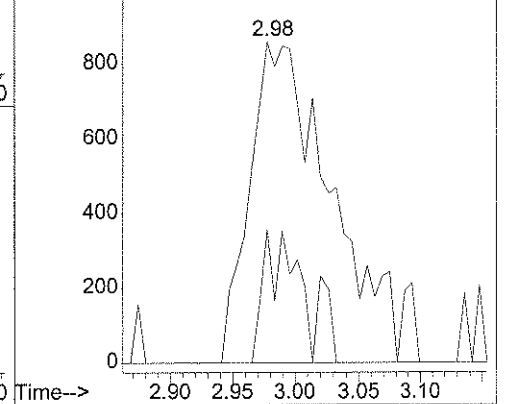


#11  
 Acetone  
 Concen: 2.07 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0620019.D  
 Acq: 20 Jun 2007 17:02

Tgt Ion: 43 Resp: 3820  
 Ion Ratio Lower Upper  
 43 100  
 58 6.5 22.0 33.0#

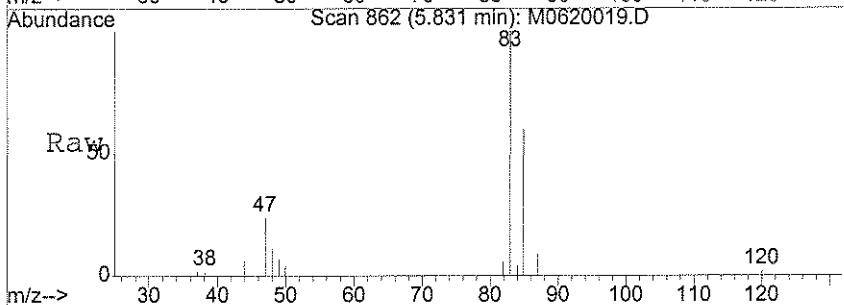


Abundance Ion 43.15 (42.85 to 43.85): M0620019  
 1000 Ion 58.05 (57.75 to 58.75): M0620019

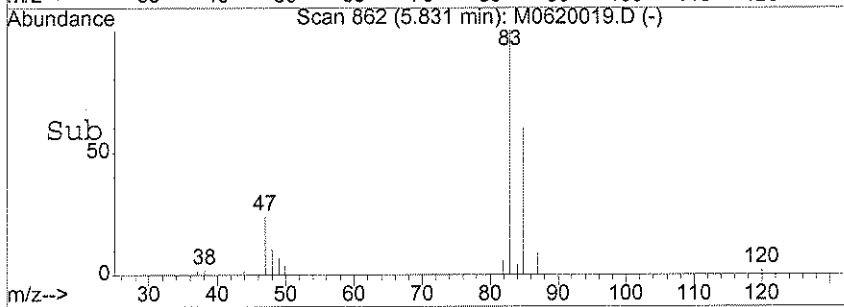
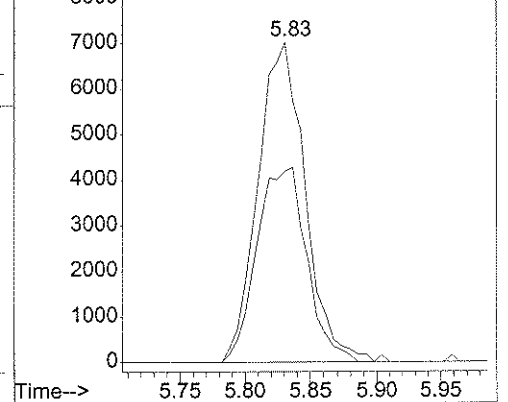


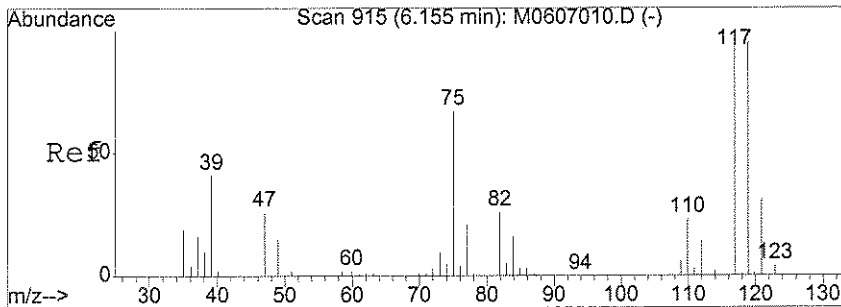
#34  
 Chloroform  
 Concen: 1.32 ug/l  
 RT: 5.83 min Scan# 862  
 Delta R.T. 0.01 min  
 Lab File: M0620019.D  
 Acq: 20 Jun 2007 17:02

Tgt Ion: 83 Resp: 17713  
 Ion Ratio Lower Upper  
 83 100  
 85 64.2 44.0 84.0



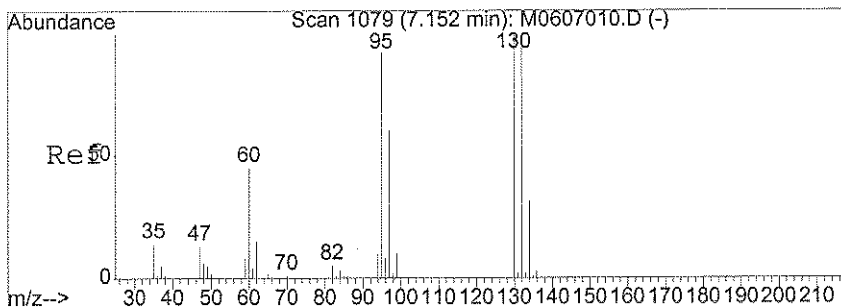
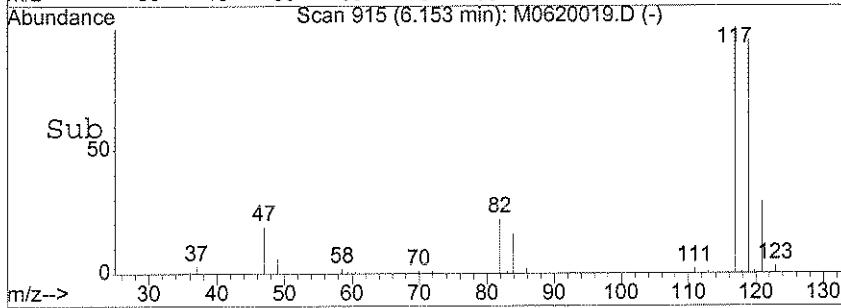
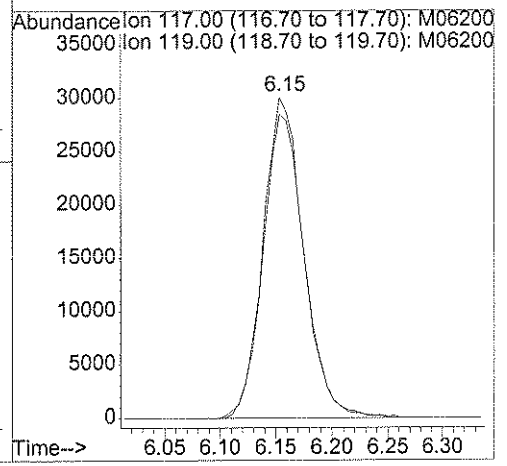
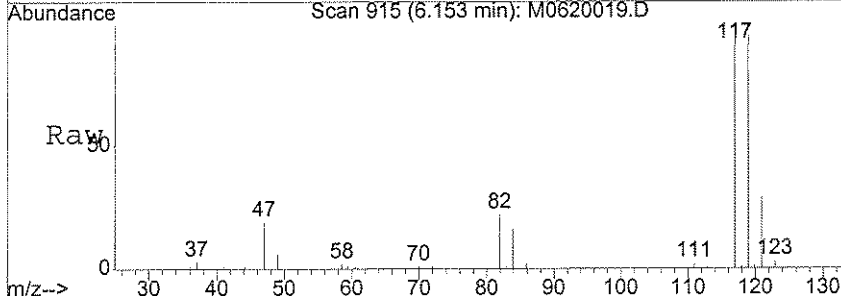
Abundance Ion 83.00 (82.70 to 83.70): M0620019  
 8000 Ion 85.00 (84.70 to 85.70): M0620019





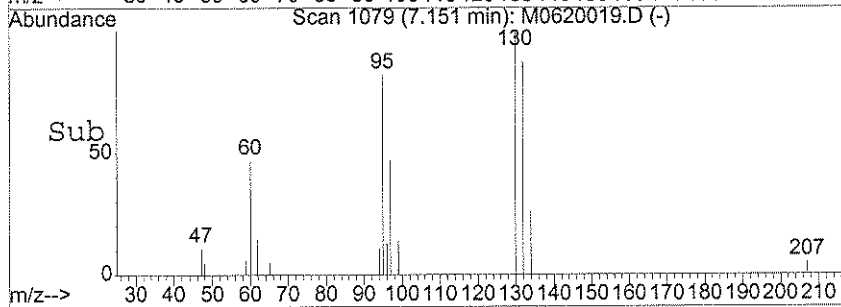
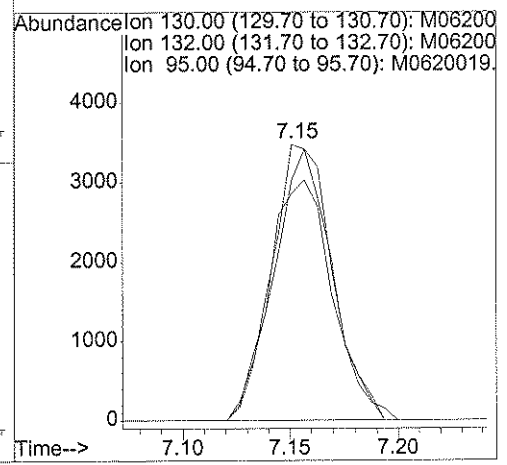
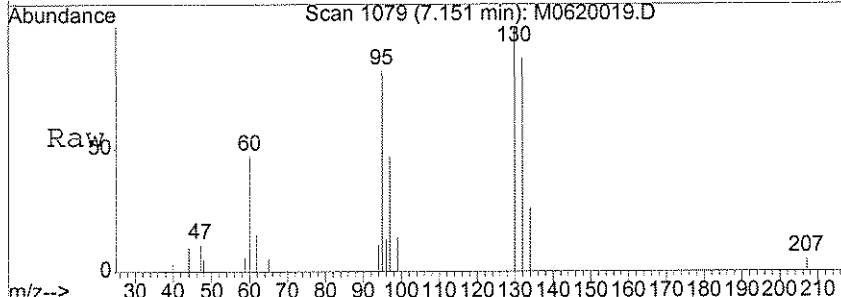
#38  
 Carbon Tetrachloride  
 Concen: 7.34 ug/l  
 RT: 6.15 min Scan# 915  
 Delta R.T. -0.01 min  
 Lab File: M0620019.D  
 Acq: 20 Jun 2007 17:02

Tgt Ion:117 Resp: 76669  
 Ion Ratio Lower Upper  
 117 100  
 119 95.7 72.2 112.2



#45  
 Trichloroethene  
 Concen: 0.75 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.01 min  
 Lab File: M0620019.D  
 Acq: 20 Jun 2007 17:02

Tgt Ion:130 Resp: 6683  
 Ion Ratio Lower Upper  
 130 100  
 132 97.8 80.2 120.2  
 95 92.7 75.8 115.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-2

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 17:34

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	0.73		J
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-2

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 17:34

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-004  
 Lab File ID: M0620020.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 17:34  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

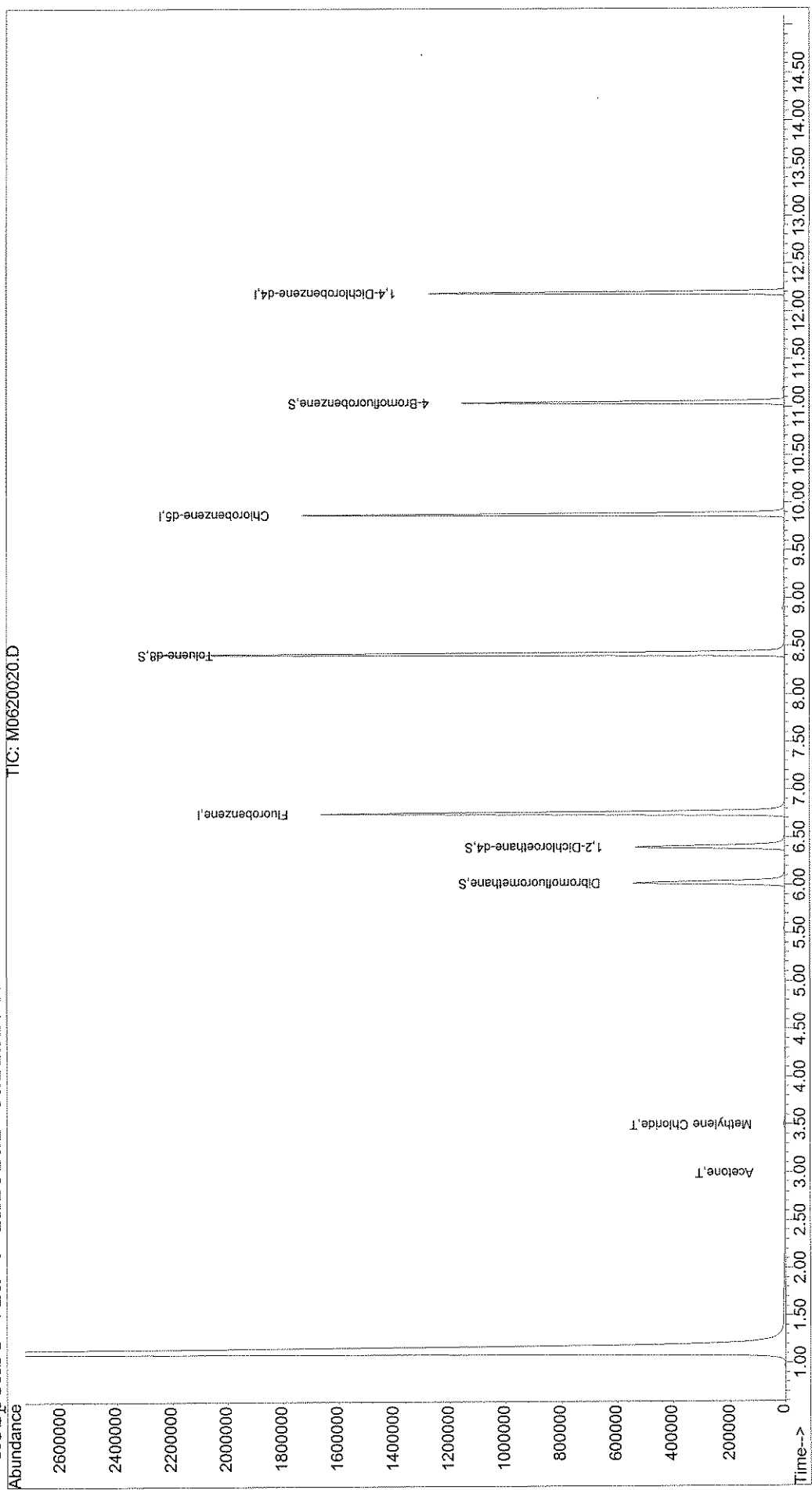
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620020.D Vial: 74  
Acq On : 20 Jun 2007 17:34 Operator: DGA  
Sample : JPL37-004 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:33 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620020.D  
 Acq On : 20 Jun 2007 17:34  
 Sample : JPL37-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:33 2007

Vial: 74  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1671206	50.00	ug/l	0.00	99.38%
54) Chlorobenzene-d5	9.88	117	1018509	50.00	ug/l	0.00	102.64%
74) 1,4-Dichlorobenzene-d4	12.19	152	352117	50.00	ug/l	0.00	91.01%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	399624	52.79	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.58%	
40) 1,2-Dichloroethane-d4	6.40	65	438497	53.53	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	107.06%	
55) Toluene-d8	8.42	98	1567383	49.82	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.64%	
76) 4-Bromofluorobenzene	11.05	95	377304	57.02	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.04%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	5691m	3.10	ug/l #	39
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.42	43	121	N.D.		
18) Methylene Chloride	3.50	84	6396	0.73	ug/l	96
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620020.D  
 Acq On : 20 Jun 2007 17:34  
 Sample : JPL37-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:33 2007

Vial: 74  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	673		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.72	41	58		N.D.	
34) Chloroform	5.83	83	561		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.17	117	177		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	880		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	75		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	1414		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.12	43	59		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2060		N.D.	
66) Chlorobenzene	9.90	112	131		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620020.D  
 Acq On : 20 Jun 2007 17:34  
 Sample : JPL37-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:33 2007

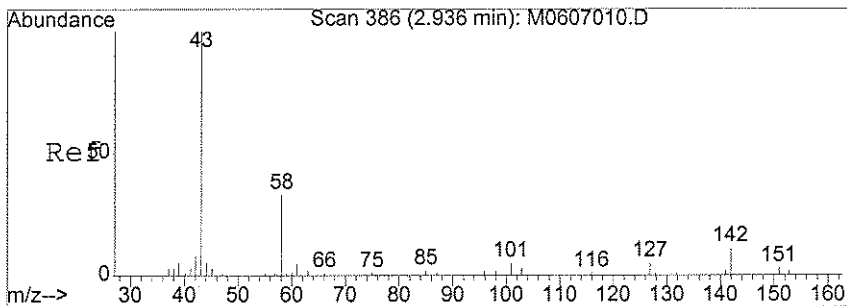
Vial: 74  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

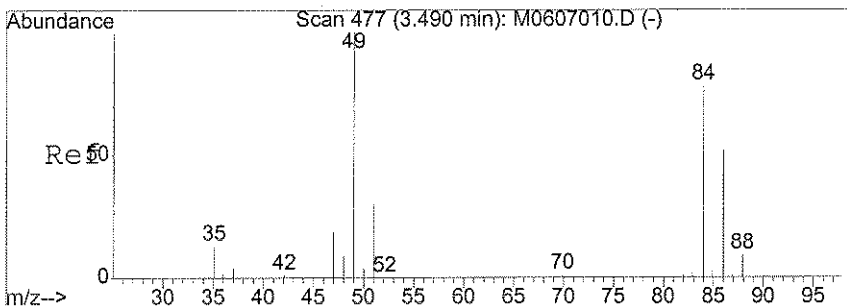
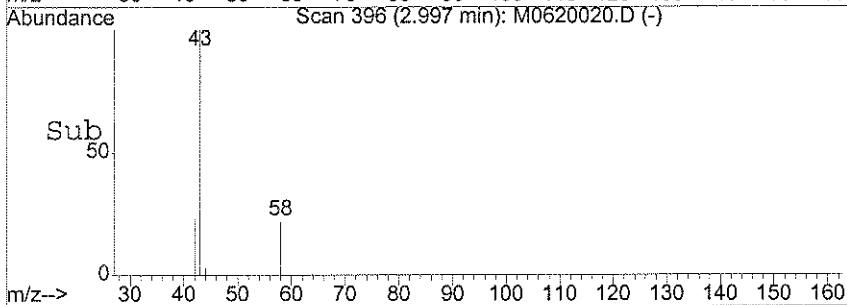
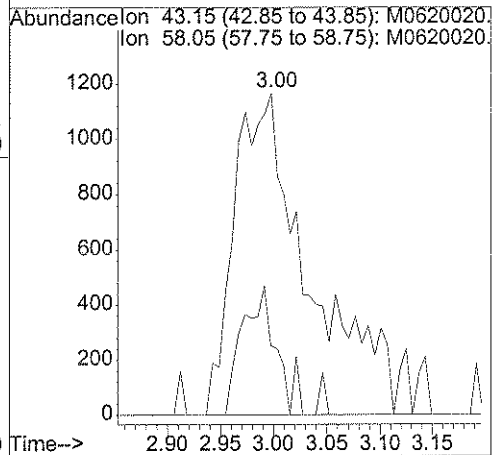
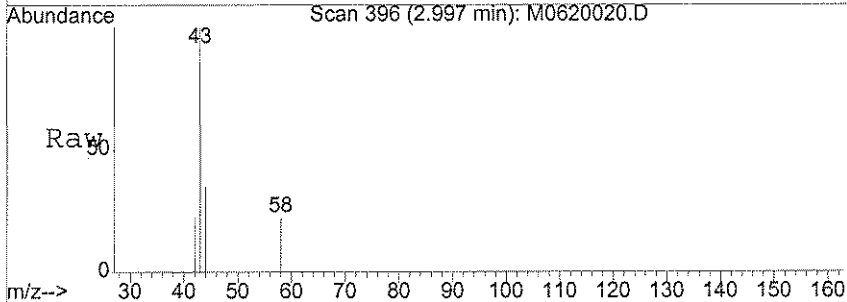
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	753		N.D.	
69) m,p-Xylene	10.11	106	694		N.D.	
70) o-xylene	10.51	106	67		N.D.	
71) Styrene	10.53	104	70		N.D.	
72) Bromoform	10.75	173	55		N.D.	
73) Isopropylbenzene	10.86	105	125		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	230		N.D.	
81) 2-Chlorotoluene	11.28	91	230		N.D.	
82) 4-Chlorotoluene	11.48	91	59		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	64		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	207		N.D.	
86) sec-butylbenzene	11.98	105	319		N.D.	
87) 1,3-Dichlorobenzene	12.22	146	56		N.D.	
88) 4-Isopropyltoluene	12.14	119	60		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	56		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	247		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



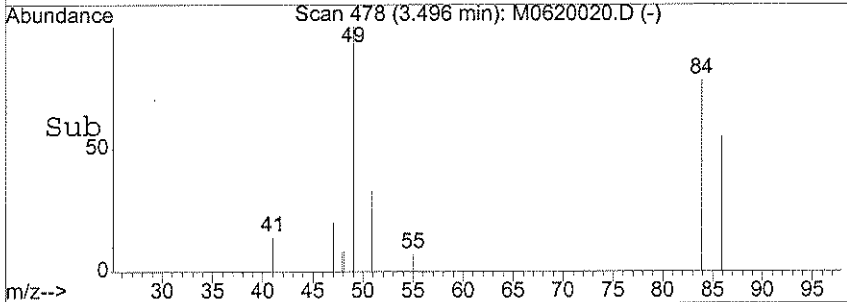
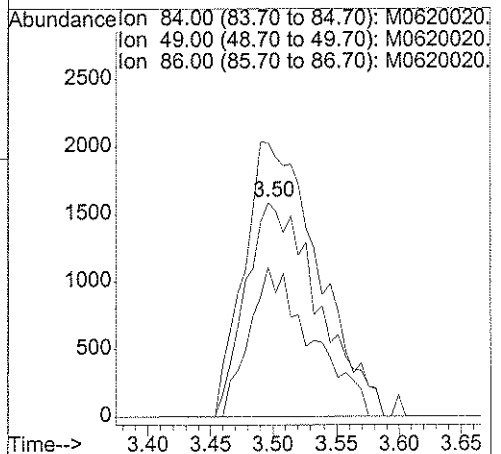
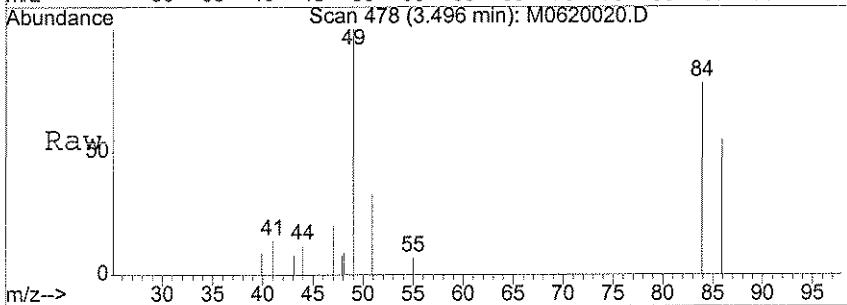
#11  
 Acetone  
 Concen: 3.10 ug/l m  
 RT: 3.00 min Scan# 396  
 Delta R.T. 0.01 min  
 Lab File: M0620020.D  
 Acq: 20 Jun 2007 17:34

Tgt Ion: 43 Resp: 5691  
 Ion Ratio Lower Upper  
 43 100  
 58 17.2 22.0 33.0#



#18  
 Methylene Chloride  
 Concen: 0.73 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0620020.D  
 Acq: 20 Jun 2007 17:34

Tgt Ion: 84 Resp: 6396  
 Ion Ratio Lower Upper  
 84 100  
 49 131.1 113.6 153.6  
 86 59.7 45.8 85.8



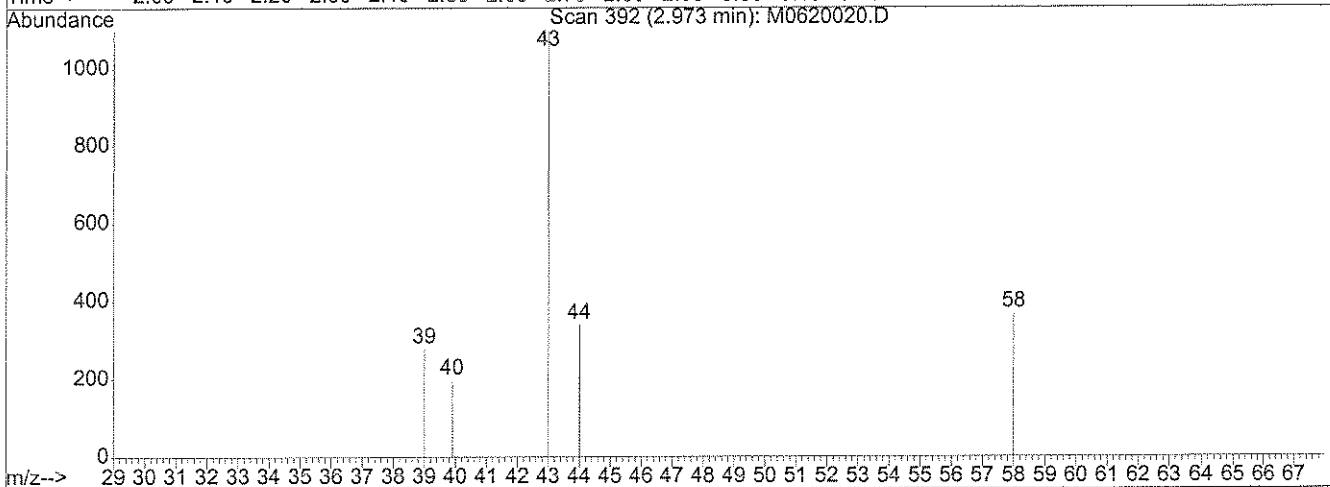
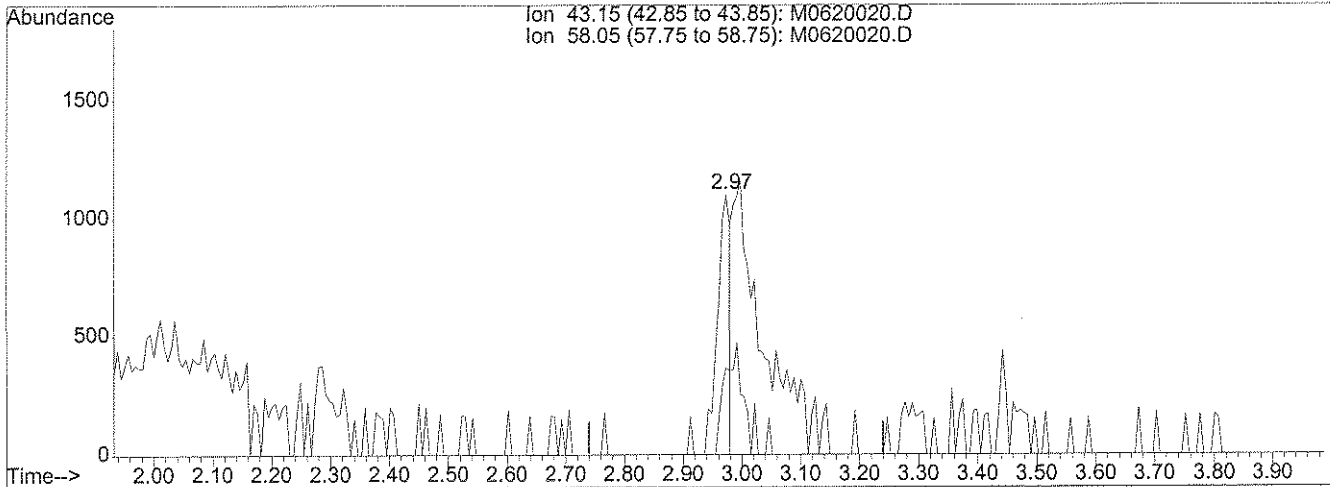
Quantitation Report (Qedit)

Data File : X:\MSVOA\MOBY\062007\M0620020.D  
Acq On : 20 Jun 2007 17:34  
Sample : JPL37-004  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:36 2007

Vial: 74  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Multiple Level Calibration



(11) Acetone (T)

2.97min 0.90ug/l

response 1648

Ion	Exp%	Act%
43.15	100	100
58.05	27.50	59.34#
0.00	0.00	0.00
0.00	0.00	0.00

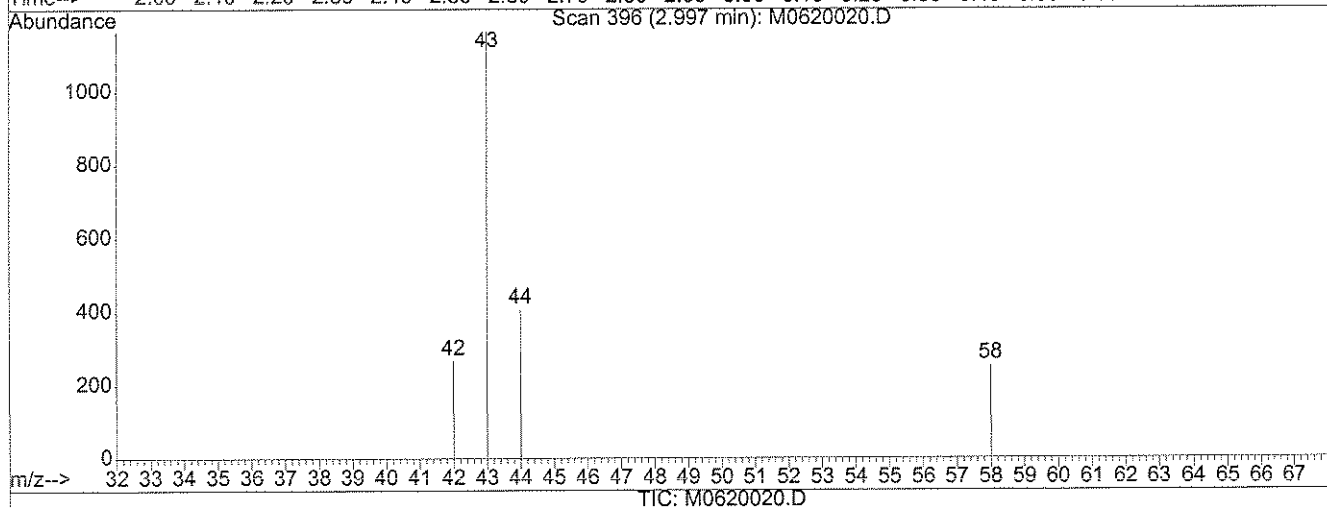
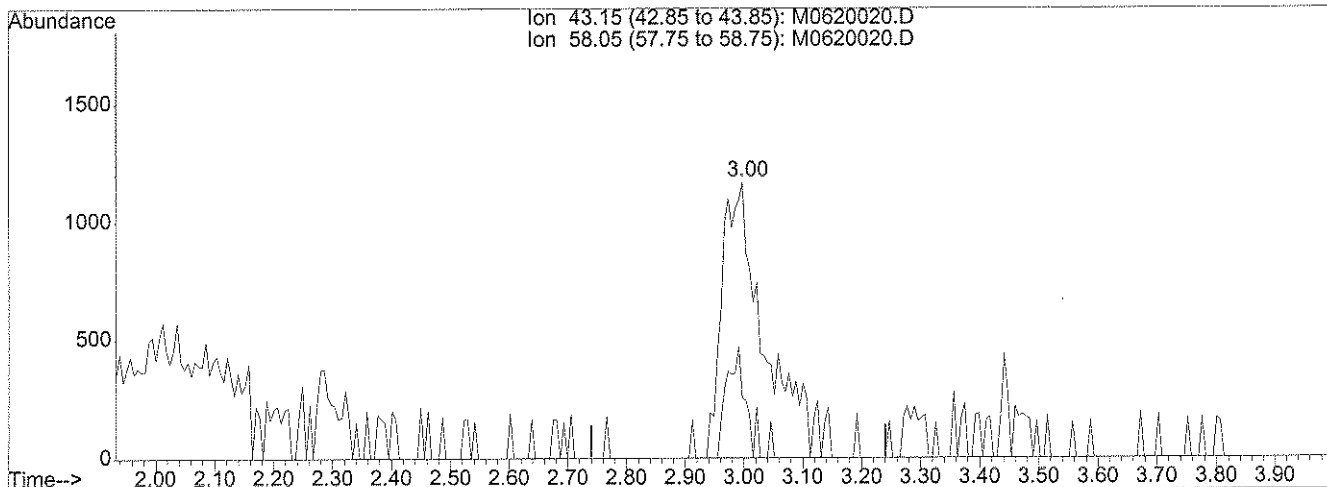
Quantitation Report (Qedit)

Data File : X:\MSVOA\MOBY\062007\M0620020.D  
 Acq On : 20 Jun 2007 17:34  
 Sample : JPL37-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:32 2007

Vial: 74  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Multiple Level Calibration



(11) Acetone (T)

3.00min 3.10ug/l m

response 5691

Ion	Exp%	Act%
43.15	100	100
58.05	27.50	17.19#
0.00	0.00	0.00
0.00	0.00	0.00

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 17:58

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 17:58

GC Column: ZE-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-18-1

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-005  
 Lab File ID: M0620021.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 17:58  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

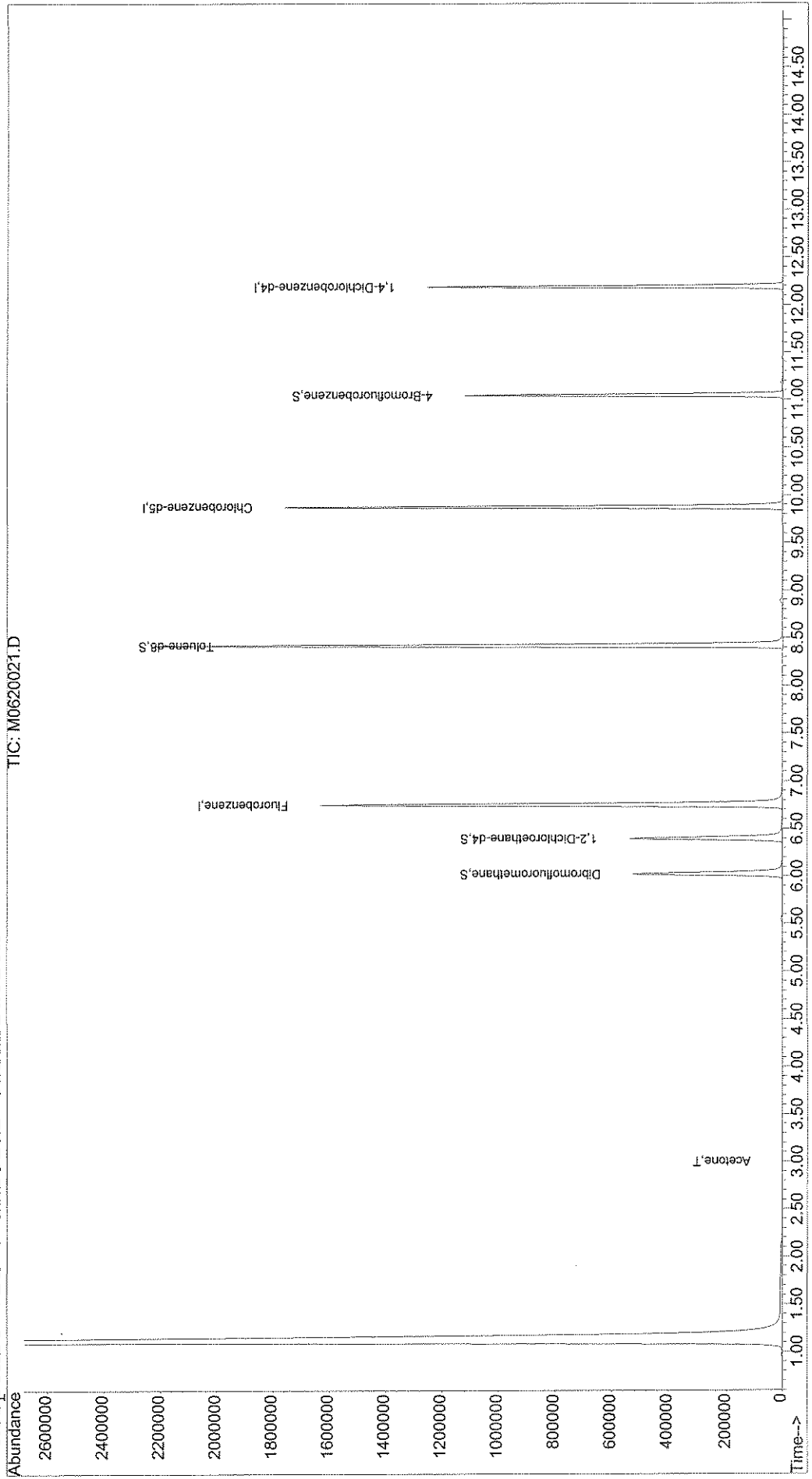
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620021.D Vial: 75  
Acq On : 20 Jun 2007 17:58 Operator: DGA  
Sample : JPL37-005 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:34 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620021.D  
 Acq On : 20 Jun 2007 17:58  
 Sample : JPL37-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:34 2007

Vial: 75  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1652435	50.00	ug/l	0.00 98.27%
54) Chlorobenzene-d5	9.88	117	1012578	50.00	ug/l	0.00 102.04%
74) 1,4-Dichlorobenzene-d4	12.19	152	345700	50.00	ug/l	0.00 89.35%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	395056	52.77	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.54%
40) 1,2-Dichloroethane-d4	6.40	65	431073	53.22	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.44%
55) Toluene-d8	8.42	98	1552197	49.63	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.26%
76) 4-Bromofluorobenzene	11.05	95	378129	58.20	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.40%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	3.01	43	3398m	1.87 ug/l #	58
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	3.06	76	65	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	3.42	43	67	N.D.	
18) Methylene Chloride	3.51	84	278	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) Acrylonitrile	0.00	53	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620021.D  
 Acq On : 20 Jun 2007 17:58  
 Sample : JPL37-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:34 2007

Vial: 75  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	1172		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.73	41	56		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	621		N.D.	
42) 1,2-Dichloroethane	6.40	62	195		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	357		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.29	43	542		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2062		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620021.D  
 Acq On : 20 Jun 2007 17:58  
 Sample : JPL37-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:34 2007

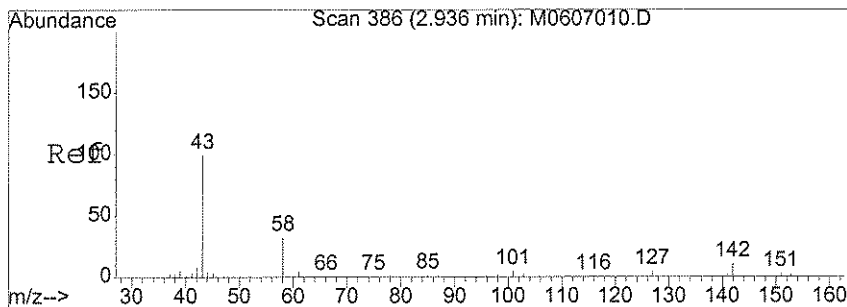
Vial: 75  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

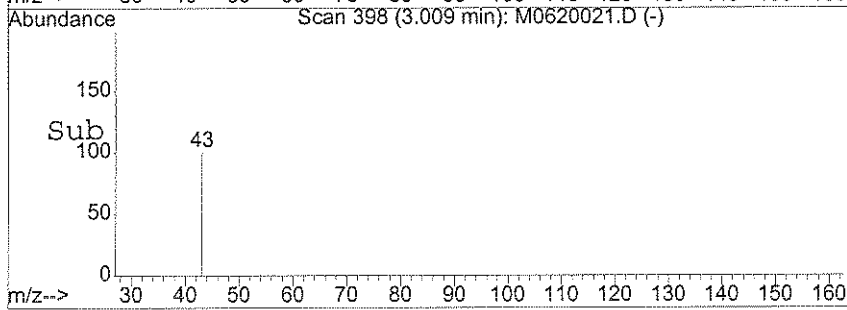
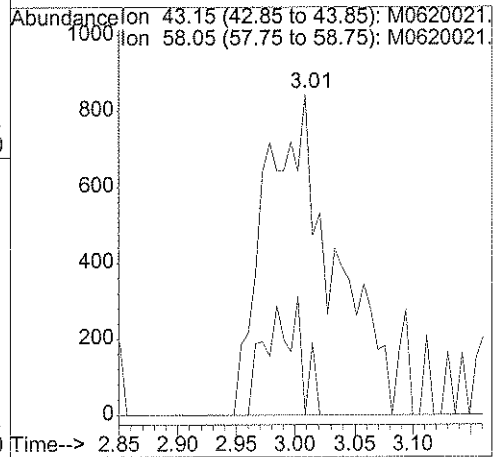
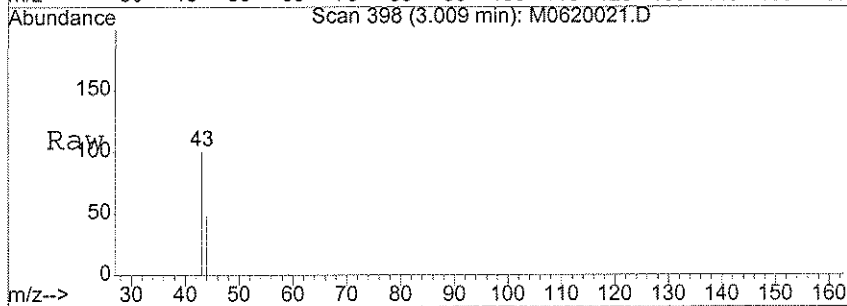
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	355		N.D.	
69) m,p-Xylene	10.11	106	288		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	227		N.D.	
73) Isopropylbenzene	10.87	105	226		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	265		N.D.	
81) 2-Chlorotoluene	11.28	91	265		N.D.	
82) 4-Chlorotoluene	11.48	91	59		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	81		N.D.	
86) sec-butylbenzene	11.98	105	268		N.D.	
87) 1,3-Dichlorobenzene	12.21	146	61		N.D.	
88) 4-Isopropyltoluene	12.14	119	235		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	61		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	305		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



#11  
 Acetone  
 Concen: 1.87 ug/l m  
 RT: 3.01 min Scan# 398  
 Delta R.T. 0.02 min  
 Lab File: M0620021.D  
 Acq: 20 Jun 2007 17:58

Tgt Ion: 43 Resp: 3398  
 Ion Ratio Lower Upper  
 43 100  
 58 18.2 22.0 33.0#



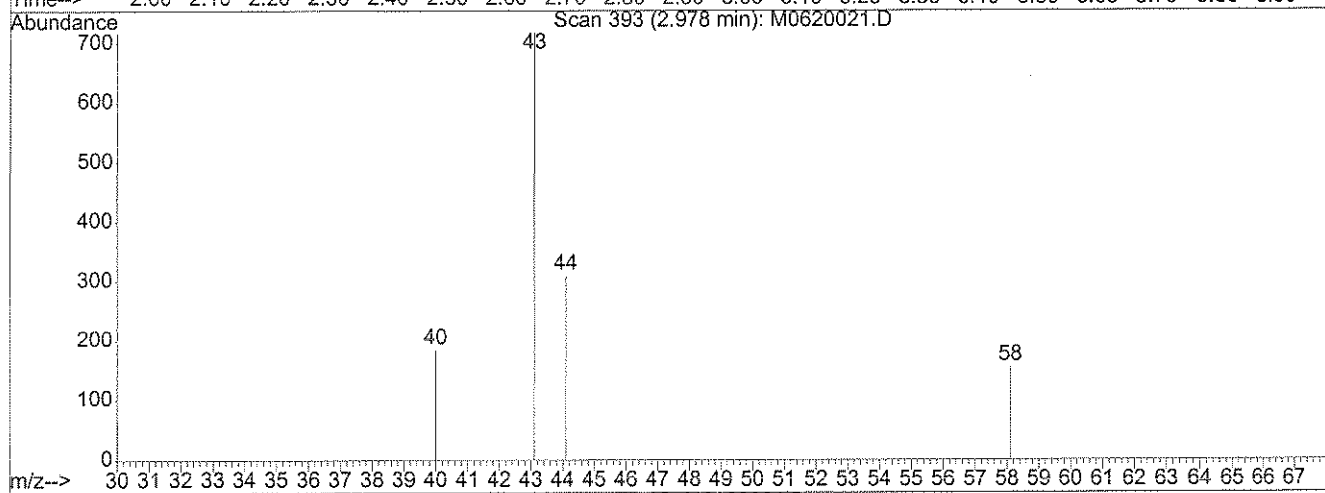
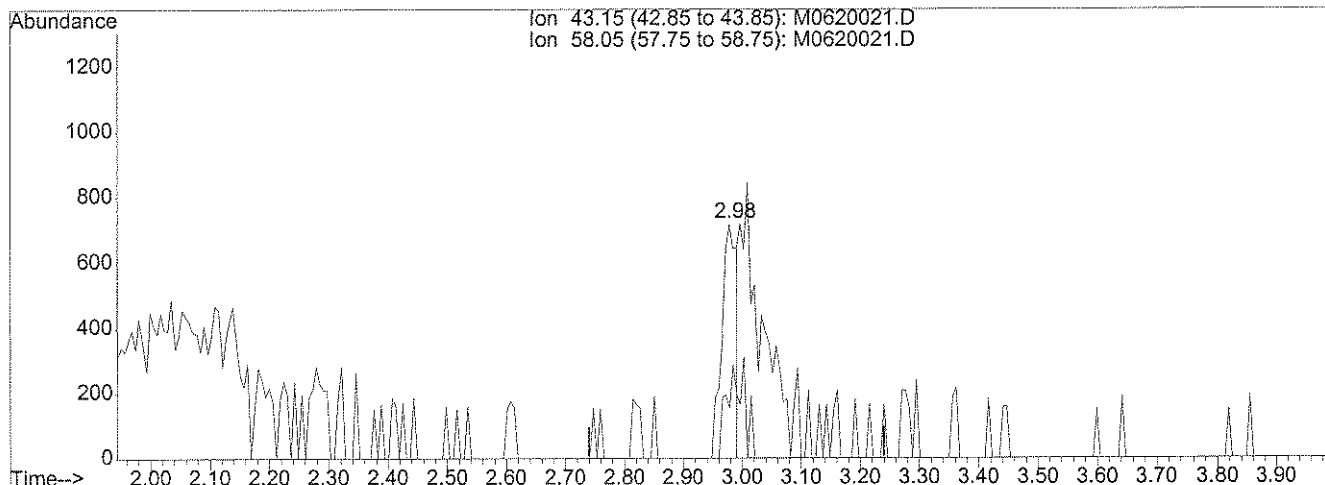
Quantitation Report (Qedit)

Data File : X:\MSVOA\MOBY\062007\M0620021.D  
 Acq On : 20 Jun 2007 17:58  
 Sample : JPL37-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:37 2007

Vial: 75  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Multiple Level Calibration



TIC: M0620021.D

(11) Acetone (T)

2.98min 0.69ug/l

response 1248

Ion	Exp%	Act%
43.15	100	100
58.05	27.50	49.44#
0.00	0.00	0.00
0.00	0.00	0.00

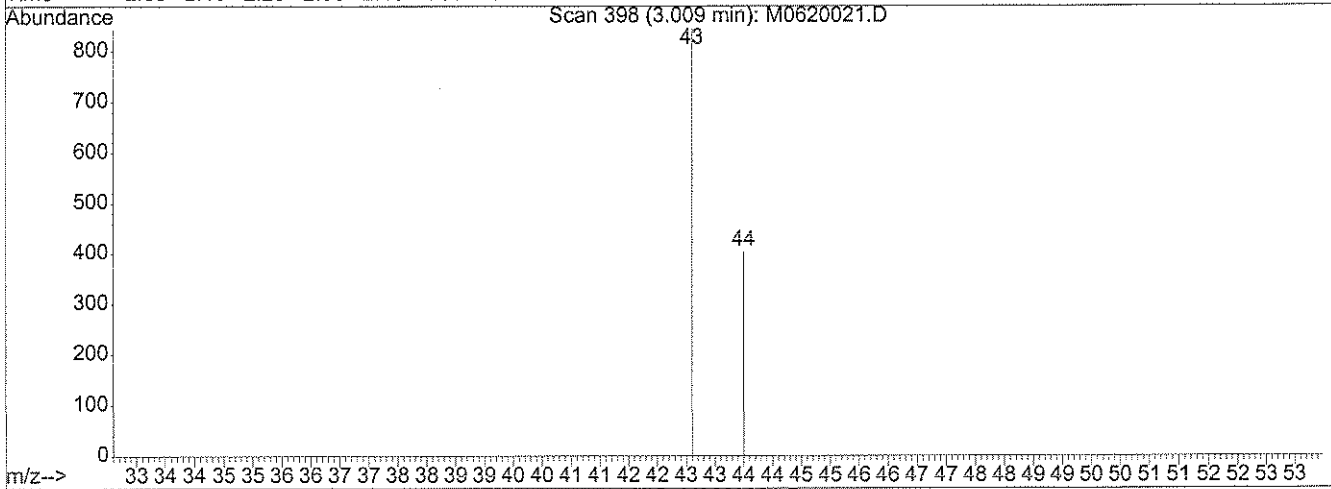
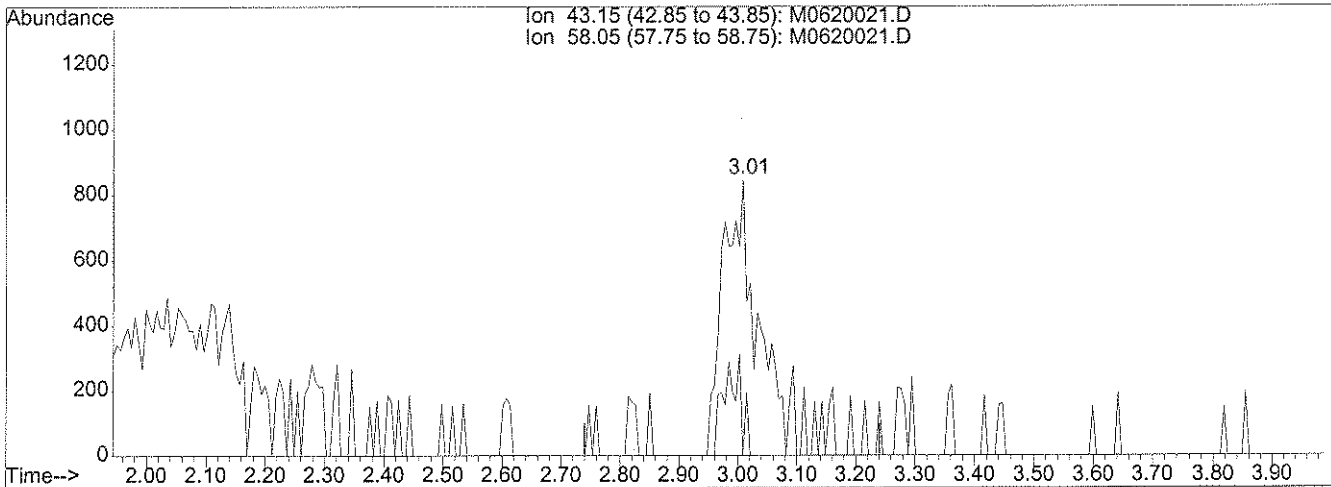
Quantitation Report (Qedit)

Data File : X:\MSVOA\MOBY\062007\M0620021.D  
 Acq On : 20 Jun 2007 17:58  
 Sample : JPL37-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:34 2007

Vial: 75  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Multiple Level Calibration



TIC: M0620021.D

(11) Acetone (T)

3.01min 1.87ug/l m

response 3398

ion	Exp%	Act%
43.15	100	100
58.05	27.50	18.16#
0.00	0.00	0.00
0.00	0.00	0.00

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 18:22

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 18:22

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-006  
 Lab File ID: M0620022.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 18:22  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

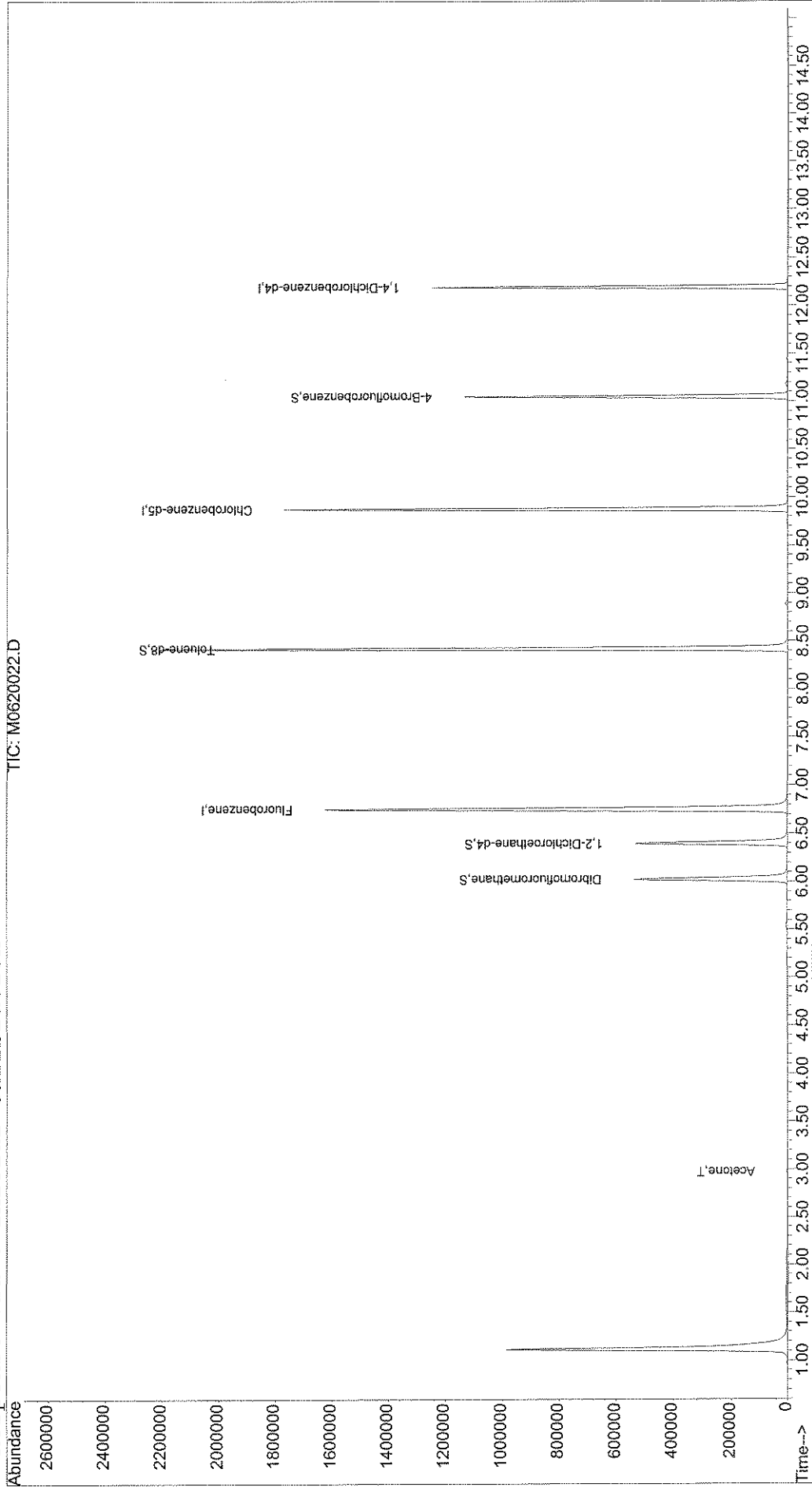
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620022.D Vial: 76  
Acq On : 20 Jun 2007 18:22 Operator: DGA  
Sample : JPL37-006 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:36 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620022.D  
 Acq On : 20 Jun 2007 18:22  
 Sample : JPL37-006  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:36 2007

Vial: 76  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1676842	50.00	ug/l	0.00	99.72%
54) Chlorobenzene-d5	9.87	117	1020525	50.00	ug/l	0.00	102.84%
74) 1,4-Dichlorobenzene-d4	12.19	152	342080	50.00	ug/l	0.00	88.41%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	398823	52.50	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.00%	
40) 1,2-Dichloroethane-d4	6.39	65	431935	52.55	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.10%	
55) Toluene-d8	8.42	98	1570405	49.82	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.64%	
76) 4-Bromofluorobenzene	11.05	95	374520	58.26	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.52%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	10133	5.49	ug/l	90
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	166	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0620022.D M8260W.M Wed Jun 27 13:36:15 2007

*J. G. [Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620022.D  
 Acq On : 20 Jun 2007 18:22  
 Sample : JPL37-006  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:36 2007

Vial: 76  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.66	41	60		N.D.	
34) Chloroform	5.83	83	666		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	6.00	56	74		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	791		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.31	83	66		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	314		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	64		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.19	43	389		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1996		N.D.	
66) Chlorobenzene	9.90	112	74		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

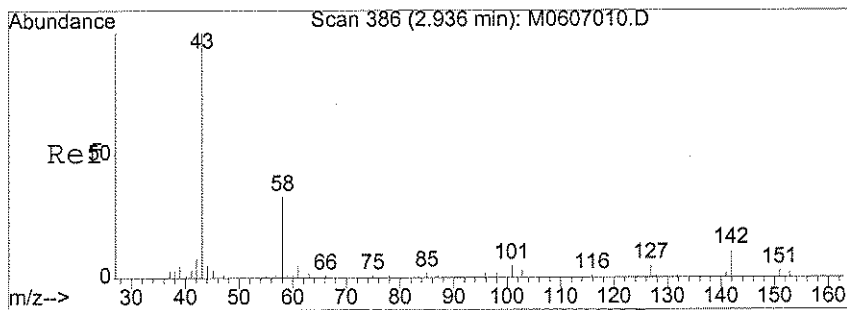
Data File : X:\MSVOA\MOBY\062007\M0620022.D  
 Acq On : 20 Jun 2007 18:22  
 Sample : JPL37-006  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:36 2007

Vial: 76  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

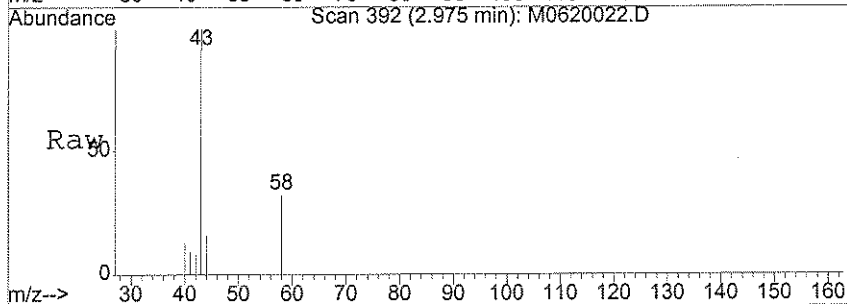
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	139		N.D.	
69) m,p-Xylene	10.11	106	119		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.74	173	154		N.D.	
73) Isopropylbenzene	10.87	105	141		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	59		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	253		N.D.	
81) 2-Chlorotoluene	11.38	91	69		N.D.	
82) 4-Chlorotoluene	11.48	91	94		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.77	119	70		N.D.	
85) 1,2,4-Trimethylbenzene	11.98	105	68		N.D.	
86) sec-butylbenzene	11.98	105	68		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.12	119	124		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	229		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

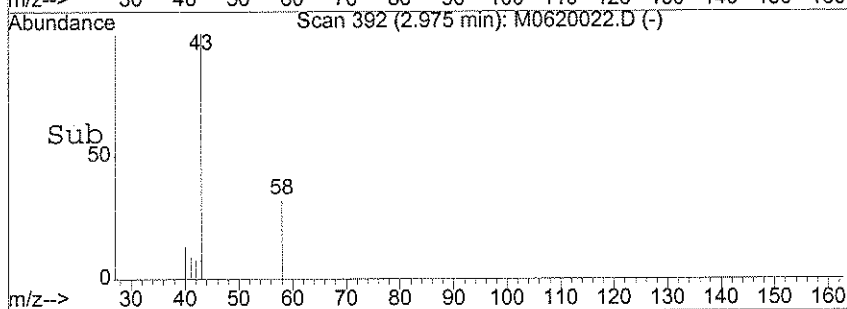
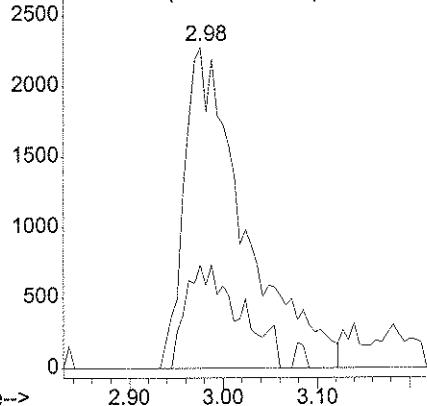


#11  
 Acetone  
 Concen: 5.49 ug/l  
 RT: 2.98 min Scan# 392  
 Delta R.T. -0.02 min  
 Lab File: M0620022.D  
 Acq: 20 Jun 2007 18:22

Tgt Ion: 43 Resp: 10133  
 Ion Ratio Lower Upper  
 43 100  
 58 22.4 22.0 33.0



Abundance Ion 43.15 (42.85 to 43.85): M0620022  
 Ion 58.05 (57.75 to 58.75): M0620022



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 13:42

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL37  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-007  
 Lab File ID: M0620012.D  
 Date Collected: 06/15/2007  
 Date/Time Analyzed: 06/20/2007 13:42  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL37

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL37-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/15/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 13:42

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

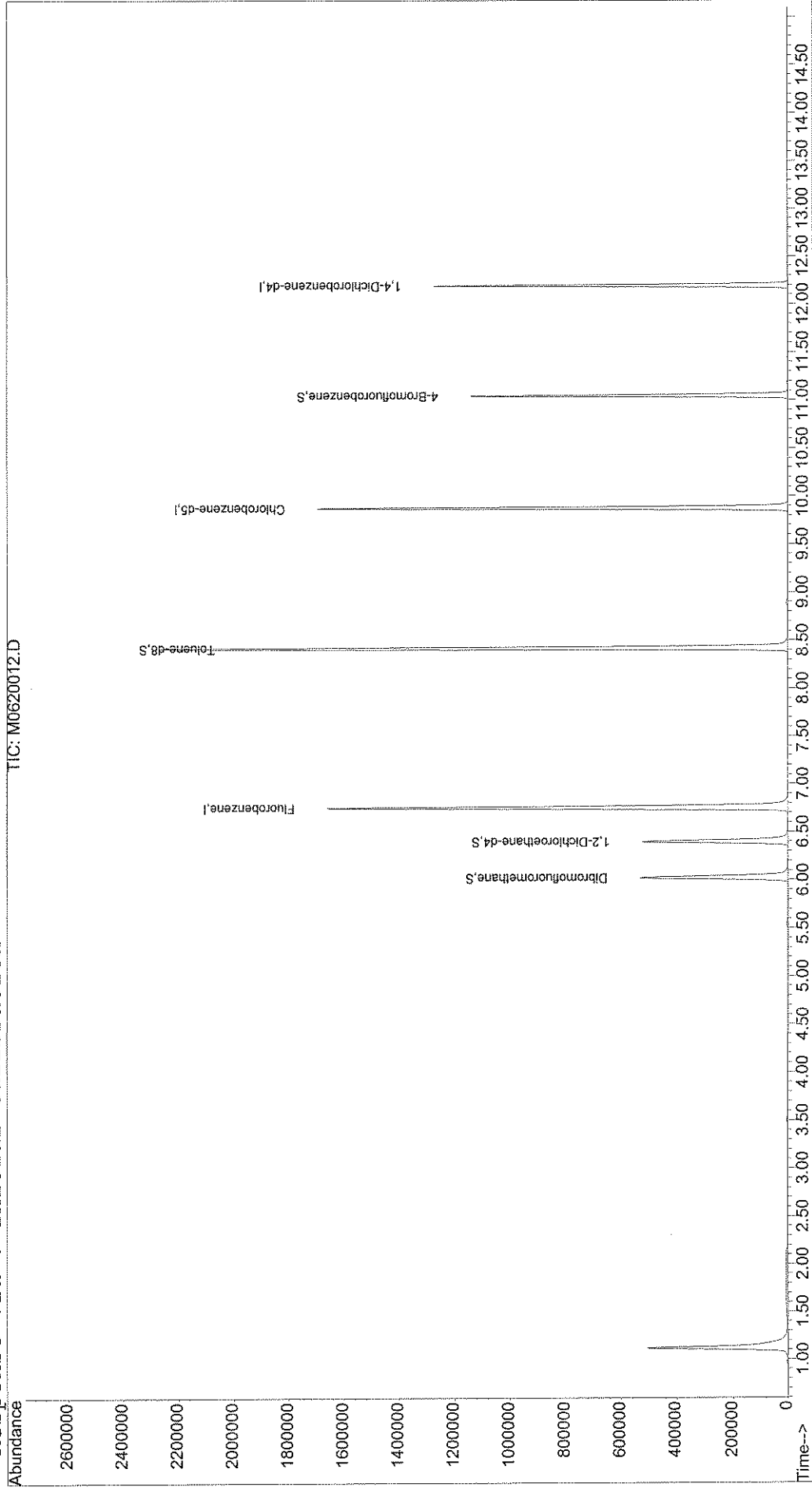
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620012.D Vial: 68  
Acq On : 20 Jun 2007 13:42 Operator: DGA  
Sample : JPL37-007 Inst : MOBY  
Misc : #1 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 12:16 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620012.D  
 Acq On : 20 Jun 2007 13:42  
 Sample : JPL37-007  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:16 2007

Vial: 68  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1691850	50.00	ug/l	0.00	100.61%
54) Chlorobenzene-d5	9.88	117	1027698	50.00	ug/l	0.00	103.57%
74) 1,4-Dichlorobenzene-d4	12.19	152	346202	50.00	ug/l	0.00	89.48%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	399411	52.11	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.22%	
40) 1,2-Dichloroethane-d4	6.40	65	431519	52.04	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.08%	
55) Toluene-d8	8.42	98	1576151	49.65	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.30%	
76) 4-Bromofluorobenzene	11.05	95	377504	58.02	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.04%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.44	50	124	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.86	96	55	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	745	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	300	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.44	43	71	N.D.		
18) Methylene Chloride	3.49	84	2582	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620012.D  
 Acq On : 20 Jun 2007 13:42  
 Sample : JPL37-007  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:16 2007

Vial: 68  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	203		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.83	83	69		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	6.00	56	62		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.18	75	60		N.D.	
41) Benzene	6.41	78	766		N.D.	
42) 1,2-Dichloroethane	6.40	62	127		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.17	130	56		N.D.	
46) Methylcyclohexane	7.30	83	203		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	518		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	230		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.20	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2102		N.D.	
66) Chlorobenzene	9.90	112	341		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620012.D  
 Acq On : 20 Jun 2007 13:42  
 Sample : JPL37-007  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:16 2007

Vial: 68  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	604		N.D.	
69) m,p-Xylene	10.12	106	625		N.D.	
70) o-xylene	10.51	106	57		N.D.	
71) Styrene	10.54	104	144		N.D.	
72) Bromoform	10.75	173	273		N.D.	
73) Isopropylbenzene	10.87	105	648		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	62		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	987		N.D.	
81) 2-Chlorotoluene	11.37	91	380		N.D.	
82) 4-Chlorotoluene	11.49	91	527		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	504		N.D.	
84) tert-Butylbenzene	11.77	119	497		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	559		N.D.	
86) sec-butylbenzene	11.98	105	793		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	257		N.D.	
88) 4-Isopropyltoluene	12.14	119	818		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	475		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	227		N.D.	
91) n-Butylbenzene	12.54	91	1021		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	214		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

**TIC FORMS**

SDG JPL37

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062007MVOWM3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: B062007MVOWM3  
 Lab File ID: M0620011.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620011.D Vial: 56  
Acq On : 20 Jun 2007 13:18 Operator: DGA  
Sample : B062007MVOWM3 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-38-11) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620011.D M8260W.M Fri Jun 29 12:07:03 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-18-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-001  
 Lab File ID: M0620017.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620017.D Vial: 71  
Acq On : 20 Jun 2007 16:11 Operator: DGA  
Sample : JPL37-001 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620017.D M8260W.M Fri Jun 29 06:46:16 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-18-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-002  
 Lab File ID: M0620018.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620018.D Vial: 72  
Acq On : 20 Jun 2007 16:35 Operator: DGA  
Sample : JPL37-002 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620018.D M8260W.M Fri Jun 29 06:46:25 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-18-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-003  
 Lab File ID: M0620019.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620019.D Vial: 73  
Acq On : 20 Jun 2007 17:02 Operator: DGA  
Sample : JPL37-003 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620019.D M8260W.M Fri Jun 29 06:46:34 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-18-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-004  
 Lab File ID: M0620020.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620020.D Vial: 74  
Acq On : 20 Jun 2007 17:34 Operator: DGA  
Sample : JPL37-004 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

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M0620020.D M8260W.M Fri Jun 29 06:48:21 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-18-1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-005  
 Lab File ID: M0620021.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620021.D Vial: 75  
Acq On : 20 Jun 2007 17:58 Operator: DGA  
Sample : JPL37-005 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620021.D M8260W.M Fri Jun 29 06:48:38 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-006  
 Lab File ID: M0620022.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620022.D Vial: 76  
Acq On : 20 Jun 2007 18:22 Operator: DGA  
Sample : JPL37-006 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620022.D M8260W.M Fri Jun 29 06:48:47 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-3-6/15/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL37  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL37-007  
 Lab File ID: M0620012.D  
 Date Collected: 06/16/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620012.D Vial: 68  
Acq On : 20 Jun 2007 13:42 Operator: DGA  
Sample : JPL37-007 Inst : MOBY  
Misc : #1 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620012.D M8260W.M Fri Jun 29 06:45:21 2007

**Metals Data**

**JPL37**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin  
 Lab Code: LAUCKS SDG No.: JPL37  
 SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
<u>MW-18-5</u>	<u>JPL37-001</u>
<u>MW-18-4</u>	<u>JPL37-002</u>
<u>MW-18-3</u>	<u>JPL37-003</u>
<u>MW-18-2</u>	<u>JPL37-004</u>
<u>MW-18-1</u>	<u>JPL37-005</u>
<u>EB-3-6/15/07</u>	<u>JPL37-006</u>

Were ICP interelement corrections applied? Yes/No YES  
 Were ICP background corrections applied? Yes/No NO  
 If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Bill Ambacher Name: Bill Ambacher  
 Date: 7/6/07 Title: Inorganics/Metals Manager



## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-18-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL37

Matrix (soil/water): Water

Lab Sample ID: JPL37-001

Level (low/med): LOW

Date Received: 06/16/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.12			M	R019127
7440-70-2	Calcium	10500			P	R019172
7440-47-3	Chromium	5.24			M	R019127
7439-89-6	Iron	134			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	57900		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-18-4

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL37Matrix (soil/water): WaterLab Sample ID: JPL37-002Level (low/med): LOWDate Received: 06/16/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.25			M	R019127
7440-70-2	Calcium	43800			P	R019188
7440-47-3	Chromium	7.21			M	R019127
7439-89-6	Iron	330			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	13300			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	34100		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-18-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL37

Matrix (soil/water): Water

Lab Sample ID: JPL37-003

Level (low/med): LOW

Date Received: 06/16/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.67			M	R019127
7440-70-2	Calcium	71600			P	R019188
7440-47-3	Chromium	12.9			M	R019127
7439-89-6	Iron	273			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	19600			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	25500		*N	P	R019188

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-18-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL37

Matrix (soil/water): Water

Lab Sample ID: JPL37-004

Level (low/med): LOW

Date Received: 06/16/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.63			M	R019127
7440-70-2	Calcium	64600			P	R019188
7440-47-3	Chromium	7.73			M	R019127
7439-89-6	Iron	280			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	20100			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	20900		*N	P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-18-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL37

Matrix (soil/water): Water

Lab Sample ID: JPL37-005

Level (low/med): LOW

Date Received: 06/16/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	49900			P	R019188
7440-47-3	Chromium	6.63			M	R019127
7439-89-6	Iron	696			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	14800			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	16800		*N	P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-3-6/15/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL37

Matrix (soil/water): Water

Lab Sample ID: JPL37-006

Level (low/med): LOW

Date Received: 06/16/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5000	U		P	R019172
7440-47-3	Chromium	1.00	U		M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	5000	U	*N	P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL37**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL37

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-18-5	JPL37-001
MW-18-5MS	JPL37-001MS
MW-18-5MSD	JPL37-001MSD
MW-18-4	JPL37-002
MW-18-3	JPL37-003
MW-18-2	JPL37-004
MW-18-2MS	JPL37-004MS
MW-18-2MSD	JPL37-004MSD
MW-18-1	JPL37-005
MW-18-1MS	JPL37-005MS
MW-18-1MSD	JPL37-005MSD
EB-3-6/15/07	JPL37-006
EB-3-6/15/07D	JPL37-006D

Comments:

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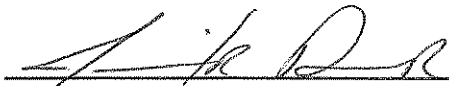


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I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-4-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**











**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL37  
**Sample Number:** EB-3-6/15/07 **Date/Time Collected:** 06/15/2007 10:40  
**Lab Sample ID:** JPL37-006 **Date/Time Received:** 06/16/2007 09:20  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.0		0.10	0.10	06/16/2007	06/16/2007	R018847

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	20		2	2	06/18/2007	06/20/2007	R018800

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/16/2007	06/16/2007	R018823
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/16/2007	06/16/2007	R018823
Chloride	16887-00-6	1	1.0	U	1.0	0.076	06/16/2007	06/16/2007	R018823

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	06/19/2007	06/19/2007	R018837
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	06/19/2007	06/19/2007	R018837

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/27/2007	06/28/2007	R019077



**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL38**

**JULY 12, 2007**

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL38  
Date of Report: July 12, 2007

**SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

**Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-20-5	JPL38-001	VOA/MET/INO
MW-20-4	JPL38-002	VOA/MET/INO
MW-20-3	JPL38-003	VOA/MET/INO
MW-20-2	JPL38-004	VOA/MET/INO
MW-20-1	JPL38-005	VOA/MET/INO
DUPE-2-2Q07	JPL38-006	VOA/MET/INO
EB-4-6/18/07	JPL38-007	VOA/MET/INO
TB-4-6/18/07	JPL38-008	VOA

**Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

**Sample Receipt Comments:**

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

One of two VOA vials for TB-4-6/18/07 was received broken.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### GENERAL REMARKS ON ORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### Holding Time Compliance:

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

#### Volatiles Fraction:

##### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factors was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 ( $r$  values greater than 0.995) and were therefore compliant.

##### Continuing Calibration Verification (CCV):

For the CCV performed on 06/20/2007 the percent difference value for dichlorodifluoromethane exceeded 30% due to increased response. This analyte was not detected in any associated samples so no further action was taken.

##### Quality Control Analyses:

Analysis of the blank spike performed on 6/20/07 yielded a recovery for dichlorodifluoromethane that exceeded the control limit. Because all other analytes were within the control limits no further action was taken.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### GENERAL REMARKS ON INORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP-MS Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### SPECIFIC REMARKS ON INORGANIC ANALYSES:

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

#### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

#### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

All samples for total dissolved solids were originally analyzed within holding time, due to quality control failures samples were reanalyzed 3 days past their holding time. Reanalysis results were reported, and original data is included.

#### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

Samples in this SDG were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding duplicate sample precision and matrix spike recovery apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL40 or the raw data provided.

The serial dilution for the element calcium did not agree within 10% of the original determination after correction for dilution for sample MW-22-5 from JPL40. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### **Miscellaneous Inorganics:**

For run sequence R018785, the second continuing calibration verification is outside the established control limits for the chloride analysis. No samples that are being reported are bracketed by this CCV. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

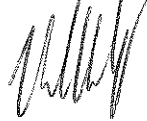
940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

12 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/12/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.



**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO <sub>3</sub> , Cl, SO <sub>4</sub>	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICS (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL38-001	06/19/2007 10:00 AM	06/18/2007 07:57 AM	MW-20-5	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-002	06/19/2007 10:00 AM	06/18/2007 08:38 AM	MW-20-4	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-003	06/19/2007 10:00 AM	06/18/2007 09:17 AM	MW-20-3	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-004	06/19/2007 10:00 AM	06/18/2007 09:52 AM	MW-20-2	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-005	06/19/2007 10:00 AM	06/18/2007 10:31 AM	MW-20-1	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-006	06/19/2007 10:00 AM	06/18/2007 12:00 AM	DUPE-2-2007	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-007	06/19/2007 10:00 AM	06/18/2007 10:12 AM	EB-4-6/18/07	IN	IN	IN	IN	A-	IN	IN	IN	IN
JPL38-008	06/19/2007 10:00 AM	06/18/2007 12:00 AM	TB-4-6/18/07								IN	

Approved By: *[Signature]*  
 Notes:

On: *[Signature]*

Samples identified with a '\*' client has requested QC for

**LEGEND:** -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged

**FORM LTL-PM-8.0**



**Cooler Receipt Form**  
**Laucks Testing Laboratories, Inc.**

SDG: JPL38

Taken By: Client

Cooler: AAP013

Transferred: Fed Ex

COC #: 42856

Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 6/19/2007

Date cooler was opened: 6/19/2007 10:00AM

**A. PRELIMINARY EXAMINATION PHASE:**

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES  
if YES, record carrier name and airbill number: 857174402216
2. Were custody seals unbroken and intact at the date and time of arrival? ..... INTACT  
Date On Custody Seal: Custody Seals Description: **One in front and back.**
3. Were custody papers sealed in a plastic bag and taped inside to the lid? ..... YES
4. Did you screen samples for radioactivity using the Geiger Counter? ..... YES
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES
6. Did you sign custody papers in the appropriate place? ..... YES
7. If required, was enough cooling material present? ..... YES
8. Have designated person initial here to acknowledge receipt of cooler: SM

**B. LOG-IN PHASE:**

Date samples were logged-in: 6/19/2007 10:10AM

Logged-in by Susan Moss (sign) Susan Moss

9. Describe type of packing in cooler:  
bubble wrap
10. Were all bottles sealed in separate plastic bags? ..... YES
11. Were labels in good condition? ..... YES
12. Were all bottle labels complete (ID,date,time signature,preservative,etc.)? ..... YES
13. Did all bottle labels agree with custody papers? ..... YES
14. Were correct containers used for the tests indicated? ..... YES
15. Were the correct pHs observed? ..... YES
16. Was a sufficient amount of sample sent for tests indicated? ..... YES
17. Were bubbles absent in VOA samples? ..... NO
18. Temperatures: 5.3

**DISCREPANCIES:**

Several 40ml HCl preserved VOA vials were received with <1/4" bubbles. See Supplemental Sample Receipt Log for details. One 40ml HCl preserved vial for sample 8 received broken.

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL38  
Cooler: AAP013  
Temperatures: 5.3  
COC #: 42856

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL38-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-007	0001	1000 mL cylinder, poly	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

**SDG:** JPL38

**Cooler:** AAP013

**Temperatures:** 5.3

**COC #:** 42856

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL38-008	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**Battelle**

**SDG No.: JPL38**

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- III. Index: 15-16
- IV. Volatiles Data: VOA 1-236
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  - B. Sample Data: 15-99
  - C. Standards Data: 100-187
  - D. Raw QC Data: 188-222
  - E. Bench Sheets: 223-236
- V. Metals Data: MET- 1-524
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  - B. Metals Analysis Data Sheets: 3-10
  - C. Quality Control Data: 11-88
  - D. Quarterly Verification of Instrument Parameters: 89-93
  - E. Raw Data: 94-520
  - F. Digestion & Distillation Logs: 521-524
- VI. Miscellaneous Inorganics Data: INO 1-207
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  - B. Inorganics Analysis Data Sheets: 3-10
  - C. Quality Control Data: 11-41
  - D. Raw Data: 42-207
- VII. Forms Summary: SUM- 1-198

Completed and checked by Judy Esklund Date: 7/12/07



**SAMPLE DATA**

SDG JPL38

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-5

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-001

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0620023.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/20/2007 18:47

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-001  
 Lab File ID: M0620023.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/20/2007 18:47  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-5

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-001

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0620023.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/20/2007 18:47

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

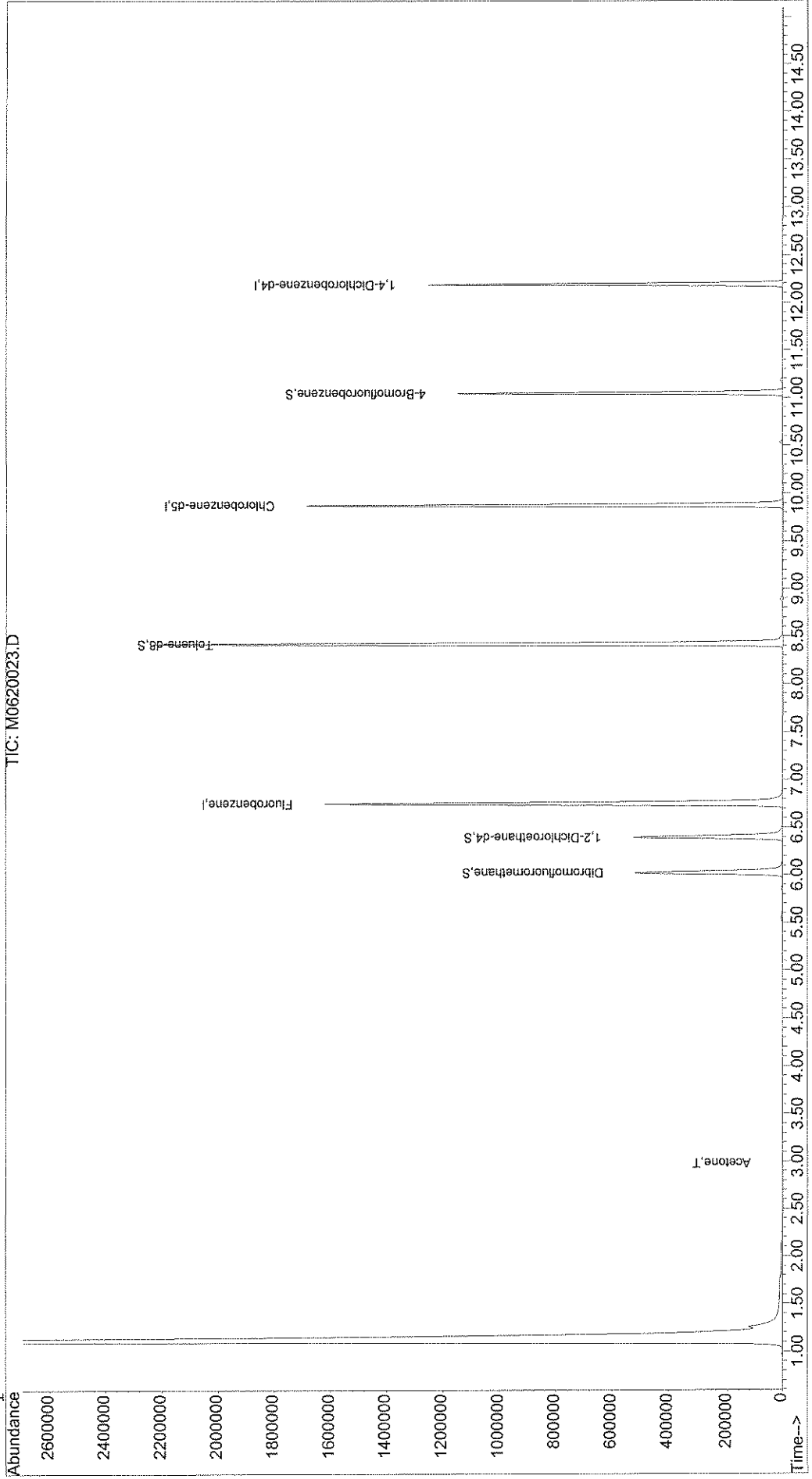
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620023.D Vial: 77  
Acq On : 20 Jun 2007 18:47 Operator: DGA  
Sample : JPL38-001 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:37 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620023.D  
 Acq On : 20 Jun 2007 18:47  
 Sample : JPL38-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:37 2007

Vial: 77  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1648683	50.00	ug/l	0.00 98.04%
54) Chlorobenzene-d5	9.88	117	996585	50.00	ug/l	0.00 100.43%
74) 1,4-Dichlorobenzene-d4	12.19	152	343554	50.00	ug/l	0.00 88.79%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	390517	52.29	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.58%
40) 1,2-Dichloroethane-d4	6.40	65	425690	52.68	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.36%
55) Toluene-d8	8.42	98	1547220	50.26	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.52%
76) 4-Bromofluorobenzene	11.05	95	373312	57.82	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.64%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	1.56	62	191	N.D.		
5) Bromomethane	1.91	96	63	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	3587	1.98 ug/l	#	78
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	1687	N.D.		
15) Allyl chloride	3.34	76	165	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	191	N.D.		
18) Methylene Chloride	3.48	84	381	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.	d	

(#) = qualifier out of range (m) = manual integration  
 M0620023.D M8260W.M Wed Jun 27 13:37:43 2007

*J. O. 06/27/07*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620023.D  
 Acq On : 20 Jun 2007 18:47  
 Sample : JPL38-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:37 2007

Vial: 77  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	722		N.D.	
31) Propionitrile	0.00	54	0		N.D.	d
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.75	41	57		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	741		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	1068		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.89	97	60		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.37	43	59		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1988		N.D.	
66) Chlorobenzene	9.91	112	64		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620023.D  
 Acq On : 20 Jun 2007 18:47  
 Sample : JPL38-001  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:37 2007

Vial: 77  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

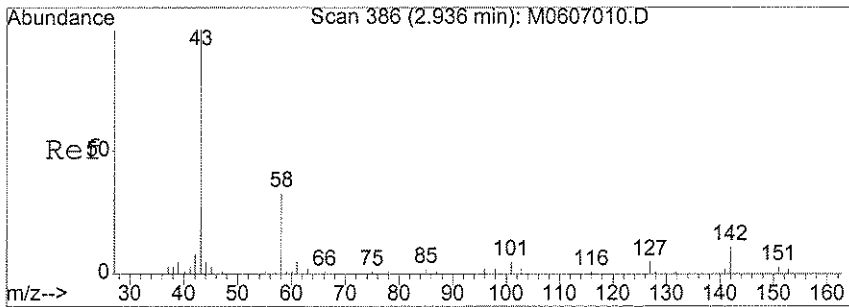
Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	2563		N.D.	
69) m,p-Xylene	10.11	106	1006		N.D.	
70) o-xylene	10.50	106	301		N.D.	
71) Styrene	10.53	104	5741		N.D.	
72) Bromoform	10.75	173	140		N.D.	
73) Isopropylbenzene	10.87	105	224		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	342		N.D.	
81) 2-Chlorotoluene	11.38	91	71		N.D.	
82) 4-Chlorotoluene	11.38	91	71		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	72		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	439		N.D.	
86) sec-butylbenzene	11.99	105	66		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	214		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	238		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

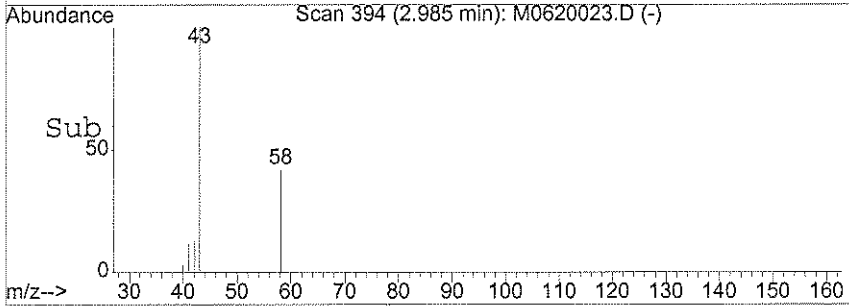
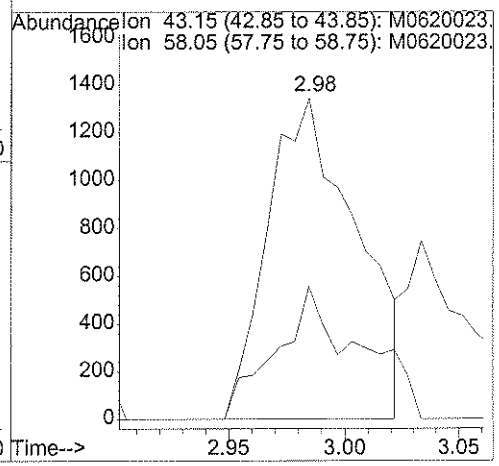
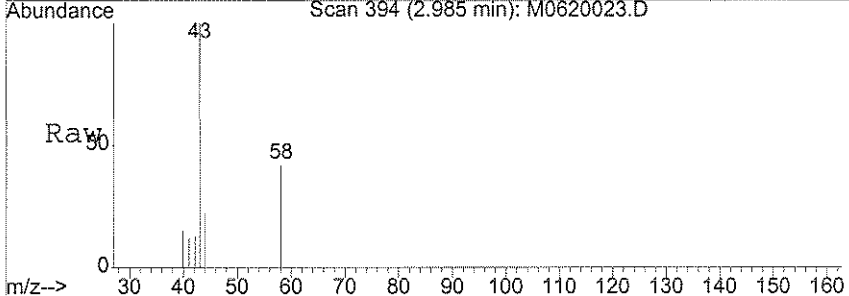
(#) = qualifier out of range (m) = manual integration





#11  
 Acetone  
 Concen: 1.98 ug/l  
 RT: 2.98 min Scan# 394  
 Delta R.T. -0.01 min  
 Lab File: M0620023.D  
 Acq: 20 Jun 2007 18:47

Tgt Ion: 43 Resp: 3587  
 Ion Ratio Lower Upper  
 43 100  
 58 39.0 22.0 33.0#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-4

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-002

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0620024.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/20/2007 19:11

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-002  
 Lab File ID: M0620024.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/20/2007 19:11  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-002  
 Lab File ID: M0620024.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/20/2007 19:11  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

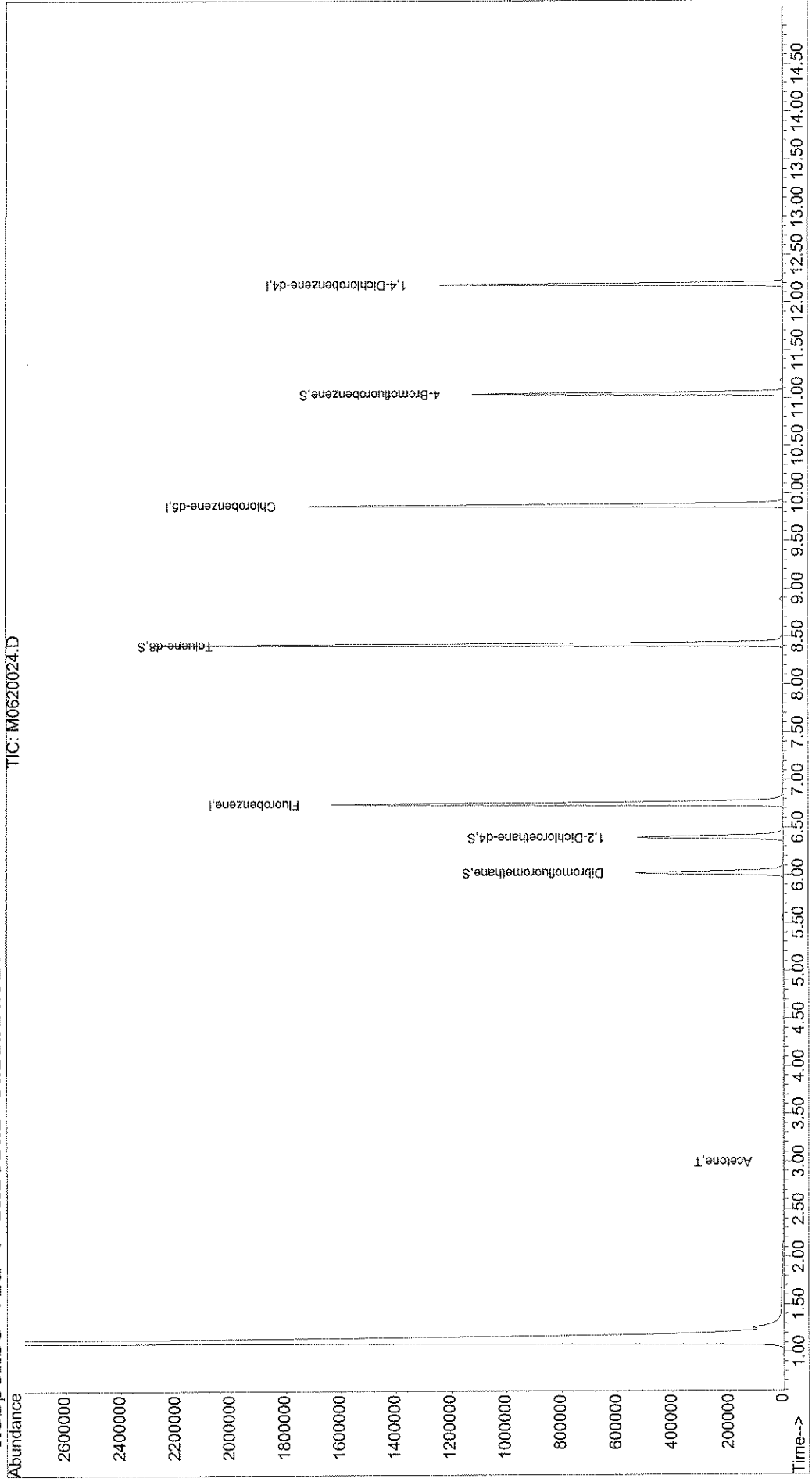
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620024.D  
Acq On : 20 Jun 2007 19:11  
Sample : JPL38-002  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:38 2007  
Vial: 78  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620024.D  
 Acq On : 20 Jun 2007 19:11  
 Sample : JPL38-002  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:38 2007

Vial: 78  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1655992	50.00	ug/l	0.00	98.48%
54) Chlorobenzene-d5	9.88	117	1003048	50.00	ug/l	0.00	101.08%
74) 1,4-Dichlorobenzene-d4	12.19	152	338252	50.00	ug/l	0.00	87.42%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	392893	52.37	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.74%	
40) 1,2-Dichloroethane-d4	6.40	65	430911	53.09	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.18%	
55) Toluene-d8	8.42	98	1556915	50.25	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.50%	
76) 4-Bromofluorobenzene	11.04	95	374545	58.92	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.84%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.45	50	65	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.94	96	70	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	3368	1.85	ug/l #	80
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	2999	N.D.		
15) Allyl chloride	3.27	76	104	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.39	43	126	N.D.		
18) Methylene Chloride	3.49	84	153	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.93	73	84	N.D.		
22) Acrylonitrile	3.95	53	563	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0620024.D M8260W.M Wed Jun 27 13:38:58 2007

*J. O. Smith*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620024.D  
 Acq On : 20 Jun 2007 19:11  
 Sample : JPL38-002  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:38 2007

Vial: 78  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	357		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	715		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	584		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	423		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1899		N.D.	
66) Chlorobenzene	9.90	112	57		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620024.D  
 Acq On : 20 Jun 2007 19:11  
 Sample : JPL38-002  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:38 2007

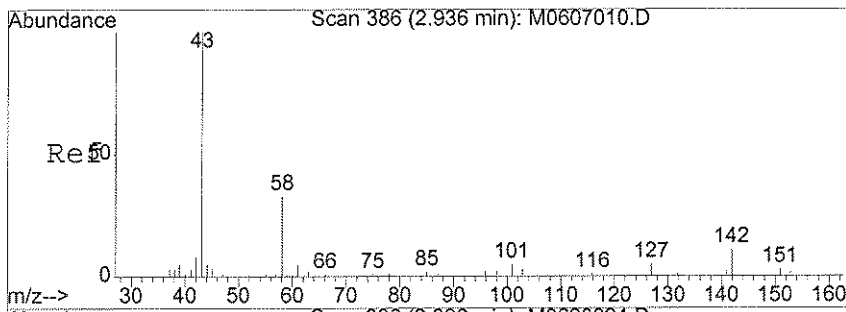
Vial: 78  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

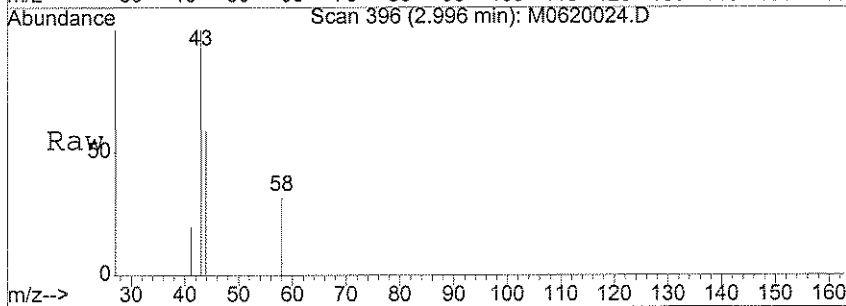
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	484		N.D.	
69) m,p-Xylene	10.11	106	741		N.D.	
70) o-xylene	10.52	106	68		N.D.	
71) Styrene	10.53	104	608		N.D.	
72) Bromoform	10.75	173	152		N.D.	
73) Isopropylbenzene	11.03	105	95		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	238		N.D.	
81) 2-Chlorotoluene	11.28	91	238		N.D.	
82) 4-Chlorotoluene	11.48	91	61		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	66		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	154		N.D.	
86) sec-butylbenzene	11.82	105	154		N.D.	
87) 1,3-Dichlorobenzene	12.21	146	73		N.D.	
88) 4-Isopropyltoluene	12.14	119	70		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	73		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	146		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



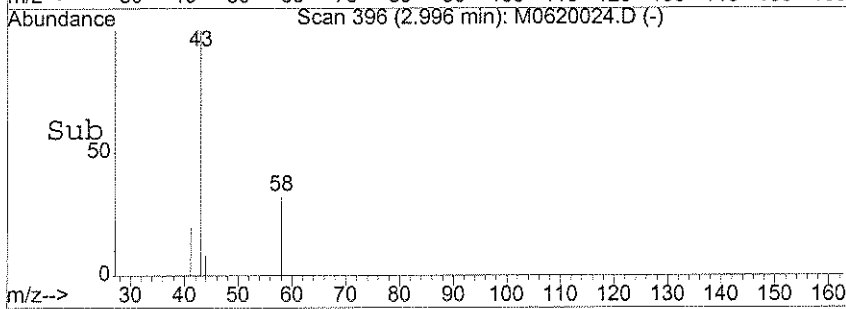
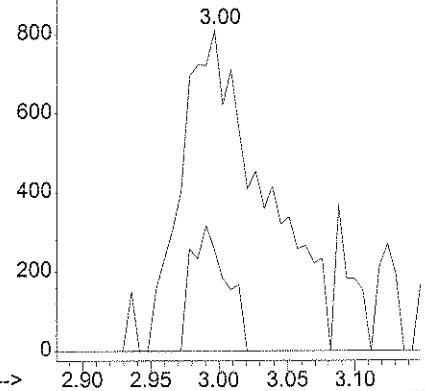


#11  
 Acetone  
 Concen: 1.85 ug/l  
 RT: 3.00 min Scan# 396  
 Delta R.T. 0.01 min  
 Lab File: M0620024.D  
 Acq: 20 Jun 2007 19:11

Tgt Ion: 43 Resp: 3368  
 Ion Ratio Lower Upper  
 43 100  
 58 17.1 22.0 33.0#



Abundance Ion 43.15 (42.85 to 43.85): M0620024.  
 Ion 58.05 (57.75 to 58.75): M0620024.



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/20/2007 19:36

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZE-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-003  
 Lab File ID: M0620025.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/20/2007 19:36  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-3

Lab Name: \_\_\_\_\_

SDG No.: JPL38

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R018875

Lab Sample ID: JPL38-003

Lab File ID: M0620025.D

Date Collected: 06/18/2007

Date/Time Analyzed: 06/20/2007 19:36

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

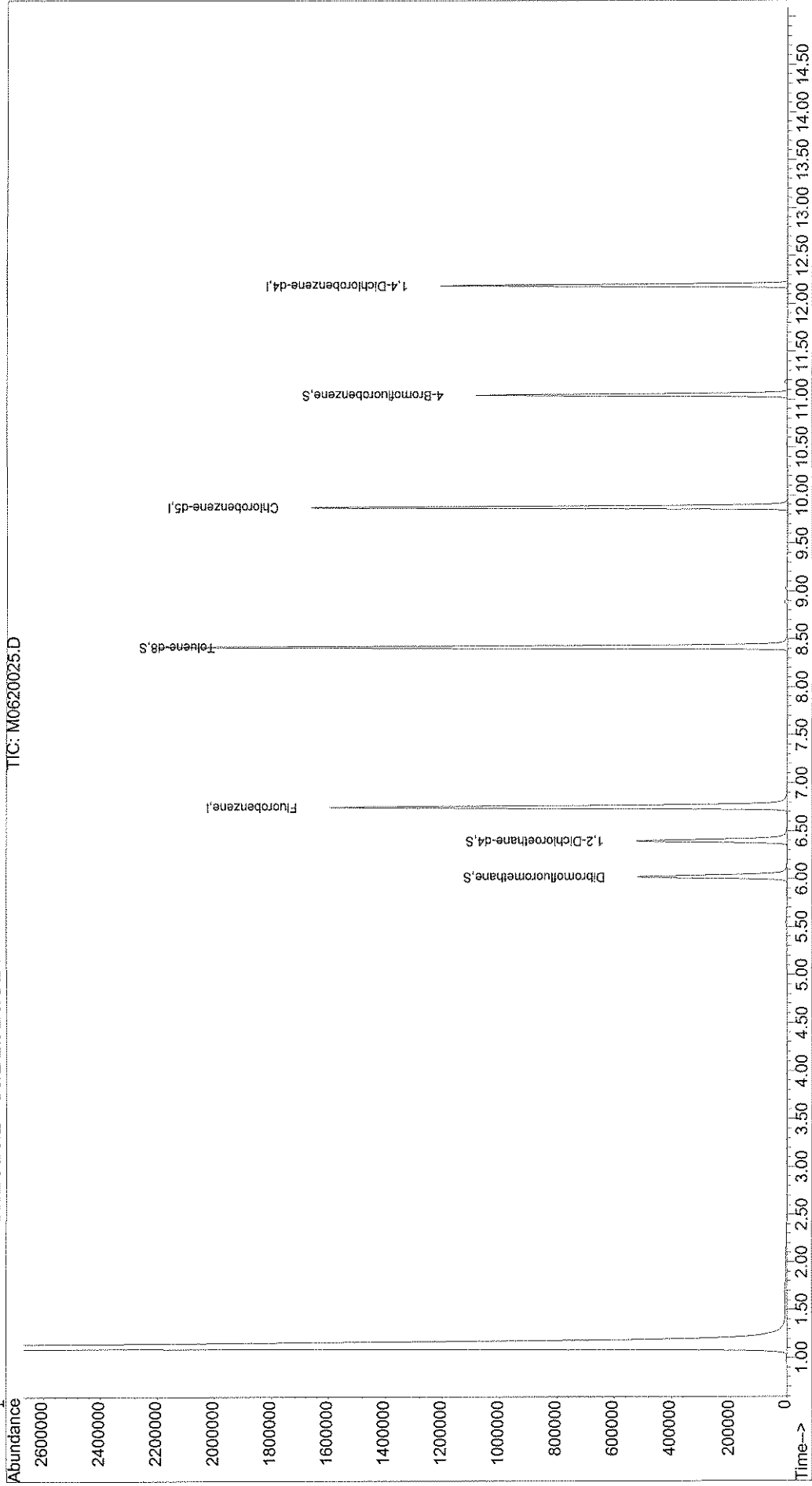
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620025.D  
Acq On : 20 Jun 2007 19:36  
Sample : JPL38-003  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 13:40 2007  
Vial: 79  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620025.D  
 Acq On : 20 Jun 2007 19:36  
 Sample : JPL38-003  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:40 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1639881	50.00	ug/l	0.00	97.52%
54) Chlorobenzene-d5	9.88	117	989828	50.00	ug/l	0.00	99.75%
74) 1,4-Dichlorobenzene-d4	12.19	152	335312	50.00	ug/l	0.00	86.66%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	391723	52.73	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.46%	
40) 1,2-Dichloroethane-d4	6.40	65	424771	52.84	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.68%	
55) Toluene-d8	8.42	98	1530755	50.07	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.14%	
76) 4-Bromofluorobenzene	11.05	95	362060	57.45	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.90%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	3.08	43	194		N.D.	
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.06	76	756		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.40	43	112		N.D.	
18) Methylene Chloride	3.50	84	192		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	3.93	73	68		N.D.	
22) Acrylonitrile	0.00	53	0		N.D.	d

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620025.D  
 Acq On : 20 Jun 2007 19:36  
 Sample : JPL38-003  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:40 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.54	43	829		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.75	41	55		N.D.	
34) Chloroform	5.82	83	633		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	714		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.15	130	149		N.D.	
46) Methylcyclohexane	7.30	83	88		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	641		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	2979		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.14	43	58		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2099		N.D.	
66) Chlorobenzene	9.90	112	200		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620025.D  
 Acq On : 20 Jun 2007 19:36  
 Sample : JPL38-003  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 13:40 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	1531		N.D.	
69) m,p-Xylene	10.11	106	562		N.D.	
70) o-xylene	10.51	106	149		N.D.	
71) Styrene	10.53	104	1994		N.D.	
72) Bromoform	10.75	173	200		N.D.	
73) Isopropylbenzene	11.03	105	291		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.05	156	65		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	80		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	221		N.D.	
81) 2-Chlorotoluene	11.28	91	221		N.D.	
82) 4-Chlorotoluene	11.28	91	221		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.84	105	184		N.D.	
86) sec-butylbenzene	11.99	105	156		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	56		N.D.	
88) 4-Isopropyltoluene	12.12	119	91		N.D.	
89) 1,4-Dichlorobenzene	12.13	146	56		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	235		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL38-004  
 Lab File ID: M0621016.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/21/2007 15:48  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL38-004  
 Lab File ID: M0621016.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/21/2007 15:48  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL38-004  
 Lab File ID: M0621016.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/21/2007 15:48  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

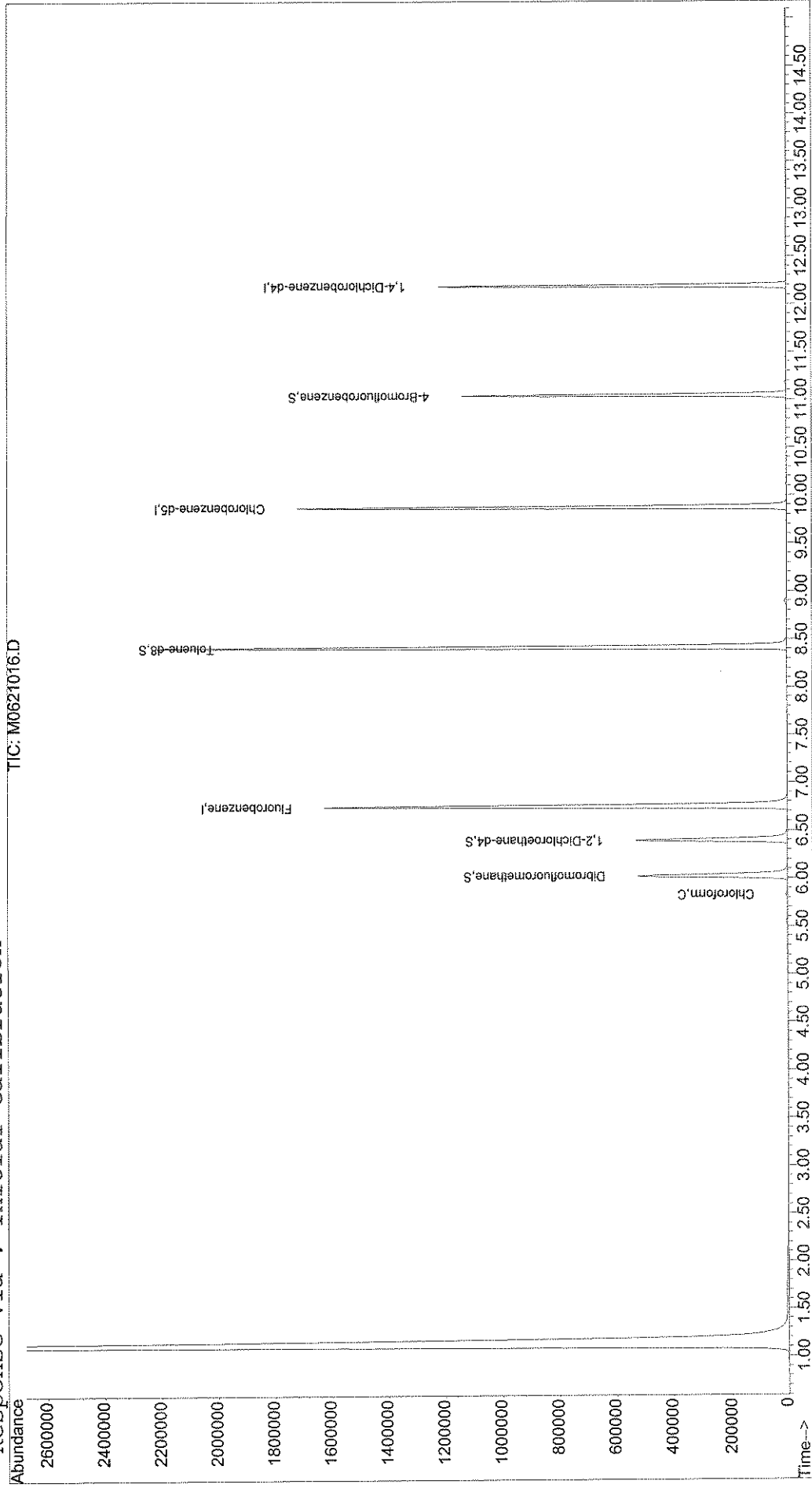
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621016.D  
Acq On : 21 Jun 2007 15:48  
Sample : JPL38-004  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:21 2007  
Vial: 80  
Operator: LH  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621016.D  
 Acq On : 21 Jun 2007 15:48  
 Sample : JPL38-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:21 2007

Vial: 80  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1667142	50.00	ug/l	0.00 99.14%
54) Chlorobenzene-d5	9.88	117	1016131	50.00	ug/l	0.00 102.40%
74) 1,4-Dichlorobenzene-d4	12.19	152	344767	50.00	ug/l	0.00 89.11%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	395378	52.35	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.70%
40) 1,2-Dichloroethane-d4	6.40	65	420377	51.44	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.88%
55) Toluene-d8	8.42	98	1559079	49.67	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.34%
76) 4-Bromofluorobenzene	11.04	95	374289	57.77	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.54%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	1.87	96	60	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	3.07	76	120	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	3.36	43	60	N.D.	
18) Methylene Chloride	3.50	84	298	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	3.94	73	70	N.D.	
22) Acrylonitrile	0.00	53	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621016.D  
 Acq On : 21 Jun 2007 15:48  
 Sample : JPL38-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:21 2007

Vial: 80  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	529		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.67	41	62		N.D.	
34) Chloroform	5.82	83	6705	0.50	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	726		N.D.	
42) 1,2-Dichloroethane	6.40	62	138		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	230		N.D.	
46) Methylcyclohexane	7.32	83	64		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	671		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	656		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.02	166	209		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.37	43	68		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2004		N.D.	
66) Chlorobenzene	9.91	112	174		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

99  
 LH 6/26/07

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621016.D  
 Acq On : 21 Jun 2007 15:48  
 Sample : JPL38-004  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:21 2007

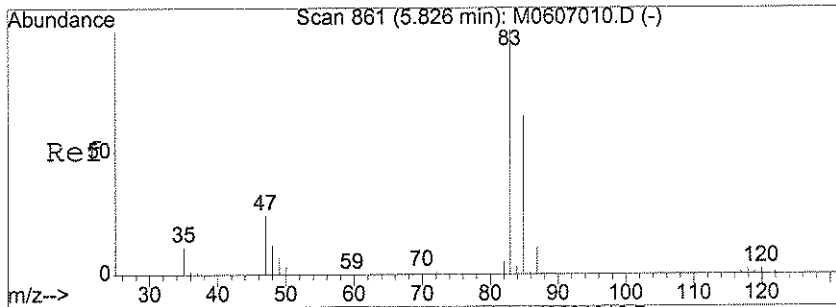
Vial: 80  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

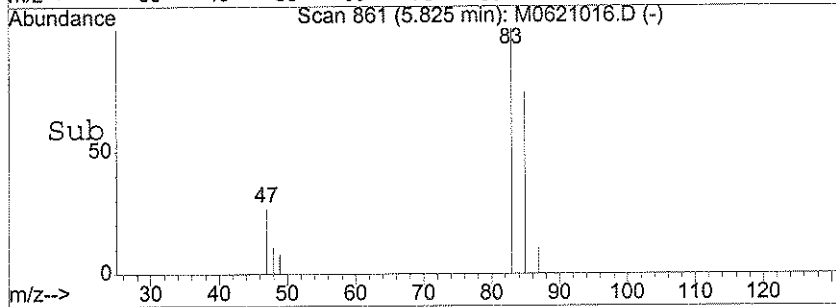
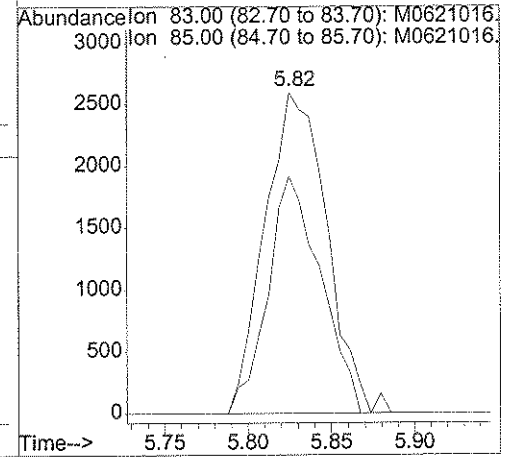
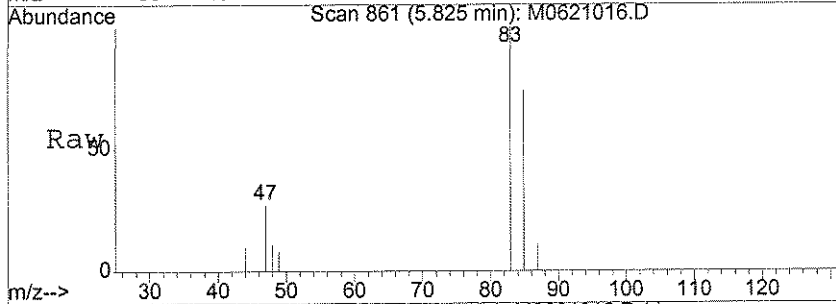
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	556		N.D.	
69) m,p-Xylene	10.12	106	839		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.53	104	120		N.D.	
72) Bromoform	10.75	173	251		N.D.	
73) Isopropylbenzene	10.87	105	131		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	58		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	283		N.D.	
81) 2-Chlorotoluene	11.37	91	118		N.D.	
82) 4-Chlorotoluene	11.49	91	140		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	69		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	149		N.D.	
86) sec-butylbenzene	11.99	105	226		N.D.	
87) 1,3-Dichlorobenzene	12.21	146	55		N.D.	
88) 4-Isopropyltoluene	12.13	119	218		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	55		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.53	91	314		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



#34  
 Chloroform  
 Concen: 0.50 ug/l  
 RT: 5.82 min Scan# 861  
 Delta R.T. -0.00 min  
 Lab File: M0621016.D  
 Acq: 21 Jun 2007 15:48

Tgt Ion	Resp	Lower	Upper
83	6705		
85	63.3	44.0	84.0





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-1

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-005

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0621017.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/21/2007 16:12

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	1.0		U
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 16:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,1,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-20-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 16:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

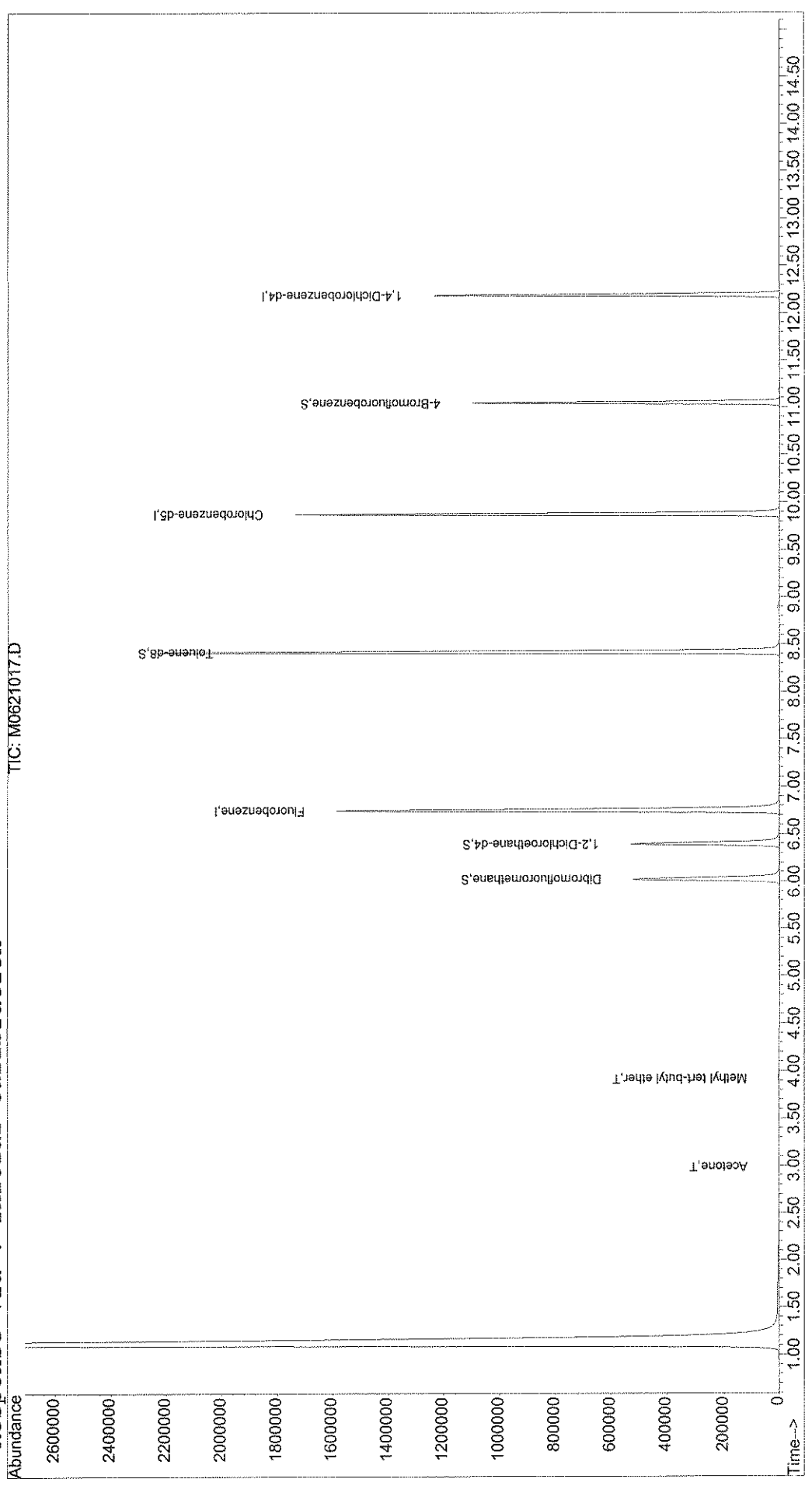
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621017.D  
Acq On : 21 Jun 2007 16:12  
Sample : JPL38-005  
Misc : #3 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:22 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621017.D  
 Acq On : 21 Jun 2007 16:12  
 Sample : JPL38-005  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:22 2007

Vial: 81  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1654604	50.00	ug/l	0.00	98.40%
54) Chlorobenzene-d5	9.88	117	1010712	50.00	ug/l	0.00	101.85%
74) 1,4-Dichlorobenzene-d4	12.19	152	340563	50.00	ug/l	0.00	88.02%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	398541	53.17	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.34%	
40) 1,2-Dichloroethane-d4	6.40	65	423150	52.17	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.34%	
55) Toluene-d8	8.42	98	1545105	49.49	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.98%	
76) 4-Bromofluorobenzene	11.04	95	372998	58.28	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.56%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	2605	1.43	ug/l #	65
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	55	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.48	84	240	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.92	73	6893	0.32	ug/l #	82
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621017.D  
 Acq On : 21 Jun 2007 16:12  
 Sample : JPL38-005  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:22 2007

Vial: 81  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	317		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.67	41	56		N.D.	
34) Chloroform	5.82	83	2314		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	780		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	461		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	330		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.89	97	55		N.D.	
60) Tetrachloroethene	9.02	166	71		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.13	43	62		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1964		N.D.	
66) Chlorobenzene	9.90	112	129		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

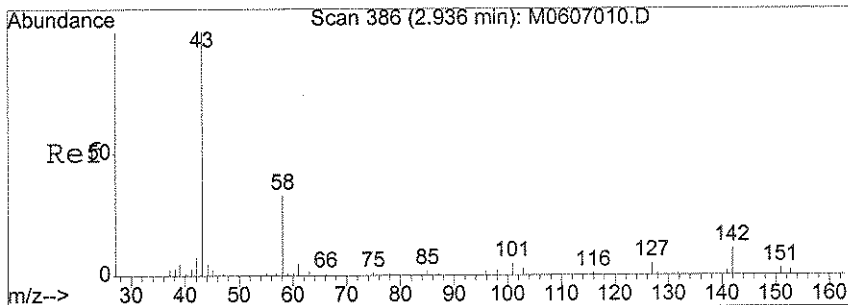
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 Sample : JPL38-005  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:22 2007

Vial: 81  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

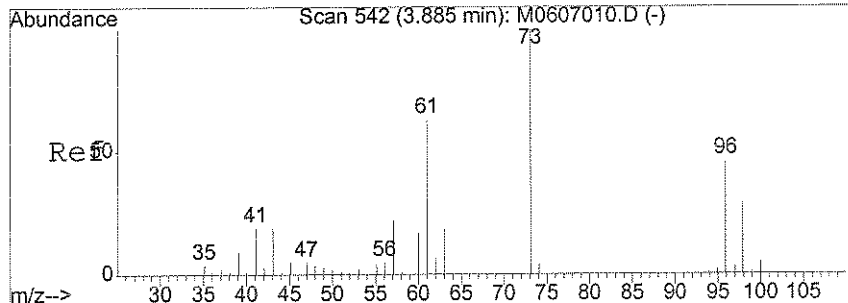
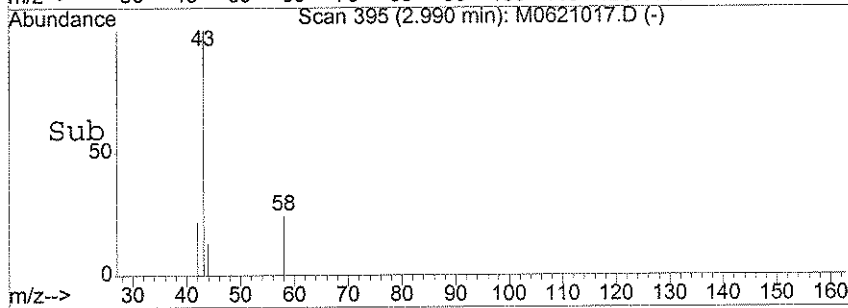
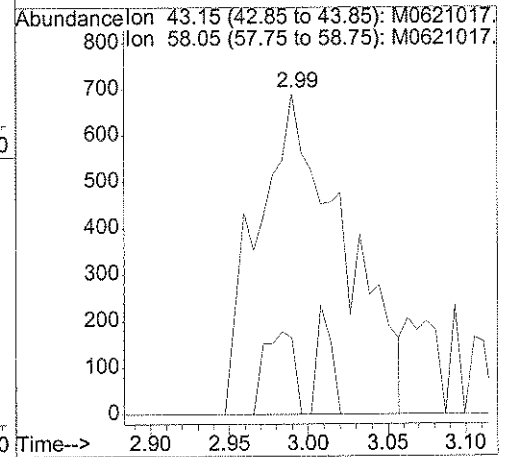
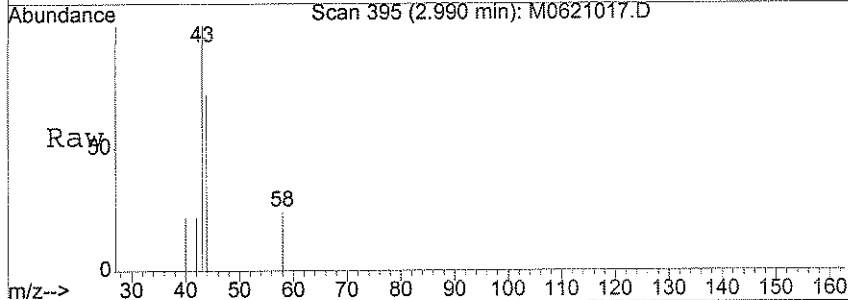
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 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	388		N.D.	
69) m,p-Xylene	10.11	106	553		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.74	173	197		N.D.	
73) Isopropylbenzene	10.87	105	59		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	291		N.D.	
81) 2-Chlorotoluene	11.27	91	291		N.D.	
82) 4-Chlorotoluene	11.49	91	81		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	89		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	57		N.D.	
86) sec-butylbenzene	11.98	105	67		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	137		N.D.	
88) 4-Isopropyltoluene	12.13	119	141		N.D.	
89) 1,4-Dichlorobenzene	12.12	146	137		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	330		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



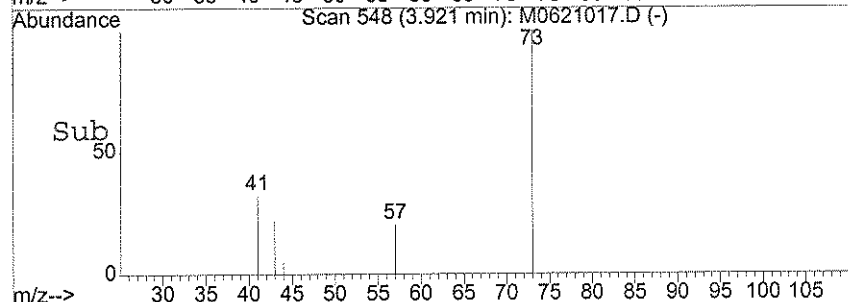
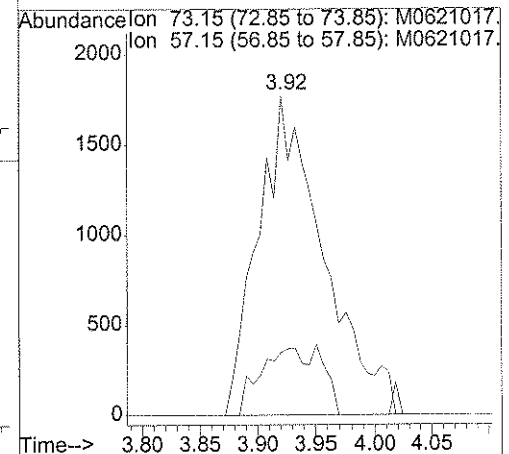
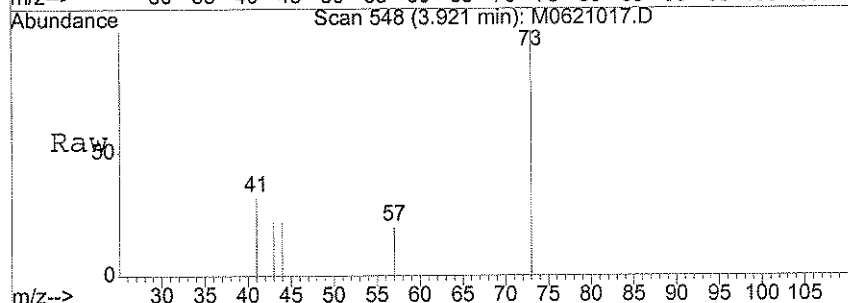
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 Acetone  
 Concen: 1.43 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. -0.00 min  
 Lab File: M0621017.D  
 Acq: 21 Jun 2007 16:12

Tgt Ion: 43 Resp: 2605  
 Ion Ratio Lower Upper  
 43 100  
 58 9.1 22.0 33.0#



#21  
 Methyl tert-butyl ether  
 Concen: 0.32 ug/l  
 RT: 3.92 min Scan# 548  
 Delta R.T. 0.01 min  
 Lab File: M0621017.D  
 Acq: 21 Jun 2007 16:12

Tgt Ion: 73 Resp: 6893  
 Ion Ratio Lower Upper  
 73 100  
 57 15.2 19.3 28.9#





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-2-2Q07

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-006

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0621018.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/21/2007 16:37

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-2-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 16:37

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-2-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 16:37

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

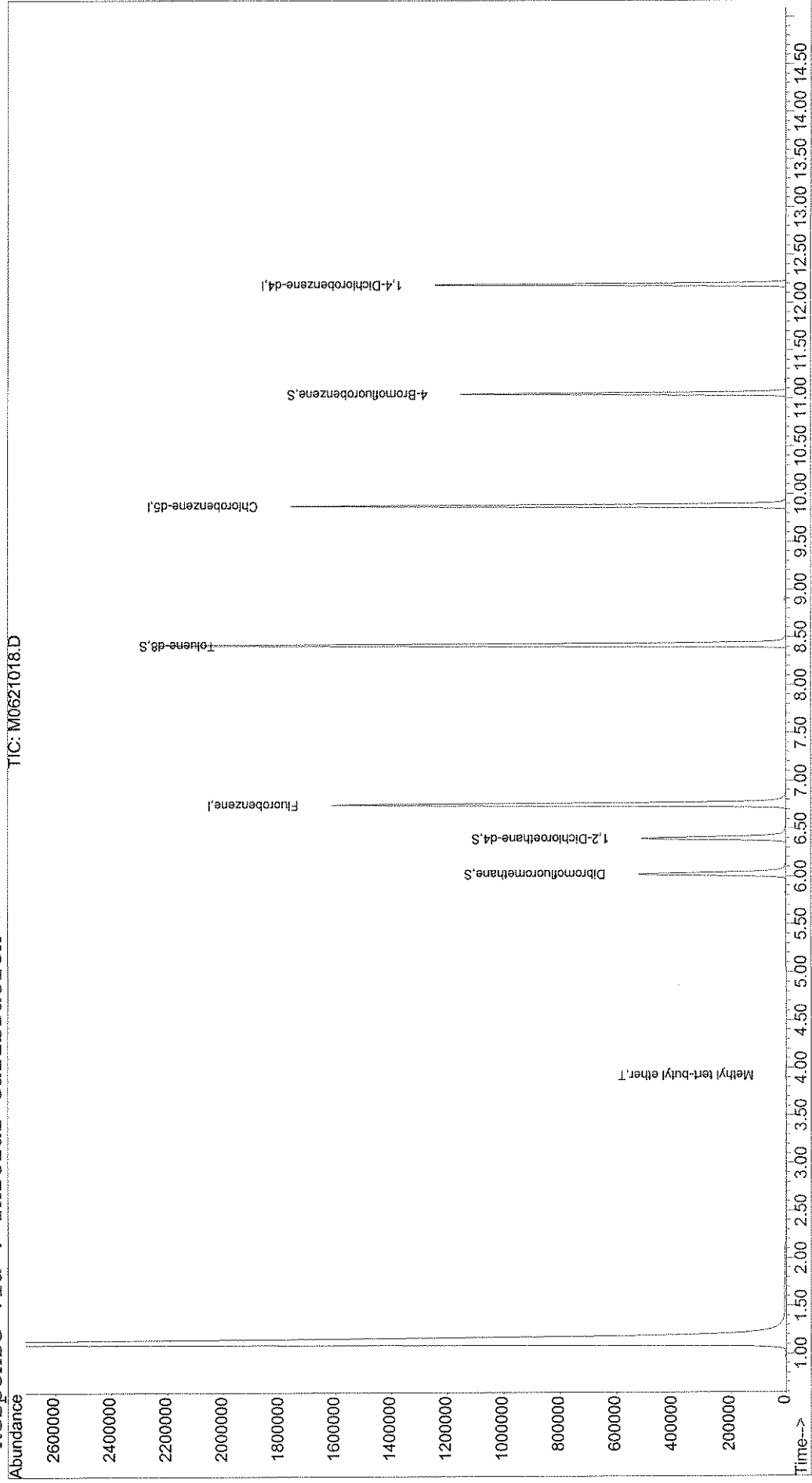
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621018.D  
Acq On : 21 Jun 2007 16:37  
Sample : JPL38-006  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:23 2007  
Vial: 82  
Operator: LH  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621018.D  
 Acq On : 21 Jun 2007 16:37  
 Sample : JPL38-006  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:23 2007

Vial: 82  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1648533	50.00	ug/l	0.00 98.04%
54) Chlorobenzene-d5	9.88	117	1018028	50.00	ug/l	0.00 102.59%
74) 1,4-Dichlorobenzene-d4	12.19	152	345322	50.00	ug/l	0.00 89.25%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	391736	52.46	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.92%
40) 1,2-Dichloroethane-d4	6.40	65	419674	51.94	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.88%
55) Toluene-d8	8.42	98	1552316	49.37	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.74%
76) 4-Bromofluorobenzene	11.04	95	375146	57.81	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.62%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.07	76	127	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.51	84	220	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.92	73	6332	0.30 ug/l	#	87
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621018.D  
 Acq On : 21 Jun 2007 16:37  
 Sample : JPL38-006  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:23 2007

Vial: 82  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	292		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.68	41	71		N.D.	
34) Chloroform	5.83	83	2951		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	734		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.32	83	65		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	610		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	541		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	152		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	9.29	43	67		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2177		N.D.	
66) Chlorobenzene	9.89	112	139		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621018.D  
 Acq On : 21 Jun 2007 16:37  
 Sample : JPL38-006  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:23 2007

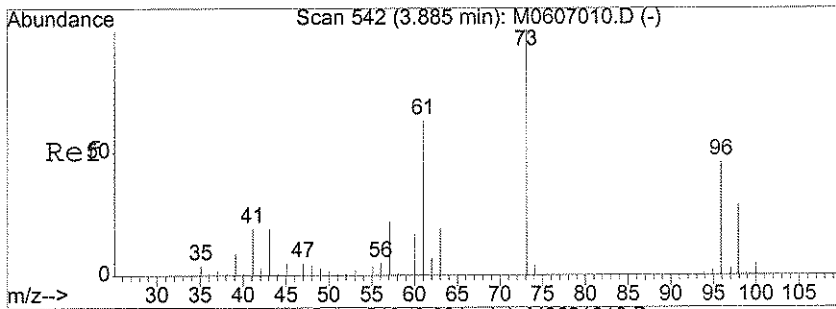
Vial: 82  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

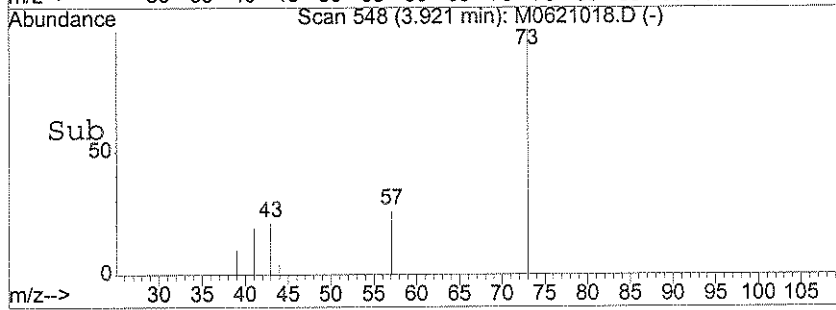
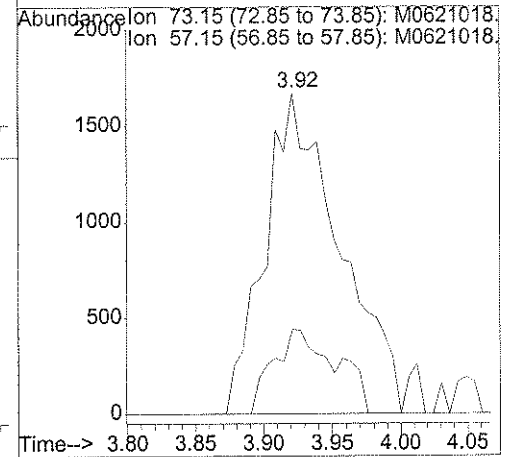
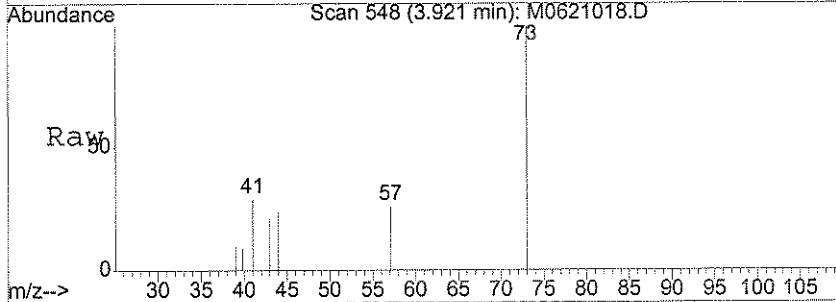
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	324		N.D.	
69) m,p-Xylene	10.11	106	369		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.53	104	134		N.D.	
72) Bromoform	10.76	173	190		N.D.	
73) Isopropylbenzene	10.87	105	70		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	64		N.D.	
79) 1,2,3-Trichloropropane	11.04	110	68		N.D.	
80) n-Propylbenzene	11.28	91	325		N.D.	
81) 2-Chlorotoluene	11.37	91	85		N.D.	
82) 4-Chlorotoluene	11.49	91	148		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	59		N.D.	
86) sec-butylbenzene	11.98	105	326		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	66		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	307		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



#21  
 Methyl tert-butyl ether  
 Concen: 0.30 ug/l  
 RT: 3.92 min Scan# 548  
 Delta R.T. 0.01 min  
 Lab File: M0621018.D  
 Acq: 21 Jun 2007 16:37

Tgt Ion: 73 Resp: 6332  
 Ion Ratio Lower Upper  
 73 100  
 57 17.5 19.3 28.9#





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-4-6/18/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 17:01

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-4-6/18/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL38-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 17:01

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-4-6/18/07

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-007

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0621019.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/21/2007 17:01

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

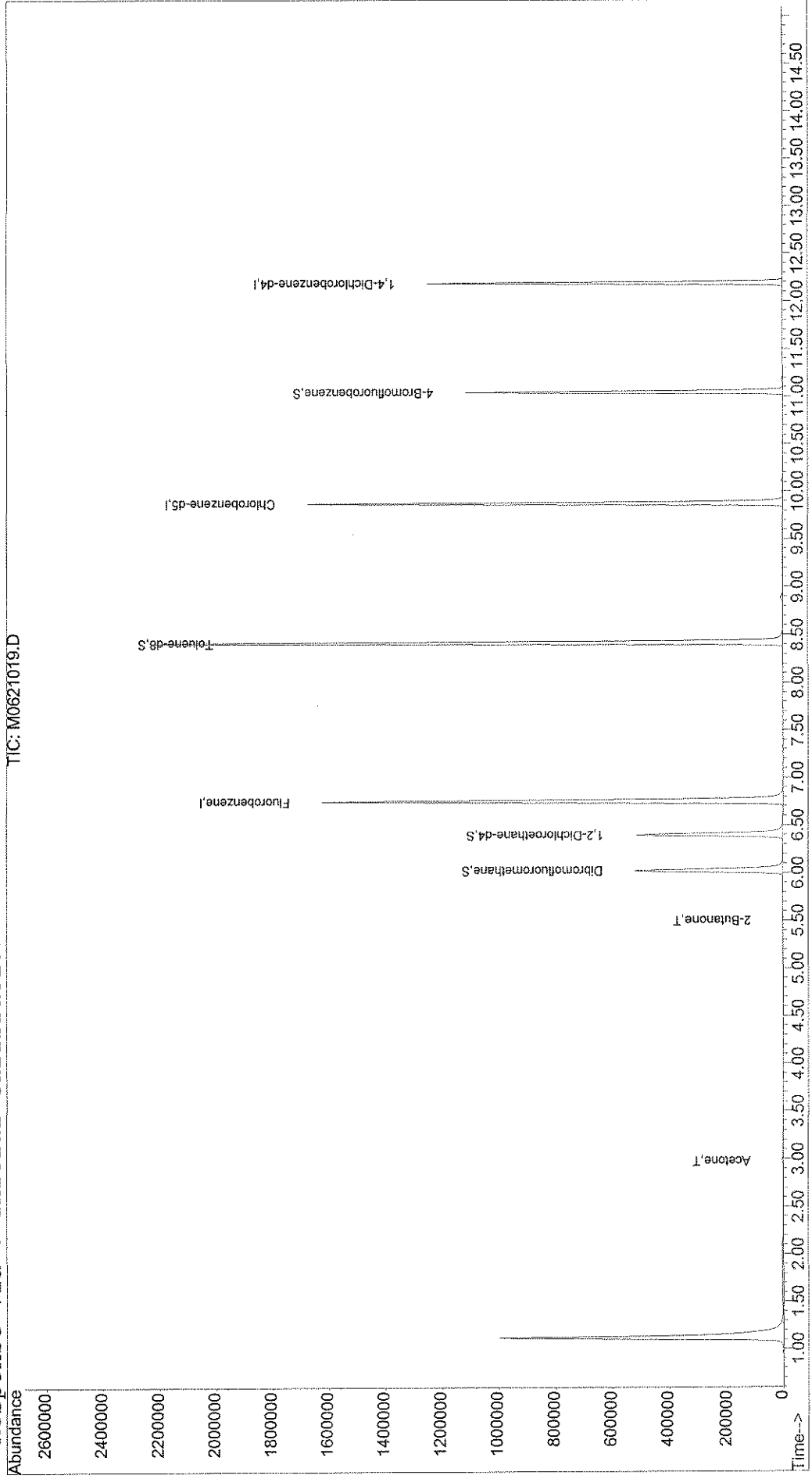
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621019.D Vial: 83  
Acq On : 21 Jun 2007 17:01 Operator: LH  
Sample : JPL38-007 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:24 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621019.D  
 Acq On : 21 Jun 2007 17:01  
 Sample : JPL38-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:24 2007

Vial: 83  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1641425	50.00	ug/l	0.00 97.61%
54) Chlorobenzene-d5	9.88	117	996865	50.00	ug/l	0.00 100.46%
74) 1,4-Dichlorobenzene-d4	12.19	152	337683	50.00	ug/l	0.00 87.28%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	393479	52.92	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.84%
40) 1,2-Dichloroethane-d4	6.40	65	422316	52.49	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.98%
55) Toluene-d8	8.42	98	1549310	50.32	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.64%
76) 4-Bromofluorobenzene	11.05	95	369692	58.25	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.50%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.44	50	66	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.85	96	62	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.97	43	9371	5.19	ug/l	97
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	58	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.51	84	594	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

*Handwritten signature/initials*  
 97  
 LW 6/25/07

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621019.D  
 Acq On : 21 Jun 2007 17:01  
 Sample : JPL38-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:24 2007

Vial: 83  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.50	43	4949	1.47	ug/l #	83
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	338		N.D.	
34) Chloroform	5.83	83	1199		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	845		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	478		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	61		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.20	43	389		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2094		N.D.	
66) Chlorobenzene	9.91	112	69		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

*LH 6/25/07*

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621019.D  
 Acq On : 21 Jun 2007 17:01  
 Sample : JPL38-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:24 2007

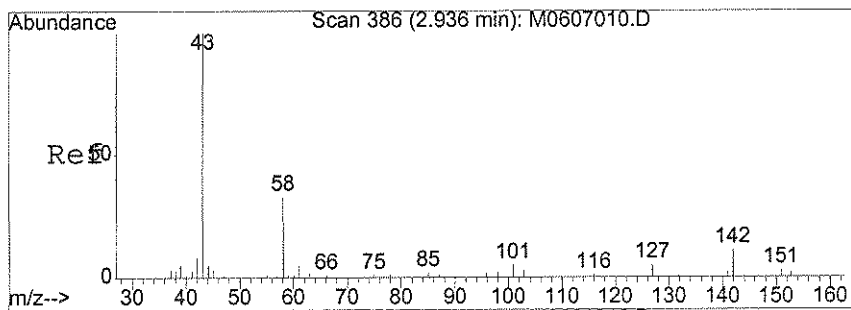
Vial: 83  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

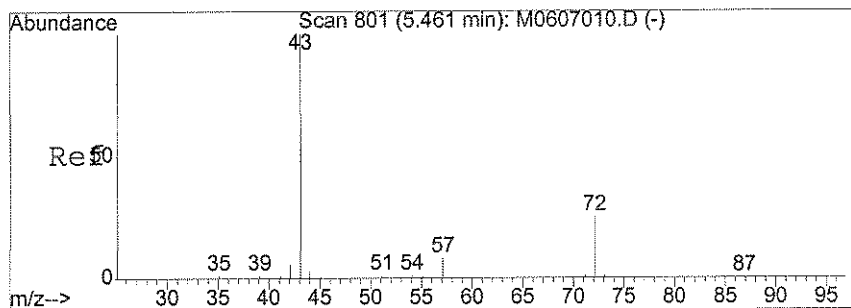
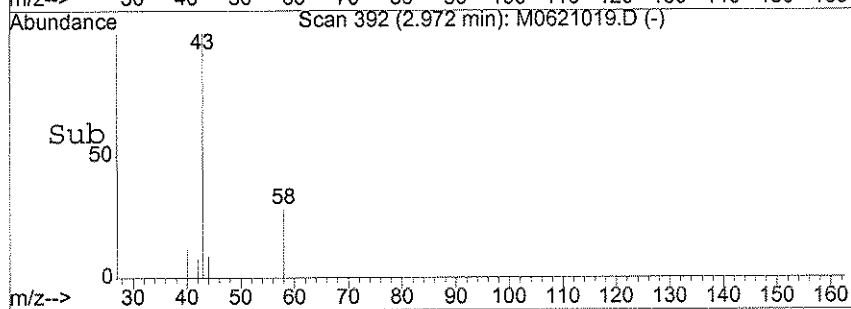
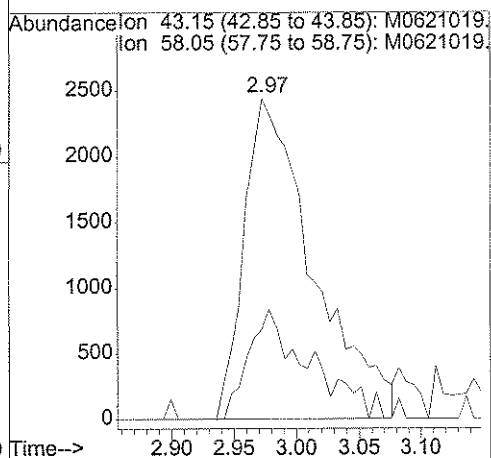
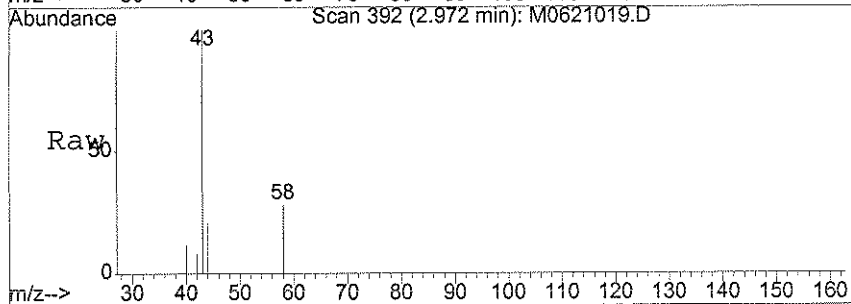
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	2790		N.D.	
69) m,p-Xylene	10.11	106	2240		N.D.	
70) o-xylene	10.51	106	875		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	76		N.D.	
73) Isopropylbenzene	10.86	105	64		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	73		N.D.	
81) 2-Chlorotoluene	11.28	91	73		N.D.	
82) 4-Chlorotoluene	11.49	91	61		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	67		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	77		N.D.	
86) sec-butylbenzene	11.99	105	138		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	147		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	361		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



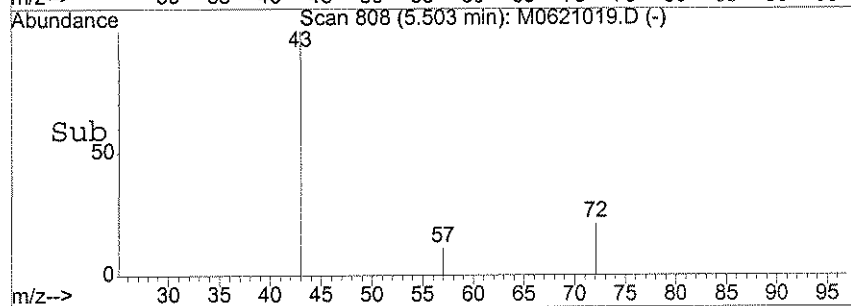
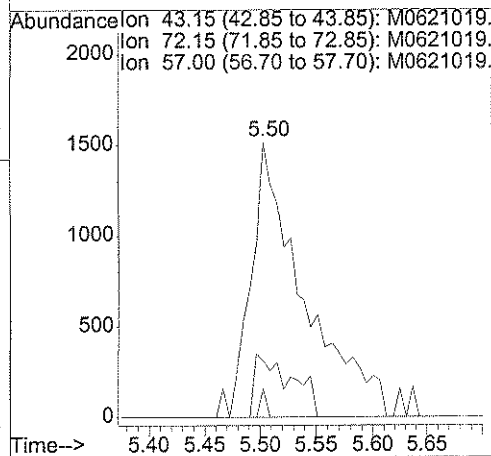
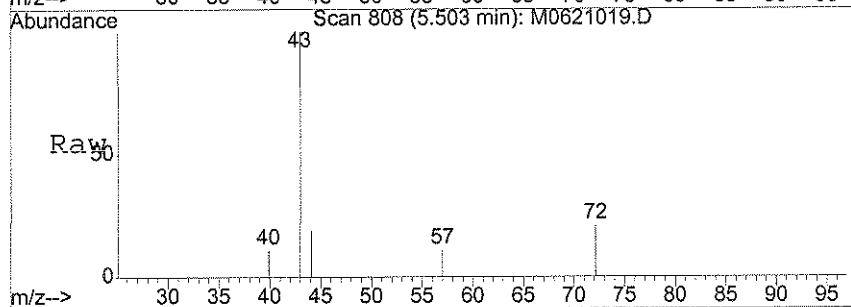
#11  
 Acetone  
 Concen: 5.19 ug/l  
 RT: 2.97 min Scan# 392  
 Delta R.T. -0.02 min  
 Lab File: M0621019.D  
 Acq: 21 Jun 2007 17:01

Tgt Ion	Resp	Lower	Upper
43	100		
58	25.7	22.0	33.0



#30  
 2-Butanone  
 Concen: 1.47 ug/l  
 RT: 5.50 min Scan# 808  
 Delta R.T. -0.01 min  
 Lab File: M0621019.D  
 Acq: 21 Jun 2007 17:01

Tgt Ion	Resp	Lower	Upper
43	100		
72	13.3	16.7	25.1#
57	1.2	6.1	9.1#





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-4-6/18/07

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL38 Run Sequence: R018875

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL38-008

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0620013.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/18/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/20/2007 14:10

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.95	J
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-4-6/18/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-008  
 Lab File ID: M0620013.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/20/2007 14:10  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-4-6/18/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL38  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-008  
 Lab File ID: M0620013.D  
 Date Collected: 06/18/2007  
 Date/Time Analyzed: 06/20/2007 14:10  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

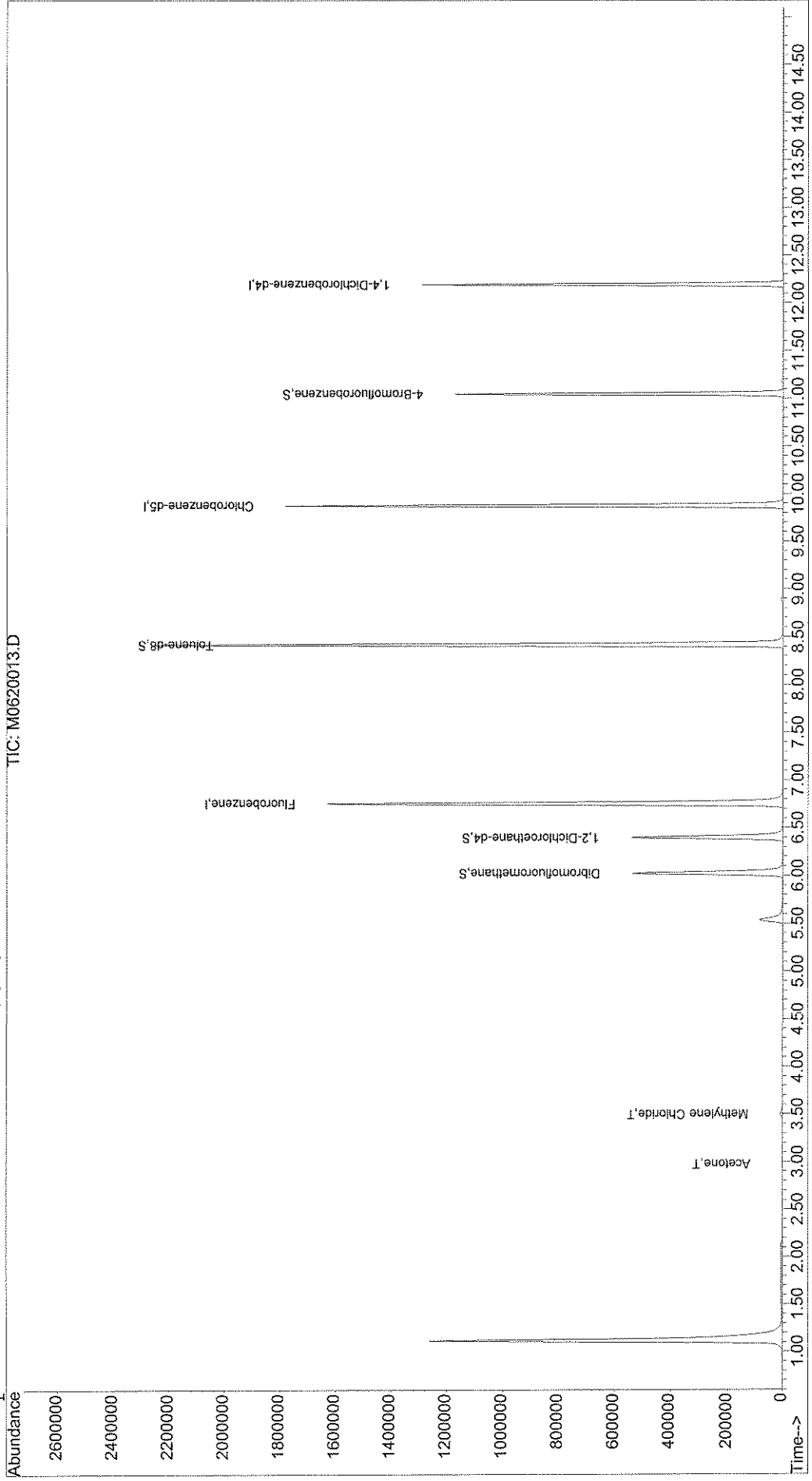
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620013.D Vial: 69  
Acq On : 20 Jun 2007 14:10 Operator: DGA  
Sample : JPL38-008 Inst : MOBY  
Misc : #1 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 12:21 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620013.D  
 Acq On : 20 Jun 2007 14:10  
 Sample : JPL38-008  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:21 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1701758	50.00	ug/l	0.00	101.20%
54) Chlorobenzene-d5	9.87	117	1044413	50.00	ug/l	0.00	105.25%
74) 1,4-Dichlorobenzene-d4	12.19	152	348591	50.00	ug/l	0.00	90.10%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	407162	52.82	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.64%	
40) 1,2-Dichloroethane-d4	6.39	65	439792	52.72	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.44%	
55) Toluene-d8	8.42	98	1599243	49.57	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.14%	
76) 4-Bromofluorobenzene	11.05	95	386250	58.96	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.92%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.44	50	200	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.86	96	63	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	5559	2.97 ug/l		95
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.07	76	74	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	516	N.D.		
18) Methylene Chloride	3.50	84	8510	0.95 ug/l		95
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

*JG* 06/21/07  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620013.D  
 Acq On : 20 Jun 2007 14:10  
 Sample : JPL38-008  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:21 2007

Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	5.52	54	63		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.76	41	56		N.D.	
34) Chloroform	5.82	83	60		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	6.01	56	135		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.16	75	130		N.D.	
41) Benzene	6.41	78	1100		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.15	130	59		N.D.	
46) Methylcyclohexane	7.29	83	68		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	1231		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.04	166	114		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.18	43	55		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2103		N.D.	
66) Chlorobenzene	9.90	112	349		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062007\M0620013.D  
 Acq On : 20 Jun 2007 14:10  
 Sample : JPL38-008  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 12:21 2007

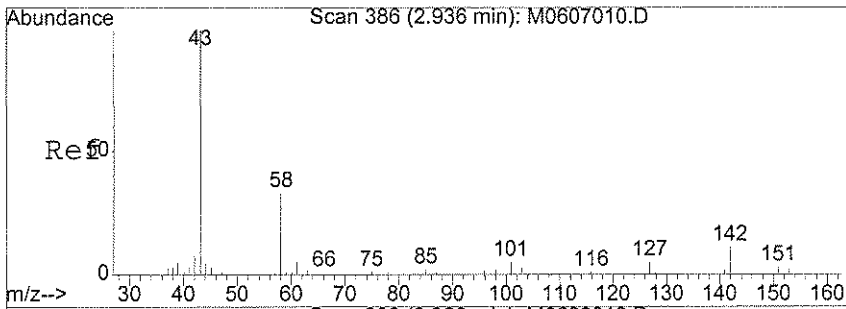
Vial: 69  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

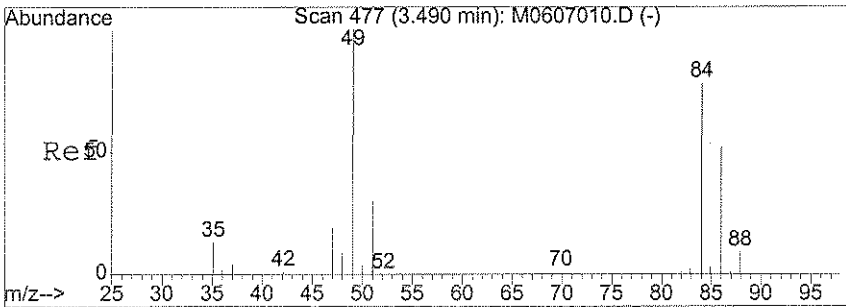
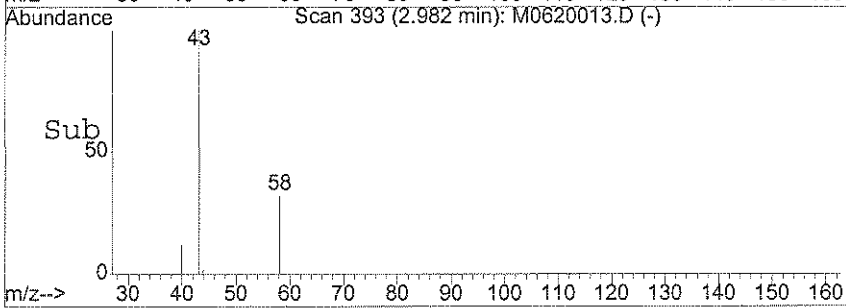
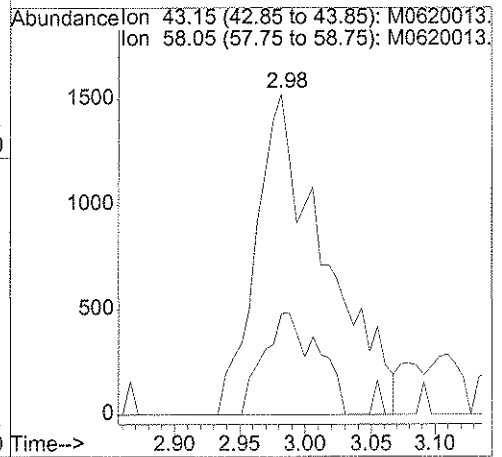
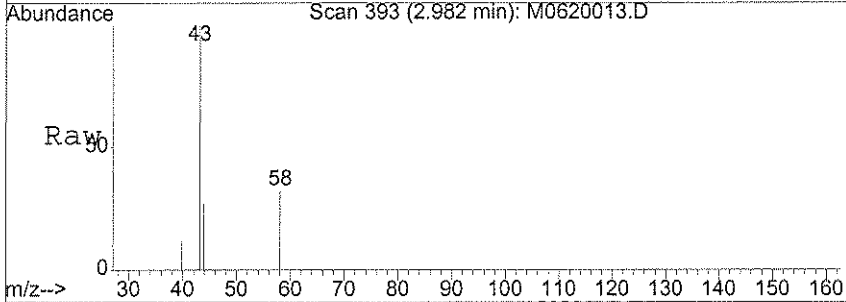
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	583		N.D.	
69) m,p-Xylene	10.12	106	634		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.53	104	217		N.D.	
72) Bromoform	10.75	173	256		N.D.	
73) Isopropylbenzene	10.87	105	468		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	729		N.D.	
81) 2-Chlorotoluene	11.38	91	309		N.D.	
82) 4-Chlorotoluene	11.49	91	422		N.D.	
83) 1,3,5-Trimethylbenzene	11.44	105	458		N.D.	
84) tert-Butylbenzene	11.77	119	239		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	308		N.D.	
86) sec-butylbenzene	11.99	105	596		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	170		N.D.	
88) 4-Isopropyltoluene	12.13	119	589		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	324		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	671		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.19	180	74		N.D.	
94) Hexachlorobutadiene	14.33	225	60		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



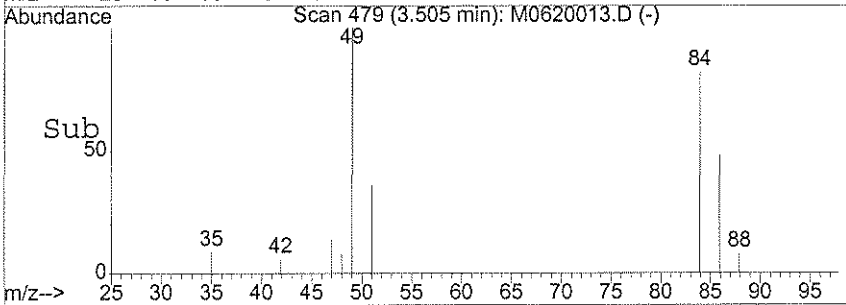
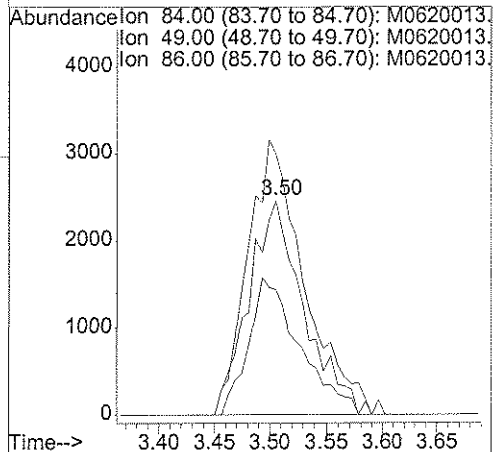
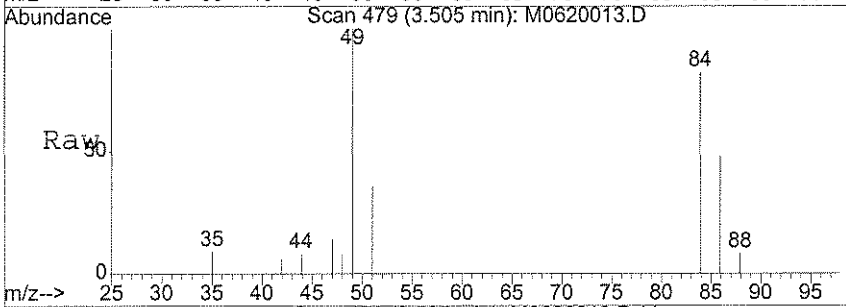
#11  
 Acetone  
 Concen: 2.97 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0620013.D  
 Acq: 20 Jun 2007 14:10

Tgt Ion: 43 Resp: 5559  
 Ion Ratio Lower Upper  
 43 100  
 58 25.0 22.0 33.0



#18  
 Methylene Chloride  
 Concen: 0.95 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0620013.D  
 Acq: 20 Jun 2007 14:10

Tgt Ion: 84 Resp: 8510  
 Ion Ratio Lower Upper  
 84 100  
 49 130.3 113.6 153.6  
 86 59.1 45.8 85.8





**TIC FORMS**

SDG JPL38

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-20-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-001  
 Lab File ID: M0620023.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620023.D Vial: 77  
Acq On : 20 Jun 2007 18:47 Operator: DGA  
Sample : JPL38-001 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620023.D M8260W.M Fri Jun 29 06:48:57 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-20-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-002  
 Lab File ID: M0620024.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620024.D Vial: 78  
Acq On : 20 Jun 2007 19:11 Operator: DGA  
Sample : JPL38-002 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620024.D M8260W.M Fri Jun 29 06:49:07 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-20-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-003  
 Lab File ID: M0620025.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620025.D Vial: 79  
Acq On : 20 Jun 2007 19:36 Operator: DGA  
Sample : JPL38-003 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620025.D M8260W.M Fri Jun 29 06:49:16 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-20-2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018909

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL38-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/21/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621016.D Vial: 80  
Acq On : 21 Jun 2007 15:48 Operator: LH  
Sample : JPL38-004 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621016.D M8260W.M Mon Jul 02 10:02:00 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-20-1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL38-005  
 Lab File ID: M0621017.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621017.D Vial: 81  
Acq On : 21 Jun 2007 16:12 Operator: LH  
Sample : JPL38-005 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621017.D M8260W.M Mon Jul 02 10:02:09 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-2-2007

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL38-006  
 Lab File ID: M0621018.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
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07				
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28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621018.D Vial: 82  
Acq On : 21 Jun 2007 16:37 Operator: LH  
Sample : JPL38-006 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621018.D M8260W.M Mon Jul 02 10:02:21 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-4-6/18/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL38-007  
 Lab File ID: M0621019.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621019.D Vial: 83  
Acq On : 21 Jun 2007 17:01 Operator: LH  
Sample : JPL38-007 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621019.D M8260W.M Mon Jul 02 10:02:32 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-4-6/18/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018875  
 Lab Sample ID: JPL38-008  
 Lab File ID: M0620013.D  
 Date Collected: 06/19/2007  
 Date Analyzed: 06/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620013.D Vial: 69  
Acq On : 20 Jun 2007 14:10 Operator: DGA  
Sample : JPL38-008 Inst : MOBY  
Misc : #1 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620013.D M8260W.M Fri Jun 29 06:45:35 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062007MVOWM3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL38

Run Sequence: R018875

Matrix: (SOIL/WATER) Water

Lab Sample ID: B062007MVOWM3

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0620011.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/20/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062007\M0620011.D Vial: 56  
Acq On : 20 Jun 2007 13:18 Operator: DGA  
Sample : B062007MVOWM3 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-38-11) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0620011.D M8260W.M Mon Jul 02 13:38:27 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062107MVOWM1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL38  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: B062107MVOWM1  
 Lab File ID: M0621010.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621010.D Vial: 55  
Acq On : 21 Jun 2007 13:23 Operator: LH  
Sample : B062107MVOWM1 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621010.D M8260W.M Mon Jul 02 10:03:55 2007

**Metals Data**

**JPL38**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-20-5	JPL38-001
MW-20-4	JPL38-002
MW-20-3	JPL38-003
MW-20-2	JPL38-004
MW-20-1	JPL38-005
DUPE-2-2007	JPL38-006
EB-4-6/18/07	JPL38-007

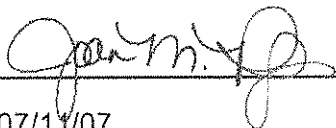
Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Joan M. Phillips

Date: 07/11/07

Title: Chemist

## **Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-20-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

Matrix (soil/water): Water

Lab Sample ID: JPL38-001

Level (low/med): LOW

Date Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.05			M	R019127
7440-70-2	Calcium	5030		E	P	R019172
7440-47-3	Chromium	4.85			M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	68300			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-20-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

Matrix (soil/water): Water

Lab Sample ID: JPL38-002

Level (low/med): LOW

Date Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.89			M	R019127
7440-70-2	Calcium	11200		E	P	R019172
7440-47-3	Chromium	5.30			M	R019127
7439-89-6	Iron	201			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	65400			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-20-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

Matrix (soil/water): Water

Lab Sample ID: JPL38-003

Level (low/med): LOW

Date Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.02			M	R019127
7440-70-2	Calcium	49900		E	P	R019216
7440-47-3	Chromium	9.71			M	R019127
7439-89-6	Iron	133			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	17300			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	65900			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-20-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

Matrix (soil/water): Water

Lab Sample ID: JPL38-004

Level (low/med): LOW

Date Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.31			M	R019127
7440-70-2	Calcium	46600		E	P	R019216
7440-47-3	Chromium	5.57			M	R019127
7439-89-6	Iron	117			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	17400			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	16700			P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-20-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL38Matrix (soil/water): WaterLab Sample ID: JPL38-005Level (low/med): LOWDate Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	113000		E	P	R019384
7440-47-3	Chromium	7.44			M	R019127
7439-89-6	Iron	378			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	35100			P	R019216
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	25600			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-2-2Q07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

Matrix (soil/water): Water

Lab Sample ID: JPL38-006

Level (low/med): LOW

Date Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	123000		E	P	R019384
7440-47-3	Chromium	7.71			M	R019127
7439-89-6	Iron	434			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	32600			P	R019216
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	30100			P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-4-6/18/07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL38Matrix (soil/water): WaterLab Sample ID: JPL38-007Level (low/med): LOWDate Received: 06/19/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5000	U	E	P	R019172
7440-47-3	Chromium	1.00	U		M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	5000	U		P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL38**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL38

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-20-5	JPL38-001
MW-20-5D	JPL38-001D
MW-20-5MS	JPL38-001MS
MW-20-5MSD	JPL38-001MSD
MW-20-4	JPL38-002
MW-20-3	JPL38-003DL
MW-20-2	JPL38-004
MW-20-1	JPL38-005DL
DUPE-2-2Q07D	JPL38-006D
DUPE-2-2Q07	JPL38-006DL
EB-4-6/18/07	JPL38-007

Comments:

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I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-11-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**









**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL38  
**Sample Number:** MW-20-1 **Date/Time Collected:** 06/18/2007 10:31  
**Lab Sample ID:** JPL38-005 **Date/Time Received:** 06/19/2007 10:00  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	06/19/2007	06/19/2007	R018856

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	520		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	9.4		2.0	0.55	06/19/2007	06/20/2007	R018864
Sulfate as SO4	14808-79-8	10	140		10	1.7	06/19/2007	06/20/2007	R018864
Chloride	16887-00-6	10	51		10	0.76	06/19/2007	06/20/2007	R018864

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4	U	4	4	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	160		4	4	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	06/27/2007	06/28/2007	R019077





**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL38  
**Sample Number:** EB-4-6/18/07 **Date/Time Collected:** 06/18/2007 10:12  
**Lab Sample ID:** JPL38-007 **Date/Time Received:** 06/19/2007 10:00  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	06/19/2007	06/19/2007	R018856

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	22		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/20/2007	06/20/2007	R018785
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/20/2007	06/20/2007	R018785
Chloride	16887-00-6	1	1.0	U	1.0	0.076	06/20/2007	06/20/2007	R018785

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/27/2007	06/28/2007	R019077

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL39**

**JULY 12, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL39  
Date of Report: July 12, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-17-5	JPL39-001	VOA/MET/INO
MW-17-4	JPL39-002	VOA/SVOA/MET/INO
MW-17-3	JPL39-003	VOA/MET/INO
MW-17-2	JPL39-004	VOA/MET/INO
MW-17-1	JPL39-005	VOA/MET/INO
DUPE-3-2Q07	JPL39-006	VOA/MET/INO
EB-5-6/19/07	JPL39-007	VOA/MET/INO
TB-5-6/19/07	JPL39-008	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
SVOA = 1,4-Dioxane (8270)  
MET = Metals (200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### **Holding Time Compliance:**

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

##### *Semi-Volatile Organic Compounds:*

The holding time to extraction is 7 days in water and 14 days in soil calculated from the date of collection. In either case, the holding time from extraction to analysis is 40 days. All samples were extracted and analyzed within holding time.

#### **Volatiles Fraction:**

##### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factor was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 ( $r$  values greater than 0.995) and were therefore compliant.

##### Quality Control Analyses:

All quality control parameters were met.

#### **Semivolatiles Fraction:**

All control parameters were met.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

**GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

**ICP-MS Metals:**

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

**SPECIFIC REMARKS ON INORGANIC ANALYSES:**

**Holding Time Compliance:**

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

**Metals:**

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

**Miscellaneous:**

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

All samples for total dissolved solids were originally analyzed within holding time, due to quality control failures samples were reanalyzed 3 days past their holding time. Reanalysis results were reported, and original data is included.

**ICP-MS Metals:**

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

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Samples in this SDG were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding duplicate sample precision and matrix spike recovery apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL40 or the raw data provided.

The serial dilution for the element calcium did not agree within 10% of the original determination after correction for dilution for sample MW-22-5 from JPL40. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

Sample MW-17-5 was analyzed for sodium at a five fold dilution with the result falling above the high standard of calibration curve (20mg/L). The linear range study that was performed on 030/8/07 resulted in a linearity for sodium up to 50mg/L. Results for MW-17-5 fell within this linear range. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for this event.

The scandium internal standard percent recovery for sample MW-17-5 fell outside of the suggested control limits of 60-125% of the intensity of scandium in the initial calibration verification sample. Sodium, magnesium, calcium and potassium are associated with this internal standard. Therefore, results for sodium, magnesium, calcium and potassium for sample MW-17-5 were reported from either a two-fold or a five-fold dilution where the scandium internal standard is within the control limits.

### **Miscellaneous Inorganics:**

For run sequence R018785, the second continuing calibration verification was outside the established control limits for the chloride analysis. All samples being reported are less than the reporting limit. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

## LAUCKS TESTING LABORATORIES

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.



**LAUCKS TESTING LABORATORIES**

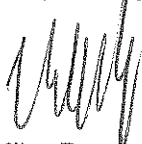
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Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

12 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/12/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	8270SIM-level 1,4-Dioxane (1.5 ppb RL; J to I ppb)	TurMet for 200.7/200.8 TurMet
JPL39-001	06/20/2007 08:30 AM	06/19/2007 07:50 AM	MW-17-5	A-	A-	IN	IN	IN	IN	IN	IN		IN
JPL39-002	06/20/2007 08:30 AM	06/19/2007 08:47 AM	MW-17-4	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN
JPL39-003	06/20/2007 08:30 AM	06/19/2007 10:15 AM	MW-17-3	A-	A-	IN	IN	IN	IN	IN	IN		IN
JPL39-004	06/20/2007 08:30 AM	06/19/2007 11:17 AM	MW-17-2	A-	A-	IN	IN	IN	IN	IN	IN		IN
JPL39-005	06/20/2007 08:30 AM	06/19/2007 11:51 AM	MW-17-1	A-	A-	IN	IN	IN	IN	IN	IN		IN
JPL39-006	06/20/2007 08:30 AM	06/19/2007 12:00 AM	DUPE-3-2007	A-	A-	IN	IN	IN	IN	IN	IN		IN
JPL39-007	06/20/2007 08:30 AM	06/19/2007 11:37 AM	EB-5-6/19/07	A-	A-	IN	IN	IN	IN	IN	IN		IN
JPL39-008	06/20/2007 08:30 AM	06/19/2007 12:00 AM	TB-5-6/19/07										

On: 6/21/07

Approved By: *[Signature]*

Samples identified with a '\*' Client has requested QC for

LEGEND: -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged  
FORM LTL-PM-8.0





**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL39  
Cooler: AAP018  
Temperatures: 5.0  
COC #: 42843

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL39-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL39-002	0001	1000 mL boston round, amber glass	7	N/A
	0002	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL39-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL39-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL39-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL39-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL39  
Cooler: AAP018  
Temperatures: 5.0  
COC #: 42843

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL39-007	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL39-008	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**LAUCKS TESTING LABORATORIES**

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**ATTACHMENT B**

Index



**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL39**

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Completed and checked by: Judy Ecklund Date: 7/12/07

**SAMPLE DATA**

SDG JPL39

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-001  
 Lab File ID: M0621025.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 19:41  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-001  
 Lab File ID: M0621025.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 19:41  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL39-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 19:41

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

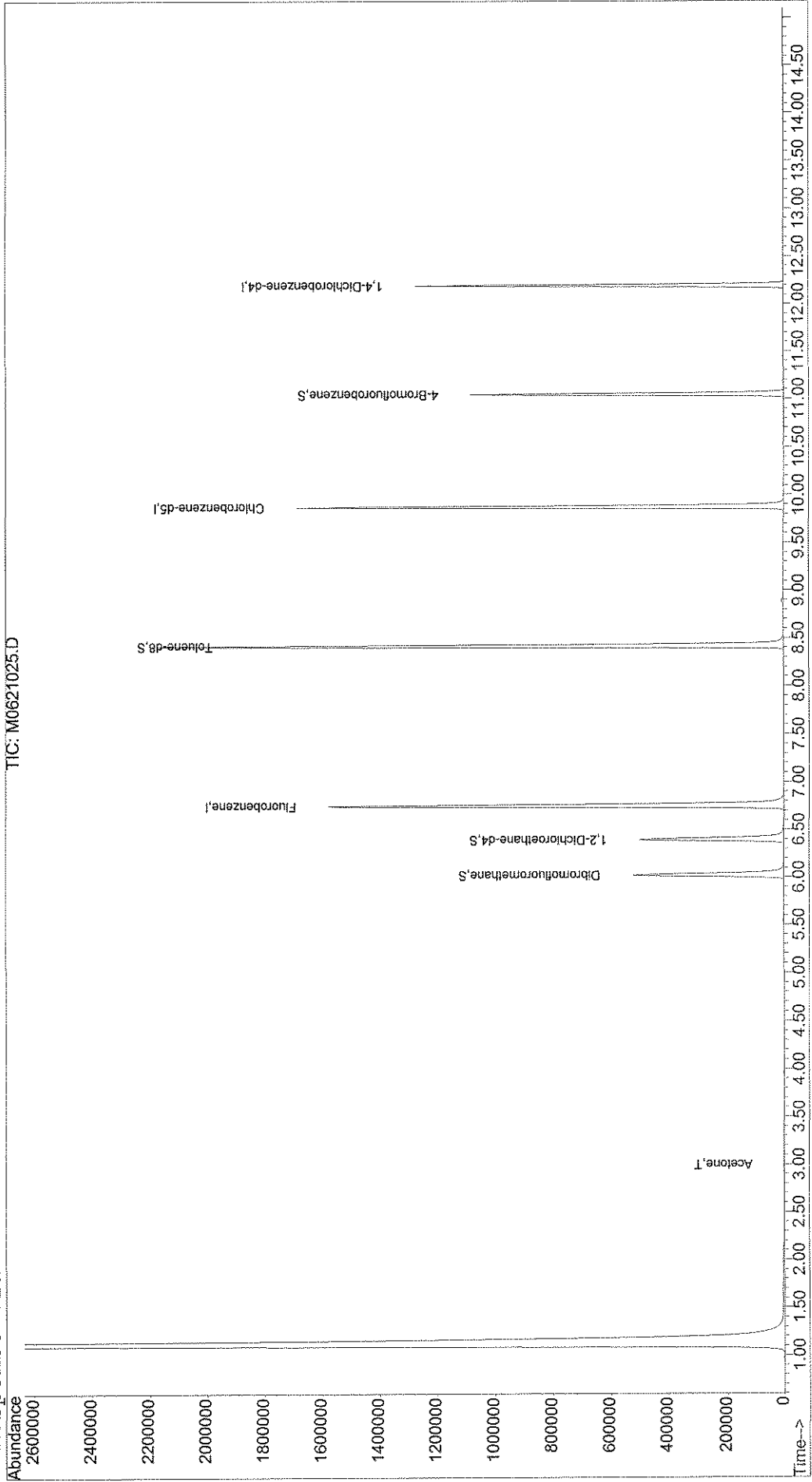
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621025.D Vial: 61  
Acq On : 21 Jun 2007 19:41 Operator: LH  
Sample : JPL39-001 Inst : MOBY  
Misc : #3 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:13 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621025.D  
 Acq On : 21 Jun 2007 19:41  
 Sample : JPL39-001  
 Misc : #3 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:13 2007

Vial: 61  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 21 10:53:54 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1622319	50.00	ug/l	0.00	96.48%
54) Chlorobenzene-d5	9.87	117	976997	50.00	ug/l	0.00	98.46%
74) 1,4-Dichlorobenzene-d4	12.19	152	339134	50.00	ug/l	0.00	87.65%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	385068	52.40	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.80%	
40) 1,2-Dichloroethane-d4	6.40	65	413708	52.03	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.06%	
55) Toluene-d8	8.42	98	1505055	49.87	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.74%	
76) 4-Bromofluorobenzene	11.05	95	361469	56.71	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	113.42%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	3107	1.74	ug/l #	72
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	385	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	251	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.	d	

*Handwritten:* 72  
 LW 6/25/07

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621025.D  
 Acq On : 21 Jun 2007 19:41  
 Sample : JPL39-001  
 Misc : #3 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:13 2007

Vial: 61  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 21 10:53:54 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	315		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.85	41	260		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	684		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	319		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	373		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	56		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1867		N.D.	
66) Chlorobenzene	9.90	112	136		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621025.D  
 Acq On : 21 Jun 2007 19:41  
 Sample : JPL39-001  
 Misc : #3 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:13 2007

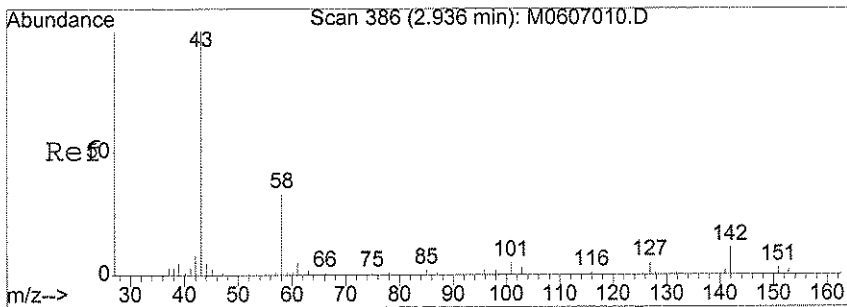
Vial: 61  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 21 10:53:54 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

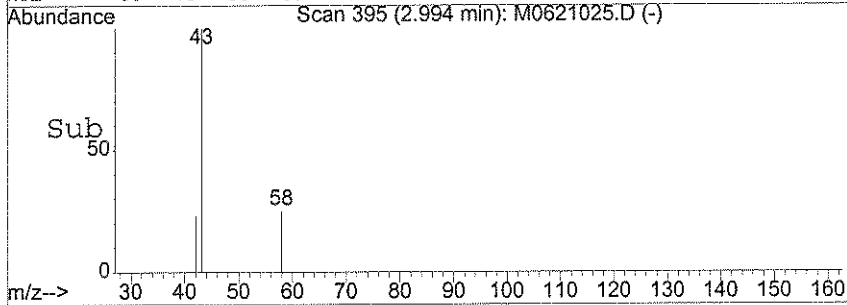
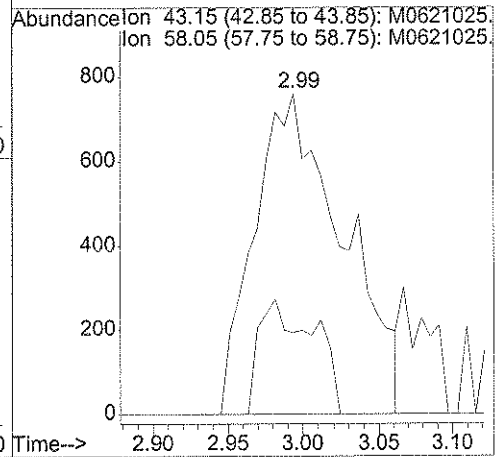
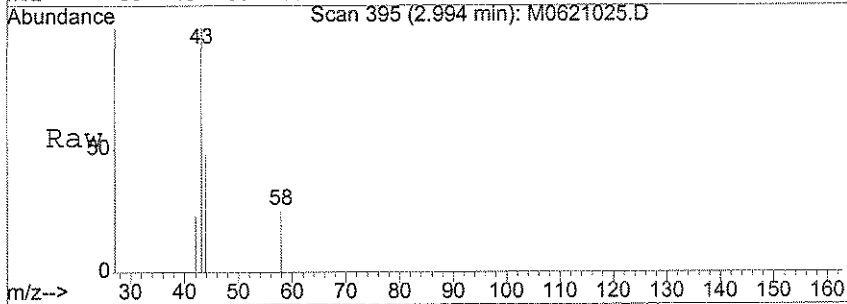
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	605		N.D.	
69) m,p-Xylene	10.12	106	587		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.54	104	1986		N.D.	
72) Bromoform	10.74	173	205		N.D.	
73) Isopropylbenzene	11.04	105	573		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	63		N.D.	
81) 2-Chlorotoluene	11.27	91	63		N.D.	
82) 4-Chlorotoluene	11.27	91	63		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	59		N.D.	
86) sec-butylbenzene	11.99	105	57		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	55		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	86		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



#11  
 Acetone  
 Concen: 1.74 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. 0.00 min  
 Lab File: M0621025.D  
 Acq: 21 Jun 2007 19:41

Tgt Ion	Resp	Lower	Upper
43	100		
58	13.0	22.0	33.0#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-002  
 Lab File ID: M0621026.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:05  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.68	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-002  
 Lab File ID: M0621026.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:05  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-002  
 Lab File ID: M0621026.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:05  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

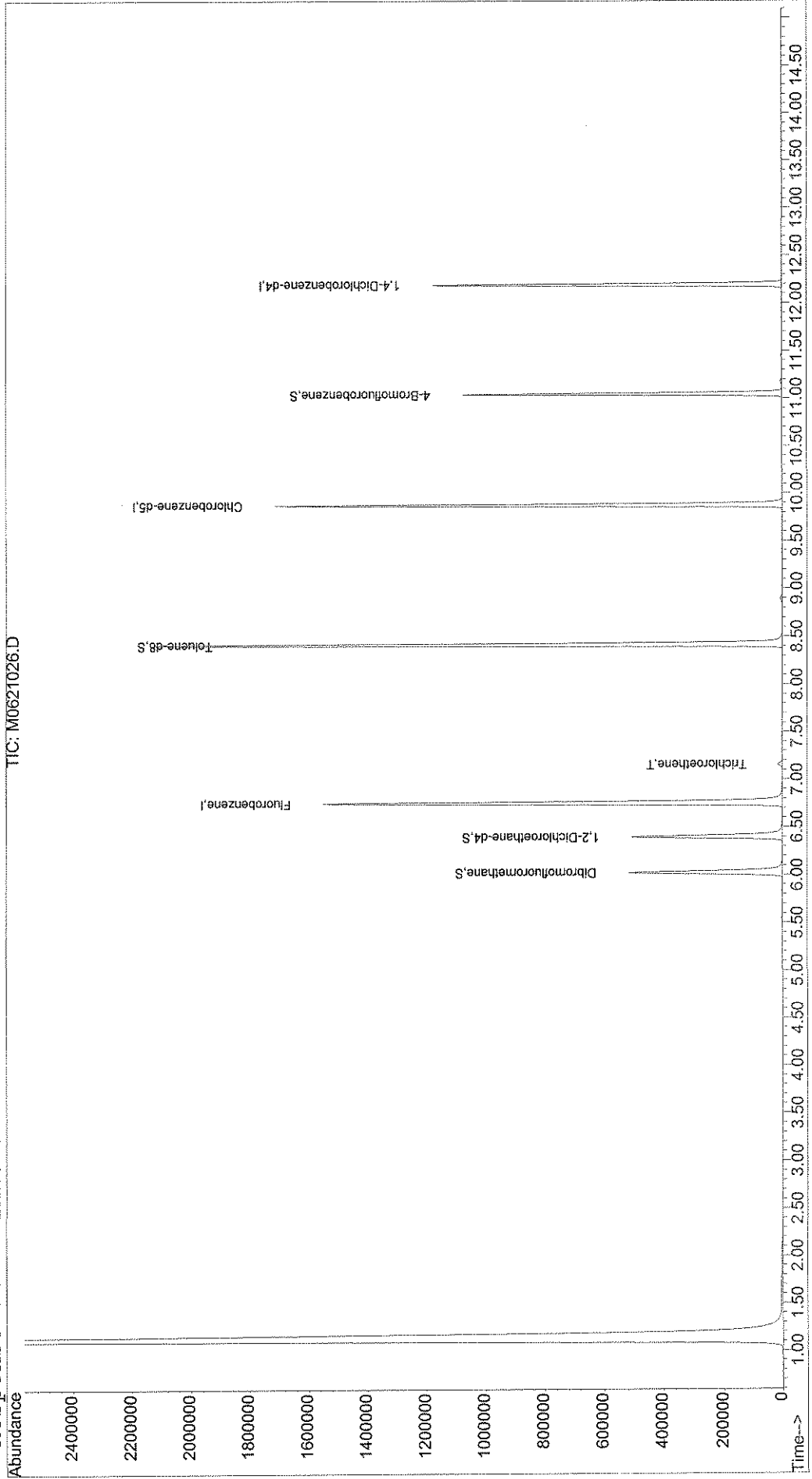
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621026.D Vial: 62  
Acq On : 21 Jun 2007 20:05 Operator: LH  
Sample : JPL39-002 Inst : MOBY  
Misc : #5 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:15 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621026.D  
 Acq On : 21 Jun 2007 20:05  
 Sample : JPL39-002  
 Misc : #5 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:15 2007

Vial: 62  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1616279	50.00	ug/l	0.00 96.12%
54) Chlorobenzene-d5	9.88	117	983961	50.00	ug/l	0.00 99.16%
74) 1,4-Dichlorobenzene-d4	12.19	152	332201	50.00	ug/l	0.00 85.86%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	382886	52.29	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.58%
40) 1,2-Dichloroethane-d4	6.40	65	411562	51.95	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.90%
55) Toluene-d8	8.42	98	1510716	49.71	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.42%
76) 4-Bromofluorobenzene	11.04	95	365449	58.54	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.08%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.51	84	627	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	3.94	53	548	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621026.D  
 Acq On : 21 Jun 2007 20:05  
 Sample : JPL39-002  
 Misc : #5 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:15 2007

Vial: 62  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.50	43	59		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.66	41	122		N.D.	
34) Chloroform	5.82	83	1897		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	917		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	5884	0.68	ug/l	97
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	641		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	549		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	9.26	43	58		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2019		N.D.	
66) Chlorobenzene	9.90	112	143		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

*LH 6/25/07*

(#) = qualifier out of range (m) = manual integration



Quantitation Report

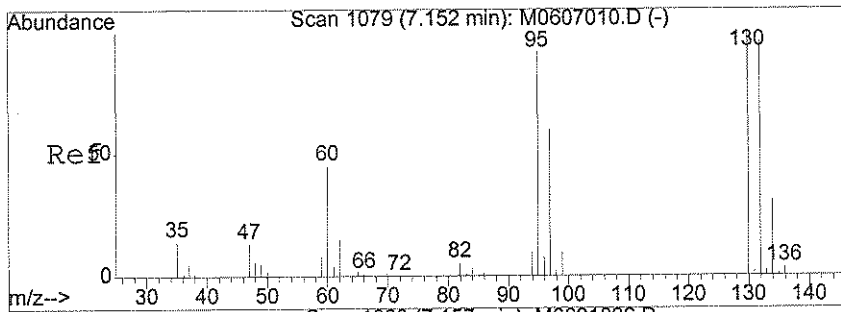
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 Acq On : 21 Jun 2007 20:05  
 Sample : JPL39-002  
 Misc : #5 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:15 2007

Vial: 62  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

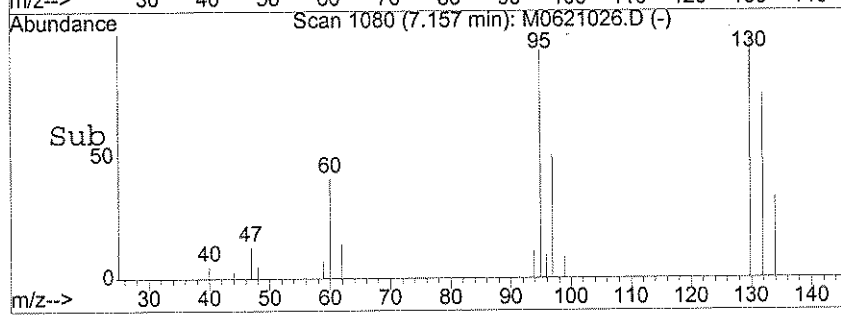
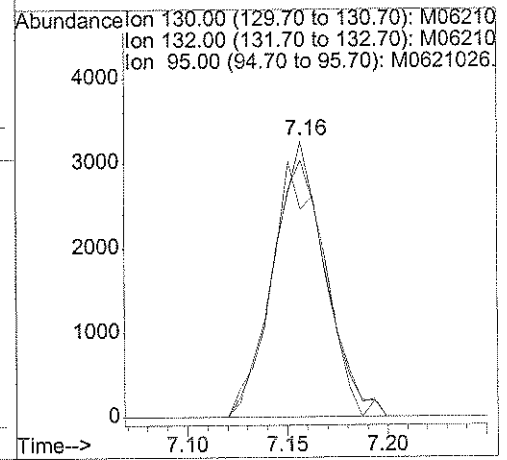
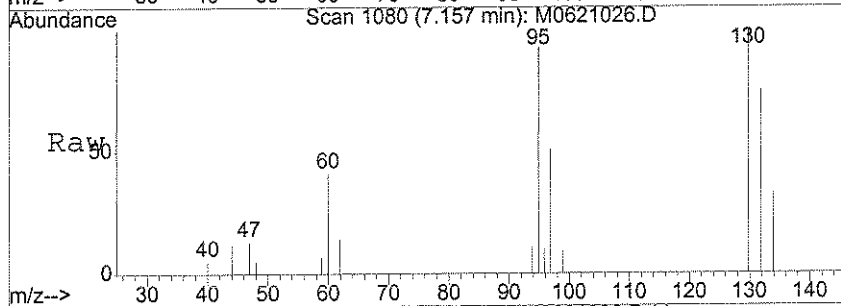
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	520		N.D.	
69) m,p-Xylene	10.11	106	555		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.53	104	818		N.D.	
72) Bromoform	10.75	173	153		N.D.	
73) Isopropylbenzene	11.06	105	385		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	59		N.D.	
81) 2-Chlorotoluene	11.28	91	59		N.D.	
82) 4-Chlorotoluene	11.28	91	59		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	62		N.D.	
86) sec-butylbenzene	11.82	105	62		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	65		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	0.00	91	0		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



#45  
 Trichloroethene  
 Concen: 0.68 ug/l  
 RT: 7.16 min Scan# 1080  
 Delta R.T. -0.00 min  
 Lab File: M0621026.D  
 Acq: 21 Jun 2007 20:05

Tgt Ion	Resp	Lower	Upper
130	5884		
130	100		
132	96.5	80.2	120.2
95	97.3	75.8	115.8



## Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621026.D Vial: 62  
 Acq On : 21 Jun 2007 20:05 Operator: LH  
 Sample : JPL39-002 Inst : MOBY  
 Misc : #5 5ml +IS/SS Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 2-Propenal Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
2.10	20.16 ug/l	1939	Fluorobenzene	4810	6.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propenal	56	C3H4O	000107-02-8	4
2	2-Propenal \$\$ Acrolein \$\$ trans-Acr	56	C3H4O	000107-02-8	4
3	2-Propenal	56	C3H4O	000107-02-8	4
4	Cyclobutanone, 2-methyl-2-oxiranyl-	126	C7H10O2	075314-19-1	4
5	Cyclopentane, (2-methylpropyl)- \$\$	126	C9H18	003788-32-7	4

\*\*\*\*\*  
 Peak Number 2 Pyrrole Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
2.13	40.19 ug/l	3866	Fluorobenzene	4810	6.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrrole	67	C4H5N	000109-97-7	2
2	Pyrrole \$\$ 1H-Pyrrole \$\$ Azole \$\$ D	67	C4H5N	000109-97-7	2
3	Pyrrole	67	C4H5N	000109-97-7	2
4	Chlorine dioxide \$\$ Chlorine oxide	67	ClO2	010049-04-4	2
5	Pyrrole	67	C4H5N	000109-97-7	2

\*\*\*\*\*  
 Peak Number 3 Acetonitrile Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
2.14	8.16 ug/l	785	Fluorobenzene	4810	6.75

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetonitrile	41	C2H3N	000075-05-8	1
2	Acetonitrile	41	C2H3N	000075-05-8	1
3	Methane, isocyano- \$\$ Methyl isocya	41	C2H3N	000593-75-9	1
4	Acetonitrile \$\$ Cyanomethane \$\$ Eth	41	C2H3N	000075-05-8	1
5	Borane, trimethyl-	56	C3H9B	000593-90-8	1

\*\*\*\*\*  
 Peak Number 4 1-Propyne \$\$ Allylene \$\$ Methy Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
------	---------	------	------------------	---------	------

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-003  
 Lab File ID: M0621027.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.80	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	1.5	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.90	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-003  
 Lab File ID: M0621027.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL39-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621027.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 20:30

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

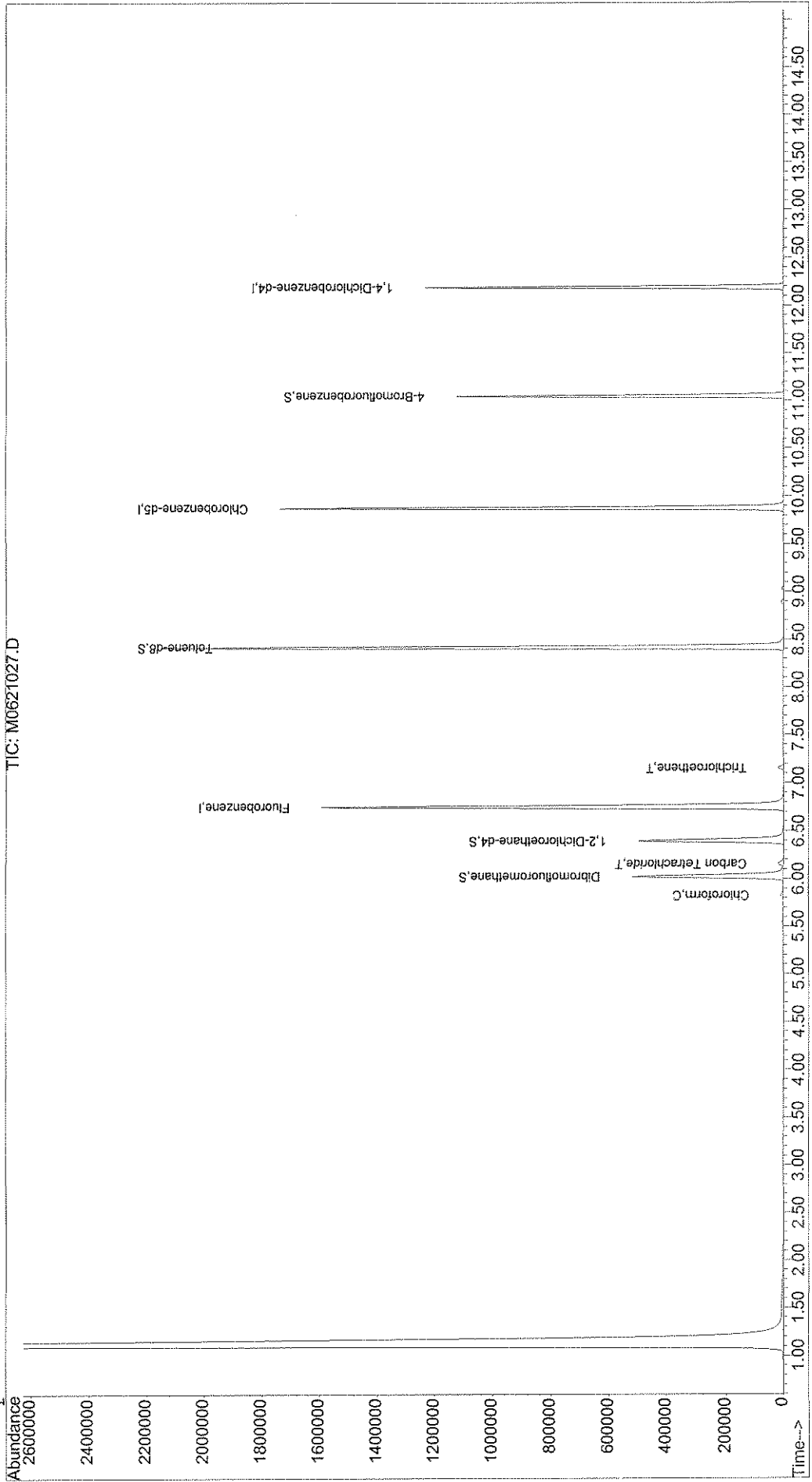
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621027.D Vial: 63  
Acq On : 21 Jun 2007 20:30 Operator: LH  
Sample : JPL39-003 Inst : MOBY  
Misc : #2 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:16 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621027.D  
 Acq On : 21 Jun 2007 20:30  
 Sample : JPL39-003  
 Misc : #2 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:16 2007

Vial: 63  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1626225	50.00	ug/l	0.00 96.71%
54) Chlorobenzene-d5	9.87	117	994542	50.00	ug/l	0.00 100.23%
74) 1,4-Dichlorobenzene-d4	12.19	152	332987	50.00	ug/l	0.00 86.06%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	384878	52.24	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.48%
40) 1,2-Dichloroethane-d4	6.39	65	413372	51.86	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.72%
55) Toluene-d8	8.42	98	1521209	49.52	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.04%
76) 4-Bromofluorobenzene	11.05	95	366020	58.49	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.98%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	1.44	50	56		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	2.85	101	66		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	0.00	76	0		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	3.51	84	470		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	3.91	73	77		N.D.	
22) Acrylonitrile	0.00	53	0		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621027.D  
 Acq On : 21 Jun 2007 20:30  
 Sample : JPL39-003  
 Misc : #2 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:16 2007

Vial: 63  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	2103	N.D.	
24) Chloroprene	0.00	53	0	N.D.	
25) Isopropyl ether	0.00	59	0	N.D.	
26) Vinyl acetate	0.00	86	0	N.D.	
27) Ethyl-t-butyl ether	0.00	59	0	N.D.	
28) 2,2-Dichloropropane	0.00	77	0	N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
30) 2-Butanone	5.53	43	720	N.D.	
31) Propionitrile	0.00	54	0	N.D.	
32) Bromochloromethane	0.00	128	0	N.D.	
33) Methacrylonitrile	5.87	41	252	N.D.	
34) Chloroform	5.82	83	10423	0.80 ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
36) Cyclohexane	0.00	56	0	N.D.	
38) Carbon Tetrachloride	6.16	117	15158	1.50 ug/l	96
39) 1,1-Dichloropropene	0.00	75	0	N.D.	
41) Benzene	6.41	78	1036	N.D.	
42) 1,2-Dichloroethane	6.49	62	265	N.D.	
43) t-Amyl methyl ether	0.00	73	0	N.D.	
44) Isobutanol	6.67	43	61	Below Cal #	22
45) Trichloroethene	7.15	130	7764	0.90 ug/l	96
46) Methylcyclohexane	0.00	83	0	N.D.	
47) 1,2-Dichloropropane	0.00	63	0	N.D.	
48) Dibromomethane	0.00	93	0	N.D.	
49) Methyl methacrylate	0.00	69	0	N.D.	
50) Bromodichloromethane	7.74	83	453	N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0	N.D. d	
56) Toluene	8.49	92	641	N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
58) Ethyl methacrylate	0.00	69	0	N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
60) Tetrachloroethene	9.03	166	2312	N.D.	
61) 1,3-Dichloropropane	0.00	76	0	N.D.	
62) 2-Hexanone	9.27	43	307	N.D.	
63) Dibromochloromethane	0.00	129	0	N.D.	
64) 1,2-Dibromoethane	0.00	107	0	N.D.	
65) 1-Chlorohexane	9.87	91	1926	N.D.	
66) Chlorobenzene	9.89	112	308	N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	

LH 6/25/07

(#) = qualifier out of range (m) = manual integration

Quantitation Report

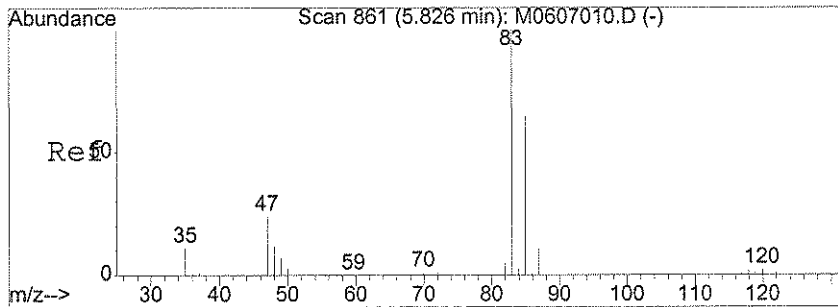
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 Acq On : 21 Jun 2007 20:30  
 Sample : JPL39-003  
 Misc : #2 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:16 2007

Vial: 63  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

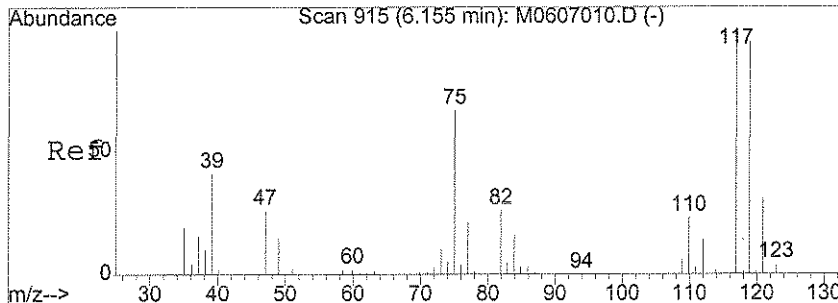
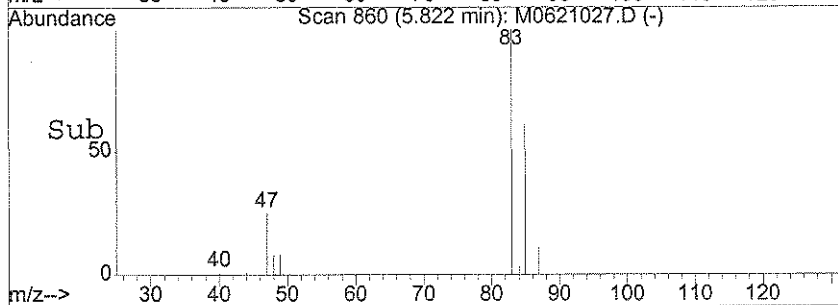
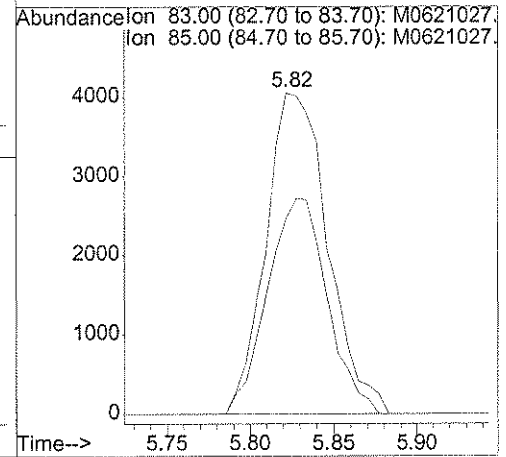
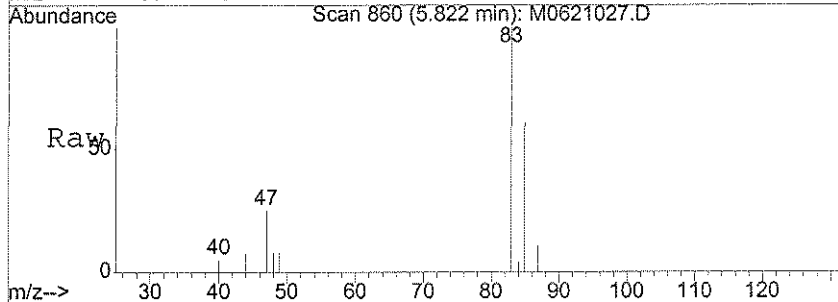
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	562		N.D.	
69) m,p-Xylene	10.11	106	686		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	302		N.D.	
73) Isopropylbenzene	11.04	105	566		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	11.04	110	58		N.D.	
80) n-Propylbenzene	11.27	91	58		N.D.	
81) 2-Chlorotoluene	11.27	91	58		N.D.	
82) 4-Chlorotoluene	11.27	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.98	105	55		N.D.	
86) sec-butylbenzene	11.98	105	55		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	605		N.D.	
88) 4-Isopropyltoluene	12.19	119	238		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	174		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	423		N.D.	
91) n-Butylbenzene	12.55	91	57		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



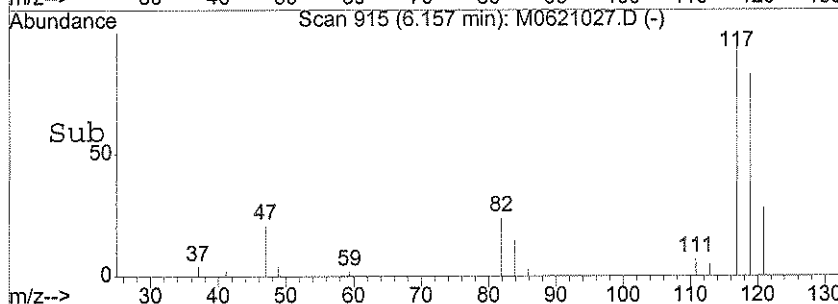
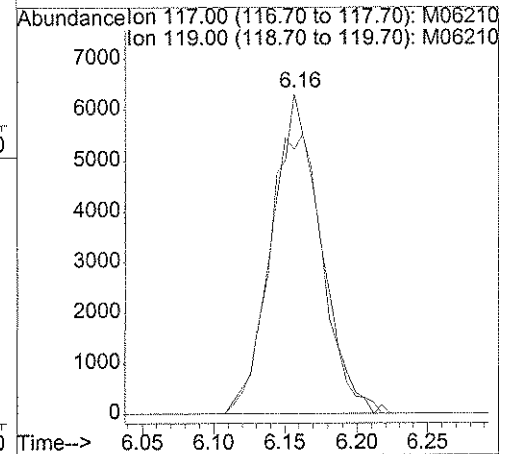
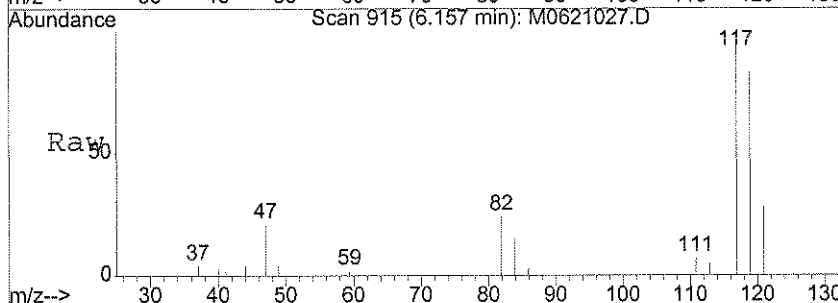
#34  
 Chloroform  
 Concen: 0.80 ug/l  
 RT: 5.82 min Scan# 860  
 Delta R.T. -0.00 min  
 Lab File: M0621027.D  
 Acq: 21 Jun 2007 20:30

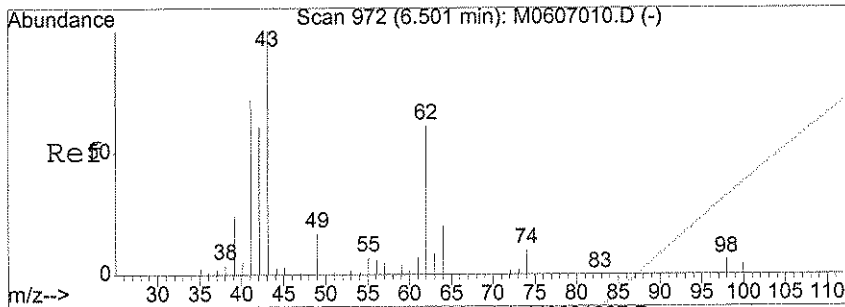
Tgt Ion: 83 Resp: 10423  
 Ion Ratio Lower Upper  
 83 100  
 85 64.7 44.0 84.0



#38  
 Carbon Tetrachloride  
 Concen: 1.50 ug/l  
 RT: 6.16 min Scan# 915  
 Delta R.T. -0.00 min  
 Lab File: M0621027.D  
 Acq: 21 Jun 2007 20:30

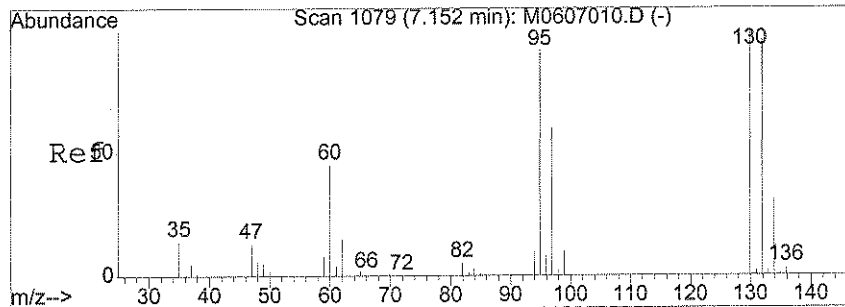
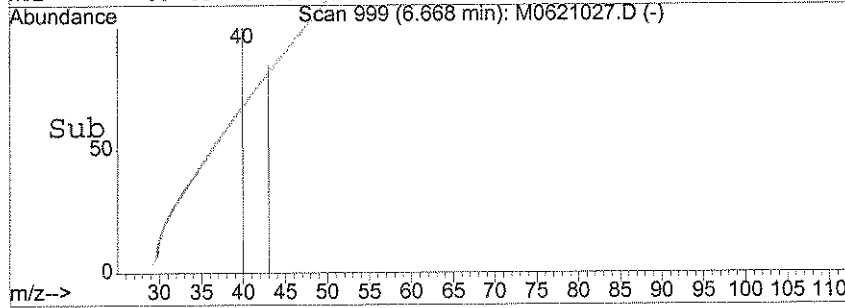
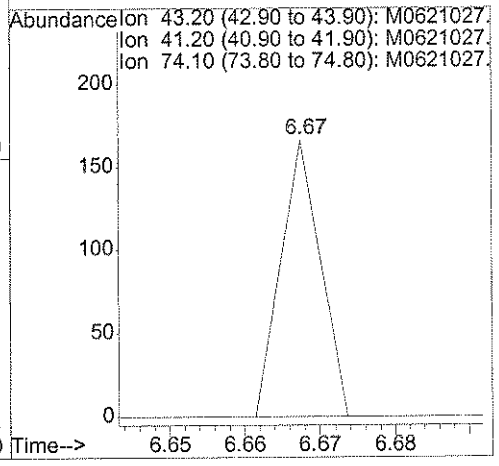
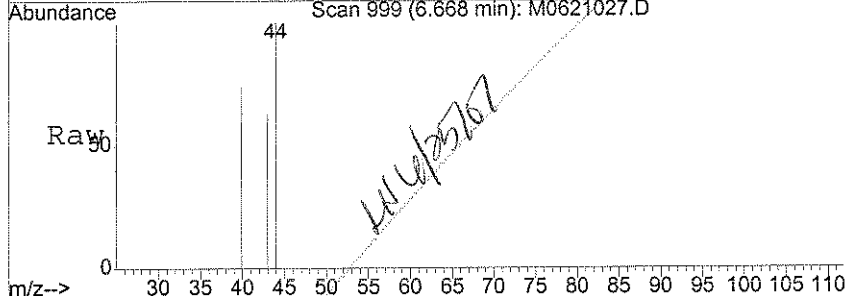
Tgt Ion: 117 Resp: 15158  
 Ion Ratio Lower Upper  
 117 100  
 119 96.0 72.2 112.2





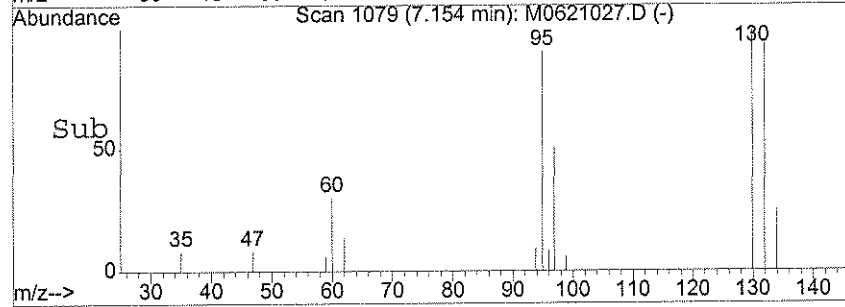
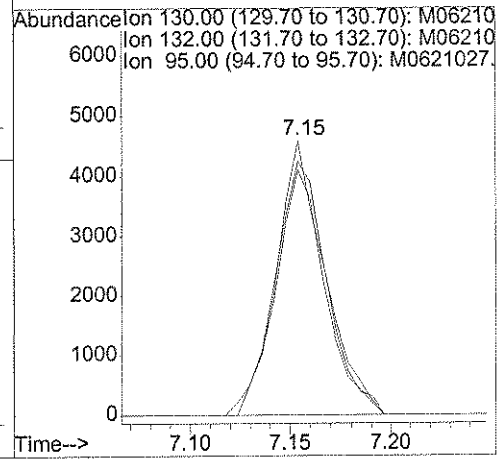
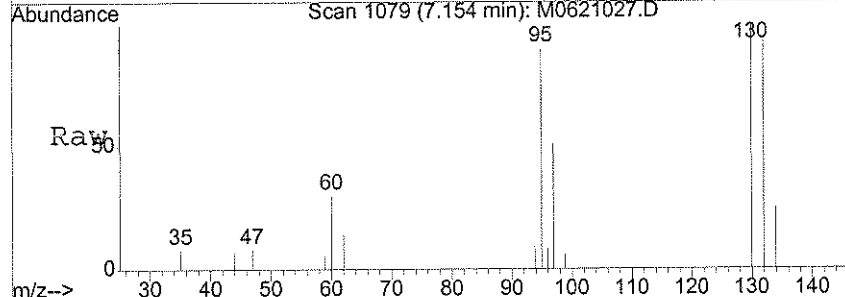
#44  
 Isobutanol  
 Concen: Below Cal  
 RT: 6.67 min Scan# 999  
 Delta R.T. 0.09 min  
 Lab File: M0621027.D  
 Acq: 21 Jun 2007 20:30

Tgt Ion	Ratio	Lower	Upper
43	100		
41	0.0	57.8	86.8#
74	0.0	10.2	15.2#



#45  
 Trichloroethene  
 Concen: 0.90 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.00 min  
 Lab File: M0621027.D  
 Acq: 21 Jun 2007 20:30

Tgt Ion	Ratio	Lower	Upper
130	100		
132	97.5	80.2	120.2
95	90.3	75.8	115.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-004  
 Lab File ID: M0621028.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.60	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	1.2	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-004  
 Lab File ID: M0621028.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.69	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-004  
 Lab File ID: M0621028.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 20:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

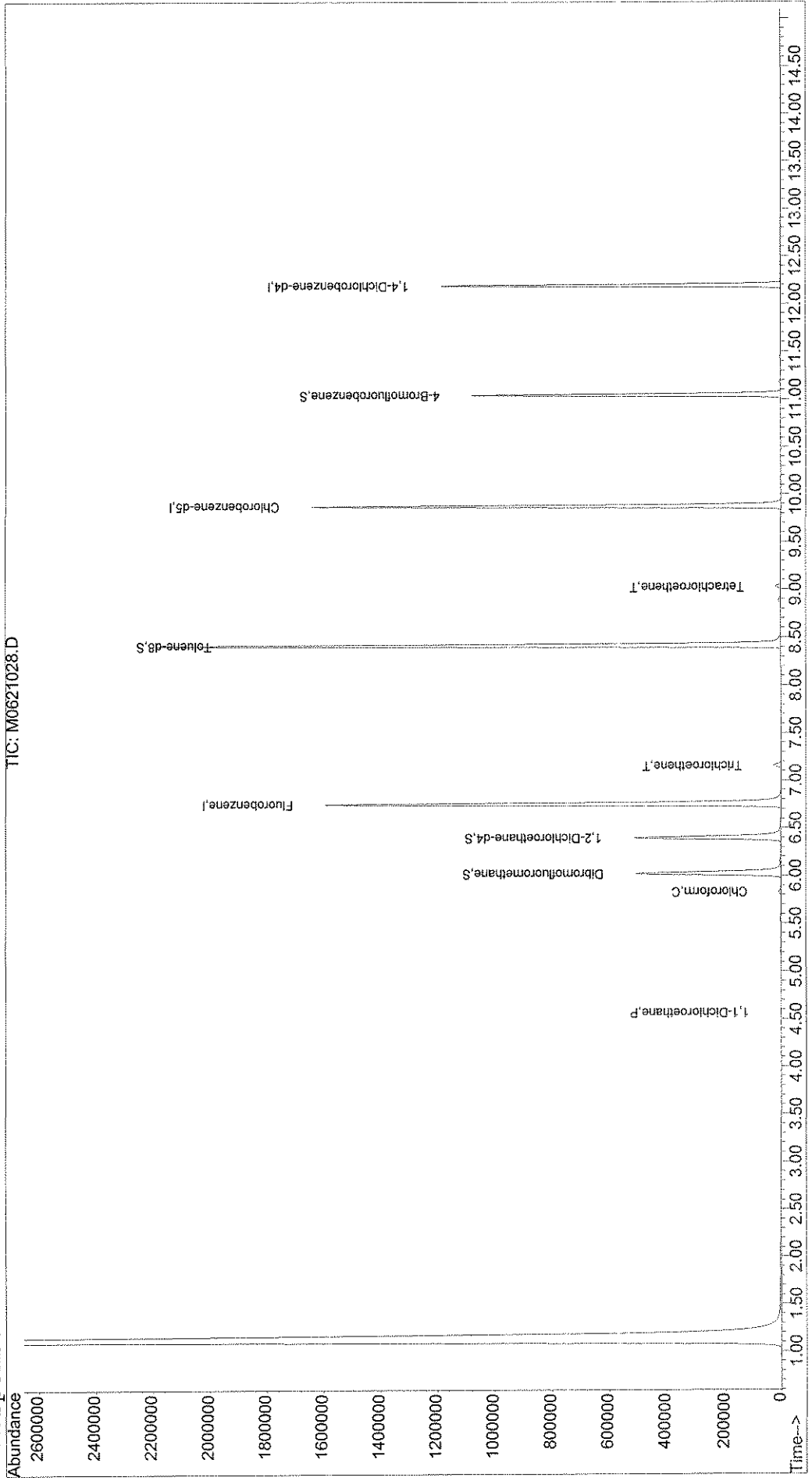
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621028.D Vial: 64  
Acq On : 21 Jun 2007 20:54 Operator: LH  
Sample : JPL39-004 Inst : MOBY  
Misc : #4 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:17 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621028.D  
 Acq On : 21 Jun 2007 20:54  
 Sample : JPL39-004  
 Misc : #4 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:17 2007

Vial: 64  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1625108	50.00	ug/l	0.00 96.64%
54) Chlorobenzene-d5	9.88	117	981063	50.00	ug/l	0.00 98.87%
74) 1,4-Dichlorobenzene-d4	12.19	152	326686	50.00	ug/l	0.00 84.43%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	385885	52.42	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.84%
40) 1,2-Dichloroethane-d4	6.40	65	417909	52.46	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.92%
55) Toluene-d8	8.42	98	1516590	50.05	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.10%
76) 4-Bromofluorobenzene	11.05	95	361138	58.82	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.64%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	3.49	84	379	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) Acrylonitrile	0.00	53	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621028.D  
 Acq On : 21 Jun 2007 20:54  
 Sample : JPL39-004  
 Misc : #4 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:17 2007

Vial: 64  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.57	63	3775	0.26	ug/l	99
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.50	43	62	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.89	41	274	N.D.		
34) Chloroform	5.83	83	7810	0.60	ug/l	100
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	6.15	117	2072	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.42	78	911	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.		
45) Trichloroethene	7.15	130	10245	1.18	ug/l	95
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.73	83	467	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.48	92	304	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	8.88	97	56	N.D.		
60) Tetrachloroethene	9.03	166	6571	0.69	ug/l	89
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	9.28	43	68	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.88	91	1745	N.D.		
66) Chlorobenzene	9.90	112	141	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

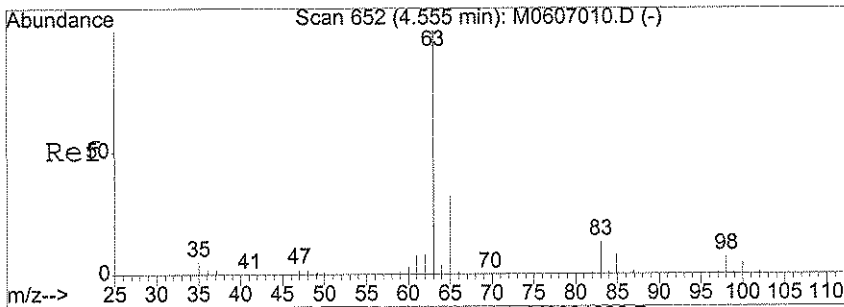
Data File : X:\MSVOA\MOBY\062107\M0621028.D  
 Acq On : 21 Jun 2007 20:54  
 Sample : JPL39-004  
 Misc : #4 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:17 2007

Vial: 64  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

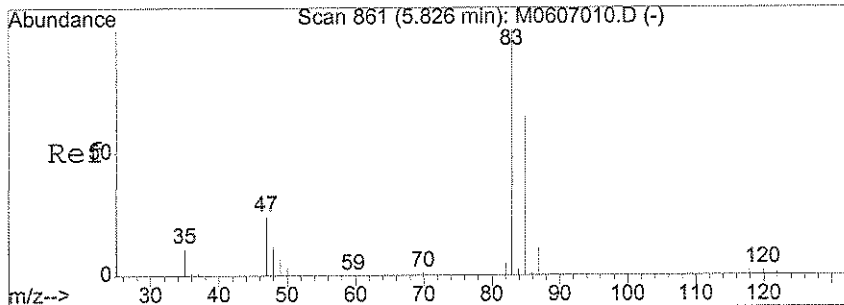
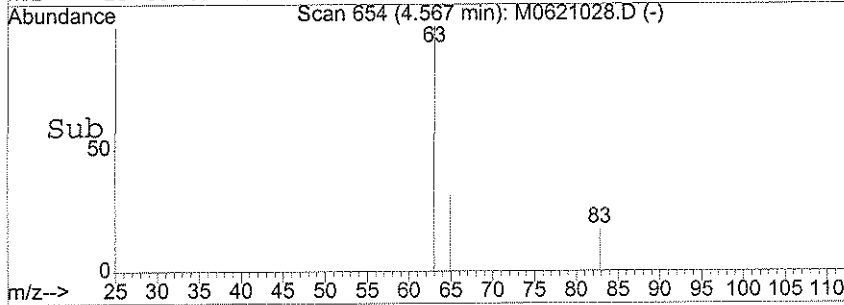
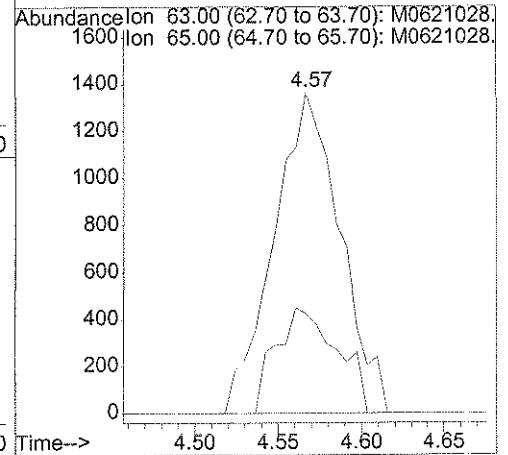
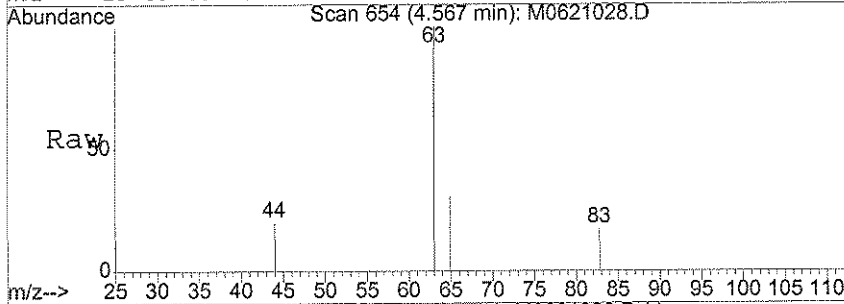
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	222		N.D.	
69) m,p-Xylene	10.11	106	67		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	166		N.D.	
73) Isopropylbenzene	11.05	105	518		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	125		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.05	91	890		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	12.21	146	64		N.D.	
88) 4-Isopropyltoluene	0.00	119	0		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	64		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	201		N.D.	
91) n-Butylbenzene	0.00	91	0		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



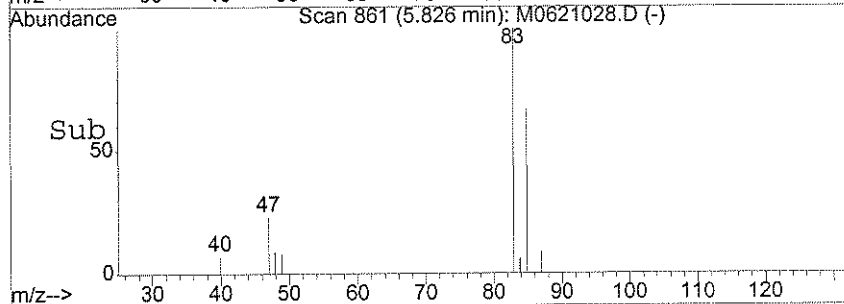
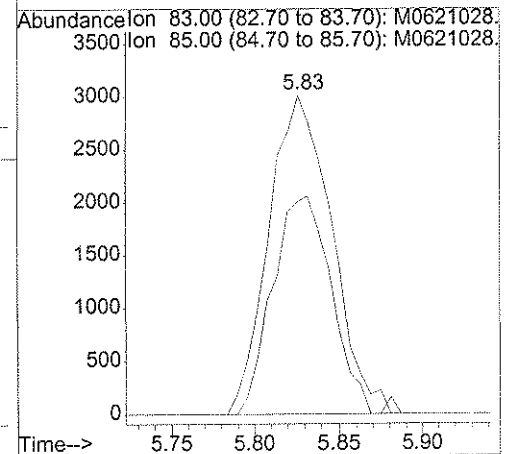
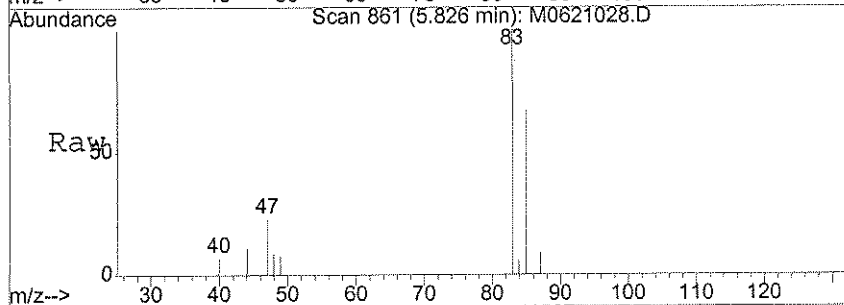
#23  
 1,1-Dichloroethane  
 Concen: 0.26 ug/l  
 RT: 4.57 min Scan# 654  
 Delta R.T. 0.00 min  
 Lab File: M0621028.D  
 Acq: 21 Jun 2007 20:54

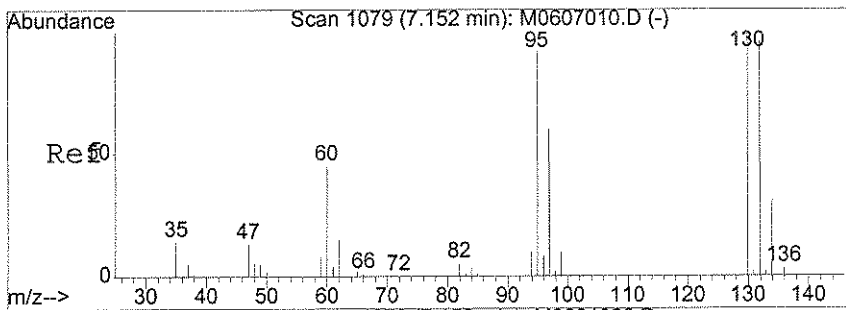
Tgt Ion: 63 Resp: 3775  
 Ion Ratio Lower Upper  
 63 100  
 65 30.5 10.2 50.2



#34  
 Chloroform  
 Concen: 0.60 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. 0.00 min  
 Lab File: M0621028.D  
 Acq: 21 Jun 2007 20:54

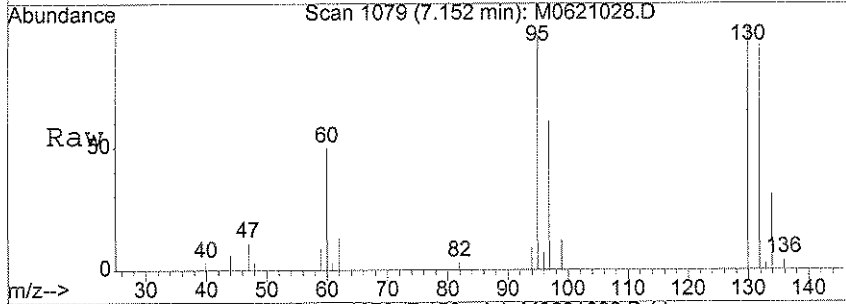
Tgt Ion: 83 Resp: 7810  
 Ion Ratio Lower Upper  
 83 100  
 85 63.7 44.0 84.0



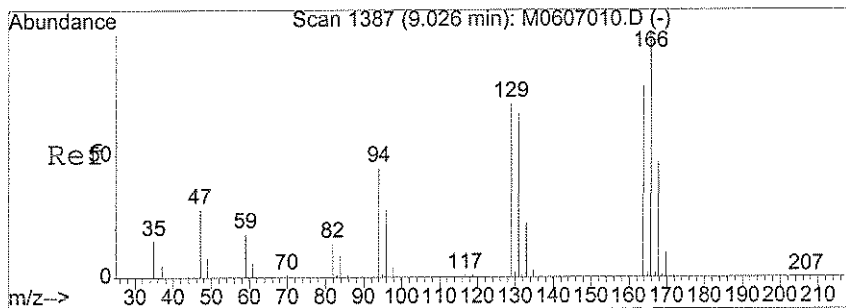
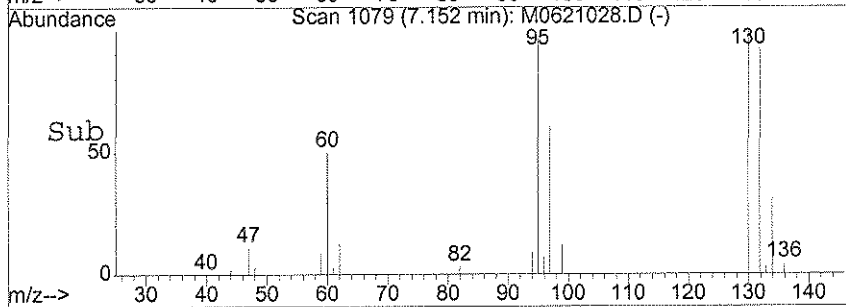
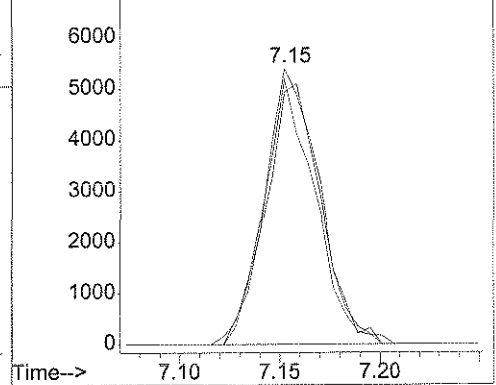


#45  
 Trichloroethene  
 Concen: 1.18 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.01 min  
 Lab File: M0621028.D  
 Acq: 21 Jun 2007 20:54

Tgt Ion	Resp	Lower	Upper
130	10245		
130	100		
132	95.5	80.2	120.2
95	91.4	75.8	115.8

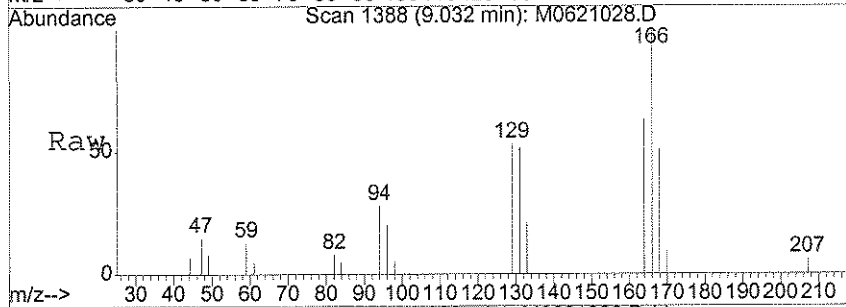


Abundance Ion 130.00 (129.70 to 130.70): M06210  
 Ion 132.00 (131.70 to 132.70): M06210  
 Ion 95.00 (94.70 to 95.70): M0621028.

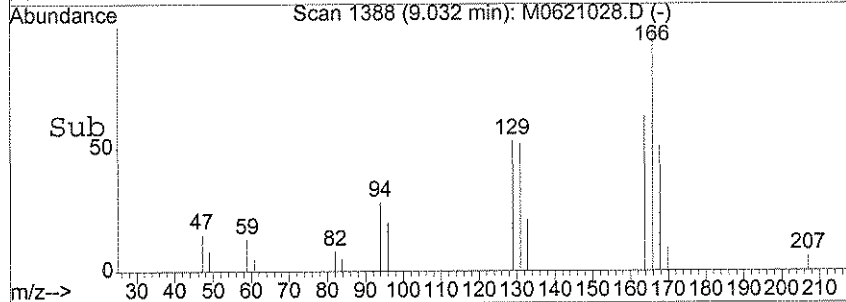
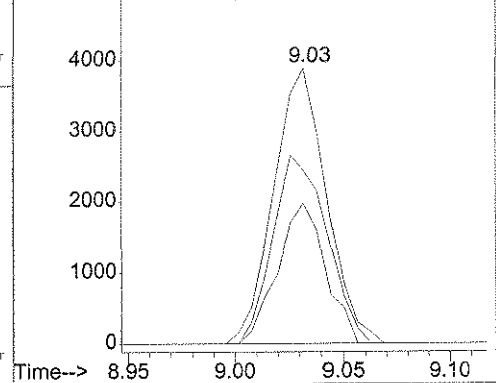


#60  
 Tetrachloroethene  
 Concen: 0.69 ug/l  
 RT: 9.03 min Scan# 1388  
 Delta R.T. 0.01 min  
 Lab File: M0621028.D  
 Acq: 21 Jun 2007 20:54

Tgt Ion	Resp	Lower	Upper
166	6571		
166	100		
164	69.9	65.6	98.4
168	46.1	41.1	61.7



Abundance Ion 165.95 (165.65 to 166.65): M06210  
 Ion 163.95 (163.65 to 164.65): M06210  
 Ion 167.95 (167.65 to 168.65): M06210



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-005  
 Lab File ID: M0621029.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 21:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-005  
 Lab File ID: M0621029.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 21:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R018909

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL39-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/21/2007 21:18

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

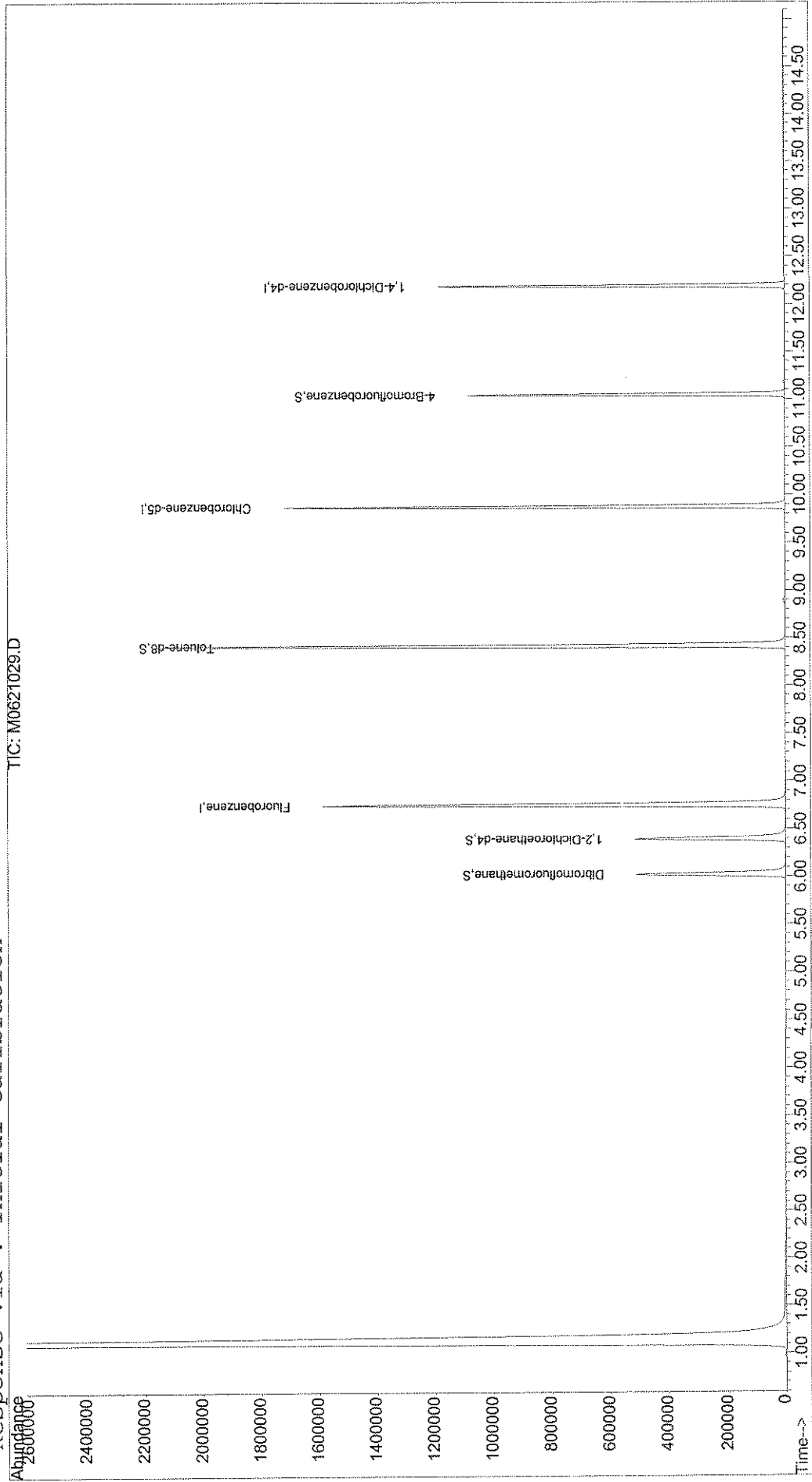
Comments:



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621029.D  
Acq On : 21 Jun 2007 21:18  
Sample : JPL39-005  
Misc : #4 5ml +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jun 25 12:18 2007  
Quant Results File: M8260W.REIS

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621029.D  
 Acq On : 21 Jun 2007 21:18  
 Sample : JPL39-005  
 Misc : #4 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:18 2007

Vial: 65  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1612881	50.00	ug/l	0.00	95.92%
54) Chlorobenzene-d5	9.88	117	987429	50.00	ug/l	0.00	99.51%
74) 1,4-Dichlorobenzene-d4	12.19	152	331873	50.00	ug/l	0.00	85.78%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	385045	52.70	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.40%	
40) 1,2-Dichloroethane-d4	6.40	65	414710	52.46	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.92%	
55) Toluene-d8	8.42	98	1510413	49.52	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.04%	
76) 4-Bromofluorobenzene	11.04	95	364639	58.46	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.92%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.04	76	77	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.48	43	57	N.D.		
18) Methylene Chloride	3.50	84	262	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	3.95	53	210	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621029.D  
 Acq On : 21 Jun 2007 21:18  
 Sample : JPL39-005  
 Misc : #4 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:18 2007

Vial: 65  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	590		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.73	41	56		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.43	78	849		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	495		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.27	43	76		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1841		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0621029.D M8260W.M Mon Jun 25 12:18:22 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621029.D  
 Acq On : 21 Jun 2007 21:18  
 Sample : JPL39-005  
 Misc : #4 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 12:18 2007

Vial: 65  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.11	91	1137		N.D.	
69) m,p-Xylene	10.11	106	405		N.D.	
70) o-xylene	10.50	106	65		N.D.	
71) Styrene	10.53	104	55		N.D.	
72) Bromoform	10.75	173	246		N.D.	
73) Isopropylbenzene	11.04	105	100		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.04	91	1011		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.19	119	87		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.53	91	55		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-3-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019008  
 Lab Sample ID: JPL39-006  
 Lab File ID: M0625021.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/25/2007 17:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.82	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	1.6	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	1.0	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-3-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R019008

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL39-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0625021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/25/2007 17:55

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-3-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R019008

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL39-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0625021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/25/2007 17:55

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

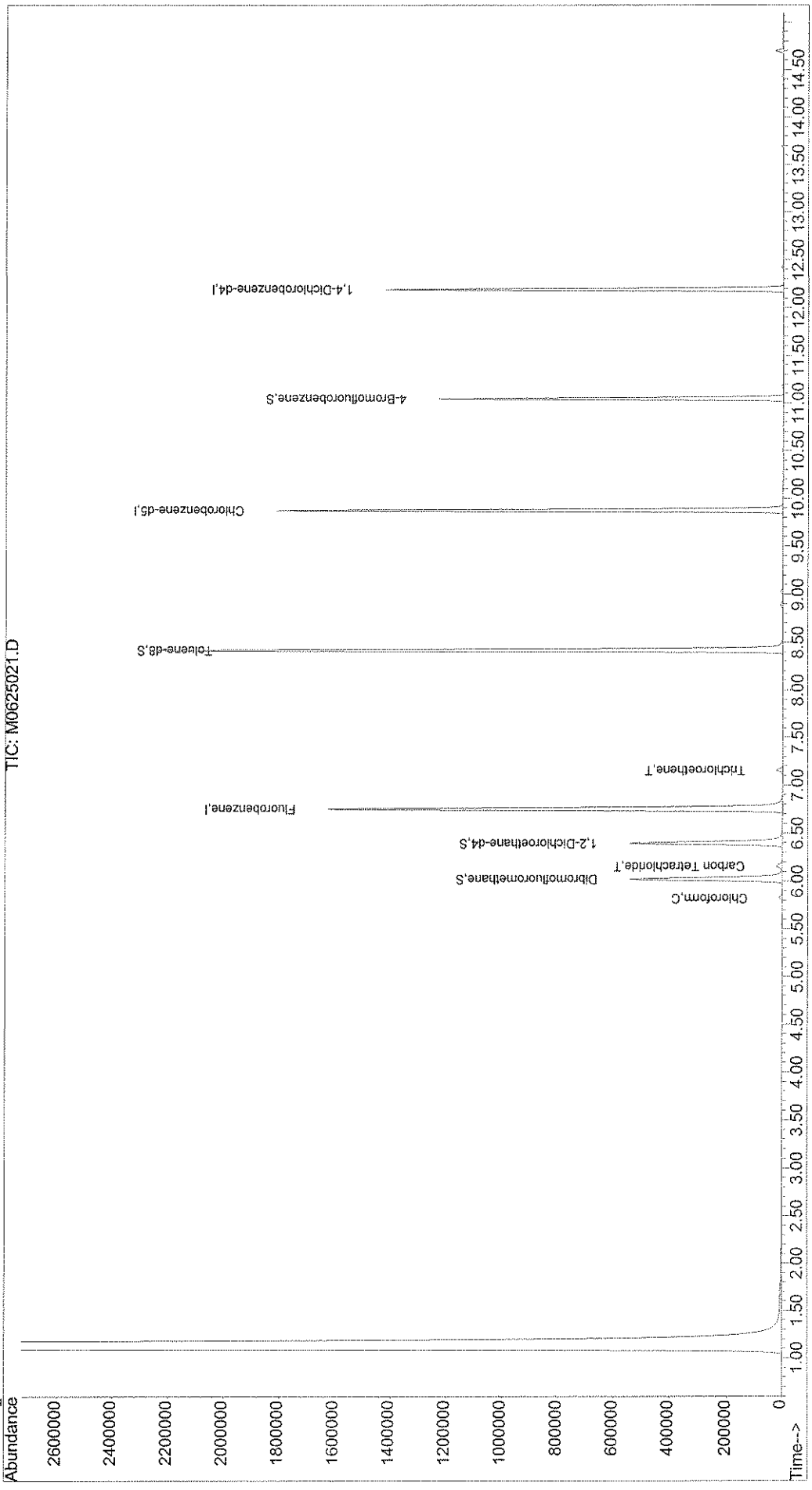
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625021.D  
Acq On : 25 Jun 2007 17:55  
Sample : JPL39-006  
Misc : #4 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 26 7:23 2007

Vial: 58  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625021.D  
 Acq On : 25 Jun 2007 17:55  
 Sample : JPL39-006  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 26 7:23 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1705893	50.00	ug/l	0.00 101.45%
54) Chlorobenzene-d5	9.87	117	1061560	50.00	ug/l	0.00 106.98%
74) 1,4-Dichlorobenzene-d4	12.19	152	392085	50.00	ug/l	0.00 101.34%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	404915	52.40	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.80%
40) 1,2-Dichloroethane-d4	6.39	65	436967	52.26	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.52%
55) Toluene-d8	8.42	98	1592412	48.56	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.12%
76) 4-Bromofluorobenzene	11.05	95	403020	54.69	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	109.38%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.04	76	95	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.39	43	56	N.D.		
18) Methylene Chloride	3.50	84	116	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.94	73	93	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625021.D  
 Acq On : 25 Jun 2007 17:55  
 Sample : JPL39-006  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 26 7:23 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.57	63	2208		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	807		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	189		N.D.	
34) Chloroform	5.82	83	11206	0.82	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.15	117	17114	1.62	ug/l	95
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.43	78	1137		N.D.	
42) 1,2-Dichloroethane	6.49	62	384		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	9063	1.00	ug/l	97
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	468		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	577		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.86	97	58		N.D.	
60) Tetrachloroethene	9.03	166	2635		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	321		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2316		N.D.	
66) Chlorobenzene	9.90	112	318		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

*Joe/26/07*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625021.D  
 Acq On : 25 Jun 2007 17:55  
 Sample : JPL39-006  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 26 7:23 2007

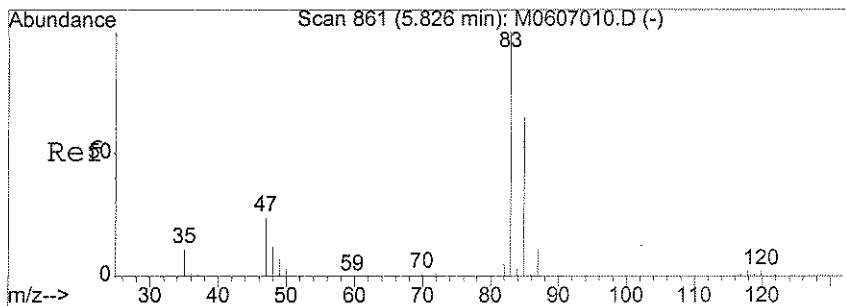
Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

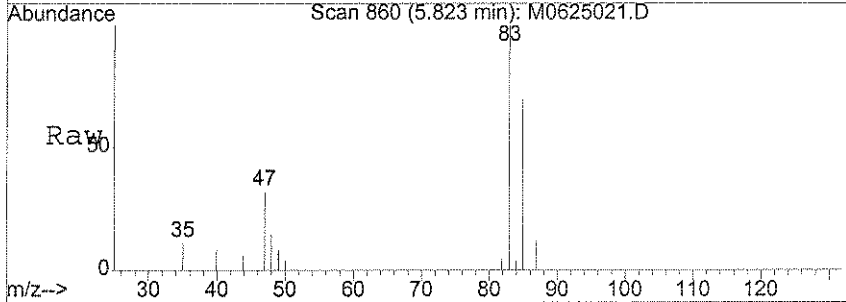
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	575		N.D.	
69) m,p-Xylene	10.11	106	524		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.53	104	80		N.D.	
72) Bromoform	10.76	173	238		N.D.	
73) Isopropylbenzene	10.87	105	163		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	421		N.D.	
81) 2-Chlorotoluene	11.38	91	78		N.D.	
82) 4-Chlorotoluene	11.49	91	131		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	133		N.D.	
84) tert-Butylbenzene	11.78	119	69		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	56		N.D.	
86) sec-butylbenzene	11.99	105	350		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	842		N.D.	
88) 4-Isopropyltoluene	12.13	119	320		N.D.	
89) 1,4-Dichlorobenzene	12.12	146	842		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	657		N.D.	
91) n-Butylbenzene	12.55	91	522		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.18	180	342		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration

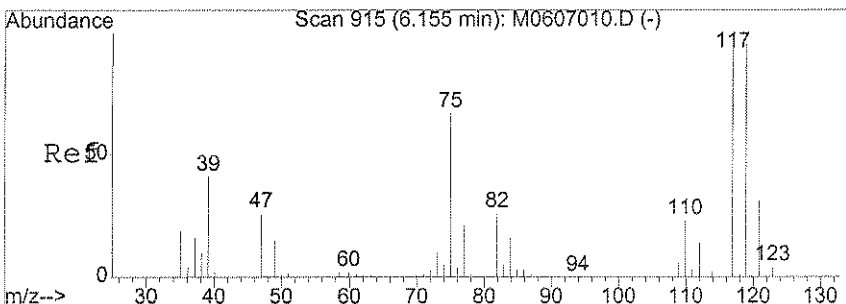
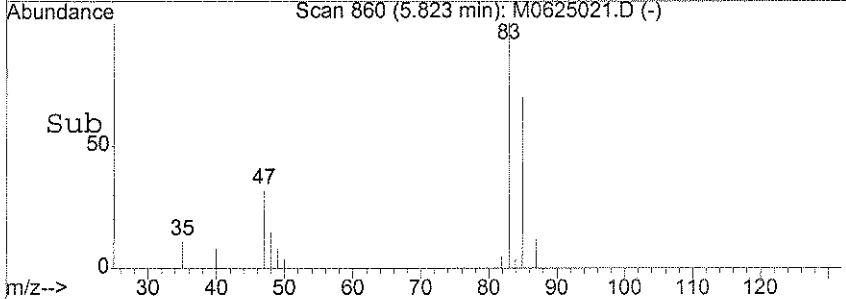
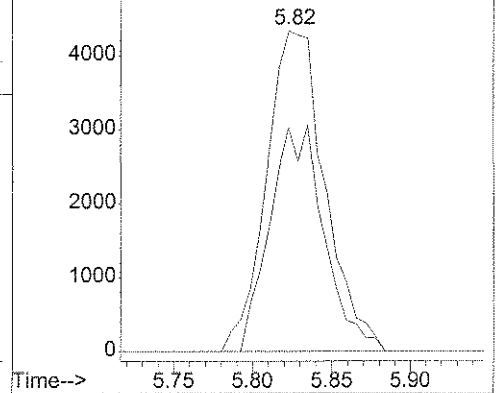


#34  
 Chloroform  
 Concen: 0.82 ug/l  
 RT: 5.82 min Scan# 860  
 Delta R.T. -0.00 min  
 Lab File: M0625021.D  
 Acq: 25 Jun 2007 17:55

Tgt Ion:	83	Resp:	11206
Ion Ratio	Lower	Upper	
83	100		
85	65.2	44.0	84.0

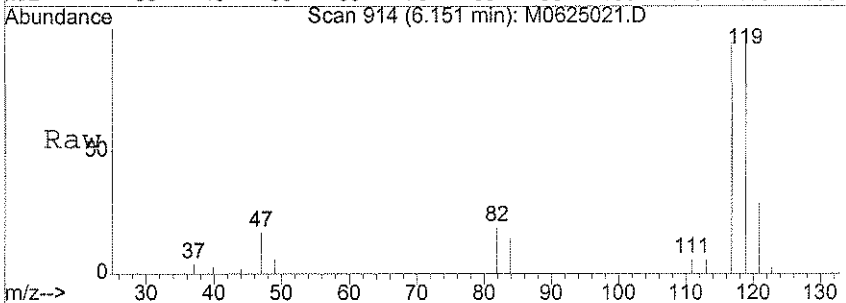


Abundance Ion 83.00 (82.70 to 83.70): M0625021  
 5000 Ion 85.00 (84.70 to 85.70): M0625021

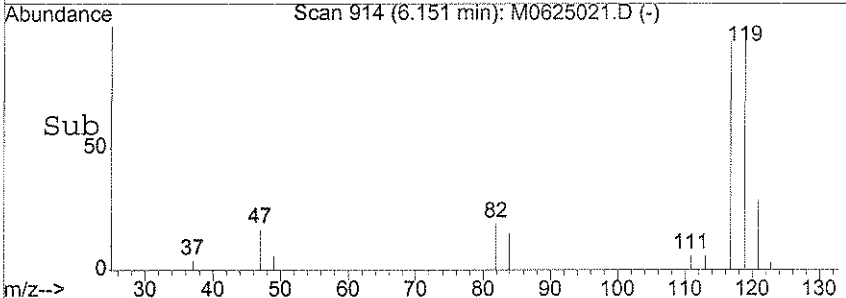
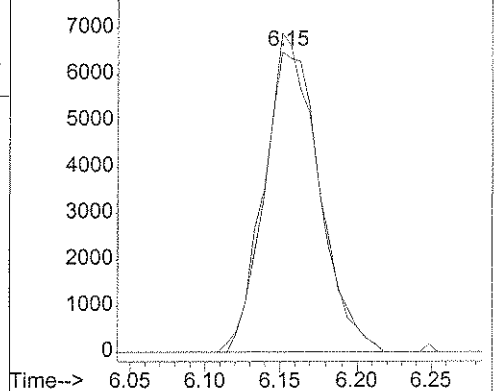


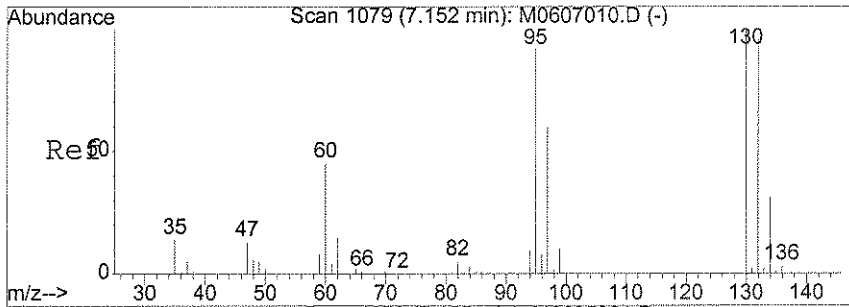
#38  
 Carbon Tetrachloride  
 Concen: 1.62 ug/l  
 RT: 6.15 min Scan# 914  
 Delta R.T. -0.01 min  
 Lab File: M0625021.D  
 Acq: 25 Jun 2007 17:55

Tgt Ion:	117	Resp:	17114
Ion Ratio	Lower	Upper	
117	100		
119	97.3	72.2	112.2



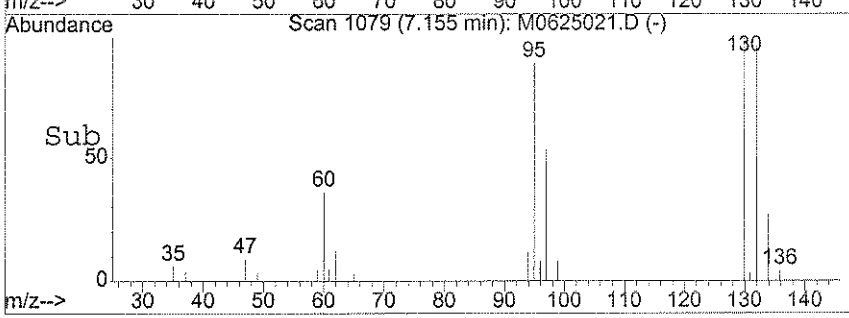
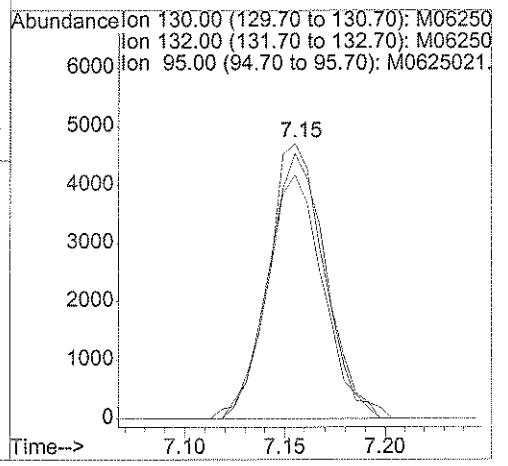
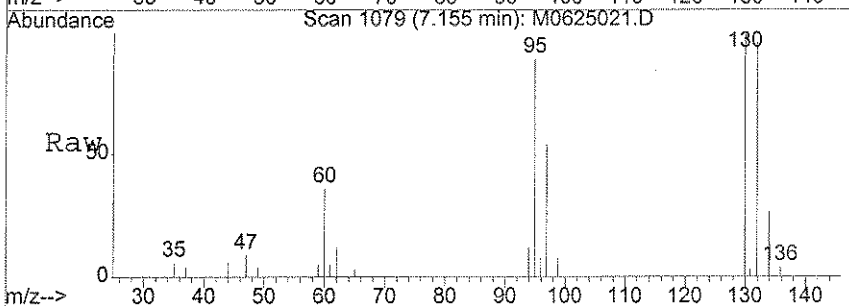
Abundance Ion 117.00 (116.70 to 117.70): M06250  
 8000 Ion 119.00 (118.70 to 119.70): M06250





#45  
 Trichloroethene  
 Concen: 1.00 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.00 min  
 Lab File: M0625021.D  
 Acq: 25 Jun 2007 17:55

Tgt Ion	Resp	Lower	Upper
130	9063		
130	100		
132	100.5	80.2	120.2
95	89.8	75.8	115.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-5-6/19/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019008  
 Lab Sample ID: JPL39-007  
 Lab File ID: M0625022.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/25/2007 18:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-5-6/19/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019008  
 Lab Sample ID: JPL39-007  
 Lab File ID: M0625022.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/25/2007 18:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-5-6/19/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated.Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019008  
 Lab Sample ID: JPL39-007  
 Lab File ID: M0625022.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/25/2007 18:18  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

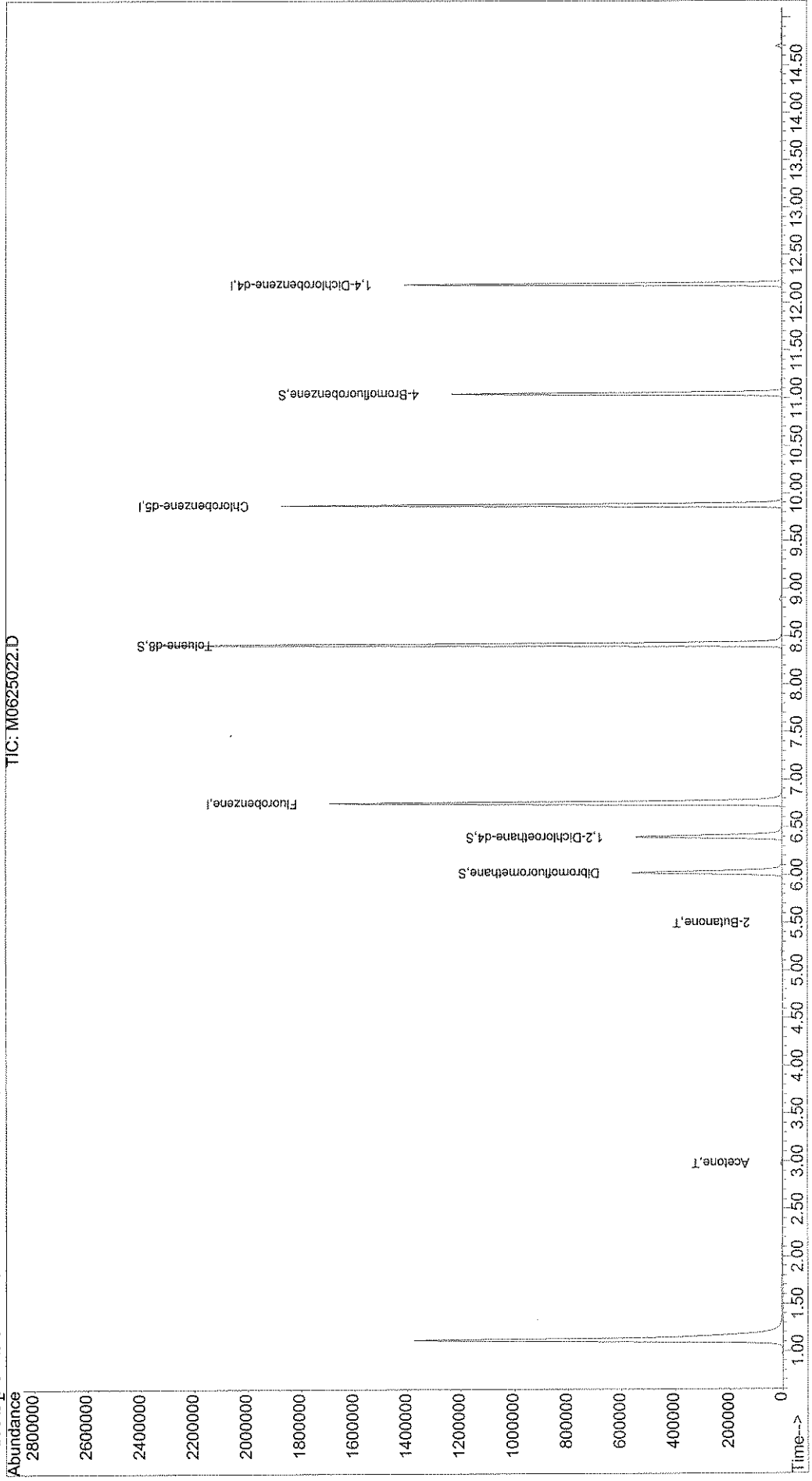
Comments:



Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625022.D Vial: 59  
Acq On : 25 Jun 2007 18:18 Operator: DGA  
Sample : JPL39-007 Inst : MOBY  
Misc : #4 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 26 7:24 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625022.D  
 Acq On : 25 Jun 2007 18:18  
 Sample : JPL39-007  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 26 7:24 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1727642	50.00	ug/l	0.00 102.74%
54) Chlorobenzene-d5	9.87	117	1081234	50.00	ug/l	0.00 108.96%
74) 1,4-Dichlorobenzene-d4	12.19	152	391464	50.00	ug/l	0.00 101.18%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	409575	52.33	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.66%
40) 1,2-Dichloroethane-d4	6.40	65	439939	51.95	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.90%
55) Toluene-d8	8.42	98	1615017	48.36	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.72%
76) 4-Bromofluorobenzene	11.05	95	408898	55.58	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	111.16%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.44	50	57	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	15305	8.05 ug/l		95
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	171	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0625022.D M8260W.M Tue Jun 26 07:25:03 2007

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625022.D  
 Acq On : 25 Jun 2007 18:18  
 Sample : JPL39-007  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 26 7:24 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.50	43	6617	1.87	ug/l #	88
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.65	41	56		N.D.	
34) Chloroform	5.82	83	603		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	785		N.D.	
42) 1,2-Dichloroethane	6.40	62	196		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	113		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.20	43	882		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2290		N.D.	
66) Chlorobenzene	9.91	112	145		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0625022.D M8260W.M Tue Jun 26 07:25:03 2007

*J. Orphan*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\062507\M0625022.D  
 Acq On : 25 Jun 2007 18:18  
 Sample : JPL39-007  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 26 7:24 2007

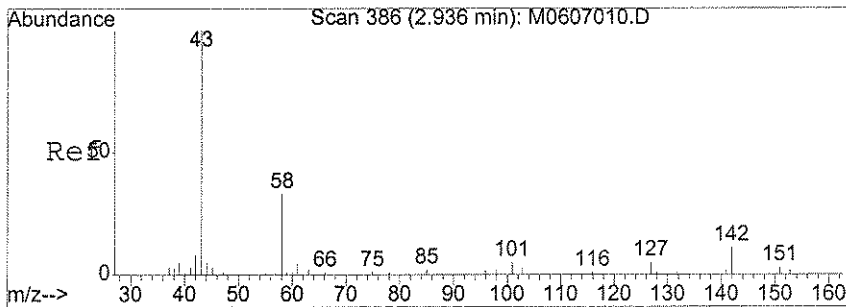
Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

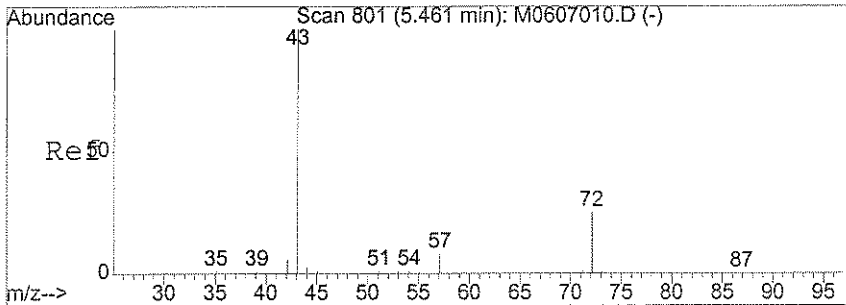
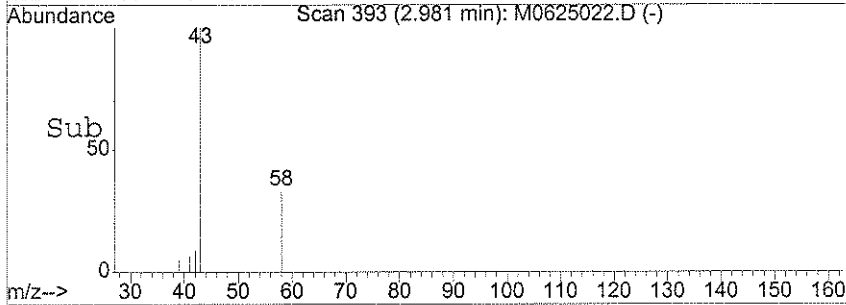
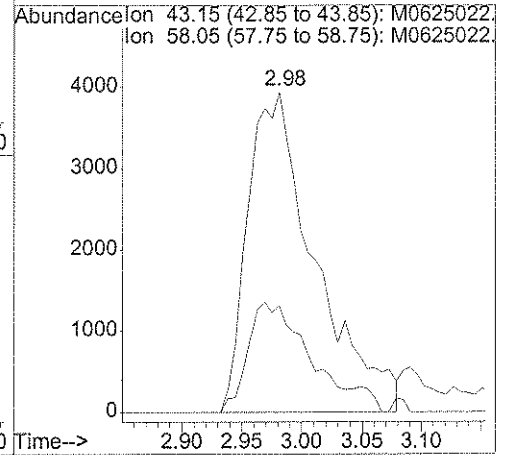
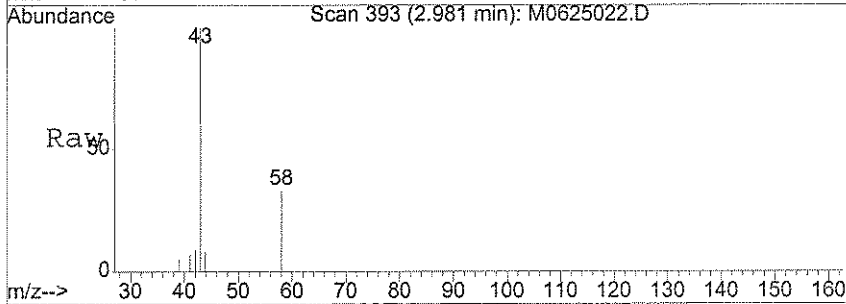
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	323		N.D.	
69) m,p-Xylene	10.11	106	127		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	150		N.D.	
73) Isopropylbenzene	10.87	105	119		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.04	83	57		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.29	91	393		N.D.	
81) 2-Chlorotoluene	11.38	91	59		N.D.	
82) 4-Chlorotoluene	11.48	91	116		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	62		N.D.	
84) tert-Butylbenzene	11.77	119	65		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	69		N.D.	
86) sec-butylbenzene	12.00	105	159		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	59		N.D.	
88) 4-Isopropyltoluene	12.13	119	296		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	82		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	406		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.18	180	261		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



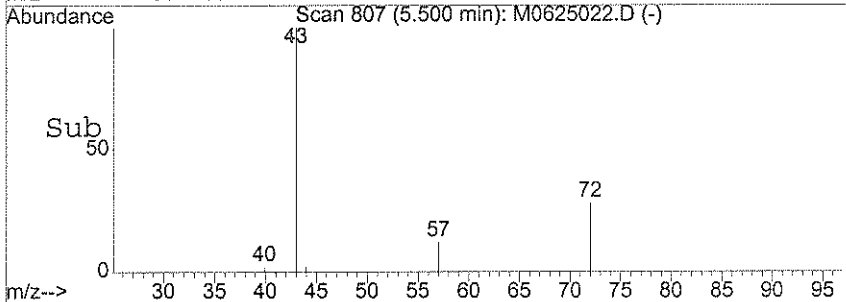
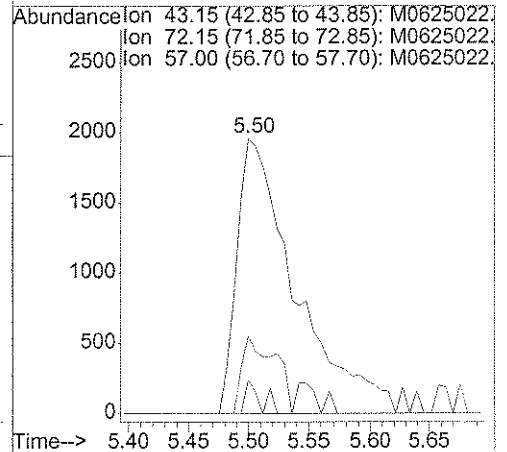
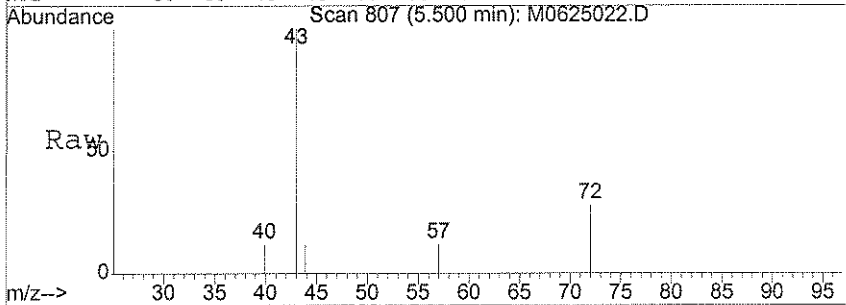
#11  
 Acetone  
 Concen: 8.05 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0625022.D  
 Acq: 25 Jun 2007 18:18

Tgt Ion: 43 Resp: 15305  
 Ion Ratio Lower Upper  
 43 100  
 58 30.2 22.0 33.0



#30  
 2-Butanone  
 Concen: 1.87 ug/l  
 RT: 5.50 min Scan# 807  
 Delta R.T. -0.01 min  
 Lab File: M0625022.D  
 Acq: 25 Jun 2007 18:18

Tgt Ion: 43 Resp: 6617  
 Ion Ratio Lower Upper  
 43 100  
 72 16.0 16.7 25.1#  
 57 2.2 6.1 9.1#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-5-6/19/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-008  
 Lab File ID: M0621015.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 15:24  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-5-6/19/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-008  
 Lab File ID: M0621015.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 15:24  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-5-6/19/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL39  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-008  
 Lab File ID: M0621015.D  
 Date Collected: 06/19/2007  
 Date/Time Analyzed: 06/21/2007 15:24  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

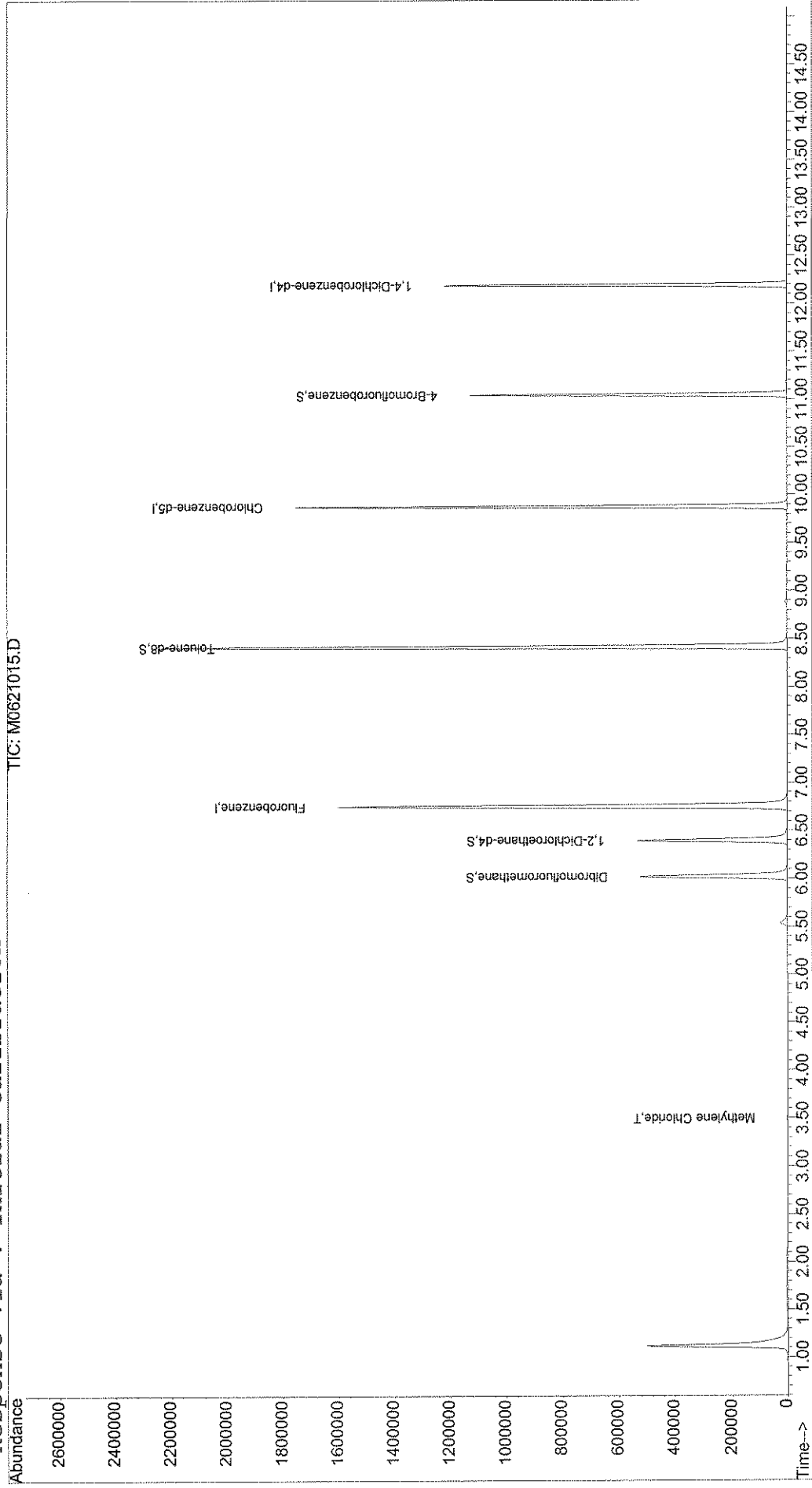
Comments:



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621015.D Vial: 60  
Acq On : 21 Jun 2007 15:24 Operator: LH  
Sample : JPL39-008 Inst : MOBY  
Misc : #1 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 25 11:20 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621015.D  
 Acq On : 21 Jun 2007 15:24  
 Sample : JPL39-008  
 Misc : #1 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:20 2007

Vial: 60  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1653119	50.00	ug/l	0.00 98.31%
54) Chlorobenzene-d5	9.88	117	1013030	50.00	ug/l	0.00 102.09%
74) 1,4-Dichlorobenzene-d4	12.19	152	338642	50.00	ug/l	0.00 87.52%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	393767	52.58	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.16%
40) 1,2-Dichloroethane-d4	6.40	65	423639	52.28	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.56%
55) Toluene-d8	8.42	98	1543443	49.33	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.66%
76) 4-Bromofluorobenzene	11.05	95	373194	58.64	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.28%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.89	96	56	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.36	43	121	N.D.		
18) Methylene Chloride	3.49	84	2848	0.33	ug/l	89
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

*Handwritten signature and date: LH 6/25/07*

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062107\M0621015.D  
 Acq On : 21 Jun 2007 15:24  
 Sample : JPL39-008  
 Misc : #1 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:20 2007

Vial: 60  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.73	41	58		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	694		N.D.	
42) 1,2-Dichloroethane	6.40	62	121		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.31	83	199		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	513		N.D.	
57) trans-1,3-Dichloropropene	8.90	75	68		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2115		N.D.	
66) Chlorobenzene	9.91	112	111		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

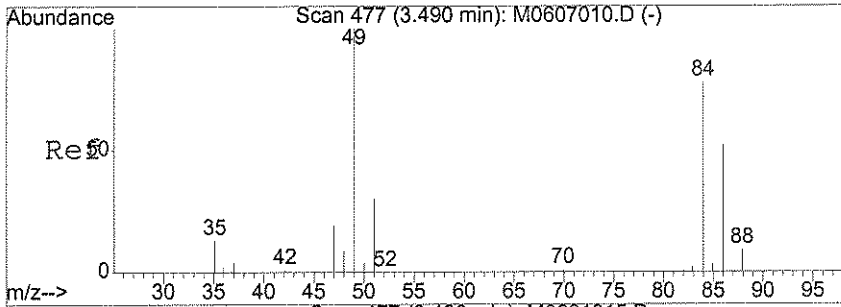
Data File : X:\MSVOA\MOBY\062107\M0621015.D  
 Acq On : 21 Jun 2007 15:24  
 Sample : JPL39-008  
 Misc : #1 5ml +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jun 25 11:20 2007

Vial: 60  
 Operator: LH  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

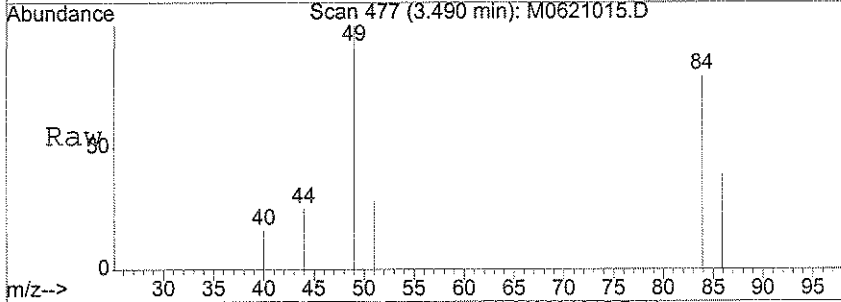
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	141		N.D.	
69) m,p-Xylene	10.11	106	145		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	201		N.D.	
73) Isopropylbenzene	10.88	105	226		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	57		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	322		N.D.	
81) 2-Chlorotoluene	11.28	91	322		N.D.	
82) 4-Chlorotoluene	11.49	91	217		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	65		N.D.	
84) tert-Butylbenzene	11.78	119	61		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	166		N.D.	
86) sec-butylbenzene	11.99	105	221		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	72		N.D.	
88) 4-Isopropyltoluene	12.13	119	205		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	68		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	349		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	73		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

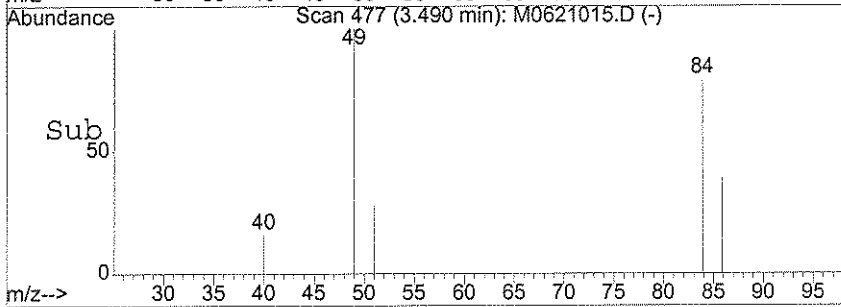
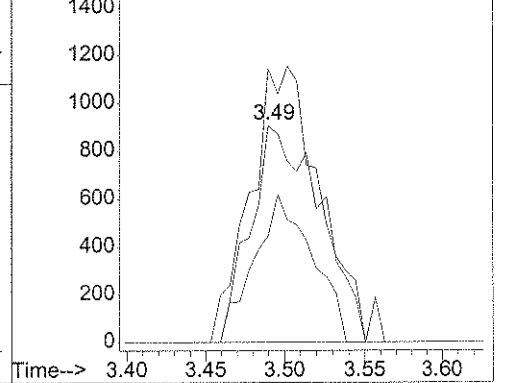


#18  
 Methylene Chloride  
 Concen: 0.33 ug/l  
 RT: 3.49 min Scan# 477  
 Delta R.T. -0.01 min  
 Lab File: M0621015.D  
 Acq: 21 Jun 2007 15:24

Tgt Ion:	84	Resp:	2848
Ion Ratio	Lower	Upper	
84	100		
49	121.8	113.6	153.6
86	55.4	45.8	85.8



Abundance Ion 84.00 (83.70 to 84.70): M0621015.D  
 Ion 49.00 (48.70 to 49.70): M0621015.D  
 Ion 86.00 (85.70 to 86.70): M0621015.D



**TIC FORMS**

SDG JPL39

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-17-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL39  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-001  
 Lab File ID: M0621025.D  
 Date Collected: 06/20/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621025.D Vial: 61  
Acq On : 21 Jun 2007 19:41 Operator: LH  
Sample : JPL39-001 Inst : MOBY  
Misc : #3 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621025.D M8260W.M Mon Jul 02 10:02:44 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-17-4

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R018909

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL39-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/21/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621026.D Vial: 62  
Acq On : 21 Jun 2007 20:05 Operator: LH  
Sample : JPL39-002 Inst : MOBY  
Misc : #5 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621026.D M8260W.M Mon Jul 02 10:02:55 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-17-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL39  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-003  
 Lab File ID: M0621027.D  
 Date Collected: 06/20/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621027.D Vial: 63  
Acq On : 21 Jun 2007 20:30 Operator: LH  
Sample : JPL39-003 Inst : MOBY  
Misc : #2 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621027.D M8260W.M Mon Jul 02 10:03:06 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-17-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL39  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-004  
 Lab File ID: M0621028.D  
 Date Collected: 06/20/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621028.D Vial: 64  
Acq On : 21 Jun 2007 20:54 Operator: LH  
Sample : JPL39-004 Inst : MOBY  
Misc : #4 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621028.D M8260W.M Mon Jul 02 10:03:19 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-17-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R018909

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL39-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/21/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621029.D Vial: 65  
Acq On : 21 Jun 2007 21:18 Operator: LH  
Sample : JPL39-005 Inst : MOBY  
Misc : #4 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621029.D M8260W.M Mon Jul 02 10:03:30 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-3-2Q07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R019008

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL39-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0625021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/25/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062507\M0625021.D Vial: 58  
Acq On : 25 Jun 2007 17:55 Operator: DGA  
Sample : JPL39-006 Inst : MOBY  
Misc : #4 5ml+IS/SS (524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0625021.D M8260W.M Tue Jul 03 09:40:59 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-5-6/19/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R019008

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL39-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0625022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/25/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062507\M0625022.D Vial: 59  
Acq On : 25 Jun 2007 18:18 Operator: DGA  
Sample : JPL39-007 Inst : MOBY  
Misc : #4 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0625022.D M8260W.M Tue Jul 03 09:41:10 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-5-6/19/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL39  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R018909  
 Lab Sample ID: JPL39-008  
 Lab File ID: M0621015.D  
 Date Collected: 06/20/2007  
 Date Analyzed: 06/21/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621015.D Vial: 60  
Acq On : 21 Jun 2007 15:24 Operator: LH  
Sample : JPL39-008 Inst : MOBY  
Misc : #1 5ml +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621015.D M8260W.M Mon Jul 02 10:01:45 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062107MVOWM1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R018909

Matrix: (SOIL/WATER) Water

Lab Sample ID: B062107MVOWM1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0621010.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/21/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062107\M0621010.D Vial: 55  
Acq On : 21 Jun 2007 13:23 Operator: LH  
Sample : B062107MVOWM1 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0621010.D M8260W.M Tue Jul 03 10:56:51 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062507MVOWM1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R019008

Matrix: (SOIL/WATER) Water

Lab Sample ID: B062507MVOWM1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0625018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/25/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062507\M0625018.D Vial: 55  
Acq On : 25 Jun 2007 16:45 Operator: DGA  
Sample : B062507MVOWM1 Inst : MOBY  
Misc : 5ml PFW+IS/SS (MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0625018.D M8260W.M Tue Jul 03 09:41:30 2007

# **SAMPLE DATA**

**SDG# JPL39**

**Semivolatiles**

1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-17-4

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitorin

SDG No.: JPL39

Run Sequence: R019167

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL39-002

Sample wt/vol: 1020.0 (g/mL) mL

Lab File ID: L0627006.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/19/2007

% Moisture: \_\_\_\_\_ Decanted: (Y/N) N

Date Extracted: 06/25/2007

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 06/27/2007

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: <2

Extraction: (Type) CONT

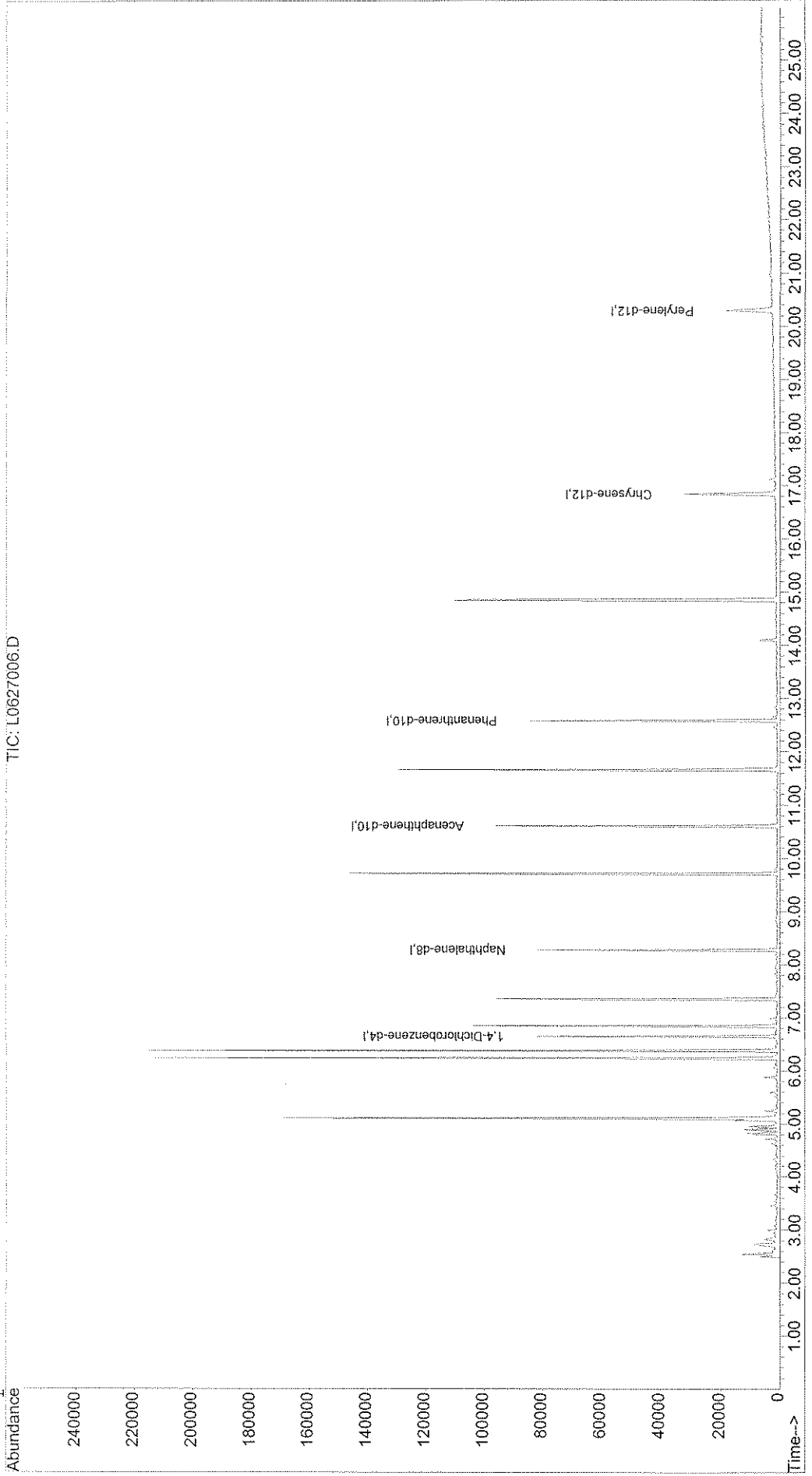
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
123-91-1	1,4-Dioxane	1.5		U

Comments:

Quantitation Report

Data File : X:\MSABN\LOUIE\062707\L0627006.D  
Acq On : 27 Jun 2007 18:06  
Sample : JPL39-002  
Misc : 5970L 1020ML->1ML+IS  
MS Integration Params: RTEINT.P  
Quant Time: Jul 2 11:59 2007  
Quant Results File: L8270M.RES

Method : X:\MSABN\LOUIE\CURVES07\061307B\L8270M.M (RTE Integrator)  
Title : 8270 SW846 BNA Calibration 5970L  
Last Update : Mon Jul 02 11:48:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\LOUIE\062707\L0627006.D  
 Acq On : 27 Jun 2007 18:06  
 Sample : JPL39-002  
 Misc : 5970L 1020ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 2 11:59 2007

Vial: 4  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270M.RES

Quant Method : X:\MSABN\L...\L8270M.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 02 11:48:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) 1,4-Dichlorobenzene-d4	6.65	152	14458	20.00	ng/ul	0.00 NA%
24) Naphthalene-d8	8.28	136	48895	20.00	ng/ul	0.00 NA%
40) Acenaphthene-d10	10.61	164	27934	20.00	ng/ul	0.00 NA%
68) Phenanthrene-d10	12.58	188	42803	20.00	ng/ul	0.00 NA%
82) Chrysene-d12	16.84	240	24560	20.00	ng/ul	0.00 NA%
92) Perylene-d12	20.30	264	17287	20.00	ng/ul	0.00 NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.11	112	49021	55.87	ng/ul	0.00
Spiked Amount	75.000	Range	20 - 110	Recovery	=	74.49%
7) Phenol-d5	6.24	99	65750	54.38	ng/ul	0.00
Spiked Amount	75.000	Range	10 - 115	Recovery	=	72.51%
11) 2-Chlorophenol-d4	6.38	132	56990	55.27	ng/ul	0.00
Spiked Amount	75.000	Range	48 - 117	Recovery	=	73.69%
15) 1,2-Dichlorobenzene-d4	6.85	152	18394	26.05	ng/ul	0.00
Spiked Amount	50.000	Range	38 - 82	Recovery	=	52.10%
25) Nitrobenzene-d5	7.36	82	44568	42.54	ng/ul	0.00
Spiked Amount	50.000	Range	40 - 110	Recovery	=	85.08%
46) 2-Fluorobiphenyl	9.72	172	68975	32.33	ng/ul	0.00
Spiked Amount	50.000	Range	50 - 100	Recovery	=	64.66%
72) 2,4,6-Tribromophenol	11.66	330	24881	50.91	ng/ul	0.00
Spiked Amount	75.000	Range	40 - 125	Recovery	=	67.88%
85) Terphenyl-d14	14.86	244	73261	48.94	ng/ul	0.01
Spiked Amount	50.000	Range	50 - 135	Recovery	=	97.88%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	0.00	88	0	N.D.	d	
3) N-nitrosodimethylamine	3.50	74	31	N.D.		
4) Pyridine	3.63	79	23	N.D.		
6) Benzaldehyde	6.24	77	121	N.D.		
8) Phenol	6.26	94	73	N.D.		
9) Aniline	6.15	93	25	N.D.		
10) Bis(2-Chloroethyl)ether	6.38	93	80	N.D.		

(#) = qualifier out of range (m) = manual integration  
 L0627006.D L8270M.M Mon Jul 02 11:59:29 2007

Quantitation Report

Data File : X:\MSABN\LOUIE\062707\L0627006.D  
 Acq On : 27 Jun 2007 18:06  
 Sample : JPL39-002  
 Misc : 5970L 1020ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 2 11:59 2007

Vial: 4  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270M.RES

Quant Method : X:\MSABN\L...\L8270M.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 02 11:48:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
12) 2-Chlorophenol	0.00	128	0		N.D.	
13) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
14) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
16) Benzyl alcohol	6.85	108	209		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	6.94	108	29		N.D.	
19) Bis(2-chloroisopropyl)ethe	6.97	45	212		N.D.	
20) 3 & 4-Methylphenol	0.00	108	0		N.D.	
21) Acetophenone	0.00	105	0		N.D.	
22) n-Nitroso-di-n-propylamine	7.17	70	77		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	7.36	77	238		N.D.	
27) Isophorone	7.68	82	105		N.D.	
28) 2-Nitrophenol	0.00	139	0		N.D.	
29) 2,4-Dimethylphenol	0.00	107	0		N.D.	
30) bis(2-Chloroethoxy)methane	7.94	93	31		N.D.	
31) Benzoic acid	0.00	105	0		N.D.	d
32) 2,4-Dichlorophenol	7.91	162	23		N.D.	
33) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
34) Naphthalene	8.19	128	24		N.D.	
35) 4-Chloroaniline	0.00	127	0		N.D.	
36) Hexachlorobutadiene	0.00	225	0		N.D.	
37) Caprolactam	0.00	113	0		N.D.	
38) 4-Chloro-3-methylphenol	0.00	107	0		N.D.	
39) 2-Methylnaphthalene	0.00	142	0		N.D.	
41) 1-Methylnaphthalene	0.00	142	0		N.D.	
42) Hexachlorocyclopentadiene	0.00	237	0		N.D.	
43) 1,2,4,5-Tetrachlorobenzene	0.00	216	0		N.D.	
44) 2,4,6-Trichlorophenol	0.00	196	0		N.D.	
45) 2,4,5-Trichlorophenol	0.00	196	0		N.D.	
47) 1,1'-Biphenyl	9.85	154	27		N.D.	
48) 2-Chloronaphthalene	0.00	162	0		N.D.	
49) 2-Nitroaniline	9.90	65	51		N.D.	
50) Dimethylphthalate	0.00	163	0		N.D.	
51) 1,4-Dinitrobenzene	0.00	168	0		N.D.	
52) 1,3-Dinitrobenzene	0.00	168	0		N.D.	
53) 2,6-Dinitrotoluene	0.00	165	0		N.D.	
54) Acenaphthylene	0.00	152	0		N.D.	
55) 1,2-Dinitrobenzene	0.00	168	0		N.D.	
56) 3-Nitroaniline	10.70	138	26		N.D.	
57) Acenaphthene	0.00	153	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 L0627006.D L8270M.M Mon Jul 02 11:59:30 2007

Quantitation Report

Data File : X:\MSABN\LOUIE\062707\L0627006.D  
 Acq On : 27 Jun 2007 18:06  
 Sample : JPL39-002  
 Misc : 5970L 1020ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 2 11:59 2007

Vial: 4  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270M.RES

Quant Method : X:\MSABN\L...\L8270M.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 02 11:48:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	0.00	109	0		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	11.20	149	68		N.D.	
65) Fluorene	0.00	166	0		N.D.	
66) 4-Chlorophenyl-phenylether	0.00	204	0		N.D.	
67) 4-Nitroaniline	0.00	138	0		N.D.	
69) 4,6-Dinitro-2-methylphenol	0.00	198	0		N.D.	
70) N-nitrosodiphenylamine	11.66	169	673		N.D.	
71) 1,2-Diphenylhydrazine	11.66	77	192		N.D.	
73) 4-Bromophenyl-phenylether	0.00	248	0		N.D.	
74) Hexachlorobenzene	0.00	284	0		N.D.	
75) Atrazine	0.00	200	0		N.D.	
76) Pentachlorophenol	0.00	266	0		N.D.	
77) Phenanthrene	0.00	178	0		N.D.	
78) Anthracene	0.00	178	0		N.D.	
79) Carbazole	0.00	167	0		N.D.	
80) Di-n-butylphthalate	13.35	149	418		N.D.	
81) Fluoranthene	0.00	202	0		N.D.	
83) Benzidine	0.00	184	0		N.D.	
84) Pyrene	0.00	202	0		N.D.	
86) Butylbenzylphthalate	0.00	149	0		N.D.	
87) Bis(2-ethylhexyl)adipate	15.86	129	40		N.D.	
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	16.84	228	35		N.D.	
90) bis(2-Ethylhexyl)phthalate	16.92	149	153		N.D.	
91) Chrysene	16.84	228	35		N.D.	
93) Di-n-octylphthalate	0.00	149	0		N.D.	d
94) Benzo[b]fluoranthene	0.00	252	0		N.D.	
95) Benzo[k]fluoranthene	0.00	252	0		N.D.	
96) Benzo[a]pyrene	0.00	252	0		N.D.	
97) Indeno[1,2,3-cd]pyrene	0.00	276	0		N.D.	
98) Dibenz[a,h]anthracene	0.00	278	0		N.D.	
99) Benzo[g,h,i]perylene	0.00	276	0		N.D.	



**Metals Data**

**JPL39**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-17-5	JPL39-001
MW-17-4	JPL39-002
MW-17-3	JPL39-003
MW-17-2	JPL39-004
MW-17-1	JPL39-005
DUPE-3-2007	JPL39-006
EB-5-6/19/07	JPL39-007

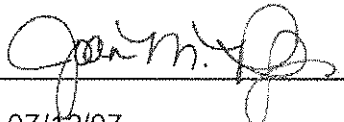
Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:   
 Date: 07/12/07

Name: Joan M. Phillips  
 Title: Chemist

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-17-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

Matrix (soil/water): Water

Lab Sample ID: JPL39-001

Level (low/med): LOW

Date Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	7.66			M	R019412
7440-70-2	Calcium	10800			P	R019411
7440-47-3	Chromium	1.54			M	R019412
7439-89-6	Iron	2330			P	R019411
7439-92-1	Lead	1.89			M	R019412
7439-95-4	Magnesium	5000	U		P	R019411
7440-09-7	Potassium	5000	U		P	R019411
7440-23-5	Sodium	59500			P	R019411

Color Before: Colorless Clarity Before: Clear Texture: \_\_\_\_\_

Color After: Colorless Clarity After: Clear Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-17-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

Matrix (soil/water): Water

Lab Sample ID: JPL39-002

Level (low/med): LOW

Date Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	4.48			M	R019127
7440-70-2	Calcium	16000		E	P	R019172
7440-47-3	Chromium	4.80			M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	55900			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-17-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

Matrix (soil/water): Water

Lab Sample ID: JPL39-003

Level (low/med): LOW

Date Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.97			M	R019127
7440-70-2	Calcium	85700		E	P	R019216
7440-47-3	Chromium	9.17			M	R019127
7439-89-6	Iron	1840			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	32000			P	R019216
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	26700			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-17-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

Matrix (soil/water): Water

Lab Sample ID: JPL39-004

Level (low/med): LOW

Date Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	134000		E	P	R019384
7440-47-3	Chromium	10.2			M	R019127
7439-89-6	Iron	495			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	38600			P	R019216
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	27300			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-17-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL39Matrix (soil/water): WaterLab Sample ID: JPL39-005Level (low/med): LOWDate Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units :

ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	50100		E	P	R019216
7440-47-3	Chromium	7.07			M	R019127
7439-89-6	Iron	275			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	15400			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	16700			P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-3-2Q07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

Matrix (soil/water): Water

Lab Sample ID: JPL39-006

Level (low/med): LOW

Date Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.29			M	R019127
7440-70-2	Calcium	85400		E	P	R019216
7440-47-3	Chromium	9.14			M	R019127
7439-89-6	Iron	2360			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	31800			P	R019216
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	26500			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-5-6/19/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

Matrix (soil/water): Water

Lab Sample ID: JPL39-007

Level (low/med): LOW

Date Received: 06/20/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5000	U	E	P	R019172
7440-47-3	Chromium	1.00	U		M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	5000	U		P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL39**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL39

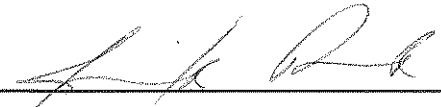
SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-17-5</u>	<u>JPL39-001</u>
<u>MW-17-5D</u>	<u>JPL39-001D</u>
<u>MW-17-5MS</u>	<u>JPL39-001MS</u>
<u>MW-17-5MSD</u>	<u>JPL39-001MSD</u>
<u>MW-17-4</u>	<u>JPL39-002</u>
<u>MW-17-4MS</u>	<u>JPL39-002MS</u>
<u>MW-17-4MSD</u>	<u>JPL39-002MSD</u>
<u>MW-17-3</u>	<u>JPL39-003</u>
<u>MW-17-3D</u>	<u>JPL39-003Dup</u>
<u>MW-17-2</u>	<u>JPL39-004</u>
<u>MW-17-1</u>	<u>JPL39-005</u>
<u>DUPE-3-2Q07</u>	<u>JPL39-006</u>
<u>DUPE-3-2Q07MS</u>	<u>JPL39-006MS</u>
<u>DUPE-3-2Q07MSD</u>	<u>JPL39-006MSD</u>
<u>EB-5-6/19/07</u>	<u>JPL39-007</u>

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Pennor

Date: 7-11-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL39  
**Sample Number:** MW-17-5 **Date/Time Collected:** 06/19/2007 07:50  
**Lab Sample ID:** JPL39-001 **Date/Time Received:** 06/20/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.4		0.10	0.10	06/20/2007	06/20/2007	R018892

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	210		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/20/2007	06/20/2007	R018785
Sulfate as SO4	14808-79-8	10	19		10	1.7	06/20/2007	06/20/2007	R018785
Chloride	16887-00-6	2	9.8		2.0	0.15	07/05/2007	07/05/2007	R019291

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4		4	4	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	110		4	4	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/28/2007	06/29/2007	R019096

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL39  
**Sample Number:** MW-17-4 **Date/Time Collected:** 06/19/2007 08:47  
**Lab Sample ID:** JPL39-002 **Date/Time Received:** 06/20/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.2		0.10	0.10	06/20/2007	06/20/2007	R018892

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	200		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/20/2007	06/20/2007	R018785
Sulfate as SO4	14808-79-8	10	19		10	1.7	06/20/2007	06/20/2007	R018785
Chloride	16887-00-6	2	10		2.0	0.15	07/05/2007	07/05/2007	R019291

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4		4	4	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	120		4	4	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/28/2007	06/29/2007	R019096

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL39  
**Sample Number:** MW-17-3 **Date/Time Collected:** 06/19/2007 10:15  
**Lab Sample ID:** JPL39-003 **Date/Time Received:** 06/20/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	06/20/2007	06/20/2007	R018892

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	450		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	8.1		2.0	0.55	06/20/2007	06/20/2007	R018785
Sulfate as SO4	14808-79-8	10	69		10	1.7	06/20/2007	06/20/2007	R018785
Chloride	16887-00-6	10	59		10	0.76	07/05/2007	07/06/2007	R019291

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4	U	4	4	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	180		4	4	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	46		4.0	0.56	06/28/2007	06/29/2007	R019096





**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL39  
**Sample Number:** MW-17-1 **Date/Time Collected:** 06/19/2007 11:51  
**Lab Sample ID:** JPL39-005 **Date/Time Received:** 06/20/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.8		0.10	0.10	06/20/2007	06/20/2007	R018892

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	240		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.45		0.20	0.055	06/20/2007	06/20/2007	R018785
Sulfate as SO4	14808-79-8	10	25		10	1.7	06/20/2007	06/20/2007	R018785
Chloride	16887-00-6	10	13		10	0.76	07/05/2007	07/06/2007	R019291

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4	U	4	4	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	160		4	4	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/28/2007	06/29/2007	R019096

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL39  
**Sample Number:** DUPE-3-2Q07 **Date/Time Collected:** 06/19/2007 00:00  
**Lab Sample ID:** JPL39-006 **Date/Time Received:** 06/20/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	06/20/2007	06/20/2007	R018892

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	470		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	8.2		2.0	0.55	06/20/2007	06/20/2007	R018785
Sulfate as SO4	14808-79-8	10	70		10	1.7	06/20/2007	06/20/2007	R018785
Chloride	16887-00-6	10	59		10	0.76	07/05/2007	07/06/2007	R019291

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4	U	4	4	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	180		4	4	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	46		4.0	0.56	06/28/2007	06/29/2007	R019096

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL39  
**Sample Number:** EB-5-6/19/07 **Date/Time Collected:** 06/19/2007 11:37  
**Lab Sample ID:** JPL39-007 **Date/Time Received:** 06/20/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.4		0.10	0.10	06/20/2007	06/20/2007	R018892

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	10		2	2	06/29/2007	07/03/2007	R019145

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/20/2007	06/21/2007	R018785
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/20/2007	06/21/2007	R018785
Chloride	16887-00-6	1	1.0	U	1.0	0.076	06/20/2007	06/21/2007	R018785

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/02/2007	07/02/2007	R019195
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	07/02/2007	07/02/2007	R019195

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/28/2007	06/29/2007	R019096

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL40**

**JULY 12, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL40  
Date of Report: July 12, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-22-5	JPL40-001	VOA/MET/INO
MW-22-4	JPL40-002	VOA/MET/INO
MW-22-3	JPL40-003	VOA/MET/INO
MW-22-2	JPL40-004	VOA/MET/INO
MW-22-1	JPL40-005	VOA/MET/INO
EB-6-6/20/07	JPL40-006	VOA/MET/INO
TB-6-6/20/07	JPL40-007	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

Two of two VOA vials for TB-6-6/20/07 were received with air bubbles less than ¼ inch in size.

One of three VOA vials for EB-6-6/20/07 was received broken.

### **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factor was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 (r values greater than 0.995) and were therefore compliant.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP-MS Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production. For the analytical run, R019172, Form 2A shows CCV recoveries for magnesium and potassium of 111.6% and 111.3%, respectively. These recoveries are within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115. Data have been reported as is.

The serial dilution for the element calcium did not agree within 10% of the original determination after correction for dilution for sample MW-22-5. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### Miscellaneous Inorganics:

For run sequence R018984, the matrix spike recovery was outside the established control limits for the sulfate and nitrate analysis. All other quality control elements are within control limits. Therefore, no further corrective action was taken.



## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
- J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
- E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
- C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

12 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/12/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL40-001	06/21/2007 10:10 AM	06/20/2007 07:45 AM	MW-22-5	A-	IN	IN	IN	A-	IN	IN	IN	IN
JPL40-002	06/21/2007 10:10 AM	06/20/2007 08:25 AM	MW-22-4	A-	IN	IN	IN	A-	IN	IN	IN	IN
JPL40-003	06/21/2007 10:10 AM	06/20/2007 09:03 AM	MW-22-3	A-	IN	IN	IN	A-	IN	IN	IN	IN
JPL40-004	06/21/2007 10:10 AM	06/20/2007 09:42 AM	MW-22-2	A-	IN	IN	IN	A-	IN	IN	IN	IN
JPL40-005	06/21/2007 10:10 AM	06/20/2007 10:20 AM	MW-22-1	A-	IN	IN	IN	A-	IN	IN	IN	IN
JPL40-006	06/21/2007 10:10 AM	06/20/2007 10:04 AM	EB-6-6/20/07	A-	IN	IN	IN	A-	IN	IN	IN	IN
JPL40-007	06/21/2007 10:10 AM	06/20/2007 12:00 AM	TB-6-6/20/07								IN	

Approved By: *[Signature]*

On: *[Signature]*

Samples identified with a \* client has requested QC for

LEGEND: -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATELLE  
 ADDRESS: 3990 OLD TOWN AVE., #205  
SAN DIEGO, CA 92110  
 ATTENTION: DAVID CONNER  
 PROJECT NAME: TRPL GW MON 2007  
 PROJECT CONTACT: DAVID CONNER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/PO NO.: 648690 / 210645

CHAIN OF CUSTODY RECORD SDG # \_\_\_\_\_  
 42858  
 WORK ORDER ID# \_\_\_\_\_

NO. OF CONTAINERS  
 VOC (524.2)  
 Total C (200.8)  
 LEAD (200.8)  
 ARSENIC (200.8)  
 CHLORIDE (714.0)  
 (TESTED) (30.130.2, 163.1/17.1)

TESTS TO PERFORM



940 South Hamer St, Seattle, WA 98108 (206) 767-9061 FAX: (206) 5063  
 1101 Latwood Ave, Yakima, WA 98902 (509) 248-5407 FAX: (509) 248-1265

LAB #	SAMPLE ID / LOCATION	DATE	TIME	MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
	MW-22-5	6/6/07	745	W	5	X	
	MW-22-4		825	X	X	X	
	MW-22-3		903	X	X	X	
	MW-22-2		942	X	X	X	
	MW-22-1		1004	X	X	X	
	EB-6-6	6/20/07		X	X	X	EQUIP. BANK
	TR-6-6	6/20/07		X	X	X	TRIP. BANK

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE.  
 2. BE SPECIFIC IN TEST REQUESTS.  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE.

NAME: BATELLE ADDRESS: 505 KING AVE  
 CITY, STATE, ZIP: COLUMBUS, OH 43201  
 RECEIVED BY (SIGN AND PRINT): GEORGE TAPKINS

DATE: 6/20/07 TIME: 1300  
 DATE: 11/21/07 TIME: 10:10

TURNAROUND REQUEST:  
 STD. 10-14 WORKING DAYS  
 24-48 HRS. (100% SUR)  
 72 HRS. (75% SUR)  
 5 DAYS (60% SUR)  
 OTHER: \_\_\_\_\_  
 TEMP. \_\_\_\_\_  
 QUANTITY SEAL



**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

**SDG: JPL40**

**Cooler: AAP007**

**Temperatures: 4.8**

**COC #: 42858**

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL40-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL40-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL40-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL40-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL40-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL40-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	500 ml cylinder, poly, HNO3	<2	N/A
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL40-007	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH



**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL40  
Cooler: AAP007  
Temperatures: 4.8  
COC #: 42858

Sample	Bottle #	Bottle Description	pH	Bubbles
--------	----------	--------------------	----	---------

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

**Battelle**

**SDG No.: JPL40**

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- III. Index: 14-15
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  - A. QC Summary Data: 1-8
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Completed and checked by: Judy Ecklund Date: 7/12/07

**SAMPLE DATA**

SDG JPL40

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-5

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL40 Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL40-001

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0626023.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/26/2007 16:45

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-001  
 Lab File ID: M0626023.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 16:45  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-001  
 Lab File ID: M0626023.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 16:45  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

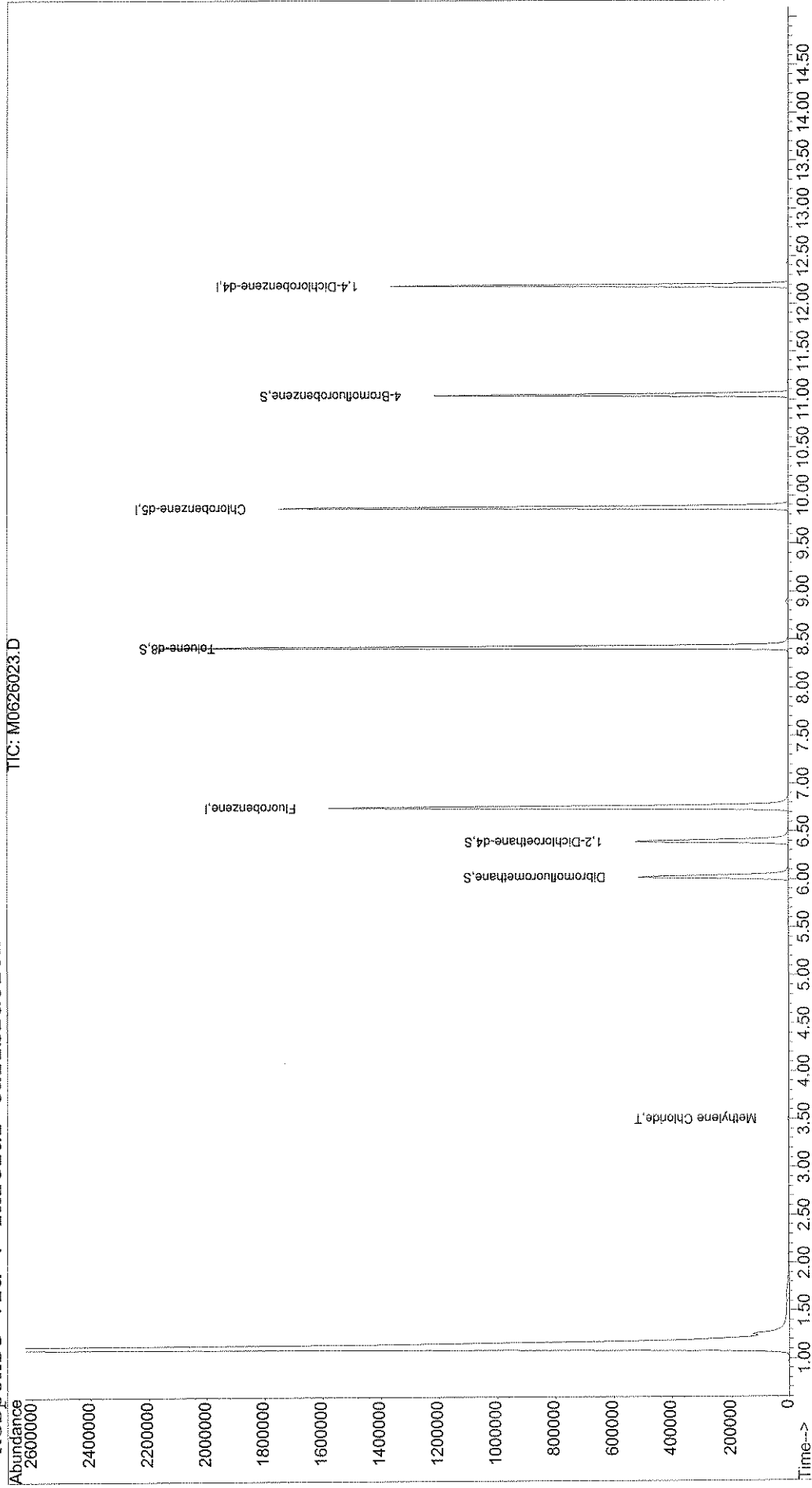
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626023.D  
Acq On : 26 Jun 2007 16:45  
Sample : JPL40-001  
Misc : #3 5ml+IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:25 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626023.D  
 Acq On : 26 Jun 2007 16:45  
 Sample : JPL40-001  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:25 2007

Vial: 78  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1603200	50.00	ug/l	0.00 95.34%
54) Chlorobenzene-d5	9.87	117	1014011	50.00	ug/l	0.00 102.19%
74) 1,4-Dichlorobenzene-d4	12.19	152	362509	50.00	ug/l	0.00 93.69%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	384478	52.94	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.88%
40) 1,2-Dichloroethane-d4	6.39	65	430960	54.84	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.68%
55) Toluene-d8	8.42	98	1511880	48.27	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.54%
76) 4-Bromofluorobenzene	11.05	95	394600	57.92	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.84%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.07	76	2363	N.D.		
15) Allyl chloride	3.23	76	168	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.46	43	60	N.D.		
18) Methylene Chloride	3.50	84	2138	0.25	ug/l	94
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0626023.D M8260W.M Wed Jun 27 07:28:09 2007

*Jg* 8/6/27/07 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626023.D  
 Acq On : 26 Jun 2007 16:45  
 Sample : JPL40-001  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:25 2007

Vial: 78  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	70		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.87	41	78		N.D.	
34) Chloroform	5.83	83	58		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	817		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	484		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2056		N.D.	
66) Chlorobenzene	9.90	112	154		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626023.D  
 Acq On : 26 Jun 2007 16:45  
 Sample : JPL40-001  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:25 2007

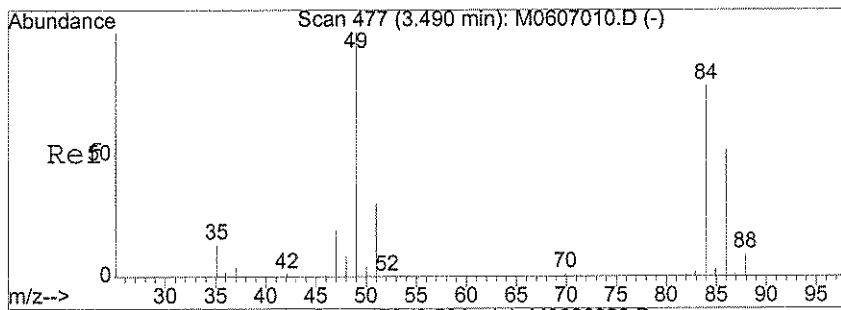
Vial: 78  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

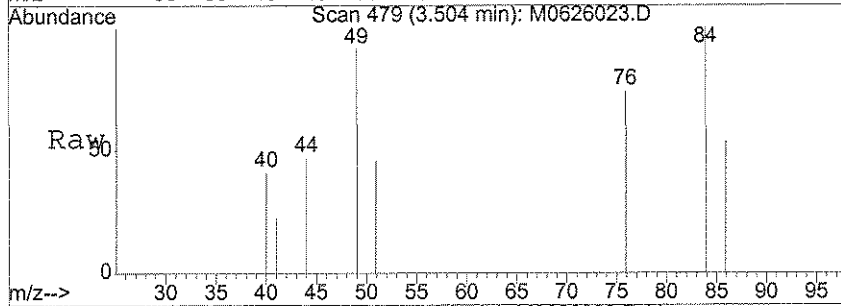
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	658		N.D.	
69) m,p-Xylene	10.12	106	535		N.D.	
70) o-xylene	10.51	106	68		N.D.	
71) Styrene	10.54	104	552		N.D.	
72) Bromoform	10.76	173	196		N.D.	
73) Isopropylbenzene	11.04	105	540		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.04	83	58		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	72		N.D.	
81) 2-Chlorotoluene	11.28	91	72		N.D.	
82) 4-Chlorotoluene	11.28	91	72		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.77	119	57		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	118		N.D.	
86) sec-butylbenzene	11.99	105	63		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	203		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	202		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	62		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

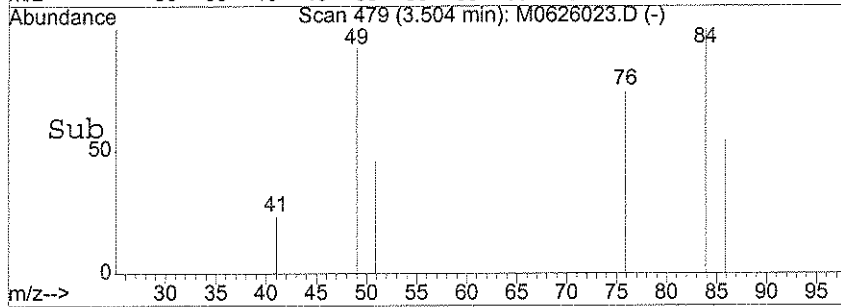
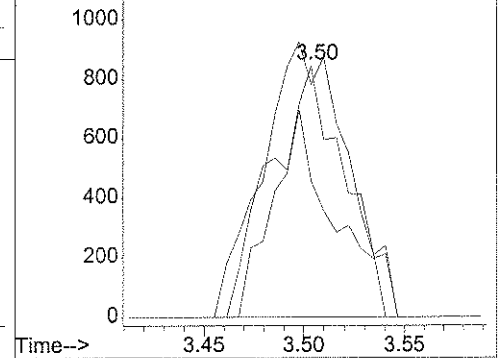


#18  
 Methylene Chloride  
 Concen: 0.25 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0626023.D  
 Acq: 26 Jun 2007 16:45

Tgt Ion:	84	Resp:	2138
Ion Ratio	Lower	Upper	
84	100		
49	126.7	113.6	153.6
86	70.6	45.8	85.8



Abundance  
 Ion 84.00 (83.70 to 84.70): M0626023.D  
 Ion 49.00 (48.70 to 49.70): M0626023.D  
 Ion 86.00 (85.70 to 86.70): M0626023.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-4

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL40 Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL40-002

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0626024.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/26/2007 17:12

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	2.7	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-002  
 Lab File ID: M0626024.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 17:12  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 17:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

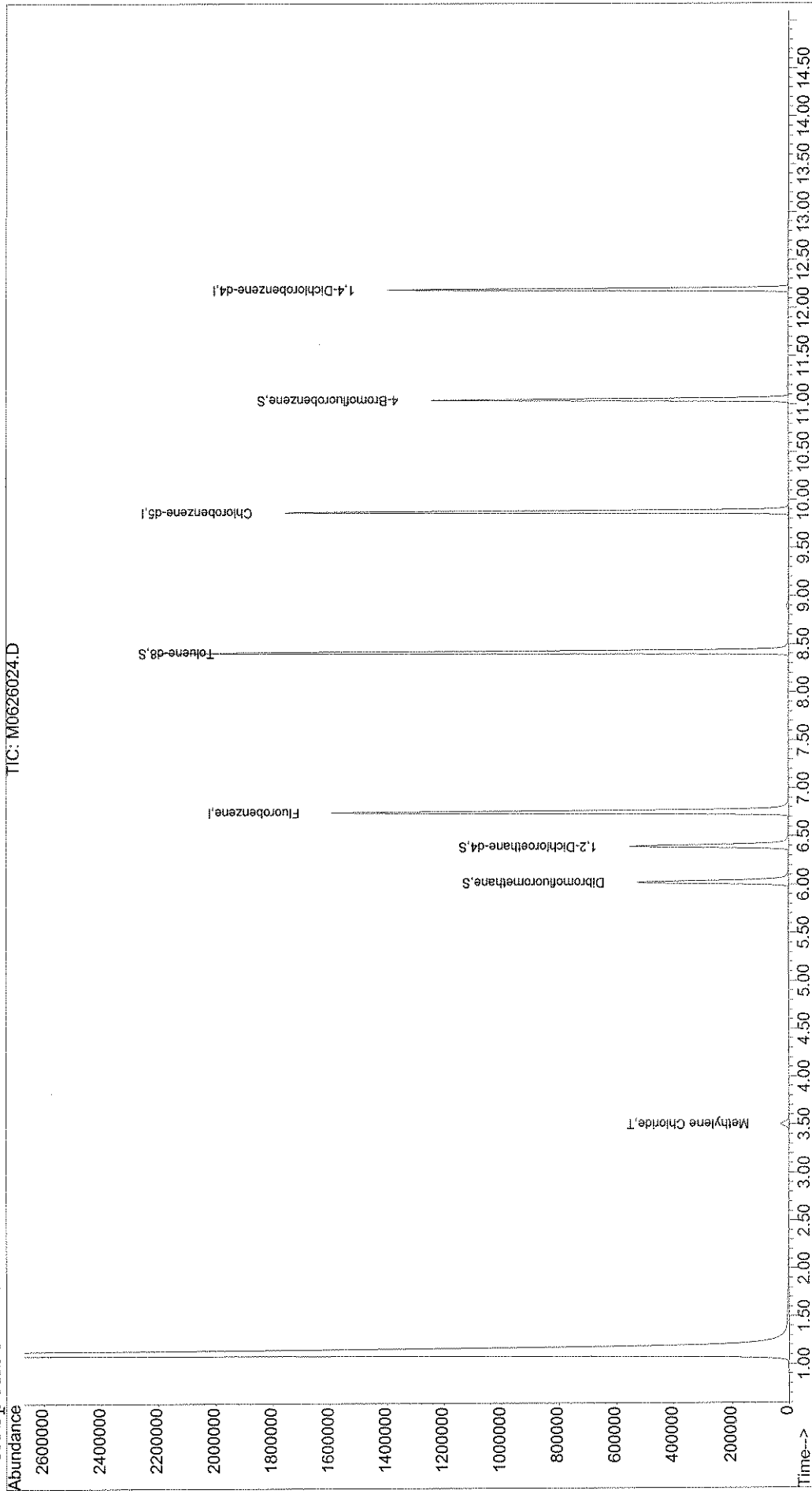
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626024.D  
Acq On : 26 Jun 2007 17:12  
Sample : JPL40-002  
Misc : #3 5ml+IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:29 2007  
Vial: 79  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626024.D  
 Acq On : 26 Jun 2007 17:12  
 Sample : JPL40-002  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:29 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	6.75	96	1630382	50.00	ug/l	0.00	96.96%
54) Chlorobenzene-d5	9.87	117	1030217	50.00	ug/l	0.00	103.82%
74) 1,4-Dichlorobenzene-d4	12.19	152	370200	50.00	ug/l	0.00	95.68%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	390249	52.84	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.68%	
40) 1,2-Dichloroethane-d4	6.39	65	441766	55.28	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.56%	
55) Toluene-d8	8.42	98	1533200	48.18	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.36%	
76) 4-Bromofluorobenzene	11.05	95	400273	57.53	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.06%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	795	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	574	N.D.		
18) Methylene Chloride	3.50	84	22947	2.67	ug/l	98
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626024.D  
 Acq On : 26 Jun 2007 17:12  
 Sample : JPL40-002  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:29 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	6.00	56	70		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	780		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	1337		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.30	43	150		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2022		N.D.	
66) Chlorobenzene	9.89	112	141		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626024.D  
 Acq On : 26 Jun 2007 17:12  
 Sample : JPL40-002  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:29 2007

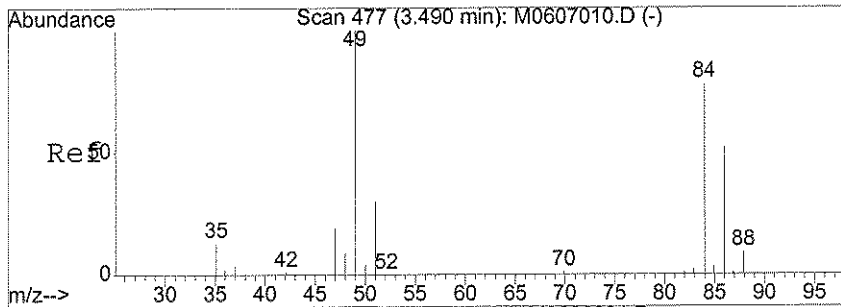
Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

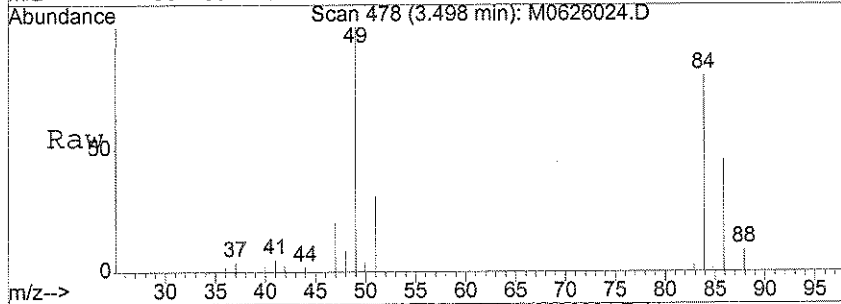
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.12	91	1015		N.D.	
69) m,p-Xylene	10.10	106	564		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.53	104	178		N.D.	
72) Bromoform	10.76	173	247		N.D.	
73) Isopropylbenzene	11.05	105	163		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	57		N.D.	
81) 2-Chlorotoluene	11.28	91	57		N.D.	
82) 4-Chlorotoluene	11.28	91	57		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	132		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.81	105	72		N.D.	
86) sec-butylbenzene	11.81	105	72		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	76		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	135		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

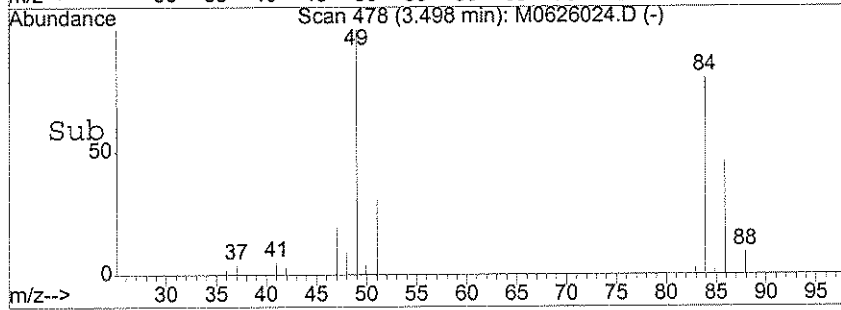
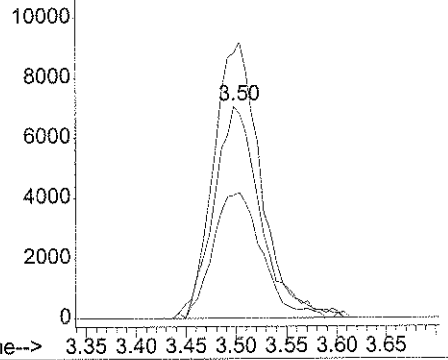


#18  
 Methylene Chloride  
 Concen: 2.67 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0626024.D  
 Acq: 26 Jun 2007 17:12

Tgt Ion	Resp	Lower	Upper
84	22947		
84	100		
49	133.2	113.6	153.6
86	62.4	45.8	85.8



Abundance  
 Ion 84.00 (83.70 to 84.70): M0626024.  
 Ion 49.00 (48.70 to 49.70): M0626024.  
 Ion 86.00 (85.70 to 86.70): M0626024.



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 17:36

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-003  
 Lab File ID: M0626025.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 17:36  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-003  
 Lab File ID: M0626025.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 17:36  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

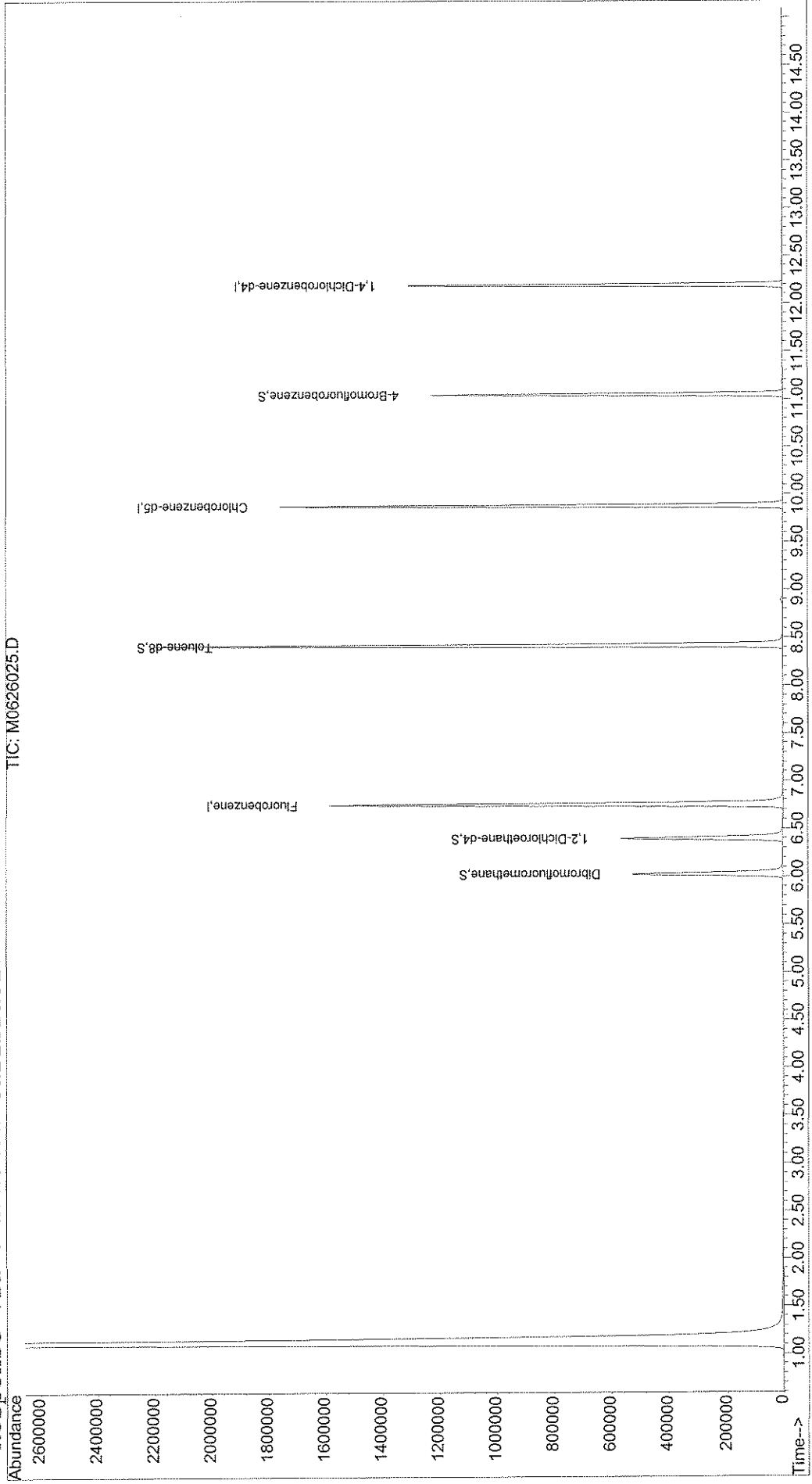
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626025.D Vial: 80  
Acq On : 26 Jun 2007 17:36 Operator: DGA  
Sample : JPL40-003 Inst : MOBY  
Misc : #4 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:31 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626025.D  
 Acq On : 26 Jun 2007 17:36  
 Sample : JPL40-003  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:31 2007

Vial: 80  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1632423	50.00	ug/l	0.00 97.08%
54) Chlorobenzene-d5	9.88	117	1033890	50.00	ug/l	0.00 104.19%
74) 1,4-Dichlorobenzene-d4	12.19	152	373596	50.00	ug/l	0.00 96.56%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	391138	52.89	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.78%
40) 1,2-Dichloroethane-d4	6.40	65	443111	55.38	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.76%
55) Toluene-d8	8.42	98	1539609	48.21	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.42%
76) 4-Bromofluorobenzene	11.05	95	396777	56.51	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	113.02%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	3.50	84	2066	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) Acrylonitrile	0.00	53	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626025.D  
 Acq On : 26 Jun 2007 17:36  
 Sample : JPL40-003  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:31 2007

Vial: 80  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.58	63	472		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	127		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.83	83	999		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	510		N.D.	
42) 1,2-Dichloroethane	6.40	62	121		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	62		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	224		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	269		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	323		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1981		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626025.D  
 Acq On : 26 Jun 2007 17:36  
 Sample : JPL40-003  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:31 2007

Vial: 80  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	210		N.D.	
69) m,p-Xylene	10.12	106	472		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.74	173	63		N.D.	
73) Isopropylbenzene	11.03	105	472		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	121		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	67		N.D.	
81) 2-Chlorotoluene	11.28	91	67		N.D.	
82) 4-Chlorotoluene	11.28	91	67		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	65		N.D.	
86) sec-butylbenzene	11.83	105	65		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	837		N.D.	
88) 4-Isopropyltoluene	12.19	119	55		N.D.	
89) 1,4-Dichlorobenzene	12.13	146	837		N.D.	
90) 1,2-Dichlorobenzene	12.58	146	276		N.D.	
91) n-Butylbenzene	12.54	91	62		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-004  
 Lab File ID: M0626026.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 18:09  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	5.9	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 18:09

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-2
---------

Lab Name: \_\_\_\_\_

SDG No.: JPL40

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019053

Lab Sample ID: JPL40-004

Lab File ID: M0626026.D

Date Collected: 06/20/2007

Date/Time Analyzed: 06/26/2007 18:09

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

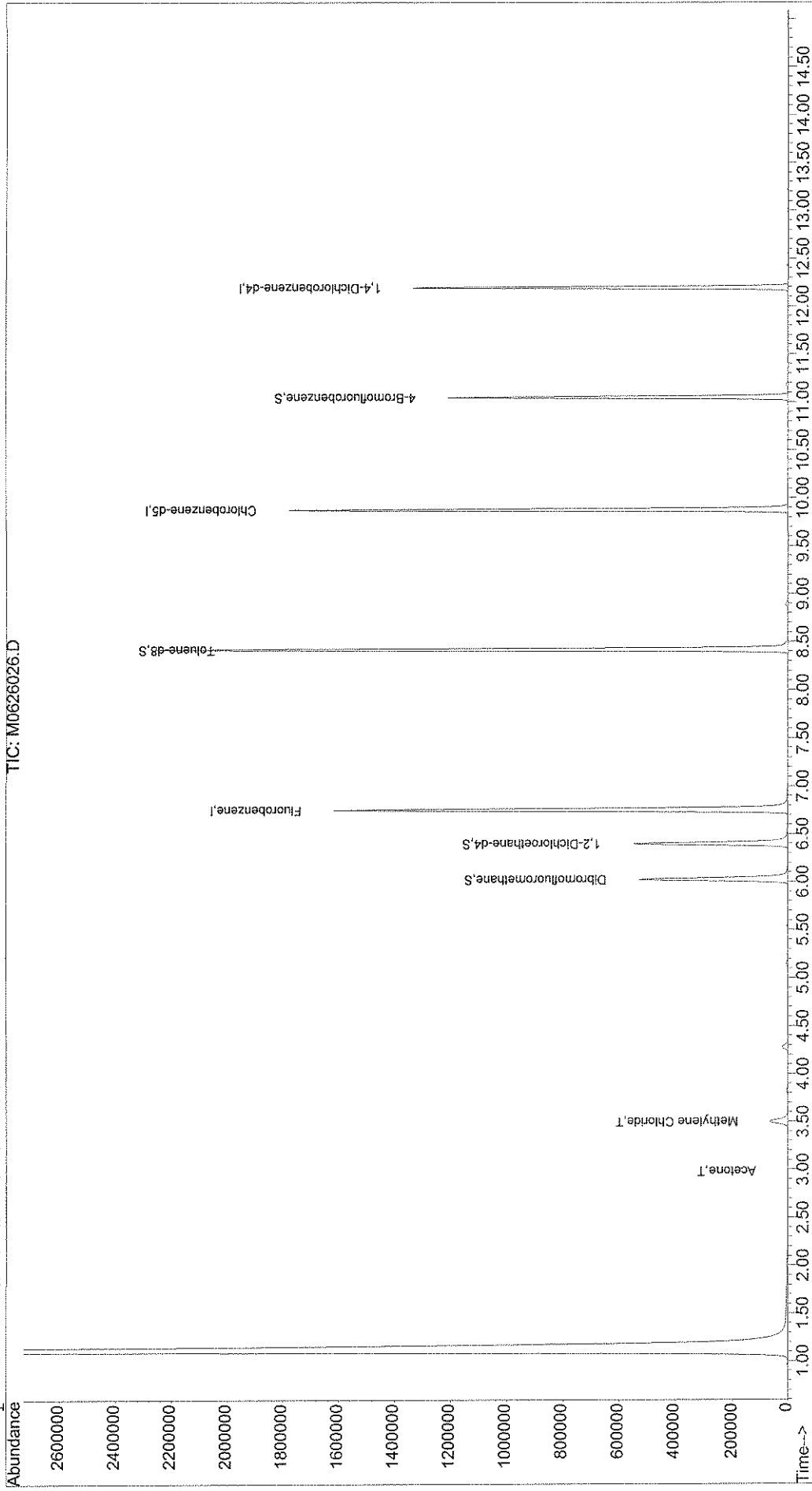
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626026.D  
Acq On : 26 Jun 2007 18:09  
Sample : JPL40-004  
Misc : #4 5ml+IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:36 2007  
Vial: 81  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626026.D  
 Acq On : 26 Jun 2007 18:09  
 Sample : JPL40-004  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:36 2007

Vial: 81  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1641849	50.00	ug/l	0.00	97.64%
54) Chlorobenzene-d5	9.88	117	1034643	50.00	ug/l	0.00	104.27%
74) 1,4-Dichlorobenzene-d4	12.20	152	366177	50.00	ug/l	0.00	94.64%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	396090	53.25	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.50%	
40) 1,2-Dichloroethane-d4	6.40	65	444359	55.22	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.44%	
55) Toluene-d8	8.42	98	1541206	48.23	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.46%	
76) 4-Bromofluorobenzene	11.05	95	396237	57.58	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.16%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	2654	1.47	ug/l	99
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.	d	
18) Methylene Chloride	3.50	84	50943	5.88	ug/l	97
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0626026.D M8260W.M Wed Jun 27 07:36:26 2007

*J. O. 6/27/07*  
 Page 1



Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626026.D  
 Acq On : 26 Jun 2007 18:09  
 Sample : JPL40-004  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:36 2007

Vial: 81  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.82	83	263		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	886		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	6.72	43	55	Below Cal	#	22
45) Trichloroethene	7.15	130	64		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	2269		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	79		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.32	43	853		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1918		N.D.	
66) Chlorobenzene	9.90	112	60		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

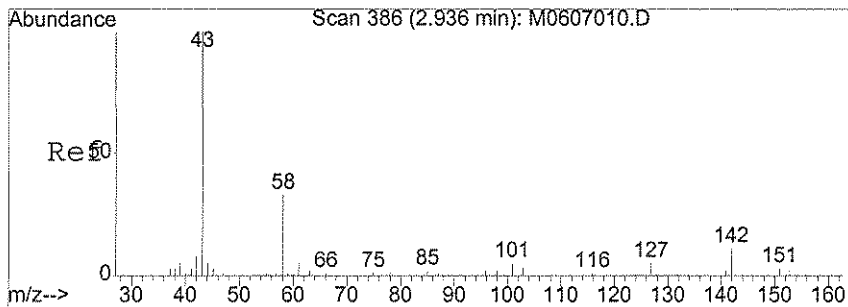
Data File : X:\MSVOA\MOBY\062607\M0626026.D  
 Acq On : 26 Jun 2007 18:09  
 Sample : JPL40-004  
 Misc : #4 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:36 2007

Vial: 81  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

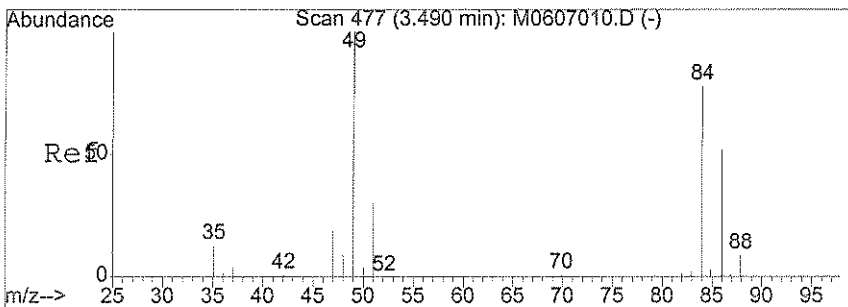
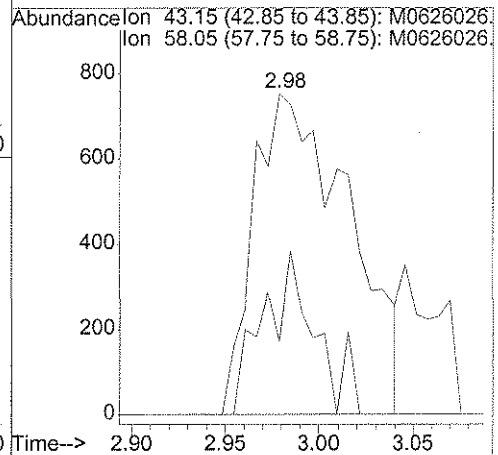
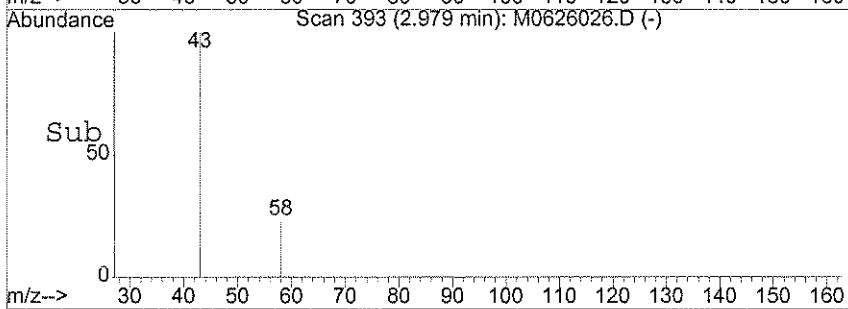
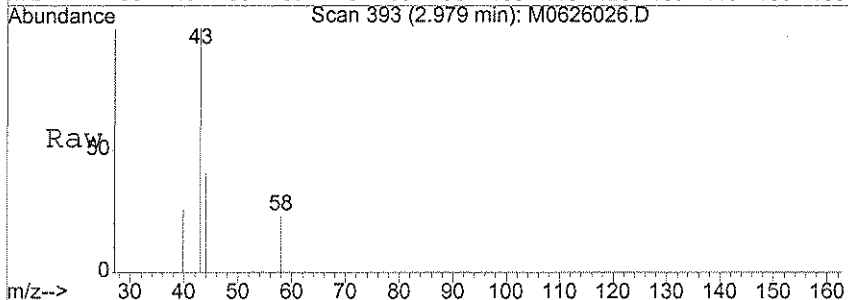
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	330		N.D.	
69) m,p-Xylene	10.11	106	629		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	288		N.D.	
73) Isopropylbenzene	11.04	105	518		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	66		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	75		N.D.	
81) 2-Chlorotoluene	11.38	91	63		N.D.	
82) 4-Chlorotoluene	11.38	91	63		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	122		N.D.	
88) 4-Isopropyltoluene	12.14	119	126		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	57		N.D.	
90) 1,2-Dichlorobenzene	12.58	146	74		N.D.	
91) n-Butylbenzene	12.54	91	153		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d



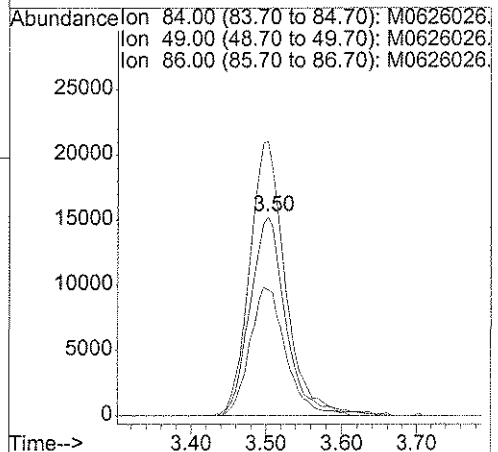
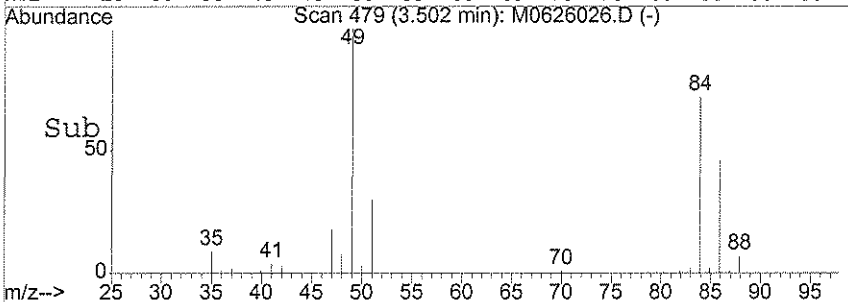
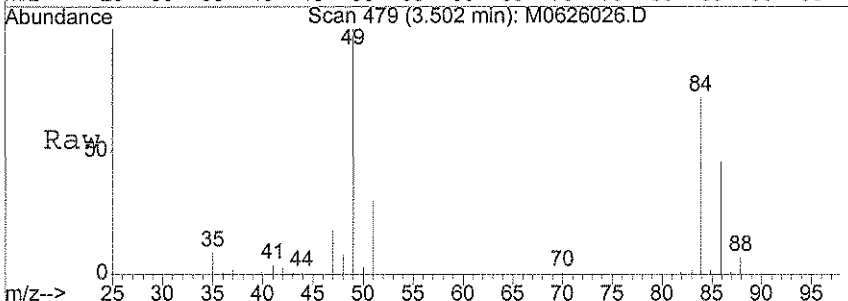
#11  
 Acetone  
 Concen: 1.47 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0626026.D  
 Acq: 26 Jun 2007 18:09

Tgt Ion:	Resp:	Lower	Upper
43	2654		
58	28.0	22.0	33.0



#18  
 Methylene Chloride  
 Concen: 5.88 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0626026.D  
 Acq: 26 Jun 2007 18:09

Tgt Ion:	Resp:	Lower	Upper
84	50943		
49	138.0	113.6	153.6
86	64.7	45.8	85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-1

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL40 Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL40-005

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0626027.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/26/2007 18:32

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626027.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 18:32

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-22-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-005  
 Lab File ID: M0626027.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 18:32  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

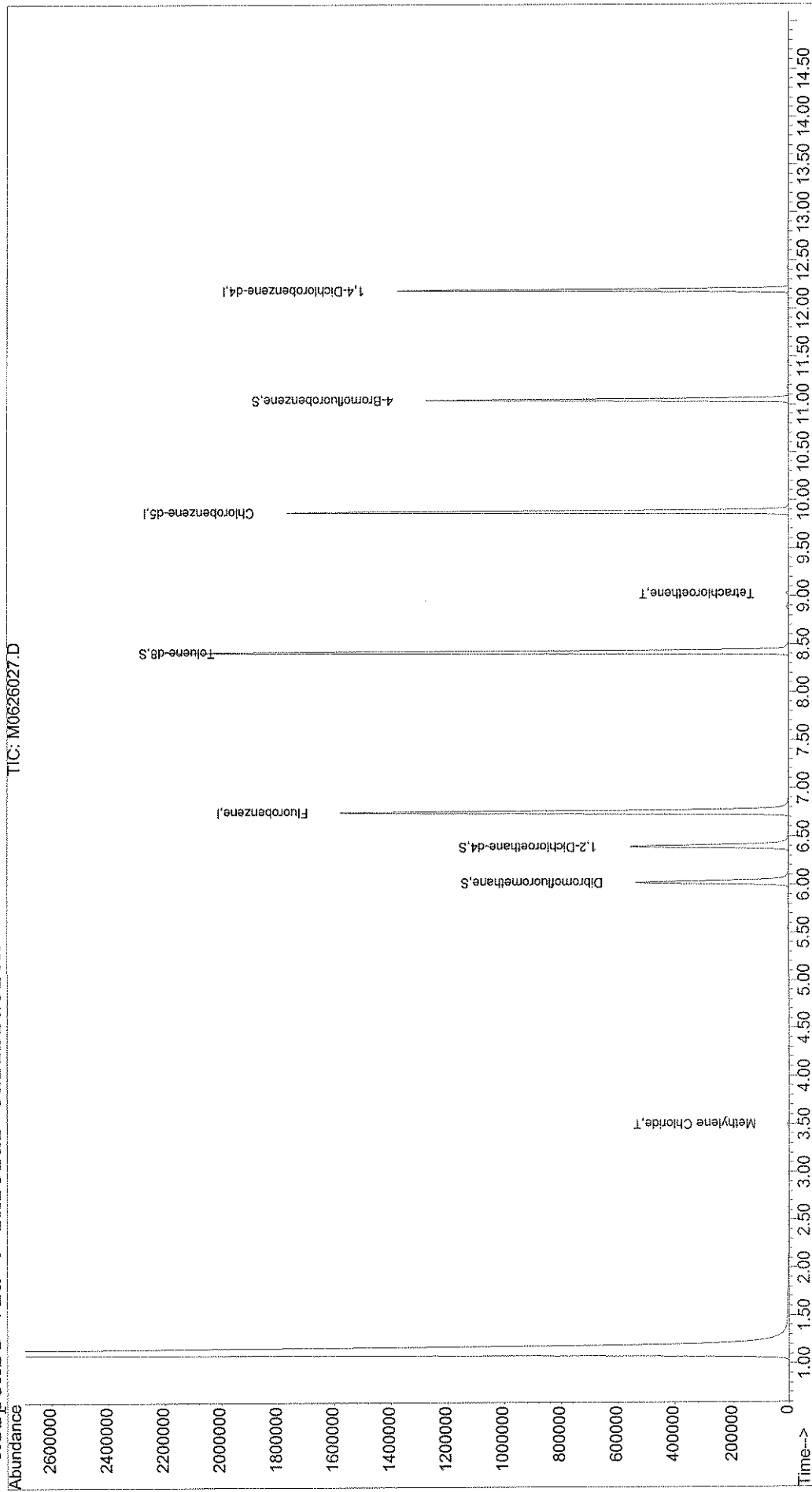
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626027.D  
Acq On : 26 Jun 2007 18:32  
Sample : JPL40-005  
Misc : #2 5ml+IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:39 2007  
Vial: 82  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626027.D  
 Acq On : 26 Jun 2007 18:32  
 Sample : JPL40-005  
 Misc : #2 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:39 2007

Vial: 82  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1632044	50.00	ug/l	0.00 97.05%
54) Chlorobenzene-d5	9.87	117	1041013	50.00	ug/l	0.00 104.91%
74) 1,4-Dichlorobenzene-d4	12.19	152	369748	50.00	ug/l	0.00 95.56%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	391614	52.97	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.94%
40) 1,2-Dichloroethane-d4	6.40	65	447173	55.90	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	111.80%
55) Toluene-d8	8.42	98	1543782	48.01	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.02%
76) 4-Bromofluorobenzene	11.05	95	407764	58.68	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.36%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	3910	0.45	ug/l	97
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

M0626027.D M8260W.M Wed Jun 27 07:39:32 2007

*J 8/27/07*  
 Page 1



Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626027.D  
 Acq On : 26 Jun 2007 18:32  
 Sample : JPL40-005  
 Misc : #2 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:39 2007

Vial: 82  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	1267		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.54	43	586		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.83	83	2051		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	651		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	191		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	65		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	528		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	3423	0.34	ug/l	90
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	314		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2089		N.D.	
66) Chlorobenzene	9.90	112	57		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0626027.D M8260W.M Wed Jun 27 07:39:33 2007

*J. G. Smith*  
 Page 2

Quantitation Report

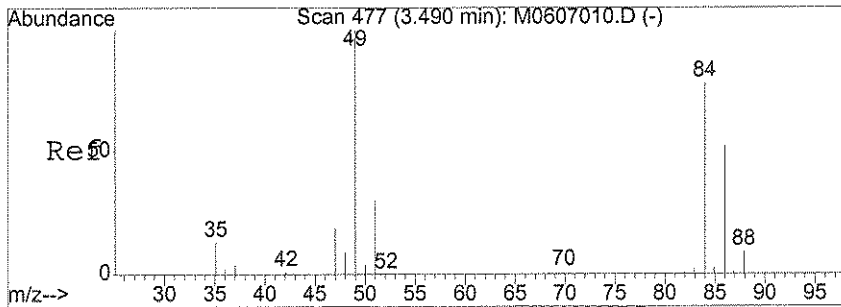
Data File : X:\MSVOA\MOBY\062607\M0626027.D  
 Acq On : 26 Jun 2007 18:32  
 Sample : JPL40-005  
 Misc : #2 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:39 2007

Vial: 82  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

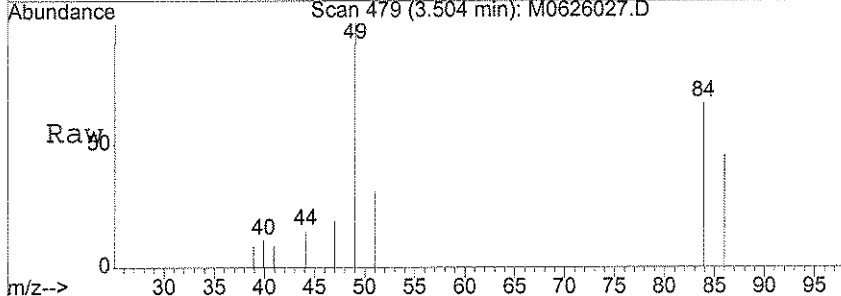
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.12	91	937		N.D.	
69) m,p-Xylene	10.12	106	320		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	207		N.D.	
73) Isopropylbenzene	11.04	105	946		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	62		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	55		N.D.	
80) n-Propylbenzene	11.27	91	150		N.D.	
81) 2-Chlorotoluene	11.27	91	150		N.D.	
82) 4-Chlorotoluene	11.27	91	150		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.88	105	73		N.D.	
86) sec-butylbenzene	11.98	105	58		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	56		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	61		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

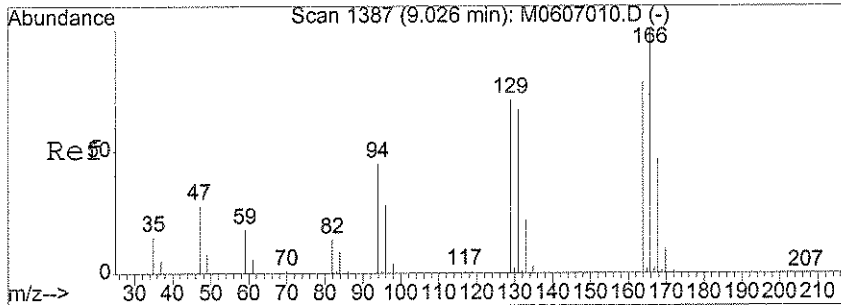
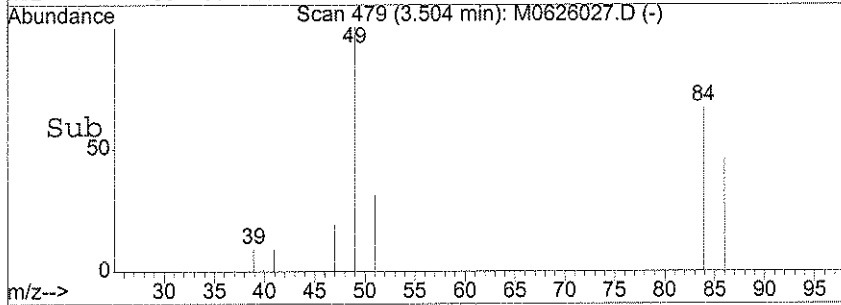
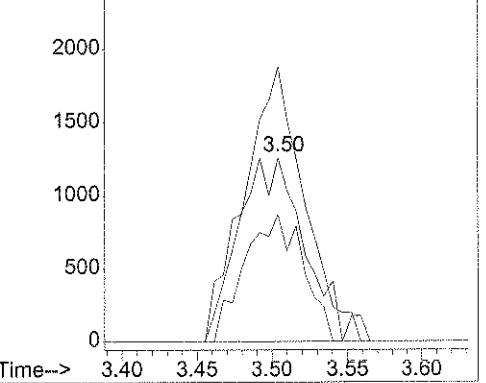


#18  
 Methylene Chloride  
 Concen: 0.45 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0626027.D  
 Acq: 26 Jun 2007 18:32

Tgt Ion	Resp	Lower	Upper
84	3910		
49	134.2	113.6	153.6
86	60.4	45.8	85.8

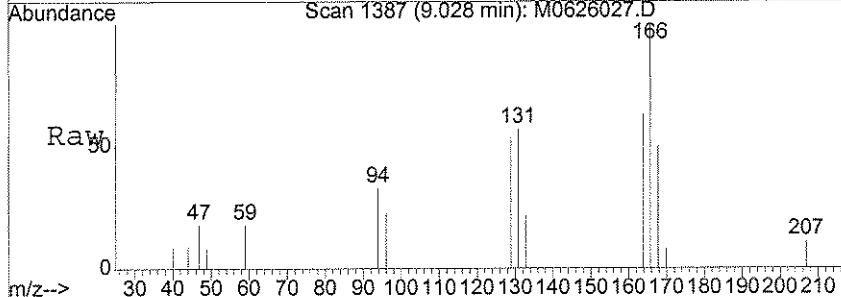


Abundance  
 Ion 84.00 (83.70 to 84.70): M0626027  
 Ion 49.00 (48.70 to 49.70): M0626027  
 Ion 86.00 (85.70 to 86.70): M0626027

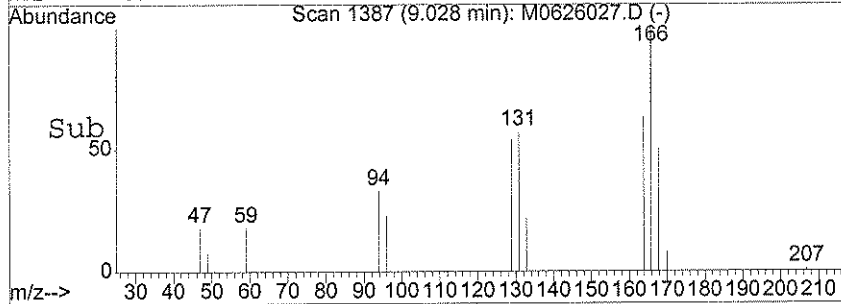
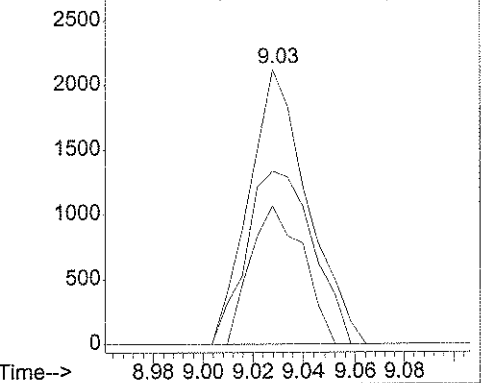


#60  
 Tetrachloroethene  
 Concen: 0.34 ug/l  
 RT: 9.03 min Scan# 1387  
 Delta R.T. 0.00 min  
 Lab File: M0626027.D  
 Acq: 26 Jun 2007 18:32

Tgt Ion	Resp	Lower	Upper
166	3423		
164	71.8	65.6	98.4
168	45.5	41.1	61.7



Abundance  
 Ion 165.95 (165.65 to 166.65): M06260  
 Ion 163.95 (163.65 to 164.65): M06260  
 Ion 167.95 (167.65 to 168.65): M06260



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-6-6/20/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-006  
 Lab File ID: M0626028.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 18:58  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	3.3	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-6-6/20/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626028.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 18:58

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-6-6/20/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-006  
 Lab File ID: M0626028.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 18:58  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

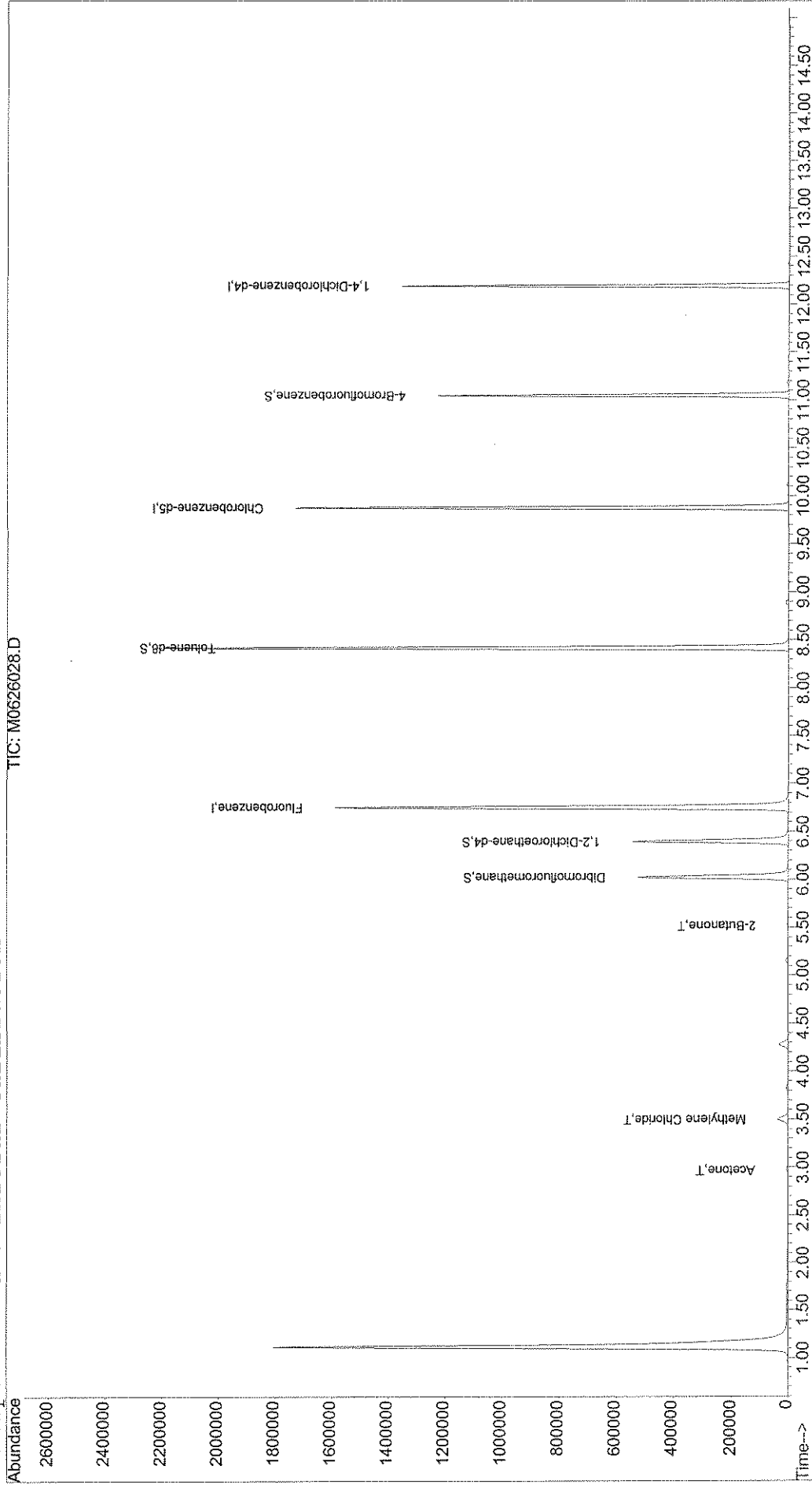
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626028.D  
Acq On : 26 Jun 2007 18:58  
Sample : JPL40-006  
Misc : #3 5ml+IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:41 2007  
Vial: 83  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626028.D  
 Acq On : 26 Jun 2007 18:58  
 Sample : JPL40-006  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:41 2007

Vial: 83  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1628226	50.00	ug/l	0.00 96.83%
54) Chlorobenzene-d5	9.88	117	1029205	50.00	ug/l	0.00 103.72%
74) 1,4-Dichlorobenzene-d4	12.19	152	368731	50.00	ug/l	0.00 95.30%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	391981	53.14	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.28%
40) 1,2-Dichloroethane-d4	6.39	65	443769	55.60	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	111.20%
55) Toluene-d8	8.42	98	1530199	48.13	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.26%
76) 4-Bromofluorobenzene	11.05	95	397300	57.33	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	114.66%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.97	43	13079	7.30	ug/l	96
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.	d	
18) Methylene Chloride	3.50	84	28279	3.29	ug/l	100
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0626028.D M8260W.M Wed Jun 27 07:41:55 2007

*J. Smith*  
 Page 1



Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626028.D  
 Acq On : 26 Jun 2007 18:58  
 Sample : JPL40-006  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:41 2007

Vial: 83  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	6064	1.82	ug/l #	92
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.83	83	66		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	611		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.49	92	983		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.20	43	368		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2041		N.D.	
66) Chlorobenzene	9.90	112	59		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

*J. Su/27/07*  
 Page 2

Quantitation Report

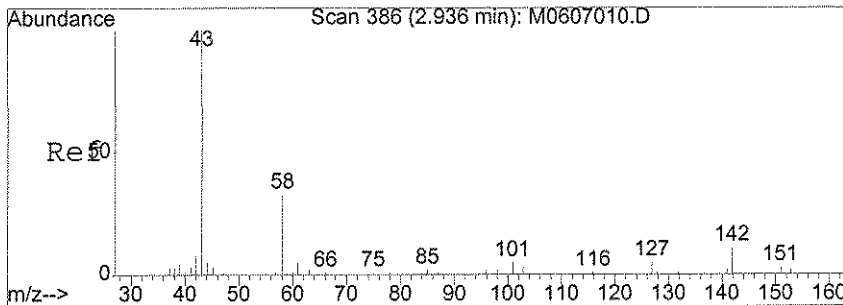
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 Acq On : 26 Jun 2007 18:58  
 Sample : JPL40-006  
 Misc : #3 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:41 2007

Vial: 83  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

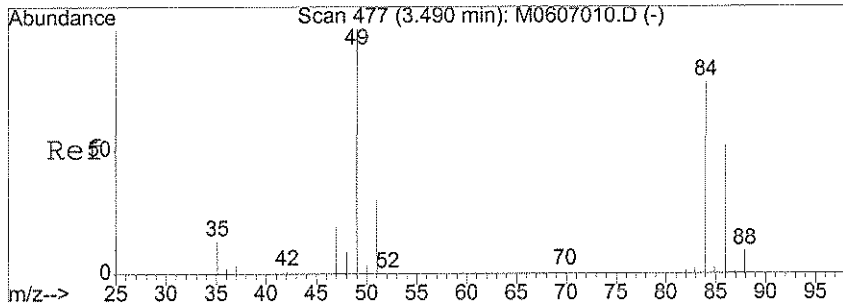
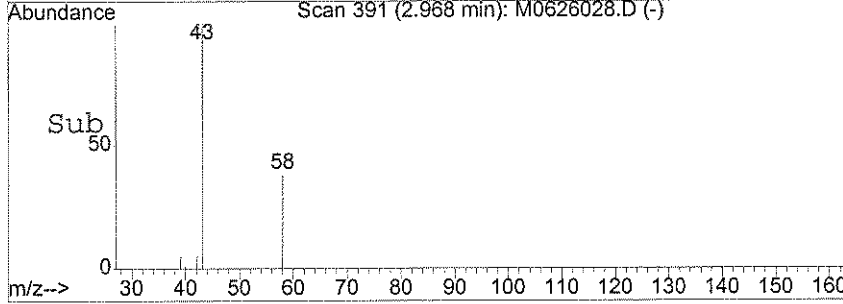
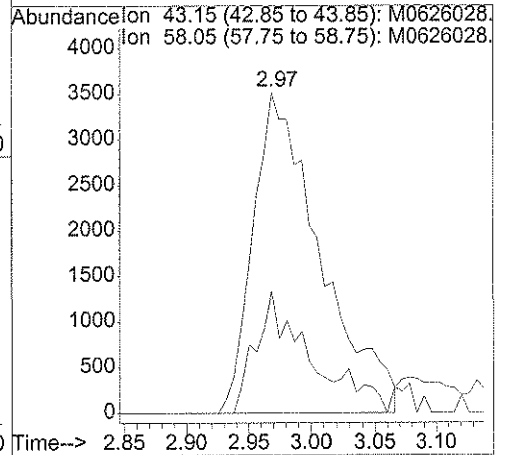
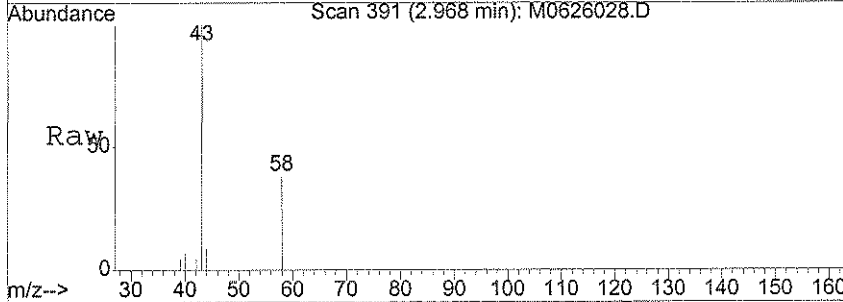
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	1919		N.D.	
69) m,p-Xylene	10.12	106	1808		N.D.	
70) o-xylene	10.50	106	548		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	218		N.D.	
73) Isopropylbenzene	10.86	105	61		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	56		N.D.	
80) n-Propylbenzene	11.28	91	67		N.D.	
81) 2-Chlorotoluene	11.28	91	67		N.D.	
82) 4-Chlorotoluene	11.28	91	67		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.98	105	59		N.D.	
86) sec-butylbenzene	11.98	105	59		N.D.	
87) 1,3-Dichlorobenzene	12.22	146	61		N.D.	
88) 4-Isopropyltoluene	12.13	119	138		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	61		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	190		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



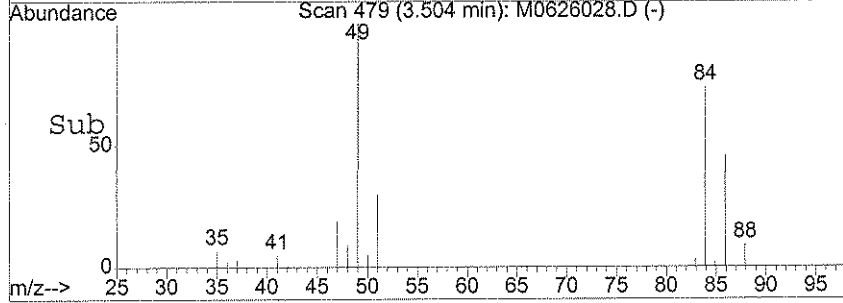
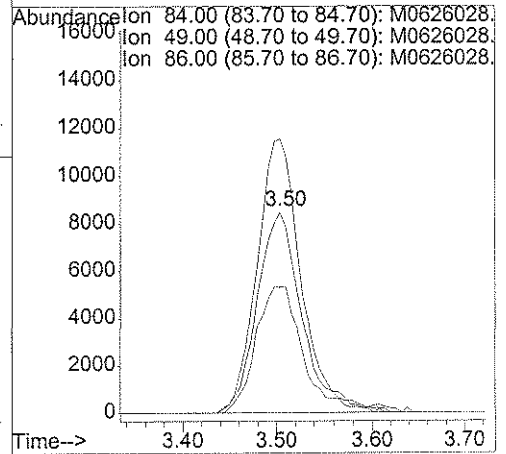
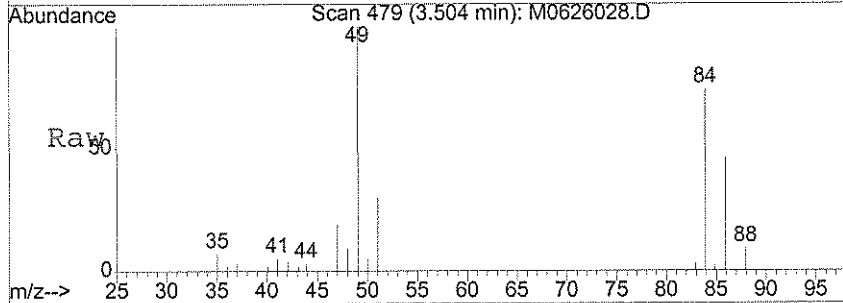
#11  
 Acetone  
 Concen: 7.30 ug/l  
 RT: 2.97 min Scan# 391  
 Delta R.T. -0.02 min  
 Lab File: M0626028.D  
 Acq: 26 Jun 2007 18:58

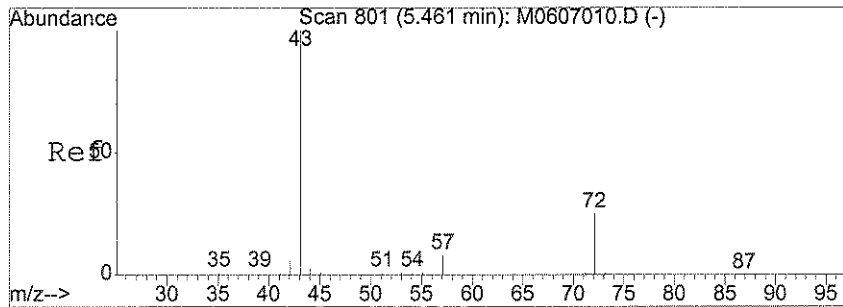
Tgt Ion: 43 Resp: 13079  
 Ion Ratio Lower Upper  
 43 100  
 58 25.6 22.0 33.0



#18  
 Methylene Chloride  
 Concen: 3.29 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0626028.D  
 Acq: 26 Jun 2007 18:58

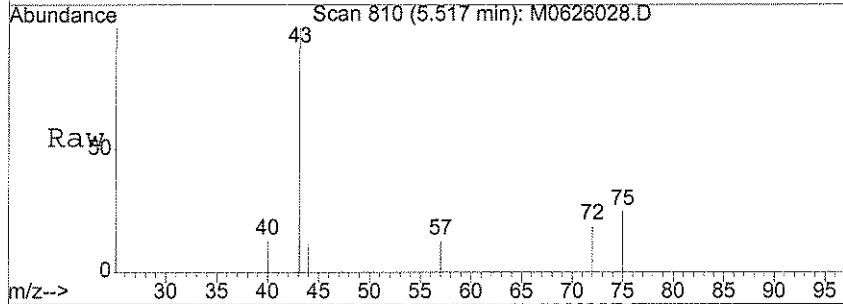
Tgt Ion: 84 Resp: 28279  
 Ion Ratio Lower Upper  
 84 100  
 49 134.0 113.6 153.6  
 86 65.7 45.8 85.8



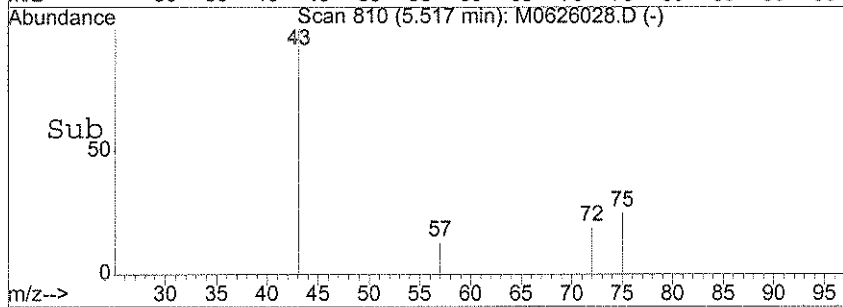
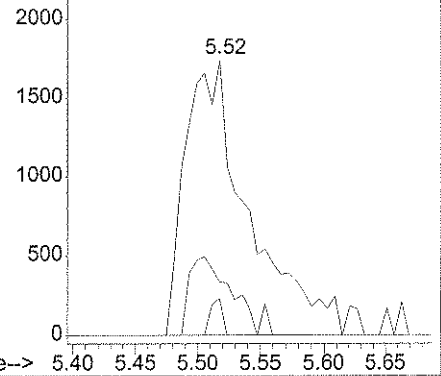


#30  
 2-Butanone  
 Concen: 1.82 ug/l  
 RT: 5.52 min Scan# 810  
 Delta R.T. 0.01 min  
 Lab File: M0626028.D  
 Acq: 26 Jun 2007 18:58

Tgt Ion	Resp	Lower	Upper
43	6064		
72	18.6	16.7	25.1
57	2.6	6.1	9.1#



Abundance  
 Ion 43.15 (42.85 to 43.85): M0626028  
 Ion 72.15 (71.85 to 72.85): M0626028  
 Ion 57.00 (56.70 to 57.70): M0626028



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-6-6/20/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 19:24

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	4.8		
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-6-6/20/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL40  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-007  
 Lab File ID: M0626029.D  
 Date Collected: 06/20/2007  
 Date/Time Analyzed: 06/26/2007 19:24  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-6-6/20/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL40-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/26/2007 19:24

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

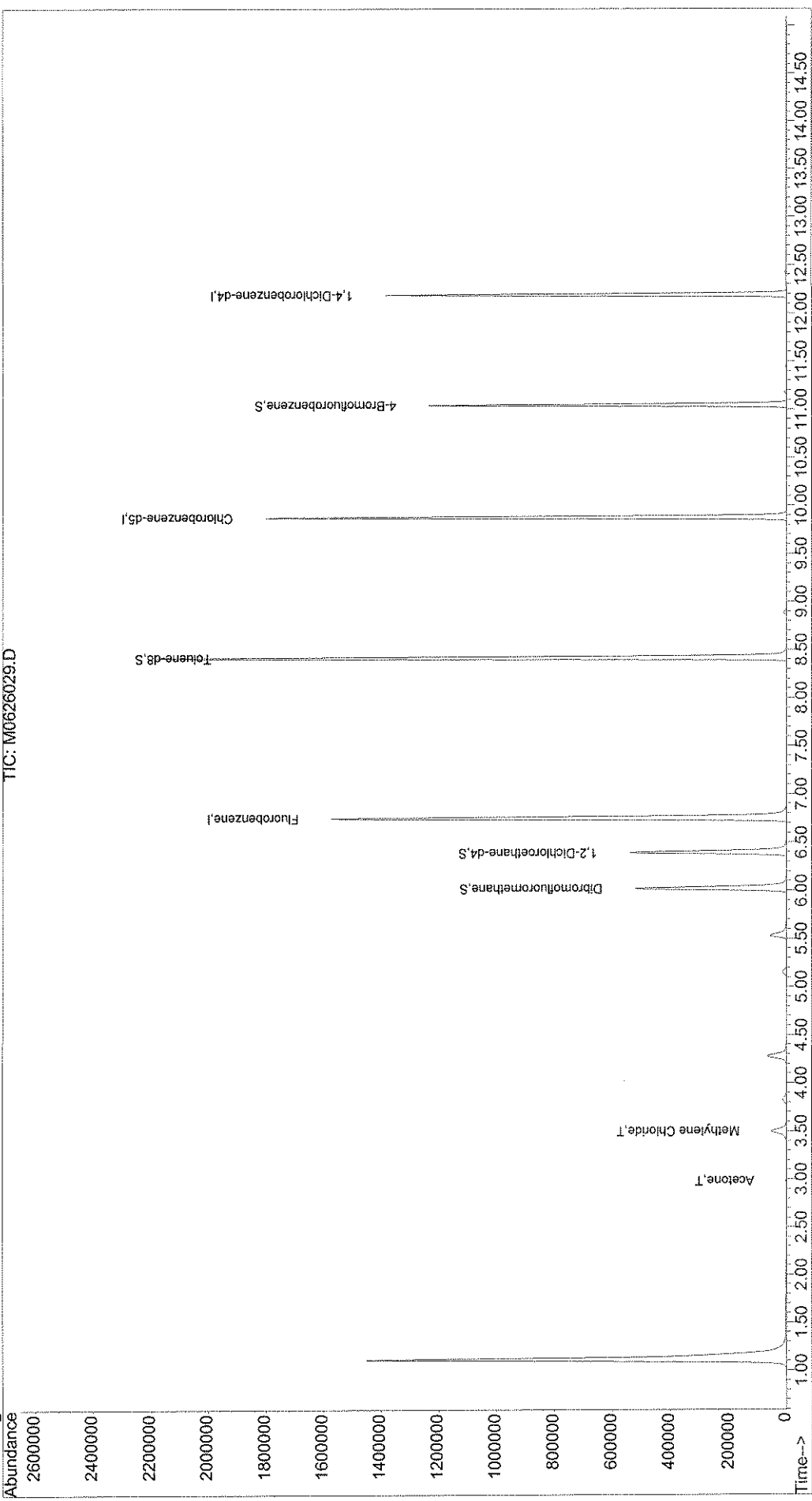
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626029.D  
Acq On : 26 Jun 2007 19:24  
Sample : JPL40-007  
Misc : #2 5ml+IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 27 7:44 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626029.D  
 Acq On : 26 Jun 2007 19:24  
 Sample : JPL40-007  
 Misc : #2 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:44 2007

Vial: 84  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1613163	50.00	ug/l	0.00	95.93%
54) Chlorobenzene-d5	9.87	117	1032442	50.00	ug/l	0.00	104.04%
74) 1,4-Dichlorobenzene-d4	12.19	152	364619	50.00	ug/l	0.00	94.24%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	386681	52.91	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.82%	
40) 1,2-Dichloroethane-d4	6.39	65	443944	56.14	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	112.28%	
55) Toluene-d8	8.42	98	1524555	47.81	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.62%	
76) 4-Bromofluorobenzene	11.05	95	402008	58.67	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.34%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	5963	3.36	ug/l #	67
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	59	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.	d	
18) Methylene Chloride	3.50	84	41217	4.84	ug/l	99
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0626029.D M8260W.M Wed Jun 27 07:44:11 2007

*J. n/27/07*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626029.D  
 Acq On : 26 Jun 2007 19:24  
 Sample : JPL40-007  
 Misc : #2 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:44 2007

Vial: 84  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.82	83	270		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.15	75	55		N.D.	
41) Benzene	6.42	78	608		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	929		N.D.	
57) trans-1,3-Dichloropropene	8.88	75	55		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	57		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2196		N.D.	
66) Chlorobenzene	9.90	112	120		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0626029.D M8260W.M Wed Jun 27 07:44:12 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062607\M0626029.D  
 Acq On : 26 Jun 2007 19:24  
 Sample : JPL40-007  
 Misc : #2 5ml+IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 27 7:44 2007

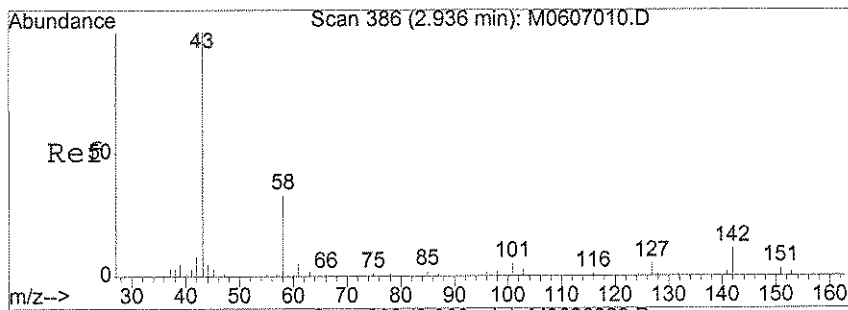
Vial: 84  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

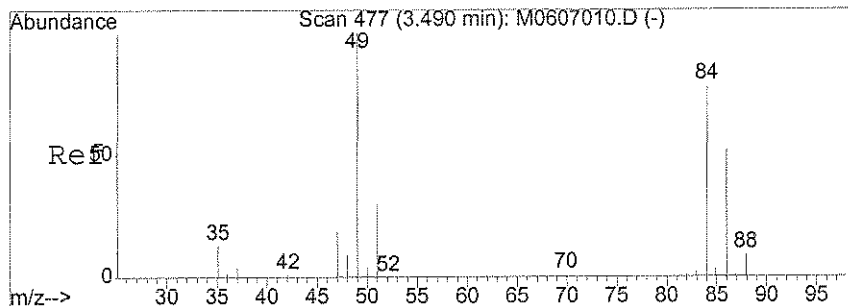
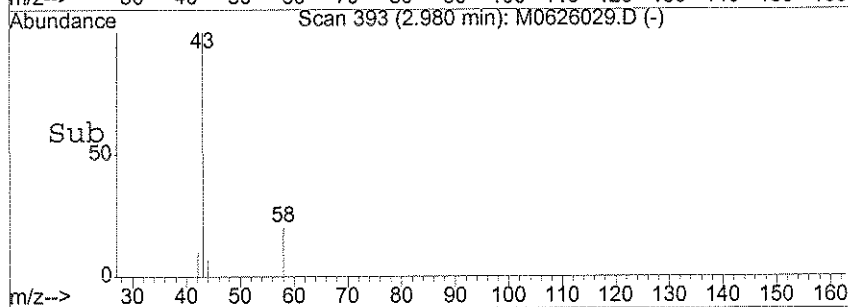
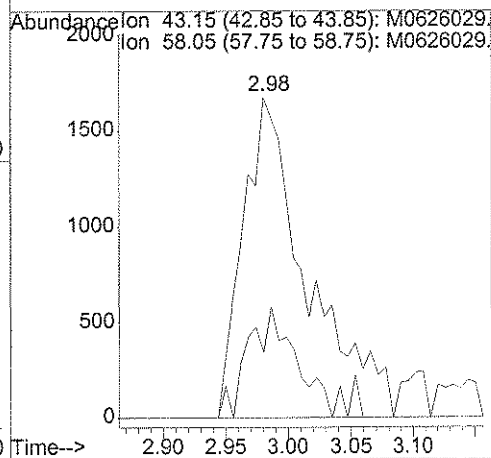
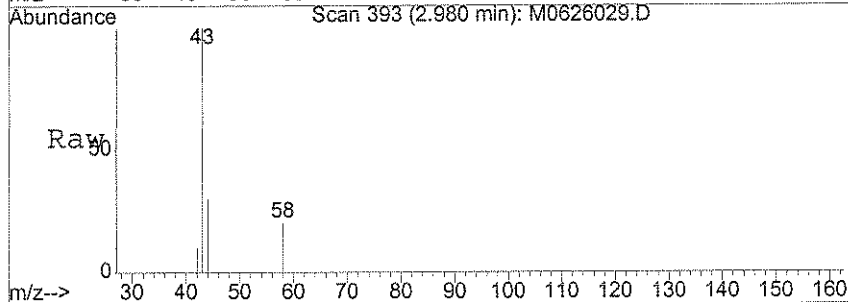
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	138		N.D.	
69) m,p-Xylene	10.12	106	135		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.74	173	358		N.D.	
73) Isopropylbenzene	11.04	105	892		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.04	83	172		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	55		N.D.	
80) n-Propylbenzene	11.27	91	58		N.D.	
81) 2-Chlorotoluene	11.27	91	58		N.D.	
82) 4-Chlorotoluene	11.27	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	79		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	0.00	91	0		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



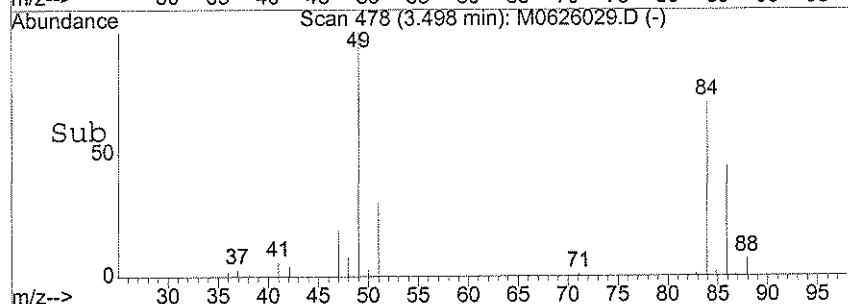
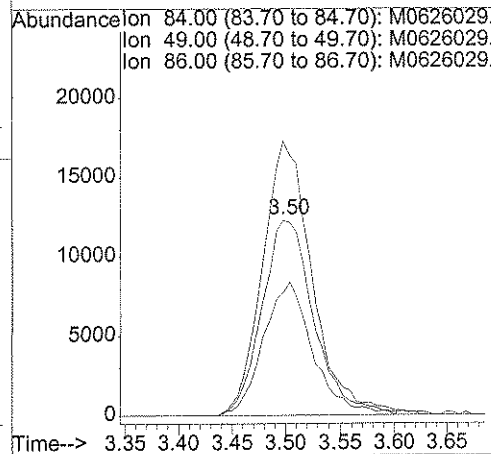
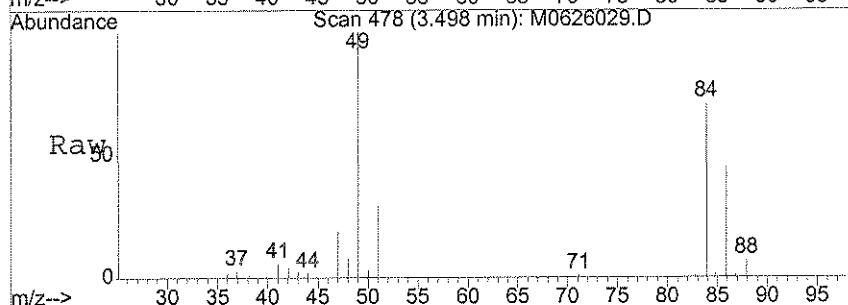
#11  
 Acetone  
 Concen: 3.36 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0626029.D  
 Acq: 26 Jun 2007 19:24

Tgt Ion	Resp	Lower	Upper
43	5963	100	
58	10.4	22.0	33.0#



#18  
 Methylene Chloride  
 Concen: 4.84 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0626029.D  
 Acq: 26 Jun 2007 19:24

Tgt Ion	Resp	Lower	Upper
84	41217	100	
49	135.6	113.6	153.6
86	64.9	45.8	85.8



**TIC FORMS**

SDG JPL40

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-22-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL40  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-001  
 Lab File ID: M0626023.D  
 Date Collected: 06/21/2007  
 Date Analyzed: 06/26/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626023.D Vial: 78  
Acq On : 26 Jun 2007 16:45 Operator: DGA  
Sample : JPL40-001 Inst : MOBY  
Misc : #3 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626023.D M8260W.M Thu Jul 05 07:39:57 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-22-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL40  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-002  
 Lab File ID: M0626024.D  
 Date Collected: 06/21/2007  
 Date Analyzed: 06/26/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626024.D Vial: 79  
Acq On : 26 Jun 2007 17:12 Operator: DGA  
Sample : JPL40-002 Inst : MOBY  
Misc : #3 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626024.D M8260W.M Thu Jul 05 07:52:29 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-22-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL40  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-003  
 Lab File ID: M0626025.D  
 Date Collected: 06/21/2007  
 Date Analyzed: 06/26/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626025.D Vial: 80  
Acq On : 26 Jun 2007 17:36 Operator: DGA  
Sample : JPL40-003 Inst : MOBY  
Misc : #4 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626025.D M8260W.M Thu Jul 05 07:52:40 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-22-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL40  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019053  
 Lab Sample ID: JPL40-004  
 Lab File ID: M0626026.D  
 Date Collected: 06/21/2007  
 Date Analyzed: 06/26/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626026.D Vial: 81  
Acq On : 26 Jun 2007 18:09 Operator: DGA  
Sample : JPL40-004 Inst : MOBY  
Misc : #4 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626026.D M8260W.M Thu Jul 05 07:52:52 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-22-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL40-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626027.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/26/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626027.D Vial: 82  
Acq On : 26 Jun 2007 18:32 Operator: DGA  
Sample : JPL40-005 Inst : MOBY  
Misc : #2 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626027.D M8260W.M Thu Jul 05 07:53:02 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-6-6/20/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL40-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626028.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/26/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626028.D Vial: 83  
Acq On : 26 Jun 2007 18:58 Operator: DGA  
Sample : JPL40-006 Inst : MOBY  
Misc : #3 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626028.D M8260W.M Thu Jul 05 07:53:12 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-6-6/20/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL40-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/26/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626029.D Vial: 84  
Acq On : 26 Jun 2007 19:24 Operator: DGA  
Sample : JPL40-007 Inst : MOBY  
Misc : #2 5ml+IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626029.D M8260W.M Thu Jul 05 07:53:21 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062607MVOWM2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL40

Run Sequence: R019053

Matrix: (SOIL/WATER) Water

Lab Sample ID: B062607MVOWM2

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0626008.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/26/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062607\M0626008.D Vial: 57  
Acq On : 26 Jun 2007 10:19 Operator: DGA  
Sample : B062607MVOWM2 Inst : MOBY  
Misc : 1mL MeOH+5ml PFW+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0626008.D M8260W.M Thu Jul 05 07:39:42 2007

**Metals Data**

**JPL40**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

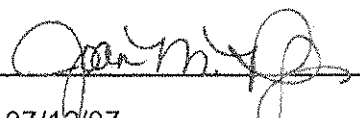
Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin  
 Lab Code: LAUCKS SDG No.: JPL40  
 SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-22-5	JPL40-001
MW-22-5MS	JPL40-001MS
MW-22-5MSD	JPL40-001MSD
MW-22-4	JPL40-002
MW-22-3	JPL40-003
MW-22-2	JPL40-004
MW-22-1	JPL40-005
EB-6-6/20/07	JPL40-006

Were ICP interelement corrections applied? Yes/No YES  
 Were ICP background corrections applied? Yes/No NO  
 If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Joan M. Phillips  
 Date: 07/12/07 Title: Chemist

## **Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-22-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL40

Matrix (soil/water): Water

Lab Sample ID: JPL40-001

Level (low/med): LOW

Date Received: 06/21/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5870		E	P	R019172
7440-47-3	Chromium	2.80			M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	80300			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-22-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL40

Matrix (soil/water): Water

Lab Sample ID: JPL40-002

Level (low/med): LOW

Date Received: 06/21/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.41			M	R019127
7440-70-2	Calcium	38900		E	P	R019216
7440-47-3	Chromium	9.04			M	R019127
7439-89-6	Iron	131			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	11100			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	31800			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-22-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL40

Matrix (soil/water): Water

Lab Sample ID: JPL40-003

Level (low/med): LOW

Date Received: 06/21/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.26			M	R019127
7440-70-2	Calcium	70100		E	P	R019216
7440-47-3	Chromium	8.97			M	R019127
7439-89-6	Iron	233			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	27300			P	R019384
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	46000			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-22-2

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL40Matrix (soil/water): WaterLab Sample ID: JPL40-004Level (low/med): LOWDate Received: 06/21/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.55			M	R019127
7440-70-2	Calcium	53100		E	P	R019216
7440-47-3	Chromium	8.36			M	R019127
7439-89-6	Iron	197			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	19400			P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	32300			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-22-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL40Matrix (soil/water): WaterLab Sample ID: JPL40-005Level (low/med): LOWDate Received: 06/21/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	182000		E	P	R019384
7440-47-3	Chromium	10.3			M	R019127
7439-89-6	Iron	1030			P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	53400			P	R019216
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	35700			P	R019216

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-6-6/20/07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL40Matrix (soil/water): WaterLab Sample ID: JPL40-006Level (low/med): LOWDate Received: 06/21/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019127
7440-70-2	Calcium	5000	U	E	P	R019172
7440-47-3	Chromium	1.00	U		M	R019127
7439-89-6	Iron	100	U		P	R019172
7439-92-1	Lead	1.00	U		M	R019127
7439-95-4	Magnesium	5000	U		P	R019172
7440-09-7	Potassium	5000	U		P	R019172
7440-23-5	Sodium	5000	U		P	R019172

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL40**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL40

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-22-5</u>	<u>JPL40-001</u>
<u>MW-22-5MS</u>	<u>JPL40-001MS</u>
<u>MW-22-5MSD</u>	<u>JPL40-001MSD</u>
<u>MW-22-4</u>	<u>JPL40-002</u>
<u>MW-22-3</u>	<u>JPL40-003DL</u>
<u>MW-22-3MS</u>	<u>JPL40-003MS</u>
<u>MW-22-3MSD</u>	<u>JPL40-003MSD</u>
<u>MW-22-2</u>	<u>JPL40-004DL</u>
<u>MW-22-1D</u>	<u>JPL40-005D</u>
<u>MW-22-1</u>	<u>JPL40-005DL</u>
<u>EB-6-6/20/07</u>	<u>JPL40-006</u>
<u>EB-6-6/20/07D</u>	<u>JPL40-006D</u>

Comments:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-10-07

Title: Inorganics Lead



## **Inorganic Analysis Data Sheets**













**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL41**

**JULY 17, 2007**



# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL41  
Date of Report: July 17, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-3-5	JPL41-001	VOA/MET/INO
MW-3-4	JPL41-002	VOA/MET/INO
MW-3-3	JPL41-003	VOA/MET/INO
MW-3-2	JPL41-004	VOA/MET/INO
MW-3-1	JPL41-005	VOA/MET/INO
DUPE-4-2Q07	JPL41-006	VOA/MET/INO
EB-7-06/21/07	JPL41-007	VOA/MET/INO
TB-7-06/21/07	JPL41-008	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

## **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factors was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 ( $r$  values greater than 0.995) and were therefore compliant.

#### Continuing Calibration Verification (CCV):

In the CCV performed on 06/27/2007 the percent difference value for hexachlorobutadiene exceeded 20% due to decreased response. This analyte was not detected in any associated samples so no further action was taken.

#### Quality Control Analyses:

MS/MSD analyses performed on sample MW-3-3 yielded recoveries for hexachlorobutadiene that fell below the control limits. All other analytes were within the control limits; no further action was taken.

Analysis of the blank spike performed on 06/27/07 yielded a recovery for hexachlorobutadiene that fell below the control limit. Because all other analytes were within the control limits no further action was taken.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

## LAUCKS TESTING LABORATORIES

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### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

#### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

#### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production. For the analytical run, R019325, Form 2A shows a CCV recovery for magnesium of 112.7% respectively. This recovery is within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115. Data have been reported as is.

Samples in this SDG (JPL41) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Samples from this SDG (JPL41) and also other samples from a different SDG (JPL42) were selected for sample-level QC. Comments regarding matrix spike/matrix spike duplicate recoveries and serial dilutions apply to all samples prepared and analyzed together. Sample level QC and analytical time can be seen on Form 14.

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The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-4-2. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

The serial dilution for the elements calcium and magnesium did not agree within 10% of the original determination after correction for dilution for sample MW-4-2 for JPL42. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### **Miscellaneous Inorganics:**

No comments.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
- J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
- E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
- C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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Seattle, WA 98108

INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

17 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

2/12/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies



**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL41-001	06/22/2007 10:10 AM	06/21/2007 07:55 AM	MW-3-5	A+	A-	IN	IN	A+	IN	IN	IN	IN
JPL41-002	06/22/2007 10:10 AM	06/21/2007 08:39 AM	MW-3-4	A+	A-	IN	IN	A+	IN	IN	IN	IN
*JPL41-003	06/22/2007 10:10 AM	06/21/2007 09:18 AM	MW-3-3	A+	A-	IN	IN	A+	IN	IN	IN	IN
JPL41-004	06/22/2007 10:10 AM	06/21/2007 10:17 AM	MW-3-2	A+	A-	IN	IN	A+	IN	IN	IN	IN
JPL41-005	06/22/2007 10:10 AM	06/21/2007 11:25 AM	MW-3-1	A+	A-	IN	IN	A+	IN	IN	IN	IN
JPL41-006	06/22/2007 10:10 AM	06/21/2007 12:00 AM	DUPE-4-2007	A+	A-	IN	IN	A+	IN	IN	IN	IN
JPL41-007	06/22/2007 10:10 AM	06/21/2007 11:03 AM	EB-7-06/21/07	A+	A-	IN	IN	A+	IN	IN	IN	IN
JPL41-008	06/22/2007 10:10 AM	06/21/2007 12:00 AM	TB-7-06/21/07			IN	IN	A+	IN	IN	IN	IN

Approved By: *[Signature]*

On: *6/22/07*

Samples identified with a "1st" client has requested QC for

**LEGEND:** -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged

**FORM LTL-PM-8.0**





**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL41  
Cooler: AAP006  
Temperatures: 5.7  
COC #: 42850

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL41-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-003	0001	1000 mL cylinder, poly	7	N/A
	0002	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	500 ml cylinder, poly, HNO3	<2	N/A
	0010	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-006	0001	1000 mL cylinder, poly	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL41

Cooler: AAP006

Temperatures: 5.7

COC #: 42850

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-007	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL41-008	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
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**ATTACHMENT B**

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**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL41**

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Completed and checked by: Andy Ecklund Date: 7/17/07

**SAMPLE DATA**

SDG JPL41

VOLATILES ANALYSIS



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-001  
 Lab File ID: M0627018.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 14:34  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.68	J
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 14:34

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-5

Lab Name: \_\_\_\_\_

SDG No.: JPL41

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019090

Lab Sample ID: JPL41-001

Lab File ID: M0627018.D

Date Collected: 06/21/2007

Date/Time Analyzed: 06/27/2007 14:34

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

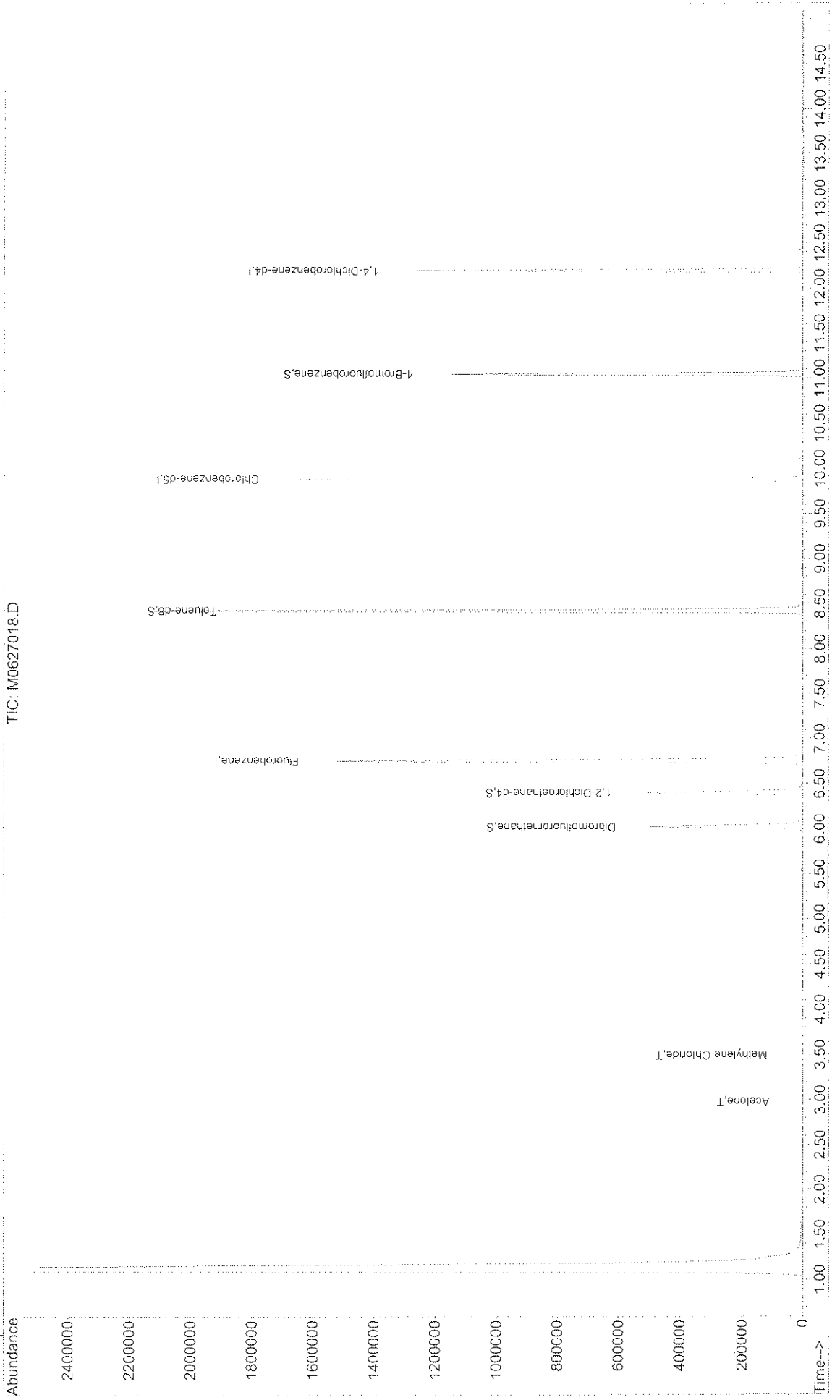
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Acq On : 27 Jun 2007 14:34  
Sample : JPL41-001  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 28 8:23 2007

Vial: 57  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00

Quant Results File: M8260w.RES

Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

TIC: M0627018.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627018.D  
 Acq On : 27 Jun 2007 14:34  
 Sample : JPL41-001  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:23 2007

Vial: 57  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1547288	50.00	ug/l	0.00 92.01%
54) Chlorobenzene-d5	9.88	117	981015	50.00	ug/l	0.00 98.86%
74) 1,4-Dichlorobenzene-d4	12.19	152	343070	50.00	ug/l	0.00 88.67%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	370385	52.84	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.68%
40) 1,2-Dichloroethane-d4	6.40	65	416512	54.92	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.84%
55) Toluene-d8	8.42	98	1467493	48.43	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.86%
76) 4-Bromofluorobenzene	11.05	95	382620	59.34	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	118.68%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	3854	2.26	ug/l #	89
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon disulfide	3.06	76	1057	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.45	43	116	N.D.		
18) Methylene Chloride	3.50	84	5588	0.68	ug/l	98
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.95	73	120	N.D.		
22) Acrylonitrile	3.95	53	702	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.53	43	1215	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.86	41	582	N.D.		
34) Chloroform	0.00	83	0	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

*Handwritten signature and date: 06/29/07*

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627018.D  
 Acq On : 27 Jun 2007 14:34  
 Sample : JPL41-001  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:23 2007

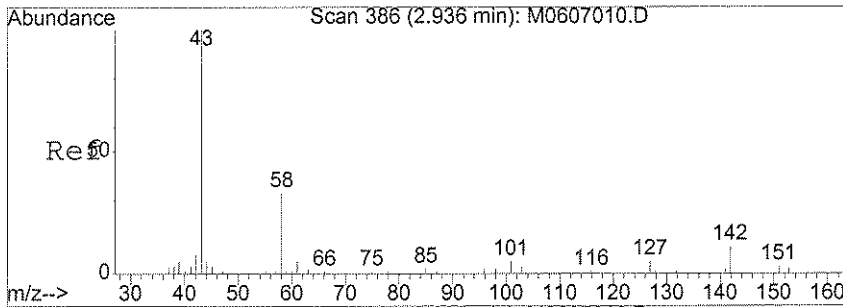
Vial: 57  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

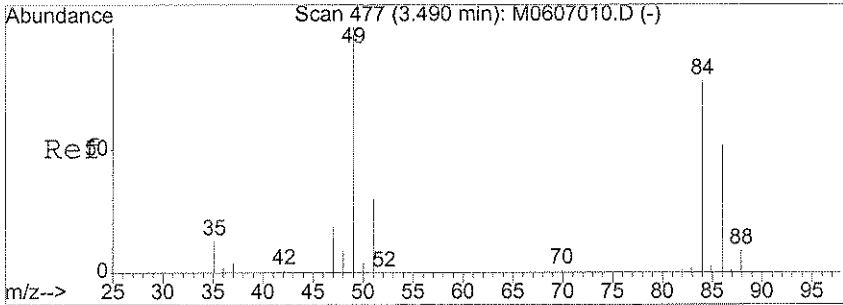
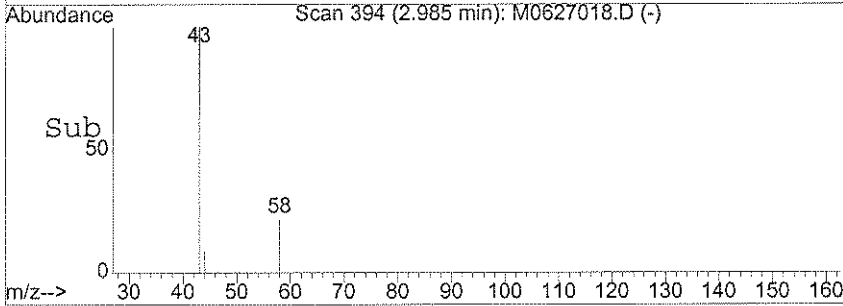
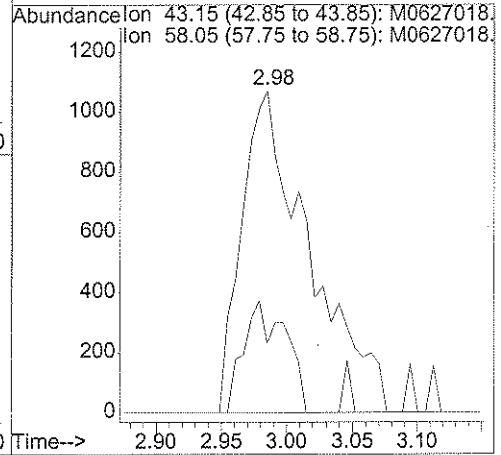
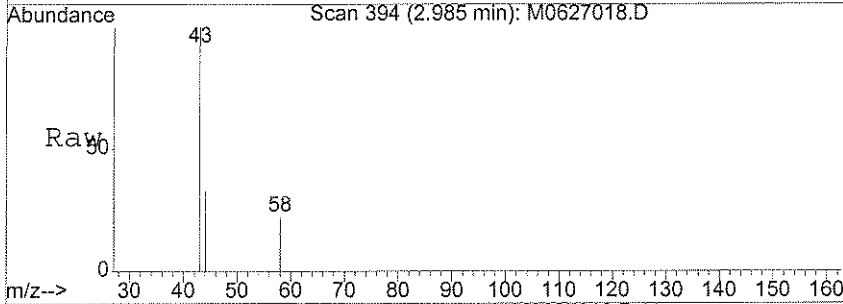
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	1444		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	3764		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	146		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1966		N.D.	
66) Chlorobenzene	9.90	112	160		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	10698		N.D.	
69) m,p-Xylene	10.11	106	3853		N.D.	
70) o-xylene	10.51	106	1542		N.D.	
71) Styrene	10.53	104	4217		N.D.	
72) Bromoform	10.75	173	276		N.D.	
73) Isopropylbenzene	10.87	105	1515		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	2134		N.D.	
81) 2-Chlorotoluene	11.38	91	794		N.D.	
82) 4-Chlorotoluene	11.48	91	394		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	1626		N.D.	
84) tert-Butylbenzene	11.77	119	1378		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	3515		N.D.	
86) sec-butylbenzene	11.99	105	1874		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	405		N.D.	
88) 4-Isopropyltoluene	12.13	119	1351		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	262		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	395		N.D.	
91) n-Butylbenzene	12.54	91	1195		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration  
 M0627018.D M8260W.M Fri Jun 29 05:51:32 2007



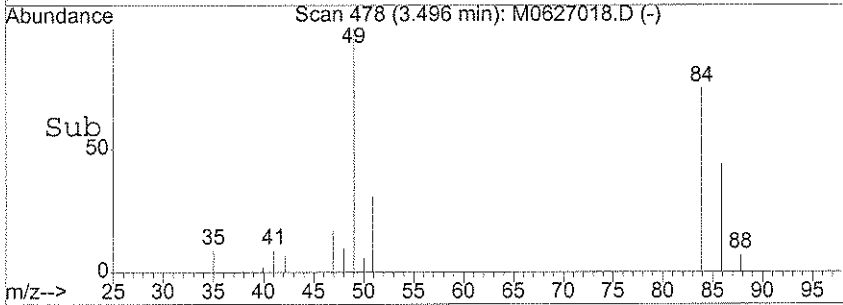
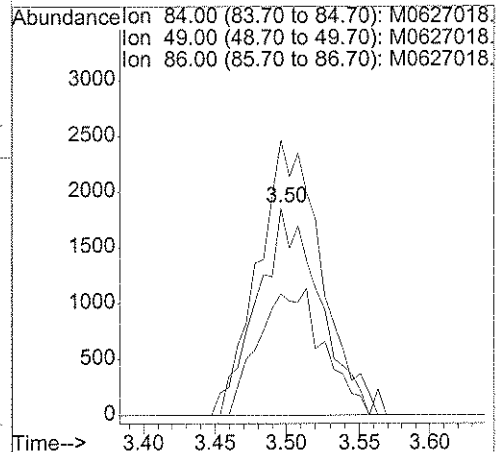
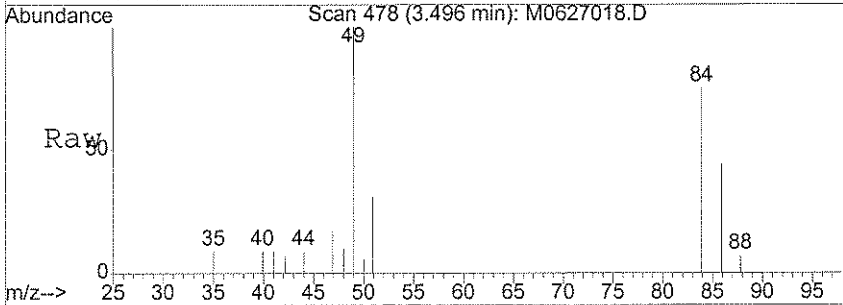
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 Acetone  
 Concen: 2.26 ug/l  
 RT: 2.98 min Scan# 394  
 Delta R.T. -0.01 min  
 Lab File: M0627018.D  
 Acq: 27 Jun 2007 14:34

Tgt Ion: 43 Resp: 3854  
 Ion Ratio Lower Upper  
 43 100  
 58 21.8 22.0 33.0#



#18  
 Methylene Chloride  
 Concen: 0.68 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.01 min  
 Lab File: M0627018.D  
 Acq: 27 Jun 2007 14:34

Tgt Ion: 84 Resp: 5588  
 Ion Ratio Lower Upper  
 84 100  
 49 135.1 113.6 153.6  
 86 63.3 45.8 85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-002  
 Lab File ID: M0627019.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 15:04  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.77	J
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-002  
 Lab File ID: M0627019.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 15:04  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 15:04

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

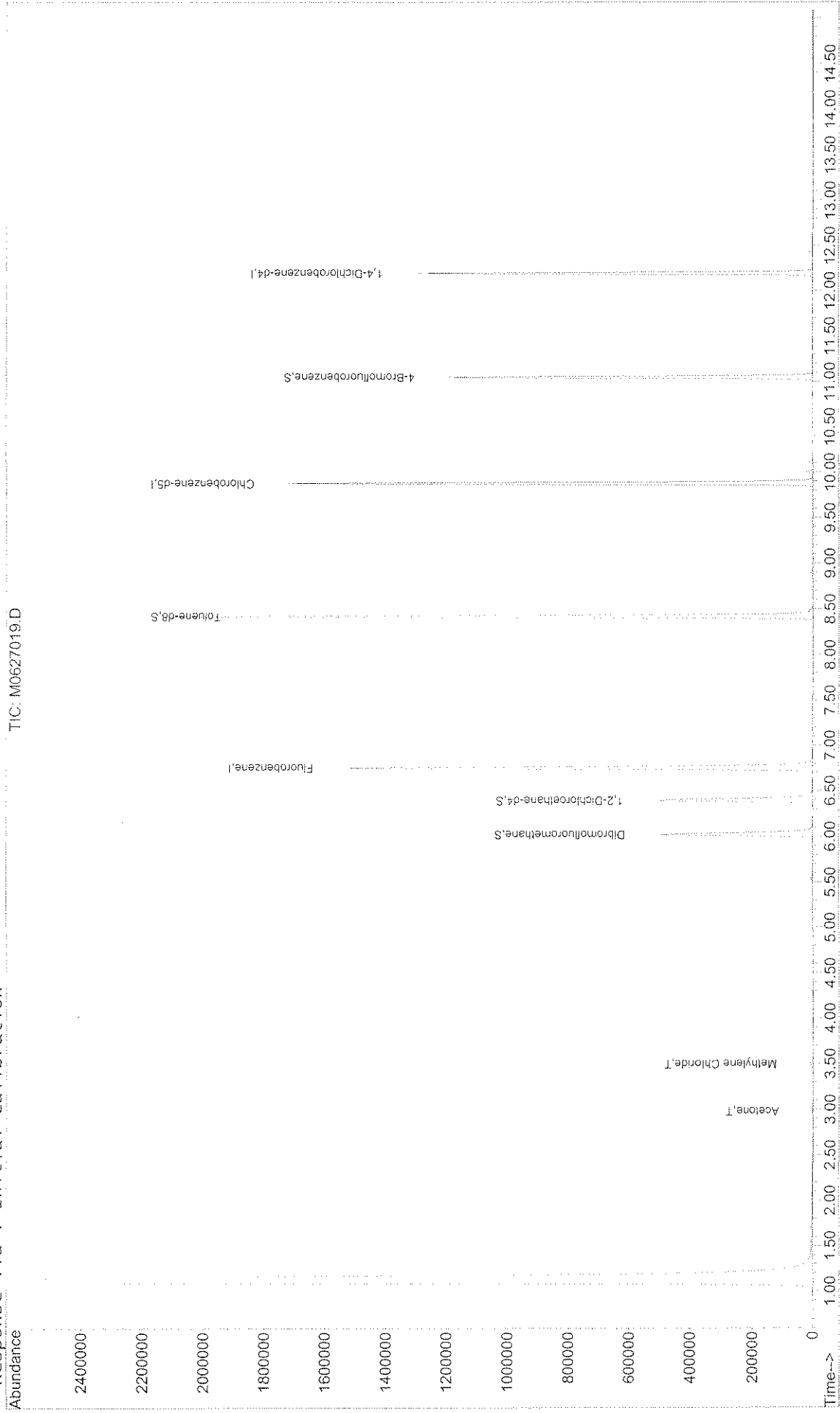
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627019.D Vial: 58  
Acq On : 27 Jun 2007 15:04 Operator: DGA  
Sample : JPL41-002 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rreint.p  
Quant Time: Jun 28 8:24 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627019.D  
 Acq On : 27 Jun 2007 15:04  
 Sample : JPL41-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:24 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	6.75	96	1549639	50.00	ug/l	0.00 92.15%
54) Chlorobenzene-d5	9.87	117	996839	50.00	ug/l	0.00 100.46%
74) 1,4-Dichlorobenzene-d4	12.19	152	342867	50.00	ug/l	0.00 88.62%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	373472	53.20	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.40%
40) 1,2-Dichloroethane-d4	6.39	65	418843	55.14	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.28%
55) Toluene-d8	8.42	98	1471658	47.80	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.60%
76) 4-Bromofluorobenzene	11.05	95	389749	60.49	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	120.98%#

Target Compounds

	R.T.	QIon	Response	Conc	Units	qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	2.21	101	60		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	2.99	43	3628	2.13	ug/l #	62
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.05	76	429		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D. d	
17) Methyl Acetate	3.42	43	178		N.D.	
18) Methylene Chloride	3.49	84	6311	0.77	ug/l	94
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	3.95	73	198		N.D.	
22) Acrylonitrile	3.95	53	967		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	1355		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0627019.D M8260W.M Fri Jun 29 05:51:49 2007

*JG* 6/28/07

Quantitation Report

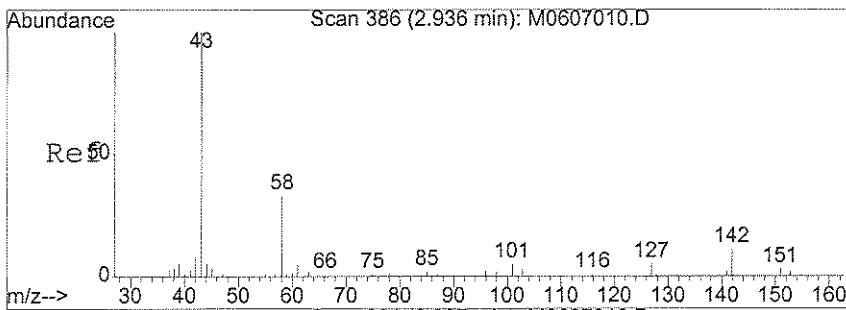
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 Acq On : 27 Jun 2007 15:04  
 Sample : JPL41-002  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:24 2007

Vial: 58  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

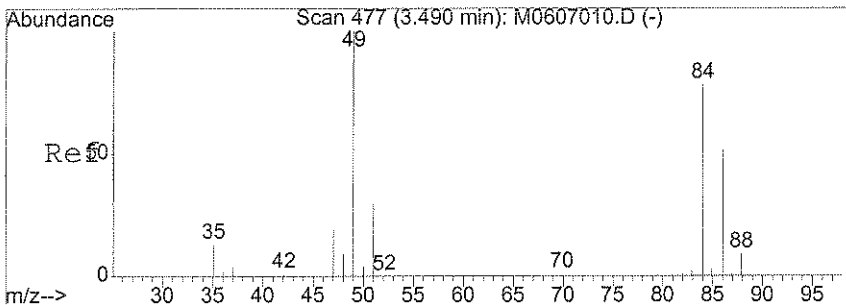
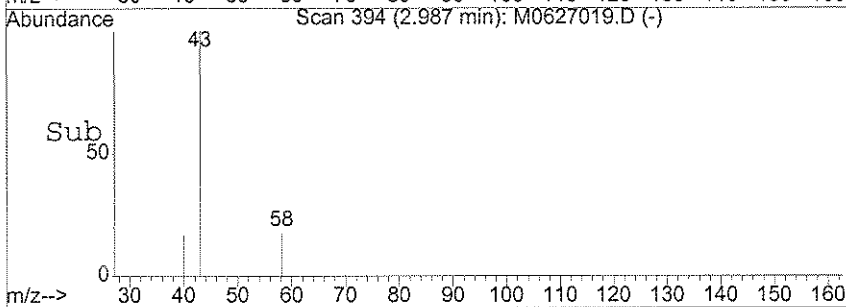
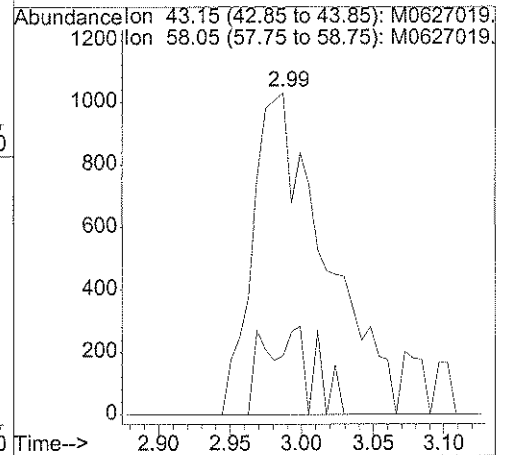
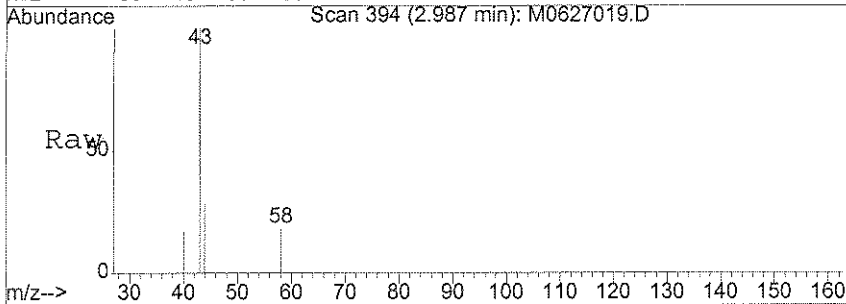
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	1665		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	3422		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2060		N.D.	
66) Chlorobenzene	9.90	112	69		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	15959		N.D.	
69) m,p-xylene	10.11	106	3617		N.D.	
70) o-xylene	10.51	106	1154		N.D.	
71) Styrene	10.53	104	2940		N.D.	
72) Bromoform	10.74	173	125		N.D.	
73) Isopropylbenzene	10.87	105	1124		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1691		N.D.	
81) 2-Chlorotoluene	11.38	91	614		N.D.	
82) 4-Chlorotoluene	11.49	91	278		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	1267		N.D.	
84) tert-Butylbenzene	11.77	119	1084		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	2951		N.D.	
86) sec-butylbenzene	11.99	105	1610		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	300		N.D.	
88) 4-Isopropyltoluene	12.13	119	1174		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	156		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	314		N.D.	
91) n-Butylbenzene	12.54	91	1128		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d



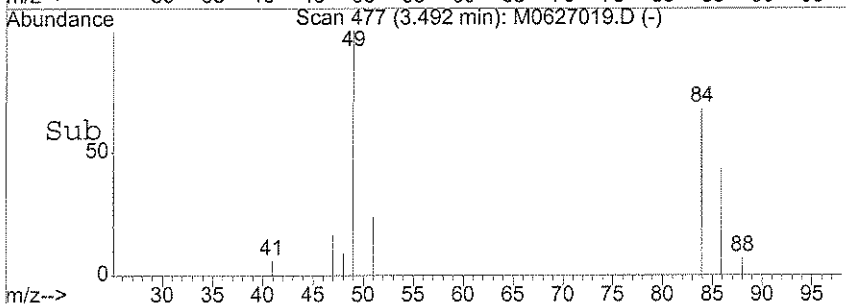
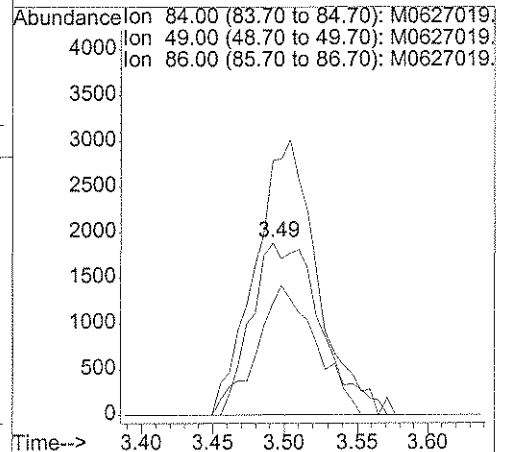
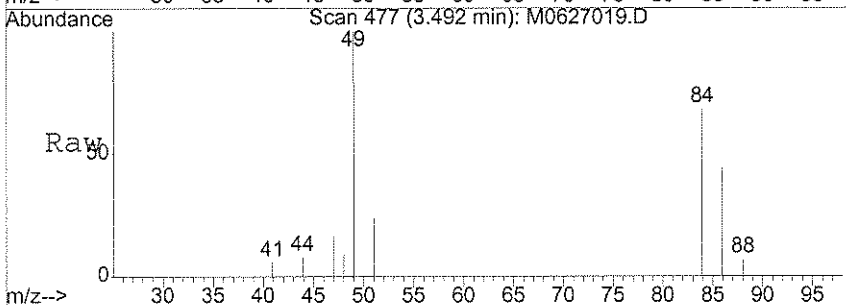
#11  
 Acetone  
 Concen: 2.13 ug/l  
 RT: 2.99 min Scan# 394  
 Delta R.T. -0.00 min  
 Lab File: M0627019.D  
 Acq: 27 Jun 2007 15:04

Tgt Ion: 43 Resp: 3628  
 Ion Ratio Lower Upper  
 43 100  
 58 7.4 22.0 33.0#



#18  
 Methylene Chloride  
 Concen: 0.77 ug/l  
 RT: 3.49 min Scan# 477  
 Delta R.T. -0.01 min  
 Lab File: M0627019.D  
 Acq: 27 Jun 2007 15:04

Tgt Ion: 84 Resp: 6311  
 Ion Ratio Lower Upper  
 84 100  
 49 144.4 113.6 153.6  
 86 64.9 45.8 85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-003  
 Lab File ID: M0627020.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 15:34  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.92	J
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-003  
 Lab File ID: M0627020.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 15:34  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-3
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Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-003  
 Lab File ID: M0627020.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 15:34  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

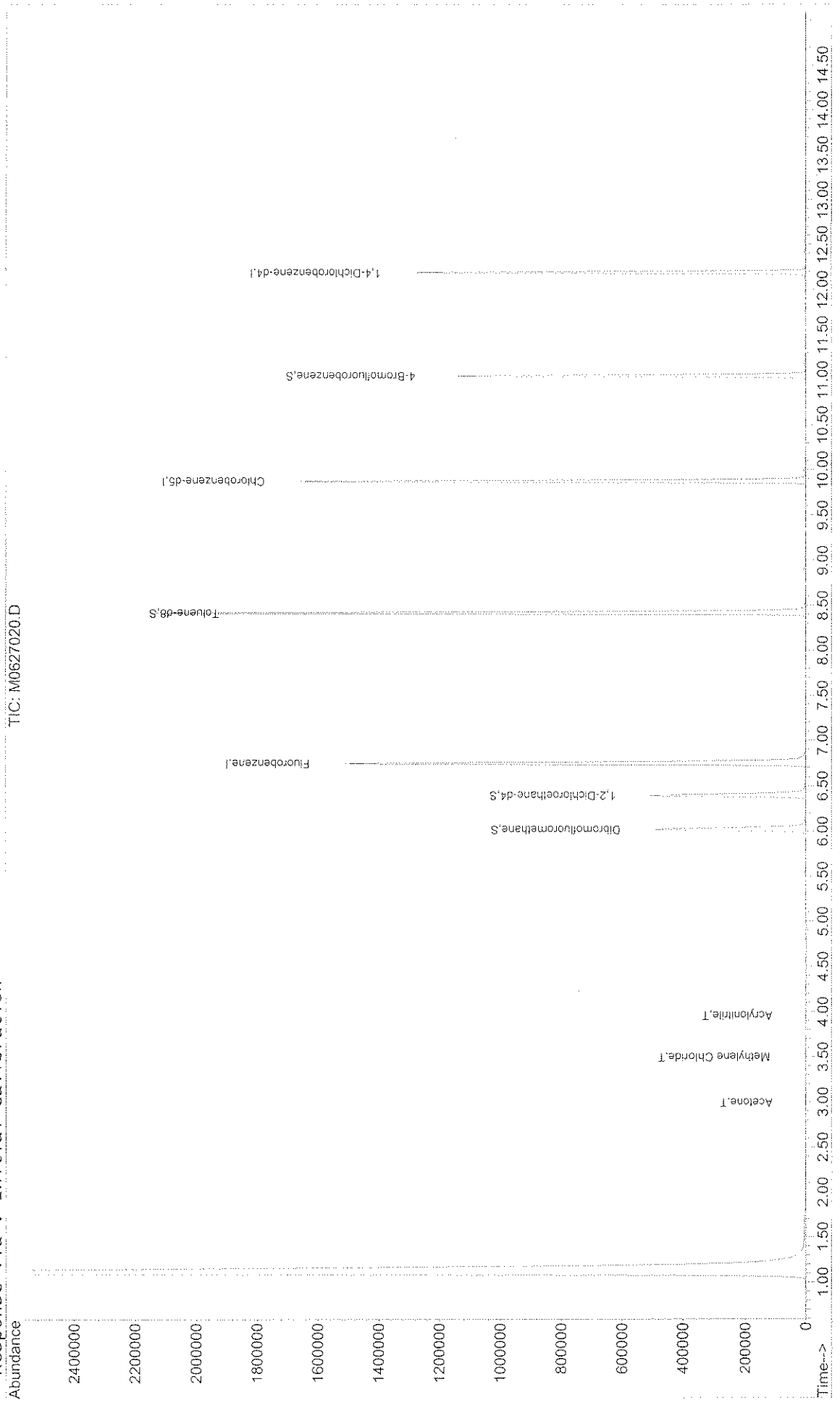
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627020.D  
Acq On : 27 Jun 2007 15:34  
Sample : JPL41-003  
Misc : #8 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 28 8:25 2007

Vial: 59  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627020.D  
 Acq On : 27 Jun 2007 15:34  
 Sample : JPL41-003  
 Misc : #8 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:25 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Thu Jun 28 07:42:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1515486	50.00	ug/l	0.00 90.12%
54) Chlorobenzene-d5	9.88	117	973305	50.00	ug/l	0.00 98.08%
74) 1,4-Dichlorobenzene-d4	12.20	152	346262	50.00	ug/l	0.00 89.49%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	367667	53.55	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	107.10%
40) 1,2-Dichloroethane-d4	6.40	65	411529	55.40	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.80%
55) Toluene-d8	8.42	98	1436632	47.79	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.58%
76) 4-Bromofluorobenzene	11.05	95	379064	58.25	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.50%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	2.21	101	58	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	1307	0.78	ug/l #	57
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	212	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D. d		
17) Methyl Acetate	3.50	43	65	N.D.		
18) Methylene Chloride	3.51	84	7381	0.92	ug/l	98
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	3.96	53	1388	0.57	ug/l #	48
23) 1,1-Dichloroethane	4.57	63	1183	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.53	43	639	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.84	83	671	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.00	56	71	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0627020.D M8260W.M Fri Jun 29 05:52:05 2007

*J. O. / 28/07*  
 Page 1

Quantitation Report

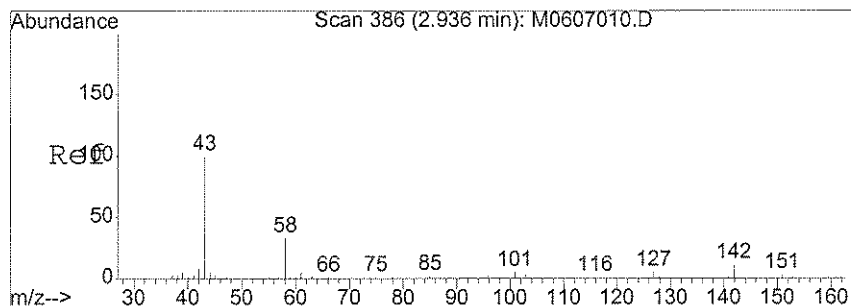
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 Acq On : 27 Jun 2007 15:34  
 Sample : JPL41-003  
 Misc : #8 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:25 2007

Vial: 59  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

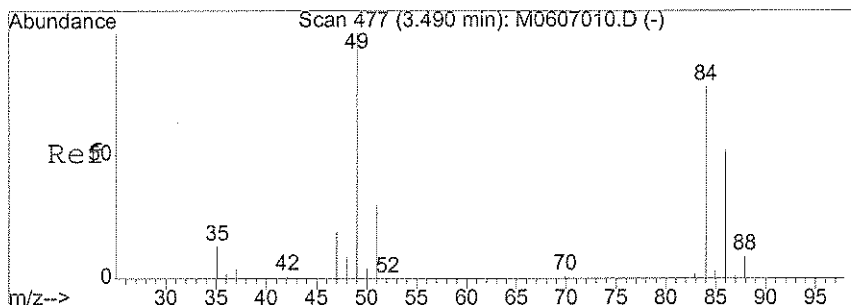
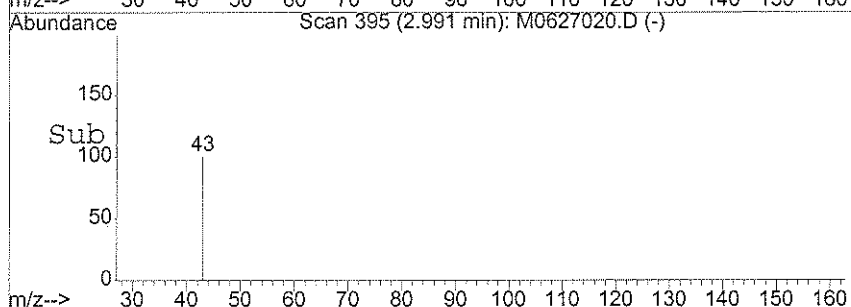
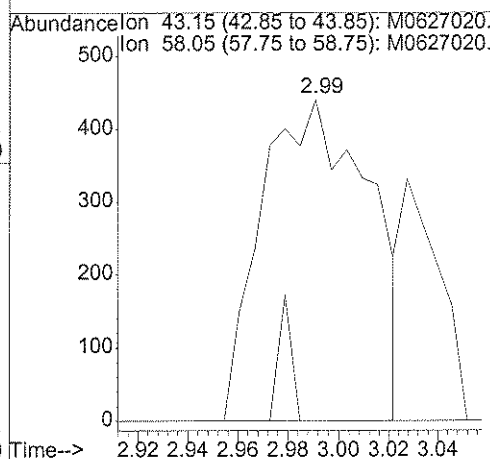
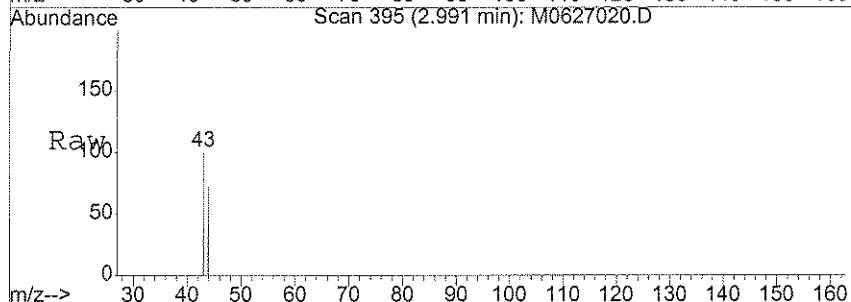
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	1344		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	72		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	1893		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	780		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2014		N.D.	
66) Chlorobenzene	9.90	112	77		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	5945		N.D.	
69) m,p-Xylene	10.11	106	1990		N.D.	
70) o-xylene	10.50	106	528		N.D.	
71) Styrene	10.53	104	3608		N.D.	
72) Bromoform	10.75	173	64		N.D.	
73) Isopropylbenzene	10.87	105	876		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1456		N.D.	
81) 2-Chlorotoluene	11.39	91	433		N.D.	
82) 4-Chlorotoluene	11.48	91	204		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	1124		N.D.	
84) tert-Butylbenzene	11.77	119	972		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	2339		N.D.	
86) sec-butylbenzene	11.98	105	1379		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	512		N.D.	
88) 4-Isopropyltoluene	12.14	119	1141		N.D.	
89) 1,4-Dichlorobenzene	12.12	146	512		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	376		N.D.	
91) n-Butylbenzene	12.54	91	910		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d



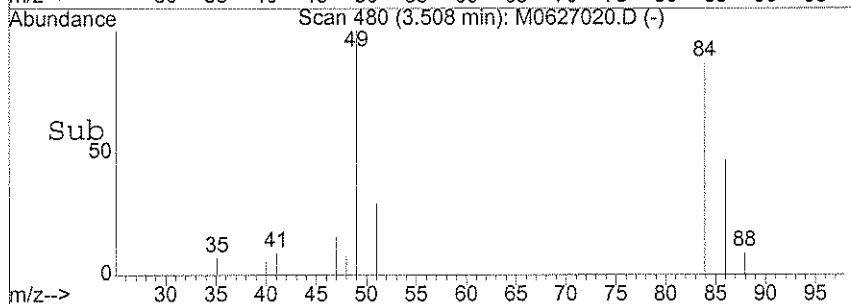
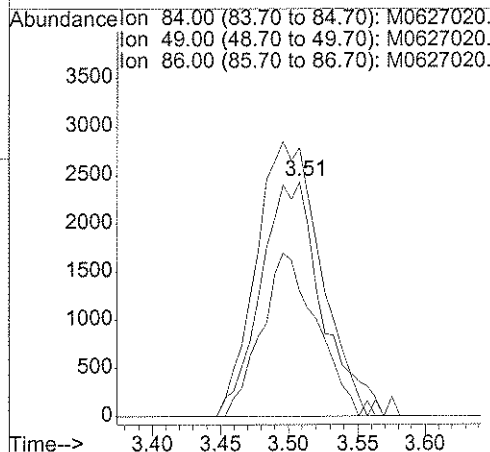
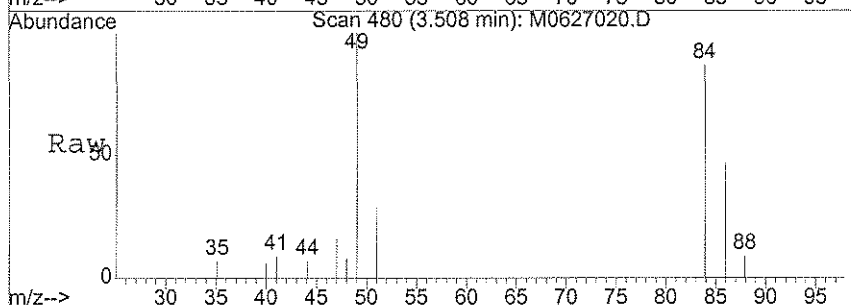
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 Acetone  
 Concen: 0.78 ug/l  
 RT: 2.99 min Scan# 395  
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 Lab File: M0627020.D  
 Acq: 27 Jun 2007 15:34

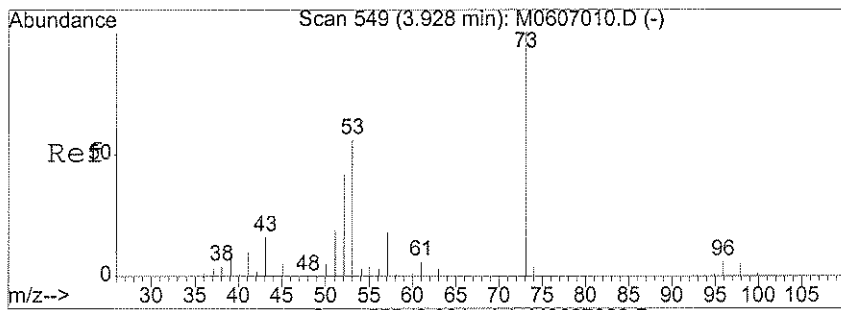
Tgt Ion: 43 Resp: 1307  
 Ion Ratio Lower Upper  
 43 100  
 58 4.8 22.0 33.0#



#18  
 Methylene Chloride  
 Concen: 0.92 ug/l  
 RT: 3.51 min Scan# 480  
 Delta R.T. 0.01 min  
 Lab File: M0627020.D  
 Acq: 27 Jun 2007 15:34

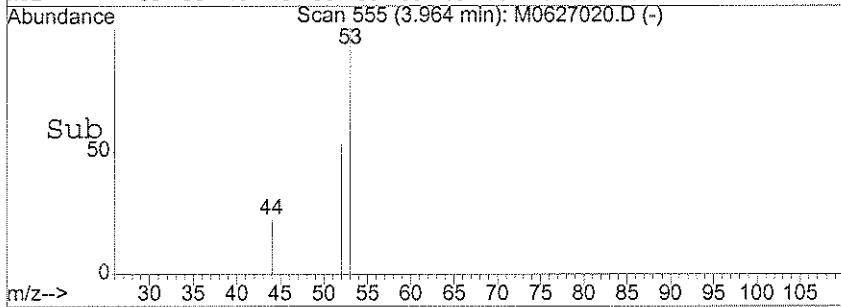
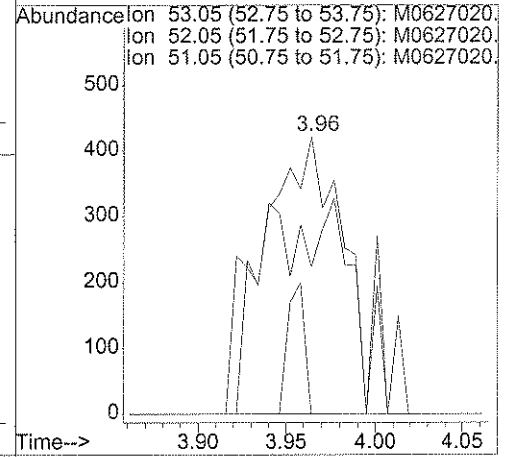
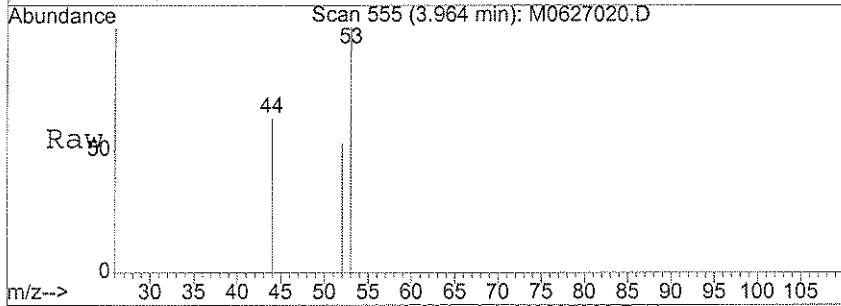
Tgt Ion: 84 Resp: 7381  
 Ion Ratio Lower Upper  
 84 100  
 49 130.2 113.6 153.6  
 86 65.2 45.8 85.8





#22  
 Acrylonitrile  
 Concen: 0.57 ug/l  
 RT: 3.96 min Scan# 555  
 Delta R.T. 0.02 min  
 Lab File: M0627020.D  
 Acq: 27 Jun 2007 15:34

Tgt Ion	Resp	Lower	Upper
53	1388		
53	100		
52	33.3	65.4	98.0#
51	9.7	30.2	45.2#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-004  
 Lab File ID: M0627021.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 16:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	2.2	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-004  
 Lab File ID: M0627021.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 16:02  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 16:02

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

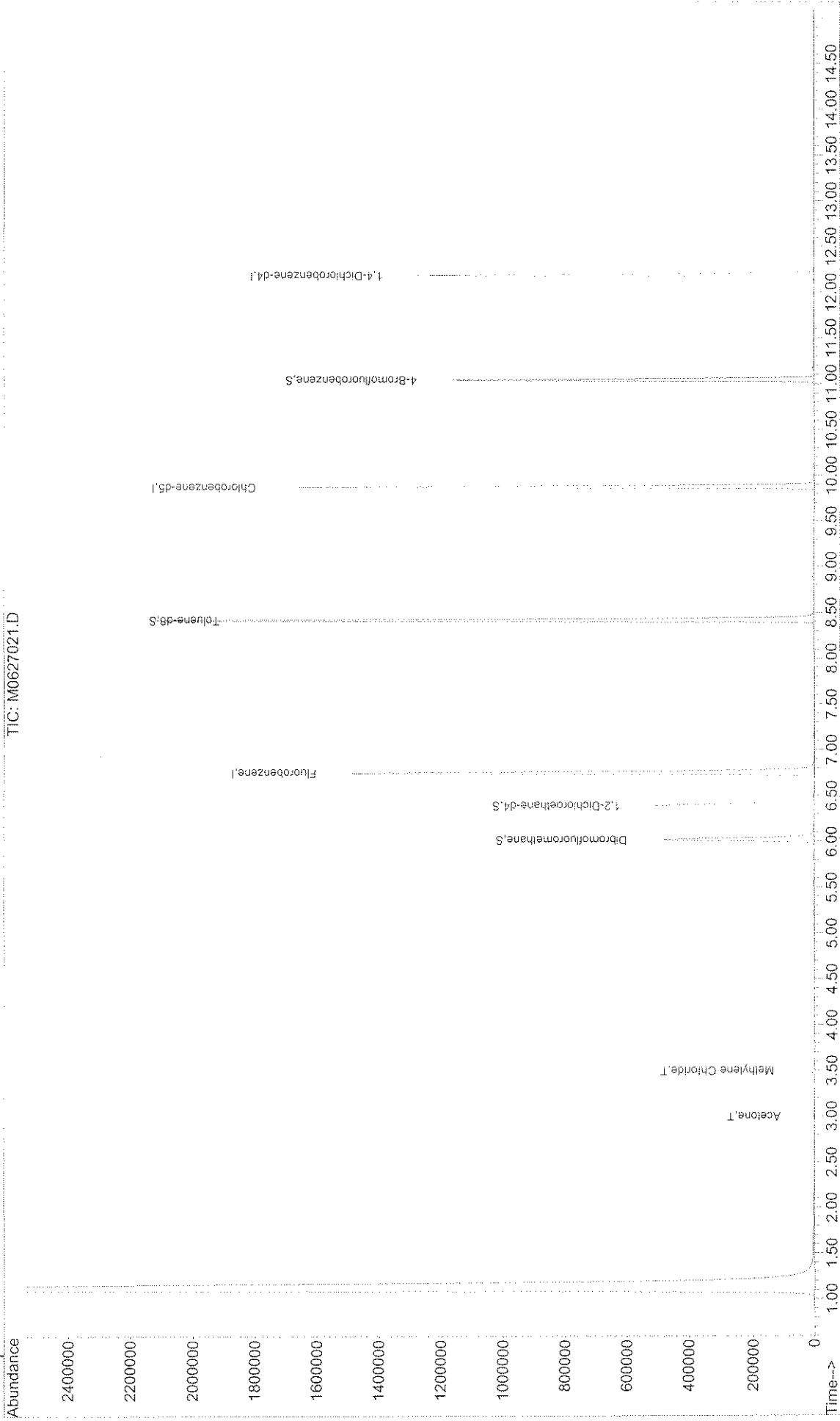
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627021.D  
Acq On : 27 Jun 2007 16:02  
Sample : JPL41-004  
Misc : #3 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 28 8:25 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627021.D  
 Acq On : 27 Jun 2007 16:02  
 Sample : JPL41-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:25 2007

Vial: 60  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Thu Jun 28 07:42:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1525177	50.00	ug/l	0.00	90.70%
54) Chlorobenzene-d5	9.87	117	962640	50.00	ug/l	0.00	97.01%
74) 1,4-Dichlorobenzene-d4	12.19	152	342986	50.00	ug/l	0.00	88.65%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	369799	53.52	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	107.04%	
40) 1,2-Dichloroethane-d4	6.39	65	415422	55.57	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	111.14%	
55) Toluene-d8	8.42	98	1439182	48.40	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.80%	
76) 4-Bromofluorobenzene	11.05	95	375177	58.20	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	116.40%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	2.20	101	64	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	2075	1.24	ug/l #	55
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	55	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.46	43	81	N.D.		
18) Methylene Chloride	3.50	84	17813	2.21	ug/l	97
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.92	73	368	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.52	43	71	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.83	83	2995	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0627021.D M8260W.M Fri Jun 29 05:52:24 2007

*Handwritten signature and date: 8/06/28/07*

Quantitation Report

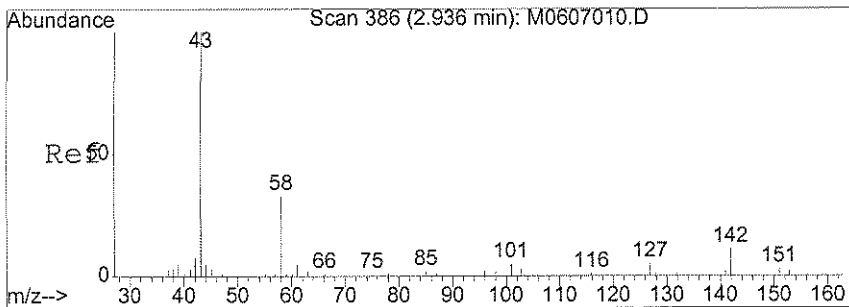
Data File : X:\MSVOA\MOBY\062707\M0627021.D  
 Acq On : 27 Jun 2007 16:02  
 Sample : JPL41-004  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:25 2007

Vial: 60  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

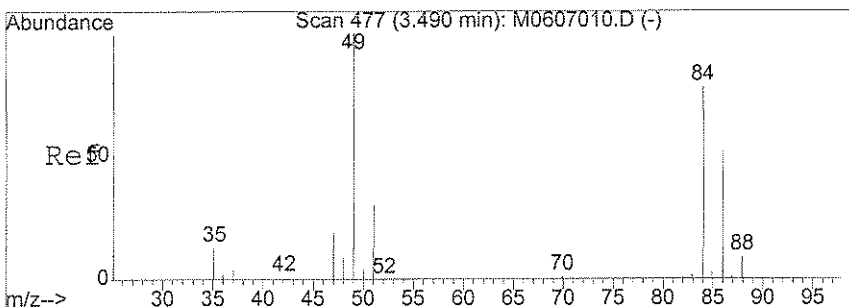
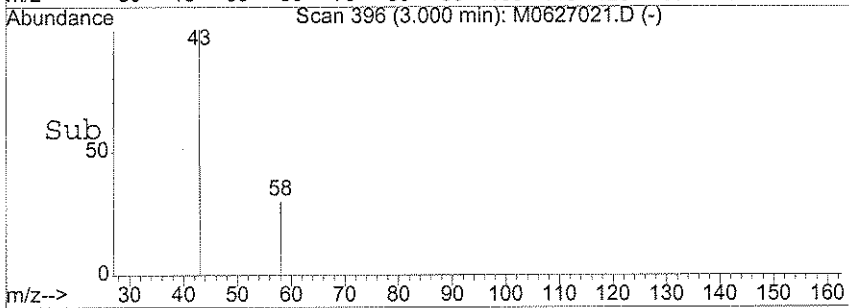
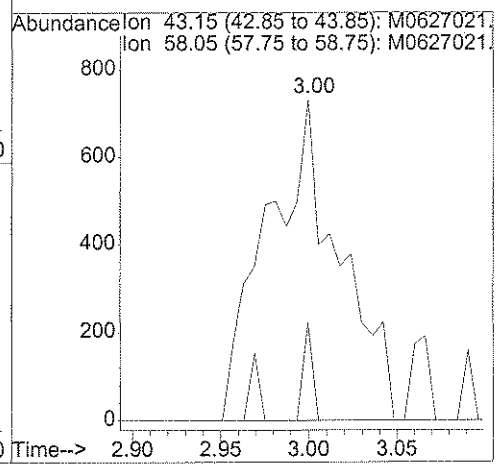
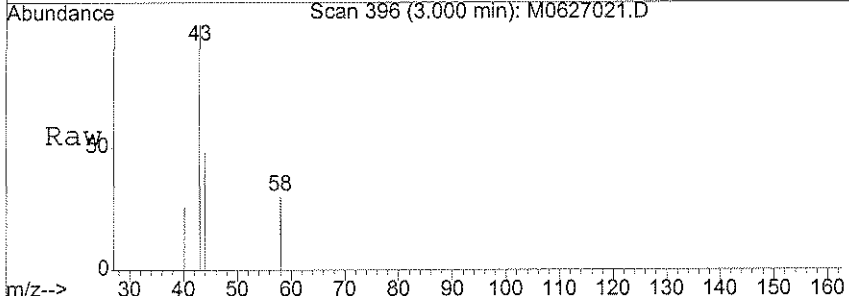
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.15	117	3568		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	2363		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	2423		N.D.	
46) Methylcyclohexane	7.31	83	58		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	1168		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.02	166	217		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	363		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1788		N.D.	
66) Chlorobenzene	9.90	112	60		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	1988		N.D.	
69) m,p-xylene	10.11	106	1144		N.D.	
70) o-xylene	10.51	106	280		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	130		N.D.	
73) Isopropylbenzene	10.87	105	925		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.05	156	66		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	77		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1079		N.D.	
81) 2-Chlorotoluene	11.38	91	168		N.D.	
82) 4-Chlorotoluene	11.49	91	66		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	916		N.D.	
84) tert-Butylbenzene	11.78	119	853		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	1752		N.D.	
86) sec-butylbenzene	11.98	105	1161		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	90		N.D.	
88) 4-Isopropyltoluene	12.13	119	950		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	173		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	78		N.D.	
91) n-Butylbenzene	12.54	91	848		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d



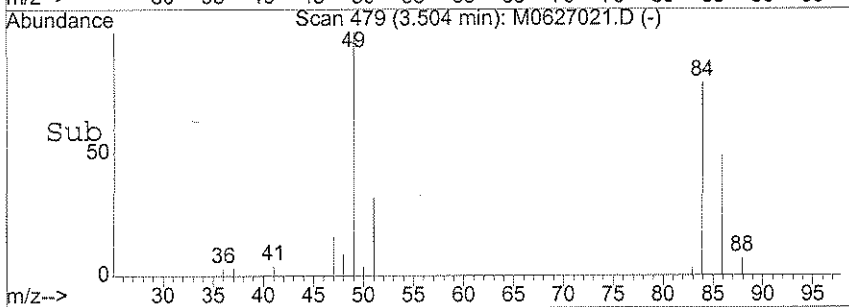
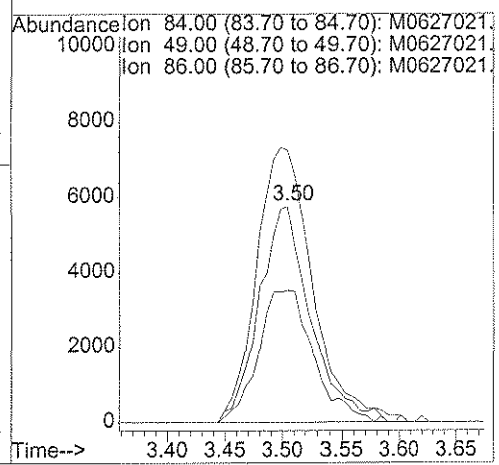
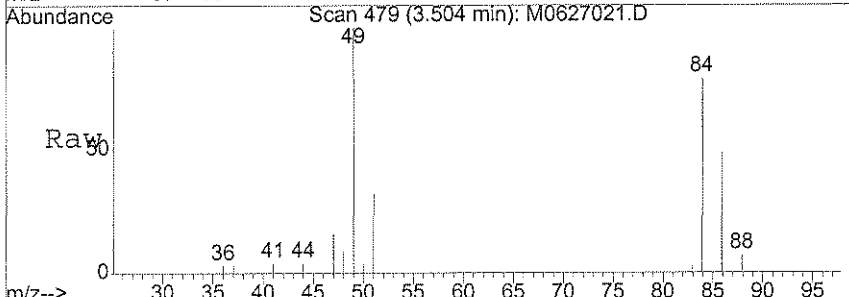
#11  
 Acetone  
 Concen: 1.24 ug/l  
 RT: 3.00 min Scan# 396  
 Delta R.T. 0.01 min  
 Lab File: M0627021.D  
 Acq: 27 Jun 2007 16:02

Tgt Ion	Resp	Lower	Upper
43	100		
58	3.9	22.0	33.0#



#18  
 Methylene Chloride  
 Concen: 2.21 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0627021.D  
 Acq: 27 Jun 2007 16:02

Tgt Ion	Resp	Lower	Upper
84	100		
49	139.1	113.6	153.6
86	65.7	45.8	85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 16:30

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	2.8	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-005  
 Lab File ID: M0627022.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 16:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-005  
 Lab File ID: M0627022.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 16:30  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:



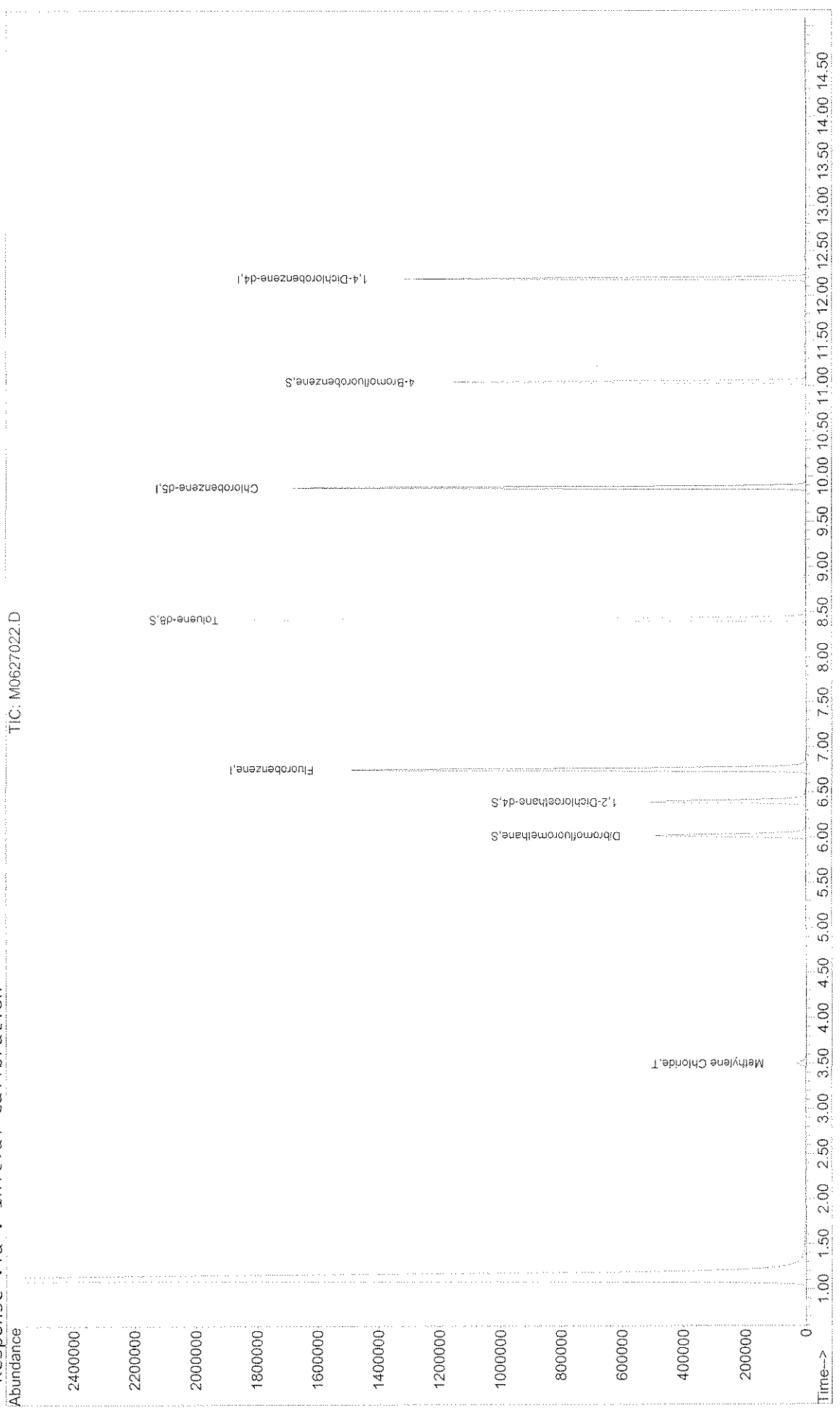
Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627022.D  
Acq On : 27 Jun 2007 16:30  
Sample : JPL41-005  
Misc : #4 5ml +IS/SS(524)  
MS Integration Params: rreint.p  
Quant Time: Jun 28 8:26 2007

Vial: 61  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00

Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



TIC: M0627022.D

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627022.D  
 Acq On : 27 Jun 2007 16:30  
 Sample : JPL41-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:26 2007

Vial: 61  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1518140	50.00	ug/l	0.00 90.28%
54) Chlorobenzene-d5	9.87	117	976779	50.00	ug/l	0.00 98.44%
74) 1,4-Dichlorobenzene-d4	12.19	152	342950	50.00	ug/l	0.00 88.64%

System Monitoring Compounds						
37) Dibromofluoromethane	6.02	111	363966	52.92	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.84%
40) 1,2-Dichloroethane-d4	6.40	65	415738	55.87	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	111.74%
55) Toluene-d8	8.42	98	1449441	48.04	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.08%
76) 4-Bromofluorobenzene	11.05	95	379753	58.92	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.84%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	2.99	43	735		N.D.	
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	0.00	76	0		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.41	43	55		N.D.	
18) Methylene Chloride	3.50	84	22771	2.84	ug/l	95
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	0.00	73	0		N.D.	
22) Acrylonitrile	0.00	53	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	827		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627022.D  
 Acq On : 27 Jun 2007 16:30  
 Sample : JPL41-005  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:26 2007

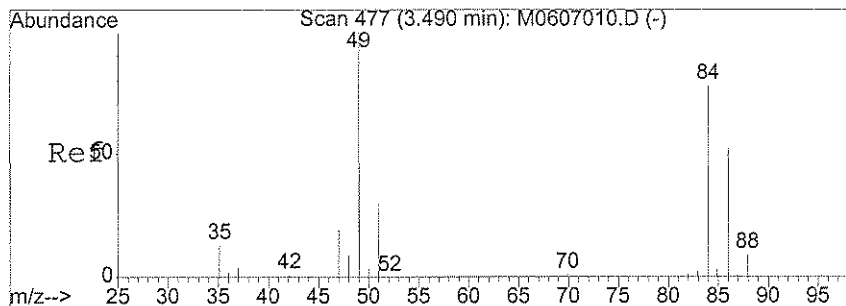
Vial: 61  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

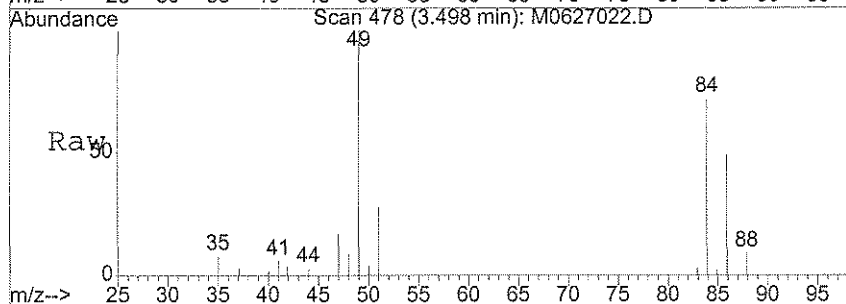
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	1157		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	920		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	66		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	76		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2026		N.D.	
66) Chlorobenzene	9.90	112	63		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.99	91	979		N.D.	
69) m,p-xylene	10.11	106	789		N.D.	
70) o-xylene	10.51	106	272		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	153		N.D.	
73) Isopropylbenzene	10.87	105	510		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	966		N.D.	
81) 2-Chlorotoluene	11.37	91	206		N.D.	
82) 4-Chlorotoluene	11.49	91	68		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	666		N.D.	
84) tert-Butylbenzene	11.77	119	837		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	1640		N.D.	
86) sec-butylbenzene	11.99	105	1025		N.D.	
87) 1,3-Dichlorobenzene	12.22	146	127		N.D.	
88) 4-Isopropyltoluene	12.13	119	794		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	127		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	761		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration  
 M0627022.D M8260W.M Fri Jun 29 05:52:42 2007

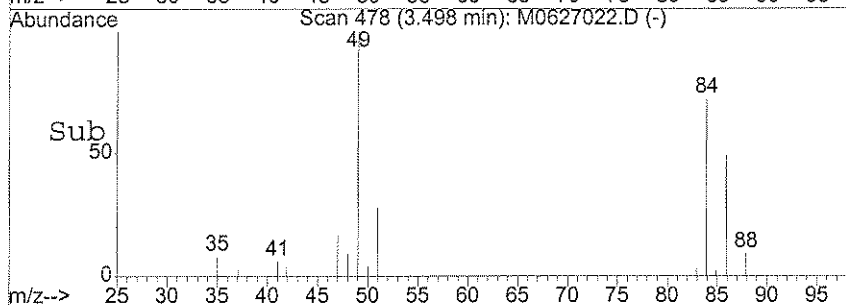
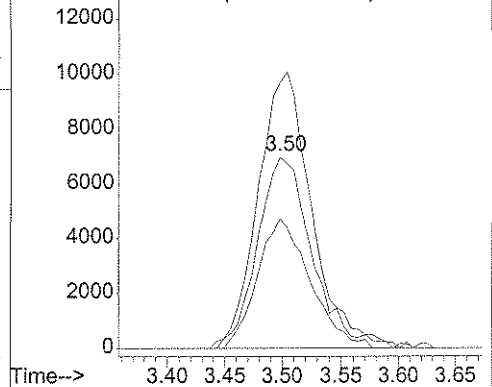


#18  
 Methylene Chloride  
 Concen: 2.84 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0627022.D  
 Acq: 27 Jun 2007 16:30

Tgt Ion	Resp	Lower	Upper
84	22771		
49	142.8	113.6	153.6
86	65.6	45.8	85.8



Abundance  
 Ion 84.00 (83.70 to 84.70): M0627022  
 Ion 49.00 (48.70 to 49.70): M0627022  
 Ion 86.00 (85.70 to 86.70): M0627022



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-006  
 Lab File ID: M0627023.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 17:01  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	3.4		
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-006  
 Lab File ID: M0627023.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 17:01  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 17:01

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

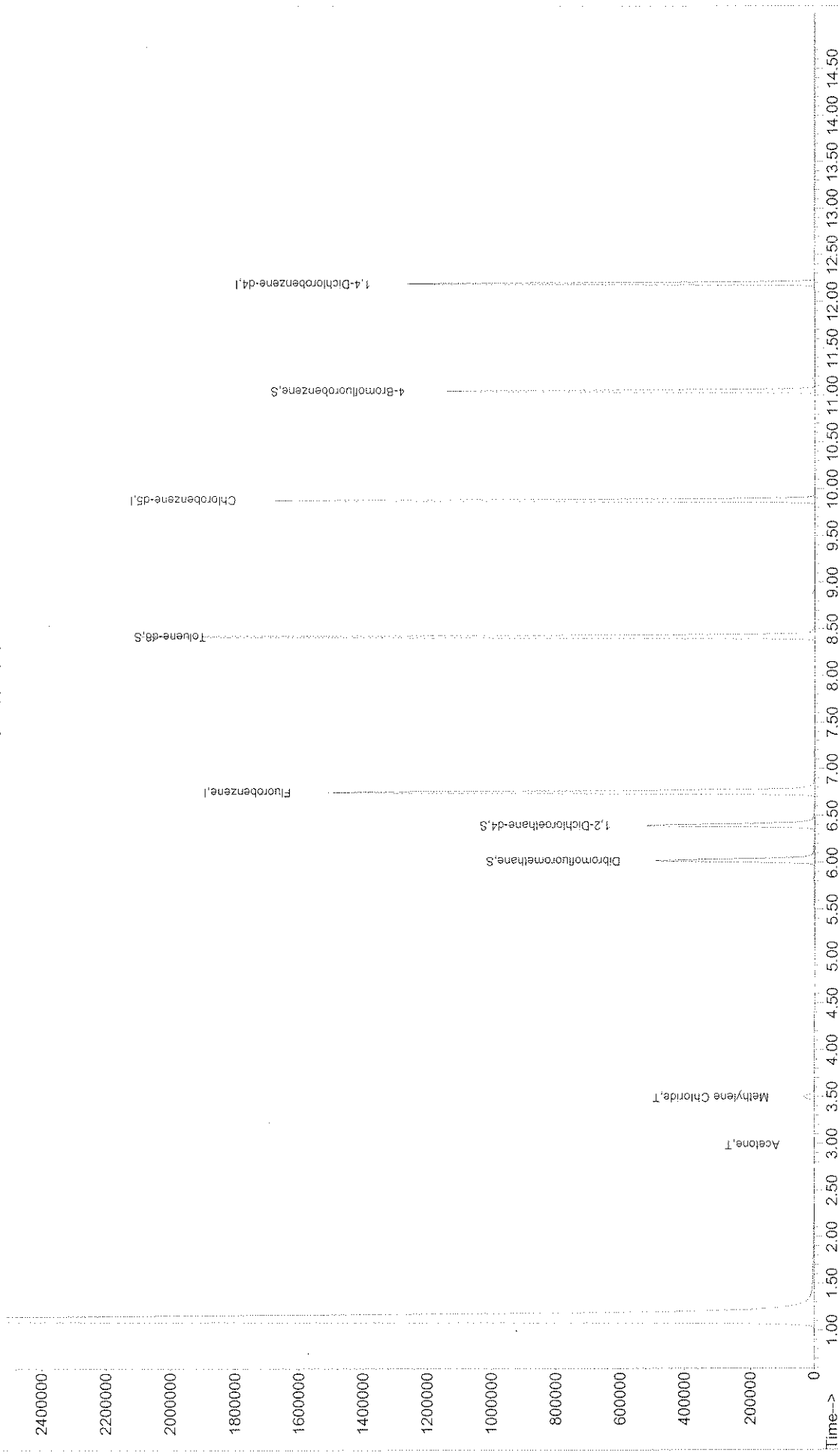
Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627023.D  
Acq On : 27 Jun 2007 17:01  
Sample : JPL41-006  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 28 8:27 2007

Vial: 62  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260w.RES

Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

Abundance TIC: M0627023.D





Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627023.D  
 Acq On : 27 Jun 2007 17:01  
 Sample : JPL41-006  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:27 2007

Vial: 62  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1522138	50.00	ug/l	0.00	90.52%
54) Chlorobenzene-d5	9.88	117	974315	50.00	ug/l	0.00	98.19%
74) 1,4-Dichlorobenzene-d4	12.20	152	342476	50.00	ug/l	0.00	88.52%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	364472	52.86	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.72%	
40) 1,2-Dichloroethane-d4	6.40	65	413460	55.42	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.84%	
55) Toluene-d8	8.42	98	1451246	48.22	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.44%	
76) 4-Bromofluorobenzene	11.05	95	385727	59.93	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	119.86%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	1989	1.19	ug/l #	67
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon disulfide	3.06	76	191	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.43	43	115	N.D.		
18) Methylene Chloride	3.50	84	27198	3.39	ug/l	95
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.94	73	1040	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.53	43	611	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.83	83	3038	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0627023.D M8260W.M Fri Jun 29 05:52:59 2007

*J 06/28/07*

Quantitation Report

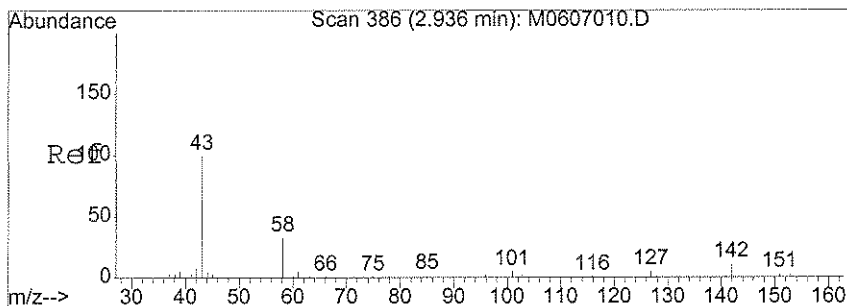
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 Acq On : 27 Jun 2007 17:01  
 Sample : JPL41-006  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:27 2007

Vial: 62  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

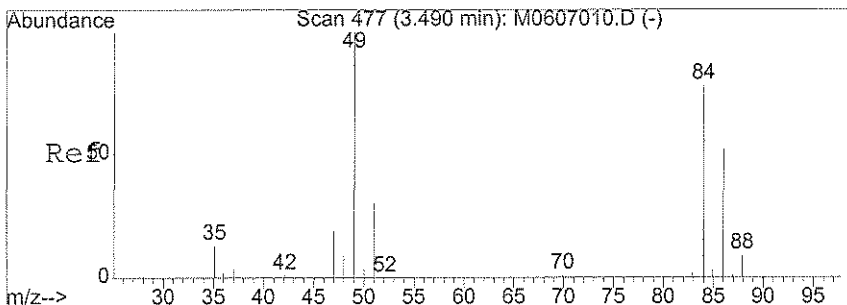
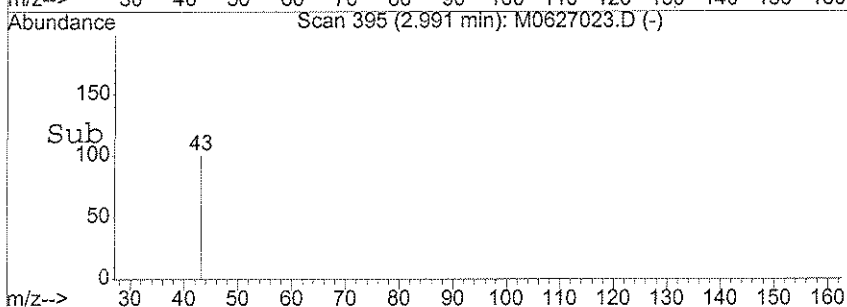
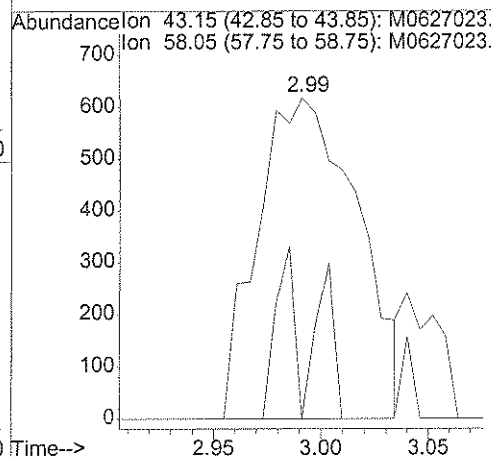
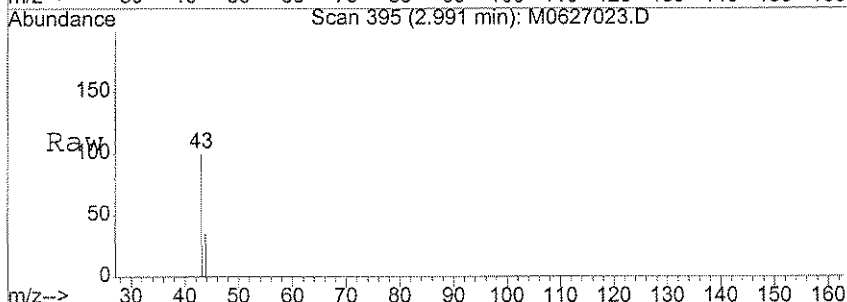
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.15	117	3588		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	2517		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	2172		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.42	92	69		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.87	97	65		N.D.	
60) Tetrachloroethene	9.04	166	209		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.13	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	2045		N.D.	
66) Chlorobenzene	9.90	112	151		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	1646		N.D.	
69) m,p-Xylene	10.12	106	753		N.D.	
70) o-xylene	10.51	106	255		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	132		N.D.	
73) Isopropylbenzene	10.88	105	537		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	118		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	61		N.D.	
80) n-Propylbenzene	11.27	91	939		N.D.	
81) 2-Chlorotoluene	11.38	91	62		N.D.	
82) 4-Chlorotoluene	11.48	91	55		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	703		N.D.	
84) tert-Butylbenzene	11.78	119	758		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	1357		N.D.	
86) sec-butylbenzene	11.99	105	870		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	59		N.D.	
88) 4-Isopropyltoluene	12.13	119	691		N.D.	
89) 1,4-Dichlorobenzene	12.12	146	59		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	750		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.67	180	90		N.D.	



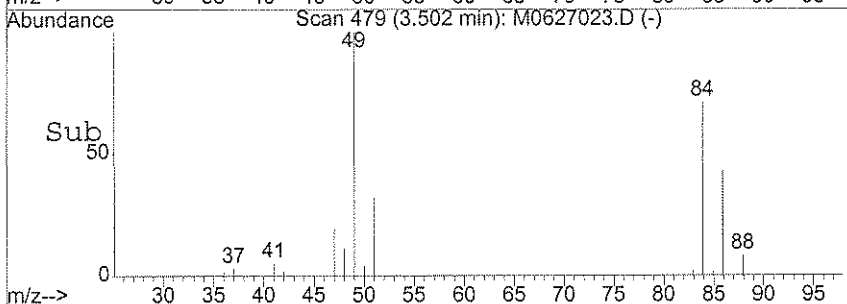
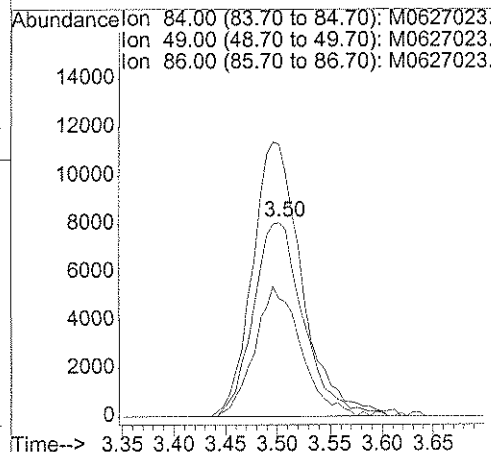
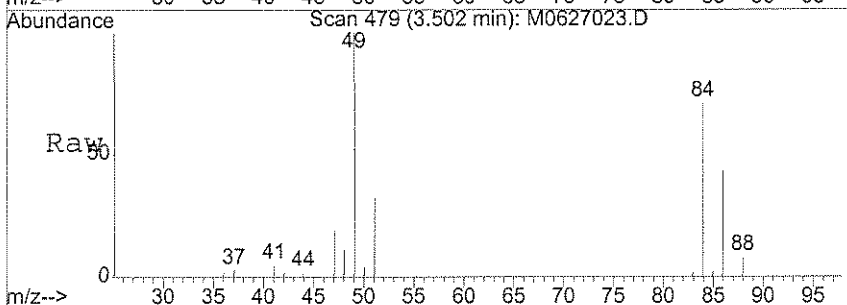
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 Acetone  
 Concen: 1.19 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. 0.00 min  
 Lab File: M0627023.D  
 Acq: 27 Jun 2007 17:01

Tgt Ion: 43 Resp: 1989  
 Ion Ratio Lower Upper  
 43 100  
 58 10.1 22.0 33.0#



#18  
 Methylene Chloride  
 Concen: 3.39 ug/l  
 RT: 3.50 min Scan# 479  
 Delta R.T. 0.00 min  
 Lab File: M0627023.D  
 Acq: 27 Jun 2007 17:01

Tgt Ion: 84 Resp: 27198  
 Ion Ratio Lower Upper  
 84 100  
 49 140.0 113.6 153.6  
 86 61.8 45.8 85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-7-06/21/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 17:28

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	2.4	
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-7-06/21/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-007  
 Lab File ID: M0627024.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 17:28  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-7-06/21/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-007  
 Lab File ID: M0627024.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 17:28  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

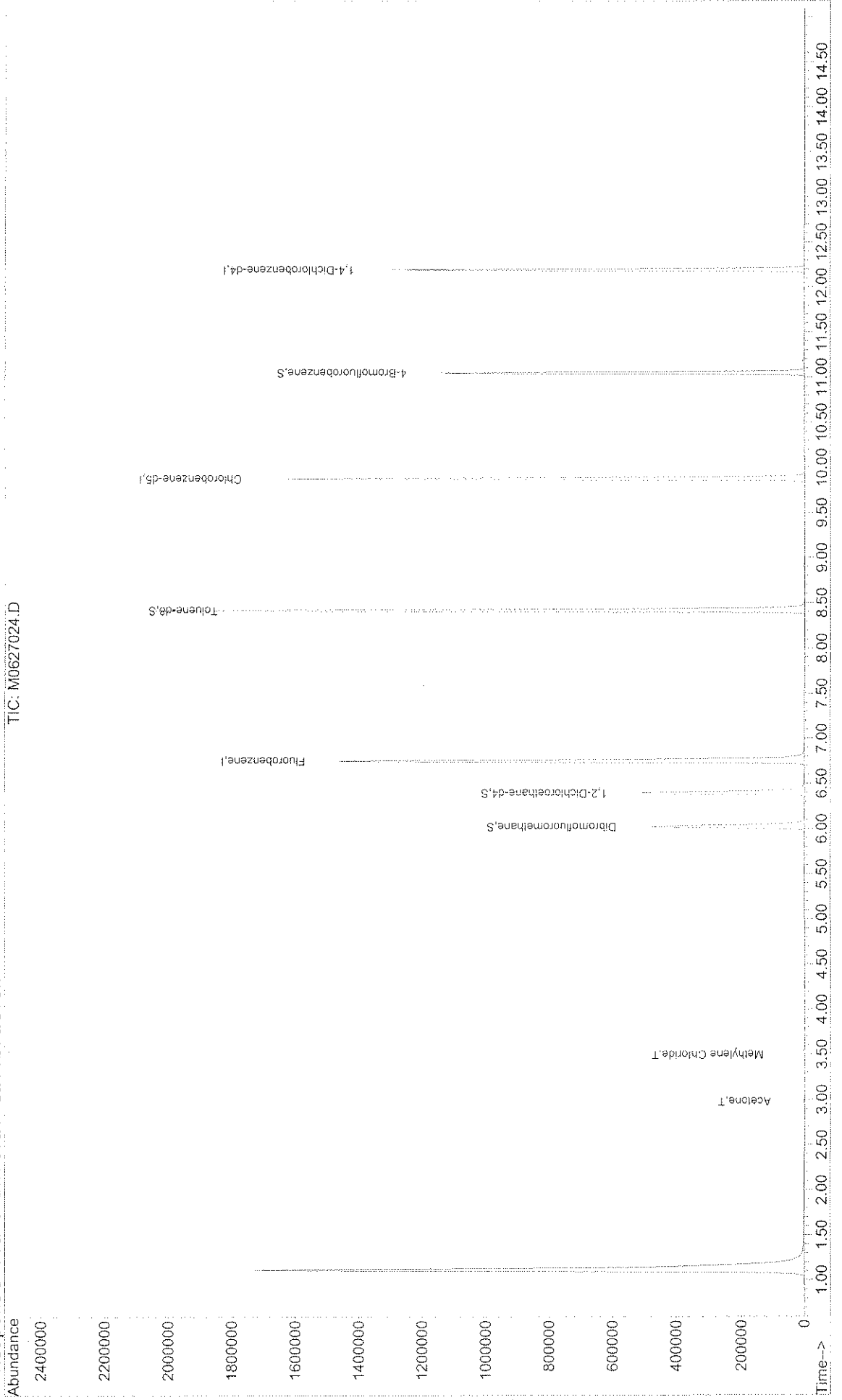
Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627024.D  
Acq On : 27 Jun 2007 17:28  
Sample : JPL41-007  
Misc : #4 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 28 8:27 2007

Vial: 63  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

TIC: M0627024.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627024.D  
 Acq On : 27 Jun 2007 17:28  
 Sample : JPL41-007  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:27 2007

Vial: 63  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1512441	50.00	ug/l	0.00 89.94%
54) Chlorobenzene-d5	9.87	117	954048	50.00	ug/l	0.00 96.14%
74) 1,4-Dichlorobenzene-d4	12.19	152	337731	50.00	ug/l	0.00 87.29%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	362613	52.92	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.84%
40) 1,2-Dichloroethane-d4	6.39	65	410900	55.43	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.86%
55) Toluene-d8	8.42	98	1428831	48.49	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.98%
76) 4-Bromofluorobenzene	11.05	95	373255	58.81	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	117.62%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	5700	3.43	ug/l	96
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	19402	2.43	ug/l	96
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	3.89	59	155	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.83	83	254	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

*JG 06/28/07*  
 Page 1



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627024.D  
 Acq On : 27 Jun 2007 17:28  
 Sample : JPL41-007  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:27 2007

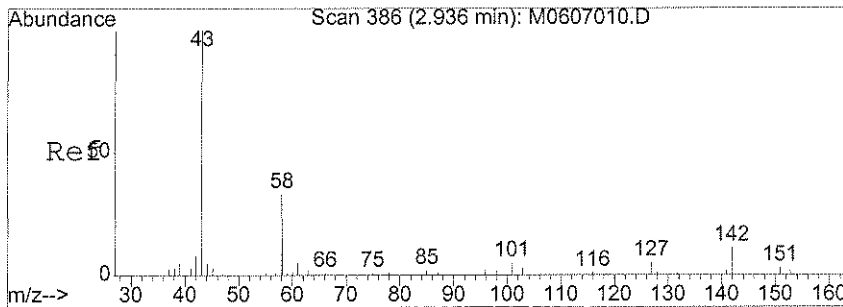
Vial: 63  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

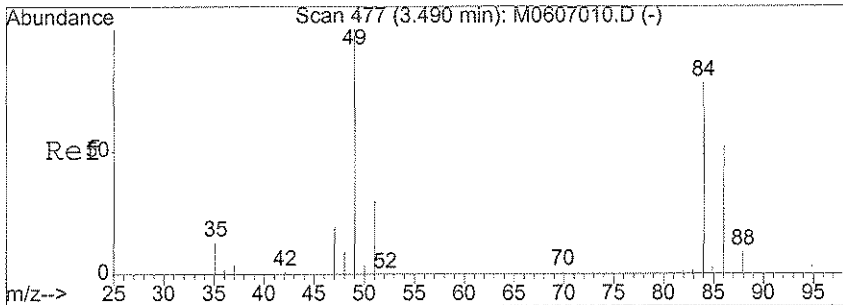
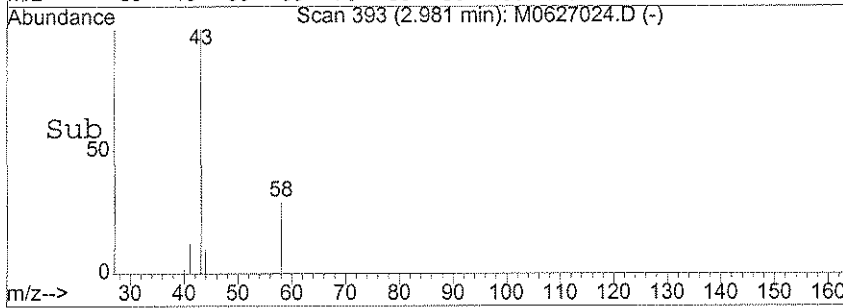
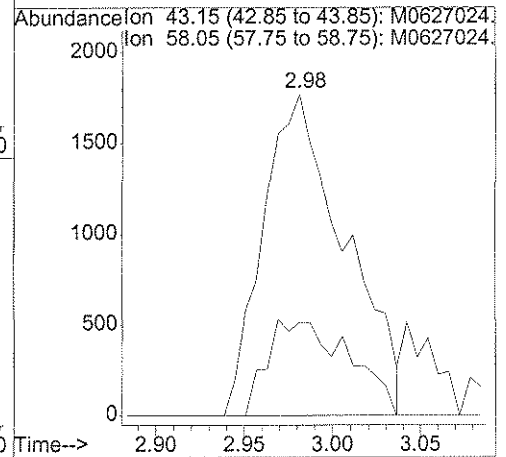
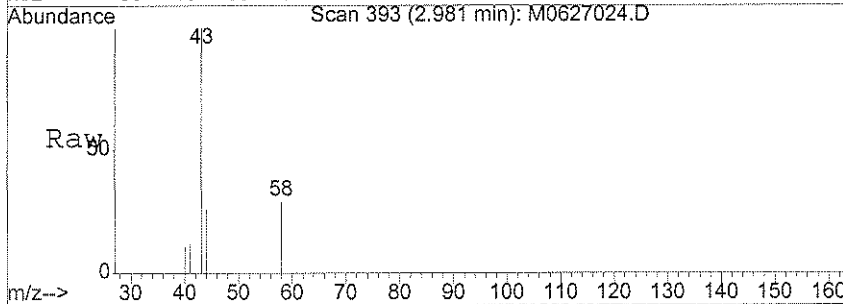
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	530		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	465		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.89	97	59		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.27	43	59		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1928		N.D.	
66) Chlorobenzene	9.90	112	149		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	1015		N.D.	
69) m,p-Xylene	10.11	106	1023		N.D.	
70) o-xylene	10.51	106	247		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	55		N.D.	
73) Isopropylbenzene	10.87	105	233		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	65		N.D.	
80) n-Propylbenzene	11.28	91	707		N.D.	
81) 2-Chlorotoluene	11.38	91	145		N.D.	
82) 4-Chlorotoluene	11.38	91	145		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	384		N.D.	
84) tert-Butylbenzene	11.78	119	436		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	948		N.D.	
86) sec-butylbenzene	11.99	105	773		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	615		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	543		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.18	180	207		N.D.	
94) Hexachlorobutadiene	14.33	225	57		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration  
 M0627024.D M8260W.M Fri Jun 29 05:53:23 2007



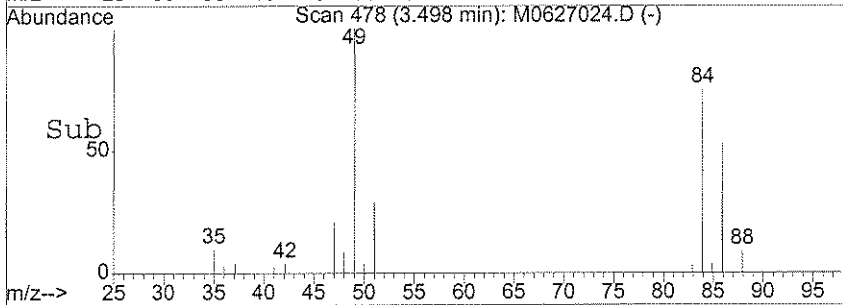
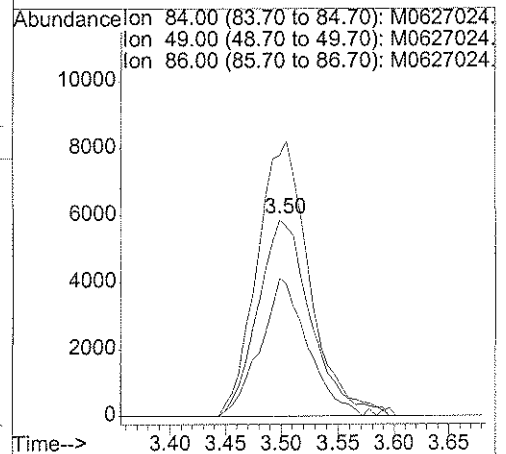
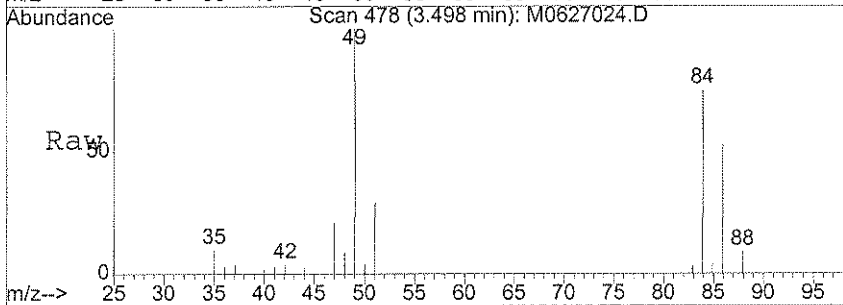
#11  
 Acetone  
 Concen: 3.43 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0627024.D  
 Acq: 27 Jun 2007 17:28

Tgt Ion	Resp	Lower	Upper
43	5700		
58	29.5	22.0	33.0



#18  
 Methylene Chloride  
 Concen: 2.43 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0627024.D  
 Acq: 27 Jun 2007 17:28

Tgt Ion	Resp	Lower	Upper
84	19402		
49	138.7	113.6	153.6
86	62.8	45.8	85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-7-06/21/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-008  
 Lab File ID: M0627016.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 13:39  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	1.0		U
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-7-06/21/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL41  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-008  
 Lab File ID: M0627016.D  
 Date Collected: 06/21/2007  
 Date/Time Analyzed: 06/27/2007 13:39  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-7-06/21/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL41-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/21/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/27/2007 13:39

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627016.D  
Acq On : 27 Jun 2007 13:39 Vial: 55  
Sample : JPL41-008 Operator: DGA  
Misc : #1 5ml +IS/SS(524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 28 8:22 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration  
TIC: M0627016.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627016.D  
 Acq On : 27 Jun 2007 13:39  
 Sample : JPL41-008  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:22 2007

Vial: 55  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Thu Jun 28 07:42:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) RCV(Ar )
1) Fluorobenzene	6.75	96	1542409	50.00	ug/l	0.00 91.72%
54) Chlorobenzene-d5	9.88	117	987054	50.00	ug/l	0.00 99.47%
74) 1,4-Dichlorobenzene-d4	12.19	152	346643	50.00	ug/l	0.00 89.59%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	370853	53.08	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.16%
40) 1,2-Dichloroethane-d4	6.40	65	414059	54.77	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.54%
55) Toluene-d8	8.42	98	1461259	47.93	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.86%
76) 4-Bromofluorobenzene	11.04	95	385199	59.13	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	118.26%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	3.00	43	91		N.D.	
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.06	76	151		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.43	43	58		N.D.	
18) Methylene Chloride	3.50	84	2944		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	0.00	73	0		N.D.	
22) Acrylonitrile	0.00	53	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	319		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0627016.D M8260W.M Fri Jun 29 05:50:57 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627016.D  
 Acq On : 27 Jun 2007 13:39  
 Sample : JPL41-008  
 Misc : #1 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:22 2007

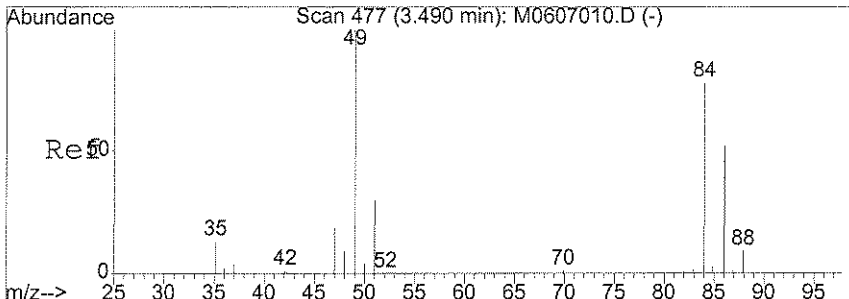
Vial: 55  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

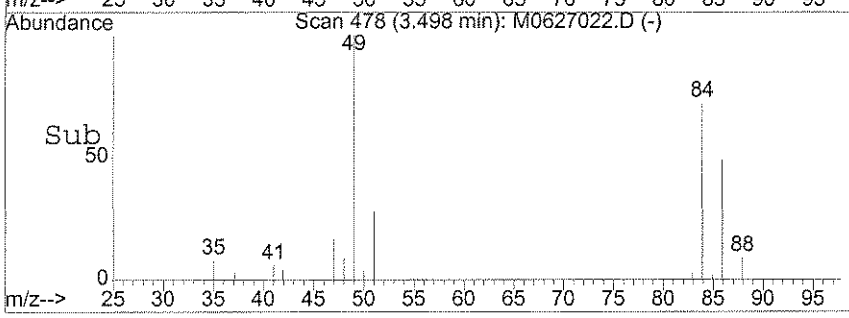
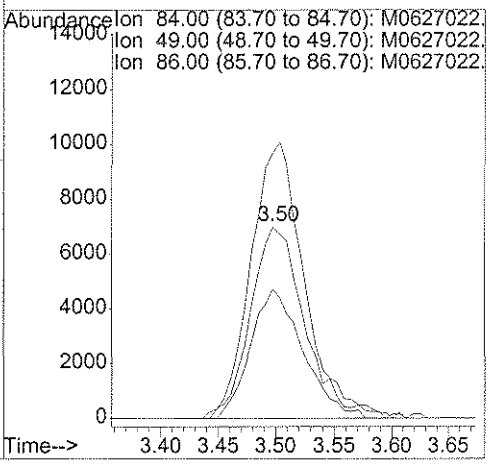
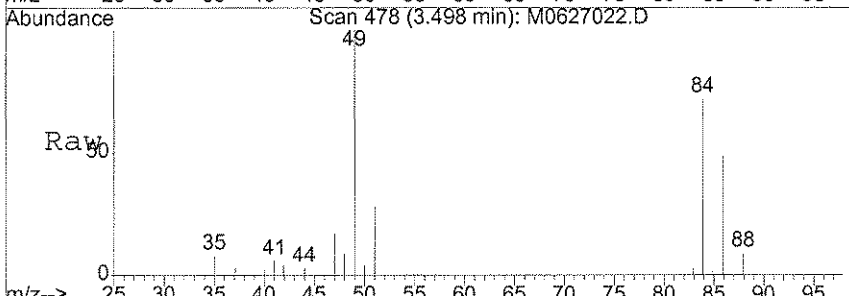
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	1796		N.D.	
42) 1,2-Dichloroethane	6.40	62	184		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	55		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	4024		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	57		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1963		N.D.	
66) Chlorobenzene	9.90	112	141		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	1797		N.D.	
69) m,p-xylene	10.11	106	1964		N.D.	
70) o-xylene	10.51	106	784		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	76		N.D.	
73) Isopropylbenzene	10.87	105	472		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1315		N.D.	
81) 2-Chlorotoluene	11.38	91	566		N.D.	
82) 4-Chlorotoluene	11.48	91	330		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	870		N.D.	
84) tert-Butylbenzene	11.77	119	437		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	1849		N.D.	
86) sec-butylbenzene	11.99	105	1061		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	293		N.D.	
88) 4-Isopropyltoluene	12.13	119	708		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	283		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	61		N.D.	
91) n-Butylbenzene	12.54	91	817		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	14.34	225	128		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

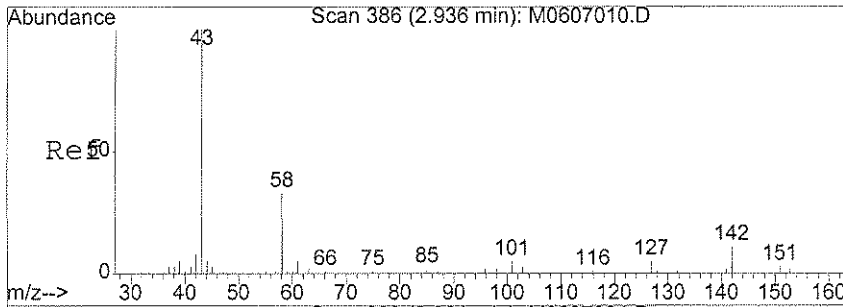




#18  
 Methylene Chloride  
 Concen: 2.84 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0627022.D  
 Acq: 27 Jun 2007 16:30

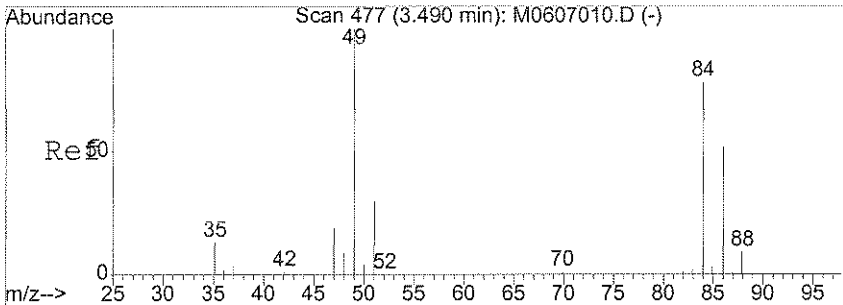
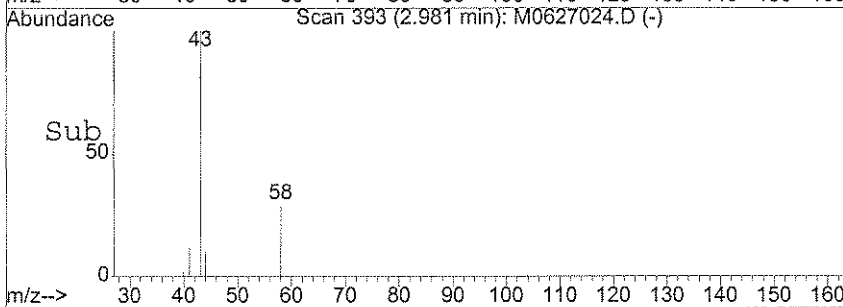
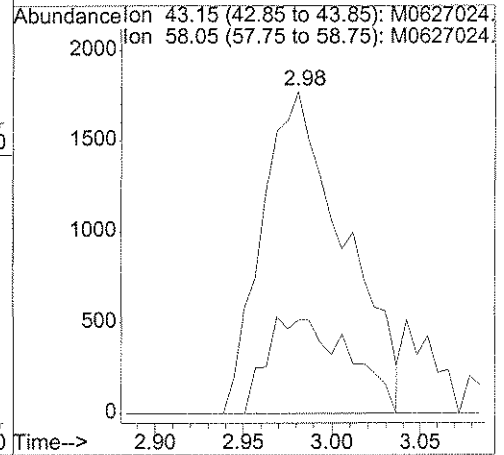
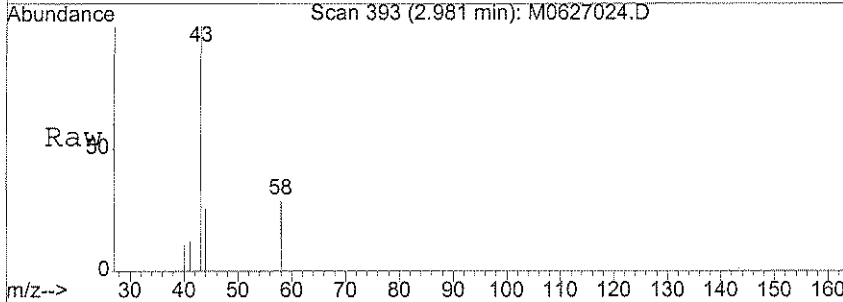
Tgt Ion:	84	Resp:	22771
Ion Ratio	Lower	Upper	
84	100		
49	142.8	113.6	153.6
86	65.6	45.8	85.8





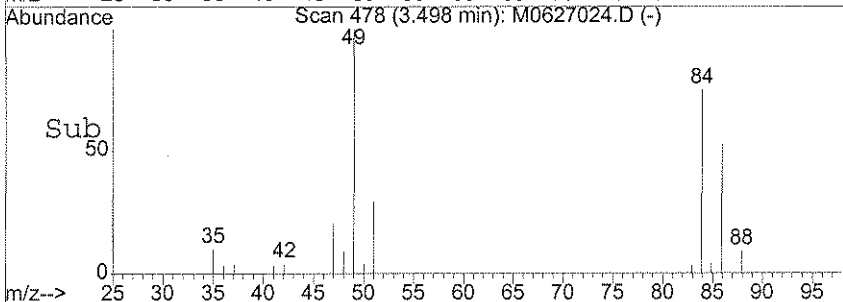
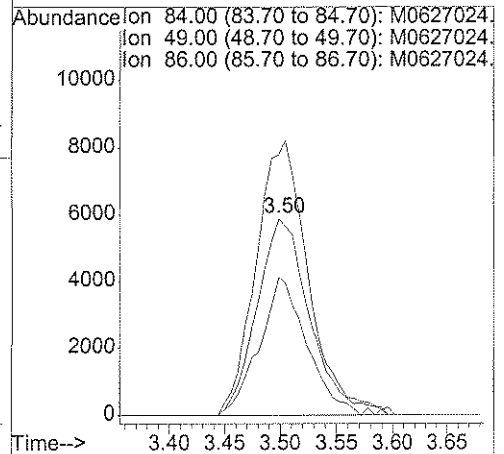
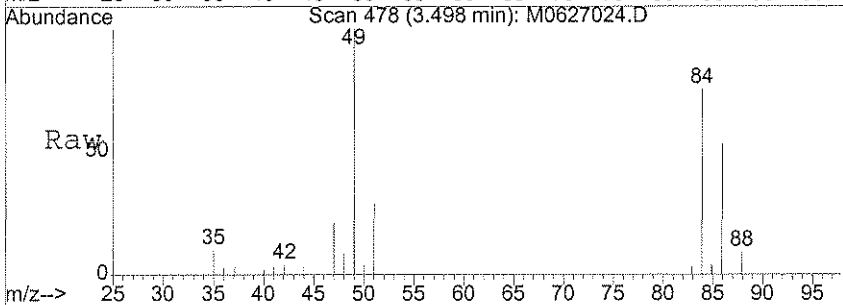
#11  
 Acetone  
 Concen: 3.43 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0627024.D  
 Acq: 27 Jun 2007 17:28

Tgt Ion: 43 Resp: 5700  
 Ion Ratio Lower Upper  
 43 100  
 58 29.5 22.0 33.0



#18  
 Methylene Chloride  
 Concen: 2.43 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.00 min  
 Lab File: M0627024.D  
 Acq: 27 Jun 2007 17:28

Tgt Ion: 84 Resp: 19402  
 Ion Ratio Lower Upper  
 84 100  
 49 138.7 113.6 153.6  
 86 62.8 45.8 85.8



**TIC FORMS**

SDG JPL41

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL41  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL41-001  
 Lab File ID: M0627018.D  
 Date Collected: 06/22/2007  
 Date Analyzed: 06/27/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627018.D                   Vial: 57  
Acq On    : 27 Jun 2007 14:34                   Operator: DGA  
Sample    : JPL41-001                         Inst     : MOBY  
Misc      : #2 5ml +IS/SS(524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library     : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627018.D M8260W.M    Fri Jun 29 05:51:37 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3-4

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627019.D                    Vial: 58  
Acq On    : 27 Jun 2007 15:04                                    Operator: DGA  
Sample    : JPL41-002    Inst     : MOBY  
Misc      : #3 5ml +IS/SS(524)                                  Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627019.D M8260W.M    Fri Jun 29 05:51:55 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3-3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627020.D                   Vial: 59  
Acq On    : 27 Jun 2007 15:34                   Operator: DGA  
Sample    : JPL41-003                         Inst     : MOBY  
Misc      : #8 5ml +IS/SS(524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library     : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627020.D M8260W.M    Fri Jun 29 05:52:11 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3-2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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18					
19					
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23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627021.D Vial: 60  
Acq On : 27 Jun 2007 16:02 Operator: DGA  
Sample : JPL41-004 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627021.D M8260W.M Fri Jun 29 05:52:30 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-3-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627022.D                   Vial: 61  
Acq On    : 27 Jun 2007 16:30                   Operator: DGA  
Sample    : JPL41-005                         Inst     : MOBY  
Misc      : #4 5ml +IS/SS(524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627022.D M8260W.M    Fri Jun 29 05:52:47 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-4-2Q07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627023.D                   Vial: 62  
Acq On    : 27 Jun 2007 17:01                   Operator: DGA  
Sample    : JPL41-006                         Inst     : MOBY  
Misc      : #2 5ml +IS/SS(524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library     : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627023.D M8260W.M   Fri Jun 29 05:53:11 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-7-06/21/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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26					
27					
28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627024.D                   Vial: 63  
Acq On    : 27 Jun 2007 17:28                   Operator: DGA  
Sample    : JPL41-007                         Inst    : MOBY  
Misc      : #4 5ml +IS/SS(524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627024.D M8260W.M    Fri Jun 29 05:53:28 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-7-06/21/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL41

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL41-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/22/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627016.D Vial: 55  
Acq On : 27 Jun 2007 13:39 Operator: DGA  
Sample : JPL41-008 Inst : MOBY  
Misc : #1 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627016.D M8260W.M Fri Jun 29 05:51:02 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062707MVOWM2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL41  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: B062707MVOWM2  
 Lab File ID: M0627012.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/27/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627012.D                   Vial: 55  
Acq On    : 27 Jun 2007 11:52                   Operator: DGA  
Sample    : B062707MVOWM2                   Inst     : MOBY  
Misc      : 5ml PFW+IS/SS(MV8-39-9)        Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627012.D M8260W.M     Fri Jun 29 05:50:19 2007

**Metals Data**

**JPL41**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

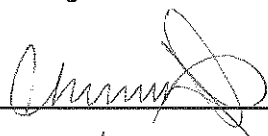
Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin  
 Lab Code: LAUCKS SDG No.: JPL41  
 SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-3-5</u>	<u>JPL41-001</u>
<u>MW-3-4</u>	<u>JPL41-002</u>
<u>MW-3-3</u>	<u>JPL41-003</u>
<u>MW-3-3MS</u>	<u>JPL41-003MS</u>
<u>MW-3-3MSD</u>	<u>JPL41-003MSD</u>
<u>MW-3-2</u>	<u>JPL41-004</u>
<u>MW-3-1</u>	<u>JPL41-005</u>
<u>DUPE-4-2Q07</u>	<u>JPL41-006</u>
<u>EB-7-06/21/07</u>	<u>JPL41-007</u>

Were ICP interelement corrections applied? Yes/No YES  
 Were ICP background corrections applied? Yes/No NO  
 If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Cherronne Oreiro  
 Date: 07/16/2007 Title: Metals Lead

## **Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-001

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	3.13			M	R019266
7440-70-2	Calcium	14300		E	P	R019325
7440-47-3	Chromium	1.00	U		M	R019266
7439-89-6	Iron	710			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	6570		E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	71000		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-002

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	3.68			M	R019266
7440-70-2	Calcium	17900		E	P	R019325
7440-47-3	Chromium	1.00	U		M	R019266
7439-89-6	Iron	1690			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	6940		E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	67100		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-003

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.46			M	R019266
7440-70-2	Calcium	21500		E	P	R019513
7440-47-3	Chromium	1.14			M	R019266
7439-89-6	Iron	100	U		P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	12100		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	47000		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-004

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	58700		E	P	R019384
7440-47-3	Chromium	2.10			M	R019266
7439-89-6	Iron	305			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	19000		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	26100		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-005

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	50200		E	P	R019384
7440-47-3	Chromium	1.16			M	R019266
7439-89-6	Iron	259			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	16600		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	28900		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-4-2Q07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-006

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	53500		E	P	R019384
7440-47-3	Chromium	1.94			M	R019266
7439-89-6	Iron	318			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	19600		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	20500		*	P	R019513

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-7-06/21/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

Matrix (soil/water): Water

Lab Sample ID: JPL41-007

Level (low/med): LOW

Date Received: 06/22/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	5000	U	E	P	R019325
7440-47-3	Chromium	1.91			M	R019266
7439-89-6	Iron	100	U		P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	5000	U	E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	5000	U	*	P	R019325

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL41**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL41

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-3-5</u>	<u>JPL41-001</u>
<u>MW-3-4</u>	<u>JPL41-002</u>
<u>MW-3-3</u>	<u>JPL41-003</u>
<u>MW-3-3D</u>	<u>JPL41-003D</u>
<u>MW-3-3MS</u>	<u>JPL41-003MS</u>
<u>MW-3-3MSD</u>	<u>JPL41-003MSD</u>
<u>MW-3-2</u>	<u>JPL41-004</u>
<u>MW-3-1</u>	<u>JPL41-005</u>
<u>DUPE-4-2007</u>	<u>JPL41-006</u>
<u>EB-7-06/21/07</u>	<u>JPL41-007</u>

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-10-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL41  
**Sample Number:** MW-3-5 **Date/Time Collected:** 06/21/2007 07:55  
**Lab Sample ID:** JPL41-001 **Date/Time Received:** 06/22/2007 10:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.5		0.10	0.10	06/22/2007	06/22/2007	R018976

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	180		2	2	06/25/2007	06/27/2007	R018985

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/22/2007	06/23/2007	R018984
Sulfate as SO4	14808-79-8	1	1.8		1.0	0.17	06/22/2007	06/23/2007	R018984
Chloride	16887-00-6	10	11		10	0.76	06/22/2007	06/23/2007	R018984

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	12		4	4	07/03/2007	07/03/2007	R019262
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	150		4	4	07/03/2007	07/03/2007	R019262

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/28/2007	06/29/2007	R019096

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL41  
**Sample Number:** MW-3-4 **Date/Time Collected:** 06/21/2007 08:39  
**Lab Sample ID:** JPL41-002 **Date/Time Received:** 06/22/2007 10:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.8		0.10	0.10	06/22/2007	06/22/2007	R018976

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	200		2	2	06/25/2007	06/27/2007	R018985

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/22/2007	06/23/2007	R018984
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/22/2007	06/23/2007	R018984
Chloride	16887-00-6	10	12		10	0.76	06/22/2007	06/23/2007	R018984

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/03/2007	07/03/2007	R019262
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	170		8	8	07/03/2007	07/03/2007	R019262

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/28/2007	06/29/2007	R019096



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL41  
**Sample Number:** MW-3-2 **Date/Time Collected:** 06/21/2007 10:17  
**Lab Sample ID:** JPL41-004 **Date/Time Received:** 06/22/2007 10:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	06/22/2007	06/22/2007	R018976

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	290		2	2	06/25/2007	06/27/2007	R018985

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	2.2		0.20	0.055	06/22/2007	06/23/2007	R018984
Sulfate as SO4	14808-79-8	10	43		10	1.7	06/22/2007	06/23/2007	R018984
Chloride	16887-00-6	10	21		10	0.76	06/22/2007	06/23/2007	R018984

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/18/2007	07/18/2007	R019651
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	160		8	8	07/18/2007	07/18/2007	R019651

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	78		2.0	0.28	06/28/2007	06/29/2007	R019096







**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL41  
**Sample Number:** EB-7-06/21/07 **Date/Time Collected:** 06/21/2007 11:03  
**Lab Sample ID:** JPL41-007 **Date/Time Received:** 06/22/2007 10:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	06/22/2007	06/22/2007	R018976

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	2	U	2	2	06/25/2007	06/27/2007	R018985

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/22/2007	06/23/2007	R018984
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/22/2007	06/23/2007	R018984
Chloride	16887-00-6	1	1.0	U	1.0	0.076	06/22/2007	06/23/2007	R018984

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/03/2007	07/03/2007	R019262
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	07/03/2007	07/03/2007	R019262

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/28/2007	06/29/2007	R019096

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL42**

**JULY 19, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL42  
Date of Report: July 19, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-4-5	JPL42-001	VOA/MET/INO
MW-4-4	JPL42-002	VOA/MET/INO
MW-4-3	JPL42-003	VOA/MET/INO
MW-4-2	JPL42-004	VOA/MET/INO
MW-4-1	JPL42-005	VOA/SVOA/MET/INO
EB-9-6/25/07	JPL42-006	VOA/MET/INO
TB-9-6/25/07	JPL42-007	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
SVOA = 1,4-Dioxane (8270)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

The temperature blank measured above the control limit of 6 deg C.

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### GENERAL REMARKS ON ORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### Holding Time Compliance:

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

##### *Semi-Volatile Organic Compounds:*

The holding time to extraction is 7 days in water and 14 days in soil calculated from the date of collection. In either case, the holding time from extraction to analysis is 40 days. All samples were extracted and analyzed within holding time.

#### Volatiles Fraction:

##### Initial Calibration

Analysis of the initial calibration yielded a %RSD value for methylene chloride that exceeded 20%. An alternative curve fit was not used for it because the results would have been biased low. Using the average resulted in a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 (r values greater than 0.995) and were therefore compliant.

##### Continuing Calibration Verification (CCV):

In the CCV performed on 06/27/2007 the percent difference value for hexachlorobutadiene exceeded 30% due to decreased response. This analyte was not detected in any associated samples so no further action was taken.

In the CCV performed on 06/28/2007 the percent difference value for hexachlorobutadiene and the percent drift value for 1,2,3-trichlorobenzene exceeded 30% due to decreased response. Because analytes are reported well below the reporting limit the chance of reporting false negatives is negligible.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

Quality Control Analyses:

MS/MSD analyses were not performed on sample MW-4-2 due to insufficient sample volume. Analysis of the blank spike performed on 06/27/07 yielded a recovery for hexachlorobutadiene that fell below the control limit. Because all other analytes were within the control limits no further action was taken.

Analysis of the blank spike performed on 06/28/07 yielded a recovery for dichlorodifluoromethane that fell below the control limit. Because all other analytes were within the control limits no further action was taken.

Semivolatiles Fraction:

All quality control parameters were met.

**GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

**SPECIFIC REMARKS ON INORGANIC ANALYSES:**

Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

All samples were analyzed past their holding time for nitrate by method 300.0. When the samples were received the anion instrument was not functioning properly. An aliquot was split and preserved with sulfuric acid for NO<sub>3</sub>/NO<sub>2</sub> analysis. The samples were analyzed within the 48 hour hold time by method 354.1 for nitrite and within the 28 day holding time for NO<sub>3</sub>/NO<sub>2</sub> by method 353.2. The nitrate was then calculated from the difference. The final results include data from all methods, and all raw data are included in the data package.

### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production. Calcium fell outside of the calibration range for sample EB-9-6/25/07 and the LCS/LCSD. Since the LCS/LCSD fell within all quality control limits, no further action was taken. Data have been reported as is.

For the analytical run, R019325, Form 2A shows a CCV recovery for magnesium of 112.7% respectively. This recovery is within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115. Data have been reported as is.

Samples in this SDG (JPL42) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Samples from this SDG (JPL42) and also other samples from a different SDG (JPL41) were selected for sample-level QC. Comments regarding matrix spike/matrix spike duplicate recoveries and serial dilutions apply to all samples prepared and analyzed together. Sample level QC and analytical time can be seen on Form 14.

The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-4-2 for JPL42. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

The serial dilution for the elements calcium and magnesium did not agree within 10% of the original determination after correction for dilution for sample MW-4-2 for JPL42. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### Miscellaneous Inorganics:

For run sequence R019390, the blank spike duplicate recovery was outside the established control limits for the perchlorate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

For run sequence R019406, the matrix spike recovery was outside the established control limits for the chloride analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

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Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.



## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,

  
Mike Baxter  
Project Manager

  
Harry Romberg  
Quality Assurance Officer

19 July 2007  
(DATE)

2/19/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	8270SIM-level 1,4-Dioxane (1.5 ppb RL; J to 1 ppb)	TurMet for 200.7/200.8 TurMet
JPL42-001	06/26/2007 08:30 AM	06/25/2007 07:43 AM	MW-4-5	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL42-002	06/26/2007 08:30 AM	06/25/2007 08:18 AM	MW-4-4	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL42-003	06/26/2007 08:30 AM	06/25/2007 08:53 AM	MW-4-3	IN	IN	IN	IN	IN	IN	IN	IN		IN
*JPL42-004	06/26/2007 08:30 AM	06/25/2007 09:26 AM	MW-4-2	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL42-005	06/26/2007 08:30 AM	06/25/2007 10:03 AM	MW-4-1	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL42-006	06/26/2007 08:30 AM	06/25/2007 09:46 AM	EB-9-6/25/07	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL42-007	06/26/2007 08:30 AM	06/25/2007 12:00 AM	TB-9-6/25/07								IN		

Approved By: *[Signature]*

On: *[Signature]*

Notes:

Samples identified with a "\*" client has requested QC for  
 LEGEND: -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATTELLE  
 ADDRESS: 3990 OLD TOWN AVE, C-205  
SAN DIEGO, CA 92110  
 ATTENTION: DAVID CONNER  
 PROJECT NAME: ILL GUM MON 2007  
 PROJECT CONTACT: DAVID CONNER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/PO. NO.: 6486090 / 210640

CHAIN OF CUSTODY RECORD  
 42844

WORK ORDER ID# \_\_\_\_\_  
 SDG # SP12A  
 PAGE 1 OF 1  
 SUBMITTED AT: \_\_\_\_\_



TESTS TO PERFORM  
 40 South Hamer St., Seattle, WA 98108 (206) 737-3000 FAX 737-3003  
 1100 Everitt Ave., Tukwila, WA 98162 (206) 248-4095 FAX 432-1263

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS
	VOL (524.2)
	TOTAL (200.8)
	LEAD (200.8)
	ARSENIC (200.8)
	GEN CHEM (200.8)
	C10 (200.8)
	GEN CHEM (310.1300.0)
	1,4-DIOXANE (827.0)

LAB #	SAMPLE ID / LOCATION	DATE	TIME
1	MW-4-5	6/25/07	743
2	MW-4-4		818
3	MW-4-3		853
4	MW-4-2		926
5	MW-4-1		1003
6	ES-9 - 6/25/07		946
7	TS-9 - 6/25/07		-

LAB #	SAMPLE ID / LOCATION	DATE	TIME	MATRIX	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-4-5	6/25/07	743	W	5	X	
2	MW-4-4		818	W	5	X	
3	MW-4-3		853	W	5	X	
4	MW-4-2		926	W	5	X	LEVE TO O
5	MW-4-1		1003	W	5	X	LEVE TO O
6	ES-9 - 6/25/07		946	W	5	X	EQUIP. BLANK
7	TS-9 - 6/25/07		-	W	2	X	TRIP BLANK

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE.  
 2. BE SPECIFIC IN TEST REQUESTS.  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE.

NAME: BATTELLE  
 ADDRESS: 505 KING AVE  
 CITY, STATE, ZIP: COLUMBUS OH 43201

RELINQUISHED BY (SIGN AND PRINT): GERALD TOMPKINS  
 RECEIVED BY (SIGN AND PRINT): \_\_\_\_\_

DATE: 6/25/07 TIME: \_\_\_\_\_

RELINQUISHED BY (SIGN AND PRINT): [Signature]  
 RECEIVED BY (SIGN AND PRINT): [Signature]

DATE: 6/25/07 TIME: 1300

DATE: 6/28/07 TIME: 6/28/07

FINANCE CHARGES AND/OR COLLECTION FEE MAY BE APPLIED TO DELINQUENT ACCOUNTS.  
 FINAL REPORT COPY



**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL42  
Cooler: AAP016  
Temperatures: 7.1  
COC #: 42844

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL42-001	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	500 ml cylinder, poly, HNO3	<2	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	1000 mL cylinder, poly	7	N/A
JPL42-002	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	500 ml cylinder, poly, HNO3	<2	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	1000 mL cylinder, poly	7	N/A
JPL42-003	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	500 ml cylinder, poly, HNO3	<2	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	1000 mL cylinder, poly	7	N/A
JPL42-004	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	500 ml cylinder, poly, HNO3	<2	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	1000 mL cylinder, poly	7	N/A
JPL42-005	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	500 ml cylinder, poly, HNO3	<2	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0007	1000 mL cylinder, poly	7	N/A
JPL42-006	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	500 ml cylinder, poly, HNO3	<2	N/A
	0006	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0007	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0008	1000 mL cylinder, poly	7	N/A
JPL42-007	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL42  
 Cooler: AAP016  
 Temperatures: 7.1  
 COC #: 42844

Sample	Bottle #	Bottle Description	pH	Bubbles
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	1000 mL cylinder, poly	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH



**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**Battelle**

**SDG No.: JPL42**

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Completed and checked by:

*Judy Ecklernd*

Date:

*7/19/07*

**SAMPLE DATA**

SDG JPL42

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-5

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL42 Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL42-001

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0628013.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/28/2007 12:12

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628013.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 12:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	0.57	J
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628013.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 12:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

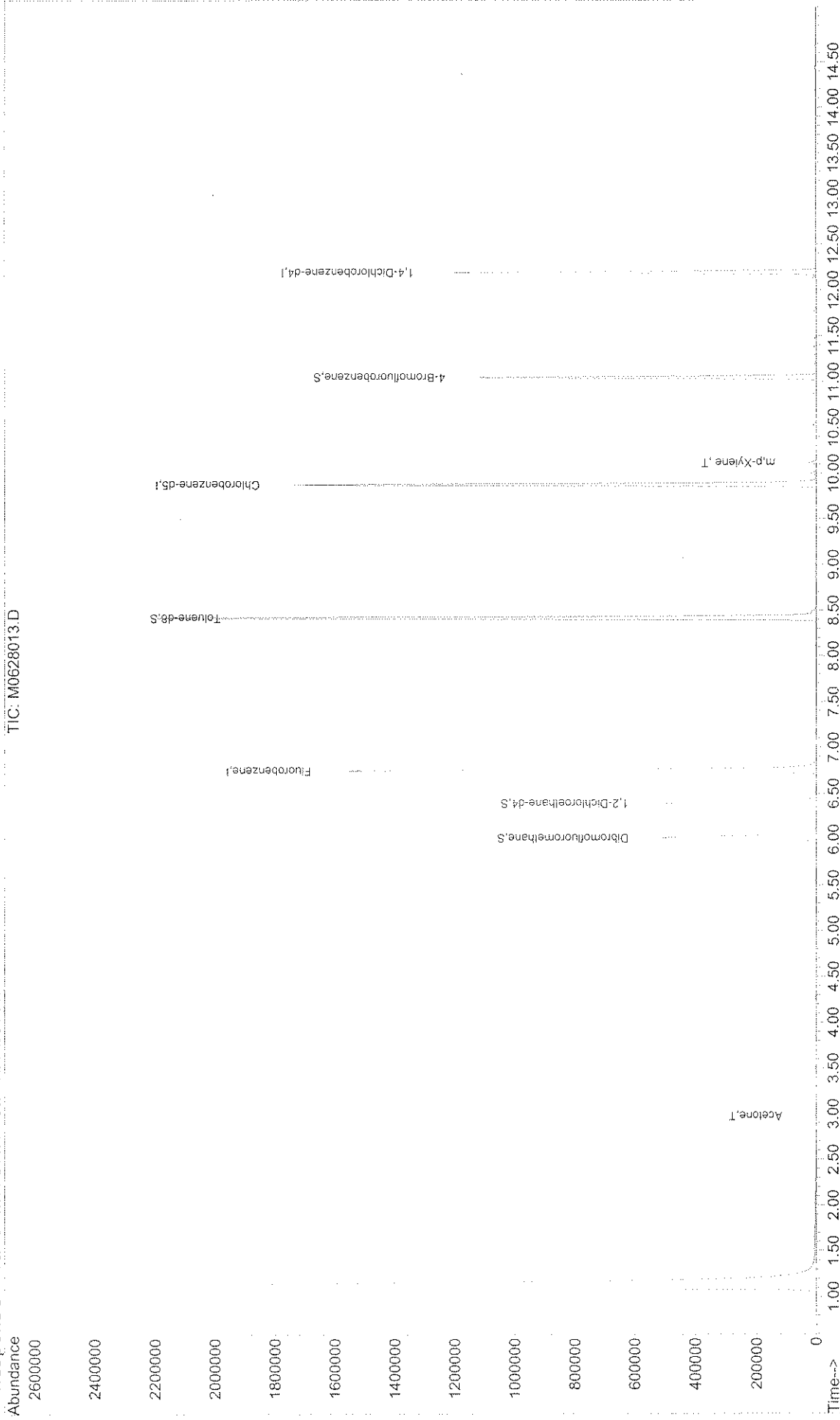
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628013.D  
Acq On : 28 Jun 2007 12:12  
Sample : JPL42-001  
Misc : #5 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:13 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

TIC: M0628013.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628013.D  
 Acq On : 28 Jun 2007 12:12  
 Sample : JPL42-001  
 Misc : #5 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:13 2007

vial: 57  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1606889	50.00	ug/l	0.00 95.56%
54) Chlorobenzene-d5	9.88	117	1007827	50.00	ug/l	0.00 101.56%
74) 1,4-Dichlorobenzene-d4	12.19	152	336491	50.00	ug/l	0.00 86.97%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	382468	52.54	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.08%
40) 1,2-Dichloroethane-d4	6.40	65	413392	52.49	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.98%
55) Toluene-d8	8.42	98	1520402	48.84	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.68%
76) 4-Bromofluorobenzene	11.05	95	377510	59.70	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	119.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	2265	1.28	ug/l	91
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	1177	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.45	43	563	N.D.		
18) Methylene Chloride	3.51	84	944	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	3.98	53	112	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	5.20	59	57	N.D.		
28) 2,2-Dichloropropane	5.36	77	596	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.52	43	371	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.86	41	58	N.D.		
34) Chloroform	5.83	83	287	N.D.		
35) 1,1,1-Trichloroethane	5.97	97	1150	N.D.		
36) Cyclohexane	5.99	56	154	N.D.		

*Handwritten signature and date: 06/29/07*



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628013.D  
 Acq On : 28 Jun 2007 12:12  
 Sample : JPL42-001  
 Misc : #5 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:13 2007

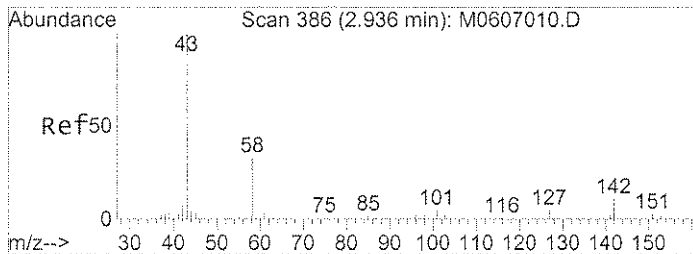
Vial: 57  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

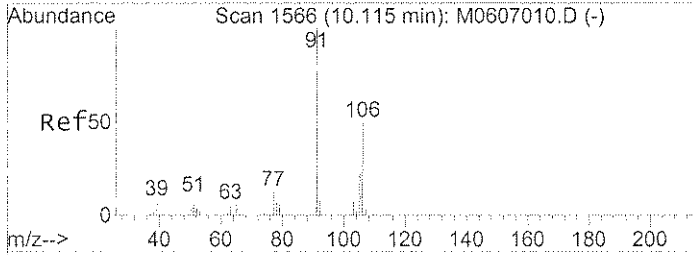
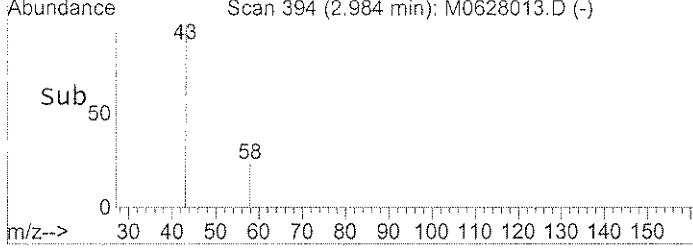
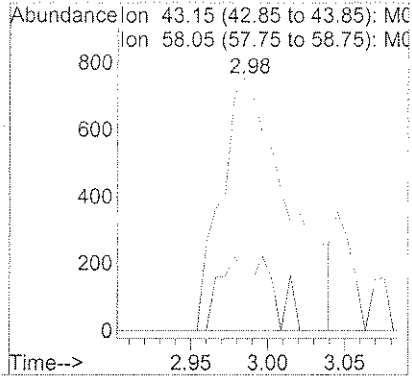
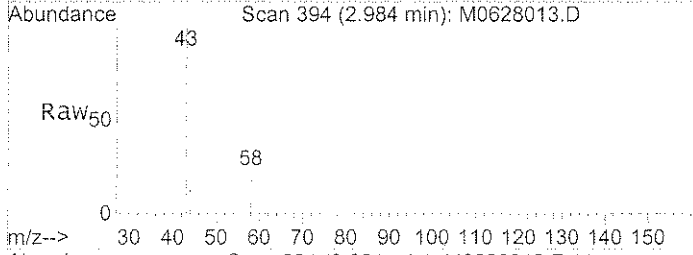
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.16	117	1666		N.D.	
39) 1,1-Dichloropropene	6.17	75	1445		N.D.	
41) Benzene	6.42	78	2427		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	7.16	130	1106		N.D.	
46) Methylcyclohexane	7.31	83	315		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	8.17	75	143		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	3855		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.95	97	61		N.D.	
60) Tetrachloroethene	9.03	166	2669		N.D.	
61) 1,3-Dichloropropane	9.10	76	73		N.D.	
62) 2-Hexanone	9.12	43	221		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2456		N.D.	
66) Chlorobenzene	9.91	112	3213		N.D.	
67) 1,1,1,2-Tetrachloroethane	10.00	131	701		N.D.	
68) Ethylbenzene	10.00	91	10892		N.D.	
69) m,p-Xylene	10.11	106	7182	0.57	ug/l	98
70) o-xylene	10.51	106	3104		N.D.	
71) Styrene	10.53	104	4128		N.D.	
72) Bromoform	10.75	173	388		N.D.	
73) Isopropylbenzene	10.87	105	7577		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.20	156	1227		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.23	83	223		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	76		N.D.	
80) n-Propylbenzene	11.28	91	8494		N.D.	
81) 2-Chlorotoluene	11.37	91	4880		N.D.	
82) 4-Chlorotoluene	11.49	91	4996		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	5276		N.D.	
84) tert-Butylbenzene	11.77	119	4060		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	5466		N.D.	
86) sec-butylbenzene	11.99	105	4743		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	3355		N.D.	
88) 4-Isopropyltoluene	12.13	119	4246		N.D.	
89) 1,4-Dichlorobenzene	12.13	146	3355		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	2606		N.D.	
91) n-Butylbenzene	12.54	91	3270		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

*J. 06/29/07*



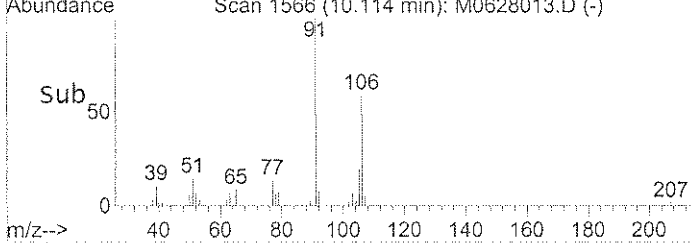
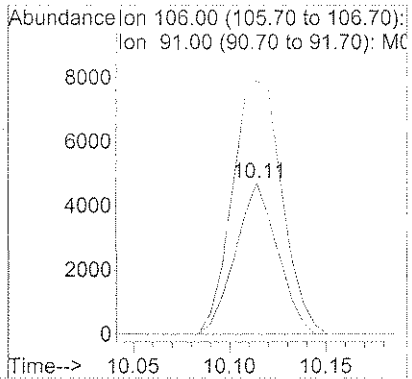
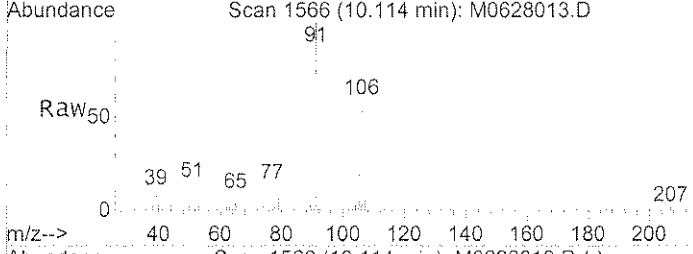
#11  
 Acetone  
 Concen: 1.28 ug/l  
 RT: 2.98 min Scan# 394  
 Delta R.T. -0.01 min  
 Lab File: M0628013.D  
 Acq: 28 Jun 2007 12:12

Tgt Ion: 43 Resp: 2265  
 Ion Ratio Lower Upper  
 43 100  
 58 22.8 22.0 33.0



#69  
 m,p-Xylene  
 Concen: 0.57 ug/l  
 RT: 10.11 min Scan# 1566  
 Delta R.T. -0.00 min  
 Lab File: M0628013.D  
 Acq: 28 Jun 2007 12:12

Tgt Ion: 106 Resp: 7182  
 Ion Ratio Lower Upper  
 106 100  
 91 197.0 174.3 214.3



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 12:41

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.82	J
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-002  
 Lab File ID: M0628014.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/28/2007 12:41  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 12:41

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

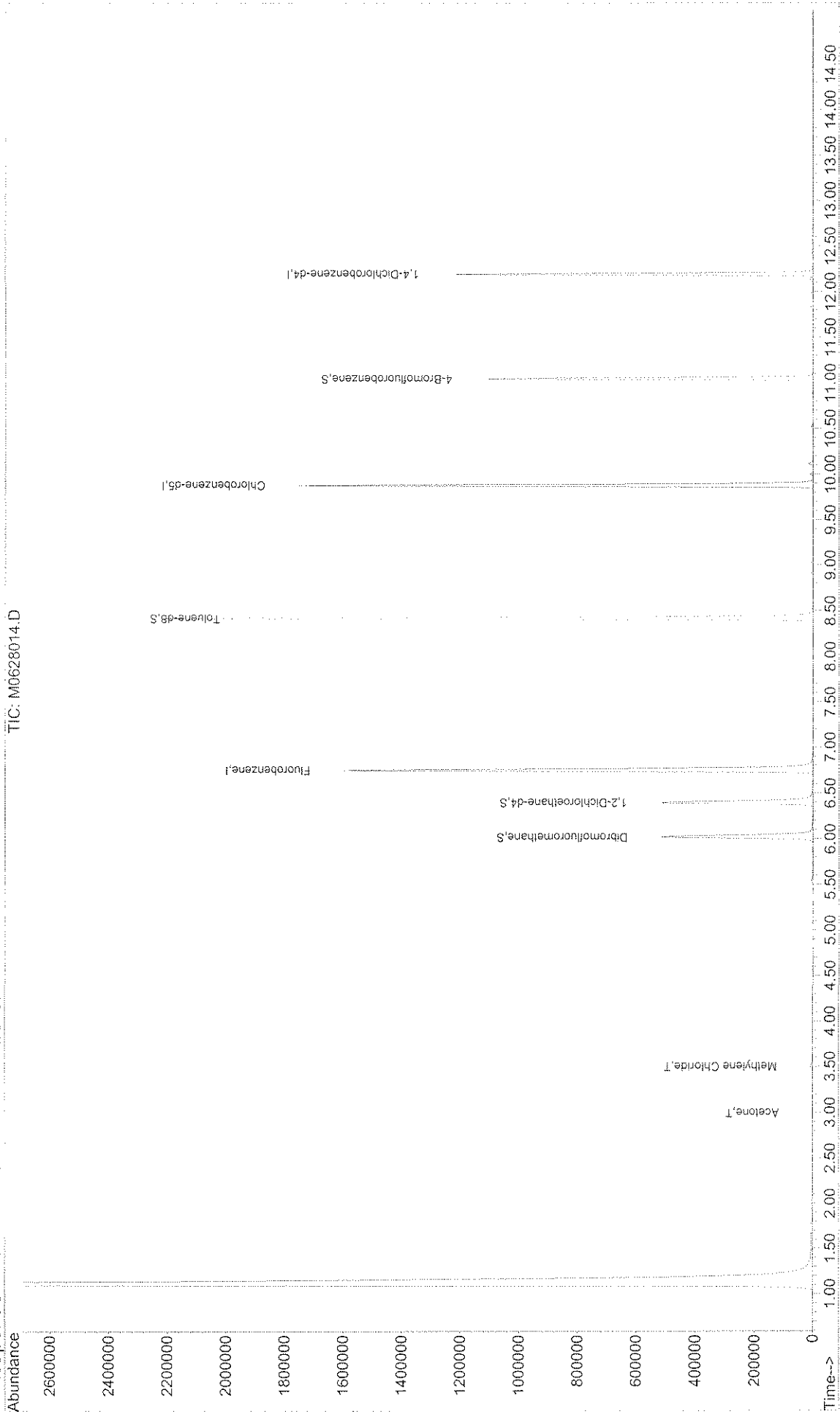
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628014.D  
Acq On : 28 Jun 2007 12:41  
Sample : JPL42-002  
Misc : #1 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:14 2007

Vial: 58  
Operator: LPM  
Inst : MOBY  
Multiplier: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628014.D  
 Acq On : 28 Jun 2007 12:41  
 Sample : JPL42-002  
 Misc : #1 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:14 2007

Vial: 58  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1617676	50.00	ug/l	0.00	96.20%
54) Chlorobenzene-d5	9.88	117	1003572	50.00	ug/l	0.00	101.14%
74) 1,4-Dichlorobenzene-d4	12.20	152	333306	50.00	ug/l	0.00	86.15%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	389417	53.14	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.28%	
40) 1,2-Dichloroethane-d4	6.40	65	416452	52.52	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.04%	
55) Toluene-d8	8.42	98	1526248	49.24	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.48%	
76) 4-Bromofluorobenzene	11.05	95	373873	59.69	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	119.38%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	3046	1.71	ug/l #	66
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.07	76	230	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	7019	0.82	ug/l	99
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.52	43	1219	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.87	41	308	N.D.		
34) Chloroform	0.00	83	0	N.D.		
35) 1,1,1-Trichloroethane	5.98	97	402	N.D.		
36) Cyclohexane	5.99	56	350	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0628014.D M8260W.M Fri Jun 29 08:14:56 2007

*J. Ru/29/07*

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628014.D  
 Acq On : 28 Jun 2007 12:41  
 Sample : JPL42-002  
 Misc : #1 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:14 2007

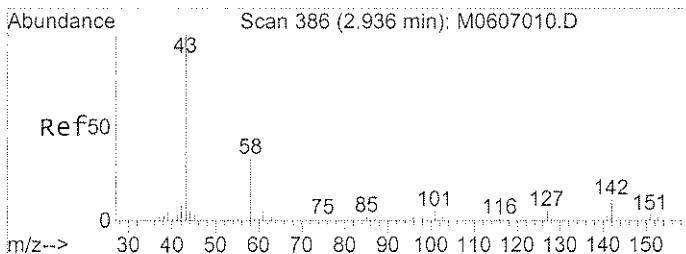
Vial: 58  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

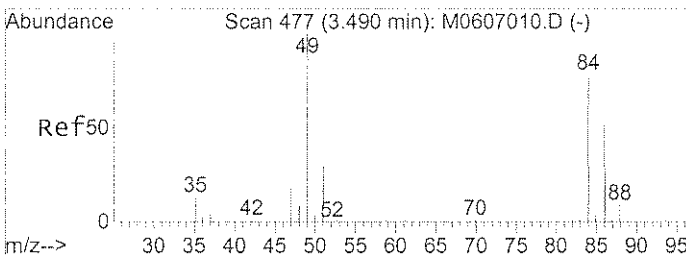
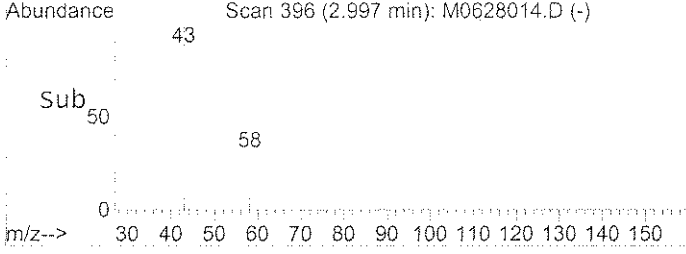
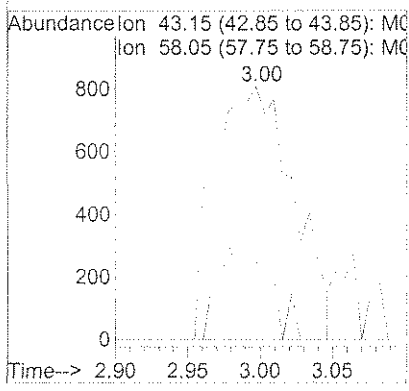
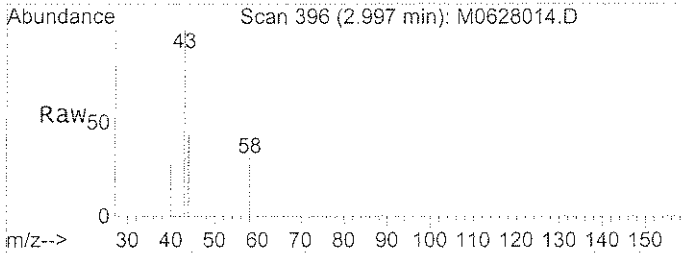
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.16	117	735		N.D.	
39) 1,1-Dichloropropene	6.17	75	669		N.D.	
41) Benzene	6.41	78	1207		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	515		N.D.	
46) Methylcyclohexane	7.30	83	377		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	2056		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	1890		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.13	43	123		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2325		N.D.	
66) Chlorobenzene	9.91	112	1820		N.D.	
67) 1,1,1,2-Tetrachloroethane	9.99	131	446		N.D.	
68) Ethylbenzene	10.00	91	6615		N.D.	
69) m, p-Xylene	10.11	106	5173		N.D.	
70) o-xylene	10.51	106	2045		N.D.	
71) Styrene	10.53	104	1816		N.D.	
72) Bromoform	10.75	173	231		N.D.	
73) Isopropylbenzene	10.87	105	6769		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.20	156	759		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	65		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	7085		N.D.	
81) 2-Chlorotoluene	11.38	91	4220		N.D.	
82) 4-Chlorotoluene	11.48	91	3907		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	4402		N.D.	
84) tert-Butylbenzene	11.78	119	3774		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	4471		N.D.	
86) sec-butylbenzene	11.99	105	4562		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	2445		N.D.	
88) 4-Isopropyltoluene	12.13	119	3820		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	2553		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	2139		N.D.	
91) n-Butylbenzene	12.55	91	3032		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	14.34	225	434		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d





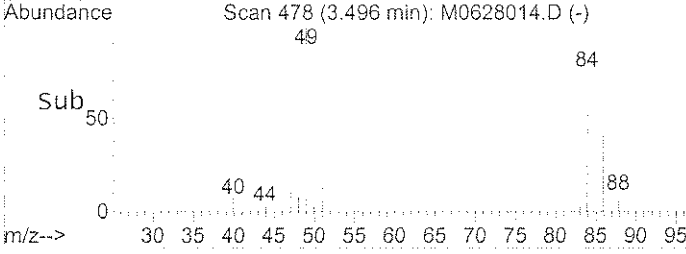
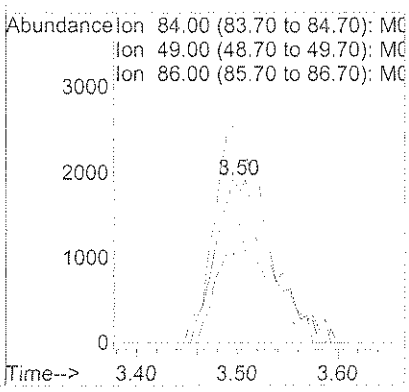
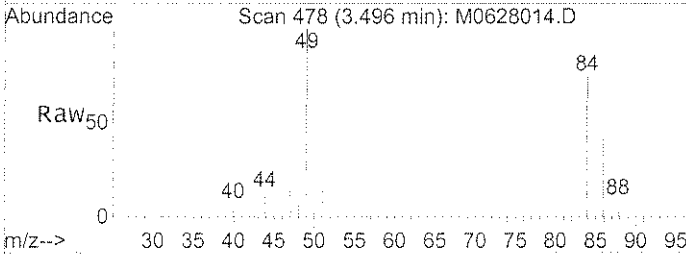
#11  
 Acetone  
 Concen: 1.71 ug/l  
 RT: 3.00 min Scan# 396  
 Delta R.T. 0.01 min  
 Lab File: M0628014.D  
 Acq: 28 Jun 2007 12:41

Tgt Ion	Resp	Lower	Upper
43	3046		
58	100	9.8	22.0
			33.0#



#18  
 Methylene Chloride  
 Concen: 0.82 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.01 min  
 Lab File: M0628014.D  
 Acq: 28 Jun 2007 12:41

Tgt Ion	Resp	Lower	Upper
84	7019		
49	134.3	113.6	153.6
86	63.8	45.8	85.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 13:08

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.73	J
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 13:08

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	1.4	
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 13:08

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

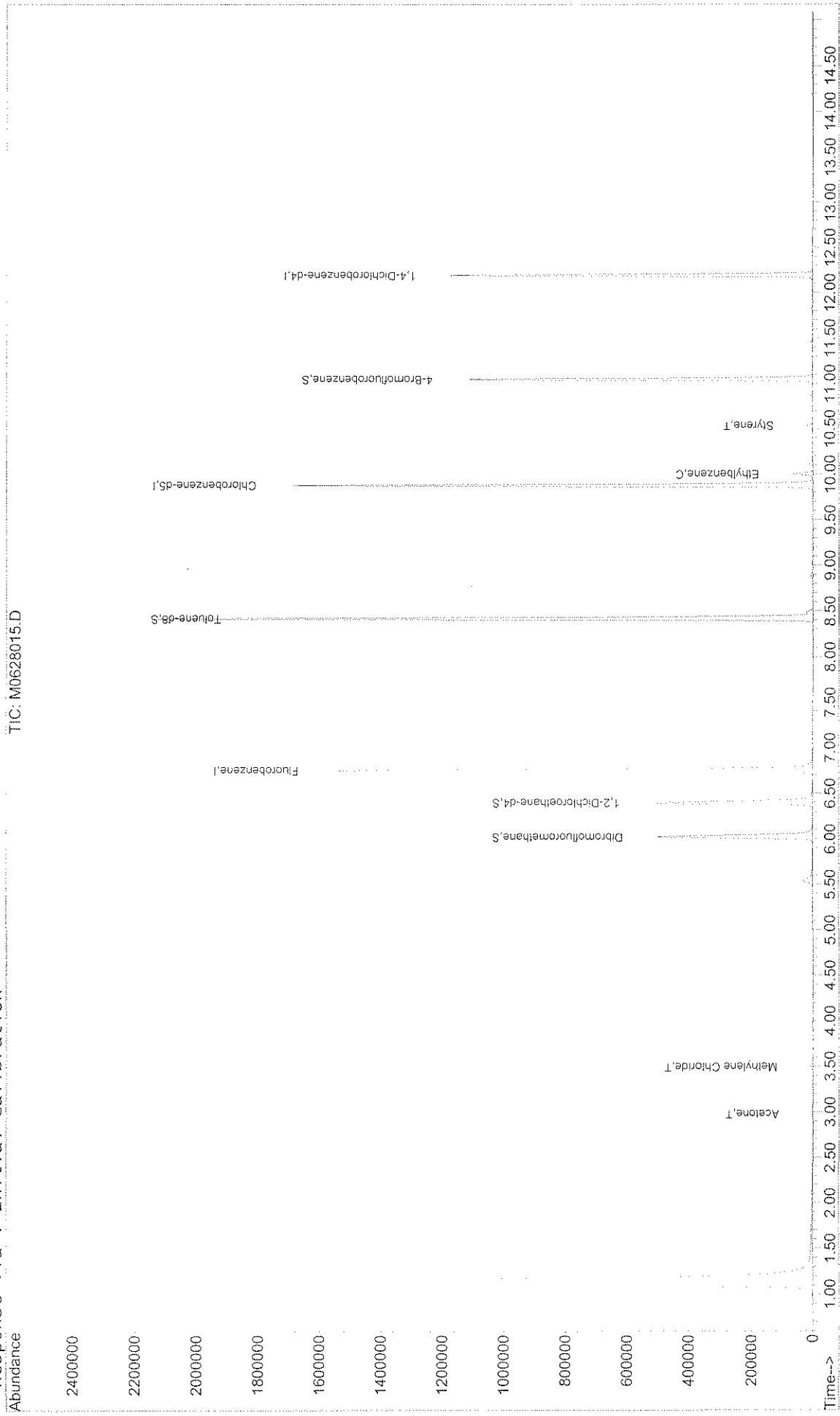
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628015.D  
Acq On : 28 Jun 2007 13:08  
Sample : JPL42-003  
Misc : #1 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:16 2007

Vial: 59  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260w.RES

Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628015.D  
 Acq On : 28 Jun 2007 13:08  
 Sample : JPL42-003  
 Misc : #1 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:16 2007

Vial: 59  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1590170	50.00	ug/l	0.00	94.56%
54) Chlorobenzene-d5	9.88	117	1004082	50.00	ug/l	0.00	101.19%
74) 1,4-Dichlorobenzene-d4	12.20	152	331653	50.00	ug/l	0.00	85.72%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	378913	52.60	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.20%	
40) 1,2-Dichloroethane-d4	6.40	65	411625	52.81	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.62%	
55) Toluene-d8	8.42	98	1500863	48.39	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.78%	
76) 4-Bromofluorobenzene	11.05	95	376551	60.41	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	120.82%#	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	1.54	62	211	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	4708	2.69	ug/l #	69
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	515	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.47	43	251	N.D.		
18) Methylene Chloride	3.50	84	6130	0.73	ug/l	95
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	3.87	59	80	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	3.95	53	1079	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.	d	
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.86	41	560	N.D.		
34) Chloroform	0.00	83	0	N.D.		
35) 1,1,1-Trichloroethane	5.97	97	56	N.D.		
36) Cyclohexane	6.00	56	62	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0628015.D M8260W.M Fri Jun 29 08:16:07 2007

*J oe/29/07*

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628015.D  
 Acq On : 28 Jun 2007 13:08  
 Sample : JPL42-003  
 Misc : #1 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:16 2007

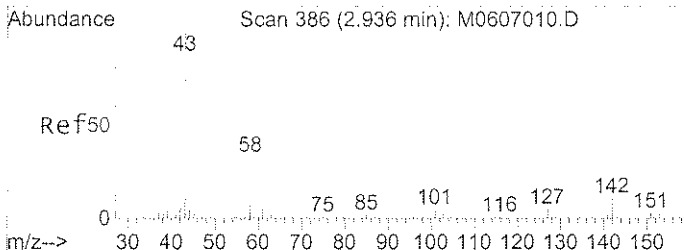
Vial: 59  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

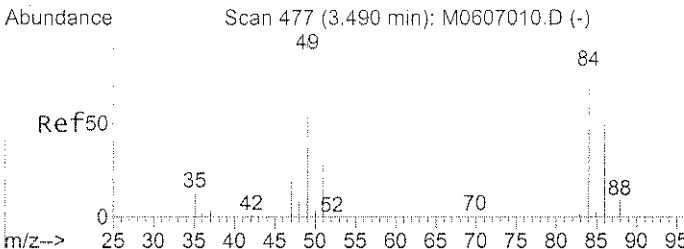
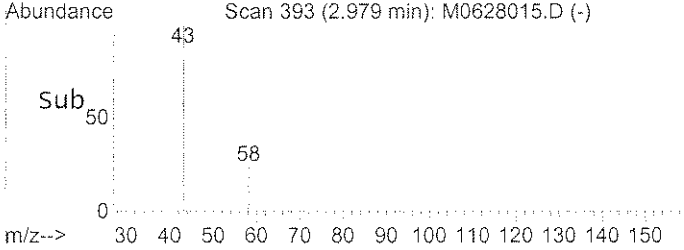
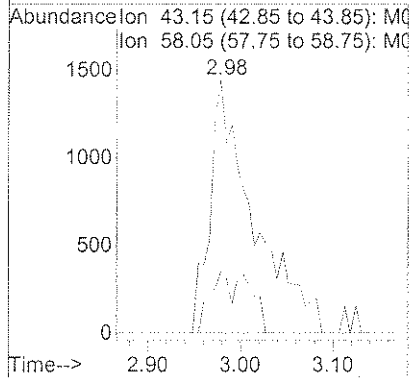
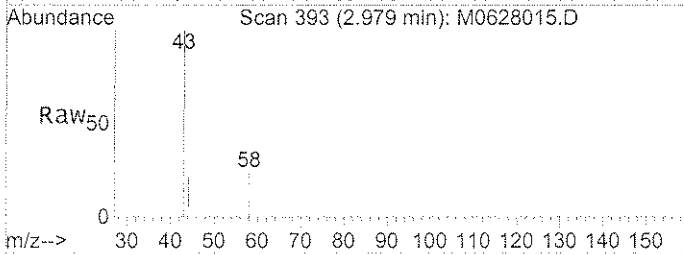
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.16	75	350		N.D.	
41) Benzene	6.42	78	1671		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	287		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	6193		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.04	166	920		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	59		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2272		N.D.	
66) Chlorobenzene	9.90	112	1442		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	47488	1.41	ug/l	100
69) m,p-Xylene	10.11	106	3395		N.D.	
70) o-xylene	10.51	106	1382		N.D.	
71) Styrene	10.53	104	9072	0.50	ug/l	94
72) Bromoform	10.75	173	183		N.D.	
73) Isopropylbenzene	10.87	105	4343		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	11.20	156	163		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	4819		N.D.	
81) 2-Chlorotoluene	11.37	91	2316		N.D.	
82) 4-Chlorotoluene	11.48	91	2160		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	2743		N.D.	
84) tert-Butylbenzene	11.77	119	2602		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	3243		N.D.	
86) sec-butylbenzene	11.82	105	3243		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	1429		N.D.	
88) 4-Isopropyltoluene	12.13	119	3028		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	1483		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	1296		N.D.	
91) n-Butylbenzene	12.55	91	2249		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	d
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

*for o/p/r/h*



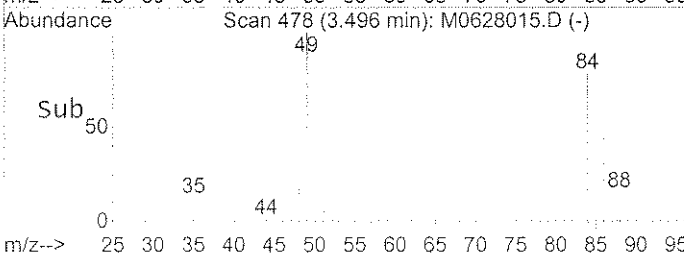
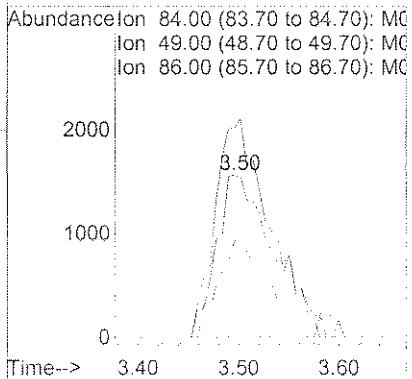
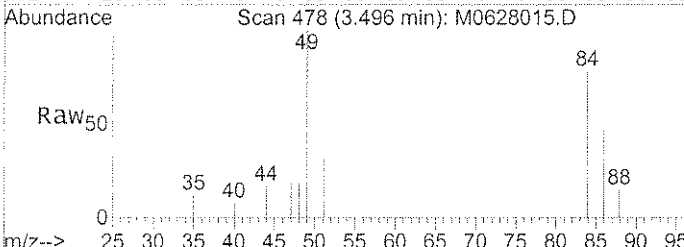
#11  
 Acetone  
 Concen: 2.69 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0628015.D  
 Acq: 28 Jun 2007 13:08

Tgt Ion: 43 Resp: 4708  
 Ion Ratio Lower Upper  
 43 100  
 58 11.3 22.0 33.0#

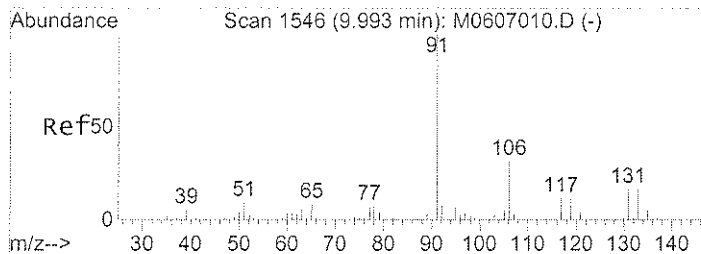


#18  
 Methylene Chloride  
 Concen: 0.73 ug/l  
 RT: 3.50 min Scan# 478  
 Delta R.T. -0.01 min  
 Lab File: M0628015.D  
 Acq: 28 Jun 2007 13:08

Tgt Ion: 84 Resp: 6130  
 Ion Ratio Lower Upper  
 84 100  
 49 133.0 113.6 153.6  
 86 54.1 45.8 85.8

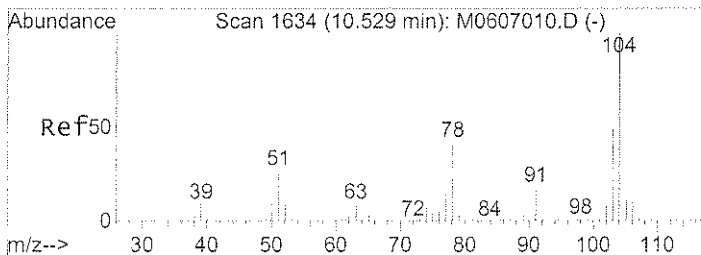
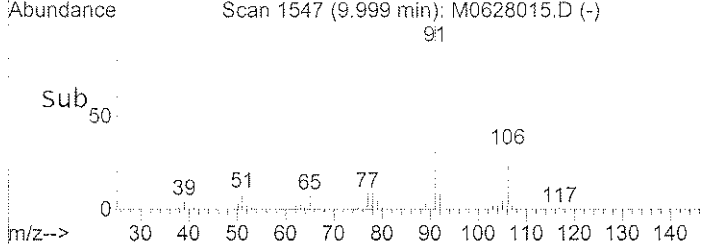
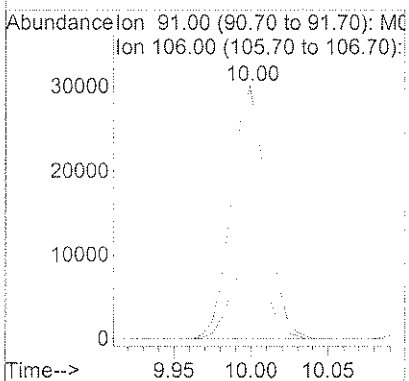
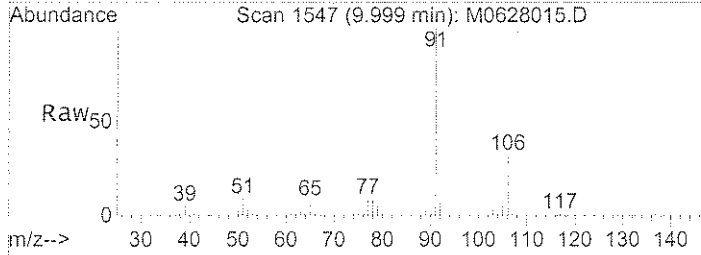






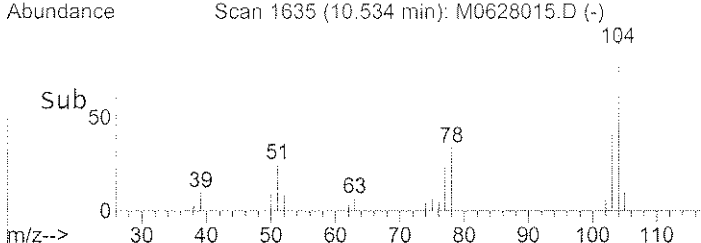
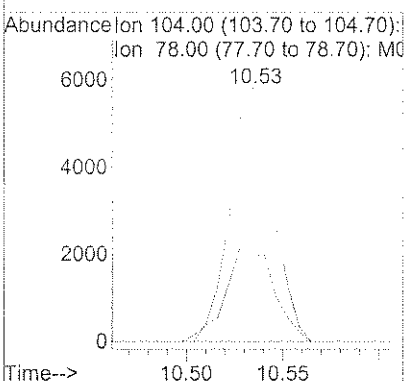
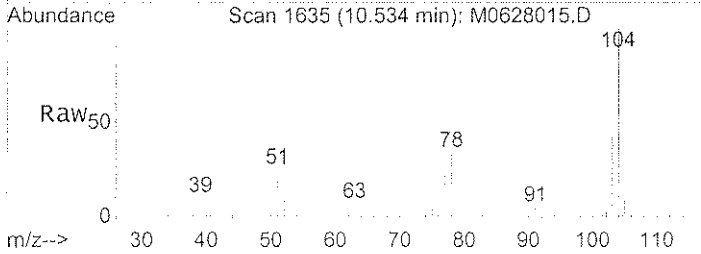
#68  
 Ethylbenzene  
 Concen: 1.41 ug/l  
 RT: 10.00 min Scan# 1547  
 Delta R.T. 0.00 min  
 Lab File: M0628015.D  
 Acq: 28 Jun 2007 13:08

Tgt Ion	Resp	Lower	Upper
91	47488		
106	32.2	25.6	38.4



#71  
 Styrene  
 Concen: 0.50 ug/l  
 RT: 10.53 min Scan# 1635  
 Delta R.T. 0.00 min  
 Lab File: M0628015.D  
 Acq: 28 Jun 2007 13:08

Tgt Ion	Resp	Lower	Upper
104	9072		
78	41.7	25.4	65.4



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 13:31

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.62	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-004  
 Lab File ID: M0628016.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/28/2007 13:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 13:31

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

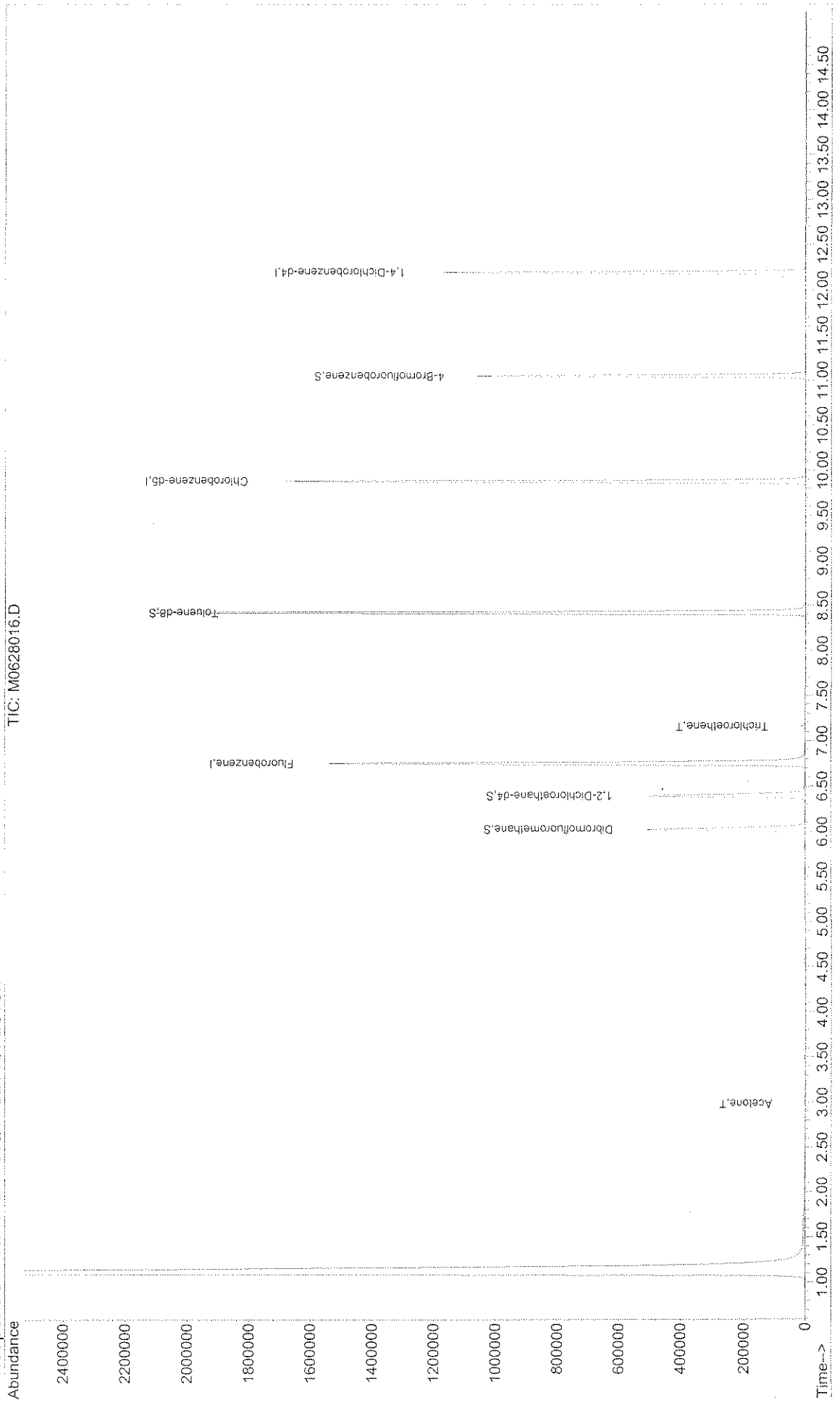
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628016.D  
Acq On : 28 Jun 2007 13:31  
Sample : JPL42-004  
Misc : #1 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:17 2007

Vial: 60  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



TIC: M0628016.D

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628016.D  
 Acq On : 28 Jun 2007 13:31  
 Sample : JPL42-004  
 Misc : #1 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:17 2007

Vial: 60  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1572842	50.00	ug/l	0.00 93.53%
54) Chlorobenzene-d5	9.88	117	981967	50.00	ug/l	0.00 98.96%
74) 1,4-Dichlorobenzene-d4	12.19	152	329095	50.00	ug/l	0.00 85.06%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	376393	52.83	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.66%
40) 1,2-Dichloroethane-d4	6.40	65	411178	53.33	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.66%
55) Toluene-d8	8.42	98	1488790	49.08	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.16%
76) 4-Bromofluorobenzene	11.04	95	368773	59.63	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	119.26%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	1304	0.75	ug/l #	67
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	57	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.49	84	702	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	4.56	63	4520	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.53	43	104	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.87	41	192	N.D.		
34) Chloroform	5.82	83	2882	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.00	56	55	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0628016.D M8260W.M Fri Jun 29 08:17:19 2007

Quantitation Report

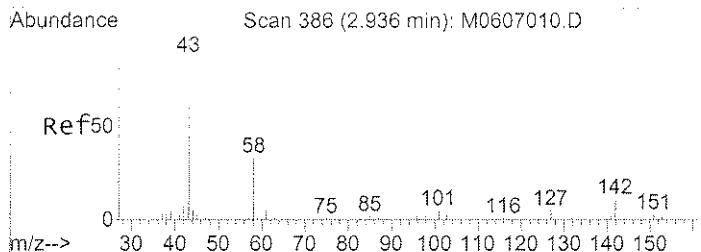
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 Sample : JPL42-004  
 Misc : #1 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:17 2007

Vial: 60  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

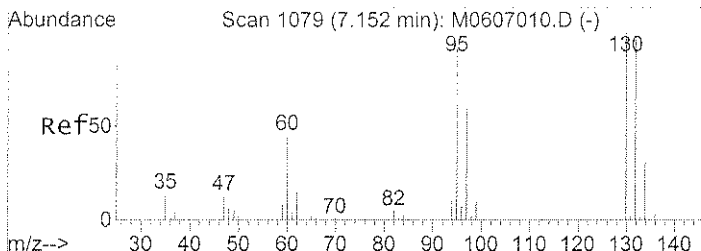
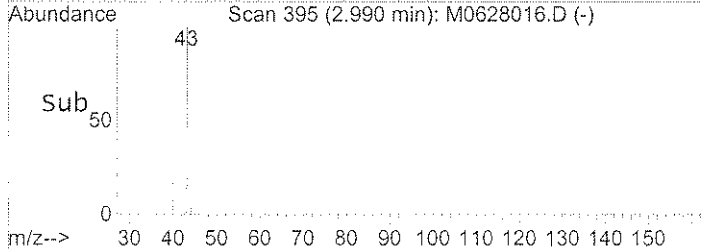
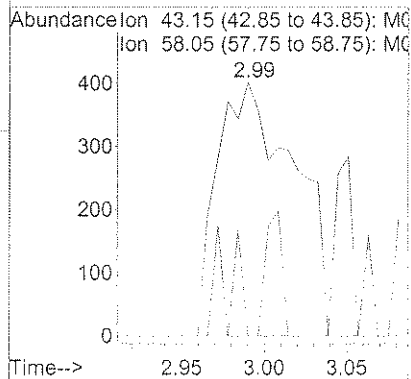
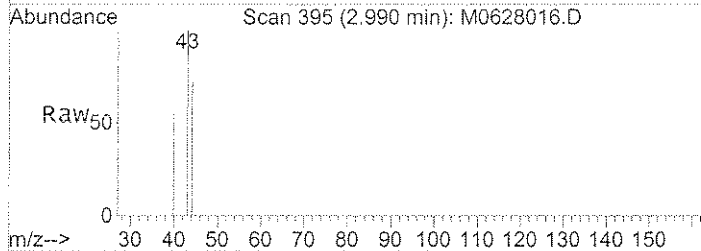
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 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0	N.D.	
39) 1,1-Dichloropropene	0.00	75	0	N.D.	
41) Benzene	6.42	78	929	N.D.	
42) 1,2-Dichloroethane	0.00	62	0	N.D.	
43) t-Amyl methyl ether	0.00	73	0	N.D.	
44) Isobutanol	6.67	43	66	Below Cal	# 22
45) Trichloroethene	7.15	130	5230	0.62 ug/l	95
46) Methylcyclohexane	7.32	83	81	N.D.	
47) 1,2-Dichloropropane	0.00	63	0	N.D.	
48) Dibromomethane	0.00	93	0	N.D.	
49) Methyl methacrylate	0.00	69	0	N.D.	
50) Bromodichloromethane	0.00	83	0	N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d
56) Toluene	8.48	92	1004	N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
58) Ethyl methacrylate	0.00	69	0	N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
60) Tetrachloroethene	9.03	166	3552	N.D.	
61) 1,3-Dichloropropane	0.00	76	0	N.D.	
62) 2-Hexanone	9.28	43	126	N.D.	
63) Dibromochloromethane	0.00	129	0	N.D.	
64) 1,2-Dibromoethane	0.00	107	0	N.D.	
65) 1-Chlorohexane	9.88	91	2227	N.D.	
66) Chlorobenzene	9.90	112	639	N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
68) Ethylbenzene	10.00	91	2672	N.D.	
69) m,p-Xylene	10.11	106	1455	N.D.	
70) o-xylene	10.50	106	520	N.D.	
71) Styrene	10.54	104	460	N.D.	
72) Bromoform	10.75	173	169	N.D.	
73) Isopropylbenzene	10.87	105	2300	N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
77) Bromobenzene	0.00	156	0	N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
79) 1,2,3-Trichloropropane	11.06	110	57	N.D.	
80) n-Propylbenzene	11.28	91	2910	N.D.	
81) 2-Chlorotoluene	11.38	91	1097	N.D.	
82) 4-Chlorotoluene	11.49	91	1028	N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	1841	N.D.	
84) tert-Butylbenzene	11.77	119	2153	N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	1914	N.D.	
86) sec-butylbenzene	11.99	105	2515	N.D.	
87) 1,3-Dichlorobenzene	12.13	146	878	N.D.	
88) 4-Isopropyltoluene	12.13	119	2071	N.D.	
89) 1,4-Dichlorobenzene	12.13	146	878	N.D.	
90) 1,2-Dichlorobenzene	12.59	146	960	N.D.	
91) n-Butylbenzene	12.55	91	1505	N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0	N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0	N.D.	d
94) Hexachlorobutadiene	0.00	225	0	N.D.	d
95) Naphthalene	0.00	128	0	N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0	N.D.	d



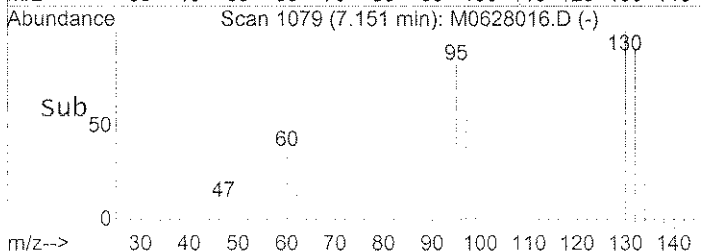
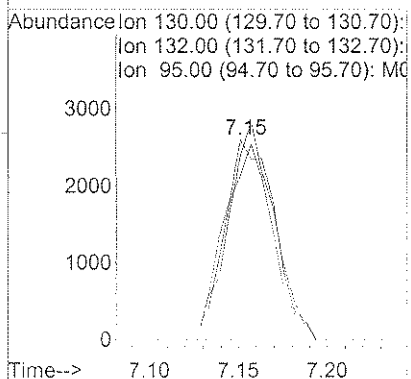
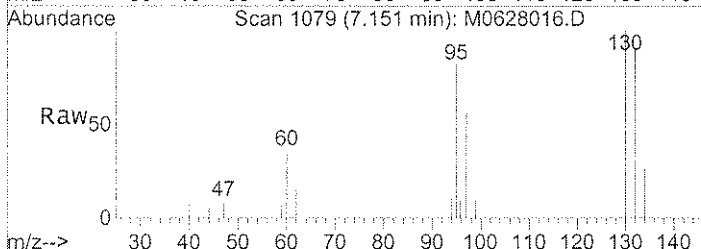
#11  
 Acetone  
 Concen: 0.75 ug/l  
 RT: 2.99 min Scan# 395  
 Delta R.T. -0.00 min  
 Lab File: M0628016.D  
 Acq: 28 Jun 2007 13:31

Tgt Ion	Resp	Lower	Upper
43	1304		
58	10.4	22.0	33.0#



#45  
 Trichloroethene  
 Concen: 0.62 ug/l  
 RT: 7.15 min Scan# 1079  
 Delta R.T. -0.01 min  
 Lab File: M0628016.D  
 Acq: 28 Jun 2007 13:31

Tgt Ion	Resp	Lower	Upper
130	5230		
132	96.4	80.2	120.2
95	89.6	75.8	115.8





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-005  
 Lab File ID: M0628017.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/28/2007 13:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-005  
 Lab File ID: M0628017.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/28/2007 13:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 13:55

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

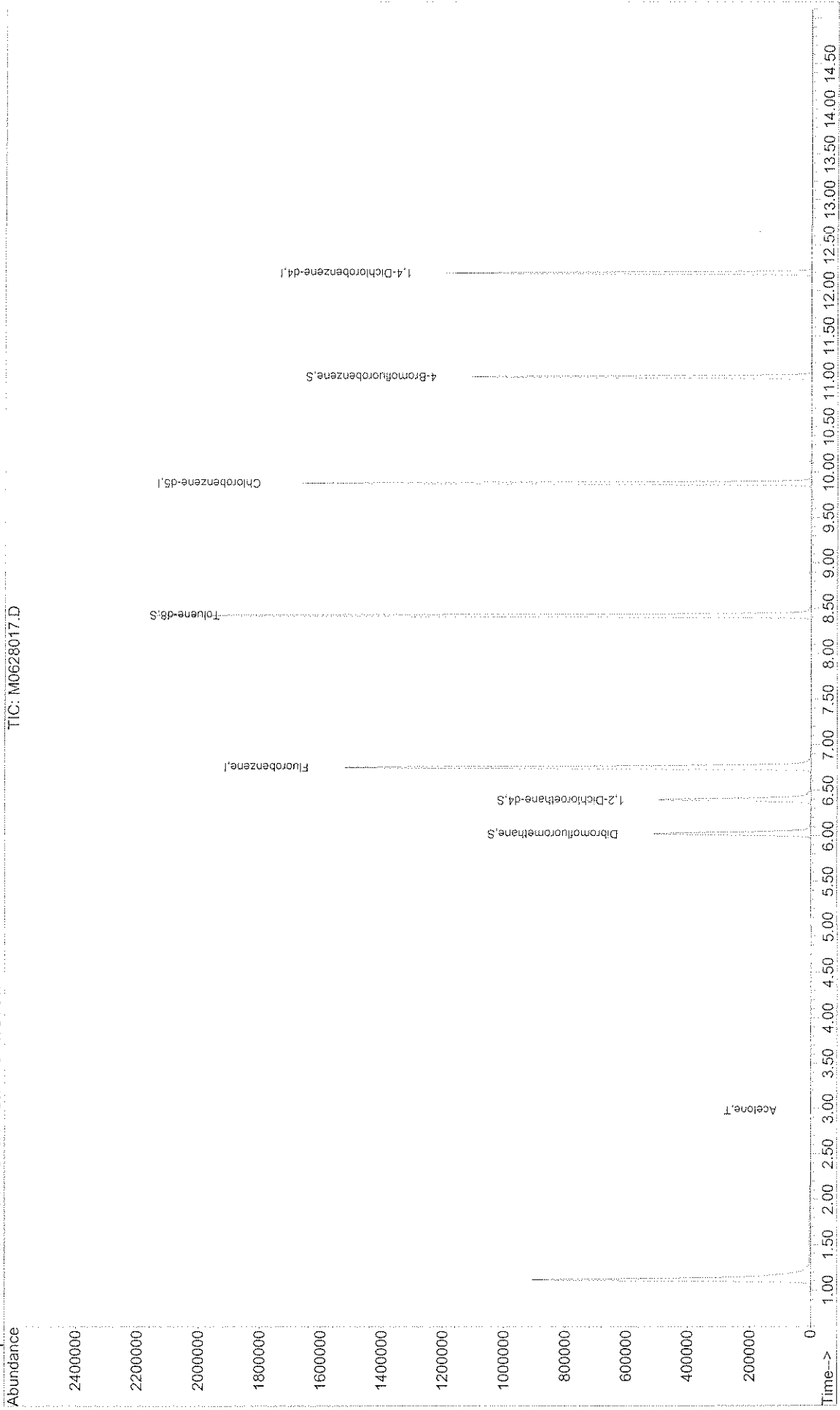
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628017.D  
Acq On : 28 Jun 2007 13:55 Vial: 61  
Sample : JPL42-005 Operator: LPM  
Misc : #6 5ml+IS/SS (524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 29 8:18 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

TIC: M0628017.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628017.D  
 Acq On : 28 Jun 2007 13:55  
 Sample : JPL42-005  
 Misc : #6 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:18 2007

Vial: 61  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1582582	50.00	ug/l	0.00 94.11%
54) Chlorobenzene-d5	9.87	117	989136	50.00	ug/l	0.00 99.68%
74) 1,4-Dichlorobenzene-d4	12.19	152	327911	50.00	ug/l	0.00 84.75%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	380086	53.02	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.04%
40) 1,2-Dichloroethane-d4	6.39	65	408273	52.63	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.26%
55) Toluene-d8	8.42	98	1498671	49.05	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.10%
76) 4-Bromofluorobenzene	11.05	95	369774	60.00	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	120.00%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.45	50	177	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	5322	3.06	ug/l #	86
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene chloride	3.49	84	1275	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.52	43	1506	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.87	41	149	N.D.		
34) Chloroform	5.82	83	868	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	6.00	56	180	N.D.		

*J 06/29/07*

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628017.D  
 Acq On : 28 Jun 2007 13:55  
 Sample : JPL42-005  
 Misc : #6 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:18 2007

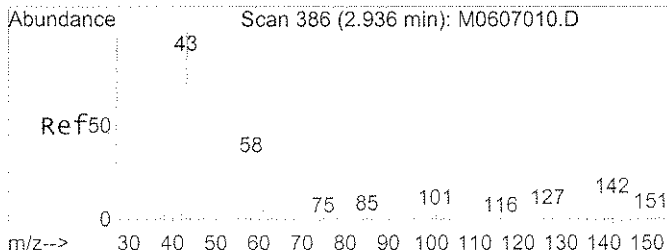
Vial: 61  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

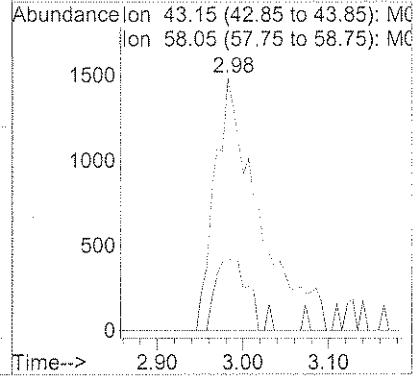
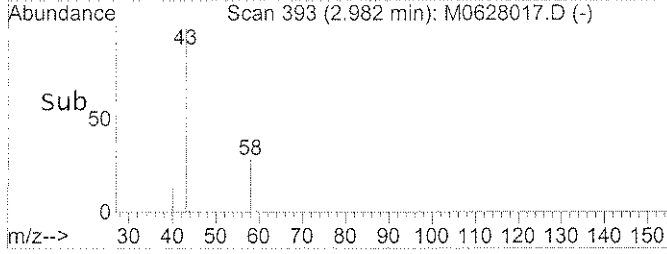
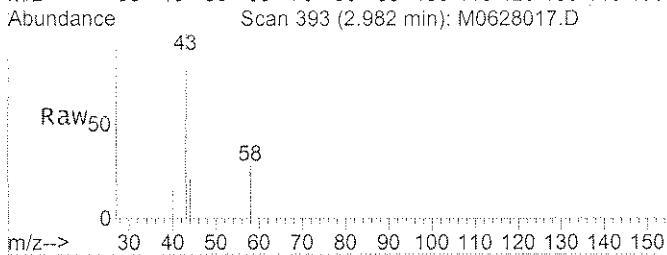
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	798		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	6.46	43	483	Below Cal #		1
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	63		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	998		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.04	166	241		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.99	43	71		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	2017		N.D.	
66) Chlorobenzene	9.91	112	321		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	1947		N.D.	
69) m,p-Xylene	10.11	106	2571		N.D.	
70) o-xylene	10.51	106	959		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	162		N.D.	
73) Isopropylbenzene	10.87	105	1722		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	2009		N.D.	
81) 2-Chlorotoluene	11.38	91	739		N.D.	
82) 4-Chlorotoluene	11.49	91	428		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	1227		N.D.	
84) tert-Butylbenzene	11.77	119	1359		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	1356		N.D.	
86) sec-butylbenzene	11.99	105	1899		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	452		N.D.	
88) 4-Isopropyltoluene	12.13	119	1342		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	402		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	314		N.D.	
91) n-Butylbenzene	12.54	91	1332		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.19	180	158		N.D.	
94) Hexachlorobutadiene	14.33	225	73		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration  
 M0628017.D M8260W.M Fri Jun 29 08:18:13 2007



#11  
 Acetone  
 Concen: 3.06 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0628017.D  
 Acq: 28 Jun 2007 13:55

Tgt Ion	Resp	Lower	Upper
43	100		
58	20.0	22.0	33.0#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-9-6/25/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL42-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 14:19

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-9-6/25/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-006  
 Lab File ID: M0628018.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/28/2007 14:19  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-9-6/25/07

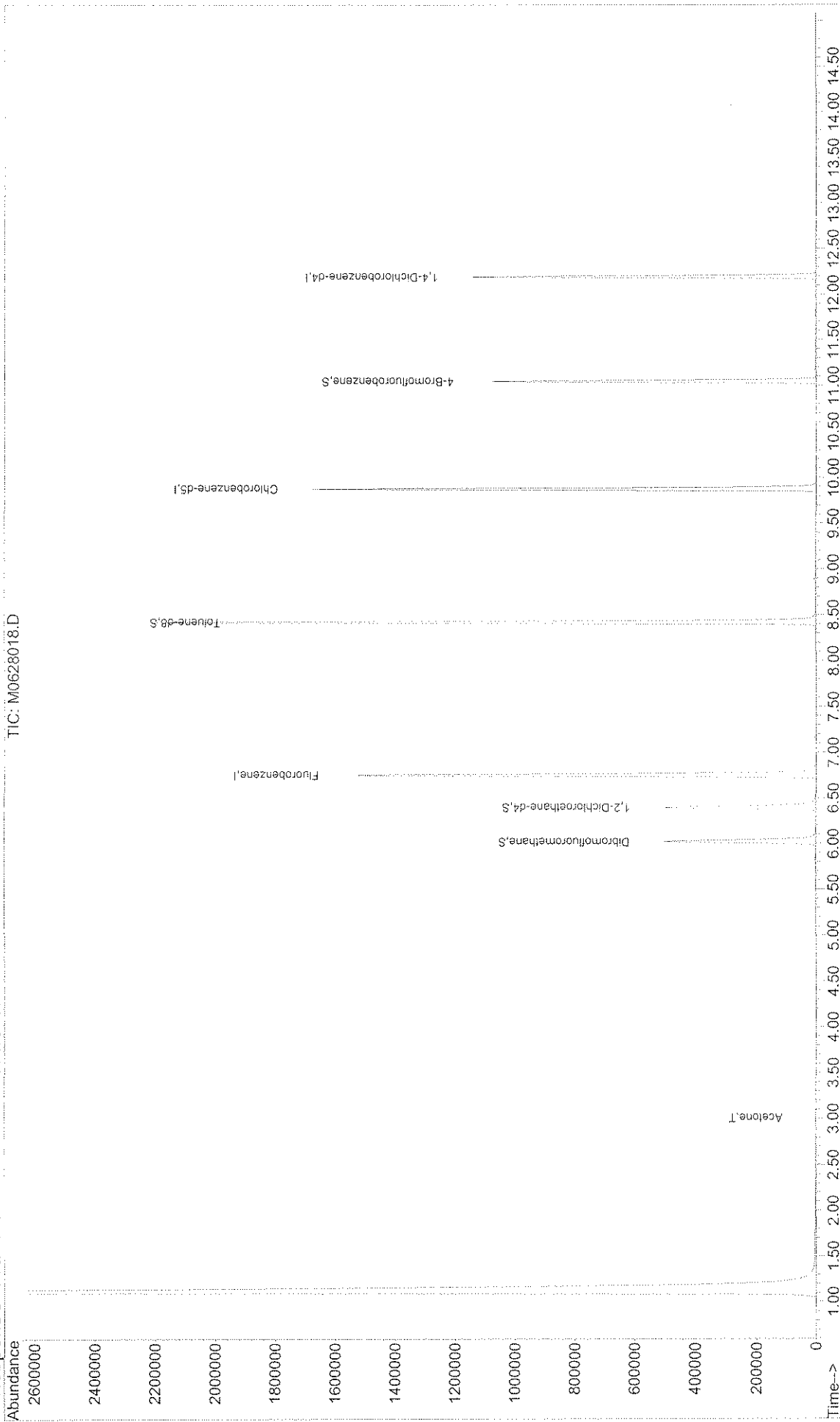
Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin  
 SDG No.: JPL42 Run Sequence: R019107  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL42-006  
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0628018.D  
 Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/25/2007  
 % Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/28/2007 14:19  
 GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628018.D  
Acq On : 28 Jun 2007 14:19 Vial: 62  
Sample : JPL42-006 Operator: LPM  
Misc : #2 5ml+IS/SS (524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 29 8:18 2007 Quant Results File: M8260w.RES



TIC: M0628018.D

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628018.D  
 Acq On : 28 Jun 2007 14:19  
 Sample : JPL42-006  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:18 2007

Vial: 62  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1577176	50.00	ug/l	0.00 93.79%
54) Chlorobenzene-d5	9.88	117	969708	50.00	ug/l	0.00 97.72%
74) 1,4-Dichlorobenzene-d4	12.20	152	324419	50.00	ug/l	0.00 83.85%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	379030	53.05	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.10%
40) 1,2-Dichloroethane-d4	6.40	65	406503	52.58	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.16%
55) Toluene-d8	8.42	98	1486280	49.62	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.24%
76) 4-Bromofluorobenzene	11.05	95	360009	59.05	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	118.10%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	1369	0.79	ug/l #	73
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.47	43	57	N.D.		
18) Methylene Chloride	3.50	84	422	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.53	43	386	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.86	41	151	N.D.		
34) Chloroform	5.83	83	5491	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0628018.D M8260W.M Fri Jun 29 08:18:57 2007

8 07/10/07

Quantitation Report

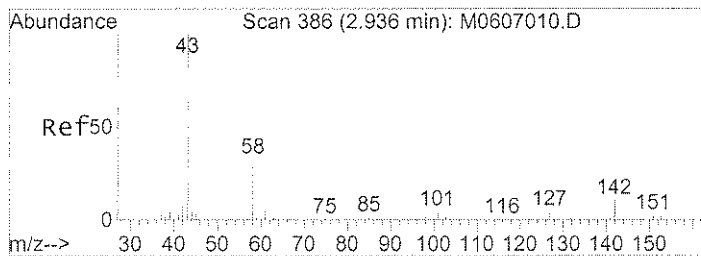
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 Acq On : 28 Jun 2007 14:19  
 Sample : JPL42-006  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:18 2007

Vial: 62  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

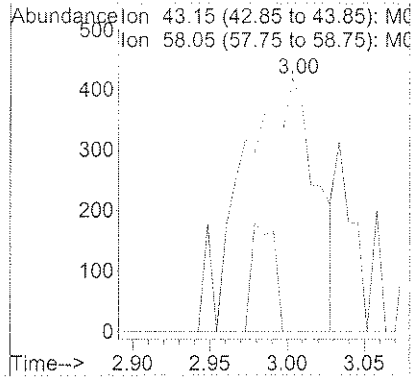
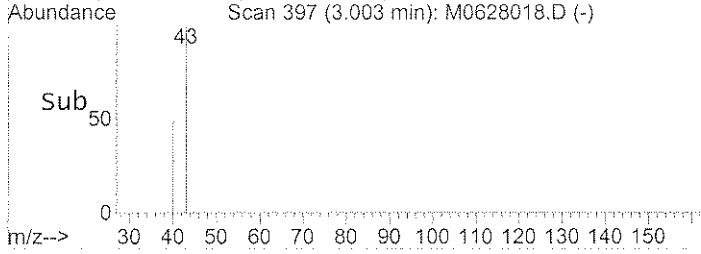
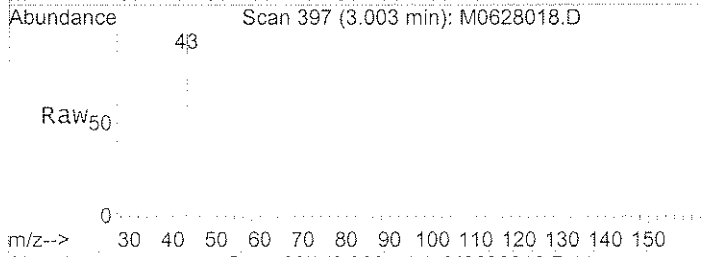
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.15	117	122		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	764		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	6.65	43	74	Below Cal	#	22
45) Trichloroethene	7.15	130	2725		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.74	83	353		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	734		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	316		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	9.33	129	62		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1920		N.D.	
66) Chlorobenzene	9.91	112	226		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	651		N.D.	
69) m,p-Xylene	10.11	106	570		N.D.	
70) o-xylene	10.52	106	89		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.87	105	976		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1298		N.D.	
81) 2-Chlorotoluene	11.38	91	296		N.D.	
82) 4-Chlorotoluene	11.50	91	327		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	622		N.D.	
84) tert-Butylbenzene	11.78	119	1047		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	969		N.D.	
86) sec-butylbenzene	11.99	105	1440		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	253		N.D.	
88) 4-Isopropyltoluene	12.13	119	1077		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	140		N.D.	
90) 1,2-Dichlorobenzene	12.60	146	78		N.D.	
91) n-Butylbenzene	12.54	91	888		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.19	180	227		N.D.	
94) Hexachlorobutadiene	14.33	225	145		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.68	180	68		N.D.	



#11  
 Acetone  
 Concen: 0.79 ug/l  
 RT: 3.00 min Scan# 397  
 Delta R.T. 0.01 min  
 Lab File: M0628018.D  
 Acq: 28 Jun 2007 14:19

Tgt Ion	Ratio	Lower	Upper
43	100		
58	13.4	22.0	33.0#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-9-6/25/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL42-007  
 Lab File ID: M0627017.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/27/2007 14:06  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-9-6/25/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL42  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019090  
 Lab Sample ID: JPL42-007  
 Lab File ID: M0627017.D  
 Date Collected: 06/25/2007  
 Date/Time Analyzed: 06/27/2007 14:06  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-9-6/25/07

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL42 Run Sequence: R019090

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL42-007

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: M0627017.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 06/25/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 06/27/2007 14:06

GC Column: ZB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

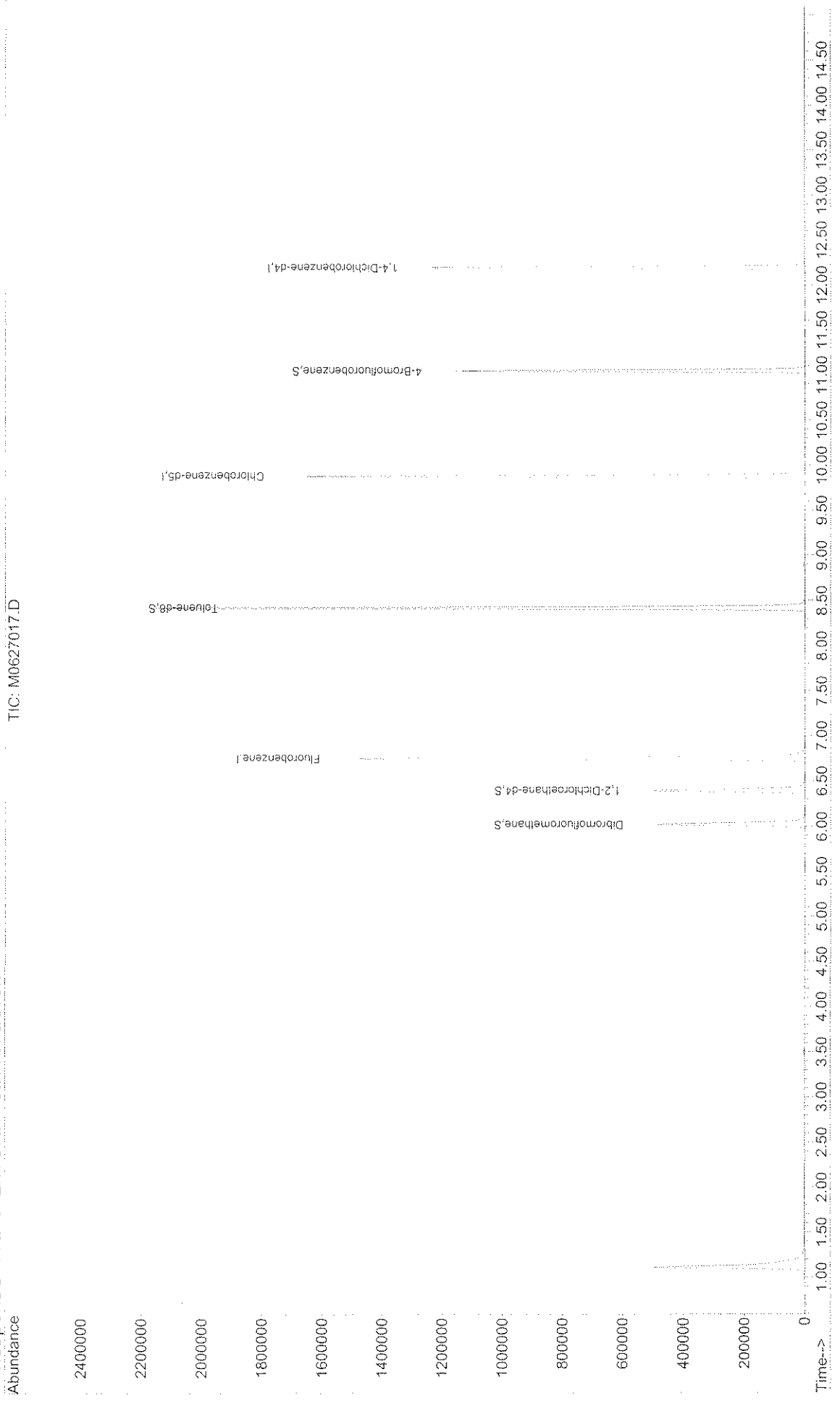
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627017.D  
Acq On : 27 Jun 2007 14:06  
Sample : JPL42-007  
Misc : #3 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jun 28 8:22 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

TIC: M0627017.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627017.D  
 Acq On : 27 Jun 2007 14:06  
 Sample : JPL42-007  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:22 2007

Vial: 56  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Thu Jun 28 07:42:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1519797	50.00	ug/l	0.00	90.38%
54) Chlorobenzene-d5	9.88	117	964072	50.00	ug/l	0.00	97.15%
74) 1,4-Dichlorobenzene-d4	12.19	152	347529	50.00	ug/l	0.00	89.82%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	365237	53.05	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.10%	
40) 1,2-Dichloroethane-d4	6.40	65	410778	55.14	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.28%	
55) Toluene-d8	8.42	98	1436329	48.23	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.46%	
76) 4-Bromofluorobenzene	11.05	95	377509	57.80	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	115.60%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	129	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene chloride	3.50	84	2961	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	0.00	83	0	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

Quantitation Report

Data File : X:\MSVOA\MOBY\062707\M0627017.D  
 Acq On : 27 Jun 2007 14:06  
 Sample : JPL42-007  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 28 8:22 2007

Vial: 56  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Thu Jun 28 07:42:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	726		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	833		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1970		N.D.	
66) Chlorobenzene	9.90	112	58		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	759		N.D.	
69) m,p-Xylene	10.12	106	802		N.D.	
70) o-xylene	10.51	106	363		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	193		N.D.	
73) Isopropylbenzene	10.87	105	422		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	11.05	83	125		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	67		N.D.	
80) n-Propylbenzene	11.28	91	576		N.D.	
81) 2-Chlorotoluene	11.37	91	183		N.D.	
82) 4-Chlorotoluene	11.48	91	138		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	286		N.D.	
84) tert-Butylbenzene	11.78	119	241		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	1027		N.D.	
86) sec-butylbenzene	11.98	105	410		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	55		N.D.	
88) 4-Isopropyltoluene	12.13	119	321		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	78		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	556		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.18	180	235		N.D.	
94) Hexachlorobutadiene	14.33	225	58		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	d

(#) = qualifier out of range (m) = manual integration  
 M0627017.D M8260W.M Fri Jun 29 05:51:16 2007

**TIC FORMS**

SDG JPL42

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-4-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL42  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-001  
 Lab File ID: M0628013.D  
 Date Collected: 06/26/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
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30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628013.D                   Vial: 57  
Acq On    : 28 Jun 2007  12:12                   Operator: LPM  
Sample    : JPL42-001                           Inst     : MOBY  
Misc      : #5 5ml+IS/SS (524)                Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628013.D  M8260W.M     Fri Jun 29 08:14:44 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-4-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL42  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-002  
 Lab File ID: M0628014.D  
 Date Collected: 06/26/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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11					
12					
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29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628014.D                   Vial: 58  
Acq On    : 28 Jun 2007 12:41                   Operator: LPM  
Sample    : JPL42-002                         Inst     : MOBY  
Misc      : #1 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628014.D M8260W.M     Fri Jun 29 08:15:02 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-4-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL42  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-003  
 Lab File ID: M0628015.D  
 Date Collected: 06/26/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628015.D                   Vial: 59  
Acq On    : 28 Jun 2007 13:08                   Operator: LPM  
Sample    : JPL42-003                         Inst    : MOBY  
Misc      : #1 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628015.D M8260W.M    Fri Jun 29 08:16:12 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-4-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL42  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL42-004  
 Lab File ID: M0628016.D  
 Date Collected: 06/26/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628016.D                   Vial: 60  
Acq On    : 28 Jun 2007  13:31                   Operator: LPM  
Sample    : JPL42-004                           Inst     : MOBY  
Misc      : #1 5ml+IS/SS (524)                Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628016.D  M8260W.M     Fri Jun 29 08:17:25 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-4-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL42-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/28/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628017.D Vial: 61  
Acq On : 28 Jun 2007 13:55 Operator: LPM  
Sample : JPL42-005 Inst : MOBY  
Misc : #6 5ml+IS/SS (524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628017.D M8260W.M Fri Jun 29 08:18:18 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-9-6/25/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019107

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL42-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/28/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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09					
10					
11					
12					
13					
14					
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30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628018.D Vial: 62  
Acq On : 28 Jun 2007 14:19 Operator: LPM  
Sample : JPL42-006 Inst : MOBY  
Misc : #2 5ml+IS/SS (524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628018.D M8260W.M Fri Jun 29 08:19:02 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-9-6/25/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL42-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627017.D                   Vial: 56  
Acq On    : 27 Jun 2007 14:06                   Operator: DGA  
Sample    : JPL42-007                         Inst     : MOBY  
Misc      : #3 5ml +IS/SS(524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library     : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627017.D M8260W.M    Fri Jun 29 05:51:21 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062707MVOWM2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL42

Run Sequence: R019090

Matrix: (SOIL/WATER) Water

Lab Sample ID: B062707MVOWM2

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0627012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/27/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062707\M0627012.D Vial: 55  
Acq On : 27 Jun 2007 11:52 Operator: DGA  
Sample : B062707MVOWM2 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0627012.D M8260W.M Tue Jul 10 10:03:50 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B062807MVOWM1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL42  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: B062807MVOWM1  
 Lab File ID: M0628012.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628012.D                   Vial: 56  
Acq On    : 28 Jun 2007 11:42                   Operator: LPM  
Sample    : B062807MVOWM1                   Inst    : MOBY  
Misc      : 5ml PFW+IS/SS(MV8-39-9)        Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628012.D M8260W.M    Fri Jun 29 08:00:00 2007

# **SAMPLE DATA**

**SDG# JPL42**

**Semivolatiles**



1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4-1
--------

Lab Name: Laucks Testing Laboratories,  
 SDG No.: JPL42  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 1040.0 (g/mL)      mL  
 Level: (LOW/MED)       
 % Moisture:      Decanted: (Y/N) N  
 Concentrated Extract Volume: 1000 (uL)  
 Injection Volume: 2.0 (uL)  
 GPC Cleanup: (Y/N) N pH: <2

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019268  
 Lab Sample ID: JPL42-005  
 Lab File ID: L0703005.D  
 Date Collected: 06/25/2007  
 Date Extracted: 06/27/2007  
 Date Analyzed: 07/03/2007  
 Dilution Factor: 1.0  
 Extraction: (Type) CONT

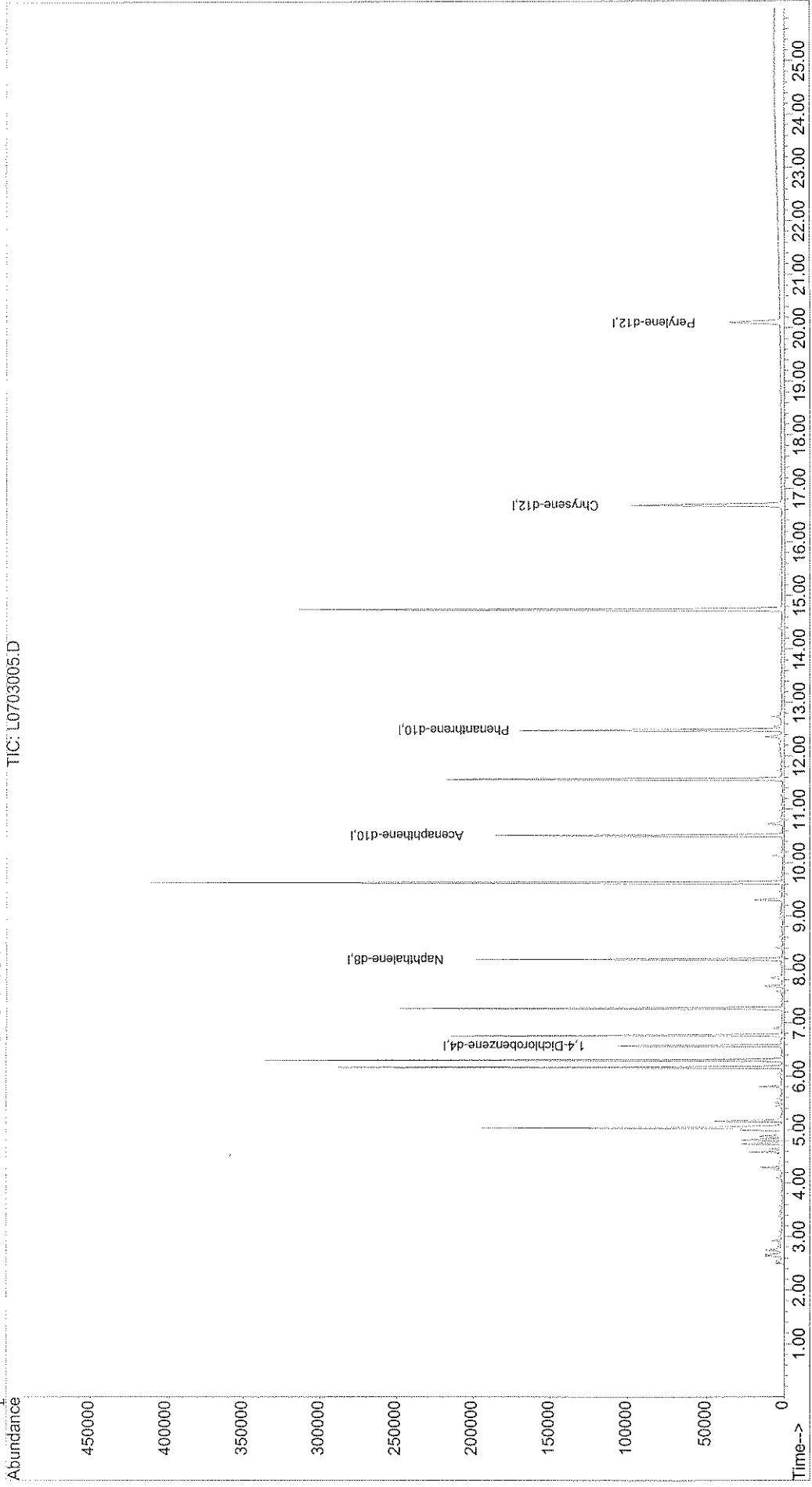
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	1.4	U

Comments:

Quantitation Report

Data File : X:\MSABN\LOUIE\070307\L0703005.D Vial: 3  
Acq On : 3 Jul 2007 17:47 Operator: AP  
Sample : JPL42-005 Inst : LOUIE  
Misc : 5970L 1040ML->1ML+IS Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Jul 5 9:30 2007 Quant Results File: L8270M.RES

Method : X:\MSABN\LOUIE\QUANT\L8270M.M (RTE Integrator)  
Title : 8270 SW846 BNA Calibration 5970L  
Last Update : Thu Jul 05 09:24:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\LOUIE\070307\L0703005.D  
 Acq On : 3 Jul 2007 17:47  
 Sample : JPL42-005  
 Misc : 5970L 1040ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 5 9:30 2007

Vial: 3  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270M.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270M.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Thu Jul 05 09:24:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar )
1) 1,4-Dichlorobenzene-d4	6.58	152	27109	20.00	ng/ul	0.00	NA%
24) Naphthalene-d8	8.19	136	101397	20.00	ng/ul	0.00	NA%
40) Acenaphthene-d10	10.52	164	65241	20.00	ng/ul	0.00	NA%
68) Phenanthrene-d10	12.50	188	112303	20.00	ng/ul	0.00	NA%
82) Chrysene-d12	16.69	240	76160	20.00	ng/ul	-0.02	NA%
92) Perylene-d12	20.10	264	33457	20.00	ng/ul	-0.02	NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.04	112	52290	31.42	ng/ul	0.00	
Spiked Amount	75.000	Range	20 - 110	Recovery	=	41.89%	
7) Phenol-d5	6.17	99	87852	38.79	ng/ul	0.00	
Spiked Amount	75.000	Range	10 - 115	Recovery	=	51.72%	
11) 2-Chlorophenol-d4	6.31	132	87277	44.60	ng/ul	0.00	
Spiked Amount	75.000	Range	48 - 117	Recovery	=	59.47%	
15) 1,2-Dichlorobenzene-d4	6.76	152	40146	30.76	ng/ul	-0.01	
Spiked Amount	50.000	Range	38 - 82	Recovery	=	61.52%	
25) Nitrobenzene-d5	7.27	82	89291	40.27	ng/ul	-0.01	
Spiked Amount	50.000	Range	40 - 110	Recovery	=	80.54%	
46) 2-Fluorobiphenyl	9.63	172	168861	33.74	ng/ul	0.00	
Spiked Amount	50.000	Range	50 - 100	Recovery	=	67.48%	
72) 2,4,6-Tribromophenol	11.57	330	50901	37.87	ng/ul	0.00	
Spiked Amount	75.000	Range	40 - 125	Recovery	=	50.49%	
85) Terphenyl-d14	14.75	244	192396	40.62	ng/ul	0.00	
Spiked Amount	50.000	Range	50 - 135	Recovery	=	81.24%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	3.00	88	358	N.D.		
3) N-nitrosodimethylamine	3.48	74	30	N.D.		
4) Pyridine	3.51	79	28	N.D.		
6) Benzaldehyde	6.09	77	26	N.D.		
8) Phenol	6.17	94	102	N.D.		
9) Aniline	6.14	93	32	N.D.		
10) Bis(2-Chloroethyl) ether	6.31	93	191	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\LOUIE\070307\L0703005.D  
 Acq On : 3 Jul 2007 17:47  
 Sample : JPL42-005  
 Misc : 5970L 1040ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 5 9:30 2007

Vial: 3  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270M.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270M.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Thu Jul 05 09:24:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
12) 2-Chlorophenol	6.32	128	39		N.D.	
13) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
14) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
16) Benzyl alcohol	6.76	108	482		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	6.76	108	482		N.D.	
19) Bis(2-chloroisopropyl) ethe	6.88	45	607		N.D.	
20) 3 & 4-Methylphenol	7.15	108	28		N.D.	
21) Acetophenone	7.15	105	26		N.D.	
22) n-Nitroso-di-n-propylamine	7.14	70	74		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	7.27	77	417		N.D.	
27) Isophorone	7.69	82	254		N.D.	
28) 2-Nitrophenol	0.00	139	0		N.D.	
29) 2,4-Dimethylphenol	0.00	107	0		N.D.	
30) bis(2-Chloroethoxy)methane	0.00	93	0		N.D.	
31) Benzoic acid	7.91	105	173	3.40	ng/ul	NOL 90
32) 2,4-Dichlorophenol	8.10	162	28		N.D.	7/05/07 AP
33) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
34) Naphthalene	8.21	128	119		N.D.	
35) 4-Chloroaniline	0.00	127	0		N.D.	
36) Hexachlorobutadiene	0.00	225	0		N.D.	
37) Caprolactam	8.77	113	30		N.D.	
38) 4-Chloro-3-methylphenol	8.96	107	28		N.D.	
39) 2-Methylnaphthalene	0.00	142	0		N.D.	
41) 1-Methylnaphthalene	0.00	142	0		N.D.	
42) Hexachlorocyclopentadiene	0.00	237	0		N.D.	
43) 1,2,4,5-Tetrachlorobenzene	0.00	216	0		N.D.	
44) 2,4,6-Trichlorophenol	0.00	196	0		N.D.	
45) 2,4,5-Trichlorophenol	0.00	196	0		N.D.	
47) 1,1'-Biphenyl	9.63	154	313		N.D.	
48) 2-Chloronaphthalene	0.00	162	0		N.D.	
49) 2-Nitroaniline	10.03	65	38		N.D.	
50) Dimethylphthalate	10.17	163	25		N.D.	
51) 1,4-Dinitrobenzene	0.00	168	0		N.D.	
52) 1,3-Dinitrobenzene	0.00	168	0		N.D.	
53) 2,6-Dinitrotoluene	0.00	165	0		N.D.	
54) Acenaphthylene	10.38	152	29		N.D.	
55) 1,2-Dinitrobenzene	0.00	168	0		N.D.	
56) 3-Nitroaniline	0.00	138	0		N.D.	
57) Acenaphthene	0.00	153	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\LOUIE\070307\L0703005.D  
 Acq On : 3 Jul 2007 17:47  
 Sample : JPL42-005  
 Misc : 5970L 1040ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 5 9:30 2007

Vial: 3  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270M.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270M.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Thu Jul 05 09:24:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	10.73	109	33		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	11.11	149	232		N.D.	
65) Fluorene	11.29	166	43		N.D.	
66) 4-Chlorophenyl-phenylether	0.00	204	0		N.D.	
67) 4-Nitroaniline	0.00	138	0		N.D.	
69) 4,6-Dinitro-2-methylphenol	0.00	198	0		N.D.	
70) N-nitrosodiphenylamine	11.56	169	1534		N.D.	
71) 1,2-Diphenylhydrazine	11.56	77	281		N.D.	
73) 4-Bromophenyl-phenylether	0.00	248	0		N.D.	
74) Hexachlorobenzene	0.00	284	0		N.D.	
75) Atrazine	0.00	200	0		N.D.	
76) Pentachlorophenol	0.00	266	0		N.D.	d
77) Phenanthrene	12.37	178	28		N.D.	
78) Anthracene	0.00	178	0		N.D.	
79) Carbazole	12.74	167	69		N.D.	
80) Di-n-butylphthalate	13.27	149	897		N.D.	
81) Fluoranthene	0.00	202	0		N.D.	
83) Benzidine	0.00	184	0		N.D.	
84) Pyrene	0.00	202	0		N.D.	
86) Butylbenzylphthalate	15.59	149	24		N.D.	
87) Bis(2-ethylhexyl)adipate	15.73	129	299		N.D.	
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	16.69	228	199		N.D.	
90) bis(2-Ethylhexyl)phthalate	16.77	149	347		N.D.	
91) Chrysene	16.69	228	199		N.D.	
93) Di-n-octylphthalate	0.00	149	0		N.D.	
94) Benzo[b]fluoranthene	0.00	252	0		N.D.	
95) Benzo[k]fluoranthene	0.00	252	0		N.D.	
96) Benzo[a]pyrene	20.10	252	33		N.D.	
97) Indeno[1,2,3-cd]pyrene	0.00	276	0		N.D.	
98) Dibenz[a,h]anthracene	0.00	278	0		N.D.	
99) Benzo[g,h,i]perylene	0.00	276	0		N.D.	

**Metals Data**

**JPL42**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL42

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
<u>MW-4-5</u>	<u>JPL42-001</u>
<u>MW-4-4</u>	<u>JPL42-002</u>
<u>MW-4-3</u>	<u>JPL42-003</u>
<u>MW-4-2</u>	<u>JPL42-004</u>
<u>MW-4-2MS</u>	<u>JPL42-004MS</u>
<u>MW-4-2MSD</u>	<u>JPL42-004MSD</u>
<u>MW-4-1</u>	<u>JPL42-005</u>
<u>EB-9-6/25/07</u>	<u>JPL42-006</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Cheronne Oreio

Date: 07/17/007

Title: Metals Lead

## **Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-4-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL42

Matrix (soil/water): Water

Lab Sample ID: JPL42-001

Level (low/med): LOW

Date Received: 06/26/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	16600		E	P	R019513
7440-47-3	Chromium	2.47			M	R019266
7439-89-6	Iron	1470			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	16100		E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	46900		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-4-4

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL42Matrix (soil/water): WaterLab Sample ID: JPL42-002Level (low/med): LOWDate Received: 06/26/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.22			M	R019266
7440-70-2	Calcium	30800		E	P	R019384
7440-47-3	Chromium	3.50			M	R019266
7439-89-6	Iron	141			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	19900		E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	45500		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-4-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL42

Matrix (soil/water): Water

Lab Sample ID: JPL42-003

Level (low/med): LOW

Date Received: 06/26/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019412
7440-70-2	Calcium	39800			P	R019411
7440-47-3	Chromium	1.00	U		M	R019412
7439-89-6	Iron	3060			P	R019411
7439-92-1	Lead	1.00	U		M	R019412
7439-95-4	Magnesium	20700			P	R019411
7440-09-7	Potassium	2770			P	R019411
7440-23-5	Sodium	48200			P	R019411

Color Before: Yellow Clarity Before: Clear Texture: \_\_\_\_\_

Color After: Colorless Clarity After: Clear Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-4-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL42

Matrix (soil/water): Water

Lab Sample ID: JPL42-004

Level (low/med): LOW

Date Received: 06/26/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.16			M	R019266
7440-70-2	Calcium	105000		E	P	R019384
7440-47-3	Chromium	2.92			M	R019266
7439-89-6	Iron	310			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	33900		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	35400		*	P	R019513

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-4-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL42Matrix (soil/water): WaterLab Sample ID: JPL42-005Level (low/med): LOWDate Received: 06/26/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	5000	U	E	P	R019325
7440-47-3	Chromium	7.71			M	R019266
7439-89-6	Iron	100	U		P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	5000	U	E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	5000	U	*	P	R019325

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-9-6/25/07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL42Matrix (soil/water): WaterLab Sample ID: JPL42-006Level (low/med): LOWDate Received: 06/26/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019412
7440-70-2	Calcium	55300			P	R019411
7440-47-3	Chromium	1.72			M	R019412
7439-89-6	Iron	828			P	R019411
7439-92-1	Lead	1.00	U		M	R019412
7439-95-4	Magnesium	17500			P	R019411
7440-09-7	Potassium	2500	U		P	R019411
7440-23-5	Sodium	19700			P	R019411

Color Before: Colorless Clarity Before: Clear Texture: \_\_\_\_\_Color After: Colorless Clarity After: Clear Artifacts: No

Comment \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL42**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL42

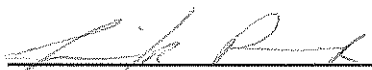
SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-4-5</u>	<u>JPL42-001</u>
<u>MW-4-5MS</u>	<u>JPL42-001MS</u>
<u>MW-4-5MSD</u>	<u>JPL42-001MSD</u>
<u>MW-4-4</u>	<u>JPL42-002</u>
<u>MW-4-3</u>	<u>JPL42-003</u>
<u>MW-4-2</u>	<u>JPL42-004</u>
<u>MW-4-2D</u>	<u>JPL42-004D</u>
<u>MW-4-2MS</u>	<u>JPL42-004MS</u>
<u>MW-4-2MSD</u>	<u>JPL42-004MSD</u>
<u>MW-4-1</u>	<u>JPL42-005</u>
<u>EB-9-6/25/07</u>	<u>JPL42-006</u>

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7/18/07

Title: Inorganics Lead



## **Inorganic Analysis Data Sheets**



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL42  
**Sample Number:** MW-4-4 **Date/Time Collected:** 06/25/2007 08:18  
**Lab Sample ID:** JPL42-002 **Date/Time Received:** 06/26/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	06/26/2007	06/26/2007	R019057

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	190		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	2.7		0.20	0.055	07/10/2007	07/11/2007	R019406
Sulfate as SO4	14808-79-8	1	15		1.0	0.17	07/10/2007	07/11/2007	R019406
Chloride	16887-00-6	10	22		10	0.76	07/10/2007	07/11/2007	R019406

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/03/2007	07/03/2007	R019262
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	140		8	8	07/03/2007	07/03/2007	R019262

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/06/2007	07/07/2007	R019277

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	3		0.5	0.01	07/04/2007	07/02/2007	R019235
Total Nitrate / Nitrite	N+N	2	2.8		0.10	0.032	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0080		0.0050	0.0012	06/26/2007	06/26/2007	R019100

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL42  
**Sample Number:** MW-4-3 **Date/Time Collected:** 06/25/2007 08:53  
**Lab Sample ID:** JPL42-003 **Date/Time Received:** 06/26/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	06/26/2007	06/26/2007	R019057

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	240		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/10/2007	07/11/2007	R019406
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	07/10/2007	07/11/2007	R019406
Chloride	16887-00-6	10	14		10	0.76	07/10/2007	07/11/2007	R019406

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/03/2007	07/03/2007	R019262
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	210		8	8	07/03/2007	07/03/2007	R019262

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/06/2007	07/07/2007	R019277

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/04/2007	07/02/2007	R019235
Total Nitrate / Nitrite	N+N	1	0.065		0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/26/2007	06/26/2007	R019100



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL42  
**Sample Number:** MW-4-1 **Date/Time Collected:** 06/25/2007 10:03  
**Lab Sample ID:** JPL42-005 **Date/Time Received:** 06/26/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.8		0.10	0.10	06/26/2007	06/26/2007	R019057

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	17		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/10/2007	07/11/2007	R019406
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	07/10/2007	07/11/2007	R019406
Chloride	16887-00-6	1	1.0	U	1.0	0.076	07/10/2007	07/11/2007	R019406

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	5	5.0	U	5.0	0.70	07/10/2007	07/11/2007	R019390

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/04/2007	07/02/2007	R019235
Total Nitrate / Nitrite	N+N	1	0.15		0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/26/2007	06/26/2007	R019100

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL42  
**Sample Number:** EB-9-6/25/07 **Date/Time Collected:** 06/25/2007 09:46  
**Lab Sample ID:** JPL42-006 **Date/Time Received:** 06/26/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.3		0.10	0.10	06/26/2007	06/26/2007	R019057

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	260		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	3.4		0.20	0.055	07/10/2007	07/11/2007	R019406
Sulfate as SO4	14808-79-8	10	34		10	1.7	07/10/2007	07/11/2007	R019406
Chloride	16887-00-6	10	17		10	0.76	07/10/2007	07/11/2007	R019406

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	140		8	8	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	5	330		5.0	0.70	07/10/2007	07/11/2007	R019390

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	4		0.5	0.01	07/04/2007	07/02/2007	R019235
Total Nitrate / Nitrite	N+N	2	3.5		0.10	0.032	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/26/2007	06/26/2007	R019100

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL43**

**JULY 19, 2007**



# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL43  
Date of Report: July 19, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-12-5	JPL43-001	VOA/MET/INO
MW-12-4	JPL43-002	VOA/MET/INO
MW-12-3	JPL43-003	VOA/MET/INO
MW-12-2	JPL43-004	VOA/MET/INO
MW-12-1	JPL43-005	VOA/MET/INO
DUPE-5-2Q07	JPL43-006	VOA/MET/INO
EB-10-6/26/07	JPL43-007	VOA/MET/INO
TB-10-6/26/07	JPL43-008	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

The test for 200.8 Lead was not marked on the COC for EB-10-6/26/07. Since the sample is the equipment blank and all other samples were marked for 200.8 Lead, the test for lead was performed.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### GENERAL REMARKS ON ORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### Holding Time Compliance:

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

#### Volatiles Fraction:

##### Continuing Calibration Verification (CCV):

Analysis of the CCV M0628007.D yielded %D values for hexachlorobutadiene and 1,2,3-trichlorobenzene that exceeded 30% due to decreased response. These analytes were not detected in any associated samples. Additionally, because sample results are reported well below the reporting limit (RL) the chance of reporting any false negatives for these compounds at the RL was negligible.

##### Quality Control Analysis:

Analysis of the blank spike yielded a slightly low recovery value for dichlorodifluoromethane. Because this was within the marginal exceedance, no further action was taken.

### GENERAL REMARKS ON INORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

## SPECIFIC REMARKS ON INORGANIC ANALYSES:

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

All samples were analyzed past their holding time for nitrate by method 300.0. When the samples were received the anion instrument was not functioning properly. When the samples were received and aliquot was split and preserved with sulfuric acid for NO<sub>3</sub>/NO<sub>2</sub> analysis. The samples were analyzed within the 48 hour hold time by method 354.1 for nitrite and within the 28 day holding time for NO<sub>3</sub>/NO<sub>2</sub> by method 353.2. The nitrate was then calculated from the difference. The final results include data from all methods, and all raw data is included in the data package.

### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production. For the analytical run, R019325, Form 2A shows a CCV recovery for magnesium of 112.7% respectively. This recovery is within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115. Data have been reported as is.

Samples in this SDG were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate sample recoveries and serial dilutions apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG's JPL41 and JPL42 or the raw data provided.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

The scandium internal standard recovery was outside of the lower control limit for sample MW-12-1. Calcium, chromium, magnesium, potassium, and sodium are associated with this internal standard, and the results would be biased high. Sample MW-12-1 contained concentrations of these elements that were less than the CRDL, except for chromium. The client action level for chromium is 10 ug/L. Since the sample result for chromium for sample MW-12-1 was less than the client action level, no corrective action was taken. Data have not been flagged for these events.

The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-4-2 for JPL42. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

The serial dilution for the elements calcium and magnesium did not agree within 10% of the original determination after correction for dilution for sample MW-4-2 for JPL42. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### **Miscellaneous Inorganics:**

For run sequence R019101, the matrix spike and matrix spike duplicate recoveries fell outside the established control limits for the nitrite analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

For run sequence R01390, the blank spike duplicate recovery for the perchlorate analysis fell outside the established control limits. All other quality control elements are within control limits. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager

19 July 2007  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/19/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies



**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	353.2 Nitrate (as N) by Calc., water	353.2 Nitrate + Nitrite (as N), Water	354.1 Nitrite (as N), Water	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL43-001	06/27/2007 08:30 AM	06/26/2007 07:36 AM	MW-12-5	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-002	06/27/2007 08:30 AM	06/26/2007 08:13 AM	MW-12-4	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-003	06/27/2007 08:30 AM	06/26/2007 08:45 AM	MW-12-3	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-004	06/27/2007 08:30 AM	06/26/2007 09:17 AM	MW-12-2	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-005	06/27/2007 08:30 AM	06/26/2007 10:03 AM	MW-12-1	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-006	06/27/2007 08:30 AM	06/26/2007 12:00 AM	DUPE-5-2007	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-007	06/27/2007 08:30 AM	06/26/2007 09:42 AM	EB-10-6/26/07	A-	IN	IN	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL43-008	06/27/2007 08:30 AM	06/26/2007 12:00 AM	TB-10-6/26/07												

Approved By: *[Signature]*

On: *6/28/07*

Notes: Samples identified with a "\*" client has requested QC for

LEGEND: -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged  
FORM LTL-PM-8.0





**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL43  
Cooler: AAP021  
Temperatures: 4.8  
COC #: 42852

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL43-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-007	0001	1000 mL cylinder, poly	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL43  
Cooler: AAP021  
Temperatures: 4.8  
COC #: 42852

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL43-008	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**LAUCKS TESTING LABORATORIES**

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**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL43**

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Completed and checked by: Judy Ecklund Date: 7/20/07

# **SAMPLE DATA**

**SDG# JPL43**

**Volatiles**



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 14:44

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 14:44

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 14:44

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL43  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-001  
 Lab File ID: M0628019.D  
 Date Collected: 06/27/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

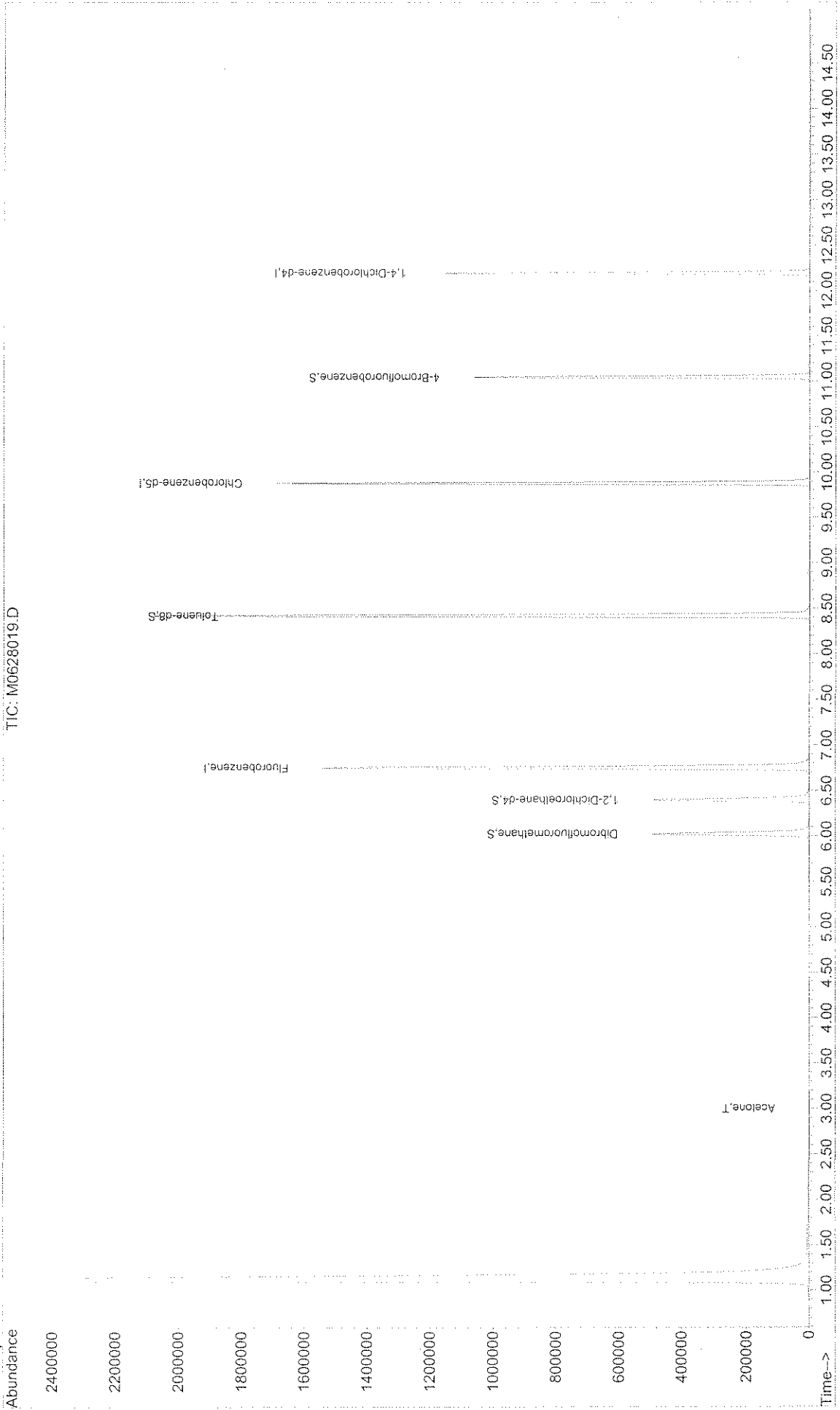
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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11				
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29				
30				

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628019.D  
Acq On : 28 Jun 2007 14:44  
Sample : JPL43-001  
Misc : #2 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:19 2007  
Vial: 63  
Operator: LPM  
Inst : MOBY  
Multiplier: 1.00  
Quant Results File: M8260W.RES

TIC: M0628019.D



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628019.D  
 Acq On : 28 Jun 2007 14:44  
 Sample : JPL43-001  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:19 2007

Vial: 63  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1565735	50.00	ug/l	0.00	93.11%
54) Chlorobenzene-d5	9.88	117	970781	50.00	ug/l	0.00	97.83%
74) 1,4-Dichlorobenzene-d4	12.19	152	320634	50.00	ug/l	0.00	82.87%

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
37) Dibromofluoromethane	6.03	111	373739	52.69	ug/l	0.00	
Spiked Amount	50.000						
Range	85 - 115		Recovery	=	105.38%		
40) 1,2-Dichloroethane-d4	6.40	65	402468	52.44	ug/l	0.00	
Spiked Amount	50.000						
Range	70 - 120		Recovery	=	104.88%		
55) Toluene-d8	8.42	98	1481873	49.42	ug/l	0.00	
Spiked Amount	50.000						
Range	85 - 120		Recovery	=	98.84%		
76) 4-Bromofluorobenzene	11.04	95	359537	59.67	ug/l	0.00	
Spiked Amount	50.000						
Range	75 - 120		Recovery	=	119.34%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	1792	1.04	ug/l #	68
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	274	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.49	84	600	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.50	43	196	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.82	83	833	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

Quantitation Report

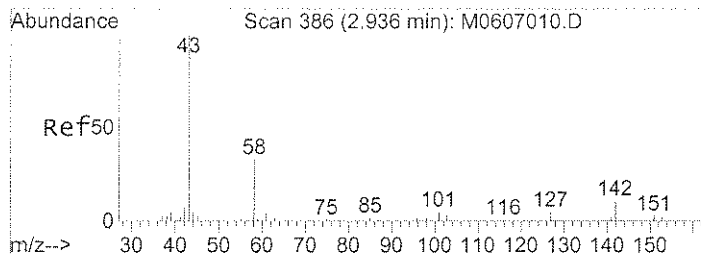
Data File : X:\MSVOA\MOBY\062807\M0628019.D  
 Acq On : 28 Jun 2007 14:44  
 Sample : JPL43-001  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:19 2007

Vial: 63  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

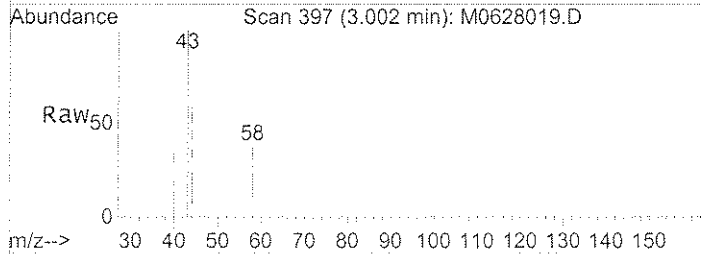
Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

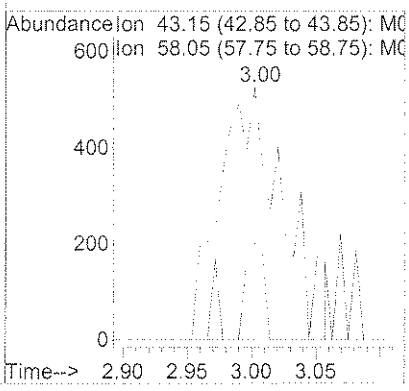
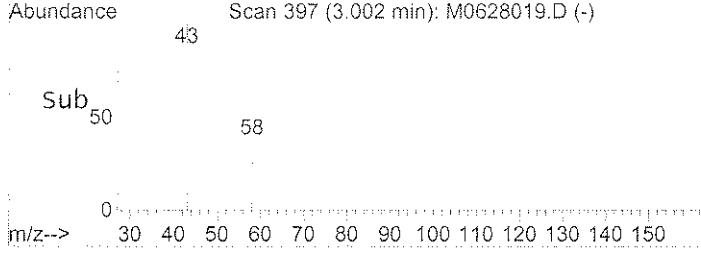
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.15	117	1822		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	796		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	324		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	555		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1723		N.D.	
66) Chlorobenzene	9.91	112	61		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	431		N.D.	
69) m,p-Xylene	10.11	106	805		N.D.	
70) o-xylene	10.52	106	61		N.D.	
71) Styrene	10.55	104	64		N.D.	
72) Bromoform	10.75	173	122		N.D.	
73) Isopropylbenzene	10.87	105	620		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.29	91	800		N.D.	
81) 2-Chlorotoluene	11.37	91	55		N.D.	
82) 4-Chlorotoluene	11.49	91	182		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	414		N.D.	
84) tert-Butylbenzene	11.77	119	775		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	630		N.D.	
86) sec-butylbenzene	11.98	105	1089		N.D.	
87) 1,3-dichlorobenzene	12.13	146	201		N.D.	
88) 4-Isopropyltoluene	12.13	119	765		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	186		N.D.	
90) 1,2-Dichlorobenzene	12.58	146	123		N.D.	
91) n-Butylbenzene	12.55	91	864		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.18	180	57		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.68	180	59		N.D.	



#11  
 Acetone  
 Concen: 1.04 ug/l  
 RT: 3.00 min Scan# 397  
 Delta R.T. 0.01 min  
 Lab File: M0628019.D  
 Acq: 28 Jun 2007 14:44



Tgt Ion: 43 Resp: 1792  
 Ion Ratio Lower Upper  
 43 100  
 58 11.0 22.0 33.0#





Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628019.D                   Vial: 63  
Acq On    : 28 Jun 2007 14:44                   Operator: LPM  
Sample    : JPL43-001                         Inst     : MOBY  
Misc      : #2 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628019.D M8260W.M    Fri Jun 29 08:19:45 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 15:08

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.63	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.75	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-002  
 Lab File ID: M0628020.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 15:08  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
10061-02-	trans-1,3-Dichloropropene	0.50		U
79-00-5	1,1,2-Trichloroethane	0.50		U
127-18-4	Tetrachloroethene	0.50		U
142-28-9	1,3-Dichloropropane	0.50		U
124-48-1	Dibromochloromethane	0.50		U
106-93-4	1,2-Dibromoethane	0.50		U
108-90-7	Chlorobenzene	0.50		U
100-41-4	Ethylbenzene	0.50		U
630-20-6	1,1,1,2-Tetrachloroethane	0.50		U
179601-23	m,p-Xylene	1.0		U
95-47-6	o-Xylene	0.50		U
100-42-5	Styrene	0.50		U
75-25-2	Bromoform	0.50		U
98-82-8	Isopropylbenzene	0.50		U
79-34-5	1,1,2,2-Tetrachloroethane	0.50		U
103-65-1	n-Propylbenzene	0.50		U
108-86-1	Bromobenzene	0.50		U
96-18-4	1,2,3-Trichloropropane	0.50		U
95-49-8	2-Chlorotoluene	0.50		U
108-67-8	1,3,5-Trimethylbenzene	0.50		U
106-43-4	4-Chlorotoluene	0.50		U
98-06-6	tert-Butylbenzene	0.50		U
95-63-6	1,2,4-Trimethylbenzene	0.50		U
135-98-8	sec-Butylbenzene	0.50		U
99-87-6	4-Isopropyltoluene	0.50		U
541-73-1	1,3-Dichlorobenzene	0.50		U
106-46-7	1,4-Dichlorobenzene	0.50		U
104-51-8	n-Butylbenzene	0.50		U
95-50-1	1,2-Dichlorobenzene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-002  
 Lab File ID: M0628020.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 15:08  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL43  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-002  
 Lab File ID: M0628020.D  
 Date Collected: 06/27/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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25				
26				
27				
28				
29				
30				

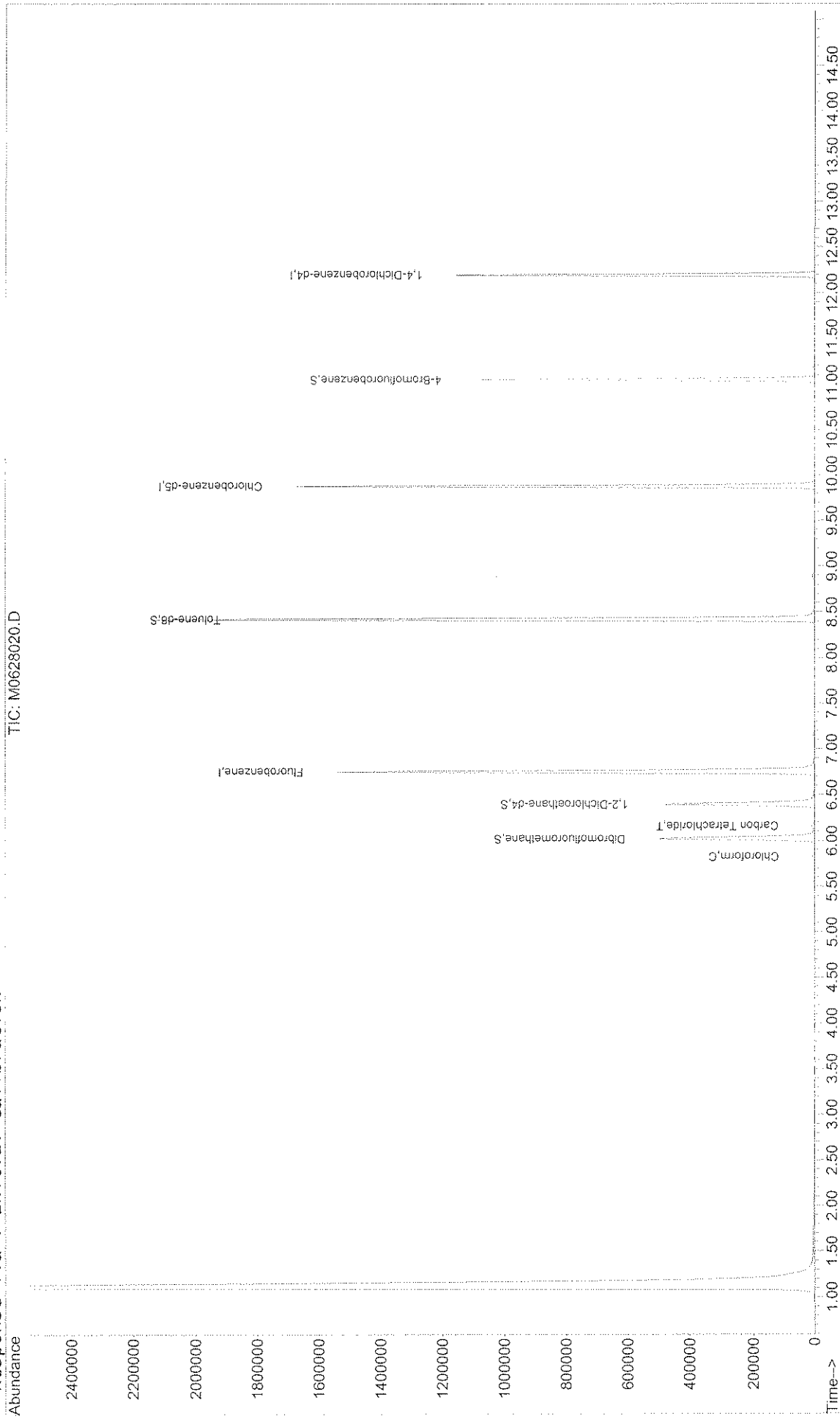
Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628020.D  
Acq On : 28 Jun 2007 15:08  
Sample : JPL43-002  
Misc : #4 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:20 2007

Vial: 64  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628020.D  
 Acq On : 28 Jun 2007 15:08  
 Sample : JPL43-002  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:20 2007

Vial: 64  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1565855	50.00	ug/l	0.00 93.12%
54) Chlorobenzene-d5	9.88	117	979372	50.00	ug/l	0.00 98.70%
74) 1,4-Dichlorobenzene-d4	12.20	152	321616	50.00	ug/l	0.00 83.12%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	376948	53.14	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.28%
40) 1,2-Dichloroethane-d4	6.40	65	401382	52.30	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.60%
55) Toluene-d8	8.42	98	1479846	48.92	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.84%
76) 4-Bromofluorobenzene	11.05	95	361962	59.89	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	119.78%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) vinyl chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.04	76	232		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.45	43	119		N.D.	
18) Methylene Chloride	3.49	84	930		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	0.00	73	0		N.D.	
22) Acrylonitrile	3.95	53	55		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.54	43	540		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.83	83	7923	0.63	ug/l	100
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0628020.D M8260W.M Fri Jun 29 08:20:34 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628020.D  
 Acq On : 28 Jun 2007 15:08  
 Sample : JPL43-002  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:20 2007

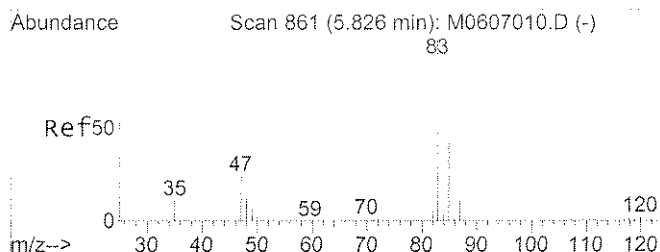
Vial: 64  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

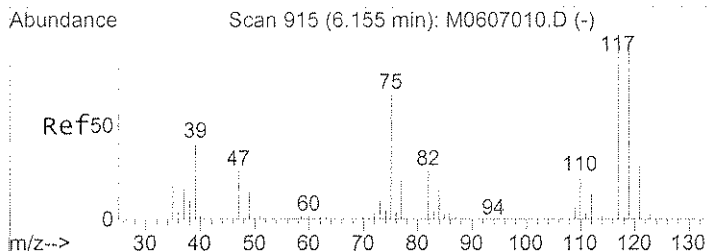
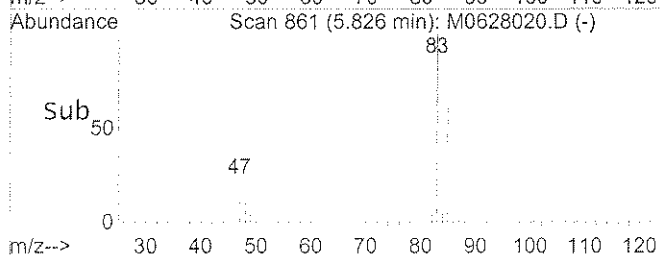
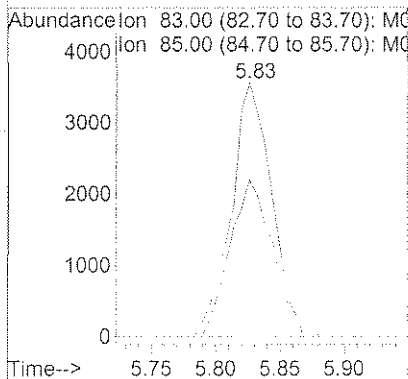
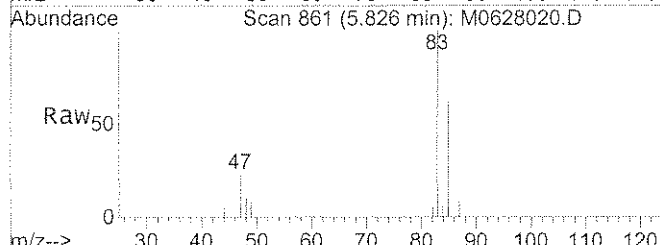
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.15	117	7294	0.75	ug/l	94
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.42	78	698	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.		
45) Trichloroethene	7.16	130	2411	N.D.		
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	69	0	N.D.		
50) Bromodichloromethane	7.73	83	74	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.48	92	502	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	0.00	166	0	N.D.		
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	0.00	43	0	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	9.88	91	1847	N.D.		
66) Chlorobenzene	9.90	112	145	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	10.00	91	486	N.D.		
69) m,p-Xylene	10.12	106	724	N.D.		
70) o-xylene	0.00	106	0	N.D.		
71) Styrene	10.53	104	612	N.D.		
72) Bromoform	10.75	173	170	N.D.		
73) Isopropylbenzene	10.88	105	399	N.D.		
75) trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.		
77) Bromobenzene	0.00	156	0	N.D.		
78) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
79) 1,2,3-Trichloropropane	11.06	110	55	N.D.		
80) n-Propylbenzene	11.28	91	686	N.D.		
81) 2-Chlorotoluene	11.37	91	59	N.D.		
82) 4-Chlorotoluene	11.37	91	59	N.D.		
83) 1,3,5-Trimethylbenzene	11.45	105	390	N.D.		
84) tert-Butylbenzene	11.78	119	625	N.D.		
85) 1,2,4-Trimethylbenzene	11.82	105	592	N.D.		
86) sec-butylbenzene	11.99	105	884	N.D.		
87) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
88) 4-Isopropyltoluene	12.13	119	649	N.D.		
89) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) n-Butylbenzene	12.54	91	528	N.D.		
92) 1,2-Dibromo-3-chloropropan	0.00	75	0	N.D.		
93) 1,2,4-Trichlorobenzene	14.18	180	70	N.D.		
94) Hexachlorobutadiene	0.00	225	0	N.D.		
95) Naphthalene	0.00	128	0	N.D.	d	
96) 1,2,3-Trichlorobenzene	0.00	180	0	N.D.		





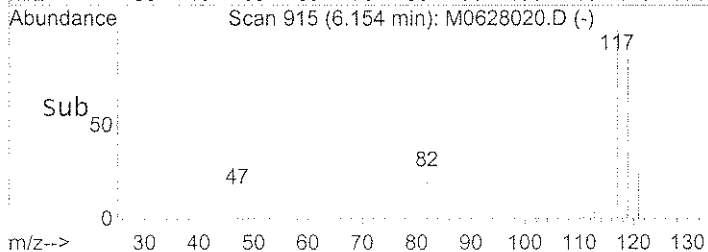
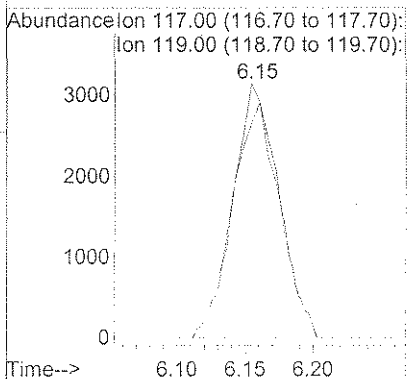
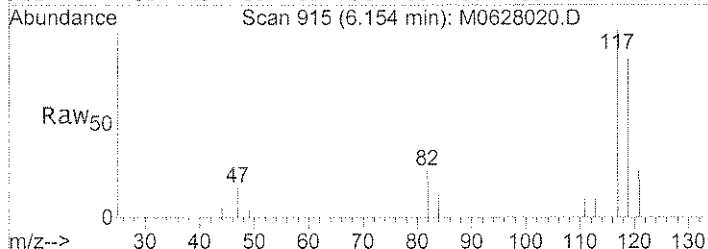
#34  
 Chloroform  
 Concen: 0.63 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. 0.00 min  
 Lab File: M0628020.D  
 Acq: 28 Jun 2007 15:08

Tgt Ion: 83 Resp: 7923  
 Ion Ratio Lower Upper  
 83 100  
 85 63.7 44.0 84.0



#38  
 Carbon Tetrachloride  
 Concen: 0.75 ug/l  
 RT: 6.15 min Scan# 915  
 Delta R.T. -0.01 min  
 Lab File: M0628020.D  
 Acq: 28 Jun 2007 15:08

Tgt Ion: 117 Resp: 7294  
 Ion Ratio Lower Upper  
 117 100  
 119 98.0 72.2 112.2



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628020.D                   Vial: 64  
Acq On    : 28 Jun 2007 15:08                   Operator: LPM  
Sample    : JPL43-002                         Inst     : MOBY  
Misc      : #4 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628020.D M8260w.M    Fri Jun 29 08:20:40 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-003  
 Lab File ID: M0628021.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 15:35  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	1.0		U
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	2.8		
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 15:35

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 15:35

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL43-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/28/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

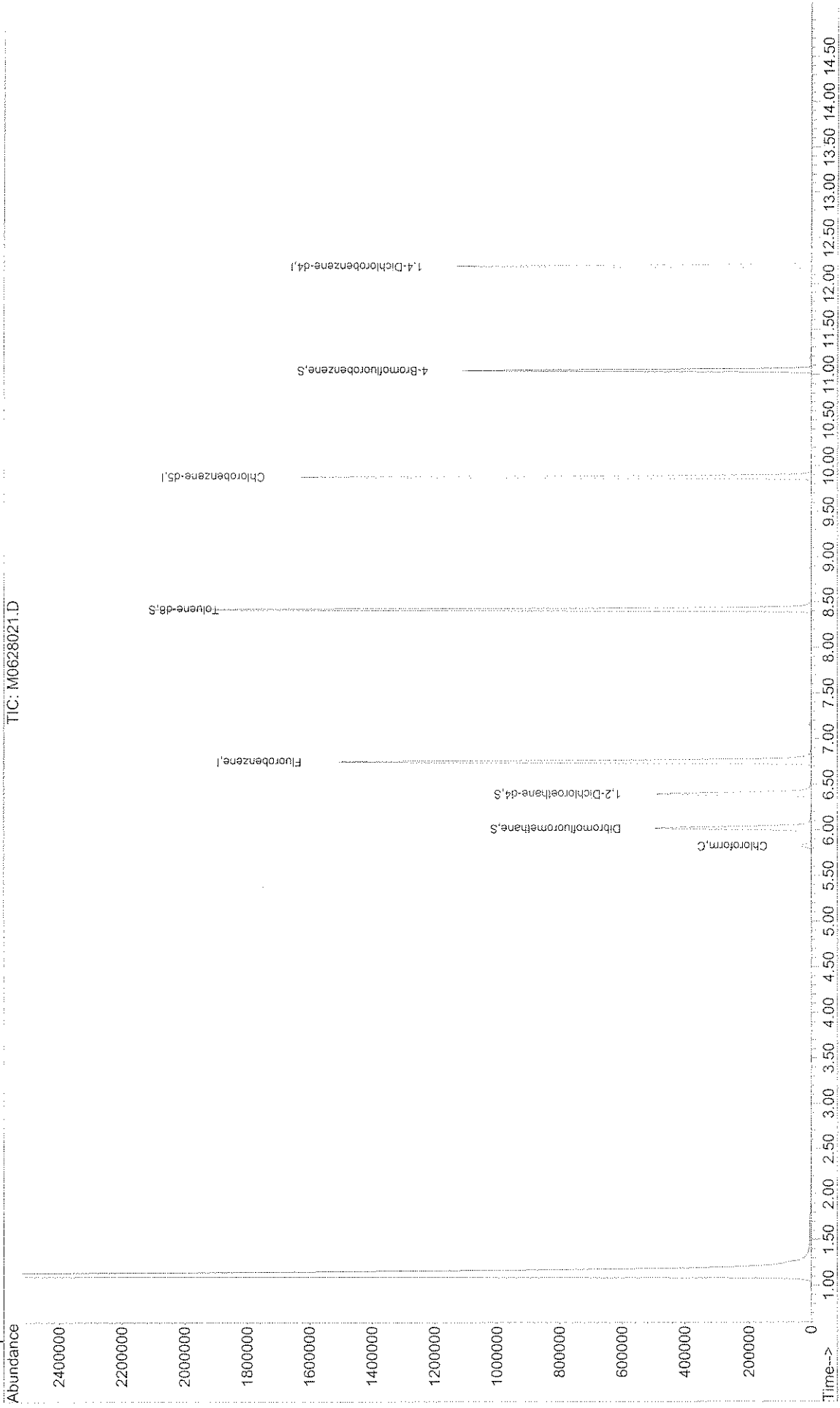
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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02				
03				
04				
05				
06				
07				
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11				
12				
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29				
30				

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628021.D  
Acq On : 28 Jun 2007 15:35 Vial: 65  
Sample : JPL43-003 Operator: LPM  
Misc : #3 5ml+IS/SS (524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 29 8:21 2007 Quant Results File: M8260w.RES

Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628021.D  
 Acq On : 28 Jun 2007 15:35  
 Sample : JPL43-003  
 Misc : #3 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:21 2007

Vial: 65  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1557093	50.00	ug/l	0.00 92.60%
54) Chlorobenzene-d5	9.88	117	975474	50.00	ug/l	0.00 98.30%
74) 1,4-Dichlorobenzene-d4	12.20	152	321773	50.00	ug/l	0.00 83.17%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	373525	52.95	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.90%
40) 1,2-Dichloroethane-d4	6.40	65	404041	52.94	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.88%
55) Toluene-d8	8.42	98	1470520	48.80	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.60%
76) 4-Bromofluorobenzene	11.05	95	365165	60.39	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	120.78%#

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	595	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.49	84	1382	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	3.94	53	71	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.52	43	141	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.81	41	56	N.D.		
34) Chloroform	5.83	83	34533	2.78	ug/l	100
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		



Quantitation Report

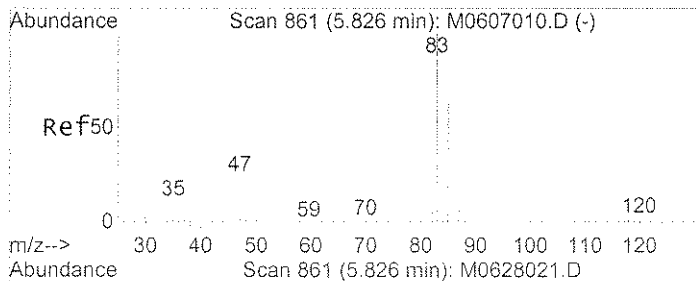
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 Acq On : 28 Jun 2007 15:35  
 Sample : JPL43-003  
 Misc : #3 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:21 2007

Vial: 65  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

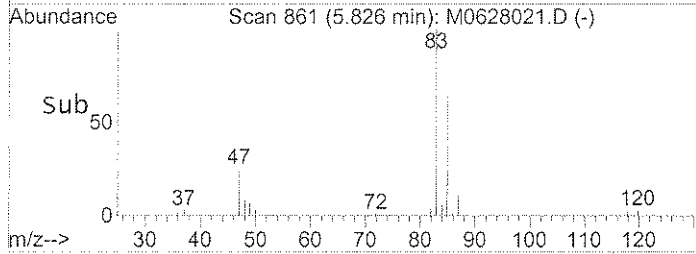
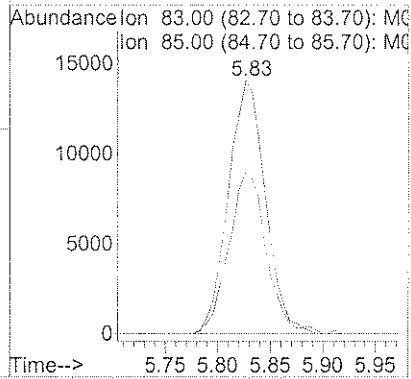
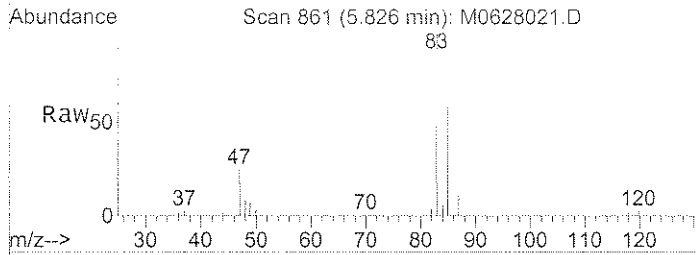
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.15	117	1728		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	651		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	2877		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	639		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1931		N.D.	
66) Chlorobenzene	9.90	112	124		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	766		N.D.	
69) m,p-Xylene	10.11	106	752		N.D.	
70) o-xylene	10.51	106	85		N.D.	
71) Styrene	10.53	104	582		N.D.	
72) Bromoform	10.76	173	64		N.D.	
73) Isopropylbenzene	10.86	105	380		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	687		N.D.	
81) 2-Chlorotoluene	11.38	91	55		N.D.	
82) 4-Chlorotoluene	11.49	91	65		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	325		N.D.	
84) tert-Butylbenzene	11.78	119	563		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	498		N.D.	
86) sec-butylbenzene	11.99	105	888		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	133		N.D.	
88) 4-Isopropyltoluene	12.13	119	627		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	67		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	606		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.34	225	146		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



#34  
 Chloroform  
 Concen: 2.78 ug/l  
 RT: 5.83 min Scan# 861  
 Delta R.T. 0.00 min  
 Lab File: M0628021.D  
 Acq: 28 Jun 2007 15:35

Tgt Ion	Resp	Lower	Upper
83	100		
85	63.7	44.0	84.0



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628021.D                   Vial: 65  
Acq On    : 28 Jun 2007 15:35                   Operator: LPM  
Sample    : JPL43-003                         Inst    : MOBY  
Misc      : #3 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628021.D M8260w.M    Fri Jun 29 08:21:29 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 15:59

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-004  
 Lab File ID: M0628022.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 15:59  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-004  
 Lab File ID: M0628022.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 15:59  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL43  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-004  
 Lab File ID: M0628022.D  
 Date Collected: 06/27/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

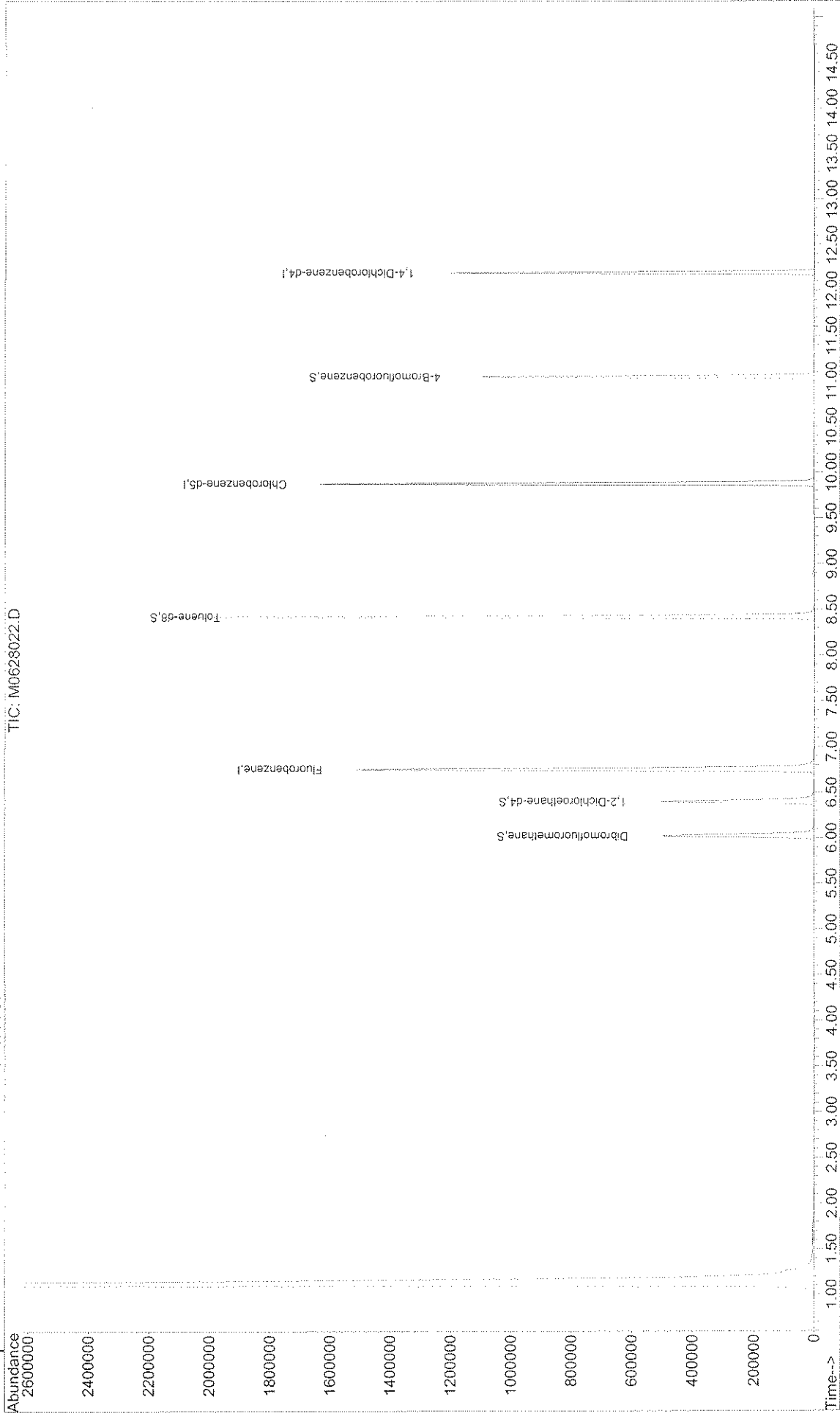
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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30				

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628022.D  
Acq On : 28 Jun 2007 15:59  
Sample : JPL43-004  
Misc : #2 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:21 2007  
Vial: 66  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260w.RES

Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title : VOA 8260- 5ML water calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628022.D  
 Acq On : 28 Jun 2007 15:59  
 Sample : JPL43-004  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:21 2007

Vial: 66  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1552372	50.00	ug/l	0.00	92.32%
54) Chlorobenzene-d5	9.87	117	973466	50.00	ug/l	0.00	98.10%
74) 1,4-Dichlorobenzene-d4	12.19	152	323565	50.00	ug/l	0.00	83.63%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	375015	53.33	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.66%	
40) 1,2-Dichloroethane-d4	6.40	65	401431	52.76	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.52%	
55) Toluene-d8	8.42	98	1479055	49.19	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.38%	
76) 4-Bromofluorobenzene	11.05	95	366526	60.28	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	120.56%#	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.05	76	445		N.D.	
15) Allyl chloride	3.33	76	58		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.44	43	56		N.D.	
18) Methylene Chloride	3.51	84	148		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	0.00	73	0		N.D.	
22) Acrylonitrile	3.95	53	456		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	56		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	55		N.D.	
34) Chloroform	5.82	83	1044		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0628022.D M8260W.M Fri Jun 29 08:22:12 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628022.D  
 Acq On : 28 Jun 2007 15:59  
 Sample : JPL43-004  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:21 2007

Vial: 66  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	6.16	117	1153		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	671		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	211		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	641		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	191		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.28	43	125		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1889		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.11	91	2220		N.D.	
69) m,p-Xylene	10.12	106	961		N.D.	
70) o-xylene	10.52	106	143		N.D.	
71) Styrene	10.53	104	801		N.D.	
72) Bromoform	10.75	173	78		N.D.	
73) Isopropylbenzene	10.86	105	287		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	526		N.D.	
81) 2-Chlorotoluene	11.36	91	83		N.D.	
82) 4-Chlorotoluene	11.49	91	120		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	268		N.D.	
84) tert-Butylbenzene	11.77	119	414		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	458		N.D.	
86) sec-butylbenzene	11.99	105	746		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	584		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	666		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.19	180	65		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628022.D Vial: 66  
Acq On : 28 Jun 2007 15:59 Operator: LPM  
Sample : JPL43-004 Inst : MOBY  
Misc : #2 5ml+IS/SS (524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628022.D M8260W.M Fri Jun 29 08:22:18 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 16:24

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 16:24

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-005  
 Lab File ID: M0628023.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 16:24  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL43-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/28/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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30					

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628023.D  
Acq On : 28 Jun 2007 16:24  
Sample : JPL43-005  
Misc : #3 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:23 2007  
Vial: 67  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration

Abundance  
TIC: M0628023.D





Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628023.D  
 Acq On : 28 Jun 2007 16:24  
 Sample : JPL43-005  
 Misc : #3 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:23 2007

Vial: 67  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1542921	50.00	ug/l	0.00 91.75%
54) Chlorobenzene-d5	9.88	117	960330	50.00	ug/l	0.00 96.78%
74) 1,4-Dichlorobenzene-d4	12.20	152	322430	50.00	ug/l	0.00 83.33%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	370860	53.06	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.12%
40) 1,2-Dichloroethane-d4	6.40	65	409604	54.16	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	108.32%
55) Toluene-d8	8.42	98	1462220	49.29	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.58%
76) 4-Bromofluorobenzene	11.05	95	358705	59.20	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	118.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.44	50	69	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.06	43	637	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	60	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	1171	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	5.51	43	3588	1.14	ug/l #	84
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.86	41	357	N.D.		
34) Chloroform	5.83	83	339	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0628023.D M8260W.M Fri Jun 29 08:23:08 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628023.D  
 Acq On : 28 Jun 2007 16:24  
 Sample : JPL43-005  
 Misc : #3 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:23 2007

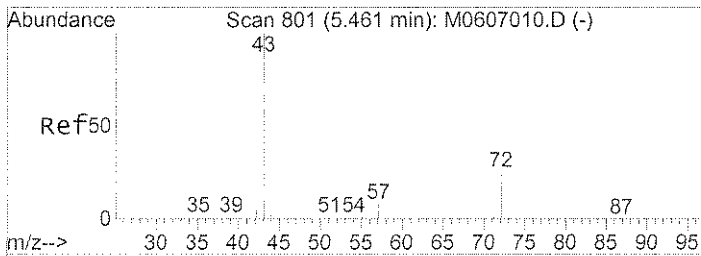
Vial: 67  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

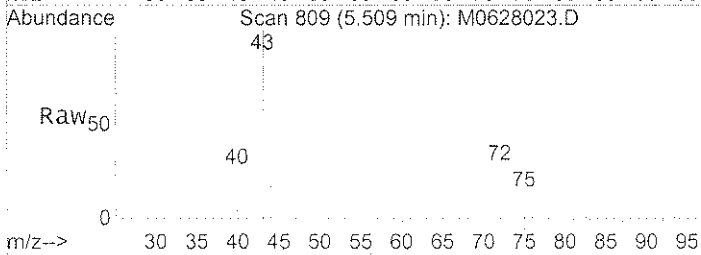
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	708		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	6.47	43	906	Below Cal #		19
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.50	92	665		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1775		N.D.	
66) Chlorobenzene	9.91	112	58		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	1556		N.D.	
69) m,p-xylene	10.11	106	2135		N.D.	
70) o-xylene	10.51	106	598		N.D.	
71) Styrene	10.53	104	56		N.D.	
72) Bromoform	10.76	173	222		N.D.	
73) Isopropylbenzene	10.86	105	236		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	394		N.D.	
81) 2-Chlorotoluene	11.28	91	394		N.D.	
82) 4-Chlorotoluene	11.28	91	394		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	127		N.D.	
84) tert-Butylbenzene	11.78	119	98		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	426		N.D.	
86) sec-butylbenzene	11.99	105	389		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	312		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	364		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0628023.D M8260W.M Fri Jun 29 08:23:09 2007

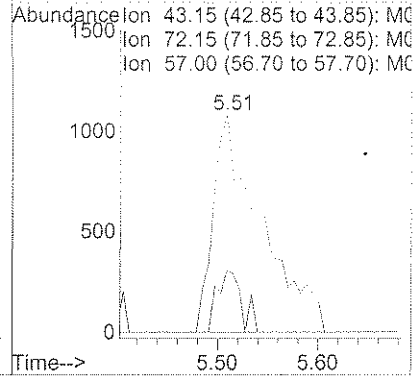
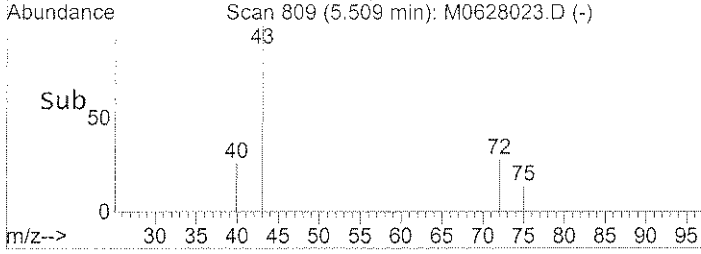


#30  
 2-Butanone  
 Concen: 1.14 ug/l  
 RT: 5.51 min Scan# 809  
 Delta R.T. 0.00 min  
 Lab File: M0628023.D  
 Acq: 28 Jun 2007 16:24

Tgt Ion	Ratio	Lower	Upper
43	100		
72	14.5	16.7	25.1#
57	0.0	6.1	9.1#



Abundance Ion 43.15 (42.85 to 43.85): MC  
 Ion 72.15 (71.85 to 72.85): MC  
 Ion 57.00 (56.70 to 57.70): MC



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628023.D                   Vial: 67  
Acq On    : 28 Jun 2007 16:24                   Operator: LPM  
Sample    : JPL43-005                         Inst     : MOBY  
Misc      : #3 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title      : VOA 8260- 5ML water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628023.D M8260w.M    Fri Jun 29 08:23:14 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-5-2Q07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 16:48

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-5-2Q07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-006  
 Lab File ID: M0628024.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 16:48  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-5-2Q07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 16:48

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-5-2Q07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL43  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-006  
 Lab File ID: M0628024.D  
 Date Collected: 06/27/2007  
 Date Analyzed: 06/28/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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Comments:

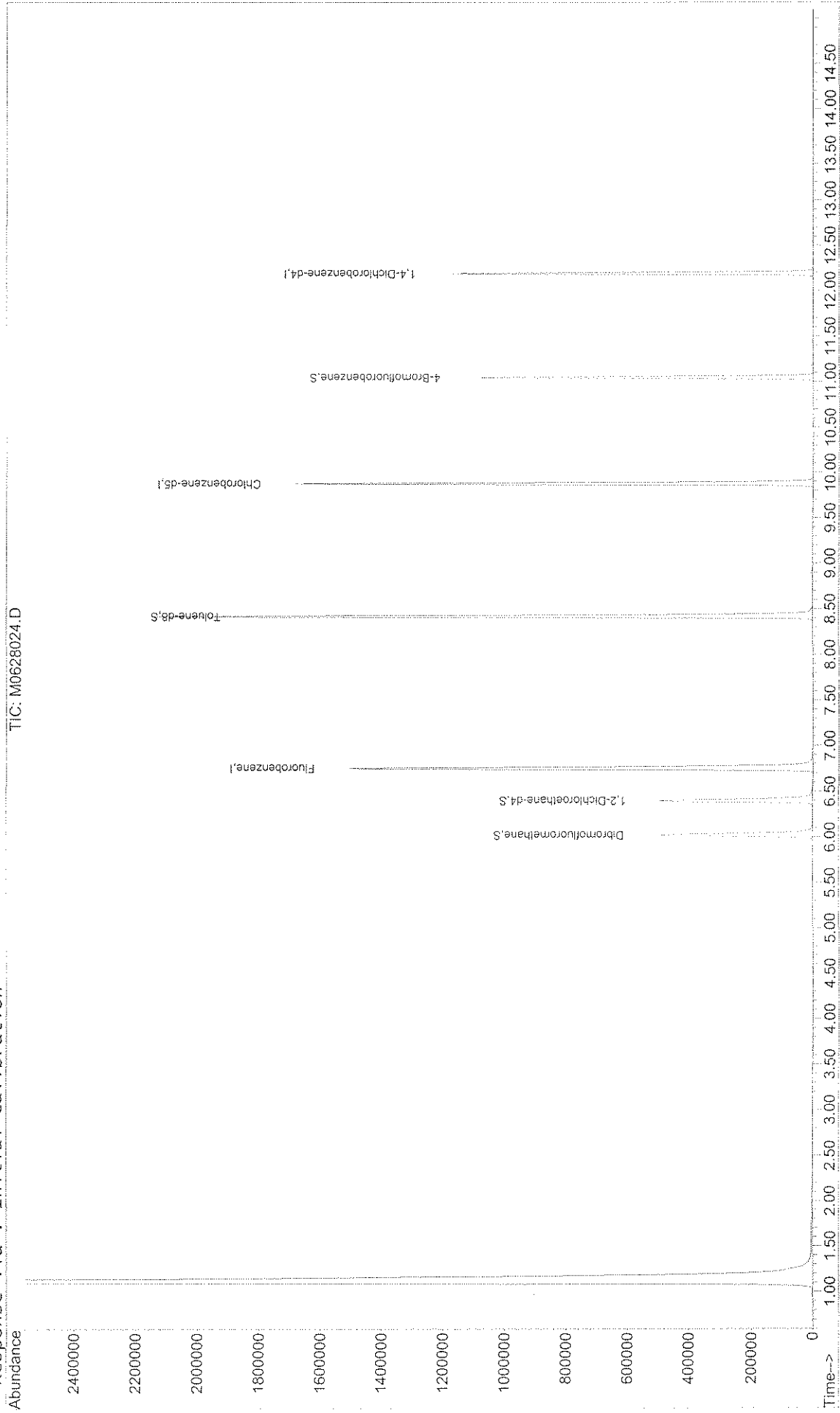


Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628024.D  
Acq On : 28 Jun 2007 16:48  
Sample : JPL43-006  
Misc : #2 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:23 2007

Vial: 68  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628024.D      Via: 68  
 Acq On : 28 Jun 2007 16:48      Operator: LPM  
 Sample : JPL43-006      Inst : MOBY  
 Misc : #2 5ml+IS/SS (524)      Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:23 2007      Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1549820	50.00	ug/l	0.00	92.17%
54) Chlorobenzene-d5	9.87	117	973889	50.00	ug/l	0.00	98.14%
74) 1,4-Dichlorobenzene-d4	12.19	152	318821	50.00	ug/l	0.00	82.40%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	371488	52.91	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.82%	
40) 1,2-Dichloroethane-d4	6.39	65	402819	53.03	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.06%	
55) Toluene-d8	8.42	98	1462641	48.62	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.24%	
76) 4-Bromofluorobenzene	11.05	95	361069	60.26	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	120.52%#	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	3.03	43	175		N.D.	
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.04	76	511		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	3.50	84	593		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	0.00	73	0		N.D.	
22) Acrylonitrile	3.95	53	62		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	194		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.87	41	65		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0628024.D M8260W.M Fri Jun 29 08:23:55 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628024.D  
 Acq On : 28 Jun 2007 16:48  
 Sample : JPL43-006  
 Misc : #2 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:23 2007

Vial: 68  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	614		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	655		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1708		N.D.	
66) Chlorobenzene	9.91	112	190		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.99	91	486		N.D.	
69) m,p-xylene	10.12	106	622		N.D.	
70) o-xylene	10.51	106	55		N.D.	
71) Styrene	10.53	104	320		N.D.	
72) Bromoform	10.76	173	251		N.D.	
73) Isopropylbenzene	10.87	105	212		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	436		N.D.	
81) 2-Chlorotoluene	11.38	91	55		N.D.	
82) 4-Chlorotoluene	11.38	91	55		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	226		N.D.	
84) tert-Butylbenzene	11.77	119	107		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	280		N.D.	
86) sec-butylbenzene	11.98	105	430		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.12	119	303		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.53	91	384		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628024.D                   Vial: 68  
Acq On    : 28 Jun 2007 16:48                   Operator: LPM  
Sample    : JPL43-006                         Inst    : MOBY  
Misc      : #2 5ml+IS/SS (524)                Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

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M0628024.D M8260w.M    Fri Jun 29 08:24:00 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 17:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 17:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 17:12

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL43-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/28/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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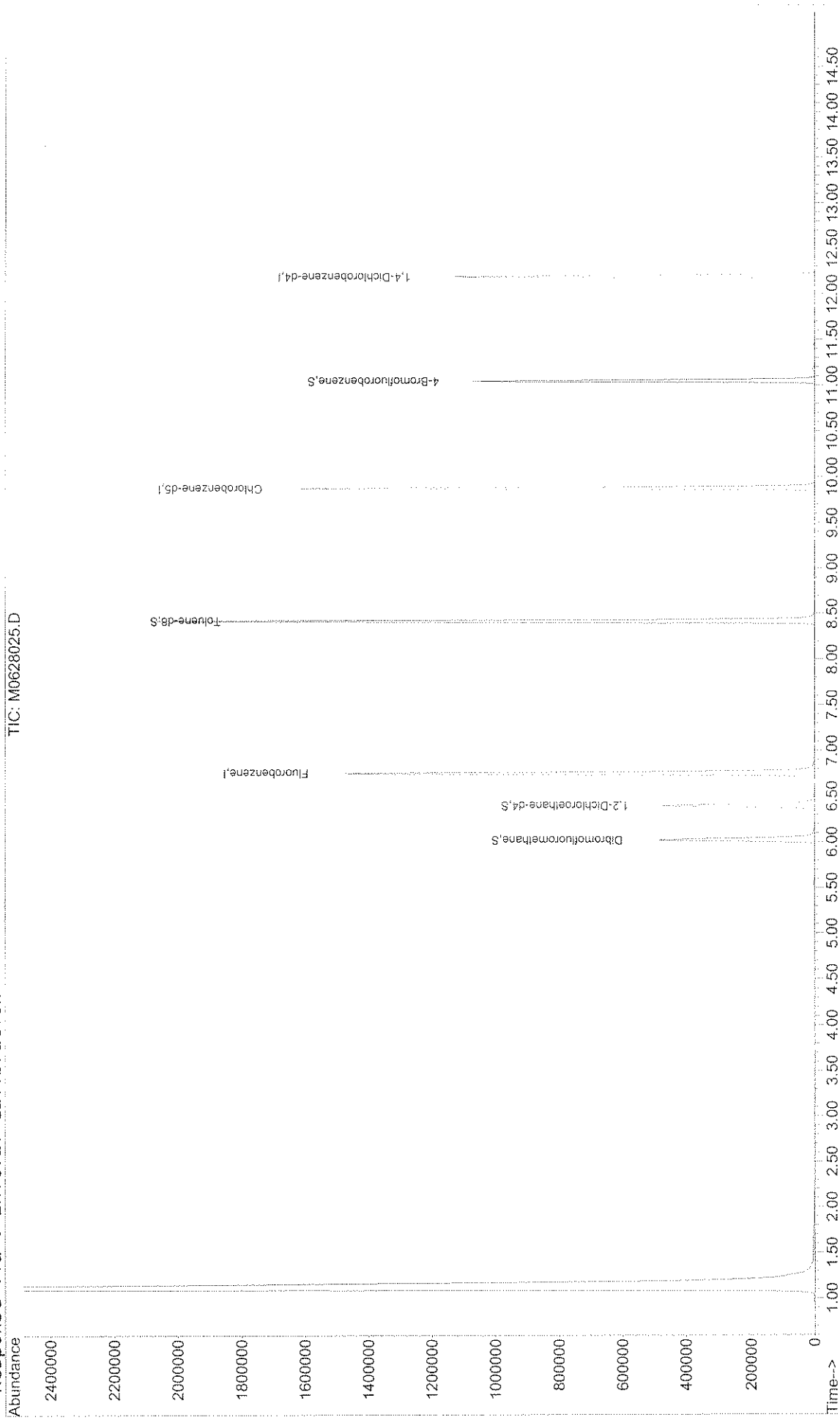
Comments:



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628025.D  
Acq On : 28 Jun 2007 17:12  
Sample : JPL43-007  
Misc : #4 5ml+IS/SS (524)  
MS Integration Params: rteint.p  
Quant Time: Jun 29 8:24 2007  
Vial: 69  
Operator: LPM  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628025.D  
 Acq On : 28 Jun 2007 17:12  
 Sample : JPL43-007  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:24 2007

Vial: 69  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.75	96	1518827	50.00	ug/l	0.00 90.32%
54) Chlorobenzene-d5	9.87	117	938867	50.00	ug/l	0.00 94.61%
74) 1,4-Dichlorobenzene-d4	12.19	152	313237	50.00	ug/l	0.00 80.96%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	364128	52.92	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.84%
40) 1,2-Dichloroethane-d4	6.40	65	393956	52.92	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	105.84%
55) Toluene-d8	8.42	98	1428330	49.25	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.50%
76) 4-Bromofluorobenzene	11.05	95	350366	59.52	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	119.04%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	2.99	43	621		N.D.	
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	3.05	76	372		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.44	43	63		N.D.	
18) Methylene Chloride	3.49	84	278		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) t-Butyl alcohol	0.00	59	0		N.D.	
21) Methyl tert-butyl ether	0.00	73	0		N.D.	
22) Acrylonitrile	3.96	53	130		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.52	43	118		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.87	41	131		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 M0628025.D M8260W.M Fri Jun 29 08:24:49 2007

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628025.D  
 Acq On : 28 Jun 2007 17:12  
 Sample : JPL43-007  
 Misc : #4 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:24 2007

vial: 69  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	811		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	643		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.90	97	64		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1900		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	400		N.D.	
69) m,p-Xylene	10.12	106	454		N.D.	
70) o-xylene	10.52	106	72		N.D.	
71) Styrene	10.54	104	309		N.D.	
72) Bromoform	10.74	173	202		N.D.	
73) Isopropylbenzene	11.05	105	509		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	11.05	110	75		N.D.	
80) n-Propylbenzene	11.28	91	192		N.D.	
81) 2-Chlorotoluene	11.28	91	192		N.D.	
82) 4-Chlorotoluene	11.28	91	192		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	161		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	388		N.D.	
86) sec-butylbenzene	11.98	105	522		N.D.	
87) 1,3-Dichlorobenzene	12.22	146	62		N.D.	
88) 4-Isopropyltoluene	12.14	119	70		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	62		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	344		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	57		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628025.D                   Vial: 69  
Acq On    : 28 Jun 2007  17:12                   Operator: LPM  
Sample    : JPL43-007                           Inst     : MOBY  
Misc      : #4 5ml+IS/SS (524)                Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260w.M (RTE Integrator)  
Title      : VOA.8260- 5ML Water Calibration 5973M  
Library    : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628025.D  M8260w.M     Fri Jun 29 08:25:12 2007

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 17:37

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL43-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/26/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 06/28/2007 17:37

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc.  
 SDG No.: JPL43  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019107  
 Lab Sample ID: JPL43-008  
 Lab File ID: M0628026.D  
 Date Collected: 06/26/2007  
 Date/Time Analyzed: 06/28/2007 17:37  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-10-6/26/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL43

Run Sequence: R019107

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL43-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0628026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 06/28/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

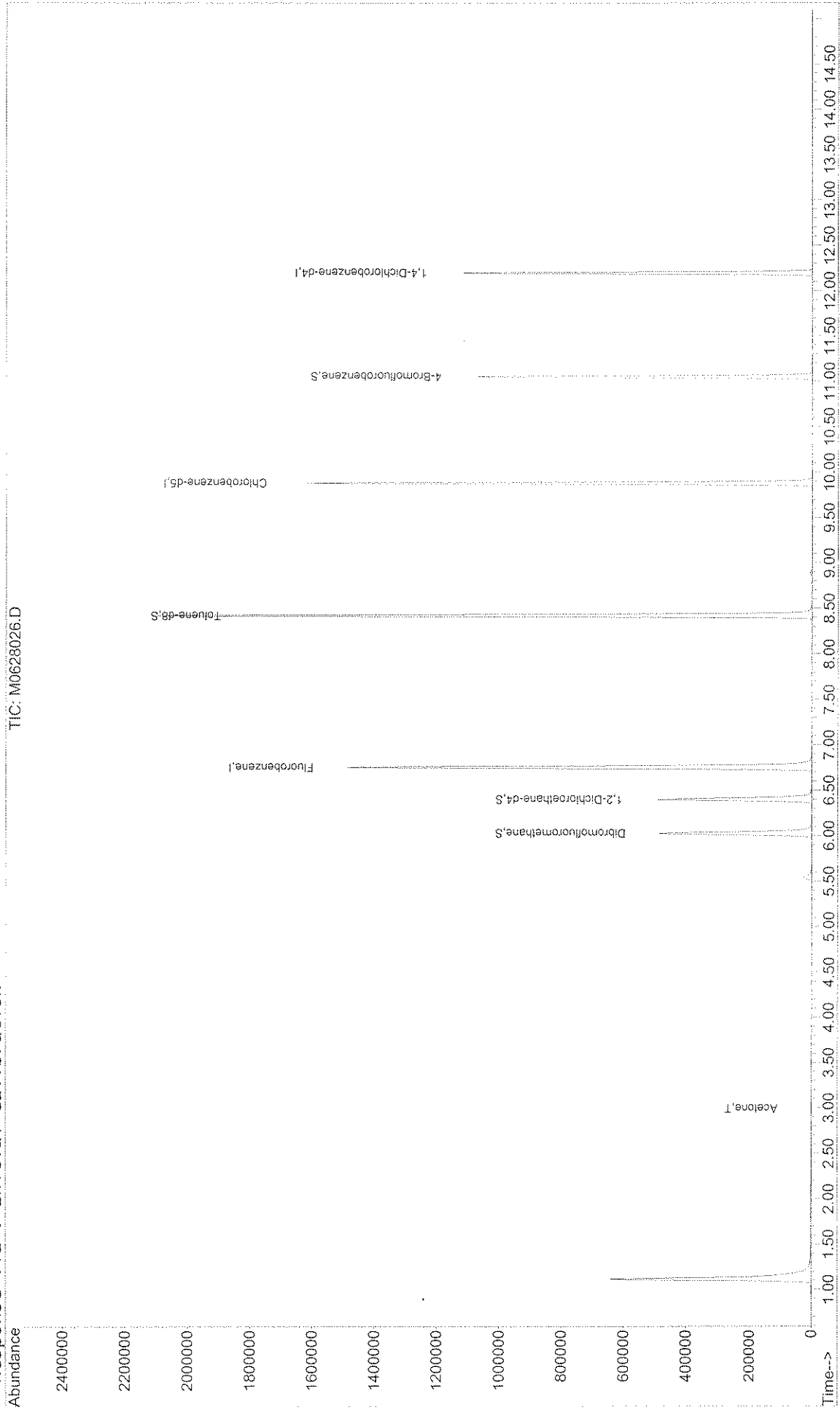
Comments:



Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628026.D  
Acq On : 28 Jun 2007 17:37 Vial: 70  
Sample : JPL43-008 Operator: LPM  
Misc : #3 5ml+IS/SS (524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jun 29 8:25 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



TIC: M0628026.D

Quantitation Report

Data File : X:\MSVOA\MOBY\062807\M0628026.D  
 Acq On : 28 Jun 2007 17:37  
 Sample : JPL43-008  
 Misc : #3 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:25 2007

Vial: 70  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.75	96	1515530	50.00	ug/l	0.00	90.13%
54) Chlorobenzene-d5	9.88	117	950427	50.00	ug/l	0.00	95.78%
74) 1,4-Dichlorobenzene-d4	12.19	152	315474	50.00	ug/l	0.00	81.54%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	363291	52.92	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.84%	
40) 1,2-Dichloroethane-d4	6.40	65	400105	53.86	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	107.72%	
55) Toluene-d8	8.42	98	1434040	48.85	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.70%	
76) 4-Bromofluorobenzene	11.05	95	352591	59.47	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	118.94%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	2013	1.21	ug/l #	59
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	56	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene chloride	3.49	84	1601	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	59	0	N.D.		
26) Vinyl acetate	0.00	86	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	0.00	83	0	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 M0628026.D M8260W.M Fri Jun 29 08:25:53 2007

Quantitation Report

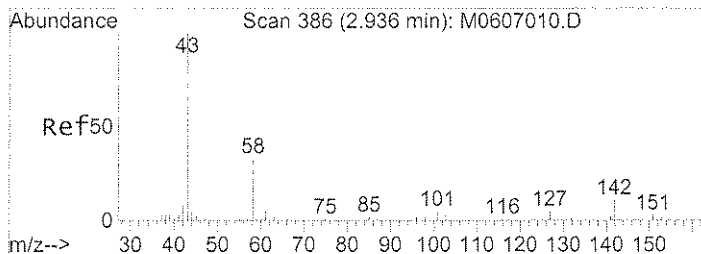
Data File : X:\MSVOA\MOBY\062807\M0628026.D  
 Acq On : 28 Jun 2007 17:37  
 Sample : JPL43-008  
 Misc : #3 5ml+IS/SS (524)  
 MS Integration Params: rteint.p  
 Quant Time: Jun 29 8:25 2007

Vial: 70  
 Operator: LPM  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

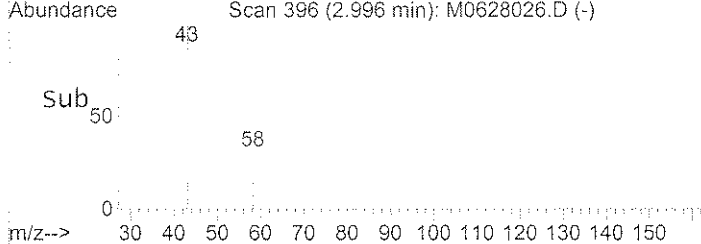
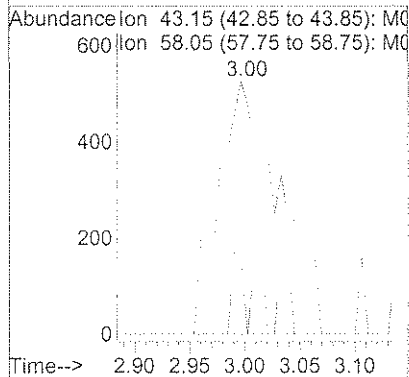
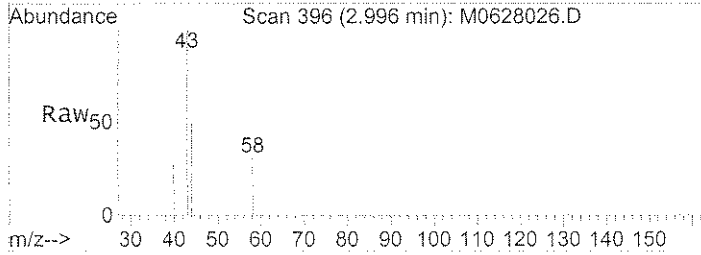
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.18	75	69		N.D.	
41) Benzene	6.41	78	555		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	338		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1767		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	10.00	91	199		N.D.	
69) m,p-xylene	10.11	106	153		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	209		N.D.	
73) Isopropylbenzene	10.87	105	65		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	275		N.D.	
81) 2-Chlorotoluene	11.28	91	275		N.D.	
82) 4-Chlorotoluene	11.28	91	275		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	81		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	311		N.D.	
86) sec-butylbenzene	11.99	105	328		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.14	119	75		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	294		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



#11  
 Acetone  
 Concen: 1.21 ug/l  
 RT: 3.00 min Scan# 396  
 Delta R.T. 0.01 min  
 Lab File: M0628026.D  
 Acq: 28 Jun 2007 17:37

Tgt Ion: 43 Resp: 2013  
 Ion Ratio Lower Upper  
 43 100  
 58 6.0 22.0 33.0#



Library Search Compound Report

Data File : X:\MSVOA\MOBY\062807\M0628026.D                   Vial: 70  
Acq On    : 28 Jun 2007 17:37                   Operator: LPM  
Sample    : JPL43-008                         Inst     : MOBY  
Misc      : #3 5ml+IS/SS (524)               Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title      : VOA 8260- 5ML Water Calibration 5973M  
Library     : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0628026.D M8260W.M    Fri Jun 29 08:25:59 2007

**Metals Data**

**JPL43**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL43

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-12-5</u>	<u>JPL43-001</u>
<u>MW-12-4</u>	<u>JPL43-002</u>
<u>MW-12-3</u>	<u>JPL43-003</u>
<u>MW-12-2</u>	<u>JPL43-004</u>
<u>MW-12-1</u>	<u>JPL43-005</u>
<u>DUPE-5-2Q07</u>	<u>JPL43-006</u>
<u>EB-10-6/26/07</u>	<u>JPL43-007</u>

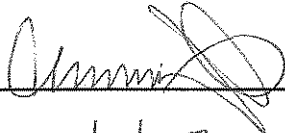
Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Therese Greig

Date: 07/17/2007

Title: Metals Lead

## **Metals Analysis Data Sheets**



## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-5

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL43Matrix (soil/water): WaterLab Sample ID: JPL43-001Level (low/med): LOWDate Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.98			M	R019412
7440-70-2	Calcium	38000			P	R019411
7440-47-3	Chromium	2.95			M	R019412
7439-89-6	Iron	914			P	R019411
7439-92-1	Lead	1.00	U		M	R019412
7439-95-4	Magnesium	8720			P	R019411
7440-09-7	Potassium	2500	U		P	R019411
7440-23-5	Sodium	43000			P	R019411

Color Before: Colorless Clarity Before: Clear Texture: \_\_\_\_\_Color After: Colorless Clarity After: Clear Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL43

Matrix (soil/water): Water

Lab Sample ID: JPL43-002

Level (low/med): LOW

Date Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.85			M	R019266
7440-70-2	Calcium	66500			P	R019384
7440-47-3	Chromium	2.01			M	R019266
7439-89-6	Iron	212			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	13800		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	27000		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-3

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL43Matrix (soil/water): WaterLab Sample ID: JPL43-003Level (low/med): LOWDate Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	42700			P	R019384
7440-47-3	Chromium	1.19			M	R019266
7439-89-6	Iron	289			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	14600		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	27100		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-2

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL43Matrix (soil/water): WaterLab Sample ID: JPL43-004Level (low/med): LOWDate Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	61100			P	R019384
7440-47-3	Chromium	2.16			M	R019266
7439-89-6	Iron	250			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	18500		E	P	R019513
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	28200		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL43Matrix (soil/water): WaterLab Sample ID: JPL43-005Level (low/med): LOWDate Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	5000	U		P	R019325
7440-47-3	Chromium	8.66			M	R019266
7439-89-6	Iron	100	U		P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	5000	U	E	P	R019325
7440-09-7	Potassium	5000	U		P	R019325
7440-23-5	Sodium	5000	U	*	P	R019325

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-5-2Q07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL43

Matrix (soil/water): Water

Lab Sample ID: JPL43-006

Level (low/med): LOW

Date Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	54100			P	R019384
7440-47-3	Chromium	5.24			M	R019266
7439-89-6	Iron	311			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	18400		E	P	R019513
7440-09-7	Potassium	5010			P	R019325
7440-23-5	Sodium	27700		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-10-6/26/07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL43Matrix (soil/water): WaterLab Sample ID: JPL43-007Level (low/med): LOWDate Received: 06/27/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019266
7440-70-2	Calcium	54400			P	R019384
7440-47-3	Chromium	5.41			M	R019266
7439-89-6	Iron	286			P	R019325
7439-92-1	Lead	1.00	U		M	R019266
7439-95-4	Magnesium	18500		E	P	R019513
7440-09-7	Potassium	5100			P	R019325
7440-23-5	Sodium	27300		*	P	R019384

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No
 Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL43**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL43

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-12-5</u>	<u>JPL43-001</u>
<u>MW-12-5D</u>	<u>JPL43-001D</u>
<u>MW-12-5MS</u>	<u>JPL43-001MS</u>
<u>MW-12-5MSD</u>	<u>JPL43-001MSD</u>
<u>MW-12-4</u>	<u>JPL43-002</u>
<u>MW-12-3</u>	<u>JPL43-003</u>
<u>MW-12-2</u>	<u>JPL43-004</u>
<u>MW-12-1</u>	<u>JPL43-005</u>
<u>DUPE-5-2Q07</u>	<u>JPL43-006</u>
<u>DUPE-5-2Q07D</u>	<u>JPL43-006D</u>
<u>DUPE-5-2Q07MS</u>	<u>JPL43-006MS</u>
<u>DUPE-5-2Q07MSD</u>	<u>JPL43-006MSD</u>
<u>EB-10-6/26/07</u>	<u>JPL43-007</u>


Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7/19/07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL43  
**Sample Number:** MW-12-4 **Date/Time Collected:** 06/26/2007 08:13  
**Lab Sample ID:** JPL43-002 **Date/Time Received:** 06/27/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	06/27/2007	06/27/2007	R019086

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	290		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.3		0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	33		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	15		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	190		8	8	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	3.5		2.0	0.28	07/10/2007	07/11/2007	R019390

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1		0.5	0.01	07/04/2007	07/02/2007	R019235
Total Nitrate / Nitrite	N+N	1	1.2		0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/28/2007	06/28/2007	R019101

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL43  
**Sample Number:** MW-12-3 **Date/Time Collected:** 06/26/2007 08:45  
**Lab Sample ID:** JPL43-003 **Date/Time Received:** 06/27/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.0		0.10	0.10	06/27/2007	06/27/2007	R019086

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	220		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	31		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	14		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	150		8	8	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/10/2007	07/11/2007	R019390

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/04/2007	07/02/2007	R019235
Total Nitrate / Nitrite	N+N	1	0.050	U	0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/28/2007	06/28/2007	R019101











**LAUCKS TESTING LABORATORIES**  
**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL44**

**JULY 23, 2007**

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL44  
Date of Report: July 23, 2007

**SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

**Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-23-5	JPL44-001	VOA/MET/INO
MW-23-4	JPL44-002	VOA/MET/INO
MW-23-3	JPL44-003	VOA/MET/INO
MW-23-2	JPL44-004	VOA/MET/INO
MW-23-1	JPL44-005	VOA/MET/INO
EB-11-6/27/07	JPL44-006	VOA/MET/INO
TB-11-6/27/07	JPL44-007	VOA

**Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

**Sample Receipt Comments:**

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation

**GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration

Analysis of the initial calibration yielded %RSD values for methylene chloride that exceeded 20% in the ICAL performed 06/18/2007. An alternative curve fit was not used for it because the results would have been biased low. The average of response factors was a better fit. Using an alternative curve fit for the other analytes that exceeded 20% resulted in  $r^2$  values greater than 0.990 (r values greater than 0.995) and were therefore compliant.

#### Quality Control Analyses:

MS/MSD analyses performed on sample MW-23-1 yielded a recovery for hexachlorobutadiene in the MS that fell below the control limit. All other analytes were within the control limits; no further action was taken.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

## SPECIFIC REMARKS ON INORGANIC ANALYSES:

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

For run sequence R019749, the matrix spike and matrix spike duplicate for sample MW-23-1 fell outside of the calibration range for the element calcium. Because the MS/MSD recoveries fall within ten percent of the true value, no further action was taken. Data have been reported as is. Data have not been flagged for these events.

The serial dilution for the element potassium did not agree within 10% of the original determination after correction for dilution for sample MW-23-1. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### Miscellaneous Inorganics:

For run sequence R019075, the matrix spike and matrix spike duplicate recoveries were outside the established control limits for the chloride analysis. All other quality control elements are within control limits for chloride. Therefore, no further action was taken.

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For run sequence R019075, CCV7 and CCV8 were outside the established control limits for chloride and sulfate. No reported samples were bracketed by these CCV's. Therefore, no action was taken.

For run sequence R019406, the matrix spike duplicate recovery fell outside the established control limits for chloride, nitrate and sulfate. All other quality control elements were within control limits. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
  - Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.



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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Mike Baxter  
Project Manager



Harry Romberg  
Quality Assurance Officer

23 July 2007  
(DATE)

7-23-07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICS (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL44-001	06/28/2007 08:30 AM	06/27/2007 07:36 AM	MW-23-5	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL44-002	06/28/2007 08:30 AM	06/27/2007 08:13 AM	MW-23-4	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL44-003	06/28/2007 08:30 AM	06/27/2007 08:49 AM	MW-23-3	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL44-004	06/28/2007 08:30 AM	06/27/2007 09:21 AM	MW-23-2	IN	IN	IN	IN	IN	IN	IN	IN	IN
*JPL44-005	06/28/2007 08:30 AM	06/27/2007 10:10 AM	MW-23-1	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL44-006	06/28/2007 08:30 AM	06/27/2007 09:51 AM	EB-11-6/27/07	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL44-007	06/28/2007 08:30 AM	06/27/2007 12:00 AM	TB-11-6/27/07								IN	

Approved By: *[Signature]*

On: *6/28/07*

LEGEND: - :Started , + :Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATELLE  
 ADDRESS: 3990 Old Town Ave, 6205 SAN DIEGO, CA 92110  
 ATTENTION: DAVID CONNER  
 PROJECT NAME: TEL SW MUD 2007  
 PROJECT CONTACT: DAVID CONNER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/P.O. NO.: 6486000 / 240640

CHAIN OF CUSTODY RECORD  
 42859

WORK ORDER ID# \_\_\_\_\_  
 SUBMITTED AT: \_\_\_\_\_

**Laucks**  
 Testing Laboratories, Inc.  
 940 SouthHamery St, Seattle, WA 98108 (206) 767-5000 FAX 767-5063  
 1100 Leitch Ave, Yakima, WA 98902 (509) 248-4455 FAX 432-1285

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS
VOL (524.2)	
TOTAL Cu (200.3)	
LEAD (200.9)	
ARSENIC (200.9)	
CADMIUM (200.9)	
CHLORIDE (314.0)	
COBALT (312.3)	
COBALT (300.9)	
COBALT (151.1)	

JOB #	SAMPLE ID / LOCATION	DATE	TIME	MATRIX	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-23-5	6/27/07	736	W	5		
2	MW-23-4		813	X	X		
3	MW-23-3		849	X	X		
4	MW-23-2		921	X	X		
5	MW-23-1		1010	X	X		
6	EB-11-6	127/07	951	X	X		
7	TB-11-6	127/07		X	X		

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE.  
 2. BE SPECIFIC IN TEST REQUESTS.  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE.

REINQUISHED BY (SIGN AND PRINT): SEARL TOMPKINS

NAME: BATELLE  
 ADDRESS: 505 KING AVE  
 CITY/STATE/ZIP: COLUMBUS, OH 43201

DATE/TIME: 6/27/07 1330  
 RECEIVED BY (SIGN AND PRINT): John Thompson

TURNAROUND REQUEST:  
 STD. 10-14 WORKING DAYS  
 24-48 HRS. (100% SUR)  
 72 HRS. (75% SUR)  
 5 DAYS (60% SUR)  
 OTHER \_\_\_\_\_  
 TEMPI \_\_\_\_\_  
 CUSTODY SEAL:  Y  N  N/A

TOTAL NO. OF CONTAINERS: \_\_\_\_\_

LABORATORY APPROVAL: \_\_\_\_\_

\* RUSH TURNAROUND IS SUBJECT TO PRIOR LABORATORY APPROVAL



**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL44

Cooler: AAP009

Temperatures: 5.3

COC #: 42859

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL44-001	0001	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL44-002	0001	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL44-003	0001	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL44-004	0001	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL44-005	0001	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	500 ml cylinder, poly, HNO3	<2	N/A
	0007	1000 mL cylinder, poly	7	N/A
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	40 ml OTWS, clear glass, HCl	N/C	None
	0010	40 ml OTWS, clear glass, HCl	N/C	None
	0011	500 ml cylinder, poly, HNO3	<2	N/A
	JPL44-006	0001	1000 mL cylinder, poly	7

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL44

Cooler: AAP009

Temperatures: 5.3

COC #: 42859

Sample	Bottle #	Bottle Description	pH	Bubbles
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL44-007	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**LAUCKS TESTING LABORATORIES**  
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Seattle, WA 98108

**ATTACHMENT B**

Index



**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

**Battelle**

**SDG No.: JPL44**

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Completed and checked by: Judyn Ecklund Date: 7/24/07

**SAMPLE DATA**

SDG JPL44

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-001  
 Lab File ID: M0702018.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 15:16  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-001  
 Lab File ID: M0702018.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 15:16  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-5
---------

Lab Name: \_\_\_\_\_

SDG No.: JPL44

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019189

Lab Sample ID: JPL44-001

Lab File ID: M0702018.D

Date Collected: 06/27/2007

Date/Time Analyzed: 07/02/2007 15:16

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

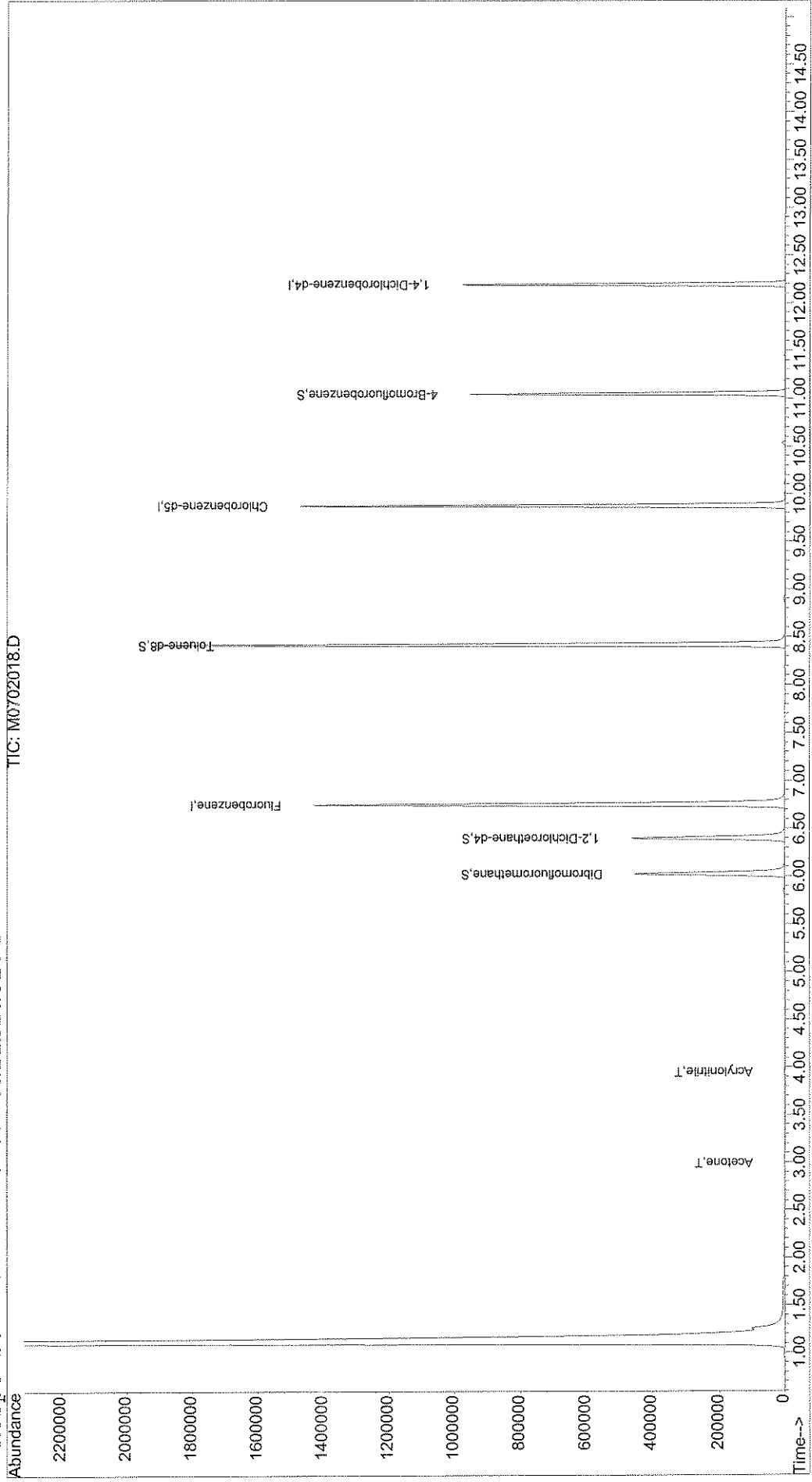
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702018.D Vial: 76  
Acq On : 2 Jul 2007 15:16 Operator: DGA  
Sample : JPL44-001 Inst : MOBY  
Misc : #5 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 3 7:46 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702018.D  
 Acq On : 2 Jul 2007 15:16  
 Sample : JPL44-001  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 7:46 2007

Vial: 76  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1424480	50.00	ug/l	0.00 84.71%
54) Chlorobenzene-d5	9.88	117	842672	50.00	ug/l	0.00 84.92%
74) 1,4-Dichlorobenzene-d4	12.19	152	272182	50.00	ug/l	0.00 70.35%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	341779	52.96	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.92%
40) 1,2-Dichloroethane-d4	6.40	65	387907	55.56	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	111.12%
55) Toluene-d8	8.42	98	1324867	50.90	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.80%
76) 4-Bromofluorobenzene	11.05	95	316228	61.82	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	123.64%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	3.00	43	2333	1.49 ug/l #		85
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.06	76	4688	N.D.		
15) Allyl chloride	3.29	76	382	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	189	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.92	73	64	N.D.		
22) Acrylonitrile	3.95	53	3849	1.69 ug/l #		89

(#) = qualifier out of range (m) = manual integration  
 M0702018.D M8260W.M Tue Jul 03 07:47:22 2007

*J. M. [Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702018.D  
 Acq On : 2 Jul 2007 15:16  
 Sample : JPL44-001  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 7:46 2007

Vial: 76  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	581		N.D.	
31) Propionitrile	5.62	54	69		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.84	41	2095		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	1836		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	128		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	8.35	43	455		N.D.	
56) Toluene	8.49	92	1251		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.04	166	209		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.12	43	114		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1826		N.D.	
66) Chlorobenzene	9.90	112	62		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702018.D  
 Acq On : 2 Jul 2007 15:16  
 Sample : JPL44-001  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 7:46 2007

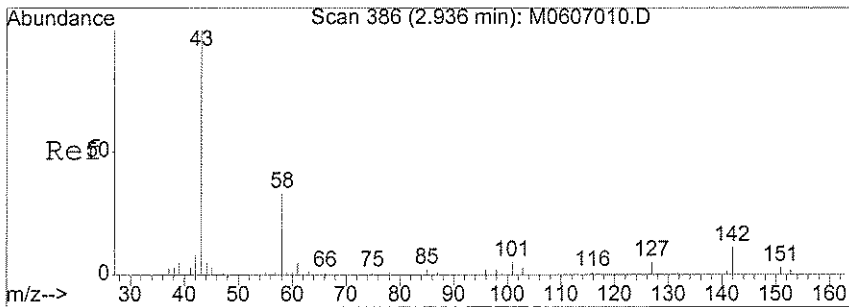
Vial: 76  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

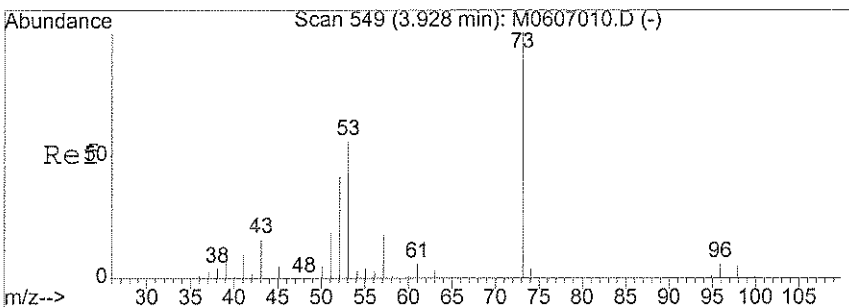
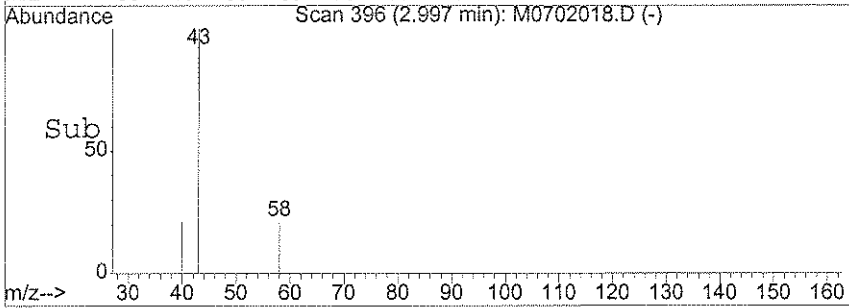
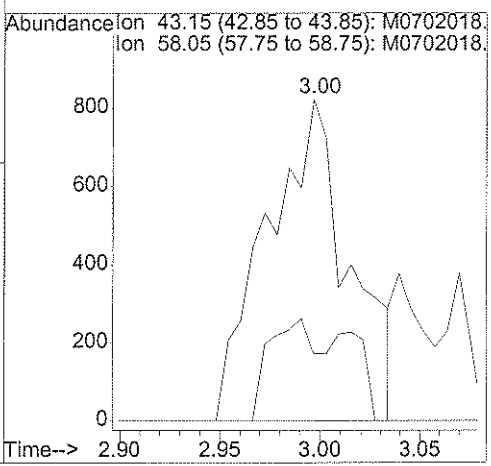
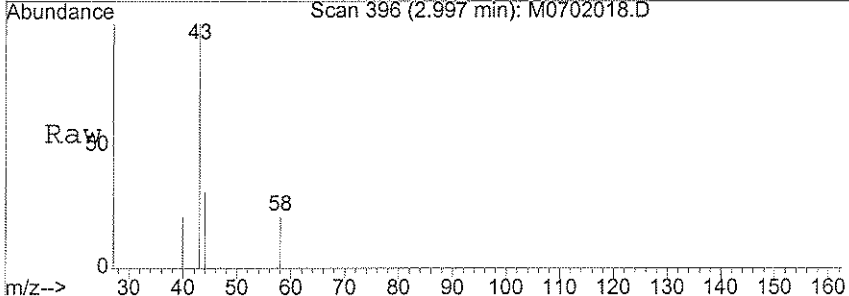
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	3196		N.D.	
69) m,p-Xylene	10.11	106	897		N.D.	
70) o-xylene	10.52	106	359		N.D.	
71) Styrene	10.53	104	5272		N.D.	
72) Bromoform	10.76	173	122		N.D.	
73) Isopropylbenzene	10.87	105	990		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1103		N.D.	
81) 2-Chlorotoluene	11.37	91	335		N.D.	
82) 4-Chlorotoluene	11.49	91	242		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	615		N.D.	
84) tert-Butylbenzene	11.78	119	733		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	949		N.D.	
86) sec-butylbenzene	11.99	105	1197		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	105		N.D.	
88) 4-Isopropyltoluene	12.13	119	830		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	142		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	474		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



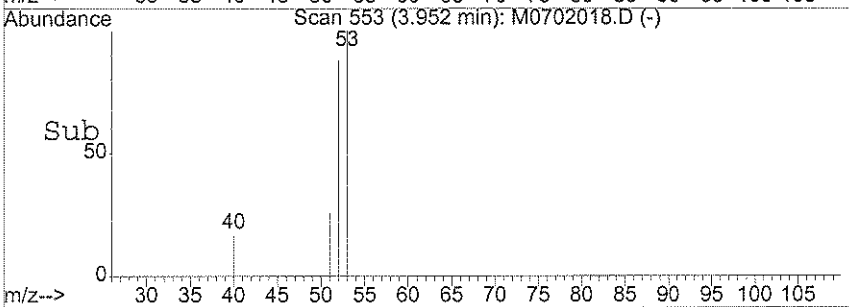
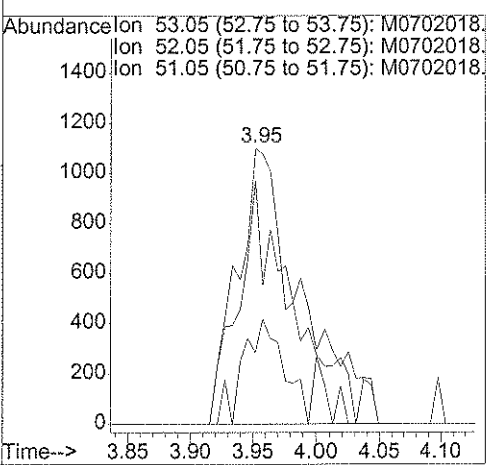
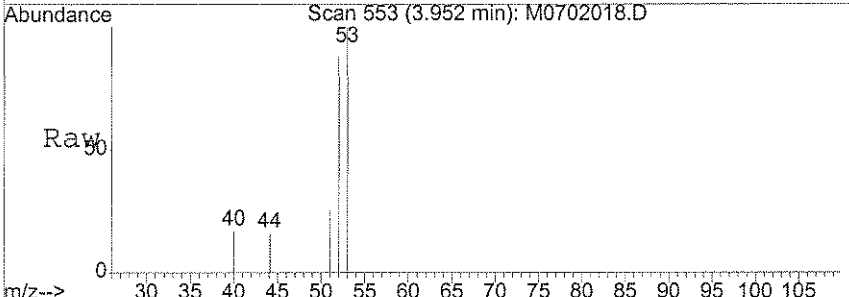
#11  
 Acetone  
 Concen: 1.49 ug/l  
 RT: 3.00 min Scan# 396  
 Delta R.T. 0.01 min  
 Lab File: M0702018.D  
 Acq: 2 Jul 2007 15:16

Tgt Ion	Resp	Lower	Upper
43	100		
58	19.7	22.0	33.0#



#22  
 Acrylonitrile  
 Concen: 1.69 ug/l  
 RT: 3.95 min Scan# 553  
 Delta R.T. 0.01 min  
 Lab File: M0702018.D  
 Acq: 2 Jul 2007 15:16

Tgt Ion	Resp	Lower	Upper
53	100		
52	76.5	65.4	98.0
51	25.2	30.2	45.2#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 15:41

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-002  
 Lab File ID: M0702019.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 15:41  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 15:41

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

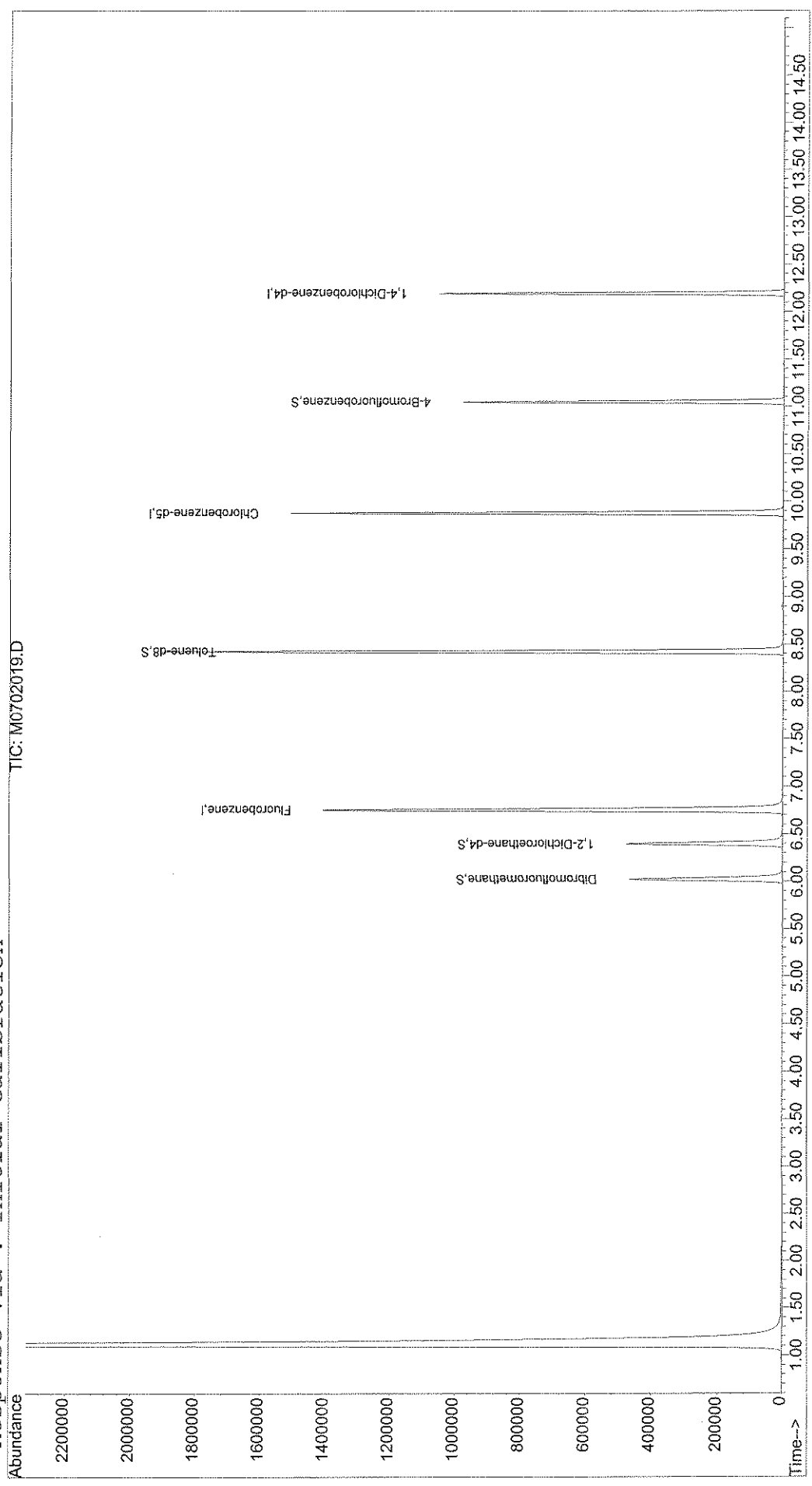
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702019.D  
Acq On : 2 Jul 2007 15:41  
Sample : JPL44-002  
Misc : #5 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 3 8:09 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702019.D  
 Acq On : 2 Jul 2007 15:41  
 Sample : JPL44-002  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:09 2007

Vial: 77  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1450110	50.00	ug/l	0.00	86.24%
54) Chlorobenzene-d5	9.87	117	864241	50.00	ug/l	0.00	87.09%
74) 1,4-Dichlorobenzene-d4	12.19	152	278727	50.00	ug/l	0.00	72.04%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	346479	52.74	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	105.48%	
40) 1,2-Dichloroethane-d4	6.40	65	389916	54.86	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.72%	
55) Toluene-d8	8.42	98	1347989	50.50	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.00%	
76) 4-Bromofluorobenzene	11.05	95	326298	62.29	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	124.58%#	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	717	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	1113	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.49	84	62	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702019.D  
 Acq On : 2 Jul 2007 15:41  
 Sample : JPL44-002  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:09 2007

Vial: 77  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.51	43	268		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	66		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	619		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	7.30	83	129		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	576		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.02	166	87		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1870		N.D.	
66) Chlorobenzene	9.90	112	60		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702019.D  
 Acq On : 2 Jul 2007 15:41  
 Sample : JPL44-002  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:09 2007

Vial: 77  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	465		N.D.	
69) m,p-Xylene	10.11	106	418		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.54	104	75		N.D.	
72) Bromoform	10.75	173	125		N.D.	
73) Isopropylbenzene	10.87	105	788		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	1100		N.D.	
81) 2-Chlorotoluene	11.37	91	284		N.D.	
82) 4-Chlorotoluene	11.48	91	80		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	509		N.D.	
84) tert-Butylbenzene	11.77	119	759		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	442		N.D.	
86) sec-butylbenzene	11.99	105	1101		N.D.	
87) 1,3-Dichlorobenzene	12.13	146	76		N.D.	
88) 4-Isopropyltoluene	12.13	119	904		N.D.	
89) 1,4-Dichlorobenzene	12.21	146	150		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	821		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.33	225	131		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-003  
 Lab File ID: M0702021.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 16:33  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 16:33

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 16:33

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

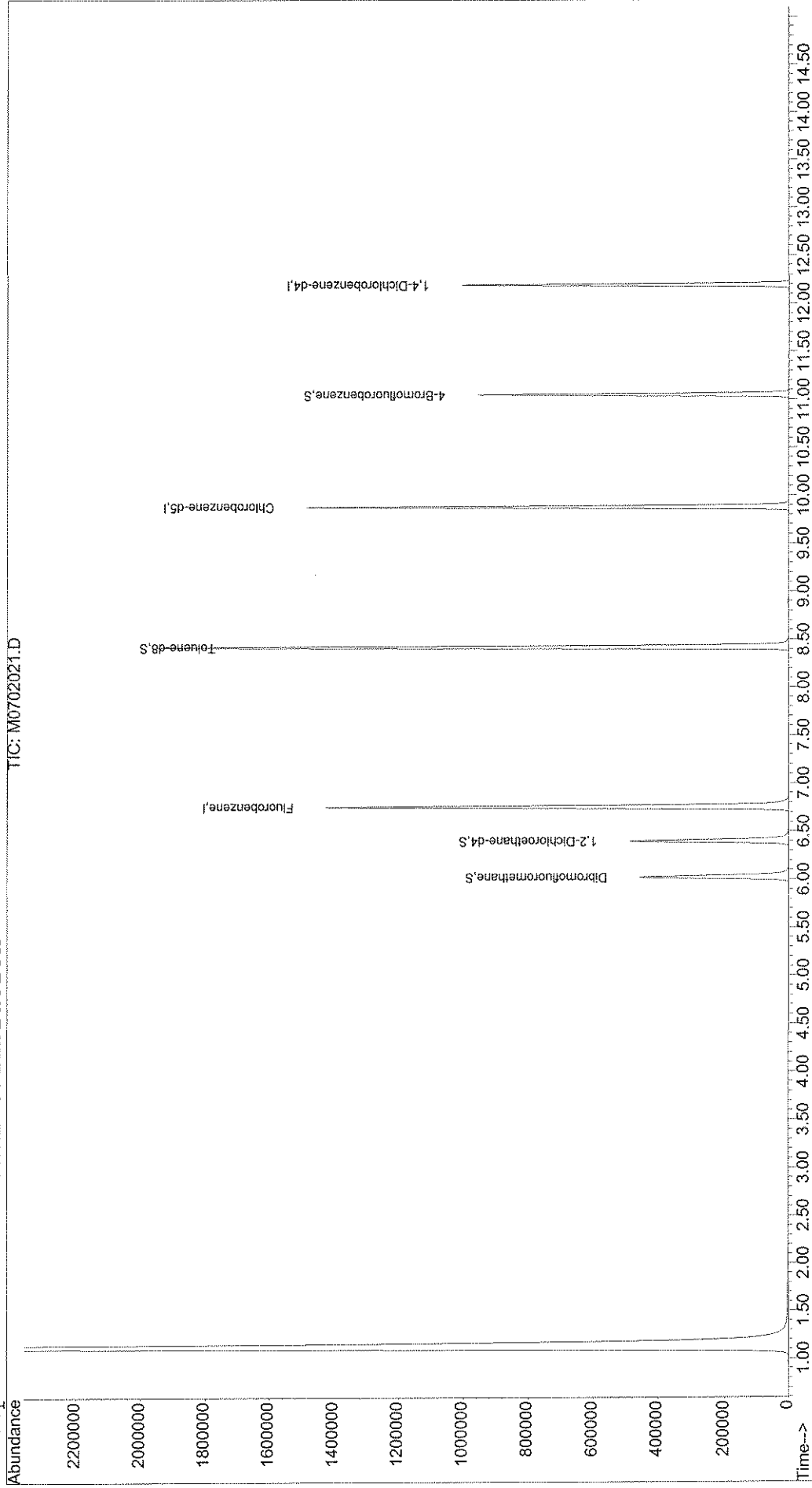
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702021.D  
Acq On : 2 Jul 2007 16:33 Vial: 79  
Sample : JPL44-003 Operator: DGA  
Misc : #4 5ml +IS/SS(524) Inst : MOBY  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jul 3 8:12 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702021.D  
 Acq On : 2 Jul 2007 16:33  
 Sample : JPL44-003  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:12 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1428828	50.00	ug/l	0.00 84.97%
54) Chlorobenzene-d5	9.88	117	852034	50.00	ug/l	0.00 85.86%
74) 1,4-Dichlorobenzene-d4	12.20	152	276020	50.00	ug/l	0.00 71.34%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	346607	53.55	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	107.10%
40) 1,2-Dichloroethane-d4	6.40	65	394032	56.26	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	112.52%
55) Toluene-d8	8.42	98	1331861	50.61	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.22%
76) 4-Bromofluorobenzene	11.05	95	320668	61.82	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	123.64%#

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.99	43	758	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.04	76	925	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.50	84	447	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702021.D  
 Acq On : 2 Jul 2007 16:33  
 Sample : JPL44-003  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:12 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	590		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	446		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	362		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.03	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1951		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702021.D  
 Acq On : 2 Jul 2007 16:33  
 Sample : JPL44-003  
 Misc : #4 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:12 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	9.99	91	150		N.D.	
69) m,p-Xylene	10.11	106	163		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	123		N.D.	
73) Isopropylbenzene	10.88	105	609		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	1035		N.D.	
81) 2-Chlorotoluene	11.37	91	58		N.D.	
82) 4-Chlorotoluene	11.37	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	11.46	105	389		N.D.	
84) tert-Butylbenzene	11.78	119	776		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	443		N.D.	
86) sec-butylbenzene	11.99	105	1044		N.D.	
87) 1,3-Dichlorobenzene	12.22	146	60		N.D.	
88) 4-Isopropyltoluene	12.13	119	874		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	60		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	786		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 16:57

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 16:57

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-004  
 Lab File ID: M0702022.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 16:57  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

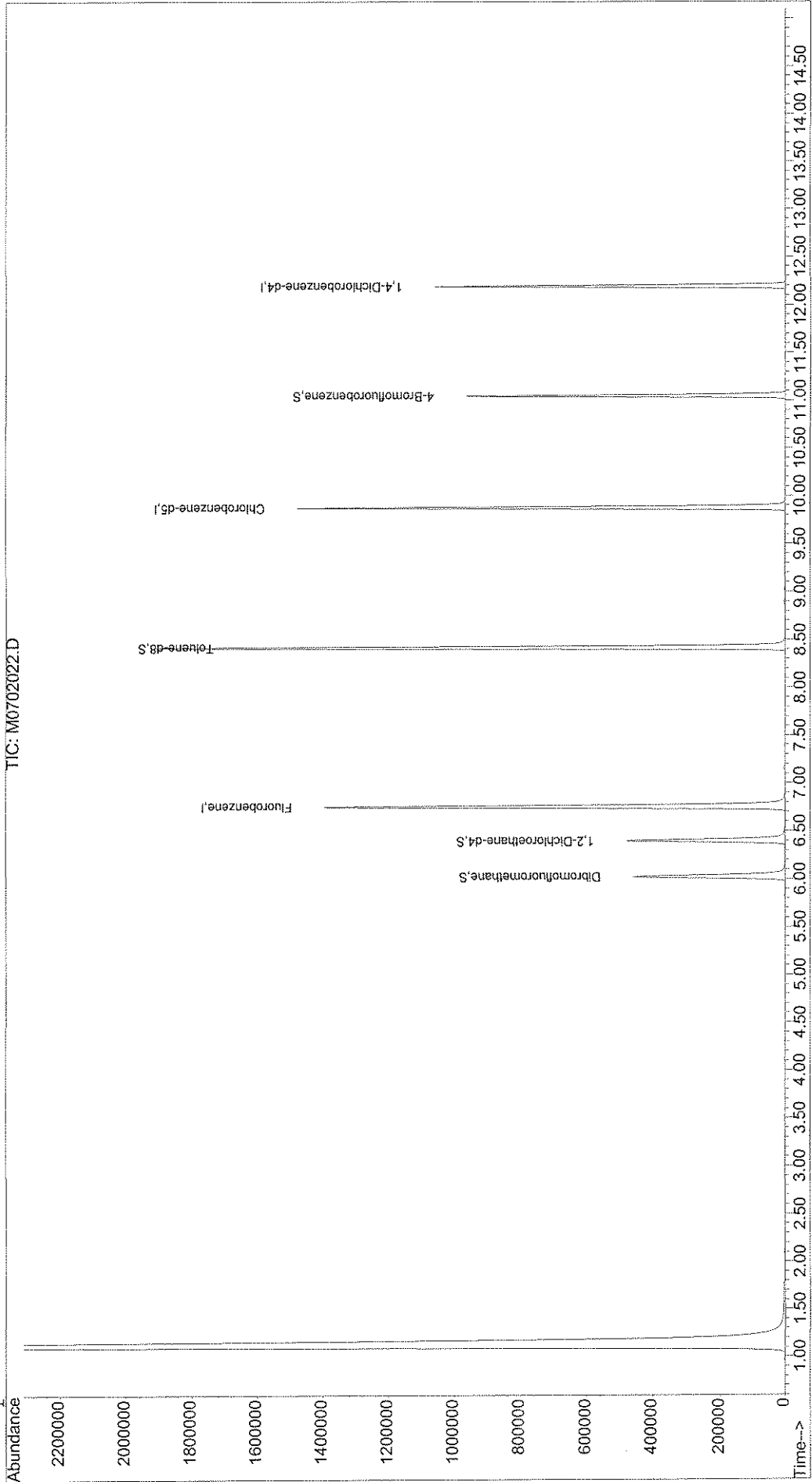
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702022.D Vial: 79  
Acq On : 2 Jul 2007 16:57 Operator: DGA  
Sample : JPL44-004 Inst : MOBY  
Misc : #5 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 3 8:12 2007 Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702022.D  
 Acq On : 2 Jul 2007 16:57  
 Sample : JPL44-004  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:12 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1)  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1415875	50.00	ug/l	0.00	84.20%
54) Chlorobenzene-d5	9.87	117	839570	50.00	ug/l	0.00	84.61%
74) 1,4-Dichlorobenzene-d4	12.19	152	272911	50.00	ug/l	0.00	70.54%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	341948	53.31	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.62%	
40) 1,2-Dichloroethane-d4	6.39	65	391580	56.42	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	112.84%	
55) Toluene-d8	8.42	98	1316775	50.78	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.56%	
76) 4-Bromofluorobenzene	11.05	95	317641	61.93	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	123.86%#	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.04	76	244	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.51	84	450	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702022.D  
 Acq On : 2 Jul 2007 16:57  
 Sample : JPL44-004  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:12 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.56	63	1496		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.57	43	71		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.87	41	270		N.D.	
34) Chloroform	5.82	83	3242		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	552		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.15	130	1887		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	484		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	383		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	1146		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1773		N.D.	
66) Chlorobenzene	9.90	112	125		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702022.D  
 Acq On : 2 Jul 2007 16:57  
 Sample : JPL44-004  
 Misc : #5 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:12 2007

Vial: 79  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	260		N.D.	
69) m,p-Xylene	10.12	106	140		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.76	173	139		N.D.	
73) Isopropylbenzene	10.87	105	352		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	814		N.D.	
81) 2-Chlorotoluene	11.38	91	76		N.D.	
82) 4-Chlorotoluene	11.38	91	76		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	391		N.D.	
84) tert-Butylbenzene	11.77	119	512		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	470		N.D.	
86) sec-butylbenzene	11.99	105	937		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	810		N.D.	
88) 4-Isopropyltoluene	12.13	119	755		N.D.	
89) 1,4-Dichlorobenzene	12.22	146	361		N.D.	
90) 1,2-Dichlorobenzene	12.59	146	579		N.D.	
91) n-Butylbenzene	12.54	91	669		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	14.69	180	57		N.D.	

(#) = qualifier out of range (m) = manual integration

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-005  
 Lab File ID: M0702023.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 17:21  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.73	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-005  
 Lab File ID: M0702023.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 17:21  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 17:21

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

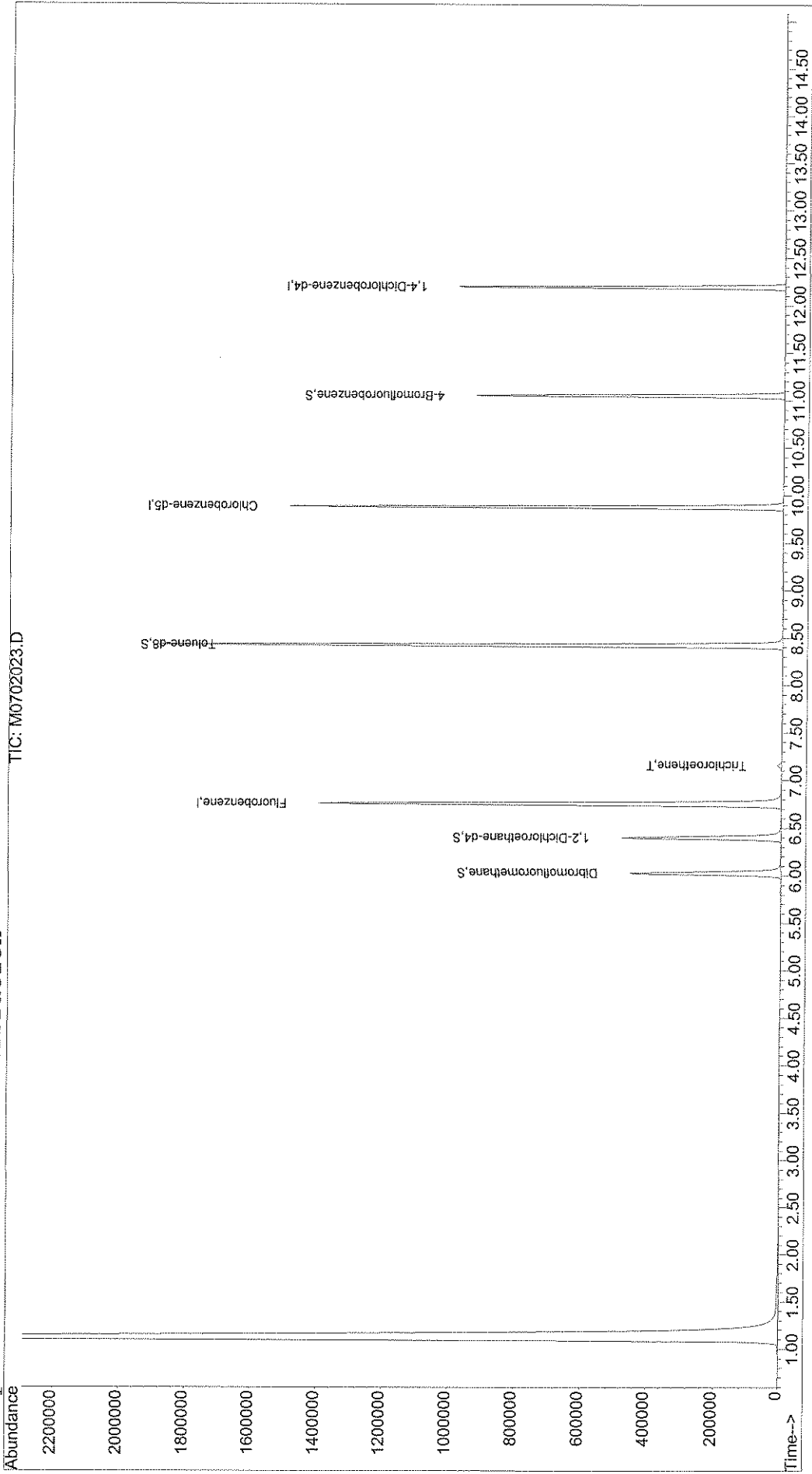
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702023.D  
Acq On : 2 Jul 2007 17:21  
Sample : JPL44-005  
Misc : #10 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 3 8:14 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702023.D  
 Acq On : 2 Jul 2007 17:21  
 Sample : JPL44-005  
 Misc : #10 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:14 2007

Vial: 80  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1402829	50.00	ug/l	0.00	83.42%
54) Chlorobenzene-d5	9.88	117	838497	50.00	ug/l	0.00	84.50%
74) 1,4-Dichlorobenzene-d4	12.19	152	272311	50.00	ug/l	0.00	70.38%

System Monitoring Compounds

37) Dibromofluoromethane	6.03	111	340160	53.53	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	107.06%	
40) 1,2-Dichloroethane-d4	6.40	65	386216	56.17	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	112.34%	
55) Toluene-d8	8.42	98	1310077	50.58	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.16%	
76) 4-Bromofluorobenzene	11.04	95	316743	61.89	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	123.78%#	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	708	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	3.05	76	55	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.51	84	222	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702023.D  
 Acq On : 2 Jul 2007 17:21  
 Sample : JPL44-005  
 Misc : #10 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:14 2007

Vial: 80  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	4.57	63	1676		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.53	43	294		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	58		N.D.	
34) Chloroform	5.83	83	3439		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.41	78	606		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	7.16	130	5482	0.73	ug/l	89
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	7.73	83	441		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	
56) Toluene	8.48	92	381		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	9.03	166	1815		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.88	91	1834		N.D.	
66) Chlorobenzene	9.90	112	69		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

*[Handwritten signature]*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702023.D  
 Acq On : 2 Jul 2007 17:21  
 Sample : JPL44-005  
 Misc : #10 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:14 2007

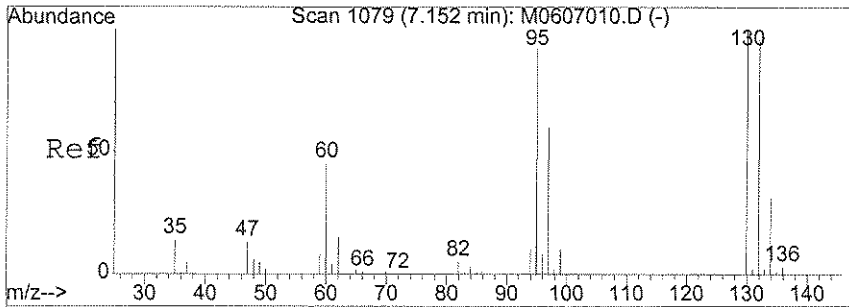
Vial: 80  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

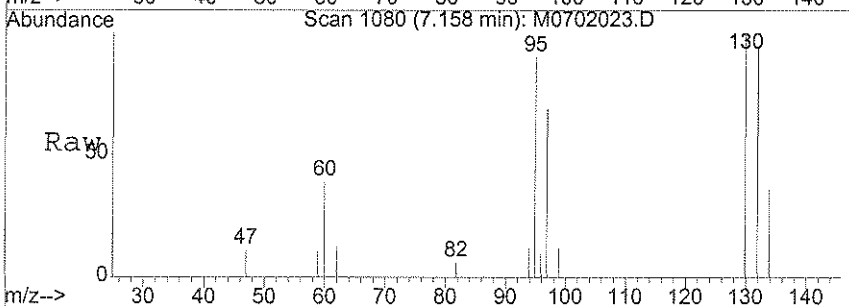
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	150		N.D.	
69) m,p-Xylene	10.11	106	175		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.88	105	359		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	606		N.D.	
81) 2-Chlorotoluene	11.28	91	606		N.D.	
82) 4-Chlorotoluene	11.28	91	606		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	315		N.D.	
84) tert-Butylbenzene	11.77	119	500		N.D.	
85) 1,2,4-Trimethylbenzene	11.84	105	234		N.D.	
86) sec-butylbenzene	11.99	105	777		N.D.	
87) 1,3-Dichlorobenzene	12.12	146	55		N.D.	
88) 4-Isopropyltoluene	12.14	119	567		N.D.	
89) 1,4-Dichlorobenzene	12.12	146	55		N.D.	
90) 1,2-Dichlorobenzene	12.58	146	63		N.D.	
91) n-Butylbenzene	12.55	91	439		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

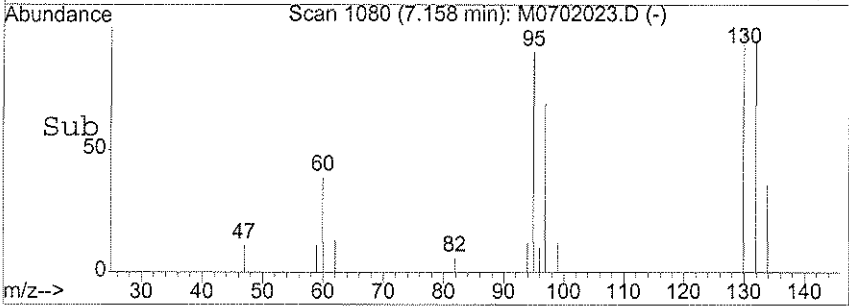
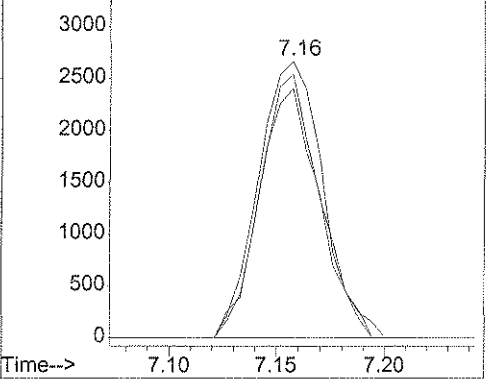


#45  
 Trichloroethene  
 Concen: 0.73 ug/l  
 RT: 7.16 min Scan# 1080  
 Delta R.T. -0.00 min  
 Lab File: M0702023.D  
 Acq: 2 Jul 2007 17:21

Tgt Ion	Resp	Lower	Upper
130	100		
132	90.1	80.2	120.2
95	85.0	75.8	115.8



Abundance  
 Ion 130.00 (129.70 to 130.70): M07020  
 Ion 132.00 (131.70 to 132.70): M07020  
 Ion 95.00 (94.70 to 95.70): M0702023



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-11-6/27/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-006  
 Lab File ID: M0702024.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 17:49  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-11-6/27/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-006  
 Lab File ID: M0702024.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 17:49  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-11-6/27/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 17:49

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

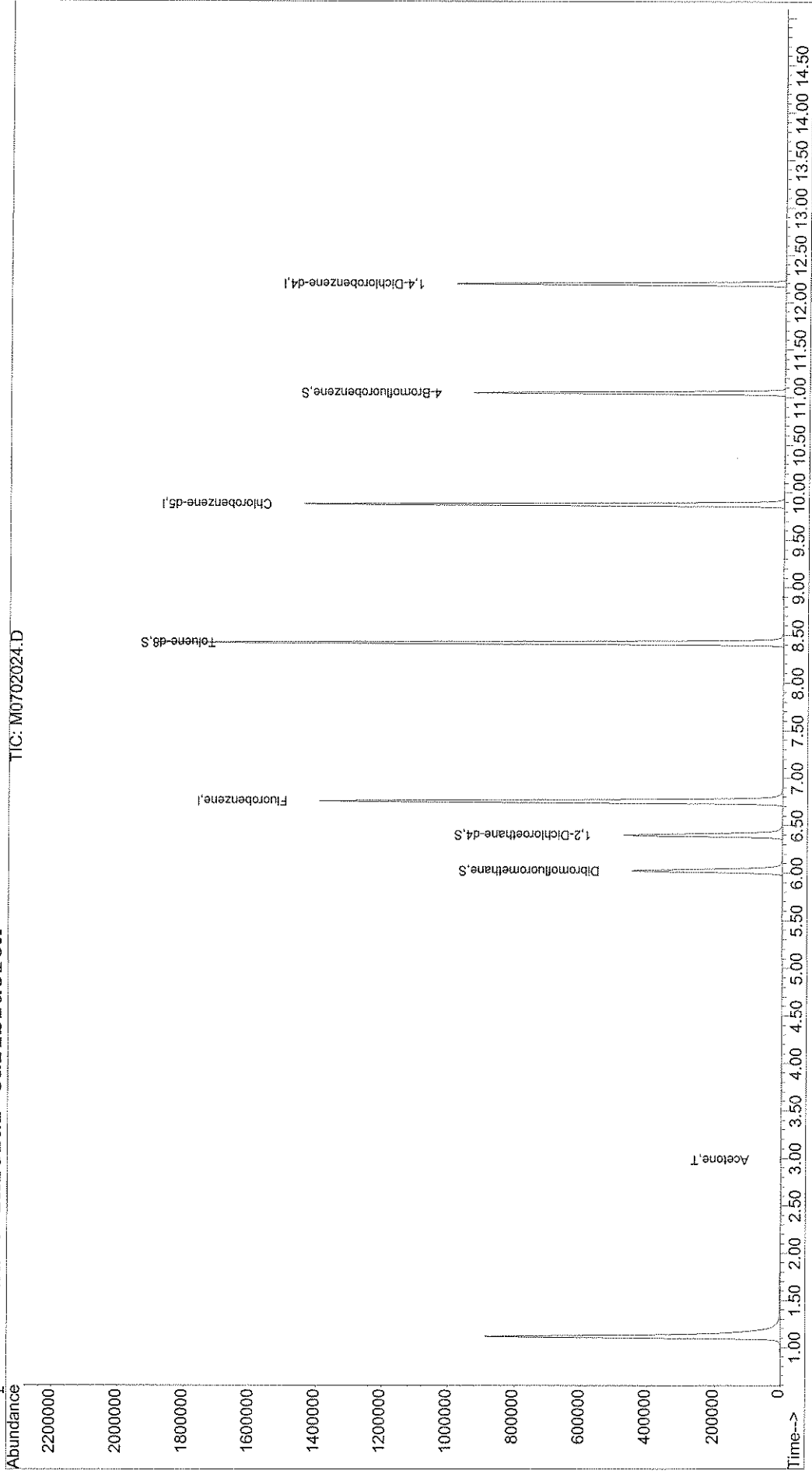
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702024.D  
Acq On : 2 Jul 2007 17:49  
Sample : JPL44-006  
Misc : #3 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 3 8:15 2007  
Vial: 81  
Operator: DGA  
Inst : MOBY  
Multiplr: 1.00  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260 - 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702024.D  
 Acq On : 2 Jul 2007 17:49  
 Sample : JPL44-006  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:15 2007

Vial: 81  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)

Title : VOA 8260- 5ML Water Calibration 5973M

Last Update : Fri Jun 22 10:17:52 2007

Response via : Initial Calibration

DataAcq Meth : 8260(0~1

IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.75	96	1397290	50.00	ug/l	0.00 83.09%
54) Chlorobenzene-d5	9.88	117	829592	50.00	ug/l	0.00 83.60%
74) 1,4-Dichlorobenzene-d4	12.20	152	268928	50.00	ug/l	0.00 69.51%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	340044	53.72	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	107.44%
40) 1,2-Dichloroethane-d4	6.40	65	390255	56.98	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	113.96%
55) Toluene-d8	8.42	98	1298696	50.68	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.36%
76) 4-Bromofluorobenzene	11.05	95	308574	61.05	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	122.10%#

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.98	43	8661	5.64	ug/l #	68
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.51	84	1055	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.	d	
21) Methyl tert-butyl ether	0.00	73	0	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

(#) = qualifier out of range (m) = manual integration

*J. Santos*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702024.D  
 Acq On : 2 Jul 2007 17:49  
 Sample : JPL44-006  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:15 2007

Vial: 81  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.86	41	296		N.D.	
34) Chloroform	5.82	83	326		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	463		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.49	92	339		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	9.19	43	55		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1775		N.D.	
66) Chlorobenzene	9.90	112	60		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702024.D  
 Acq On : 2 Jul 2007 17:49  
 Sample : JPL44-006  
 Misc : #3 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:15 2007

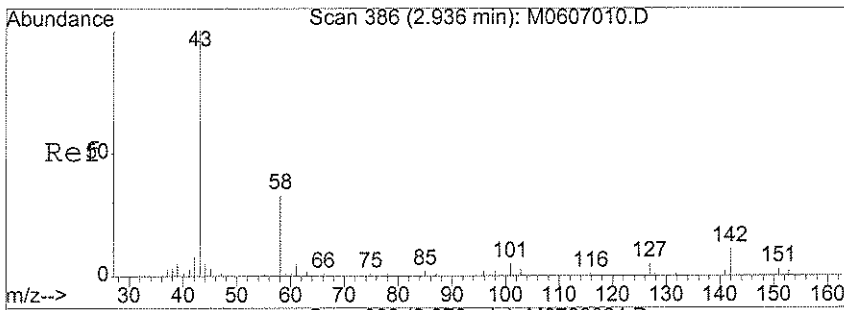
Vial: 81  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

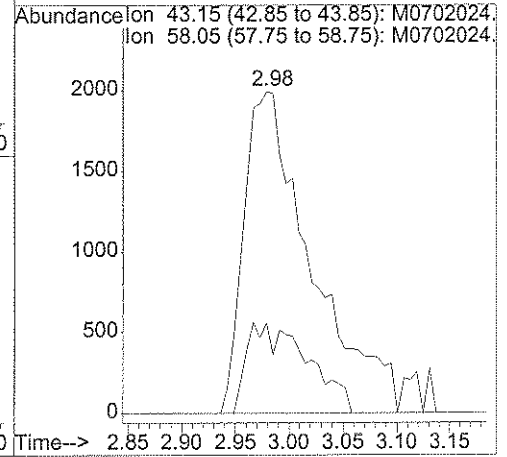
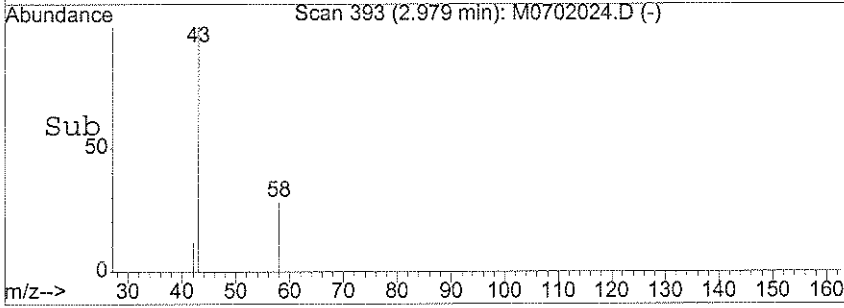
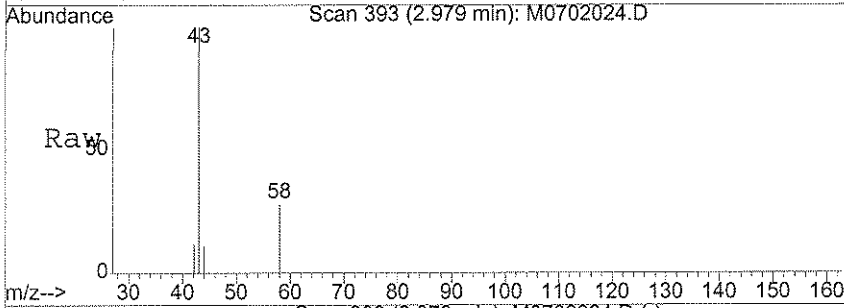
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	728		N.D.	
69) m,p-Xylene	10.11	106	475		N.D.	
70) o-xylene	10.52	106	69		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.75	173	68		N.D.	
73) Isopropylbenzene	10.88	105	256		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.28	91	544		N.D.	
81) 2-Chlorotoluene	11.28	91	544		N.D.	
82) 4-Chlorotoluene	11.28	91	544		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	217		N.D.	
84) tert-Butylbenzene	11.78	119	575		N.D.	
85) 1,2,4-Trimethylbenzene	11.82	105	76		N.D.	
86) sec-butylbenzene	11.99	105	748		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	448		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.55	91	435		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



#11  
 Acetone  
 Concen: 5.64 ug/l  
 RT: 2.98 min Scan# 393  
 Delta R.T. -0.01 min  
 Lab File: M0702024.D  
 Acq: 2 Jul 2007 17:49

Tgt Ion: 43 Resp: 8661  
 Ion Ratio Lower Upper  
 43 100  
 58 10.6 22.0 33.0#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-11-6/27/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 18:19

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-11-6/27/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL44  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-007  
 Lab File ID: M0702025.D  
 Date Collected: 06/27/2007  
 Date/Time Analyzed: 07/02/2007 18:19  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-11-6/27/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL44-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/27/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/02/2007 18:19

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

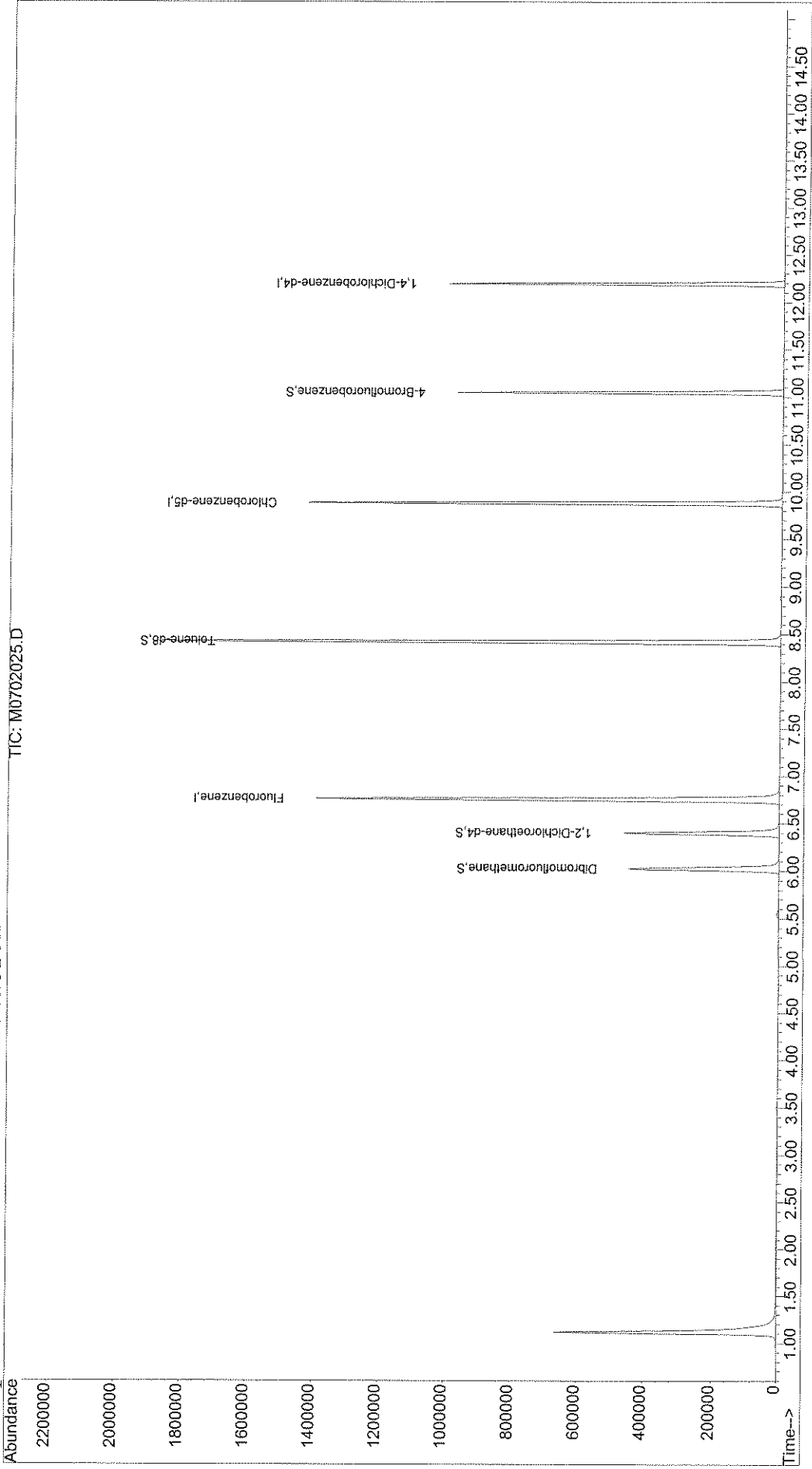
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702025.D  
Acq On : 2 Jul 2007 18:19  
Sample : JPL44-007  
Misc : #2 5ml +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 3 8:16 2007  
Quant Results File: M8260W.RES

Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Last Update : Fri Jun 22 10:17:52 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702025.D  
 Acq On : 2 Jul 2007 18:19  
 Sample : JPL44-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:16 2007

Vial: 82  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1  
 IS QA File : X:\MSVOA\MOBY\061807\M0618024.D (18 Jun 2007 14:54)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.75	96	1401174	50.00	ug/l	0.00	83.33%
54) Chlorobenzene-d5	9.88	117	829617	50.00	ug/l	0.00	83.60%
74) 1,4-Dichlorobenzene-d4	12.19	152	266739	50.00	ug/l	0.00	68.94%

System Monitoring Compounds

37) Dibromofluoromethane	6.02	111	337272	53.14	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	106.28%	
40) 1,2-Dichloroethane-d4	6.39	65	388126	56.51	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	113.02%	
55) Toluene-d8	8.42	98	1303060	50.85	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.70%	
76) 4-Bromofluorobenzene	11.05	95	310875	62.01	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	124.02%#	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	3.01	43	689	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	3.05	76	1338	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D.	d
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	3.50	84	2373	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) t-Butyl alcohol	0.00	59	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) Acrylonitrile	0.00	53	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702025.D  
 Acq On : 2 Jul 2007 18:19  
 Sample : JPL44-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:16 2007

Vial: 82  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	59	0		N.D.	
26) Vinyl acetate	0.00	86	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.54	43	530		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.42	78	469		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	69	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.48	92	397		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	9.87	91	1597		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\MOBY\070207\M0702025.D  
 Acq On : 2 Jul 2007 18:19  
 Sample : JPL44-007  
 Misc : #2 5ml +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 3 8:16 2007

Vial: 82  
 Operator: DGA  
 Inst : MOBY  
 Multiplr: 1.00

Quant Results File: M8260W.RES

Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
 Title : VOA 8260- 5ML Water Calibration 5973M  
 Last Update : Fri Jun 22 10:17:52 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260(0~1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	10.00	91	73		N.D.	
69) m,p-Xylene	10.11	106	118		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.88	105	196		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.27	91	551		N.D.	
81) 2-Chlorotoluene	11.38	91	61		N.D.	
82) 4-Chlorotoluene	11.49	91	59		N.D.	
83) 1,3,5-Trimethylbenzene	11.45	105	66		N.D.	
84) tert-Butylbenzene	11.78	119	422		N.D.	
85) 1,2,4-Trimethylbenzene	11.83	105	287		N.D.	
86) sec-butylbenzene	11.83	105	287		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	12.13	119	535		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.54	91	633		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

**TIC FORMS**

SDG JPL44

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL44-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/02/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702018.D Vial: 76  
Acq On : 2 Jul 2007 15:16 Operator: DGA  
Sample : JPL44-001 Inst : MOBY  
Misc : #5 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702018.D M8260W.M Tue Jul 03 08:09:05 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-4

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL44-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/02/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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21					
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23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702019.D Vial: 77  
Acq On : 2 Jul 2007 15:41 Operator: DGA  
Sample : JPL44-002 Inst : MOBY  
Misc : #5 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702019.D M8260W.M Tue Jul 03 08:10:02 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL44  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-003  
 Lab File ID: M0702021.D  
 Date Collected: 06/28/2007  
 Date Analyzed: 07/02/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

01	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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21					
22					
23					
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25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702021.D Vial: 79  
Acq On : 2 Jul 2007 16:33 Operator: DGA  
Sample : JPL44-003 Inst : MOBY  
Misc : #4 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702021.D M8260W.M Fri Jul 13 07:07:52 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL44  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-004  
 Lab File ID: M0702022.D  
 Date Collected: 06/28/2007  
 Date Analyzed: 07/02/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
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29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702022.D Vial: 79  
Acq On : 2 Jul 2007 16:57 Operator: DGA  
Sample : JPL44-004 Inst : MOBY  
Misc : #5 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702022.D M8260W.M Tue Jul 03 08:13:11 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL44  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-005  
 Lab File ID: M0702023.D  
 Date Collected: 06/28/2007  
 Date Analyzed: 07/02/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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12					
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28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702023.D Vial: 80  
Acq On : 2 Jul 2007 17:21 Operator: DGA  
Sample : JPL44-005 Inst : MOBY  
Misc : #10 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702023.D M8260W.M Tue Jul 03 08:14:37 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-11-6/27/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL44  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-006  
 Lab File ID: M0702024.D  
 Date Collected: 06/28/2007  
 Date Analyzed: 07/02/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702024.D Vial: 81  
Acq On : 2 Jul 2007 17:49 Operator: DGA  
Sample : JPL44-006 Inst : MOBY  
Misc : #3 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702024.D M8260W.M Tue Jul 03 08:16:03 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-11-6/27/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL44  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019189  
 Lab Sample ID: JPL44-007  
 Lab File ID: M0702025.D  
 Date Collected: 06/28/2007  
 Date Analyzed: 07/02/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702025.D Vial: 82  
Acq On : 2 Jul 2007 18:19 Operator: DGA  
Sample : JPL44-007 Inst : MOBY  
Misc : #2 5ml +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702025.D M8260W.M Tue Jul 03 08:16:59 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B070207MVOWM1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL44

Run Sequence: R019189

Matrix: (SOIL/WATER) Water

Lab Sample ID: B070207MVOWM1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: M0702010.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/02/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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17					
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24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\MOBY\070207\M0702010.D Vial: 56  
Acq On : 2 Jul 2007 11:05 Operator: DGA  
Sample : B070207MVOWM1 Inst : MOBY  
Misc : 5ml PFW+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\MOBY\QUANT\M8260W.M (RTE Integrator)  
Title : VOA 8260- 5ML Water Calibration 5973M  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
M0702010.D M8260W.M Fri Jul 13 07:07:38 2007

**Metals Data**

**JPL44**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-23-5	JPL44-001
MW-23-4	JPL44-002
MW-23-3	JPL44-003
MW-23-2	JPL44-004
MW-23-1	JPL44-005
MW-23-1MS	JPL44-005MS
MW-23-1MSD	JPL44-005MSD
EB-11-6/27/07	JPL44-006

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Christine Orend

Date: 07/23/2007

Title: Metals Lead

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

Matrix (soil/water): Water

Lab Sample ID: JPL44-001

Level (low/med): LOW

Date Received: 06/28/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	5.26			M	R019758
7440-70-2	Calcium	8220			P	R019716
7440-47-3	Chromium	8.11			M	R019758
7439-89-6	Iron	106			P	R019716
7439-92-1	Lead	1.29			M	R019758
7439-95-4	Magnesium	5000	U		P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	107000			P	R019759

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

Matrix (soil/water): Water

Lab Sample ID: JPL44-002

Level (low/med): LOW

Date Received: 06/28/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.99			M	R019758
7440-70-2	Calcium	32400			P	R019716
7440-47-3	Chromium	8.13			M	R019758
7439-89-6	Iron	133			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	12500			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	29200			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

Matrix (soil/water): Water

Lab Sample ID: JPL44-003

Level (low/med): LOW

Date Received: 06/28/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.35			M	R019758
7440-70-2	Calcium	35900			P	R019716
7440-47-3	Chromium	8.96			M	R019758
7439-89-6	Iron	624			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	12500			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	25400			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

Matrix (soil/water): Water

Lab Sample ID: JPL44-004

Level (low/med): LOW

Date Received: 06/28/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	109000			P	R019759
7440-47-3	Chromium	8.37			M	R019758
7439-89-6	Iron	342			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	34600			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	32300			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

Matrix (soil/water): Water

Lab Sample ID: JPL44-005

Level (low/med): LOW

Date Received: 06/28/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	155000			P	R019759
7440-47-3	Chromium	3.17			M	R019758
7439-89-6	Iron	828			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	55400			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	36500			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-11-6/27/07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL44Matrix (soil/water): WaterLab Sample ID: JPL44-006Level (low/med): LOWDate Received: 06/28/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	5000	U		P	R019716
7440-47-3	Chromium	4.53			M	R019758
7439-89-6	Iron	100	U		P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	5000	U		P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	5000	U		P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Miscellaneous Inorganic Data**

**JPL44**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL44

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-23-5</u>	<u>JPL44-001</u>
<u>MW-23-5D</u>	<u>JPL44-001D</u>
<u>MW-23-4</u>	<u>JPL44-002</u>
<u>MW-23-3</u>	<u>JPL44-003</u>
<u>MW-23-2</u>	<u>JPL44-004</u>
<u>MW-23-1</u>	<u>JPL44-005</u>
<u>MW-23-1D</u>	<u>JPL44-005D</u>
<u>MW-23-1MS</u>	<u>JPL44-005MS</u>
<u>MW-23-1MSD</u>	<u>JPL44-005MSD</u>
<u>EB-11-6/27/07</u>	<u>JPL44-006</u>
<u>EB-11-6/27/07D</u>	<u>JPL44-006D</u>

Comments:

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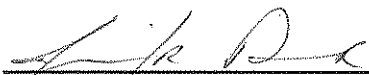


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I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7/19/07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL44  
**Sample Number:** MW-23-5 **Date/Time Collected:** 06/27/2007 07:36  
**Lab Sample ID:** JPL44-001 **Date/Time Received:** 06/28/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	9.8		0.10	0.10	06/28/2007	06/28/2007	R019126

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	250		2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/27/2007	06/28/2007	R019075
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/27/2007	06/28/2007	R019075
Chloride	16887-00-6	10	13		10	0.76	06/27/2007	06/28/2007	R019075

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	110		8	8	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	130		8	8	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/11/2007	07/12/2007	R019436











**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL44  
**Sample Number:** EB-11-6/27/07 **Date/Time Collected:** 06/27/2007 09:51  
**Lab Sample ID:** JPL44-006 **Date/Time Received:** 06/28/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.6		0.10	0.10	06/28/2007	06/28/2007	R019126

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	2	U	2	2	07/02/2007	07/03/2007	R019159

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	06/27/2007	06/29/2007	R019075
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	06/27/2007	06/29/2007	R019075
Chloride	16887-00-6	1	1.0	U	1.0	0.076	06/27/2007	06/29/2007	R019075

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/11/2007	07/12/2007	R019436

**LAUCKS TESTING LABORATORIES**  
**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL45**

**JULY 23, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL45  
Date of Report: July 23, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-24-5	JPL45-001	VOA/MET/INO
MW-24-4	JPL45-002	VOA/MET/INO
MW-24-3	JPL45-003	VOA/MET/INO
MW-24-2	JPL45-004	VOA/MET/INO
MW-24-1	JPL45-005	VOA/SVOA/MET/INO
EB-12-6/28/07	JPL45-006	VOA/MET/INO
TB-12-6/28/07	JPL45-007	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
SVOA = 1,4-Dioxane (8270)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

The temperature blank measured above the control limit of 6 deg C.

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### GENERAL REMARKS ON ORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### Holding Time Compliance:

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

##### *Semi-Volatile Organic Compounds:*

The holding time to extraction is 7 days in water and 14 days in soil calculated from the date of collection. In either case, the holding time from extraction to analysis is 40 days. All samples were extracted and analyzed within holding time.

#### Volatiles Fraction:

##### Continuing Calibration Verification (CCV):

In the CCV performed on 07/10/2007 the percent difference value for 2-butanone and 4-methyl-2-pentanone exceeded 30% due to increased response. These analytes were not detected in any associated samples so no further action was taken.

##### Method Blank

Analysis of the method blank performed on 07/10/2007 resulted in the detection of methylene chloride. The presence of this analyte may be due to laboratory contamination since it is a common laboratory solvent. All sample results reported for this analyte have been "B" flagged to denote its presence in the associated method blank analysis.

##### Quality Control Analyses:

Analysis of the blank spike performed on 07/10/2007 yielded recoveries for 2-butanone and 4-methyl-2-pentanone that exceeded the control limit. Because all other analytes were within the control limits no further action was taken.

# LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

## Semivolatiles Fraction:

All control parameters were met.

## **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

## **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

All samples were analyzed past their holding time for nitrate by method 300.0. When the samples were received the anion instrument was not functioning properly. When the samples were received an aliquot was split and preserved with sulfuric acid for NO<sub>3</sub>/NO<sub>2</sub> analysis. The samples were analyzed within the 48 hour hold time by method 354.1 for nitrite and within the 28 day holding time for NO<sub>3</sub>/NO<sub>2</sub> by method 353.2. The nitrate was then calculated from the difference. Ortho phosphorus

## LAUCKS TESTING LABORATORIES

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NO<sub>3</sub>/NO<sub>2</sub> by method 353.2. The nitrate was then calculated from the difference. Ortho phosphorus was analyzed by method 365.2. The final results include data from all methods, and all raw data are

### **ICP-MS Metals:**

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

Samples in this SDG (JPL45) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate samples and serial dilution samples apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL44 or the raw data provided.

For run sequence R019749, the matrix spike and matrix spike duplicate for sample MW-23-1, for SDG JPL44, fell outside of the calibration range for the element calcium. Because the MS/MSD recoveries fall within ten percent of the true value, no further action was taken. Data have been reported as is. Data have have not been flagged for these events.

The serial dilution for the element potassium did not agree within 10% of the original determination after correction for dilution for sample MW-23-1 for SDG JPL44. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### **Miscellaneous Inorganics:**

For run sequence R019314, the matrix spike duplicate recovery fell outside the established control limits for the chloride analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
- J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
- E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
- C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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Seattle, WA 98108

### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.



**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,

  
Mike Baxter  
Project Manager

25 July 2007  
(DATE)

  
Harry Romberg  
Quality Assurance Officer

7/23/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

**LAUCKS TESTING LABORATORIES**


940 S. Harney  
Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 Low Level NO <sub>3</sub> , NO <sub>2</sub> , Cl, SO <sub>4</sub> , OPO4	300.0 NO <sub>3</sub> , Cl, SO <sub>4</sub>	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	8270SIM-level 1,4-Dioxane (1.5 ppb RL; J to 1 ppb)	TurMet for 200.7/200.8 TurMet
JPL45-001	06/29/2007 08:10 AM	06/28/2007 07:33 AM	MW-24-5	A-	IN	IN	IN		A-	IN	IN	IN		A-
JPL45-002	06/29/2007 08:10 AM	06/28/2007 08:29 AM	MW-24-4	A-	IN	IN	IN		A-	IN	IN	IN		A-
JPL45-003	06/29/2007 08:10 AM	06/28/2007 09:04 AM	MW-24-3	A-	IN	IN	IN		A-	IN	IN	IN		A-
JPL45-004	06/29/2007 08:10 AM	06/28/2007 09:39 AM	MW-24-2	A-	IN	IN	IN		A-	IN	IN	IN		A-
JPL45-005	06/29/2007 08:10 AM	06/28/2007 10:23 AM	MW-24-1	A-	IN	IN	IN	IN		IN	IN	IN	IN	A-
JPL45-006	06/29/2007 08:10 AM	06/28/2007 10:36 AM	EB-12-6/28/07	A-	IN	IN	IN		A-	IN	IN	IN		A-
JPL45-007	06/29/2007 08:10 AM	06/28/2007 12:00 AM	TB-12-6/28/07									IN		

Approved By: 

On: *AWOT*

Notes: Samples identified with a "\*" client has requested QC for

LEGEND: -:Started , +:Completed , IN:logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged  
FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATELLE  
 ADDRESS: 3990 OLD TOWN AVE, C-205  
SAN DIEGO, CA 92110  
 ATTENTION: DAVID CONNER  
 PROJECT NAME: ITL GW MON 2007  
 PROJECT CONTACT: DAVID CONNER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/PO. NO.: G486090 / 1240640

CHAIN OF CUSTODY RECORD  
 42842  
 SDG # 1245

WORK ORDER ID# \_\_\_\_\_  
 PAGE 1 OF 1  
 SUBMITTED AT: \_\_\_\_\_

**Lauck's**  
 Testing Laboratories, Inc.  
 940 South Hamer St. Seattle, WA 98108 (206) 767-5000 FAX 767-5063  
 1100 Ludwick Ave. Yakima, WA 98901 (509) 248-4655 FAX 452-1235

MATRIX: WATER, SOIL OR SPECIFY  
 NO. OF CONTAINERS  
 VOL (524.2)  
 TOTAL G (200.8)  
 LEAD (200.8)  
 ARSENIC (200.8)  
 GEN CHEM (200.8)  
 Ni, K, Cr, Pb, Tl (200.8)  
 Cd (314.0)  
 GEN CHEM (314.0)  
 1,4-DIOXANE (577.0)  
 GEN CHEM (300.0)  
 1,1,1,2,2,2-PERFLUOROETHANE (161.1511)  
 GEN CHEM (161.1511)  
 NITRATE-P (160.0)

LAB #	SAMPLE ID / LOCATION	DATE	TIME	MATRIX	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
	MW-24-5	1/24/07	733	W	5	X	
	MW-24-4		829	W	5	X	
	MW-24-3		904	W	5	X	
	MW-24-2		939	W	5	X	
	MW-24-1		1023	W	5	X	
	EB-12-6	1/28/07	1036	W	5	X	
	TB-12-6	1/28/07	---	W	2	X	

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE  
 2. BE SPECIFIC IN TEST REQUESTS  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE

RELINQUISHED BY (SIGN AND PRINT): GERALD TOMPKINS  
 NAME: BATELLE  
 ADDRESS: 505 KING AVE  
 CITY, STATE, ZIP: COLUMBUS, OH 43201  
 DATE: 6/28/07  
 TIME: 1350  
 RECEIVED BY (SIGN AND PRINT): [Signature]  
 DATE: 6/29/07  
 TIME: [Signature]

\* RUSH TURNAROUND IS SUBJECT TO PRIOR LABORATORY APPROVAL

TURNAROUND REQUEST:  
 STD. 10-14 WORKING DAYS  
 24-48 HRS. (100% SUR)  
 72 HRS. (75% SUR)  
 5 DAYS (50% SUR)  
 OTHER \_\_\_\_\_  
 TEMP. \_\_\_\_\_  
 CUSTODY SEAL:  Y  N  N/A



**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL45  
Cooler: AAP019  
Temperatures: 7.1  
COC #: 42842

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL45-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL45-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL45-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL45-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL45-005	0001	1000 mL boston round, amber glass	7	N/A
	0002	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	500 ml cylinder, poly, HNO3	<2	N/A
JPL45-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL45

Cooler: AAP019

Temperatures: 7.1

COC #: 42842

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL45-007	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

Index



**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**Battelle**

**SDG No.: JPL 45**

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Completed and checked by

*Judy Esklund*

Date:

*7/24/07*

**SAMPLE DATA**

SDG JPL45

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL45-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	0.84		JB
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-001  
 Lab File ID: Y0710015.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL45-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

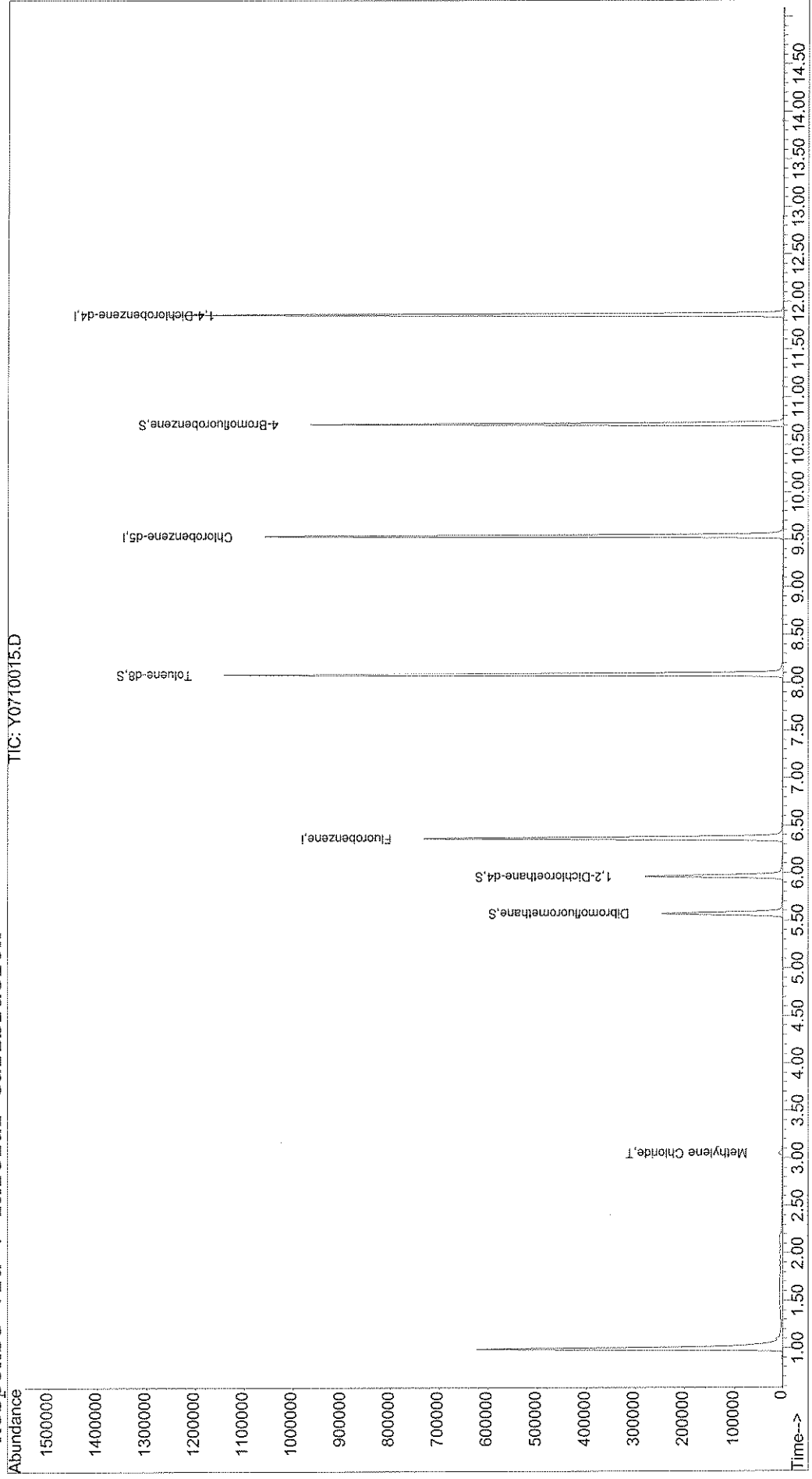
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710015.D Vial: 34  
Acq On : 10 Jul 2007 18:21 Operator: DGA  
Sample : JPL45-001 Inst : Yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:26 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710015.D  
 Acq On : 10 Jul 2007 18:21  
 Sample : JPL45-001  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:26 2007

Vial: 34  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.37	96	640673	50.00	ug/l	0.00 102.87%
54) Chlorobenzene-d5	9.54	82	299697	50.00	ug/l	0.00 103.20%
74) 1,4-Dichlorobenzene-d4	11.86	152	308772	50.00	ug/l	0.00 99.95%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	163033	45.92	ug/l	0.01
Spiked Amount	50.000	Range 85 - 115	Recovery =	91.84%		
40) 1,2-Dichloroethane-d4	5.96	65	203915	49.36	ug/l	0.00
Spiked Amount	50.000	Range 70 - 120	Recovery =	98.72%		
55) Toluene-d8	8.08	98	669470	49.89	ug/l	0.00
Spiked Amount	50.000	Range 85 - 120	Recovery =	99.78%		
76) 4-Bromofluorobenzene	10.71	95	275627	50.84	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.68	76	230		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	3.05	84	4008	0.84	ug/l #	85
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

85  
 LW 7/11/07

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710015.D  
 Acq On : 10 Jul 2007 18:21  
 Sample : JPL45-001  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:26 2007

Vial: 34  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.01	43	54		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	588		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	64		N.D.	
46) Methylcyclohexane	6.97	83	260		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	145		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.40	97	58		N.D.	
60) Tetrachloroethene	8.70	166	55		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	111		N.D.	
66) 1-Chlorohexane	9.53	91	1004		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.80	91	571		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

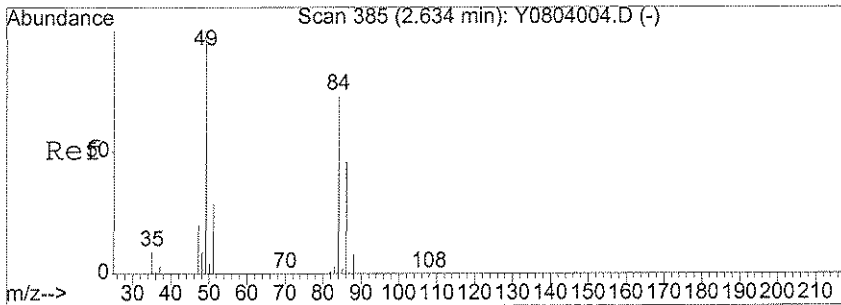
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 Acq On : 10 Jul 2007 18:21  
 Sample : JPL45-001  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:26 2007

Vial: 34  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

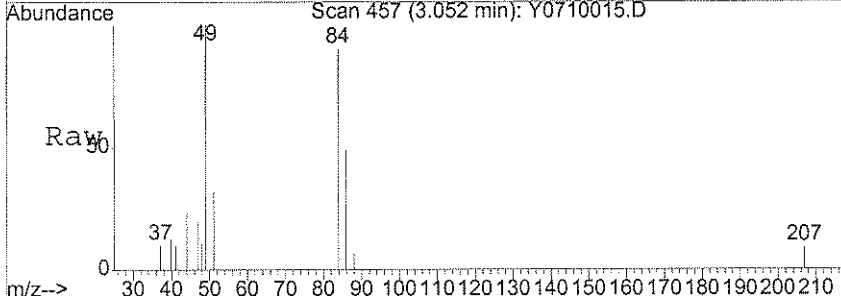
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	332		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.22	104	212		N.D.	
72) Bromoform	10.38	173	61		N.D.	
73) Isopropylbenzene	10.57	105	412		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.73	83	55		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	10.98	120	287		N.D.	
81) 2-Chlorotoluene	11.04	91	265		N.D.	
82) 4-Chlorotoluene	11.17	91	431		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	566		N.D.	
84) tert-Butylbenzene	11.48	119	141		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	432		N.D.	
86) sec-butylbenzene	11.70	105	811		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	216		N.D.	
88) 4-Isopropyltoluene	11.85	119	1196		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	292		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	55		N.D.	
91) n-Butylbenzene	12.26	91	1098		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.86	180	393		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	67		N.D.	

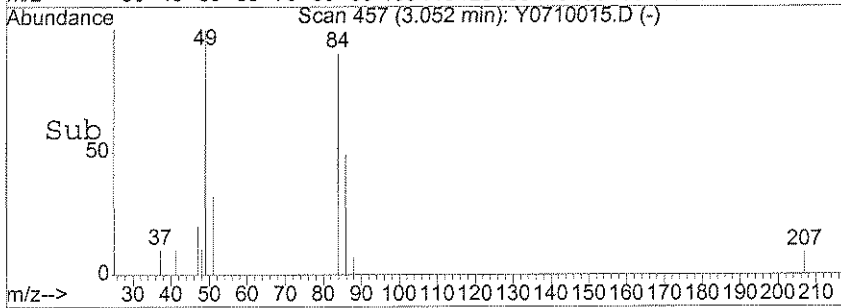
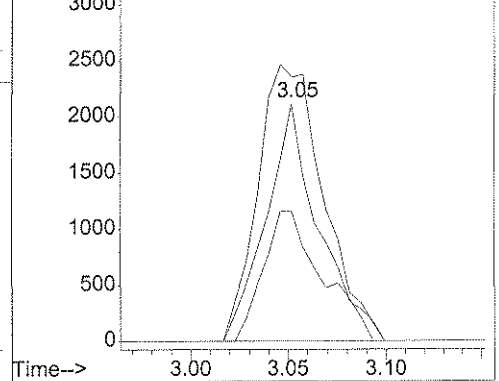


#18  
 Methylene Chloride  
 Concen: 0.84 ug/l  
 RT: 3.05 min Scan# 457  
 Delta R.T. 0.01 min  
 Lab File: Y0710015.D  
 Acq: 10 Jul 2007 18:21

Tgt Ion:	84	Resp:	4008
Ion Ratio	Lower	Upper	
84	100		
49	144.5	100.9	140.9#
86	60.7	43.3	83.3



Abundance Ion 84.00 (83.70 to 84.70): Y0710015.D  
 Ion 49.00 (48.70 to 49.70): Y0710015.D  
 Ion 86.00 (85.70 to 86.70): Y0710015.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-002  
 Lab File ID: Y0710016.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-002  
 Lab File ID: Y0710016.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL45-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

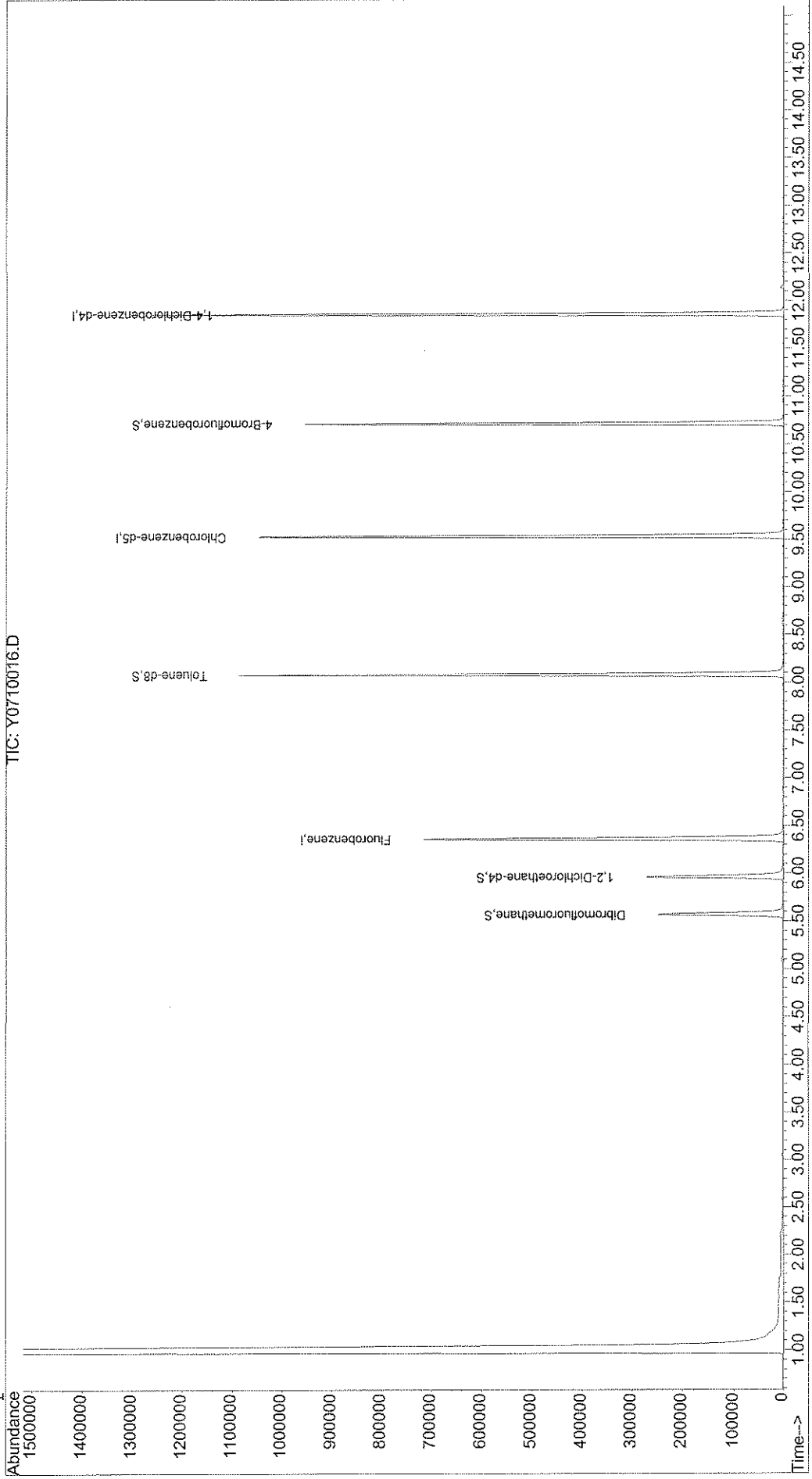
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710016.D Vial: 35  
Acq On : 10 Jul 2007 18:46 Operator: DGA  
Sample : JPL45-002 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:27 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710016.D  
 Acq On : 10 Jul 2007 18:46  
 Sample : JPL45-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:27 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.37	96	621194	50.00	ug/l	0.00 99.74%
54) Chlorobenzene-d5	9.53	82	300141	50.00	ug/l	0.00 103.35%
74) 1,4-Dichlorobenzene-d4	11.86	152	304352	50.00	ug/l	0.00 98.52%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	167069	48.53	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.06%
40) 1,2-Dichloroethane-d4	5.97	65	206237	51.48	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.96%
55) Toluene-d8	8.08	98	651389	48.47	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.94%
76) 4-Bromofluorobenzene	10.71	95	276790	51.80	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	1.28	50	79		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.68	76	877		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	2.83	41	62		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710016.D  
 Acq On : 10 Jul 2007 18:46  
 Sample : JPL45-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:27 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	228		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	221		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	5.77	75	85		N.D.	
41) Benzene	6.02	78	331		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	168		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	245		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.81	43	58		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	121		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	512		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710016.D  
 Acq On : 10 Jul 2007 18:46  
 Sample : JPL45-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:27 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	288		N.D.	
70) o-xylene	10.19	106	71		N.D.	
71) Styrene	10.21	104	220		N.D.	
72) Bromoform	10.40	173	56		N.D.	
73) Isopropylbenzene	10.57	105	200		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.72	110	66		N.D.	
80) n-Propylbenzene	10.98	120	79		N.D.	
81) 2-Chlorotoluene	11.05	91	209		N.D.	
82) 4-Chlorotoluene	11.05	91	209		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	290		N.D.	
84) tert-Butylbenzene	11.47	119	263		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	484		N.D.	
86) sec-butylbenzene	11.70	105	443		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	334		N.D.	
88) 4-Isopropyltoluene	11.85	119	959		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	375		N.D.	
90) 1,2-Dichlorobenzene	12.24	146	59		N.D.	
91) n-Butylbenzene	12.25	91	854		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	398		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.34	180	178		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-003  
 Lab File ID: Y0710017.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL45-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-003  
 Lab File ID: Y0710017.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

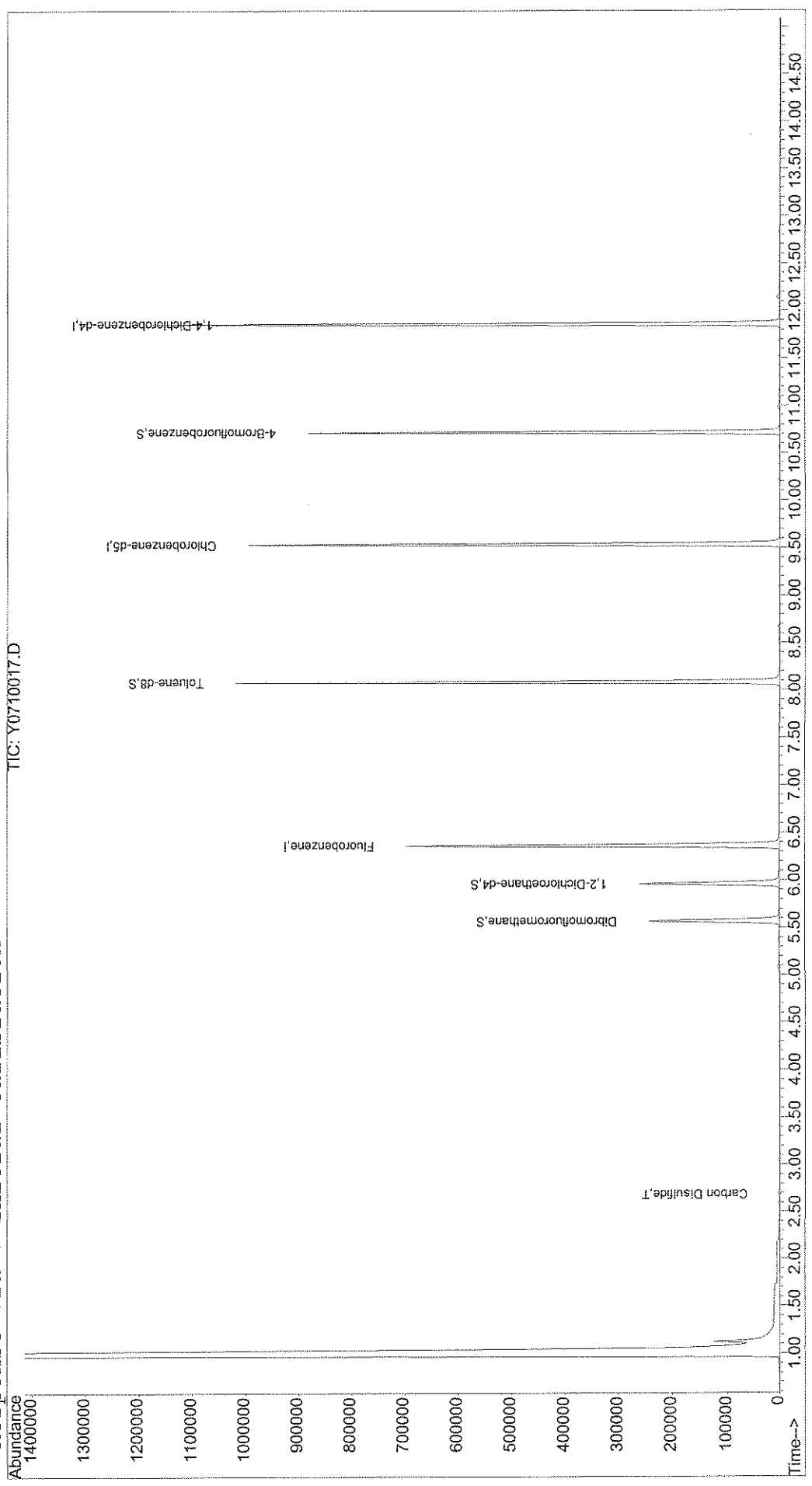
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710017.D Vial: 36  
Acq On : 10 Jul 2007 19:13 Operator: DGA  
Sample : JPL45-003 Inst : Yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:37 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710017.D  
 Acq On : 10 Jul 2007 19:13  
 Sample : JPL45-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:37 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	600675	50.00	ug/l	0.00	96.45%
54) Chlorobenzene-d5	9.53	82	275133	50.00	ug/l	0.00	94.74%
74) 1,4-Dichlorobenzene-d4	11.86	152	284845	50.00	ug/l	0.00	92.21%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	160832	48.31	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.62%	
40) 1,2-Dichloroethane-d4	5.96	65	192621	49.73	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.46%	
55) Toluene-d8	8.08	98	604000	49.03	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.06%	
76) 4-Bromofluorobenzene	10.71	95	251337	50.26	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.28	50	74	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	1.71	64	64	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.69	76	3571ms	0.42	ug/l	100
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	2.96	43	57	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.	d	
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710017.D  
 Acq On : 10 Jul 2007 19:13  
 Sample : JPL45-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:37 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	255		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	477		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	5.61	56	57		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	646		N.D.	
42) 1,2-Dichloroethane	5.97	62	54		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	76		N.D.	
46) Methylcyclohexane	6.97	83	242		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.14	92	297		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.69	166	76		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.81	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.57	112	343		N.D.	
66) 1-Chlorohexane	9.57	91	69		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	1175		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710017.D  
 Acq On : 10 Jul 2007 19:13  
 Sample : JPL45-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:37 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	443		N.D.	
70) o-xylene	10.19	106	127		N.D.	
71) Styrene	10.21	104	1174		N.D.	
72) Bromoform	10.39	173	55		N.D.	
73) Isopropylbenzene	10.57	105	403		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	62		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	59		N.D.	
80) n-Propylbenzene	10.99	120	191		N.D.	
81) 2-Chlorotoluene	11.05	91	303		N.D.	
82) 4-Chlorotoluene	11.15	91	328		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	283		N.D.	
84) tert-Butylbenzene	11.48	119	92		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	398		N.D.	
86) sec-butylbenzene	11.70	105	462		N.D.	
87) 1,3-Dichlorobenzene	11.80	146	118		N.D.	
88) 4-Isopropyltoluene	11.86	119	873		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	232		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	868		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.86	180	174		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



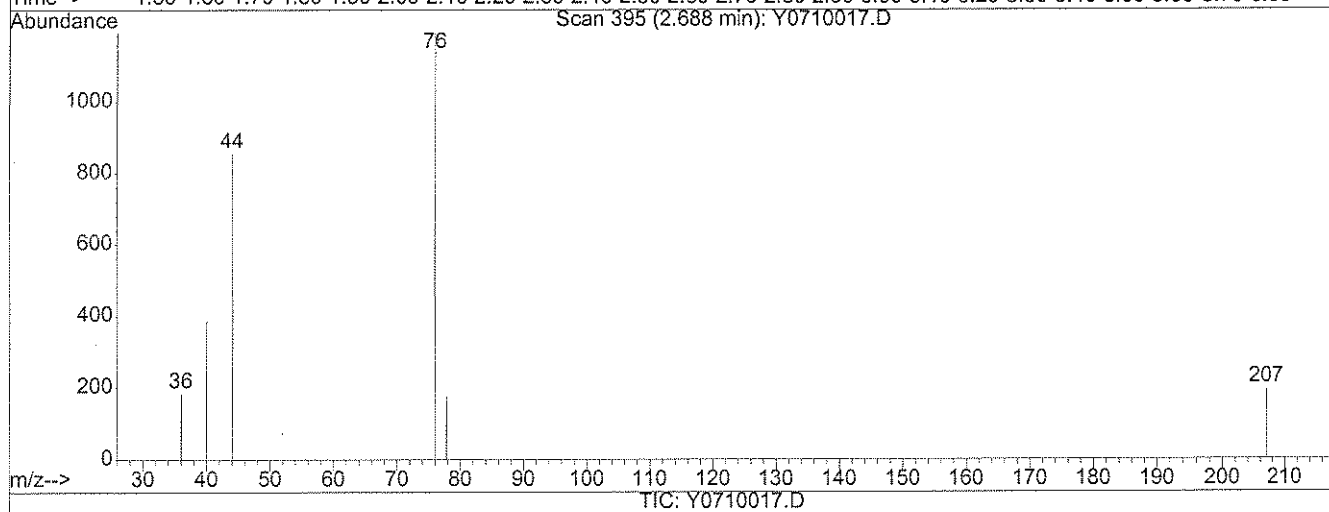
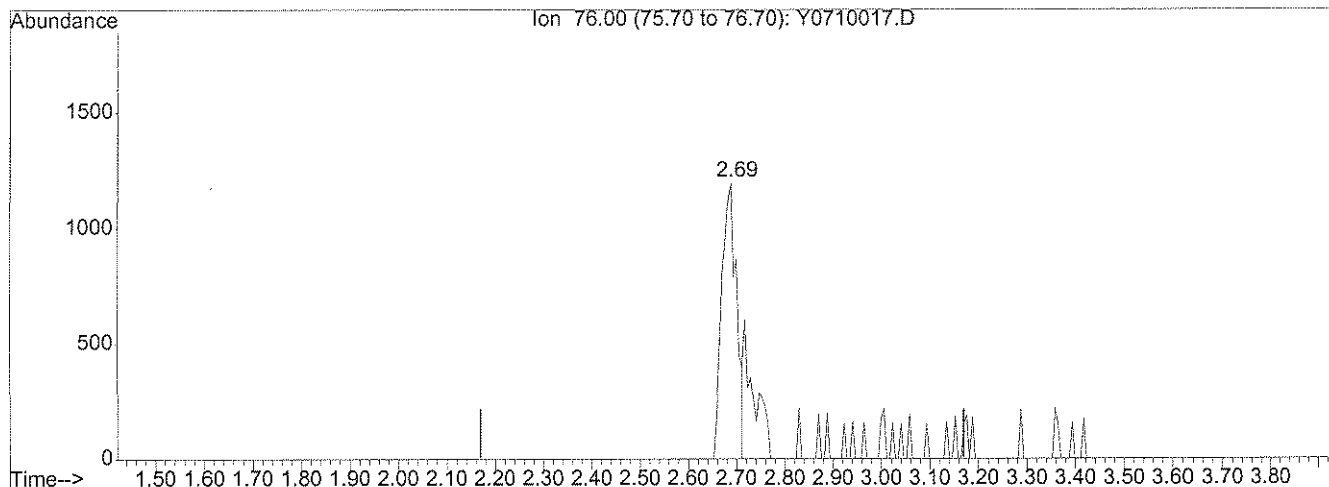
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\071007\Y0710017.D  
 Acq On : 10 Jul 2007 19:13  
 Sample : JPL45-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:28 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Multiple Level Calibration



(14) Carbon Disulfide (T)

2.69min 0.30ug/l

response 2571

Ion	Exp%	Act%
76.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

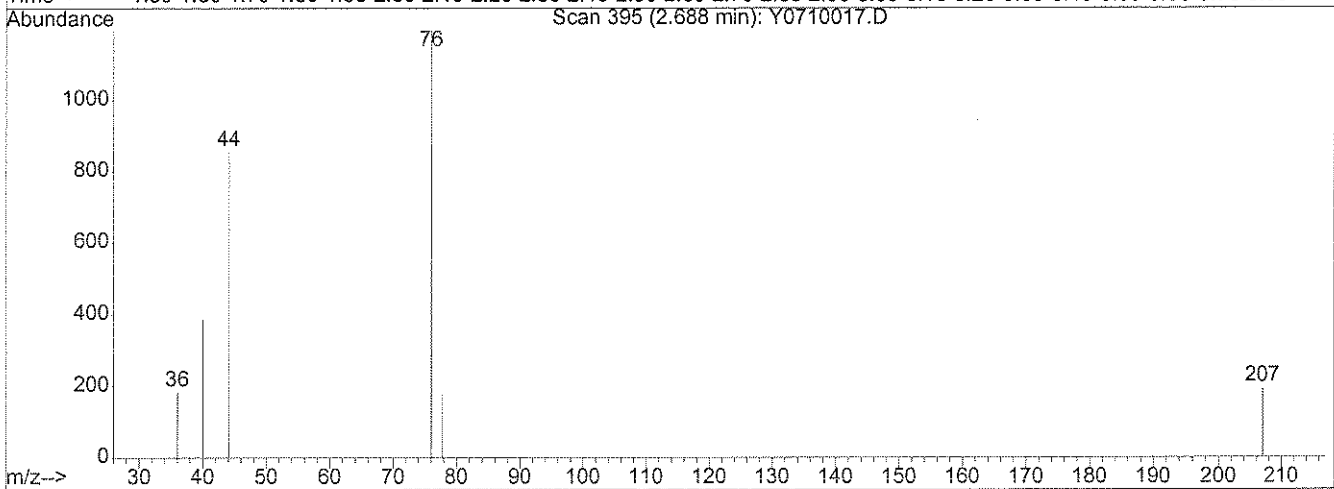
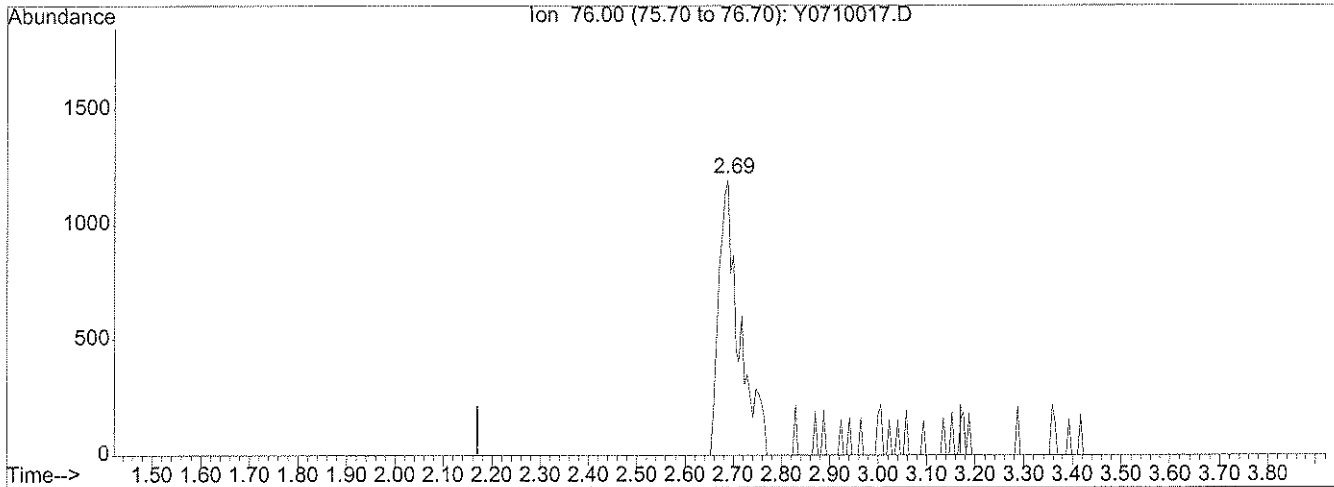
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\071007\Y0710017.D  
 Acq On : 10 Jul 2007 19:13  
 Sample : JPL45-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:36 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Multiple Level Calibration



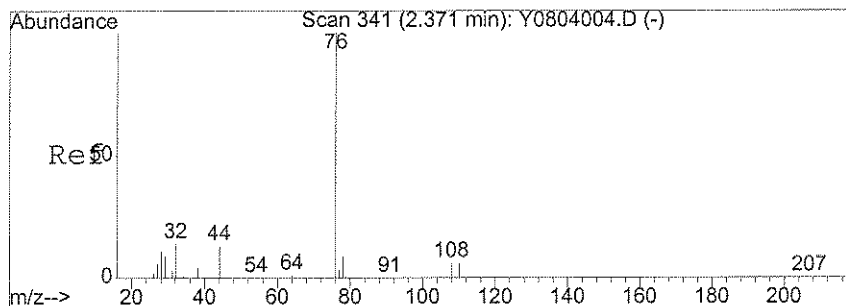
TIC: Y0710017.D

(14) Carbon Disulfide (T)

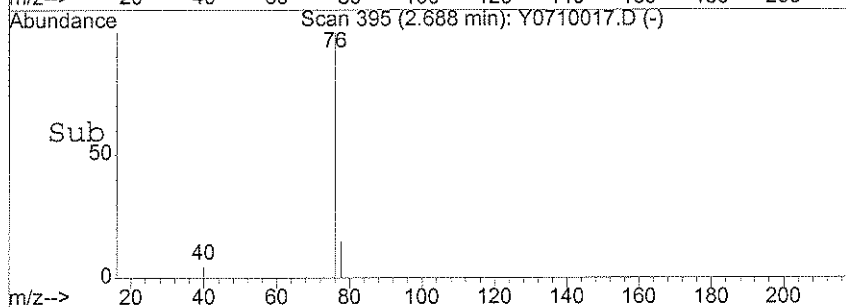
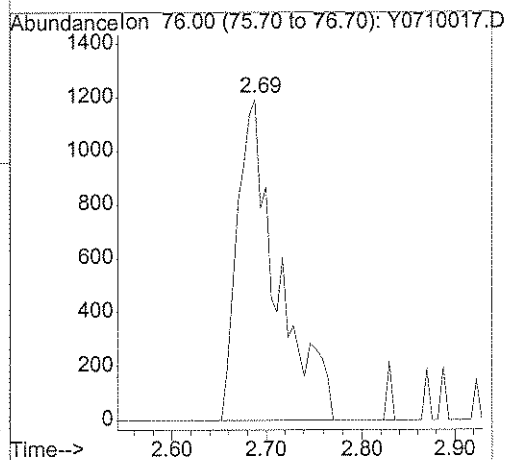
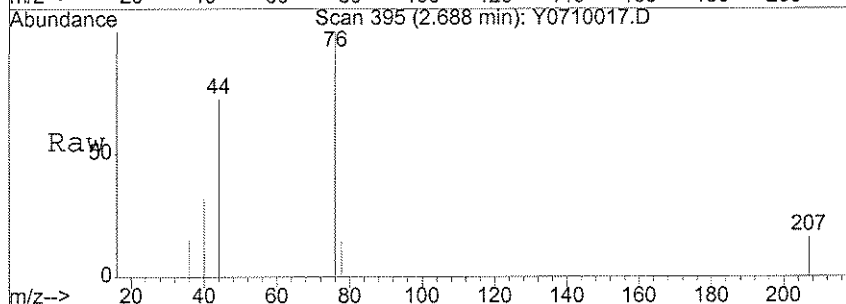
2.69min 0.42ug/l m

response 3571

Ion	Exp%	Act%
76.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00



#14  
 Carbon Disulfide  
 Concen: 0.42 ug/l m  
 RT: 2.69 min Scan# 395  
 Delta R.T. 0.02 min  
 Lab File: Y0710017.D  
 Acq: 10 Jul 2007 19:13  
 Tgt Ion: 76 Resp: 3571



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-004  
 Lab File ID: Y0710018.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-004  
 Lab File ID: Y0710018.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-004  
 Lab File ID: Y0710018.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

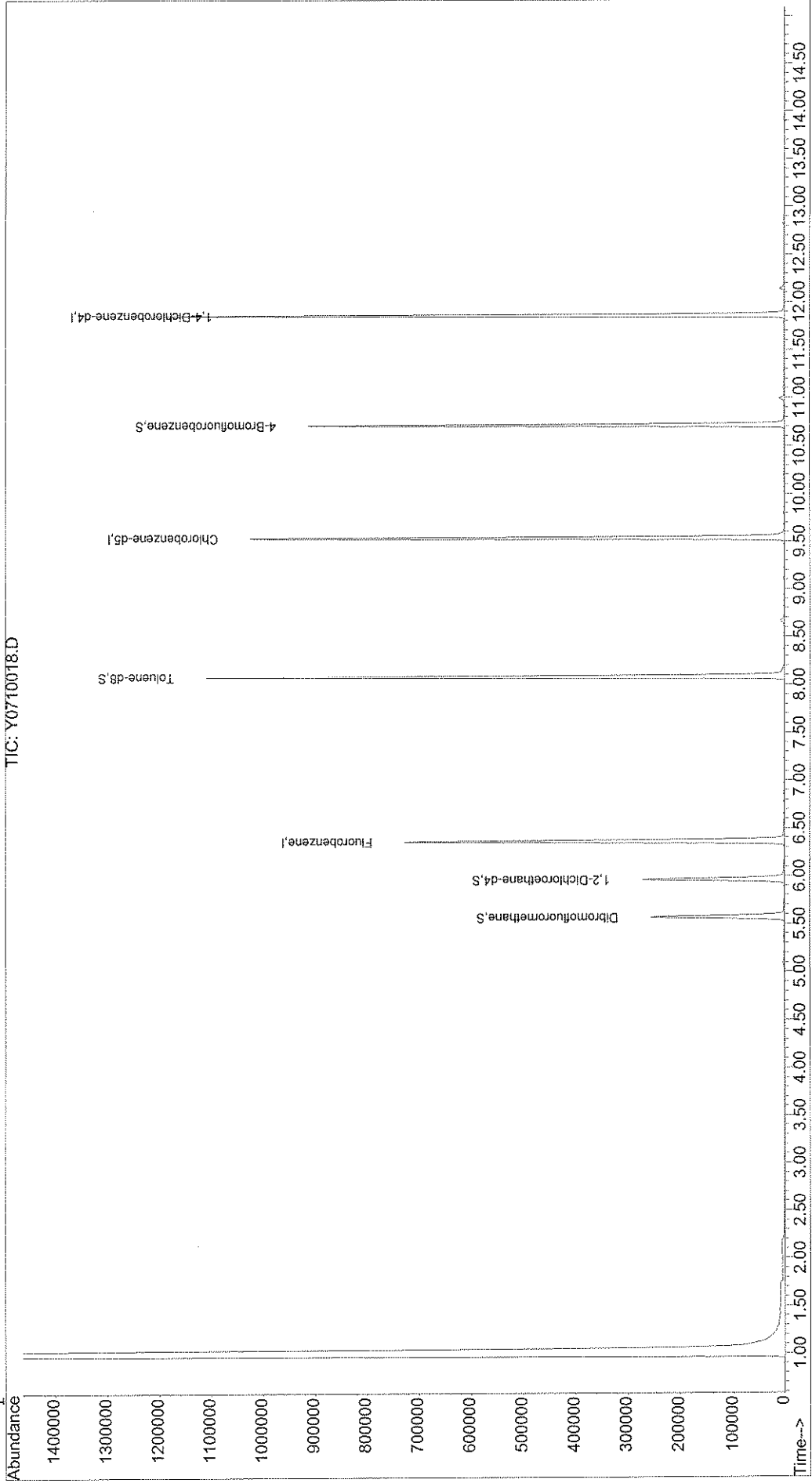
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710018.D Vial: 37  
Acq On : 10 Jul 2007 19:38 Operator: DGA  
Sample : JPL45-004 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:39 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710018.D  
 Acq On : 10 Jul 2007 19:38  
 Sample : JPL45-004  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:39 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.36	96	626797	50.00	ug/l	0.00 100.64%
54) Chlorobenzene-d5	9.54	82	291763	50.00	ug/l	0.00 100.46%
74) 1,4-Dichlorobenzene-d4	11.86	152	285362	50.00	ug/l	0.00 92.37%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	164935	47.48	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	94.96%
40) 1,2-Dichloroethane-d4	5.96	65	204830	50.68	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.36%
55) Toluene-d8	8.08	98	652833	49.97	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.94%
76) 4-Bromofluorobenzene	10.71	95	263183	52.53	ug/l	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.28	50	71	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	2.51	101	59	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	1892	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.04	84	607	<del>Below Cal</del>	#	82
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

*Handwritten:* LW 7/11/07



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710018.D  
 Acq On : 10 Jul 2007 19:38  
 Sample : JPL45-004  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:39 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	4.22	43	56		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	4.88	96	57		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.38	41	338		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	259		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	281		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.16	92	314		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	68		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	519		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710018.D  
 Acq On : 10 Jul 2007 19:38  
 Sample : JPL45-004  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:39 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	374		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	135		N.D.	
72) Bromoform	10.38	173	54		N.D.	
73) Isopropylbenzene	10.56	105	170		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	10.98	120	72		N.D.	
81) 2-Chlorotoluene	11.04	91	64		N.D.	
82) 4-Chlorotoluene	11.16	91	157		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	272		N.D.	
84) tert-Butylbenzene	11.48	119	127		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	309		N.D.	
86) sec-butylbenzene	11.69	105	413		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	286		N.D.	
88) 4-Isopropyltoluene	11.85	119	652		N.D.	
89) 1,4-Dichlorobenzene	11.87	146	131		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	152		N.D.	
91) n-Butylbenzene	12.25	91	439		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	94		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	136		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-005  
 Lab File ID: Y0710019.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.49	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.56	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-005  
 Lab File ID: Y0710019.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-005  
 Lab File ID: Y0710019.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

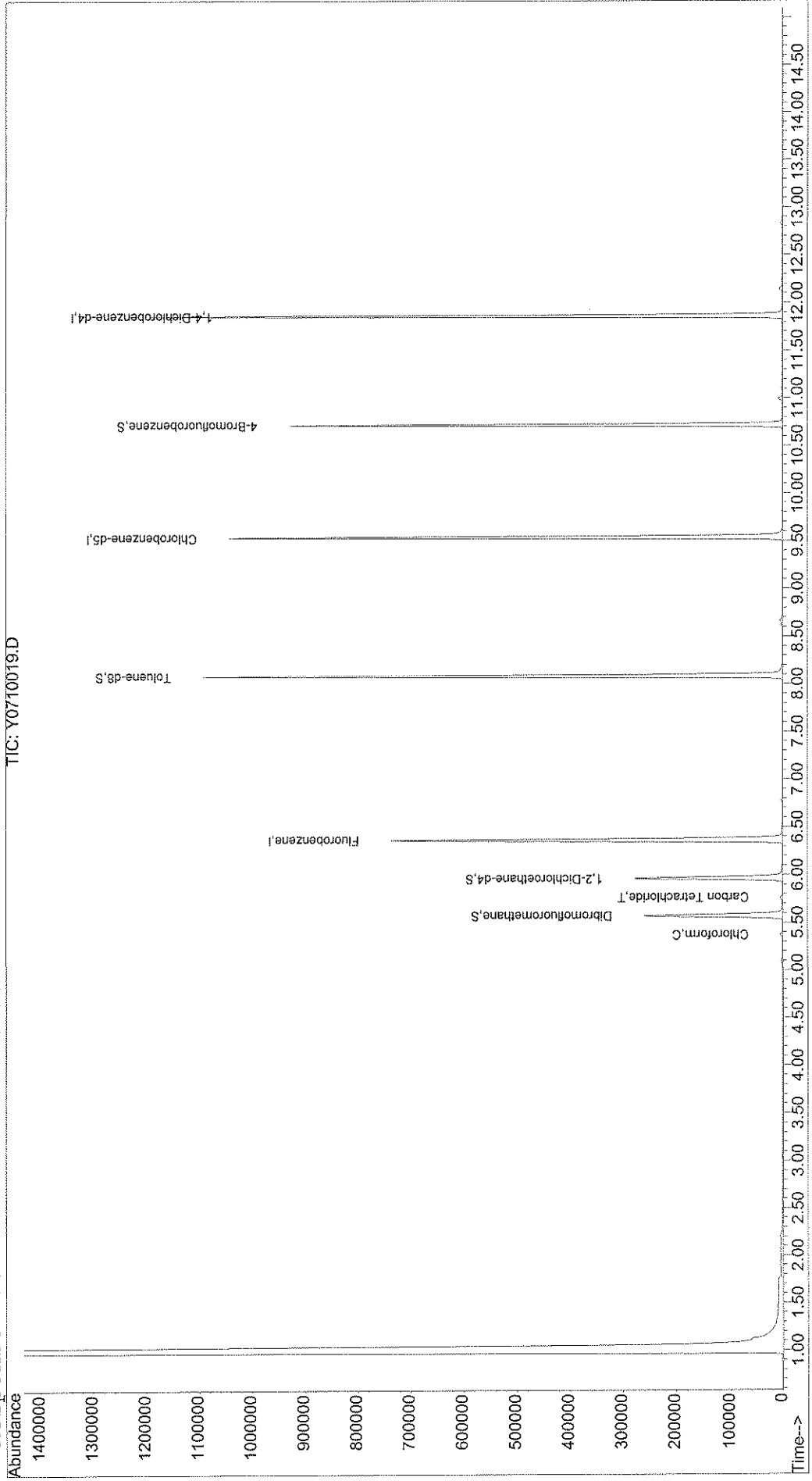
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710019.D  
Acq On : 10 Jul 2007 20:02  
Sample : JPL45-005  
Misc : #4 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:40 2007  
Vial: 38  
Operator: DGA  
Inst : yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710019.D  
 Acq On : 10 Jul 2007 20:02  
 Sample : JPL45-005  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:40 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.37	96	633412	50.00	ug/l	0.00 101.70%
54) Chlorobenzene-d5	9.54	82	293520	50.00	ug/l	0.00 101.07%
74) 1,4-Dichlorobenzene-d4	11.86	152	290988	50.00	ug/l	0.00 94.20%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	170223	48.49	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.98%
40) 1,2-Dichloroethane-d4	5.96	65	206916	50.66	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.32%
55) Toluene-d8	8.08	98	658748	50.12	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	100.24%
76) 4-Bromofluorobenzene	10.71	95	265972	52.06	ug/l	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.69	76	1159	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	3.40	96	53	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	4.06	63	591	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710019.D  
 Acq On : 10 Jul 2007 20:02  
 Sample : JPL45-005  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:40 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	268		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	63		N.D.	
34) Chloroform	5.37	83	3176	0.49	ug/l	93
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.77	117	2654	0.56	ug/l	86
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	93		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	858		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.15	92	195		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	502		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.96	43	53		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	113		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	378		N.D.	

Handwritten annotations: A large checkmark is drawn over the right side of the table, with the number '93' written next to it. Below the table, the number '86' is written. At the bottom right, there is a handwritten signature 'LW 7/11/07'.



Quantitation Report

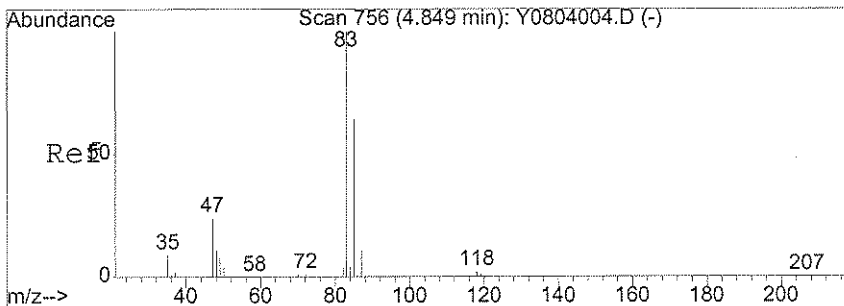
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 Acq On : 10 Jul 2007 20:02  
 Sample : JPL45-005  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:40 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

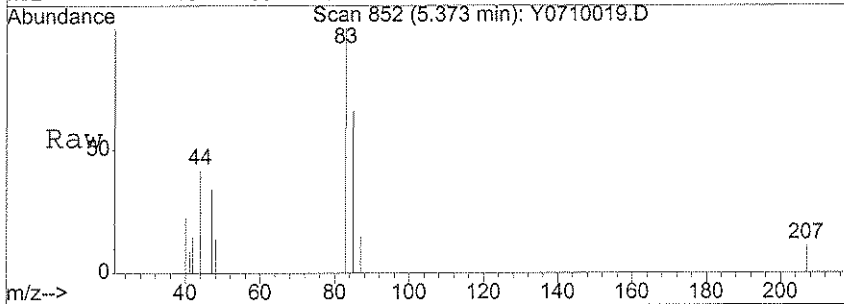
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	370		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	93		N.D.	
72) Bromoform	10.39	173	150		N.D.	
73) Isopropylbenzene	10.57	105	98		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	60		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	77		N.D.	
80) n-Propylbenzene	10.97	120	66		N.D.	
81) 2-Chlorotoluene	10.98	91	399		N.D.	
82) 4-Chlorotoluene	11.16	91	205		N.D.	
83) 1,3,5-Trimethylbenzene	11.15	105	227		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	386		N.D.	
86) sec-butylbenzene	11.69	105	372		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	717		N.D.	
88) 4-Isopropyltoluene	11.84	119	662		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	468		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	379		N.D.	
91) n-Butylbenzene	12.25	91	533		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	226		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	263		N.D.	

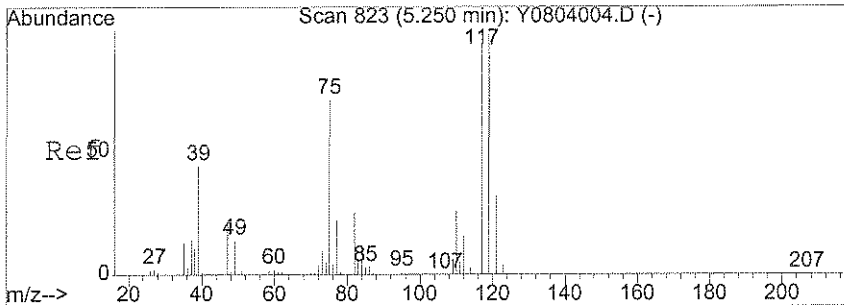
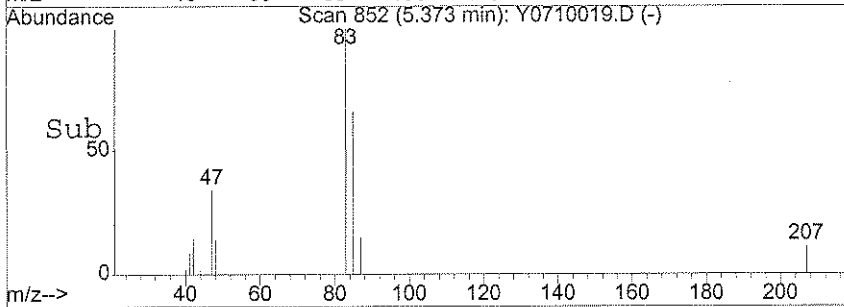
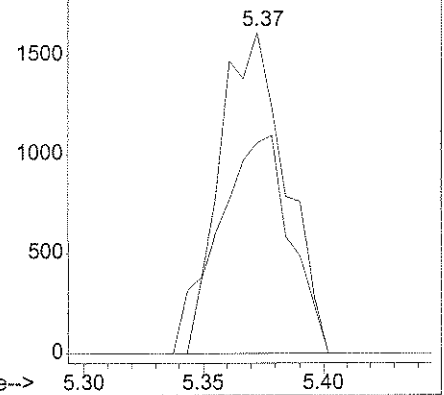


#34  
 Chloroform  
 Concen: 0.49 ug/l  
 RT: 5.37 min Scan# 852  
 Delta R.T. 0.01 min  
 Lab File: Y0710019.D  
 Acq: 10 Jul 2007 20:02

Tgt Ion: 83 Resp: 3176  
 Ion Ratio Lower Upper  
 83 100  
 85 68.5 43.3 83.3

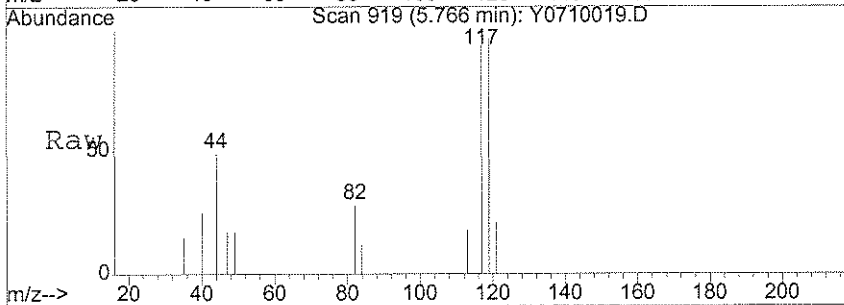


Abundance Ion 83.00 (82.70 to 83.70): Y0710019.D  
 Ion 85.00 (84.70 to 85.70): Y0710019.D

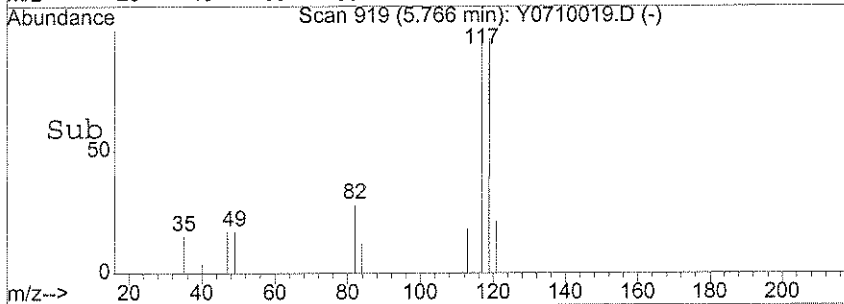
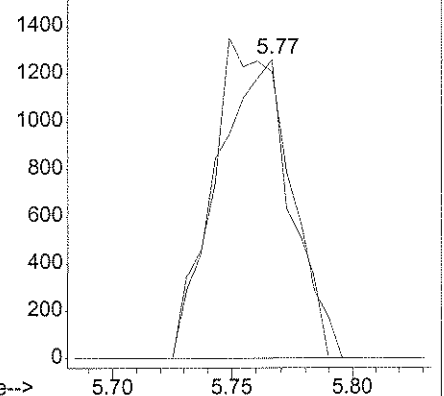


#38  
 Carbon Tetrachloride  
 Concen: 0.56 ug/l  
 RT: 5.77 min Scan# 919  
 Delta R.T. 0.02 min  
 Lab File: Y0710019.D  
 Acq: 10 Jul 2007 20:02

Tgt Ion: 117 Resp: 2654  
 Ion Ratio Lower Upper  
 117 100  
 119 111.6 78.2 118.2



Abundance Ion 117.00 (116.70 to 117.70): Y0710019.D  
 Ion 119.00 (118.70 to 119.70): Y0710019.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-12-6/28/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-006  
 Lab File ID: Y0710020.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.33	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.25	J
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	2.2	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	2.0	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.98	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-12-6/28/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-006  
 Lab File ID: Y0710020.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	2.0	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	1.2	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.89	
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-12-6/28/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL45-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/28/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

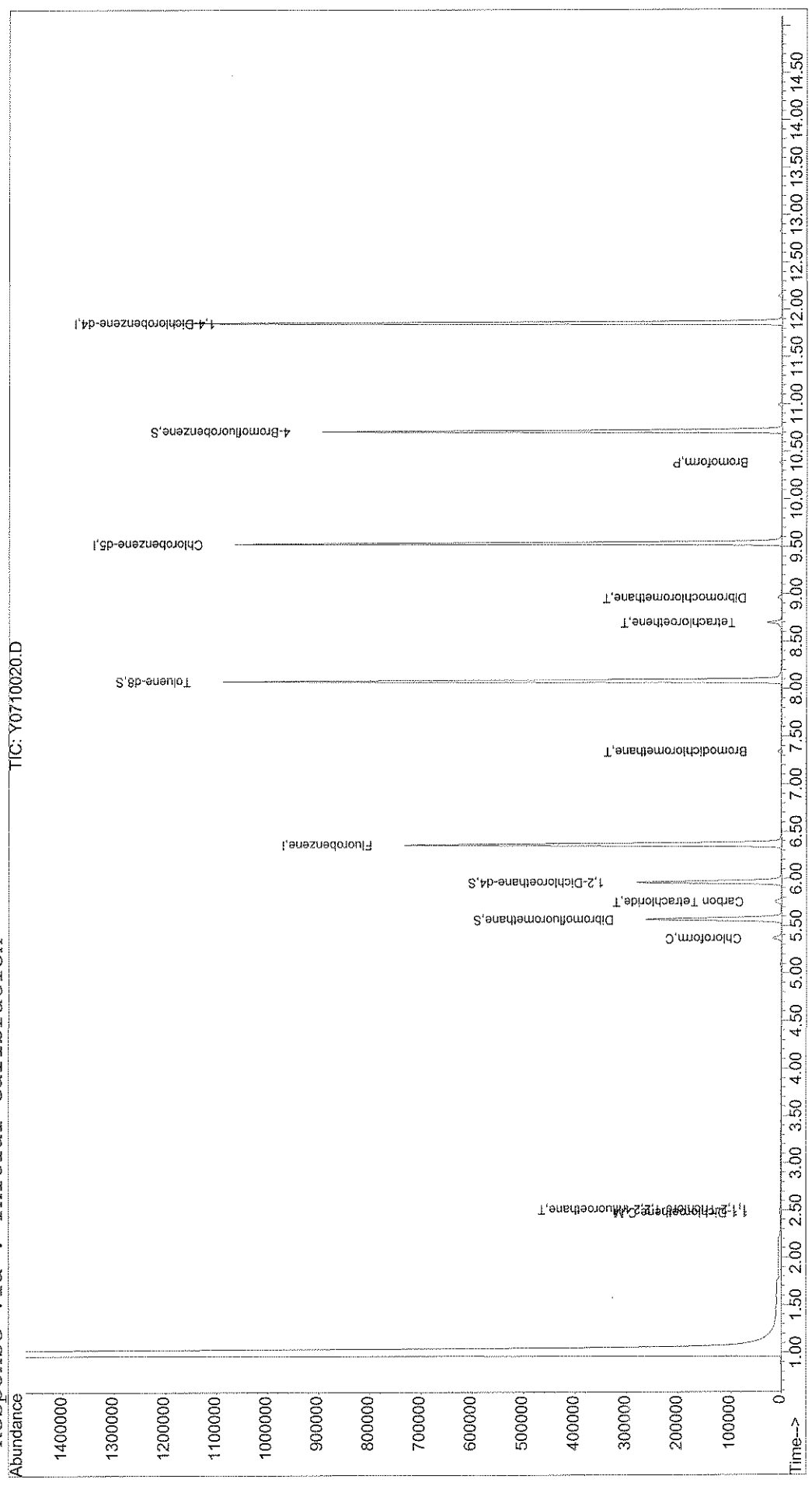
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710020.D  
Acq On : 10 Jul 2007 20:27  
Sample : JPL45-006  
Misc : #3 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:42 2007  
Vial: 39  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710020.D  
 Acq On : 10 Jul 2007 20:27  
 Sample : JPL45-006  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:42 2007

Vial: 39  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	628845	50.00	ug/l	0.00	100.97%
54) Chlorobenzene-d5	9.53	82	291857	50.00	ug/l	0.00	100.50%
74) 1,4-Dichlorobenzene-d4	11.86	152	290854	50.00	ug/l	0.00	94.15%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	168778	48.43	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.86%	
40) 1,2-Dichloroethane-d4	5.96	65	204798	50.50	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.00%	
55) Toluene-d8	8.08	98	648023	49.59	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.18%	
76) 4-Bromofluorobenzene	10.71	95	263468	51.60	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.27	50	66	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.48	96	872	0.33	ug/l #	78
10) 1,1,2-Trichloro-1,2,2-trif	2.51	101	740	0.25	ug/l #	78
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	1222	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	2.93	43	56	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

W 7/11/07

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710020.D  
 Acq On : 10 Jul 2007 20:27  
 Sample : JPL45-006  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:42 2007

Vial: 39  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.02	43	244		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	296		N.D.	
34) Chloroform	5.37	83	14112	2.18	ug/l	97
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.75	117	9325	1.99	ug/l	100
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	316		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	242		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.34	83	4384	0.98	ug/l	97
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.15	92	184		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	7886	1.98	ug/l	95
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.96	43	63		N.D.	
63) Dibromochloromethane	8.96	129	3496	1.17	ug/l	86
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.57	112	54		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	331		N.D.	

LA 7/11/07



Quantitation Report

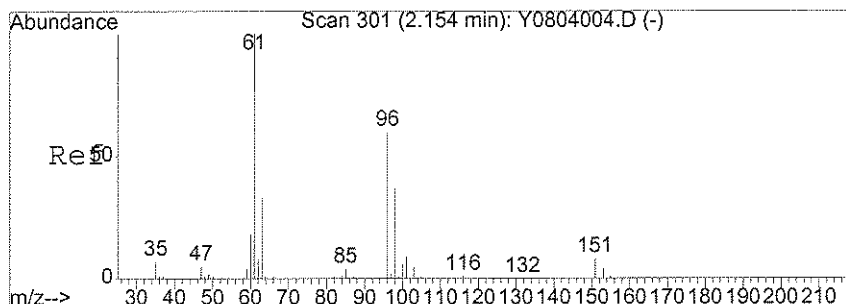
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 Acq On : 10 Jul 2007 20:27  
 Sample : JPL45-006  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:42 2007

Vial: 39  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

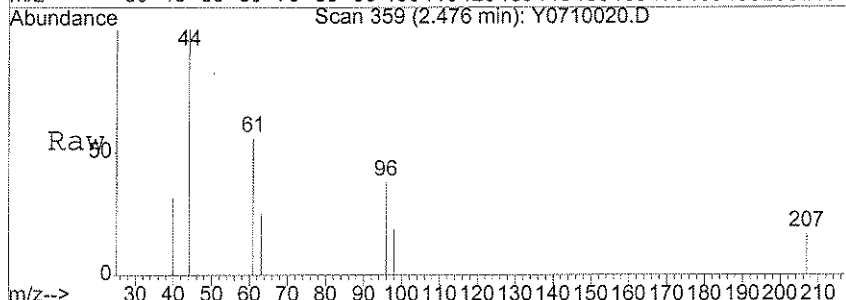
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0	N.D.		
70) o-xylene	0.00	106	0	N.D.		
71) Styrene	0.00	104	0	N.D.		
72) Bromoform	10.38	173	1936	0.89	ug/l	97
73) Isopropylbenzene	10.58	105	122	N.D.		
75) trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.		
77) Bromobenzene	0.00	156	0	N.D.		
78) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.		
79) 1,2,3-Trichloropropane	0.00	110	0	N.D.		
80) n-Propylbenzene	0.00	120	0	N.D.		
81) 2-Chlorotoluene	11.05	91	115	N.D.		
82) 4-Chlorotoluene	11.16	91	105	N.D.		
83) 1,3,5-Trimethylbenzene	11.16	105	54	N.D.		
84) tert-Butylbenzene	11.48	119	64	N.D.		
85) 1,2,4-Trimethylbenzene	11.52	105	237	N.D.		
86) sec-butylbenzene	11.71	105	324	N.D.		
87) 1,3-Dichlorobenzene	11.79	146	171	N.D.		
88) 4-Isopropyltoluene	11.85	119	380	N.D.		
89) 1,4-Dichlorobenzene	11.89	146	129	N.D.		
90) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
91) n-Butylbenzene	12.25	91	512	N.D.		
92) 1,2-Dibromo-3-chloropropan	0.00	75	0	N.D.		
93) 1,2,4-Trichlorobenzene	13.85	180	140	N.D.		
94) Hexachlorobutadiene	0.00	225	0	N.D.	d	
95) Naphthalene	0.00	128	0	N.D.		
96) 1,2,3-Trichlorobenzene	0.00	180	0	N.D.		

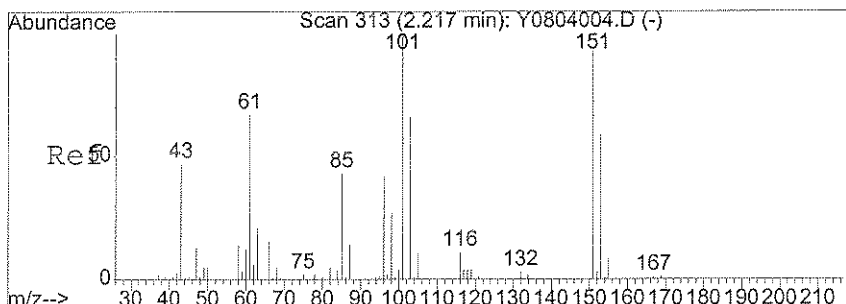
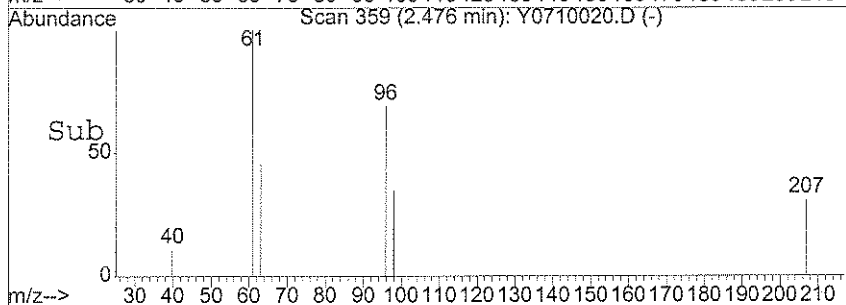
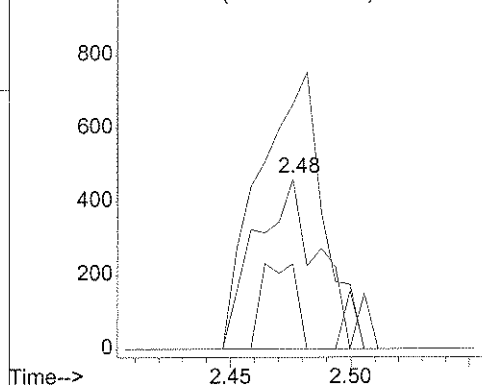


#9  
 1,1-Dichloroethene  
 Concen: 0.33 ug/l  
 RT: 2.48 min Scan# 359  
 Delta R.T. 0.01 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

Tgt Ion:	96	Resp:	872
Ion Ratio	Lower	Upper	
96	100		
61	160.4	126.4	166.4
98	26.9	43.5	83.5#

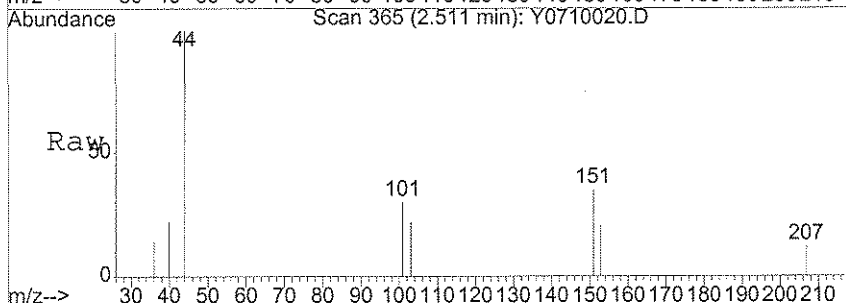


Abundance Ion 96.00 (95.70 to 96.70): Y0710020.D  
 Ion 61.00 (60.70 to 61.70): Y0710020.D  
 Ion 98.00 (97.70 to 98.70): Y0710020.D

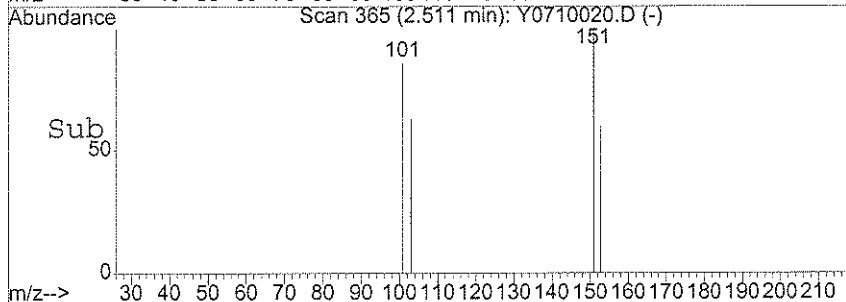
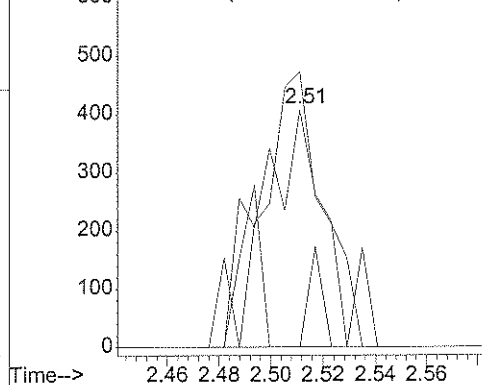


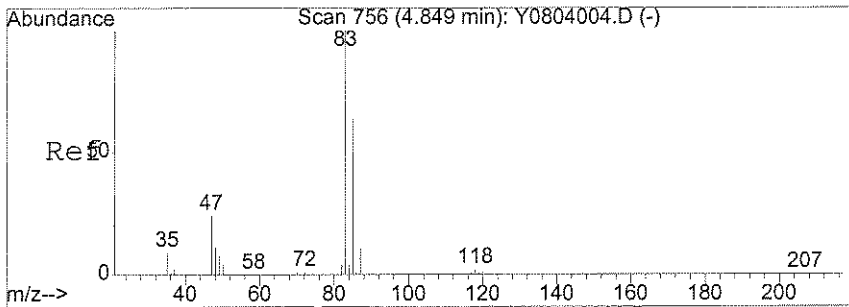
#10  
 1,1,2-Trichloro-1,2,2-trifluo  
 Concen: 0.25 ug/l  
 RT: 2.51 min Scan# 365  
 Delta R.T. 0.02 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

Tgt Ion:	101	Resp:	740
Ion Ratio	Lower	Upper	
101	100		
85	8.2	33.8	50.6#
151	102.7	76.1	114.1



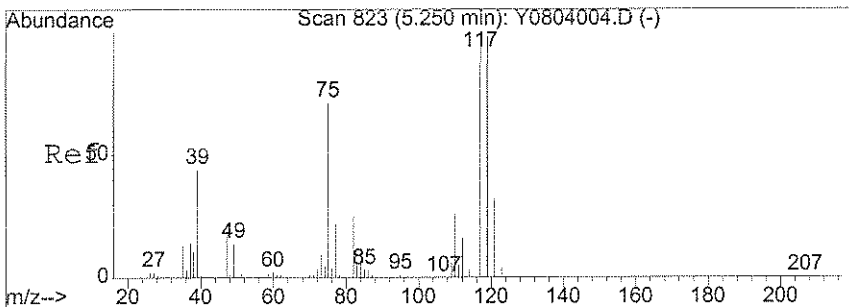
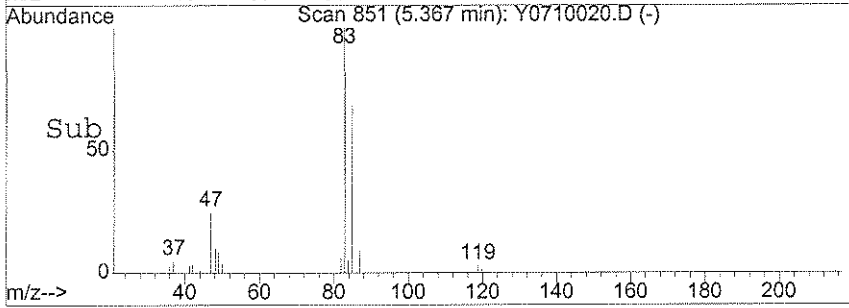
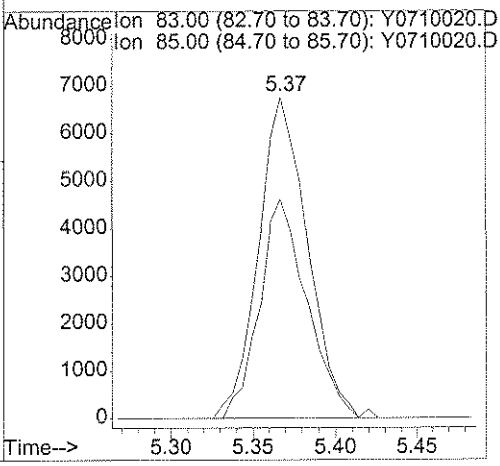
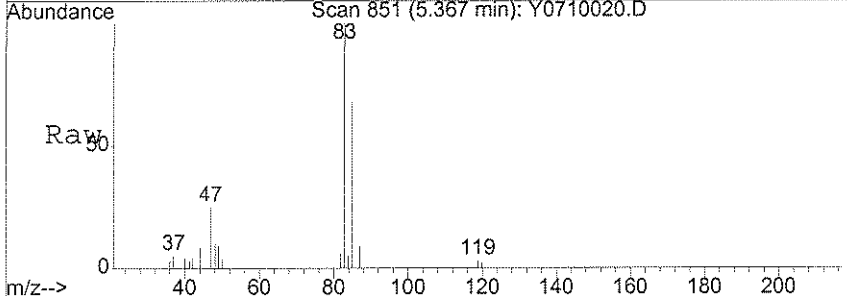
Abundance Ion 100.95 (100.65 to 101.65): Y0710020.D  
 Ion 84.95 (84.65 to 85.65): Y0710020.D  
 Ion 150.95 (150.65 to 151.65): Y0710020.D





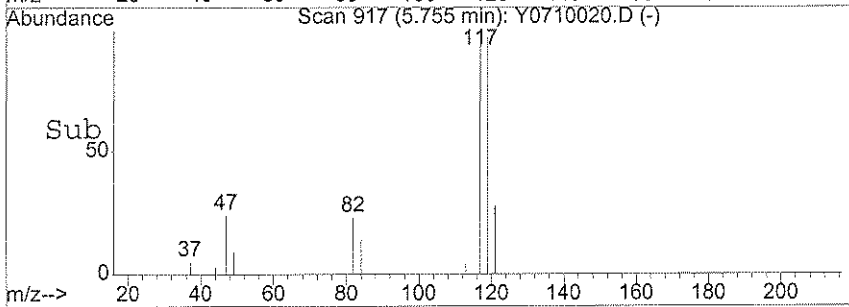
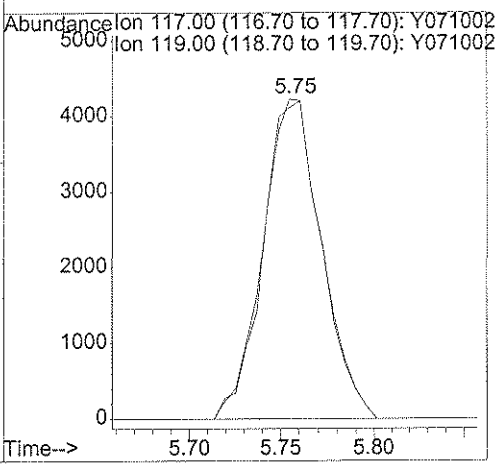
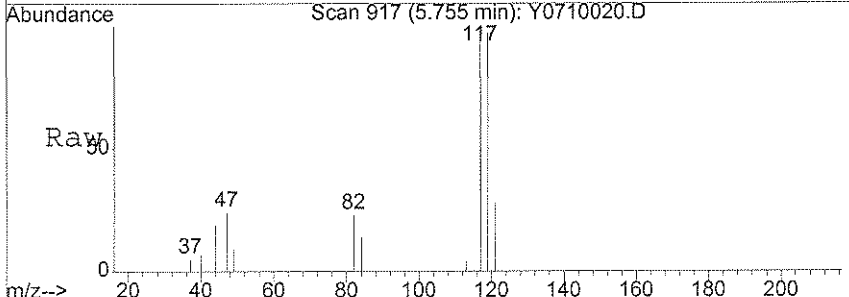
#34  
 Chloroform  
 Concen: 2.18 ug/l  
 RT: 5.37 min Scan# 851  
 Delta R.T. -0.00 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

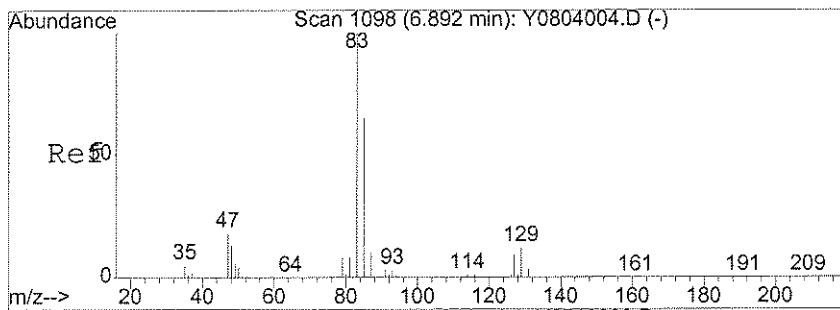
Tgt Ion:	83	Resp:	14112
Ion Ratio	Lower	Upper	
83	100		
85	65.9	43.3	83.3



#38  
 Carbon Tetrachloride  
 Concen: 1.99 ug/l  
 RT: 5.75 min Scan# 917  
 Delta R.T. 0.01 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

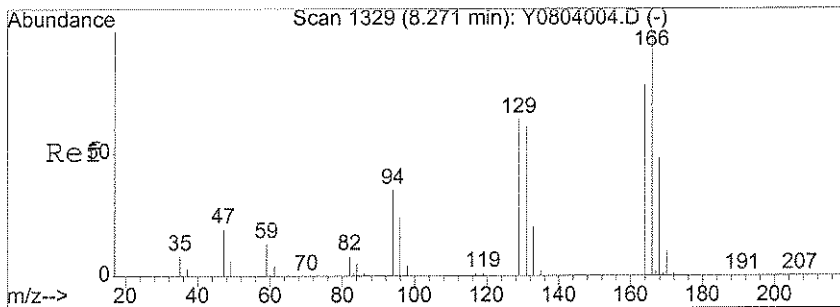
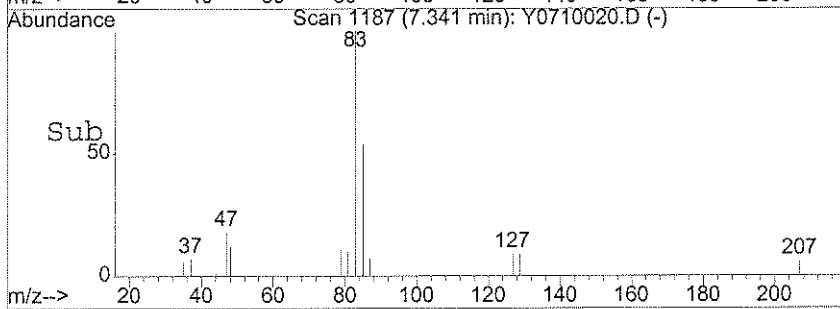
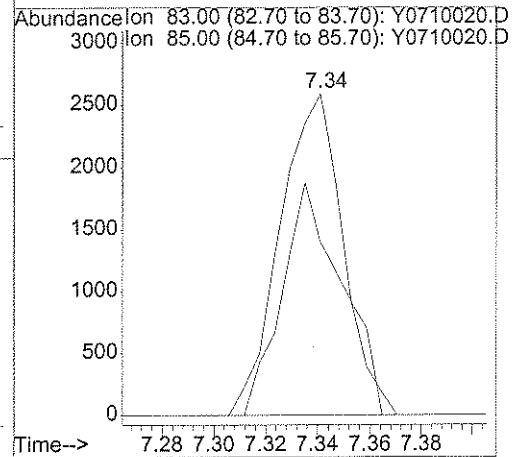
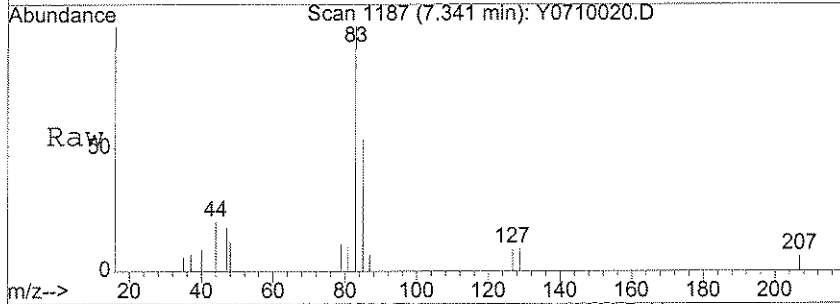
Tgt Ion:	117	Resp:	9325
Ion Ratio	Lower	Upper	
117	100		
119	98.5	78.2	118.2





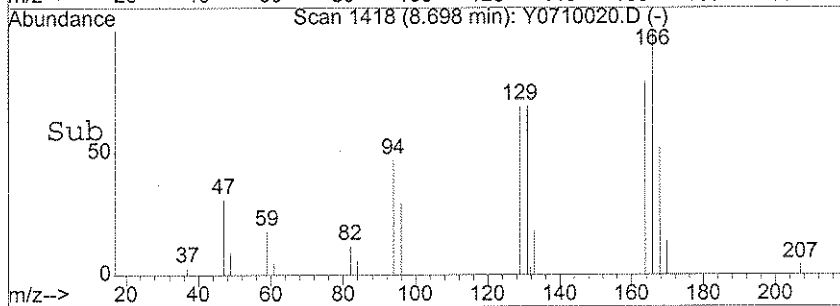
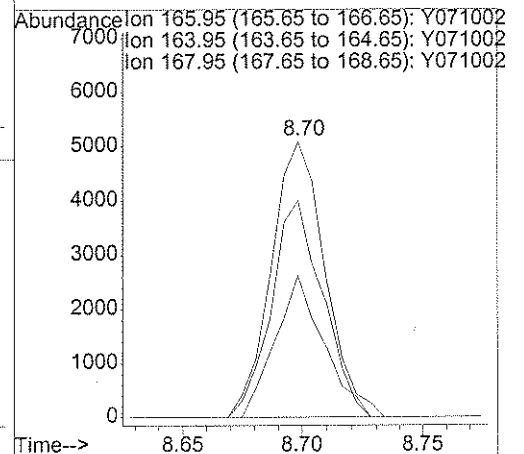
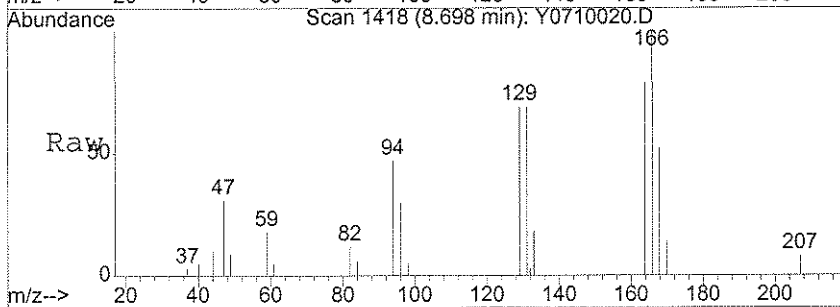
#50  
 Bromodichloromethane  
 Concen: 0.98 ug/l  
 RT: 7.34 min Scan# 1187  
 Delta R.T. 0.01 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

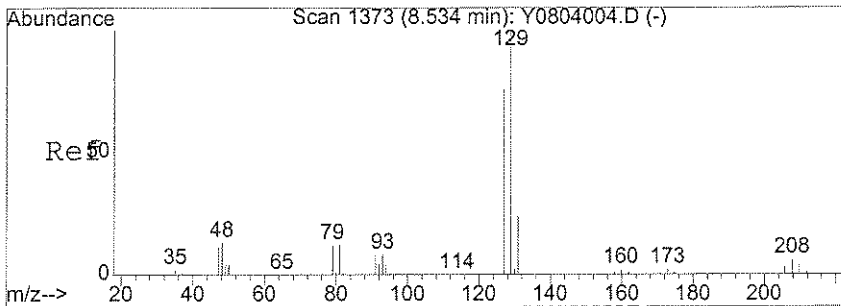
Tgt Ion	Resp	Lower	Upper
83	4384		
85	66.9	44.2	84.2



#60  
 Tetrachloroethene  
 Concen: 1.98 ug/l  
 RT: 8.70 min Scan# 1418  
 Delta R.T. -0.00 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

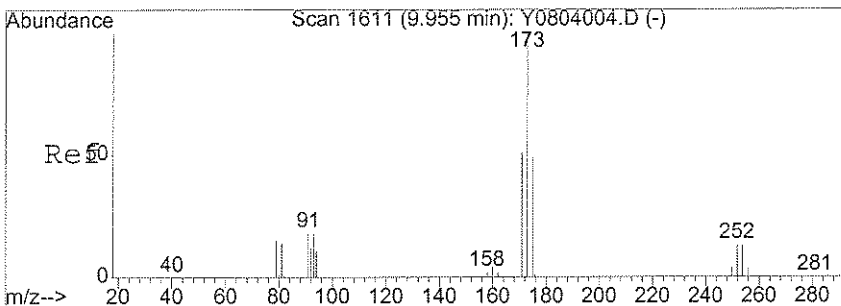
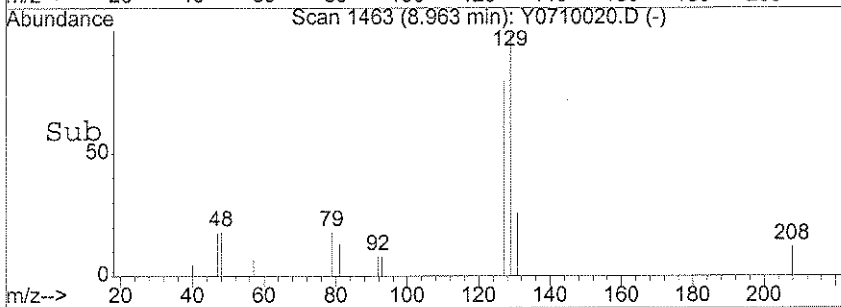
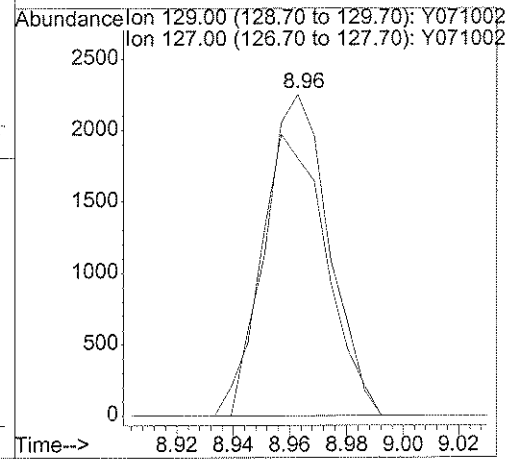
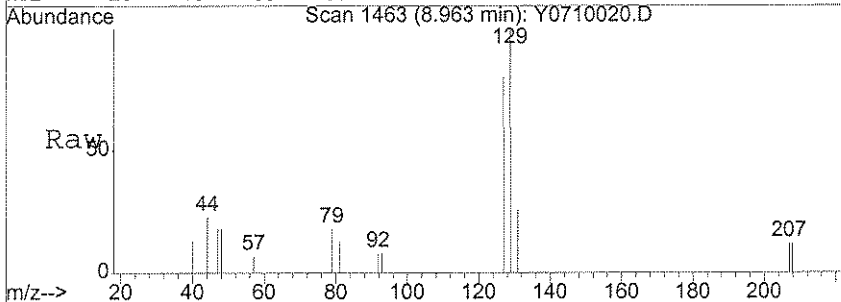
Tgt Ion	Resp	Lower	Upper
166	7886		
164	75.1	63.3	94.9
168	46.1	39.6	59.4





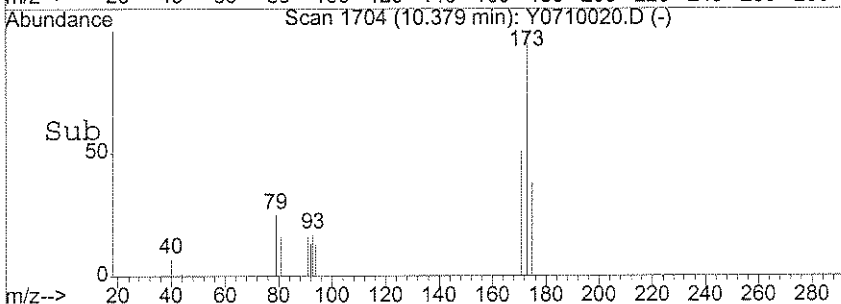
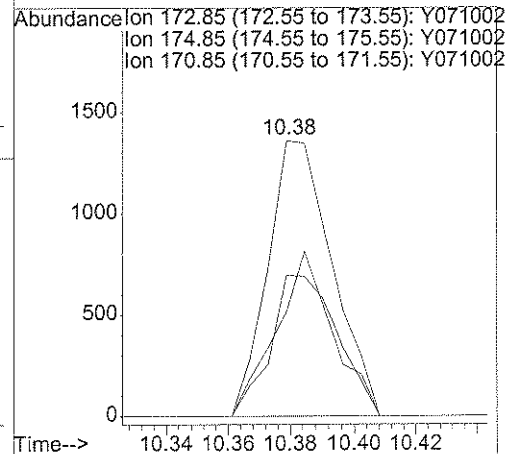
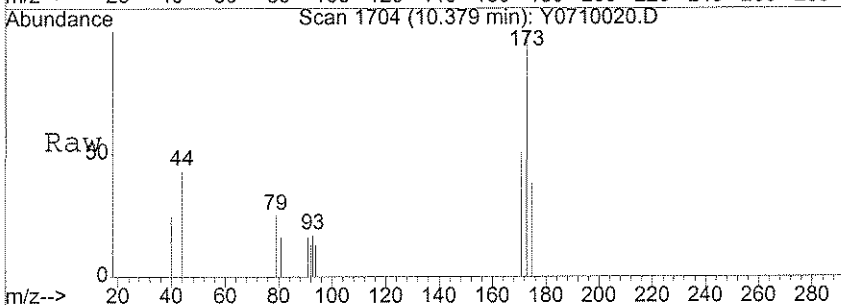
#63  
 Dibromochloromethane  
 Concen: 1.17 ug/l  
 RT: 8.96 min Scan# 1463  
 Delta R.T. -0.00 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

Tgt Ion	Resp	Lower	Upper
129	3496		
127	91.3	58.9	98.9



#72  
 Bromoform  
 Concen: 0.89 ug/l  
 RT: 10.38 min Scan# 1704  
 Delta R.T. -0.01 min  
 Lab File: Y0710020.D  
 Acq: 10 Jul 2007 20:27

Tgt Ion	Resp	Lower	Upper
173	1936		
175	52.1	40.0	60.0
171	52.5	39.8	59.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12-6/28/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-007  
 Lab File ID: Y0710021.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12-6/28/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-007  
 Lab File ID: Y0710021.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12-6/28/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL45  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-007  
 Lab File ID: Y0710021.D  
 Date Collected: 06/28/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

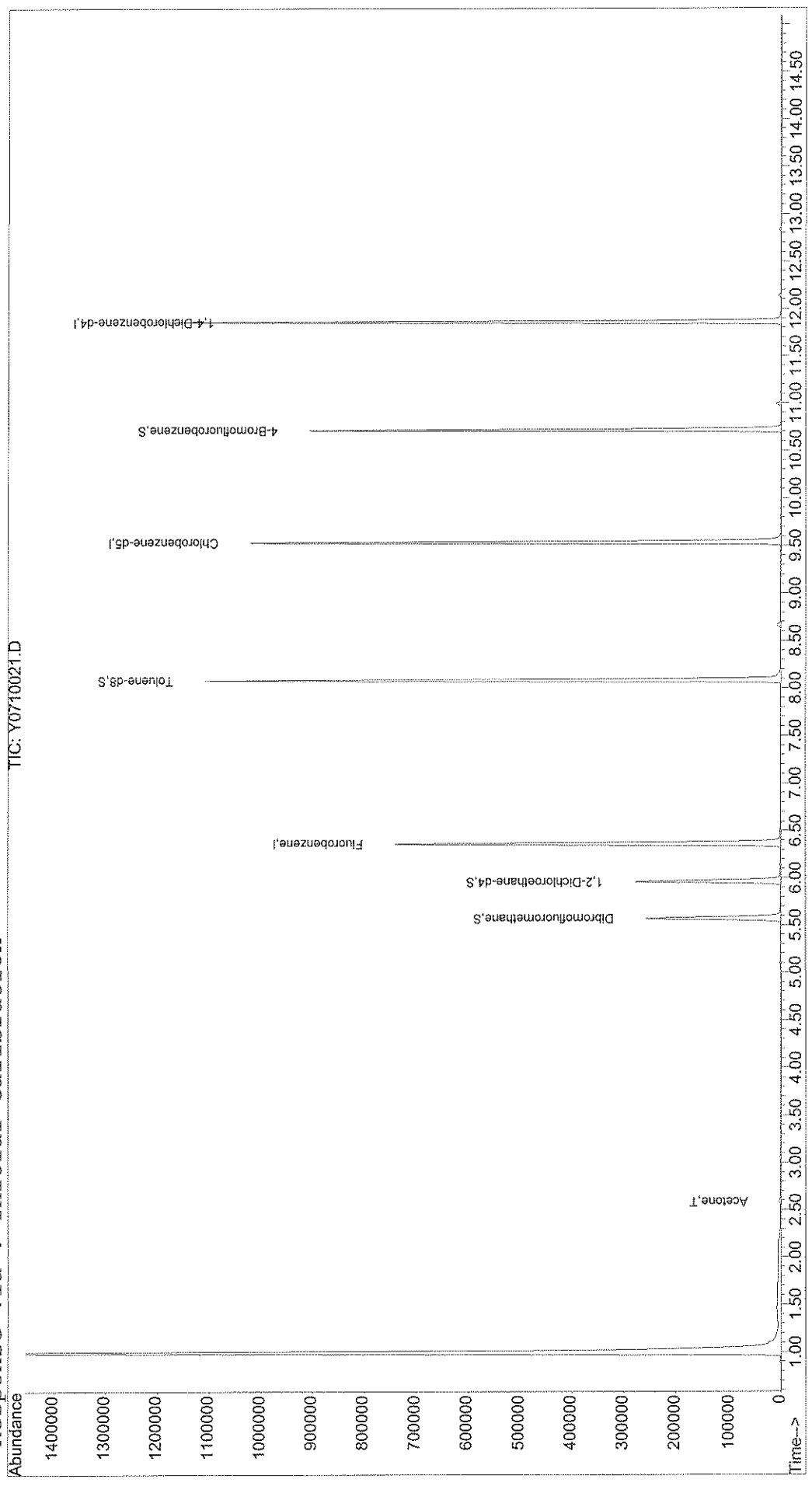
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710021.D Vial: 40  
Acq On : 10 Jul 2007 20:51 Operator: DGA  
Sample : JPL45-007 Inst : Yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:43 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710021.D  
 Acq On : 10 Jul 2007 20:51  
 Sample : JPL45-007  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:43 2007

Vial: 40  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.37	96	640365	50.00	ug/l	0.00 102.82%
54) Chlorobenzene-d5	9.53	82	295759	50.00	ug/l	0.00 101.84%
74) 1,4-Dichlorobenzene-d4	11.86	152	290612	50.00	ug/l	0.00 94.07%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	168709	47.54	ug/l	0.01
Spiked Amount	50.000	Range	85 - 115	Recovery	=	95.08%
40) 1,2-Dichloroethane-d4	5.96	65	207034	50.14	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.28%
55) Toluene-d8	8.08	98	659728	49.82	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.64%
76) 4-Bromofluorobenzene	10.71	95	265042	51.95	ug/l	0.00

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.28	50	139	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	4732	1.80	ug/l	89
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.70	76	420	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.	d	
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

*Handwritten:* 89  
 10/7/07

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710021.D  
 Acq On : 10 Jul 2007 20:51  
 Sample : JPL45-007  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:43 2007

Vial: 40  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.38	41	74		N.D.	
34) Chloroform	5.37	83	110		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	5.77	75	56		N.D.	
41) Benzene	6.02	78	238		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	d
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	62		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	86		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	72		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.96	43	59		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	140		N.D.	
66) 1-Chlorohexane	9.57	91	65		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	391		N.D.	

Quantitation Report

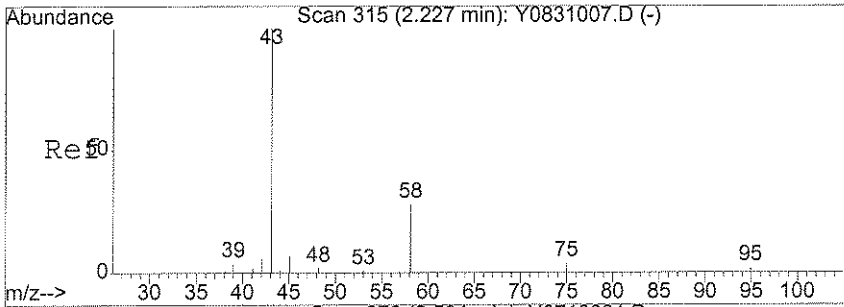
Data File : X:\MSVOA\YODA\071007\Y0710021.D  
 Acq On : 10 Jul 2007 20:51  
 Sample : JPL45-007  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:43 2007

Vial: 40  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

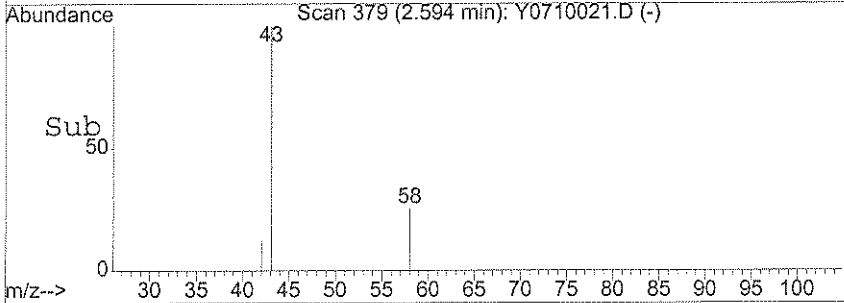
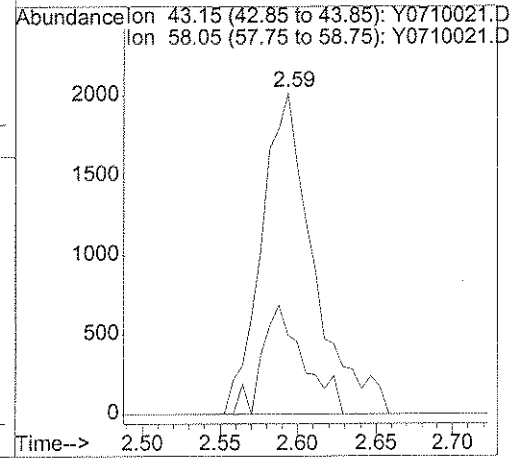
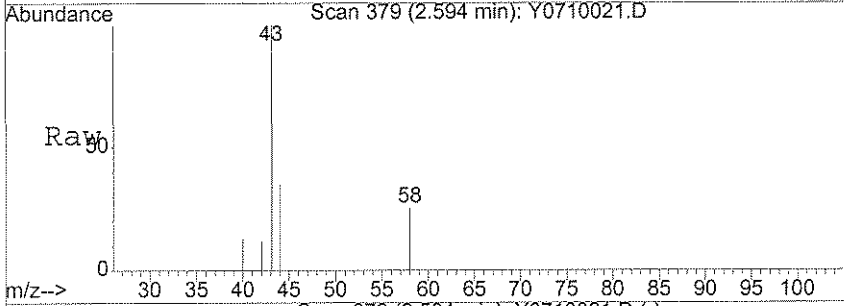
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	427		N.D.	
70) o-xylene	10.20	106	55		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.56	105	233		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	10.85	156	53		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.72	110	68		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	299		N.D.	
82) 4-Chlorotoluene	11.16	91	279		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	139		N.D.	
84) tert-Butylbenzene	11.48	119	59		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	264		N.D.	
86) sec-butylbenzene	11.70	105	290		N.D.	
87) 1,3-Dichlorobenzene	11.87	146	58		N.D.	
88) 4-Isopropyltoluene	11.85	119	352		N.D.	
89) 1,4-Dichlorobenzene	11.87	146	58		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	66		N.D.	
91) n-Butylbenzene	12.26	91	433		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.86	180	65		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



#11  
 Acetone  
 Concen: 1.80 ug/l  
 RT: 2.59 min Scan# 379  
 Delta R.T. 0.02 min  
 Lab File: Y0710021.D  
 Acq: 10 Jul 2007 20:51

Tgt Ion	Resp	Lower	Upper
43	4732		
43	100		
58	27.3	26.8	40.2



**TIC FORMS**

SDG JPL45

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL45-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710015.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/29/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710015.D Vial: 34  
Acq On : 10 Jul 2007 18:21 Operator: DGA  
Sample : JPL45-001 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710015.D 8260B.M Wed Jul 11 11:39:30 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL45  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-002  
 Lab File ID: Y0710016.D  
 Date Collected: <sup>WB</sup> 06/29/2007  
 Date Analyzed: <sup>WB</sup> 07/10/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710016.D Vial: 35  
Acq On : 10 Jul 2007 18:46 Operator: DGA  
Sample : JPL45-002 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710016.D 8260B.M Wed Jul 11 11:39:51 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL45-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710017.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/29/2007  
*JB*

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007  
*JTB*

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710017.D Vial: 36  
Acq On : 10 Jul 2007 19:13 Operator: DGA  
Sample : JPL45-003 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710017.D 8260B.M Wed Jul 11 11:40:06 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL45  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-004  
 Lab File ID: Y0710018.D  
 Date Collected: 06/29/2007  
 Date Analyzed: 07/10/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710018.D Vial: 37  
Acq On : 10 Jul 2007 19:38 Operator: DGA  
Sample : JPL45-004 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710018.D 8260B.M Wed Jul 11 11:40:15 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL45  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL45-005  
 Lab File ID: Y0710019.D  
 Date Collected: 06/29/2007  
 Date Analyzed: 07/10/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710019.D Vial: 38  
Acq On : 10 Jul 2007 20:02 Operator: DGA  
Sample : JPL45-005 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710019.D 8260B.M Wed Jul 11 11:40:25 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-12-6/28/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL45-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710020.D

Level: (LOW/MBD) \_\_\_\_\_

Date Collected: 06/29/2007  
*28*

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007  
*28*

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710020.D Vial: 39  
Acq On : 10 Jul 2007 20:27 Operator: DGA  
Sample : JPL45-006 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710020.D 8260B.M Wed Jul 11 11:40:33 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-12-6/28/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL45-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/29/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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09					
10					
11					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710021.D Vial: 40  
Acq On : 10 Jul 2007 20:51 Operator: DGA  
Sample : JPL45-007 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710021.D 8260B.M Wed Jul 11 11:40:43 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071007MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL45

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: B071007MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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12					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710014.D Vial: 33  
Acq On : 10 Jul 2007 17:57 Operator: DGA  
Sample : B071007MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710014.D 8260B.M Wed Jul 11 11:43:44 2007

# **SAMPLE DATA**

**SDG# JPL45**

**Semivolatiles**

1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1
---------

Lab Name: Laucks Testing Laboratories,  
 SDG No.: JPL45  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 980.0 (g/mL)      mL  
 Level: (LOW/MED)       
 % Moisture:      Decanted: (Y/N) N  
 Concentrated Extract Volume: 1000 (uL)  
 Injection Volume: 2.0 (uL)  
 GPC Cleanup: (Y/N) N pH: <2

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019531  
 Lab Sample ID: JPL45-005  
 Lab File ID: L0712019.D  
 Date Collected: 06/28/2007  
 Date Extracted: 07/02/2007  
 Date Analyzed: 07/12/2007  
 Dilution Factor: 1.0  
 Extraction: (Type) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	1.1	J

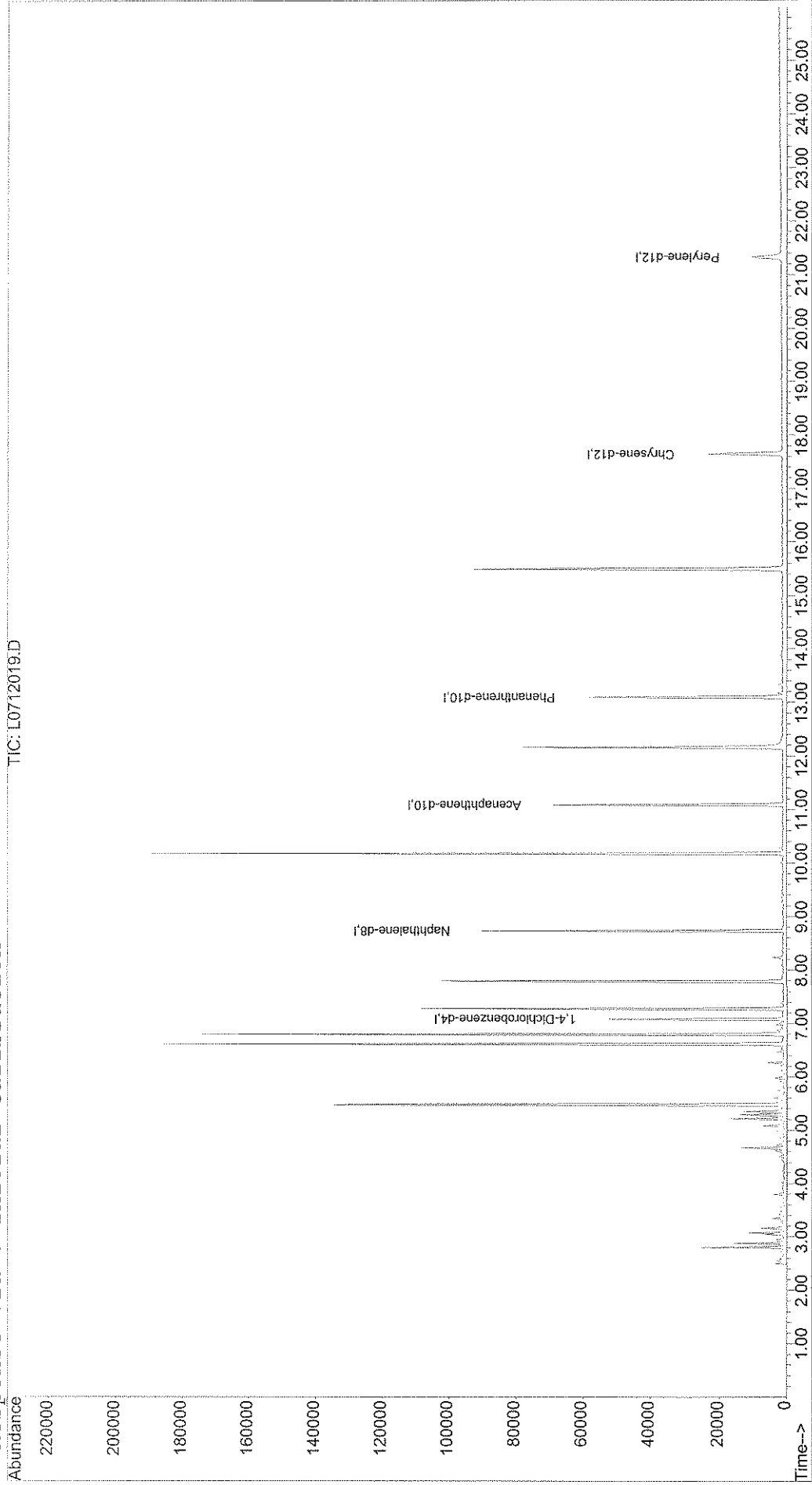
Comments:



Quantitation Report

Data File : X:\MSABN\LOUIE\071207J\L0712019.D Vial: 19  
Acq On : 12 Jul 2007 23:42 Operator: AP  
Sample : JPL45-005 Inst : LOUIE  
Misc : 5970L 980ML->1ML+IS Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Jul 16 14:39 2007 Quant Results File: L8270.RES

Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
Title : 8270 SW846 BNA Calibration 5970L  
Last Update : Mon Jul 16 14:33:35 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\LOUIE\071207J\L0712019.D  
 Acq On : 12 Jul 2007 23:42  
 Sample : JPL45-005  
 Misc : 5970L 980ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 16 14:39 2007

Vial: 19  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 16 14:33:35 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar )
1) 1,4-Dichlorobenzene-d4	7.09	152	15483	20.00	ng/ul	0.00	NA%
24) Naphthalene-d8	8.73	136	54372	20.00	ng/ul	-0.02	NA%
40) Acenaphthene-d10	11.09	164	27611	20.00	ng/ul	-0.02	NA%
68) Phenanthrene-d10	13.09	188	38213	20.00	ng/ul	-0.02	NA%
82) Chrysene-d12	17.65	240	20423	20.00	ng/ul	-0.02	NA%
92) Perylene-d12	21.33	264	11361	20.00	ng/ul	0.00	NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.49	112	59858	59.58	ng/ul	0.00	
Spiked Amount	75.000	Range	20 - 110	Recovery	=	79.44%	
7) Phenol-d5	6.62	99	84790	60.04	ng/ul	0.00	
Spiked Amount	75.000	Range	10 - 115	Recovery	=	80.05%	
11) 2-Chlorophenol-d4	6.80	132	71816	63.88	ng/ul	0.00	
Spiked Amount	75.000	Range	48 - 117	Recovery	=	85.17%	
15) 1,2-Dichlorobenzene-d4	7.28	152	25250	33.56	ng/ul	0.00	
Spiked Amount	50.000	Range	38 - 82	Recovery	=	67.12%	
25) Nitrobenzene-d5	7.80	82	55696	42.42	ng/ul	0.00	
Spiked Amount	50.000	Range	40 - 110	Recovery	=	84.84%	
46) 2-Fluorobiphenyl	10.18	172	87490	38.19	ng/ul	0.00	
Spiked Amount	50.000	Range	50 - 100	Recovery	=	76.38%	
72) 2,4,6-Tribromophenol	12.16	330	14004	54.31	ng/ul	-0.02	
Spiked Amount	75.000	Range	40 - 125	Recovery	=	72.41%	
85) Terphenyl-d14	15.49	244	63030	41.62	ng/ul	0.00	
Spiked Amount	50.000	Range	50 - 135	Recovery	=	83.24%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	3.42	88	470	1.11	ng/ul#	56
3) N-nitrosodimethylamine	3.60	74	66	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	6.62	77	144	N.D.		
8) Phenol	6.63	94	92	N.D.		
9) Aniline	6.80	93	117	N.D.		
10) Bis(2-Chloroethyl)ether	6.80	93	117	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\LOUIE\071207J\L0712019.D  
 Acq On : 12 Jul 2007 23:42  
 Sample : JPL45-005  
 Misc : 5970L 980ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 16 14:39 2007

Vial: 19  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 16 14:33:35 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
12) 2-Chlorophenol	0.00	128	0		N.D.	
13) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
14) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
16) Benzyl alcohol	7.28	108	194		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	7.28	108	194		N.D.	
19) Bis(2-chloroisopropyl) ethe	7.39	45	536		N.D.	
20) 3 & 4-Methylphenol	0.00	108	0		N.D.	
21) Acetophenone	7.59	105	55		N.D.	
22) n-Nitroso-di-n-propylamine	0.00	70	0		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	7.80	77	209		N.D.	
27) Isophorone	8.23	82	77		N.D.	
28) 2-Nitrophenol	0.00	139	0		N.D.	
29) 2,4-Dimethylphenol	0.00	107	0		N.D.	
30) bis(2-Chloroethoxy)methane	0.00	93	0		N.D.	
31) Benzoic acid	0.00	105	0		N.D.	d
32) 2,4-Dichlorophenol	0.00	162	0		N.D.	
33) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
34) Naphthalene	0.00	128	0		N.D.	
35) 4-Chloroaniline	0.00	127	0		N.D.	
36) Hexachlorobutadiene	0.00	225	0		N.D.	
37) Caprolactam	0.00	113	0		N.D.	
38) 4-Chloro-3-methylphenol	0.00	107	0		N.D.	
39) 2-Methylnaphthalene	0.00	142	0		N.D.	
41) 1-Methylnaphthalene	0.00	142	0		N.D.	
42) Hexachlorocyclopentadiene	0.00	237	0		N.D.	
43) 1,2,4,5-Tetrachlorobenzene	0.00	216	0		N.D.	
44) 2,4,6-Trichlorophenol	0.00	196	0		N.D.	
45) 2,4,5-Trichlorophenol	0.00	196	0		N.D.	
47) 1,1'-Biphenyl	10.18	154	150		N.D.	
48) 2-Chloronaphthalene	0.00	162	0		N.D.	
49) 2-Nitroaniline	0.00	65	0		N.D.	
50) Dimethylphthalate	0.00	163	0		N.D.	
51) 1,4-Dinitrobenzene	0.00	168	0		N.D.	
52) 1,3-Dinitrobenzene	0.00	168	0		N.D.	
53) 2,6-Dinitrotoluene	10.78	165	31		N.D.	
54) Acenaphthylene	0.00	152	0		N.D.	
55) 1,2-Dinitrobenzene	0.00	168	0		N.D.	
56) 3-Nitroaniline	0.00	138	0		N.D.	
57) Acenaphthene	0.00	153	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 L0712019.D L8270.M Mon Jul 16 14:39:26 2007

Quantitation Report

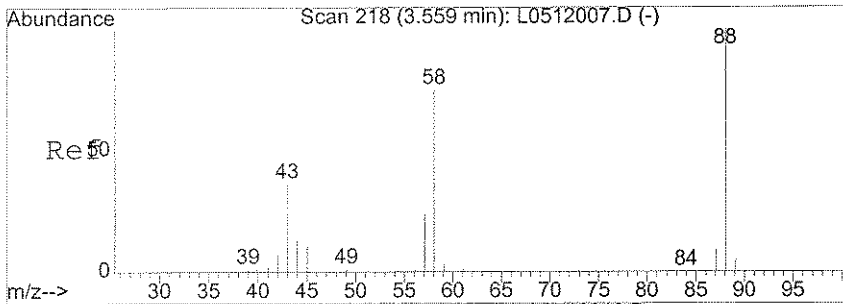
Data File : X:\MSABN\LOUIE\071207J\L0712019.D  
 Acq On : 12 Jul 2007 23:42  
 Sample : JPL45-005  
 Misc : 5970L 980ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 16 14:39 2007

Vial: 19  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

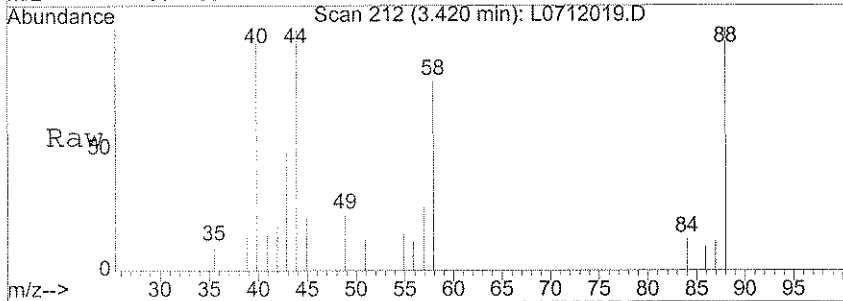
Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 16 14:33:35 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	11.09	109	53		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	11.66	149	170		N.D.	
65) Fluorene	0.00	166	0		N.D.	
66) 4-Chlorophenyl-phenylether	0.00	204	0		N.D.	
67) 4-Nitroaniline	0.00	138	0		N.D.	
69) 4,6-Dinitro-2-methylphenol	0.00	198	0		N.D.	
70) N-nitrosodiphenylamine	12.16	169	527		N.D.	
71) 1,2-Diphenylhydrazine	12.16	77	69		N.D.	
73) 4-Bromophenyl-phenylether	0.00	248	0		N.D.	
74) Hexachlorobenzene	0.00	284	0		N.D.	
75) Atrazine	0.00	200	0		N.D.	
76) Pentachlorophenol	0.00	266	0		N.D.	
77) Phenanthrene	0.00	178	0		N.D.	
78) Anthracene	0.00	178	0		N.D.	
79) Carbazole	0.00	167	0		N.D.	
80) Di-n-butylphthalate	13.88	149	654		N.D.	
81) Fluoranthene	0.00	202	0		N.D.	
83) Benzidine	0.00	184	0		N.D.	
84) Pyrene	0.00	202	0		N.D.	
86) Butylbenzylphthalate	0.00	149	0		N.D.	
87) Bis(2-ethylhexyl)adipate	0.00	129	0		N.D.	
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	0.00	228	0		N.D.	
90) bis(2-Ethylhexyl)phthalate	17.70	149	78		N.D.	
91) Chrysene	0.00	228	0		N.D.	
93) Di-n-octylphthalate	0.00	149	0		N.D.	
94) Benzo[b]fluoranthene	0.00	252	0		N.D.	
95) Benzo[k]fluoranthene	0.00	252	0		N.D.	
96) Benzo[a]pyrene	0.00	252	0		N.D.	
97) Indeno[1,2,3-cd]pyrene	0.00	276	0		N.D.	
98) Dibenz[a,h]anthracene	0.00	278	0		N.D.	
99) Benzo[g,h,i]perylene	0.00	276	0		N.D.	

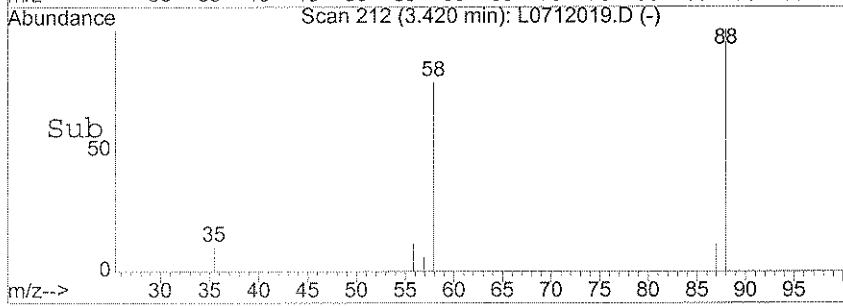
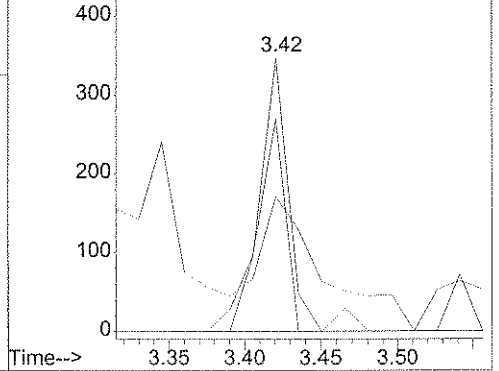


#2  
 1,4-Dioxane  
 Concen: 1.11 ng/ul  
 RT: 3.42 min Scan# 212  
 Delta R.T. 0.01 min  
 Lab File: L0712019.D  
 Acq: 12 Jul 2007 23:42

Tgt Ion	Resp	Lower	Upper
88	470		
88	100		
43	110.2	33.6	50.4#
58	76.0	70.6	105.8



Abundance  
 Ion 88.00 (87.70 to 88.70): L0712019.D  
 Ion 43.00 (42.70 to 43.70): L0712019.D  
 Ion 58.00 (57.70 to 58.70): L0712019.D



**Metals Data**

**JPL45**

## COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL45

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-24-5</u>	<u>JPL45-001</u>
<u>MW-24-4</u>	<u>JPL45-002</u>
<u>MW-24-3</u>	<u>JPL45-003</u>
<u>MW-24-2</u>	<u>JPL45-004</u>
<u>MW-24-1</u>	<u>JPL45-005</u>
<u>EB-12-6/28/07</u>	<u>JPL45-006</u>

Were ICP interelement corrections applied? Yes/No YESWere ICP background corrections applied? Yes/No NOIf yes-was raw data generated before application of background corrections? Yes/No NOComments:  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Sheronne OrainDate: 07/23/2007Title: Metals Lead

## **Metals Analysis Data Sheets**



## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-5

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL45Matrix (soil/water): WaterLab Sample ID: JPL45-001Level (low/med): LOWDate Received: 06/29/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.40			M	R019758
7440-70-2	Calcium	36800			P	R019716
7440-47-3	Chromium	3.89			M	R019758
7439-89-6	Iron	100	U		P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	9060			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	42300			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-4

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL45Matrix (soil/water): WaterLab Sample ID: JPL45-002Level (low/med): LOWDate Received: 06/29/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.51			M	R019758
7440-70-2	Calcium	9290			P	R019716
7440-47-3	Chromium	1.29			M	R019758
7439-89-6	Iron	100	U		P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	9610			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	47900			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No
 Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL45

Matrix (soil/water): Water

Lab Sample ID: JPL45-003

Level (low/med): LOW

Date Received: 06/29/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.81			M	R019758
7440-70-2	Calcium	24200			P	R019716
7440-47-3	Chromium	5.93			M	R019758
7439-89-6	Iron	361			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	13500			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	47100			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL45

Matrix (soil/water): Water

Lab Sample ID: JPL45-004

Level (low/med): LOW

Date Received: 06/29/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.34			M	R019758
7440-70-2	Calcium	43400			P	R019716
7440-47-3	Chromium	3.43			M	R019758
7439-89-6	Iron	255			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	13100			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	46700			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL45

Matrix (soil/water): Water

Lab Sample ID: JPL45-005

Level (low/med): LOW

Date Received: 06/29/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	56300			P	R019716
7440-47-3	Chromium	3.28			M	R019758
7439-89-6	Iron	1820			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	16300			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	27600			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-12-6/28/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL45

Matrix (soil/water): Water

Lab Sample ID: JPL45-006

Level (low/med): LOW

Date Received: 06/29/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	5000	U		P	R019716
7440-47-3	Chromium	1.00	U		M	R019758
7439-89-6	Iron	100	U		P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	5000	U		P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	5000	U		P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL45**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL45

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-24-5</u>	<u>JPL45-001</u>
<u>MW-24-5D</u>	<u>JPL45-001D</u>
<u>MW-24-4</u>	<u>JPL45-002</u>
<u>MW-24-3</u>	<u>JPL45-003</u>
<u>MW-24-2</u>	<u>JPL45-004</u>
<u>MW-24-1</u>	<u>JPL45-005</u>
<u>MW-24-1MS</u>	<u>JPL45-005MS</u>
<u>MW-24-1MSD</u>	<u>JPL45-005MSD</u>
<u>EB-12-6/28/07</u>	<u>JPL45-006</u>


Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7/20/07

Title: Inorganics Lead



## **Inorganic Analysis Data Sheets**





**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL45  
**Sample Number:** MW-24-3 **Date/Time Collected:** 06/28/2007 09:04  
**Lab Sample ID:** JPL45-003 **Date/Time Received:** 06/29/2007 08:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.4		0.10	0.10	06/29/2007	06/29/2007	R019130

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	220		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	1	14		1.0	0.17	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	15		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	12		8	8	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	140		8	8	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/11/2007	07/12/2007	R019436

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/17/2007	07/17/2007	R019623
Total Nitrate / Nitrite	N+N	1	0.050	U	0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/30/2007	06/30/2007	R019278

**Laucks Testing Laboratories, Inc.**

Final Results

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL45  
**Sample Number:** MW-24-2 **Date/Time Collected:** 06/28/2007 09:39  
**Lab Sample ID:** JPL45-004 **Date/Time Received:** 06/29/2007 08:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	06/29/2007	06/29/2007	R019130

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	300		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	2.0		0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	24		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	42		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/05/2007	07/05/2007	R019288
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	150		8	8	07/05/2007	07/05/2007	R019288

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	43		2.0	0.28	07/11/2007	07/12/2007	R019436

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	2		0.5	0.01	07/17/2007	07/17/2007	R019623
Total Nitrate / Nitrite	N+N	1	1.9		0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/30/2007	06/30/2007	R019278

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL45  
**Sample Number:** MW-24-1 **Date/Time Collected:** 06/28/2007 10:23  
**Lab Sample ID:** JPL45-005 **Date/Time Received:** 06/29/2007 08:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.2		0.10	0.10	06/29/2007	06/29/2007	R019130

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	300		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.4		0.040	0.055	07/06/2007	07/07/2007	R019314
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.017	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	42		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	36		2.0	0.76	07/06/2007	07/07/2007	R019314
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.33	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	150		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	20	970		20	2.8	07/12/2007	07/13/2007	R019504

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1		0.5	0.01	07/17/2007	07/17/2007	R019623
Total Nitrate / Nitrite	N+N	1	1.4		0.050	0.016	07/02/2007	07/02/2007	R019157

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0073		0.0050	0.0012	06/30/2007	06/30/2007	R019278

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring  
SDG Number: JPL45  
Sample Number: MW-24-1 Date/Time Collected: 06/28/2007 10:23  
Lab Sample ID: JPL45-005 Date/Time Received: 06/29/2007 08:10  
Method: E365.2 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Phosphorus, Orthophosphate (as P)	7723-14-0	1	0.010	U	0.010	0.0025	06/30/2007	06/30/2007	R019310





**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL46**

**JULY 23, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL46  
Date of Report: July 23, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-11-5	JPL46-001	VOA/MET/INO
MW-11-4	JPL46-002	VOA/MET/INO
MW-11-3	JPL46-003	VOA/MET/INO
MW-11-2	JPL46-004	VOA/MET/INO
MW-11-1	JPL46-005	VOA/MET/INO/ANIONS
EB-13-6/29/07	JPL46-006	VOA/MET/INO
TB-13-6/29/07	JPL46-007	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Nitrate + Nitrite (353.2)  
Nitrate (353.2)  
Nitrite (354.1)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)  
ANIONS = Chloride, Nitrate, Nitrite, Sulfate, Ortho phosphorus (300.0)

### **Sample Receipt Comments:**

One of three VOA vials for EB-13-6/29/07 was received broken.

One of three VOA vials for EB-13-6/29/07 and one of two VOA vials for TB-13-6/29/07 contained an air bubbles greater than ¼ inch in size.

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### GENERAL REMARKS ON ORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### Holding Time Compliance:

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

#### Volatiles Fraction:

##### Continuing Calibration Verification (CCV):

In the CCV performed on 07/10/2007 the percent difference value for 2-butanone and 4-methyl-2-pentanone exceeded 30% due to increased response. These analytes were not detected in any associated samples; no further action was taken.

##### Method Blank

Analysis of the method blank performed on 07/10/2007 resulted in the detection of methylene chloride. The presence of this analyte may be due to laboratory contamination since it is a common laboratory solvent. All sample results reported for this analyte have been "B" flagged to denote its presence in the associated method blank analysis.

##### Quality Control Analyses:

Analysis of the blank spike performed on 07/10/2007 yielded recoveries for 2-butanone and 4-methyl-2-pentanone that exceeded the control limit. All other analytes were within the control limits; no further action was taken.

### GENERAL REMARKS ON INORGANIC ANALYSES:

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

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### ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

#### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

#### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Nitrite	48 hours	None
Nitrate + Nitrite	28 days	None
Ortho phosphorus	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

All samples were analyzed past their holding time for nitrate by method 300.0. When the samples were received the anion instrument was not functioning properly. When the samples were received an aliquot was split and preserved with sulfuric acid for NO<sub>3</sub>/NO<sub>2</sub> analysis. The samples were analyzed within the 48 hour hold time by method 354.1 for nitrite and within the 28 day holding time for NO<sub>3</sub>/NO<sub>2</sub> by method 353.2. The nitrate was then calculated from the difference. Ortho phosphorus was analyzed by method 365.2. The final results include data from all methods, and all raw data are included in the data package.

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### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

Samples in this SDG (JPL46) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate samples and serial dilution samples apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL44 or the raw data provided.

For run sequence R019749, the matrix spike and matrix spike duplicate for sample MW-23-1, for SDG JPL44, fell outside of the calibration range for the element calcium. Because the MS/MSD recoveries fall within ten percent of the control limits, no further action was taken. Data have been reported as is. Data have have not been flagged for these events.

The serial dilution for the element potassium did not agree within 10% of the original determination after correction for dilution for sample MW-23-1 for SDG JPL44. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### Miscellaneous Inorganics:

For run sequence R019278, the matrix spike and matrix spike duplicate relative percent difference was outside the established control limits for the nitrite analysis. All other quality control elements were within control limits. Therefore, no further action was taken.

For run sequence R019314, the matrix spike recovery was outside the established control limits for the sulfate analysis. All other quality control elements were within control limits for sulfate. Therefore, no further action was taken.

For run sequence R019314, the blank spike recovery fell outside the established control limits for the nitrite analysis. All other quality control elements for nitrite are within control limits. Therefore, no further action was taken.

For run sequence R019568, the matrix spike and matrix spike duplicate recoveries were outside the established control limits for the nitrate + nitrite analysis. All other quality control elements were within control limits. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
- J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
- E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
- C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- Z When two or more sets of results are submitted, the Z-flagged data indicates that this is the secondary result.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

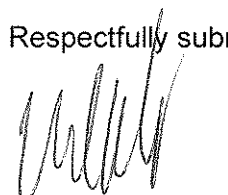
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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,

  
Mike Baxter  
Project Manager

28 July 2007  
(DATE)

  
Harry Romberg  
Quality Assurance Officer

7/23/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.



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**ATTACHMENT A**

Chain-of-Custody Copies

**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 Low Level NO3, NO2, Cl, SO4, OPO4	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	353.2 Nitrate (as N) by Calc., water	353.2 Nitrate + Nitrite (as N), Water	354.1 Nitrite (as N), Water	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL46-001	06/30/2007 09:10 AM	06/29/2007 08:08 AM	MW-11-5	A-	A-	IN	IN		IN	IN	IN	IN	IN	IN	IN	A-
JPL46-002	06/30/2007 09:10 AM	06/29/2007 07:39 AM	MW-11-4	A-	A-	IN	IN		IN	IN	IN	IN	IN	IN	IN	A-
JPL46-003	06/30/2007 09:10 AM	06/29/2007 09:05 AM	MW-11-3	A-	A-	IN	IN		IN	IN	IN	IN	IN	IN	IN	A-
JPL46-004	06/30/2007 09:10 AM	06/29/2007 09:39 AM	MW-11-2	A-	A-	IN	IN		IN	IN	IN	IN	IN	IN	IN	A-
JPL46-005	06/30/2007 09:10 AM	06/29/2007 10:20 AM	MW-11-1	A-	A-	IN	IN	IN		IN	IN	IN	IN	IN	IN	A-
JPL46-006	06/30/2007 09:10 AM	06/29/2007 10:00 AM	EB-13-6/29/07	A-	A-	IN	IN		IN	IN	IN	IN	IN	IN	IN	A-
JPL46-007	06/30/2007 09:10 AM	06/29/2007 12:00 AM	TB-13-6/29/07												IN	

Approved By: *[Signature]*

On: *7/5/07*

Samples identified with a '\*' client has requested QC for

**LEGEND:** -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged  
**FORM LTL-PM-8-0**





**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL46  
Cooler: AAP015  
Temperatures: 5.6  
COC #: 42851

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL46-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
	0006	40 ml OTWS, clear glass, HCl	N/C	None
JPL46-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL46-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL46-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL46-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL46-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	500 ml cylinder, poly, HNO3	<2	N/A
JPL46-007	0002	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	> 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL46

Cooler: AAP015

Temperatures: 5.6

COC #: 42851

Sample	Bottle #	Bottle Description	pH	Bubbles
--------	----------	--------------------	----	---------

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**  
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**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL46**

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Completed and checked by:

Judy Ecklund

Date:

7/24/07



**SAMPLE DATA**

SDG JPL46

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-001  
 Lab File ID: Y0710022.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-001  
 Lab File ID: Y0710022.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
10061-02-	trans-1,3-Dichloropropene	0.50		U
79-00-5	1,1,2-Trichloroethane	0.50		U
127-18-4	Tetrachloroethene	0.50		U
142-28-9	1,3-Dichloropropane	0.50		U
124-48-1	Dibromochloromethane	0.50		U
106-93-4	1,2-Dibromoethane	0.50		U
108-90-7	Chlorobenzene	0.50		U
100-41-4	Ethylbenzene	0.50		U
630-20-6	1,1,1,2-Tetrachloroethane	0.50		U
179601-23	m,p-Xylene	1.0		U
95-47-6	o-Xylene	0.50		U
100-42-5	Styrene	0.50		U
75-25-2	Bromoform	0.50		U
98-82-8	Isopropylbenzene	0.50		U
79-34-5	1,1,2,2-Tetrachloroethane	0.50		U
103-65-1	n-Propylbenzene	0.50		U
108-86-1	Bromobenzene	0.50		U
96-18-4	1,2,3-Trichloropropane	0.50		U
95-49-8	2-Chlorotoluene	0.50		U
108-67-8	1,3,5-Trimethylbenzene	0.50		U
106-43-4	4-Chlorotoluene	0.50		U
98-06-6	tert-Butylbenzene	0.50		U
95-63-6	1,2,4-Trimethylbenzene	0.50		U
135-98-8	sec-Butylbenzene	0.50		U
99-87-6	4-Isopropyltoluene	0.50		U
541-73-1	1,3-Dichlorobenzene	0.50		U
106-46-7	1,4-Dichlorobenzene	0.50		U
104-51-8	n-Butylbenzene	0.50		U
95-50-1	1,2-Dichlorobenzene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-5

Lab Name: \_\_\_\_\_

SDG No.: JPL46

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019410

Lab Sample ID: JPL46-001

Lab File ID: Y0710022.D

Date Collected: 06/29/2007

Date/Time Analyzed: 07/10/2007 09:00

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

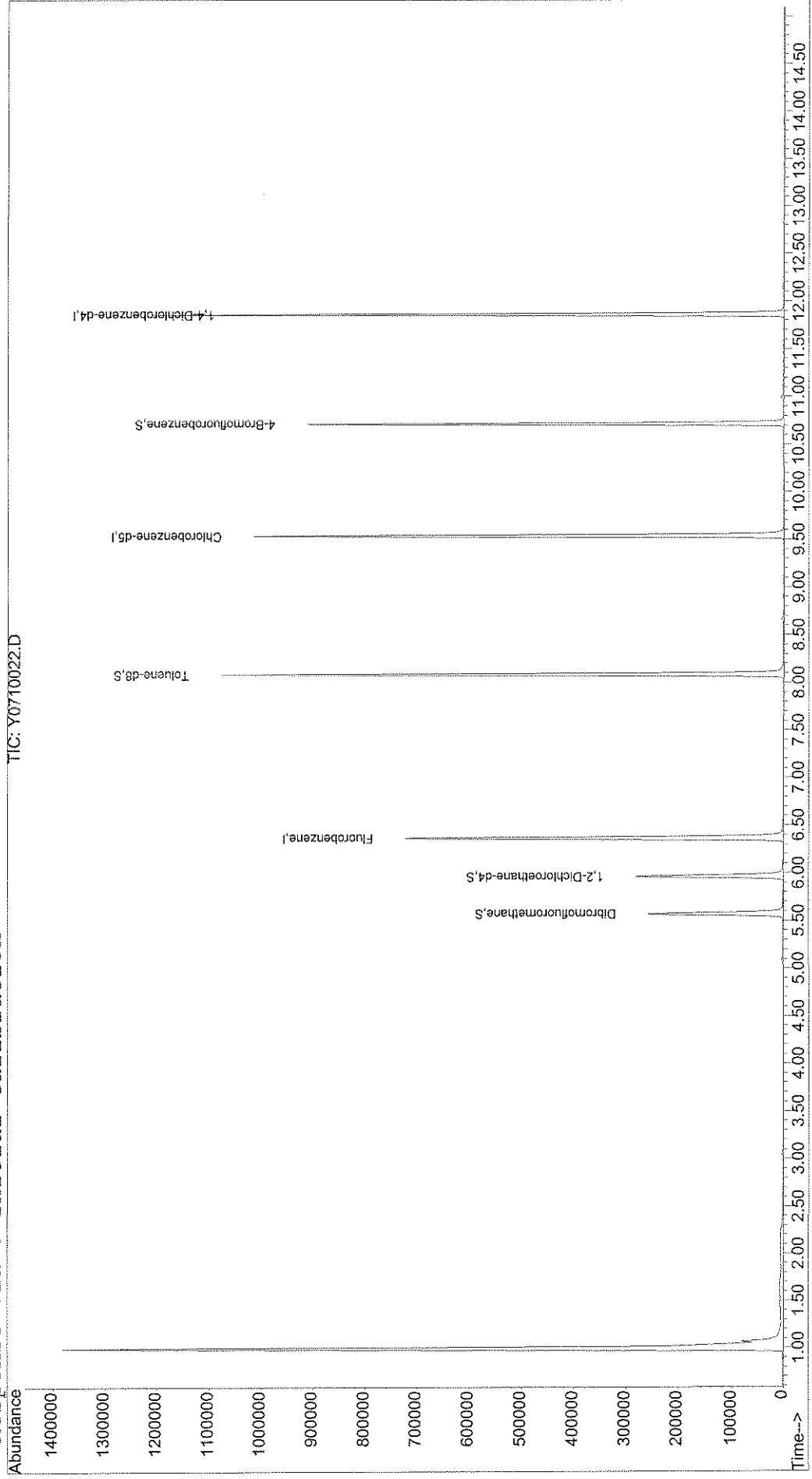
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710022.D  
Acq On : 10 Jul 2007 21:16  
Sample : JPL46-001  
Misc : #3 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:44 2007  
Vial: 41  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710022.D  
 Acq On : 10 Jul 2007 21:16  
 Sample : JPL46-001  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:44 2007

Vial: 41  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	637204	50.00	ug/l	0.00	102.31%
54) Chlorobenzene-d5	9.53	82	288894	50.00	ug/l	0.00	99.48%
74) 1,4-Dichlorobenzene-d4	11.86	152	286117	50.00	ug/l	0.00	92.62%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	170804	48.37	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.74%	
40) 1,2-Dichloroethane-d4	5.96	65	208084	50.64	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.28%	
55) Toluene-d8	8.08	98	655085	50.64	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	101.28%	
76) 4-Bromofluorobenzene	10.71	95	261069	51.97	ug/l	0.00	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.68	76	284	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0710022.D 8260B.M Wed Jul 11 10:44:32 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710022.D  
 Acq On : 10 Jul 2007 21:16  
 Sample : JPL46-001  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:44 2007

Vial: 41  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	337		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	118		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	135		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.54	91	1000		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	63		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710022.D  
 Acq On : 10 Jul 2007 21:16  
 Sample : JPL46-001  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:44 2007

Vial: 41  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	71		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	64		N.D.	
73) Isopropylbenzene	10.57	105	139		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	139		N.D.	
82) 4-Chlorotoluene	11.16	91	127		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	210		N.D.	
86) sec-butylbenzene	11.70	105	84		N.D.	
87) 1,3-Dichlorobenzene	11.87	146	60		N.D.	
88) 4-Isopropyltoluene	11.85	119	567		N.D.	
89) 1,4-Dichlorobenzene	11.87	146	60		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	495		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-002  
 Lab File ID: Y0710023.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-002  
 Lab File ID: Y0710023.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL46-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/29/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

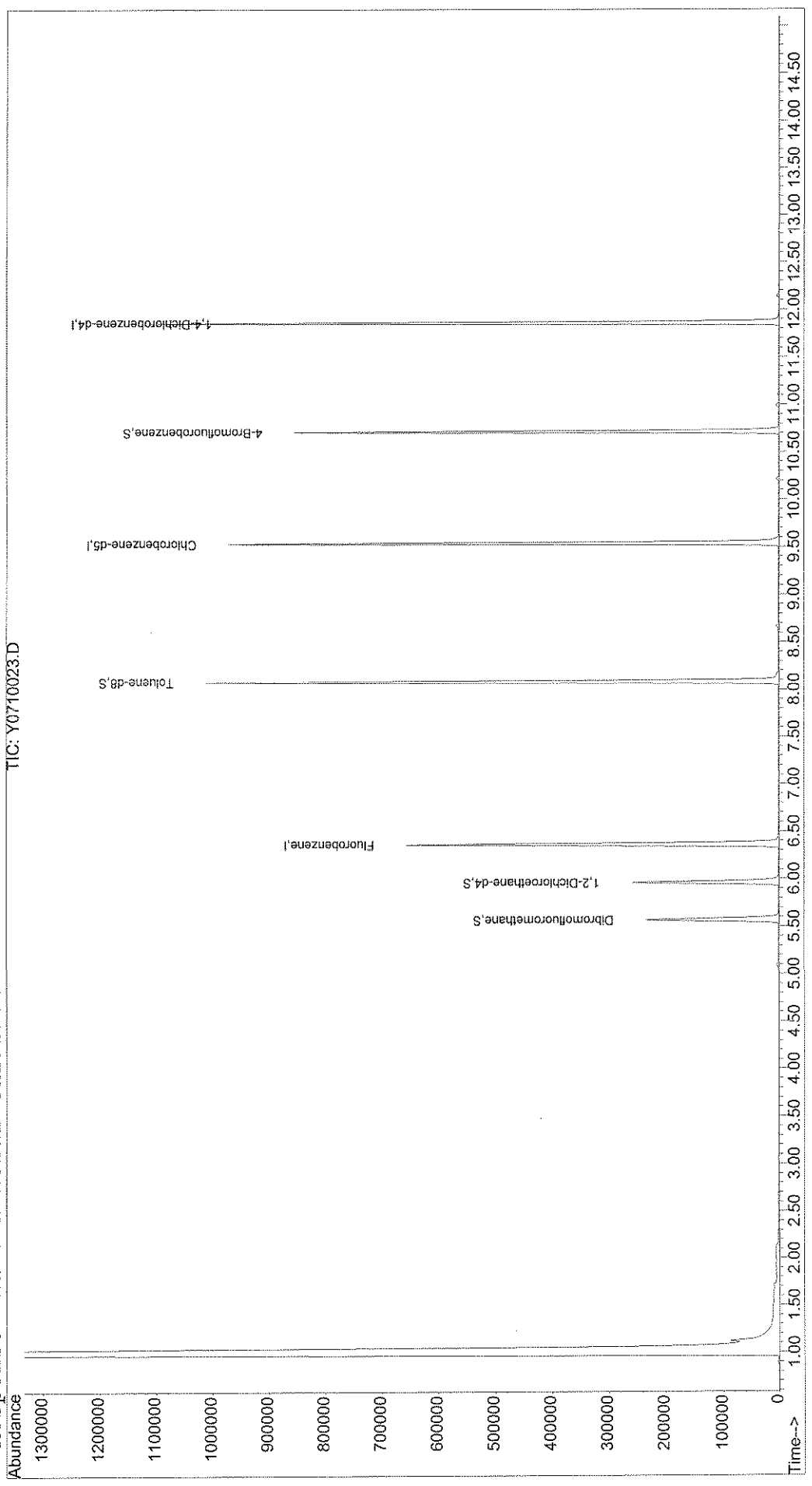
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710023.D  
Acq On : 10 Jul 2007 21:43  
Sample : JPL46-002  
Misc : #4 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:45 2007  
Vial: 42  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710023.D  
 Acq On : 10 Jul 2007 21:43  
 Sample : JPL46-002  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:45 2007

Vial: 42  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	563986	50.00	ug/l	0.00 90.56%
54) Chlorobenzene-d5	9.53	82	271393	50.00	ug/l	0.00 93.45%
74) 1,4-Dichlorobenzene-d4	11.86	152	272117	50.00	ug/l	0.00 88.09%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	150965	48.30	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.60%
40) 1,2-Dichloroethane-d4	5.96	65	186214	51.20	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.40%
55) Toluene-d8	8.08	98	602551	49.59	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.18%
76) 4-Bromofluorobenzene	10.71	95	243102	50.89	ug/l	0.00

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.28	50	64	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.68	76	1838	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	3.40	53	115	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710023.D  
 Acq On : 10 Jul 2007 21:43  
 Sample : JPL46-002  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:45 2007

Vial: 42  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	196		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	272		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	265		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	109		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	7.66	63	61		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	289		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	432		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710023.D  
 Acq On : 10 Jul 2007 21:43  
 Sample : JPL46-002  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:45 2007

Vial: 42  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	88		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	2221		N.D.	
72) Bromoform	10.38	173	133		N.D.	
73) Isopropylbenzene	10.56	105	172		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	56		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	11.05	91	96		N.D.	
82) 4-Chlorotoluene	11.15	91	57		N.D.	
83) 1,3,5-Trimethylbenzene	11.15	105	113		N.D.	
84) tert-Butylbenzene	11.48	119	116		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	334		N.D.	
86) sec-butylbenzene	11.70	105	187		N.D.	
87) 1,3-Dichlorobenzene	11.89	146	162		N.D.	
88) 4-Isopropyltoluene	11.85	119	327		N.D.	
89) 1,4-Dichlorobenzene	11.89	146	162		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	434		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-003  
 Lab File ID: Y0710024.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-003  
 Lab File ID: Y0710024.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-003  
 Lab File ID: Y0710024.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

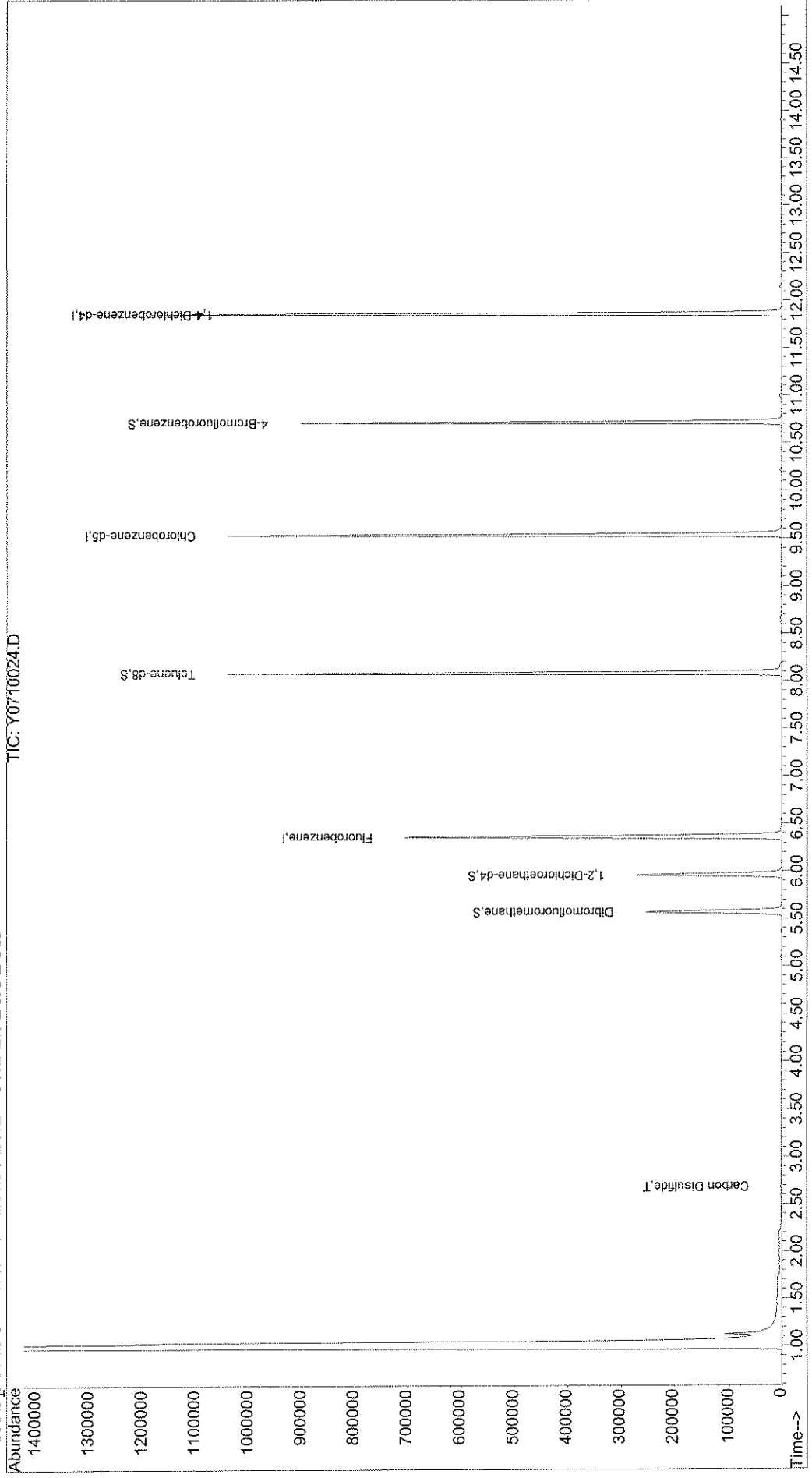
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710024.D  
Acq On : 10 Jul 2007 22:08  
Sample : JPL46-003  
Misc : #3 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:46 2007  
Vial: 43  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710024.D  
 Acq On : 10 Jul 2007 22:08  
 Sample : JPL46-003  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:46 2007

Vial: 43  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	6.37	96	614356	50.00	ug/l	0.00	98.64%
54) Chlorobenzene-d5	9.54	82	284170	50.00	ug/l	0.00	97.85%
74) 1,4-Dichlorobenzene-d4	11.86	152	282396	50.00	ug/l	0.00	91.41%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	164792	48.40	ug/l	0.01	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.80%	
40) 1,2-Dichloroethane-d4	5.96	65	200280	50.55	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.10%	
55) Toluene-d8	8.08	98	624802	49.10	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.20%	
76) 4-Bromofluorobenzene	10.71	95	258608	52.16	ug/l	0.00	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	1.71	64	73		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.69	76	3294	0.38	ug/l	100
15) Allyl chloride	2.85	76	129		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

W 7/11/07

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710024.D  
 Acq On : 10 Jul 2007 22:08  
 Sample : JPL46-003  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:46 2007

Vial: 43  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	508		N.D.	
34) Chloroform	5.37	83	54		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	226		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	61		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	318		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	868		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	580		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

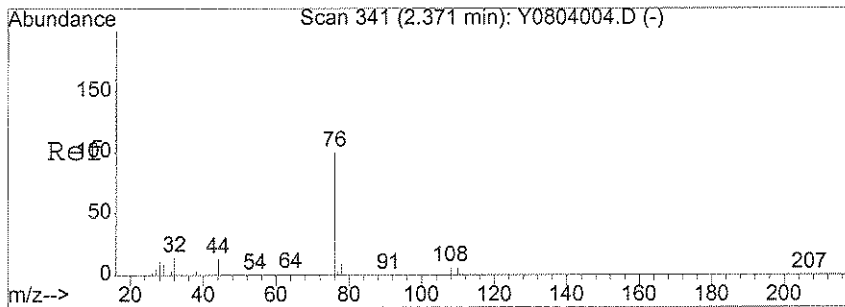
Data File : X:\MSVOA\YODA\071007\Y0710024.D  
 Acq On : 10 Jul 2007 22:08  
 Sample : JPL46-003  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:46 2007

Vial: 43  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

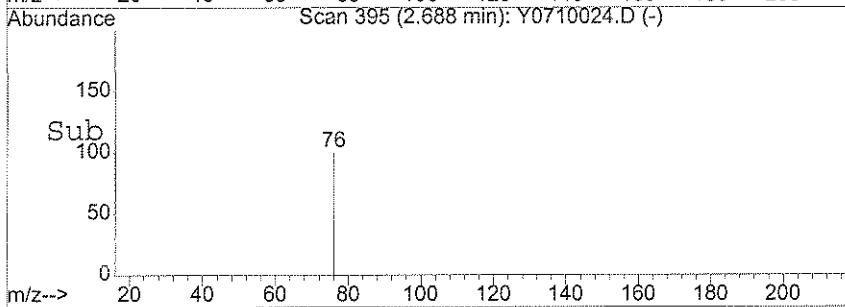
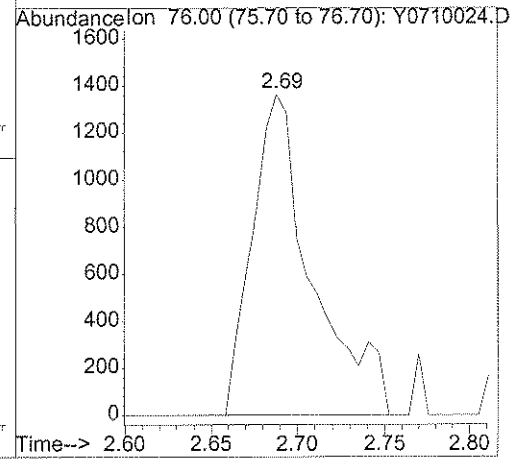
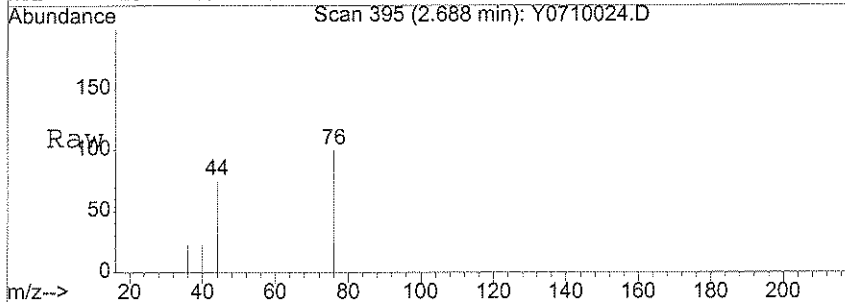
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	72		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	1786		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.56	105	54		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.70	110	54		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	11.05	91	116		N.D.	
82) 4-Chlorotoluene	11.17	91	68		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	109		N.D.	
86) sec-butylbenzene	11.70	105	217		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	464		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	551		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.84	180	66		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



#14  
 Carbon Disulfide  
 Concen: 0.38 ug/l  
 RT: 2.69 min Scan# 395  
 Delta R.T. 0.02 min  
 Lab File: Y0710024.D  
 Acq: 10 Jul 2007 22:08  
 Tgt Ion: 76 Resp: 3294



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-004  
 Lab File ID: Y0710025.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-004  
 Lab File ID: Y0710025.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-2

Lab Name: \_\_\_\_\_

SDG No.: JPL46

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019410

Lab Sample ID: JPL46-004

Lab File ID: Y0710025.D

Date Collected: 06/29/2007

Date/Time Analyzed: 07/10/2007 09:00

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

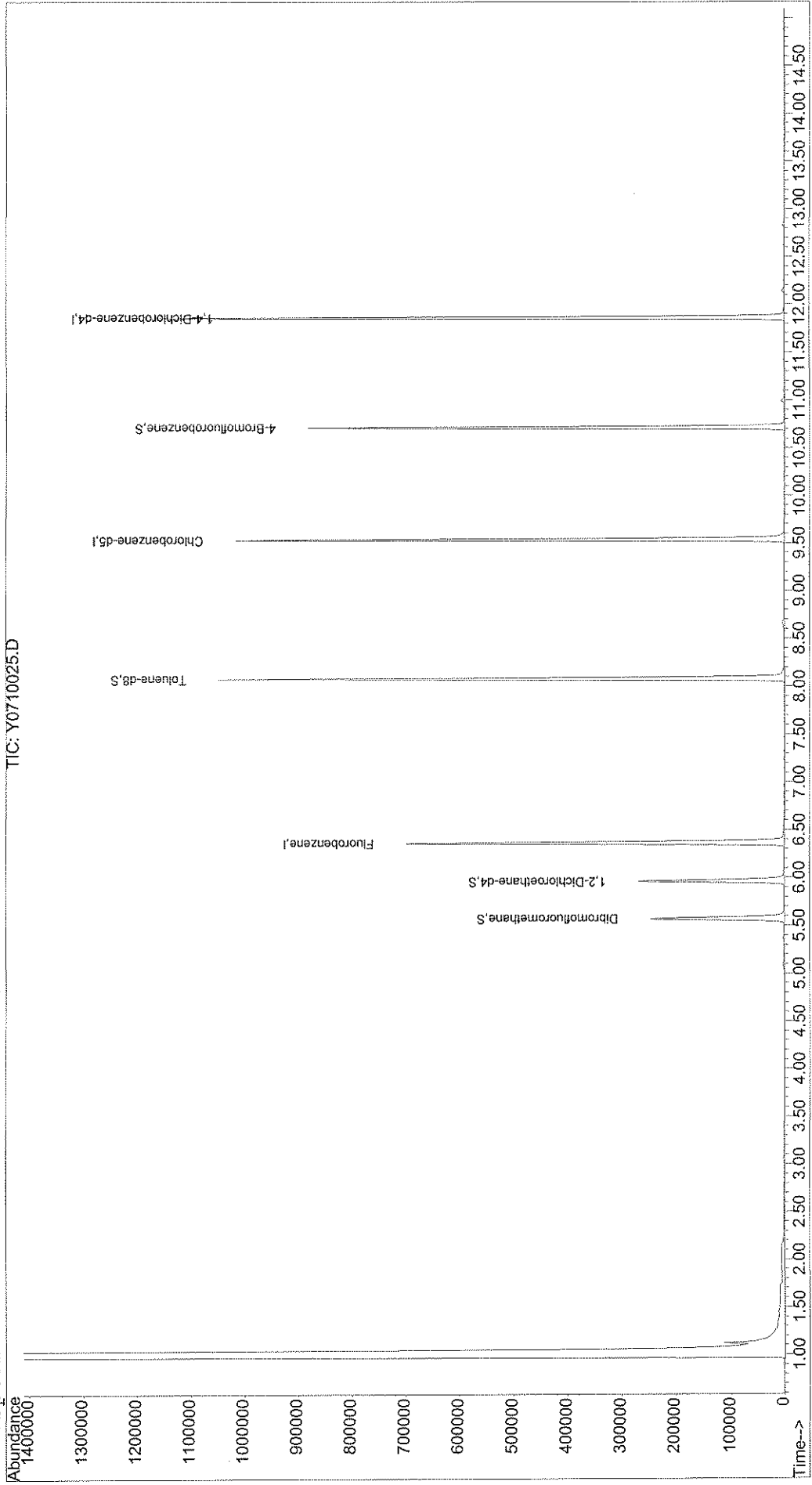
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710025.D  
Acq On : 10 Jul 2007 22:34 Vial: 44  
Sample : JPL46-004 Operator: DGA  
Misc : #3 5mL +IS/SS Inst : yoda  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jul 11 10:47 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710025.D  
 Acq On : 10 Jul 2007 22:34  
 Sample : JPL46-004  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:47 2007

Vial: 44  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	603483	50.00	ug/l	0.00	96.90%
54) Chlorobenzene-d5	9.53	82	283677	50.00	ug/l	0.00	97.68%
74) 1,4-Dichlorobenzene-d4	11.86	152	281556	50.00	ug/l	0.00	91.14%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	162290	48.52	ug/l	0.01	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.04%	
40) 1,2-Dichloroethane-d4	5.96	65	197853	50.84	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.68%	
55) Toluene-d8	8.08	98	621051	48.89	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.78%	
76) 4-Bromofluorobenzene	10.71	95	257654	52.12	ug/l	0.00	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	1.71	64	67	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.69	76	1567	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0710025.D 8260B.M Wed Jul 11 10:47:50 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710025.D  
 Acq On : 10 Jul 2007 22:34  
 Sample : JPL46-004  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:47 2007

Vial: 44  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.02	43	136		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	255		N.D.	
34) Chloroform	5.36	83	823		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.74	117	116		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	375		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	287		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.14	92	212		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	264		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710025.D  
 Acq On : 10 Jul 2007 22:34  
 Sample : JPL46-004  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:47 2007

Vial: 44  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	237		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	175		N.D.	
72) Bromoform	10.38	173	117		N.D.	
73) Isopropylbenzene	10.57	105	69		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	122		N.D.	
79) 1,2,3-Trichloropropane	10.72	110	58		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	164		N.D.	
82) 4-Chlorotoluene	10.97	91	164		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	140		N.D.	
86) sec-butylbenzene	11.70	105	164		N.D.	
87) 1,3-Dichlorobenzene	11.78	146	53		N.D.	
88) 4-Isopropyltoluene	11.85	119	513		N.D.	
89) 1,4-Dichlorobenzene	11.78	146	53		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	429		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-005  
 Lab File ID: Y0710026.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-005  
 Lab File ID: Y0710026.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-005  
 Lab File ID: Y0710026.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

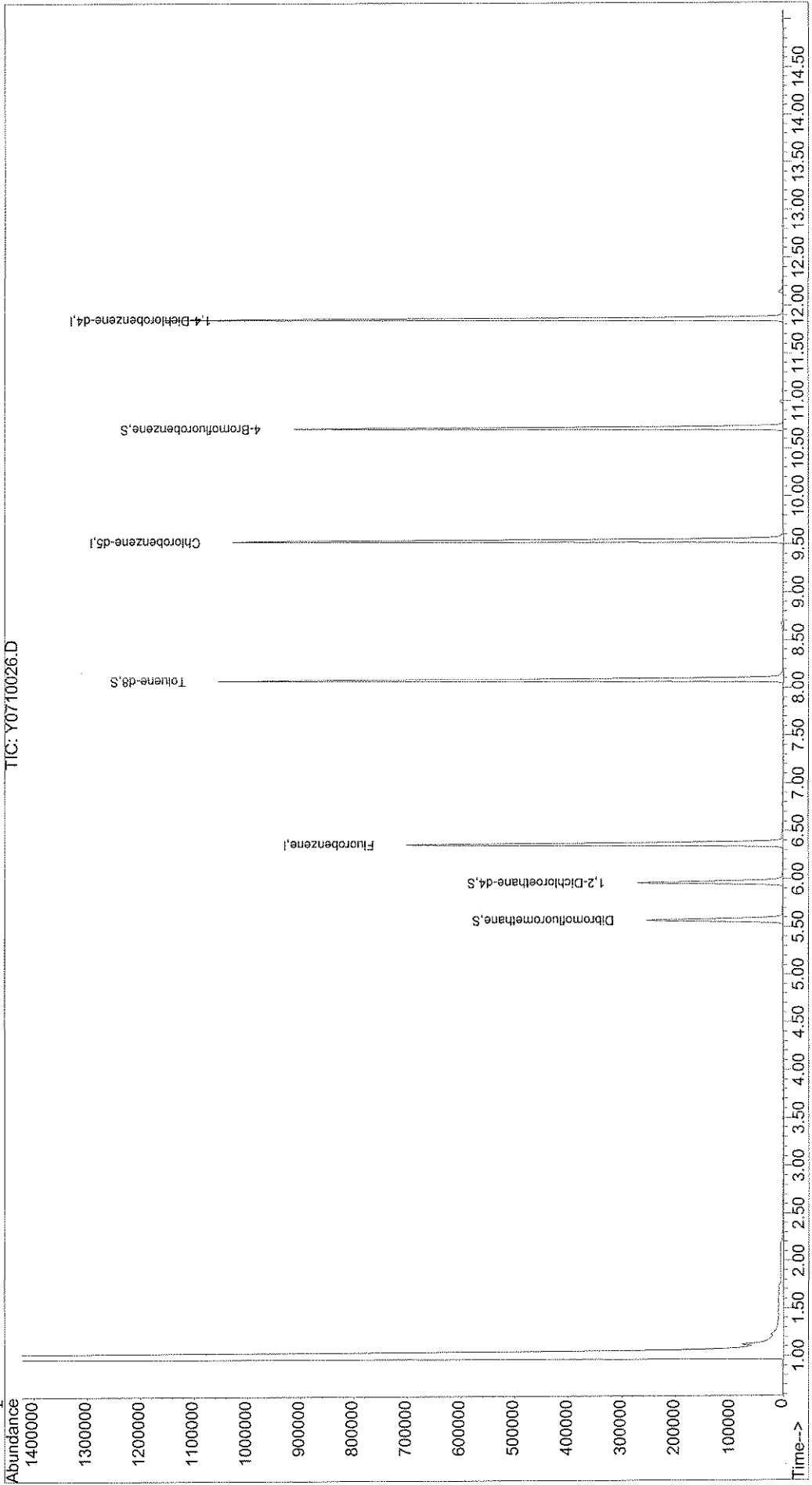
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710026.D Vial: 45  
Acq On : 10 Jul 2007 23:01 Operator: DGA  
Sample : JPL46-005 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:48 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710026.D  
 Acq On : 10 Jul 2007 23:01  
 Sample : JPL46-005  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:48 2007

Vial: 45  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.37	96	594924	50.00	ug/l	0.00 95.52%
54) Chlorobenzene-d5	9.53	82	286589	50.00	ug/l	0.00 98.68%
74) 1,4-Dichlorobenzene-d4	11.86	152	285367	50.00	ug/l	0.00 92.38%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	161589	49.01	ug/l	0.01
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.02%
40) 1,2-Dichloroethane-d4	5.97	65	199563	52.02	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	104.04%
55) Toluene-d8	8.08	98	624711	48.68	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.36%
76) 4-Bromofluorobenzene	10.71	95	262397	52.37	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	1.73	64	63		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.69	76	1343		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	3.49	73	63		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710026.D  
 Acq On : 10 Jul 2007 23:01  
 Sample : JPL46-005  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:48 2007

Vial: 45  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.04	43	311		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.38	41	118		N.D.	
34) Chloroform	5.38	83	455		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	478		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	195		N.D.	
46) Methylcyclohexane	6.97	83	72		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	482		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.95	43	53		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	55		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.81	91	600		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710026.D  
 Acq On : 10 Jul 2007 23:01  
 Sample : JPL46-005  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:48 2007

Vial: 45  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	122		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	261		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	98		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	11.05	91	55		N.D.	
82) 4-Chlorotoluene	11.16	91	165		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	216		N.D.	
86) sec-butylbenzene	11.69	105	232		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	54		N.D.	
88) 4-Isopropyltoluene	11.84	119	167		N.D.	
89) 1,4-Dichlorobenzene	11.79	146	54		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	483		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-13-6/29/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-006  
 Lab File ID: Y0710027.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-13-6/29/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-006  
 Lab File ID: Y0710027.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-13-6/29/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-006  
 Lab File ID: Y0710027.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

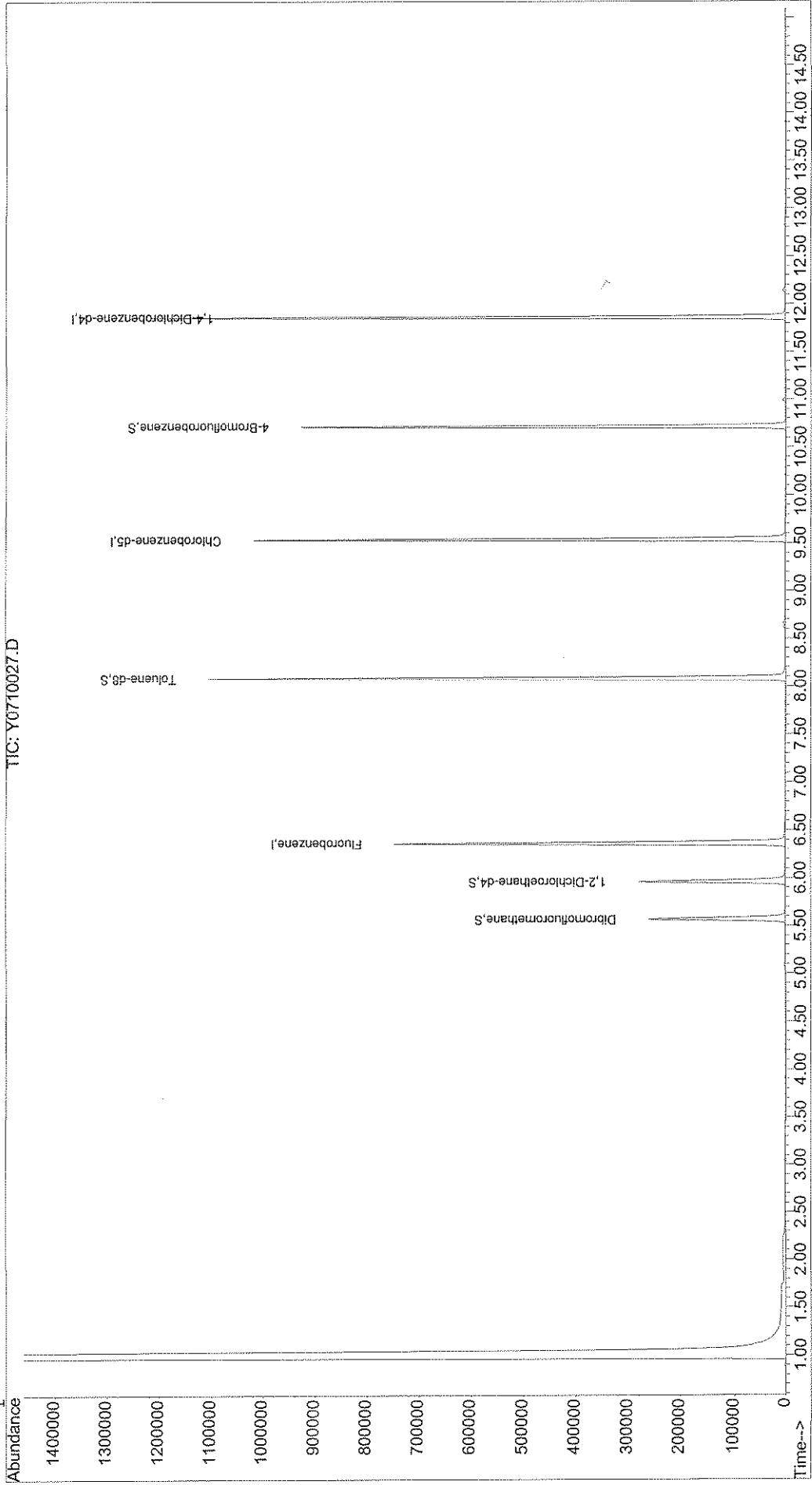
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710027.D  
Acq On : 10 Jul 2007 23:25  
Sample : JPL46-006  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:51 2007  
Vial: 46  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710027.D  
 Acq On : 10 Jul 2007 23:25  
 Sample : JPL46-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:51 2007

Vial: 46  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	629795	50.00	ug/l	0.00 101.12%
54) Chlorobenzene-d5	9.53	82	289898	50.00	ug/l	0.00 99.82%
74) 1,4-Dichlorobenzene-d4	11.86	152	287896	50.00	ug/l	0.00 93.19%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	167730	48.05	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.10%
40) 1,2-Dichloroethane-d4	5.96	65	207693	51.14	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.28%
55) Toluene-d8	8.08	98	644073	49.62	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.24%
76) 4-Bromofluorobenzene	10.71	95	265376	52.50	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	1.27	50	67		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	1.73	64	65		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.67	76	160		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710027.D  
 Acq On : 10 Jul 2007 23:25  
 Sample : JPL46-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:51 2007

Vial: 46  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	58		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	129		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	326		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	88		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	257		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.66	97	63		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.67	91	146		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710027.D  
 Acq On : 10 Jul 2007 23:25  
 Sample : JPL46-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:51 2007

Vial: 46  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	207		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	187		N.D.	
72) Bromoform	10.38	173	55		N.D.	
73) Isopropylbenzene	10.72	105	285		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	165		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	77		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	141		N.D.	
82) 4-Chlorotoluene	11.15	91	108		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	184		N.D.	
86) sec-butylbenzene	11.71	105	249		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	53		N.D.	
88) 4-Isopropyltoluene	11.85	119	428		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	91		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	299		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.84	180	55		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-13-6/29/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-007  
 Lab File ID: Y0710028.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-13-6/29/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-007  
 Lab File ID: Y0710028.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-13-6/29/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL46  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-007  
 Lab File ID: Y0710028.D  
 Date Collected: 06/29/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

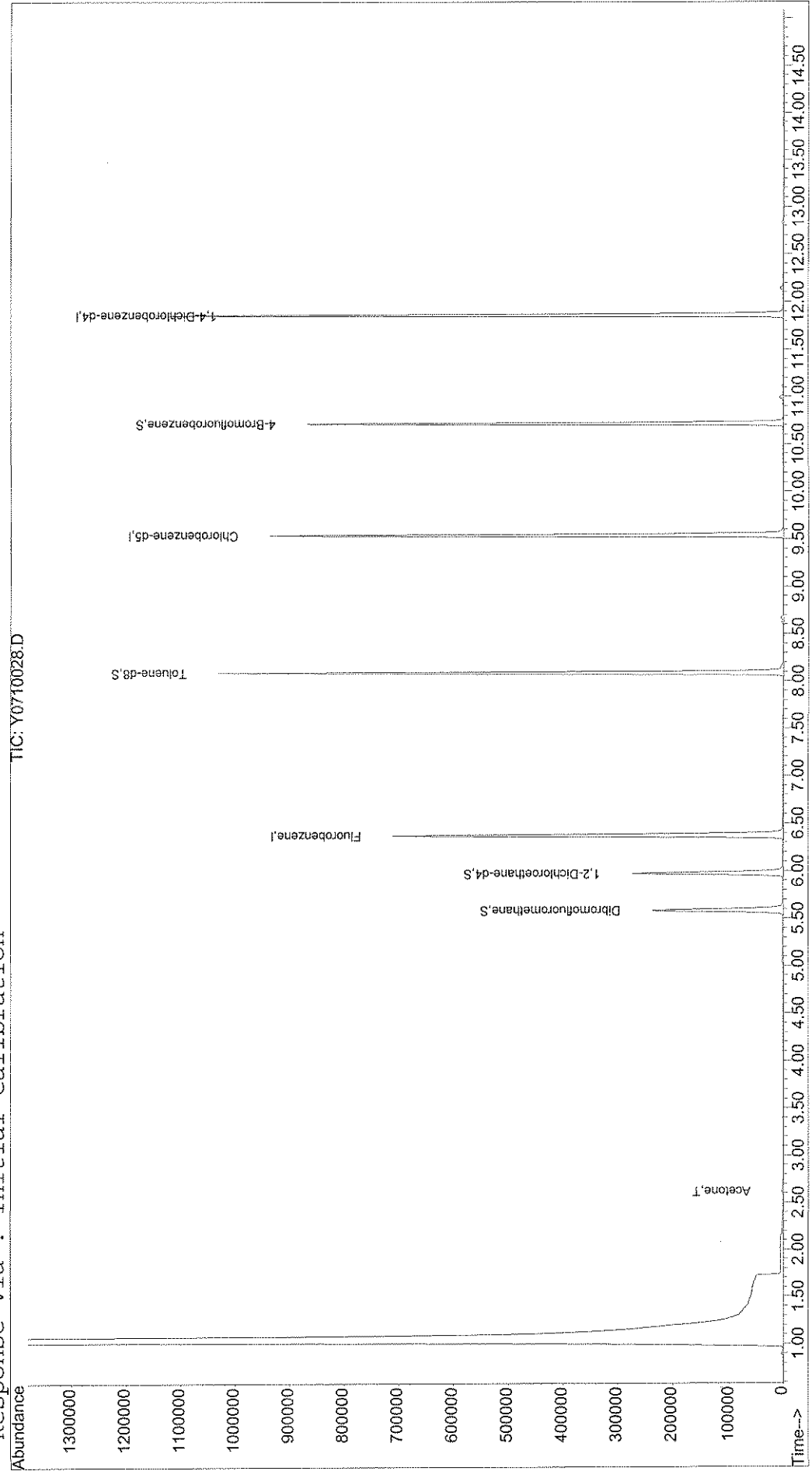
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710028.D  
Acq On : 10 Jul 2007 23:52  
Sample : JPL46-007  
Misc : #3 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:52 2007  
Vial: 47  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710028.D  
 Acq On : 10 Jul 2007 23:52  
 Sample : JPL46-007  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:52 2007

Vial: 47  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)

Title : VOA 8260- 5ML Calibration 5973Y

Last Update : Thu Jun 28 10:03:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.37	96	613636	50.00	ug/l	0.01	98.53%
54) Chlorobenzene-d5	9.54	82	260693	50.00	ug/l	0.00	89.77%
74) 1,4-Dichlorobenzene-d4	11.86	152	274204	50.00	ug/l	0.00	88.76%

System Monitoring Compounds

36) Dibromofluoromethane	5.58	111	159529	46.91	ug/l	0.02	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	93.82%	
40) 1,2-Dichloroethane-d4	5.97	65	203012	51.30	ug/l	0.01	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.60%	
55) Toluene-d8	8.09	98	628242	53.82	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	107.64%	
76) 4-Bromofluorobenzene	10.71	95	244364	50.76	ug/l	0.00	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.62	43	5144	2.42 ug/l	#	81
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.71	76	116	N.D.		
15) Allyl chloride	2.91	76	54	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.	d	
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710028.D  
 Acq On : 10 Jul 2007 23:52  
 Sample : JPL46-007  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:52 2007

Vial: 47  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.40	41	179		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.03	78	432		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	d
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.79	130	68		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.16	92	1354		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.88	43	205		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	351		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

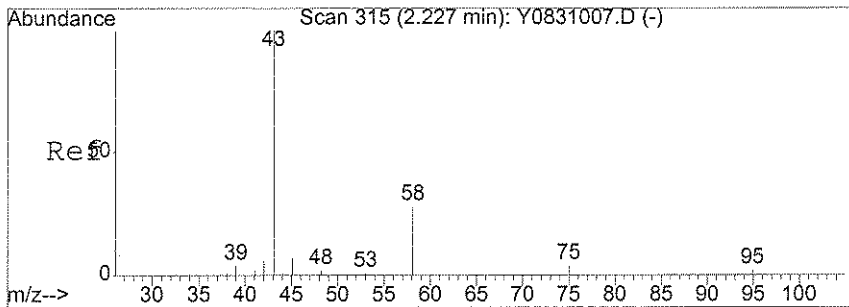
Data File : X:\MSVOA\YODA\071007\Y0710028.D  
 Acq On : 10 Jul 2007 23:52  
 Sample : JPL46-007  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:52 2007

Vial: 47  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

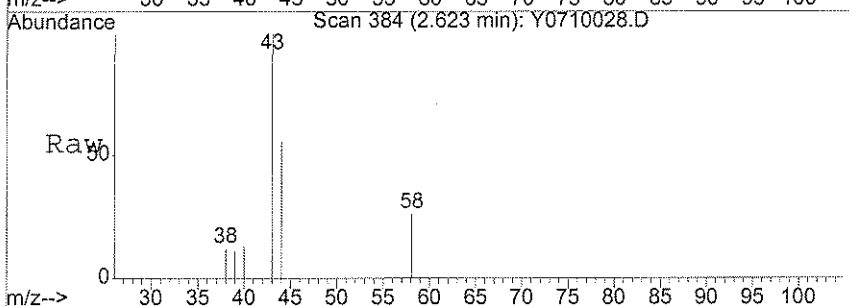
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	174		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	65		N.D.	
72) Bromoform	10.39	173	66		N.D.	
73) Isopropylbenzene	10.57	105	55		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.72	83	59		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	330		N.D.	
82) 4-Chlorotoluene	10.98	91	330		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	55		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	114		N.D.	
86) sec-butylbenzene	11.70	105	115		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	131		N.D.	
88) 4-Isopropyltoluene	11.85	119	323		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	131		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	250		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	57		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

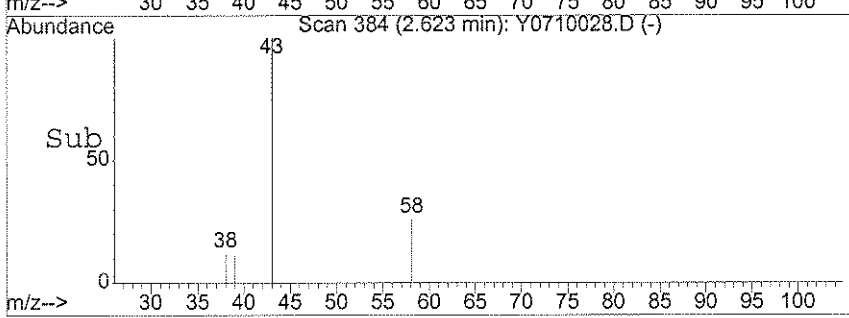
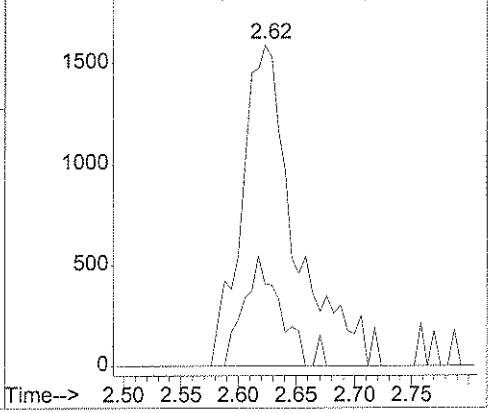


#11  
 Acetone  
 Concen: 2.42 ug/l  
 RT: 2.62 min Scan# 384  
 Delta R.T. 0.05 min  
 Lab File: Y0710028.D  
 Acq: 10 Jul 2007 23:52

Tgt Ion: 43 Resp: 5144  
 Ion Ratio Lower Upper  
 43 100  
 58 22.7 26.8 40.2#



Abundance Ion 43.15 (42.85 to 43.85); Y0710028.D  
 Ion 58.05 (57.75 to 58.75); Y0710028.D



**TIC FORMS**

SDG JPL46

VOLATILES ANALYSIS

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL46-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710022.D Vial: 41  
Acq On : 10 Jul 2007 21:16 Operator: DGA  
Sample : JPL46-001 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710022.D 8260B.M Wed Jul 11 11:40:51 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-4

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL46-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710023.D Vial: 42  
Acq On : 10 Jul 2007 21:43 Operator: DGA  
Sample : JPL46-002 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710023.D 8260B.M Wed Jul 11 11:41:03 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL46-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710024.D Vial: 43  
Acq On : 10 Jul 2007 22:08 Operator: DGA  
Sample : JPL46-003 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710024.D 8260B.M Wed Jul 11 11:41:10 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL46-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/30/2007  
*29*

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007  
*7/16/07*

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710025.D Vial: 44  
Acq On : 10 Jul 2007 22:34 Operator: DGA  
Sample : JPL46-004 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710025.D 8260B.M Wed Jul 11 11:41:19 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL46  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-005  
 Lab File ID: Y0710026.D  
 Date Collected: 06/20/2007  
 Date Analyzed: 07/10/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710026.D Vial: 45  
Acq On : 10 Jul 2007 23:01 Operator: DGA  
Sample : JPL46-005 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710026.D 8260B.M Wed Jul 11 11:41:26 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-13-6/29/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL46  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL46-006  
 Lab File ID: Y0710027.D  
 Date Collected: 06/20/2007  
 Date Analyzed: 07/10/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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12					
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29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710027.D Vial: 46  
Acq On : 10 Jul 2007 23:25 Operator: DGA  
Sample : JPL46-006 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710027.D 8260B.M Wed Jul 11 11:41:33 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-13-6/29/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL46-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710028.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 06/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710028.D Vial: 47  
Acq On : 10 Jul 2007 23:52 Operator: DGA  
Sample : JPL46-007 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710028.D 8260B.M Wed Jul 11 11:41:43 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071007MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL46

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: B071007MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710014.D Vial: 33  
Acq On : 10 Jul 2007 17:57 Operator: DGA  
Sample : B071007MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710014.D 8260B.M Wed Jul 11 11:45:43 2007

**Metals Data**

**JPL46**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

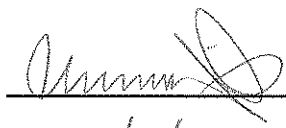
Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin  
 Lab Code: LAUCKS SDG No.: JPL46  
 SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-11-5</u>	<u>JPL46-001</u>
<u>MW-11-4</u>	<u>JPL46-002</u>
<u>MW-11-3</u>	<u>JPL46-003</u>
<u>MW-11-2</u>	<u>JPL46-004</u>
<u>MW-11-1</u>	<u>JPL46-005</u>
<u>EB-13-6/29/07</u>	<u>JPL46-006</u>

Were ICP interelement corrections applied? Yes/No YES  
 Were ICP background corrections applied? Yes/No NO  
 If yes-was raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Cherronne Orain  
 Date: 07/23/2007 Title: metals Lead

## **Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL46

Matrix (soil/water): Water

Lab Sample ID: JPL46-001

Level (low/med): LOW

Date Received: 06/30/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	5.99			M	R019758
7440-70-2	Calcium	21600			P	R019716
7440-47-3	Chromium	1.82			M	R019758
7439-89-6	Iron	379			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	5000	U		P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	56900			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL46

Matrix (soil/water): Water

Lab Sample ID: JPL46-002

Level (low/med): LOW

Date Received: 06/30/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	12100			P	R019716
7440-47-3	Chromium	1.36			M	R019758
7439-89-6	Iron	100	U		P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	9660			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	26200			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL46

Matrix (soil/water): Water

Lab Sample ID: JPL46-003

Level (low/med): LOW

Date Received: 06/30/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	43800			P	R019716
7440-47-3	Chromium	1.86			M	R019758
7439-89-6	Iron	301			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	14000			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	26800			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-2

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL46Matrix (soil/water): WaterLab Sample ID: JPL46-004Level (low/med): LOWDate Received: 06/30/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.14			M	R019758
7440-70-2	Calcium	49600			P	R019716
7440-47-3	Chromium	9.06			M	R019758
7439-89-6	Iron	514			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	19000			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	25000			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL46

Matrix (soil/water): Water

Lab Sample ID: JPL46-005

Level (low/med): LOW

Date Received: 06/30/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.01			M	R019758
7440-70-2	Calcium	73500			P	R019716
7440-47-3	Chromium	10.4			M	R019758
7439-89-6	Iron	235			P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	21200			P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	27200			P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-13-6/29/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL46

Matrix (soil/water): Water

Lab Sample ID: JPL46-006

Level (low/med): LOW

Date Received: 06/30/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019758
7440-70-2	Calcium	5000	U		P	R019716
7440-47-3	Chromium	4.43			M	R019758
7439-89-6	Iron	100	U		P	R019716
7439-92-1	Lead	1.00	U		M	R019758
7439-95-4	Magnesium	5000	U		P	R019716
7440-09-7	Potassium	5000	U	E	P	R019716
7440-23-5	Sodium	5000	U		P	R019716

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL46**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL46

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-11-5</u>	<u>JPL46-001</u>
<u>MW-11-5D</u>	<u>JPL46-001D</u>
<u>MW-11-5MS</u>	<u>JPL46-001MS</u>
<u>MW-11-5MSD</u>	<u>JPL46-001MSD</u>
<u>MW-11-4</u>	<u>JPL46-002</u>
<u>MW-11-4MS</u>	<u>JPL46-002MS</u>
<u>MW-11-4MSD</u>	<u>JPL46-002MSD</u>
<u>MW-11-3</u>	<u>JPL46-003</u>
<u>MW-11-2</u>	<u>JPL46-004</u>
<u>MW-11-2D</u>	<u>JPL46-004Dup</u>
<u>MW-11-1</u>	<u>JPL46-005</u>
<u>MW-11-1MS</u>	<u>JPL46-005MS</u>
<u>MW-11-1MSD</u>	<u>JPL46-005MSD</u>
<u>EB-13-6/29/07</u>	<u>JPL46-006</u>
<u>EB-13-6/29/07D</u>	<u>JPL46-006D</u>

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7/23/07

Title: Inorganics Lead



## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL46  
**Sample Number:** MW-11-5 **Date/Time Collected:** 06/29/2007 08:08  
**Lab Sample ID:** JPL46-001 **Date/Time Received:** 06/30/2007 09:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	190		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	1	19		1.0	0.17	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	12		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	120		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/12/2007	07/13/2007	R019504

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.050	U	0.050	0.016	07/02/2007	07/02/2007	R019157
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/20/2007	07/20/2007	R019722

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0081		0.0050	0.0012	06/30/2007	06/30/2007	R019278

**Laucks Testing Laboratories, Inc.**

Final Results

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL46  
**Sample Number:** MW-11-4 **Date/Time Collected:** 06/29/2007 07:39  
**Lab Sample ID:** JPL46-002 **Date/Time Received:** 06/30/2007 09:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.9		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	140		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	1	1.0		1.0	0.17	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	11		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	96		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/12/2007	07/13/2007	R019504

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.050	U	0.050	0.016	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/30/2007	06/30/2007	R019278

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL46  
**Sample Number:** MW-11-3 **Date/Time Collected:** 06/29/2007 09:05  
**Lab Sample ID:** JPL46-003 **Date/Time Received:** 06/30/2007 09:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.0		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	250		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	26		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	11		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	160		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/12/2007	07/13/2007	R019504

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.10		0.050	0.016	07/18/2007	07/18/2007	R019648
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/20/2007	07/20/2007	R019722

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/30/2007	06/30/2007	R019278

**Laucks Testing Laboratories, Inc.**

Final Results

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL46  
**Sample Number:** MW-11-2 **Date/Time Collected:** 06/29/2007 09:39  
**Lab Sample ID:** JPL46-004 **Date/Time Received:** 06/30/2007 09:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.0		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	270		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	38		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	18		10	0.76	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	170		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/12/2007	07/13/2007	R019504

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.050	U	0.050	0.016	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/30/2007	06/30/2007	R019278

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL46  
**Sample Number:** MW-11-1 **Date/Time Collected:** 06/29/2007 10:20  
**Lab Sample ID:** JPL46-005 **Date/Time Received:** 06/30/2007 09:10  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	330		2	2	07/03/2007	07/06/2007	R019196

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.6		0.040	0.055	07/06/2007	07/07/2007	R019314
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.017	07/06/2007	07/07/2007	R019314
Sulfate as SO4	14808-79-8	10	56		10	1.7	07/06/2007	07/07/2007	R019314
Chloride	16887-00-6	10	26		2.0	0.76	07/06/2007	07/07/2007	R019314
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.33	07/06/2007	07/07/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	200		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	07/12/2007	07/13/2007	R019504

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	1.8		0.050	0.016	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	2		0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	06/30/2007	06/30/2007	R019278

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring  
SDG Number: JPL46  
Sample Number: MW-11-1 Date/Time Collected: 06/29/2007 10:20  
Lab Sample ID: JPL46-005 Date/Time Received: 06/30/2007 09:10  
Method: E365.2 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Phosphorus, Orthophosphate (as P)	7723-14-0	1	0.014		0.010	0.0025	06/30/2007	06/30/2007	R019310





**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL47**

**AUGUST 1, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL47  
Date of Report: August 1, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-25-5	JPL47-001	VOA/MET/INO
MW-25-4	JPL47-002	VOA/MET/INO
MW-25-3	JPL47-003	VOA/MET/INO
MW-25-2	JPL47-004	VOA/MET/INO
MW-25-1	JPL47-005	VOA/MET/INO
DUPE-6-2Q07	JPL47-006	VOA/MET/INO
SB-1-7/2/07	JPL47-007	VOA/MET/INO
EB-14-7/2/07	JPL47-008	VOA/MET/INO
TB-14-7/2/07	JPL47-009	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Nitrate + Nitrite (353.2)  
Nitrate (353.2)  
Nitrite (354.1)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

The temperature blank measures above the control limit of 6 deg C.

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

Two of two VOA vials for TB-14-7/2/07 were received with air bubbles greater than ¼ inch in size.

### **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

#### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

#### Holding Time Compliance:

##### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

#### Volatiles Fraction:

##### Continuing Calibration Verification (CCV):

In the CCV performed on 07/10/2007 the percent difference values for 2-butanone and 4-methyl-2-pentanone exceeded 30% due to increased response. These analytes were not detected in any associated samples; no further action was taken.

In the CCV performed on 07/11/2007 the percent drift value for 1,2,3-trichlorobenzene exceeded 30% due to decreased response. This analyte was not detected in any associated samples so no further action was taken.

##### Method Blank

Analysis of the method blank performed on 07/10/2007 resulted in the detection of methylene chloride. The presence of this analyte may be due to laboratory contamination since it is a common laboratory solvent. All sample results reported for this analyte have been "B" flagged to denote its presence in the associated method blank analysis.

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Seattle, WA 98108

## Quality Control Analyses:

Analysis of the blank spike performed on 07/10/2007 and 07/11/2007 yielded recoveries for 2-butanone and 4-methyl-2-pentanone that exceeded the control limit. Because all other analytes were within the control limits no further action was taken.

## **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

### ICP-MS Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

## **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Nitrite	48 hours	None
Nitrate + Nitrite	28 days	None
Ortho phosphorus	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

All samples were received into the laboratory past their holding time for pH.

All samples were analyzed past their holding time for nitrate by method 300.0. When the samples were received the anion instrument was not functioning properly. An aliquot was split and preserved with sulfuric acid for NO<sub>3</sub>/NO<sub>2</sub> analysis. The samples were analyzed within the 48 hour hold time by method 354.1 for nitrite and within the 28 day holding time for NO<sub>3</sub>/NO<sub>2</sub> by method 353.2. The nitrate was then calculated from the difference. The final results include data from all methods, and all raw data are included in the data package.

### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

For the run sequence R019929, Form 2A shows CCV recoveries for magnesium and sodium exceeding control limits of 90-110% for Method 200.7. These recoveries are within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115%. Data have been reported as is.

For the run sequence R019973, the fifth and seventh CCVs exceeded the upper control limit for lead. All samples associated with these CCVs contained concentrations of lead that were less than the CRDL. Quality control data for lead were reported and were within control limits. No corrective action was required. Data have not been flagged for these events.

For the run sequence R019929, the second CCV exceeded the upper control limit for magnesium. No samples were associated with this CCV. No corrective action was required. Data have not been flagged for this event.

All samples in this SDG (JPL47) except MW-25-1 and DUPE-6-2Q07 were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate samples and serial dilution samples apply to all samples digested and analyzed together. Sample level QC and analytical times can be seen on Form 14. For QC results, see SDG JPL49 or the raw data provided. Samples MW-25-1 and DUPE-6-2Q07 were digested separately due to method criteria and have only LCS/LCSD QC. Therefore, these two samples show no flagging on the Form I's.

The matrix spike duplicate sample percent recoveries of sodium and magnesium were outside of the established control limits of 70-130% for sample MW-9 from SDG JPL49. As a result the MS/MSD relative percent differences were outside of the established control limits of 20%. Post-digestion spikes were performed and were within control limits. No further corrective action was required. All relevant data have been flagged with an "N" and a "\*" on Forms I and V.

The matrix spike sample percent recoveries of sodium and magnesium were outside of the established control limits of 70-130% for sample MW-15 from SDG JPL49. As a result the MS/MSD relative percent difference for magnesium was outside of the established control limits of 20%. Post-digestion spikes were performed and were within control limits. No further corrective action was required. All relevant data have been flagged with an "N" and a "\*" on Forms I and V.

## LAUCKS TESTING LABORATORIES

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The serial dilution for the element iron did not agree within 10% of the original determination after correction for dilution for sample MW-9 from JPL49. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

The scandium internal standard percent recoveries for samples MW-25-1 and DUPE-6-2Q07 fell outside of the suggested control limits of 60-125% of the intensity of scandium in the initial calibration verification sample. Potassium is associated with this internal standard. Therefore, results for potassium for samples MW-25-1 and DUPE-6-2Q07 were reported from a five-fold dilution where the scandium internal standard is within the control limits.

### **Miscellaneous Inorganics:**

For run sequence R019637, the matrix spike and matrix spike duplicate relative percent difference was outside the control limits for the perchlorate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

## LAUCKS TESTING LABORATORIES

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.



**LAUCKS TESTING LABORATORIES**

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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,

M. Elaine Walker  
Project Manager

Harry Romberg  
Quality Assurance Officer

8/1/07  
(DATE)

8/1/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	353.2 Nitrate (as N) by Calc., water	353.2 Nitrate + Nitrite (as N), Water	354.1 Nitrite (as N), Water	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL47-001	07/03/2007 08:30 AM	07/02/2007 07:44 AM	MW-25-5	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-002	07/03/2007 08:30 AM	07/02/2007 08:22 AM	MW-25-4	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-003	07/03/2007 08:30 AM	07/02/2007 08:57 AM	MW-25-3	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-004	07/03/2007 08:30 AM	07/02/2007 09:28 AM	MW-25-2	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-005	07/03/2007 08:30 AM	07/02/2007 10:03 AM	MW-25-1	A-	A-	P-	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-006	07/03/2007 08:30 AM	07/02/2007 12:00 AM	DUPE-6-2007	A-	A-	P-	P-	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-007	07/03/2007 08:30 AM	07/02/2007 08:43 AM	SB-1-7/2/07	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-008	07/03/2007 08:30 AM	07/02/2007 09:47 AM	EB-14-7/2/07	A-	A-	IN	IN	IN	IN	IN	IN	IN	IN	IN	A-
JPL47-009	07/03/2007 08:30 AM	07/02/2007 12:00 AM	TB-14-7/2/07											IN	

Approved By: *[Signature]*  
 Notes:

On: *[Signature]*

Samples identified with a '\*' client has requested QC for

LEGEND: -:Started, +:Completed, IN:Logged in, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATELLE  
 ADDRESS: 3690 OLD TOWN AVE, C-205  
SAN DIEGO, CA 92110  
 ATTENTION: DAVID CONNER  
 PROJECT NAME: JPL GW MON 2007  
 PROJECT CONTACT: DAVID CONNER  
 TELEPHONE: 619-786-7311 FAX: \_\_\_\_\_  
 JOB/PO. NO.: 6486090 / 240640

CHAIN OF CUSTODY RECORD SDG # \_\_\_\_\_

42860

WORK ORDER ID# 572-47

PAGE 1 OF 1

**Laucks**  
 Testing Laboratories, Inc.  
 940 South Perry St., Seattle, WA 98108 (206) 767-5000 FAX 767-5063  
 1100 Redwood Ave., Yakima, WA 98902 (509) 245-4035 FAX 452-1265

MATRIX: WATER, SOIL OR SPECIFY

NO. OF CONTAINERS
VOC (524.2)
Total Cu (200.8)
LEAD (200.8)
ARSENIC (200.8)
GEN TOX (200.8)
NO. K. (200.8)
CAD (214.0)
GEN MET (214.0)
GEN MET (214.0)

LAB/SAF	SAMPLE ID / LOCATION	DATE	TIME	MATRIX	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	8 MW-25-5	7/2/07	744	W	5	X	
2	8 MW-25-4		822	X	X	X	
3	10 MW-25-3		857	X	X	X	
4	11 MW-25-2		928	X	X	X	LEVEL III GC
5	12 MW-25-1		1003	X	X	X	
6-13	DURP-6-2007			X	X	X	DURPLICATE
14	5B-1-7/2/07		843	X	X	X	SOURCE BLANK
15	EB-14-7/2/07		947	X	X	X	EDUP BLANK
16	7B-14-7/2/07			X	X	X	TRIP BLANK

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE.  
 2. BE SPECIFIC IN TEST REQUESTS.  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE.

RELINQUISHED BY (SIGN AND PRINT): MARK MENDOZA

RECEIVED BY (SIGN AND PRINT): [Signature]

NAME: BATELLE  
 ADDRESS: 505 KING AVE  
 CITY, STATE, ZIP: COLUMBUS OH 43201

DATE: 7/2/07 TIME: 1300

DATE: 5/15/08 TIME: 0830

TURNAROUND REQUEST:  
 STD. 10-14 WORKING DAYS  
 24-48 HRS. (100% SUR)  
 72 HRS. (75% SUR)  
 5 DAYS (60% SUR)  
 OTHER: \_\_\_\_\_  
 TEMP: \_\_\_\_\_  
 CUSTODY SEAL:  Y  N  N/A



**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL47  
Cooler: AAP017  
Temperatures: 8.8  
COC #: 42860

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL47-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-006	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-007	0001	1000 mL cylinder, poly	7	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL47  
Cooler: AAP017  
Temperatures: 8.8  
COC #: 42860

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-008	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL47-009	0001	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	> 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2  
Base Preserved pH pH must be greater than 12  
NC Not Checked for pH

**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

Index



**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**Battelle**

**SDG No.: JPL47**

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- IV. Volatiles Data: VOA 1-243
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  - B. Metals Analysis Data Sheets: 3-11
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Completed and checked by: Judy Ecklund Date: 8/1/07

## **SAMPLE DATA**

SDG JPL47

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-001  
 Lab File ID: Y0710029.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-001  
 Lab File ID: Y0710029.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-001  
 Lab File ID: Y0710029.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

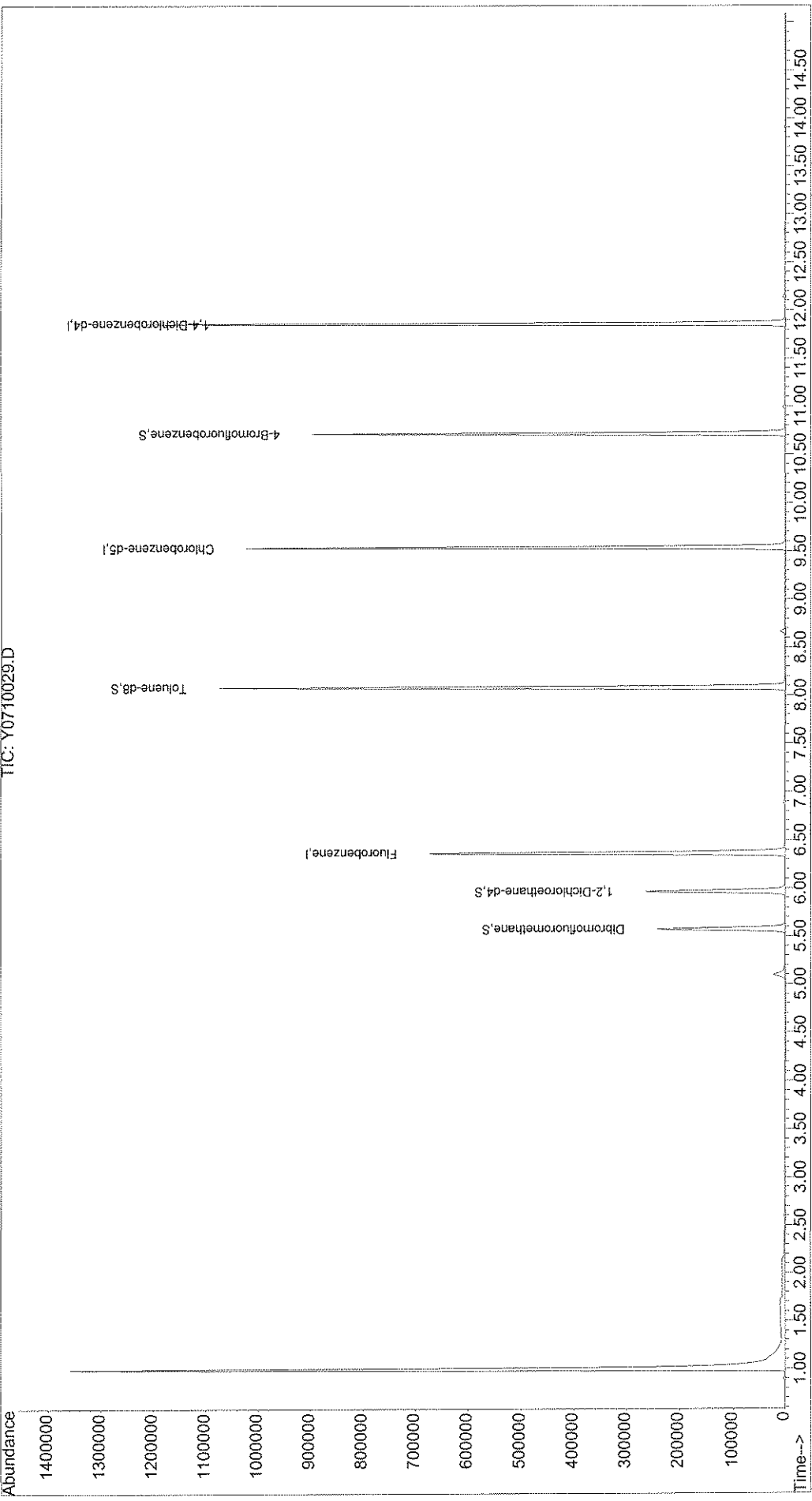
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710029.D  
Acq On : 11 Jul 2007 00:19  
Sample : JPL47-001  
Misc : #4 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:53 2007  
Vial: 48  
Operator: DGA  
Inst : yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710029.D  
 Acq On : 11 Jul 2007 00:19  
 Sample : JPL47-001  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:53 2007

Vial: 48  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.37	96	580359	50.00	ug/l	0.00 93.18%
54) Chlorobenzene-d5	9.53	82	282782	50.00	ug/l	0.00 97.37%
74) 1,4-Dichlorobenzene-d4	11.86	152	280108	50.00	ug/l	0.00 90.67%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	153711	47.79	ug/l	0.01
Spiked Amount	50.000	Range	85 - 115	Recovery	=	95.58%
40) 1,2-Dichloroethane-d4	5.97	65	193777	51.78	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.56%
55) Toluene-d8	8.08	98	627304	49.54	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.08%
76) 4-Bromofluorobenzene	10.71	95	255016	51.86	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	2.62	43	2702		N.D.	
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.69	76	842		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710029.D  
 Acq On : 11 Jul 2007 00:19  
 Sample : JPL47-001  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:53 2007

Vial: 48  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	197		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	5.75	75	58		N.D.	
41) Benzene	6.03	78	422		N.D.	
42) 1,2-Dichloroethane	5.97	62	59		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	6.98	83	79		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	119		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.66	97	59		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	68		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710029.D  
 Acq On : 11 Jul 2007 00:19  
 Sample : JPL47-001  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:53 2007

Vial: 48  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.57	105	54		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	61		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	133		N.D.	
82) 4-Chlorotoluene	10.98	91	133		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	302		N.D.	
86) sec-butylbenzene	11.70	105	85		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	69		N.D.	
88) 4-Isopropyltoluene	11.85	119	290		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	64		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	306		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-002  
 Lab File ID: Y0710030.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710030.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-002  
 Lab File ID: Y0710030.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

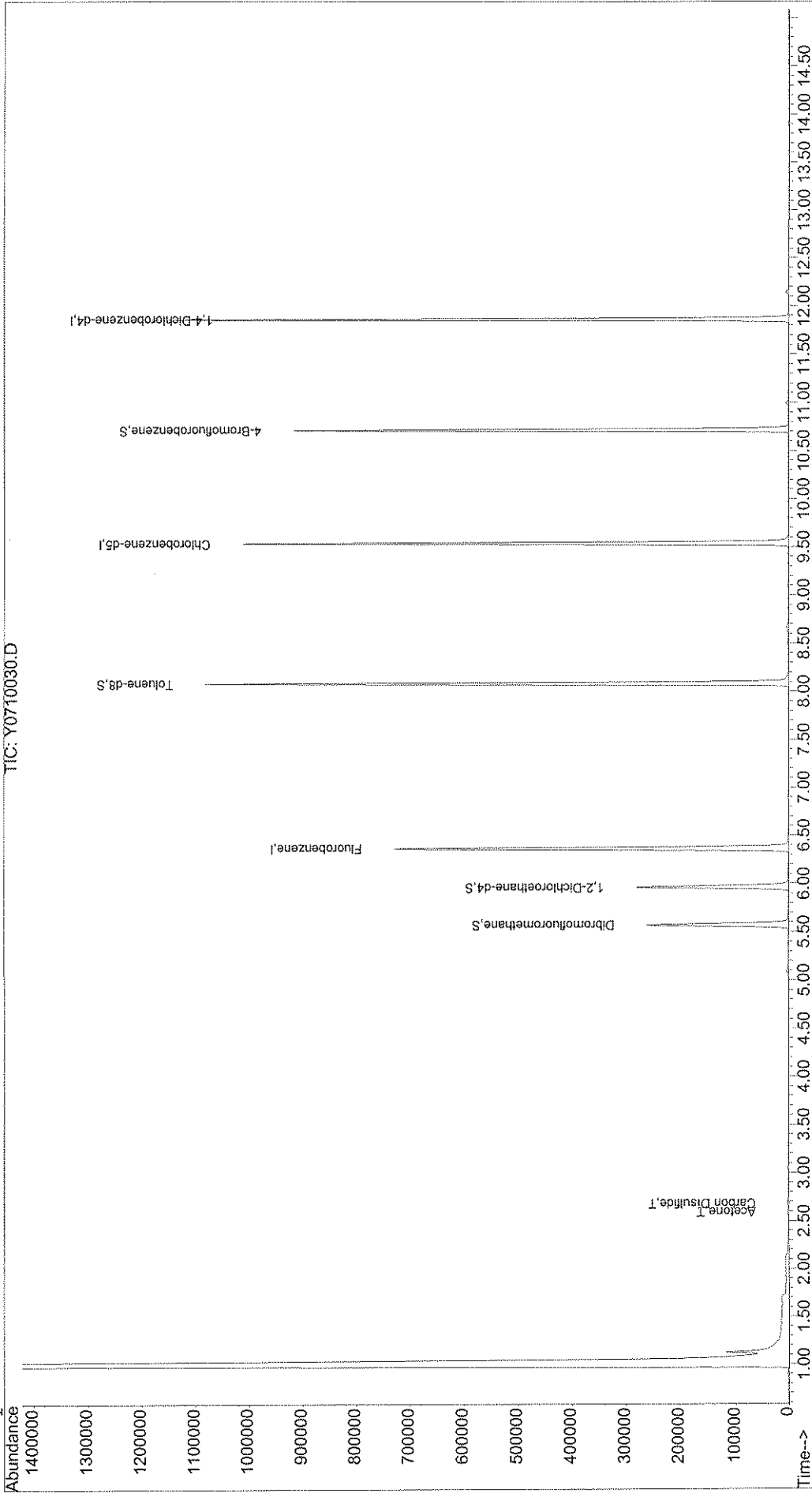
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710030.D  
Acq On : 11 Jul 2007 00:44  
Sample : JPL47-002  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:54 2007  
Vial: 49  
Operator: DGA  
Inst : yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710030.D  
 Acq On : 11 Jul 2007 00:44  
 Sample : JPL47-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:54 2007

Vial: 49  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.37	96	621340	50.00	ug/l	0.00	99.76%
54) Chlorobenzene-d5	9.53	82	286815	50.00	ug/l	0.00	98.76%
74) 1,4-Dichlorobenzene-d4	11.86	152	281202	50.00	ug/l	0.00	91.03%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	167323	48.59	ug/l	0.01	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.18%	
40) 1,2-Dichloroethane-d4	5.96	65	206023	51.42	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.84%	
55) Toluene-d8	8.08	98	640225	49.85	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.70%	
76) 4-Bromofluorobenzene	10.71	95	258687	52.40	ug/l	0.00	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	1.73	64	69	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	3418	0.61	ug/l	# 68
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	3969	0.45	ug/l	100
15) Allyl chloride	2.84	76	204	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710030.D  
 Acq On : 11 Jul 2007 00:44  
 Sample : JPL47-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:54 2007

Vial: 49  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	173		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	362		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	502		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	56		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	349		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.82	43	64		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.67	91	60		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710030.D  
 Acq On : 11 Jul 2007 00:44  
 Sample : JPL47-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:54 2007

Vial: 49  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

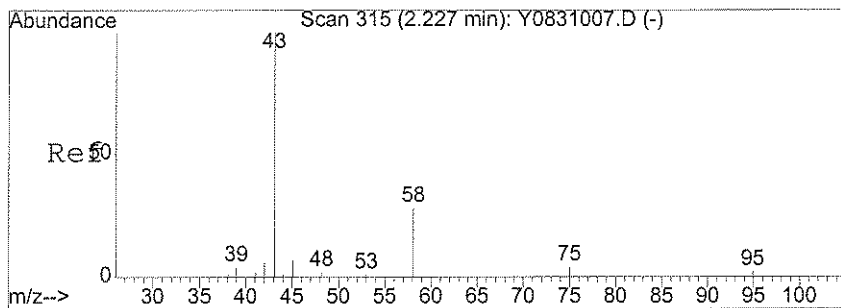
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	66		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.58	105	54		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	64		N.D.	
80) n-Propylbenzene	10.98	120	62		N.D.	
81) 2-Chlorotoluene	10.97	91	147		N.D.	
82) 4-Chlorotoluene	11.16	91	71		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	135		N.D.	
86) sec-butylbenzene	11.85	105	221		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	260		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	403		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

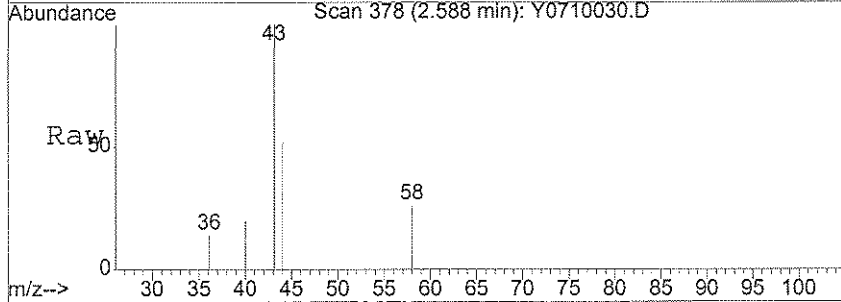
(#) = qualifier out of range (m) = manual integration



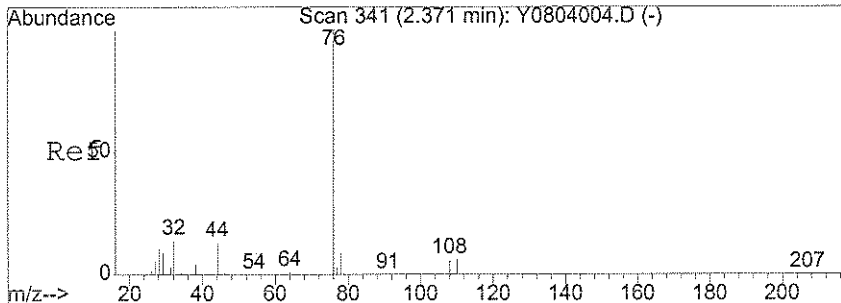
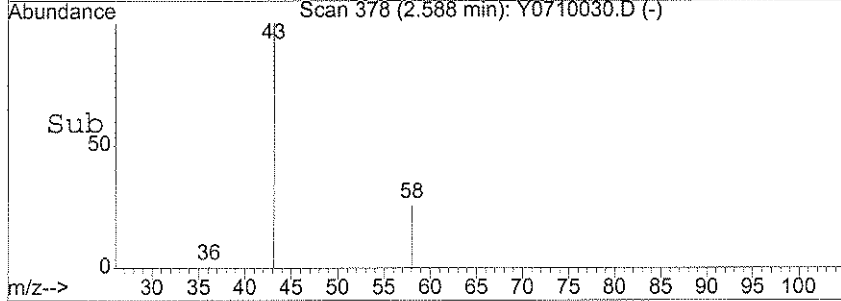
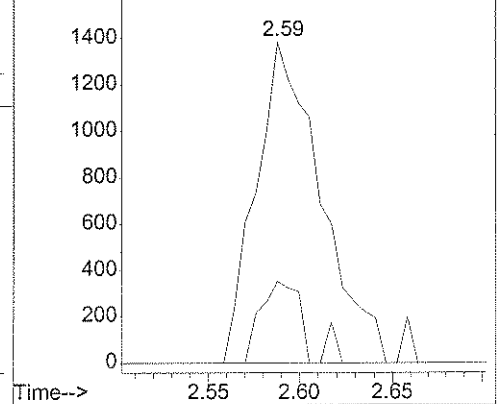


#11  
 Acetone  
 Concen: 0.61 ug/l  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.01 min  
 Lab File: Y0710030.D  
 Acq: 11 Jul 2007 00:44

Tgt Ion: 43 Resp: 3418  
 Ion Ratio Lower Upper  
 43 100  
 58 15.1 26.8 40.2#

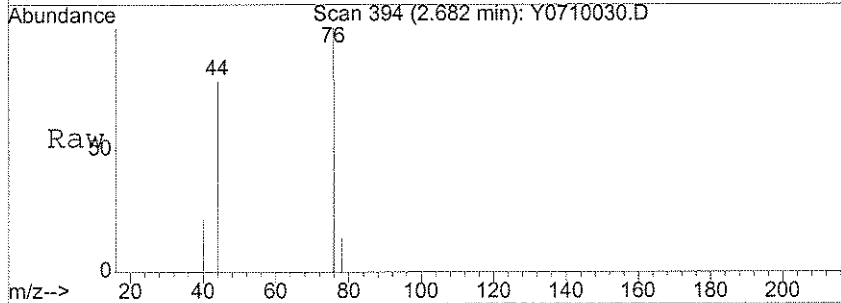


Abundance Ion 43.15 (42.85 to 43.85): Y0710030.D  
 1600 Ion 58.05 (57.75 to 58.75): Y0710030.D

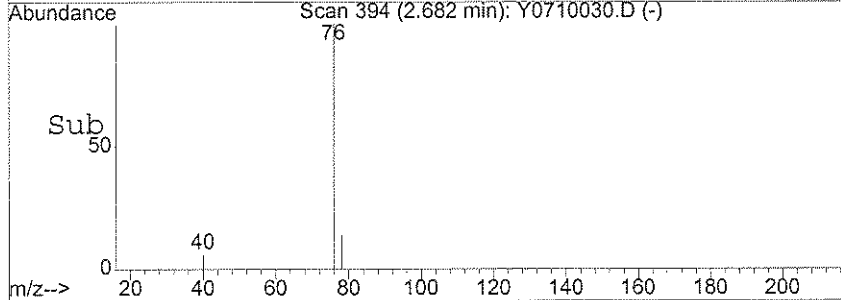
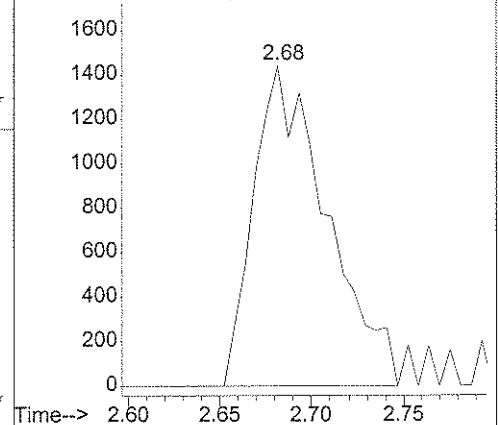


#14  
 Carbon Disulfide  
 Concen: 0.45 ug/l  
 RT: 2.68 min Scan# 394  
 Delta R.T. 0.01 min  
 Lab File: Y0710030.D  
 Acq: 11 Jul 2007 00:44

Tgt Ion: 76 Resp: 3969



Abundance Ion 76.00 (75.70 to 76.70): Y0710030.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-3

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710031.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-003  
 Lab File ID: Y0710031.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-003  
 Lab File ID: Y0710031.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

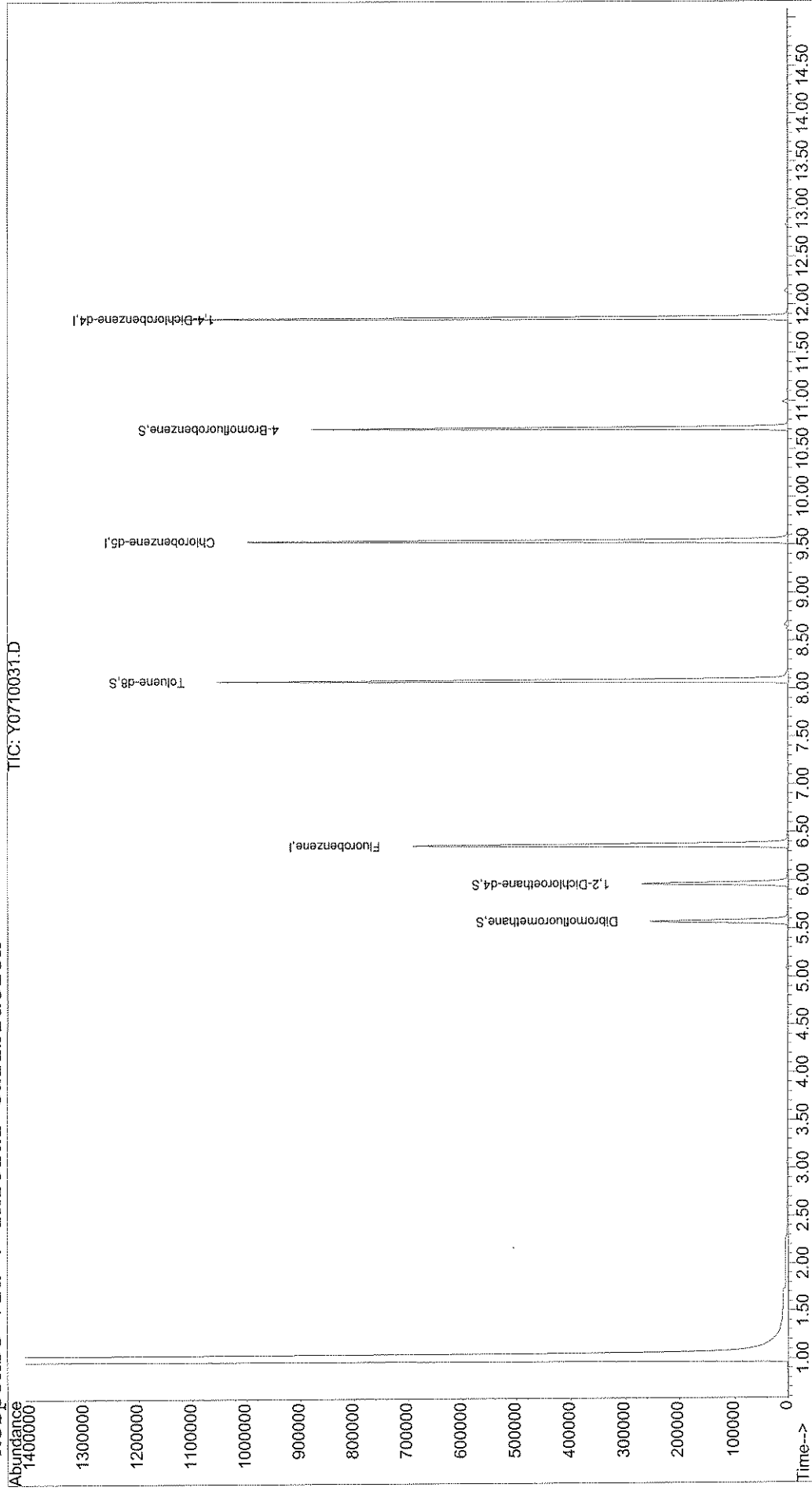
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710031.D Vial: 50  
Acq On : 11 Jul 2007 1:08 Operator: DGA  
Sample : JPL47-003 Inst : Yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:55 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710031.D  
 Acq On : 11 Jul 2007 1:08  
 Sample : JPL47-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:55 2007

Vial: 50  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	603662	50.00	ug/l	0.00 96.93%
54) Chlorobenzene-d5	9.53	82	287308	50.00	ug/l	0.00 98.93%
74) 1,4-Dichlorobenzene-d4	11.86	152	279142	50.00	ug/l	0.00 90.36%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	161364	48.23	ug/l	0.01
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.46%
40) 1,2-Dichloroethane-d4	5.96	65	200911	51.61	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.22%
55) Toluene-d8	8.08	98	631583	49.10	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.20%
76) 4-Bromofluorobenzene	10.71	95	256989	52.44	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	1.28	50	64		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.68	76	932		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	2.98	43	65		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0710031.D 8260B.M Wed Jul 11 10:55:19 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710031.D  
 Acq On : 11 Jul 2007 1:08  
 Sample : JPL47-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:55 2007

Vial: 50  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.01	43	55		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	230		N.D.	
34) Chloroform	5.37	83	78		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	313		N.D.	
42) 1,2-Dichloroethane	5.96	62	53		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	134		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.48	97	55		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.97	43	76		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	75		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710031.D  
 Acq On : 11 Jul 2007 1:08  
 Sample : JPL47-003  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:55 2007

Vial: 50  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	186		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.72	105	460		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	10.73	156	54		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	69		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	117		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	55		N.D.	
82) 4-Chlorotoluene	11.17	91	59		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	60		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	74		N.D.	
86) sec-butylbenzene	11.70	105	56		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	54		N.D.	
88) 4-Isopropyltoluene	11.85	119	451		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	54		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	334		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-004  
 Lab File ID: Y0710032.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.82	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710032.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-2

Lab Name: \_\_\_\_\_

SDG No.: JPL47

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019410

Lab Sample ID: JPL47-004

Lab File ID: Y0710032.D

Date Collected: 07/02/2007

Date/Time Analyzed: 07/10/2007 09:00

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

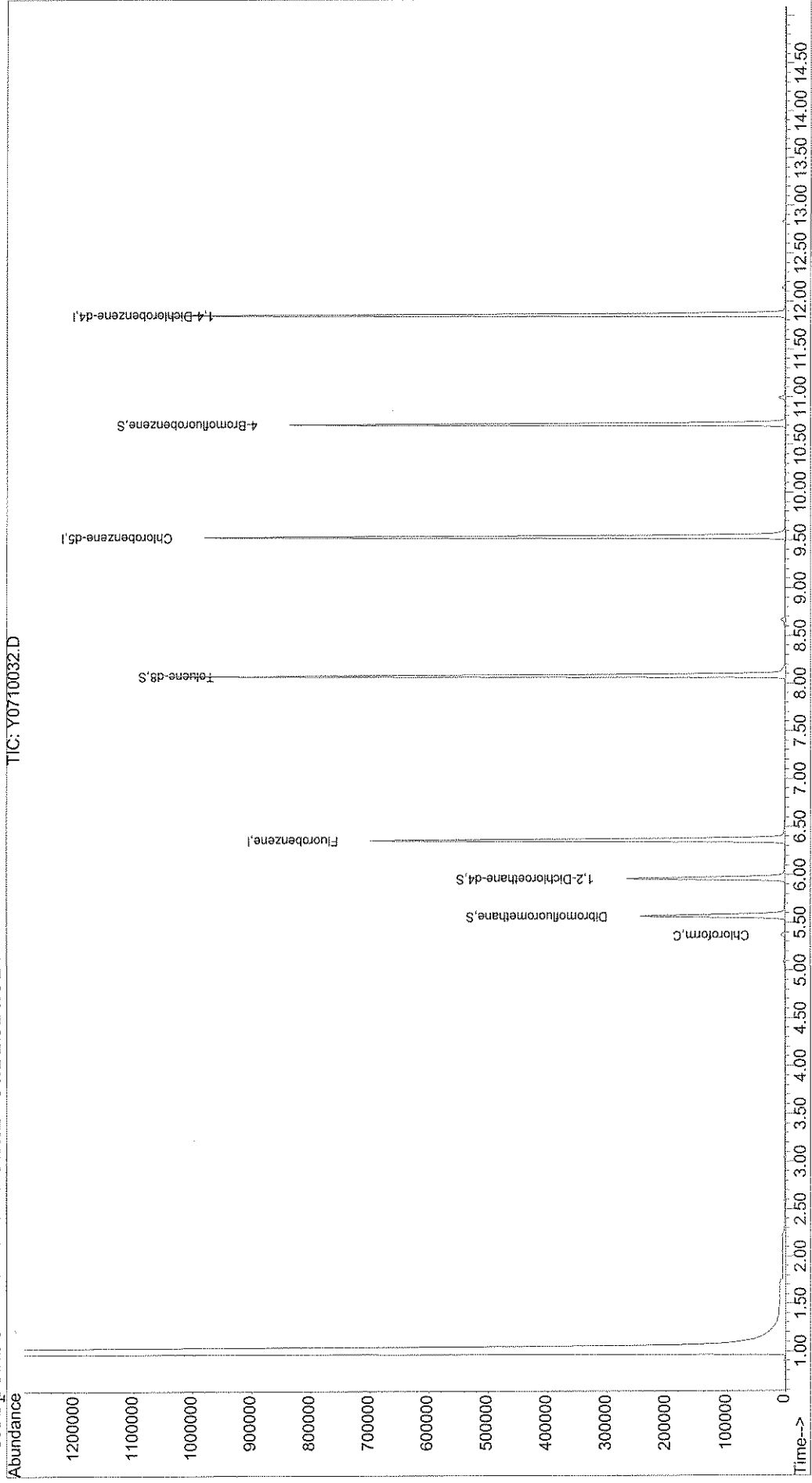
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710032.D  
Acq On : 11 Jul 2007 1:34  
Sample : JPL47-004  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:56 2007  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710032.D  
 Acq On : 11 Jul 2007 1:34  
 Sample : JPL47-004  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:56 2007

Vial: 51  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.36	96	595799	50.00	ug/l	0.00	95.66%
54) Chlorobenzene-d5	9.53	82	276183	50.00	ug/l	0.00	95.10%
74) 1,4-Dichlorobenzene-d4	11.86	152	255512	50.00	ug/l	0.00	82.71%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	158350	47.96	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	95.92%	
40) 1,2-Dichloroethane-d4	5.96	65	196168	51.06	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.12%	
55) Toluene-d8	8.08	98	614041	49.65	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.30%	
76) 4-Bromofluorobenzene	10.71	95	243834	54.36	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.27	50	64	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	1.73	64	69	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.44	96	60	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.69	76	350	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	2.98	43	65	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	3.33	96	63	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710032.D  
 Acq On : 11 Jul 2007 1:34  
 Sample : JPL47-004  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:56 2007

Vial: 51  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D. d	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	178		N.D.	
34) Chloroform	5.37	83	5033	0.82	ug/l	97
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	202		N.D.	
42) 1,2-Dichloroethane	5.97	62	63		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	167		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.34	83	70		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.14	92	113		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	53		N.D.	

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 97

Quantitation Report

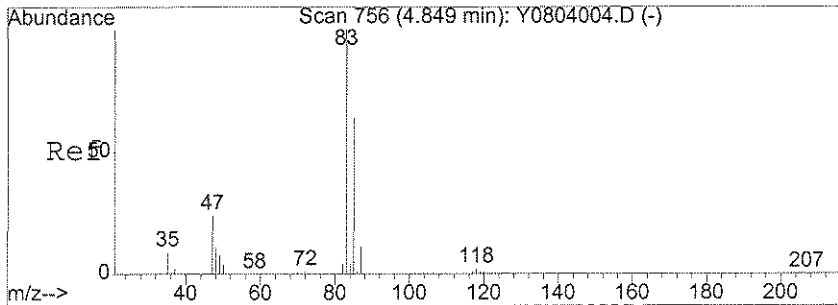
Data File : X:\MSVOA\YODA\071007\Y0710032.D  
 Acq On : 11 Jul 2007 1:34  
 Sample : JPL47-004  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:56 2007

Vial: 51  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

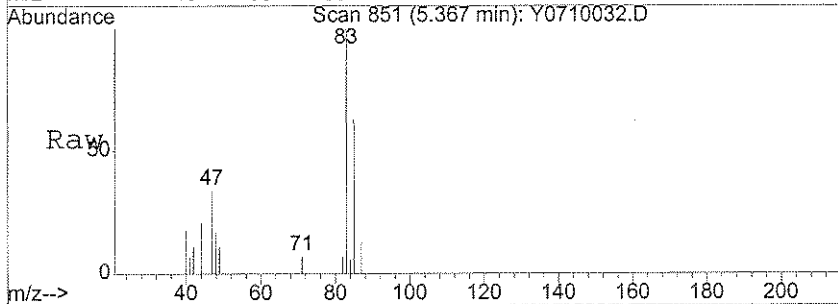
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	146		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	62		N.D.	
73) Isopropylbenzene	10.71	105	55		N.D.	
75) trans-1,4-Dichloro-2-buten	10.50	53	57		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	117		N.D.	
79) 1,2,3-Trichloropropane	10.98	110	56		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	65		N.D.	
82) 4-Chlorotoluene	10.97	91	65		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	72		N.D.	
86) sec-butylbenzene	11.54	105	114		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.86	119	439		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	80		N.D.	
91) n-Butylbenzene	12.25	91	234		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

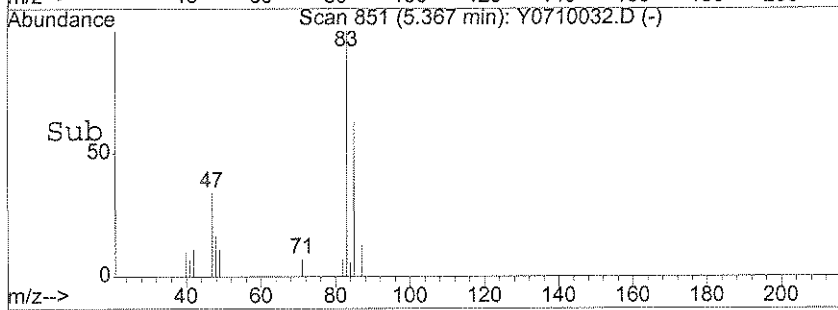
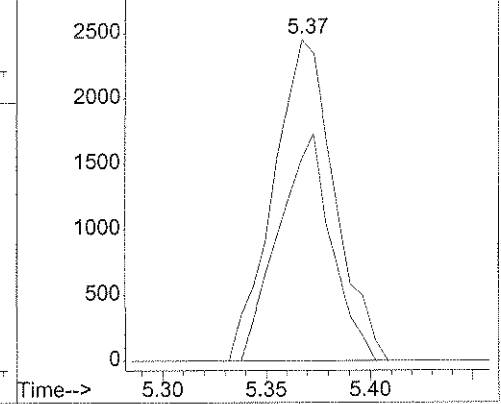


#34  
 Chloroform  
 Concen: 0.82 ug/l  
 RT: 5.37 min Scan# 851  
 Delta R.T. 0.00 min  
 Lab File: Y0710032.D  
 Acq: 11 Jul 2007 1:34

Tgt Ion	Resp	Lower	Upper
83	5033		
85	61.2	43.3	83.3



Abundance Ion 83.00 (82.70 to 83.70): Y0710032.D  
 Ion 85.00 (84.70 to 85.70): Y0710032.D





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-005  
 Lab File ID: Y0710033.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710033.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-1

Lab Name: \_\_\_\_\_

SDG No.: JPL47

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: ZB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019410

Lab Sample ID: JPL47-005

Lab File ID: Y0710033.D

Date Collected: 07/02/2007

Date/Time Analyzed: 07/10/2007 09:00

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

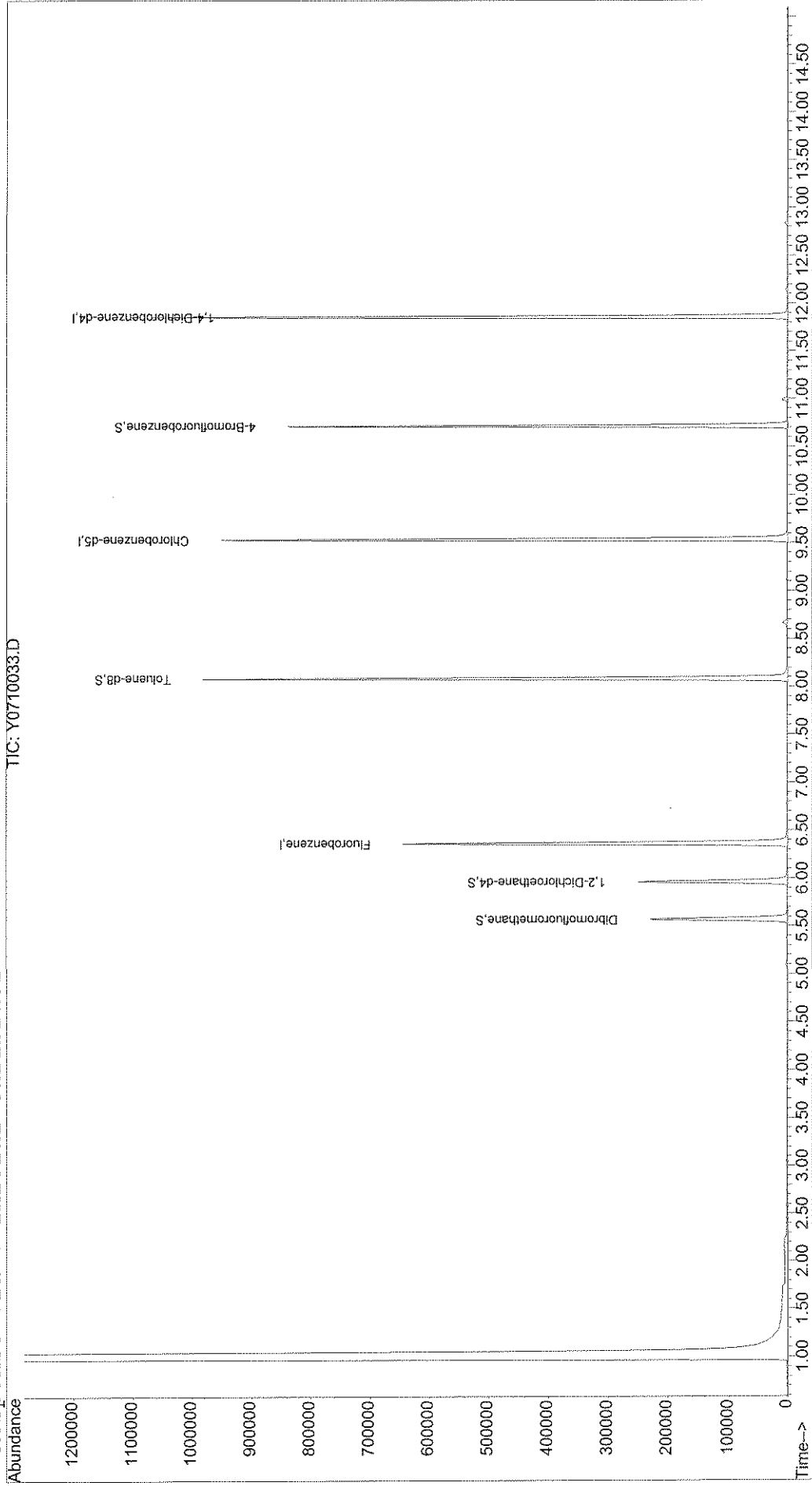
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710033.D  
Acq On : 11 Jul 2007 1:58 Vial: 52  
Sample : JPL47-005 Operator: DGA  
Misc : #4 5mL +IS/SS Inst : Yoda  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jul 11 10:57 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710033.D  
 Acq On : 11 Jul 2007 1:58  
 Sample : JPL47-005  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:57 2007

Vial: 52  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	557494	50.00	ug/l	0.00 89.51%
54) Chlorobenzene-d5	9.53	82	261183	50.00	ug/l	0.00 89.93%
74) 1,4-Dichlorobenzene-d4	11.86	152	253232	50.00	ug/l	0.00 81.97%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	149461	48.37	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.74%
40) 1,2-Dichloroethane-d4	5.96	65	183802	51.13	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.26%
55) Toluene-d8	8.08	98	582316	49.79	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.58%
76) 4-Bromofluorobenzene	10.71	95	234080	52.65	ug/l	0.00

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.27	50	68	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.67	76	74	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	
17) Methyl Acetate	2.93	43	54	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710033.D  
 Acq On : 11 Jul 2007 1:58  
 Sample : JPL47-005  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:57 2007

Vial: 52  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	309		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.37	83	774		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	193		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	493		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	248		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.80	91	325		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710033.D  
 Acq On : 11 Jul 2007 1:58  
 Sample : JPL47-005  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:57 2007

Vial: 52  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	126		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	60		N.D.	
73) Isopropylbenzene	10.71	105	237		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	123		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	183		N.D.	
82) 4-Chlorotoluene	10.98	91	183		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	77		N.D.	
86) sec-butylbenzene	11.70	105	63		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	62		N.D.	
88) 4-Isopropyltoluene	11.85	119	247		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	62		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	283		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-006  
 Lab File ID: Y0710034.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019410  
 Lab Sample ID: JPL47-006  
 Lab File ID: Y0710034.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/10/2007 09:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710034.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/10/2007 09:00

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

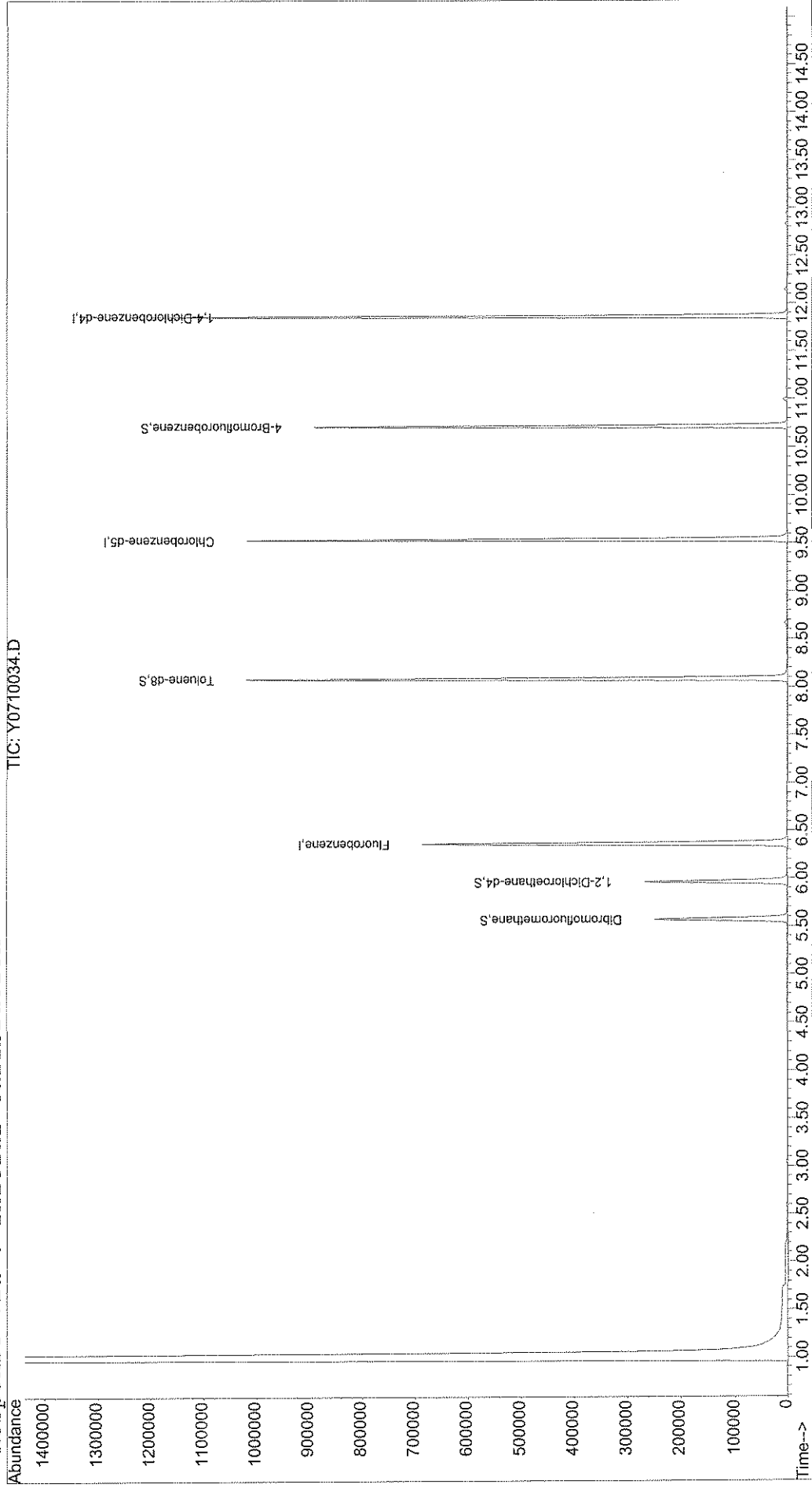
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710034.D Vial: 53  
Acq On : 11 Jul 2007 2:23 Operator: DGA  
Sample : JPL47-006 Inst : Yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 11 10:58 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710034.D  
 Acq On : 11 Jul 2007 2:23  
 Sample : JPL47-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:58 2007

Vial: 53  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : D:\MSDCHEM\1\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : File name for IS QA unknown

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar )
1) Fluorobenzene	6.36	96	592439	50.00	ug/l	0.00	NA%
54) Chlorobenzene-d5	9.53	82	284503	50.00	ug/l	0.00	NA%
74) 1,4-Dichlorobenzene-d4	11.86	152	280975	50.00	ug/l	0.00	NA%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	161259	49.11	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.22%	
40) 1,2-Dichloroethane-d4	5.96	65	197755	51.76	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.52%	
55) Toluene-d8	8.08	98	623162	48.92	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.84%	
76) 4-Bromofluorobenzene	10.71	95	255418	51.78	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	109	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	3.42	96	61	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	3.49	73	81	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0710034.D 8260B.M Wed Jul 11 10:58:48 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710034.D  
 Acq On : 11 Jul 2007 2:23  
 Sample : JPL47-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:58 2007

Vial: 53  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : D:\MSDCHEM\1\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.02	43	149		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.38	41	62		N.D.	
34) Chloroform	5.37	83	640		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.03	78	195		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	75		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	90		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.67	97	59		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.87	43	62		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.80	91	57		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071007\Y0710034.D  
 Acq On : 11 Jul 2007 2:23  
 Sample : JPL47-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 11 10:58 2007

Vial: 53  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : D:\MSDCHEM\1\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	54		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	290		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	62		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	60		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	76		N.D.	
82) 4-Chlorotoluene	11.15	91	126		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.47	119	53		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	257		N.D.	
86) sec-butylbenzene	11.54	105	257		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.84	119	66		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	269		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-007  
 Lab File ID: Y0711026.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 20:22  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.29	J
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-007  
 Lab File ID: Y0711026.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 20:22  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-007  
 Lab File ID: Y0711026.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 20:22  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

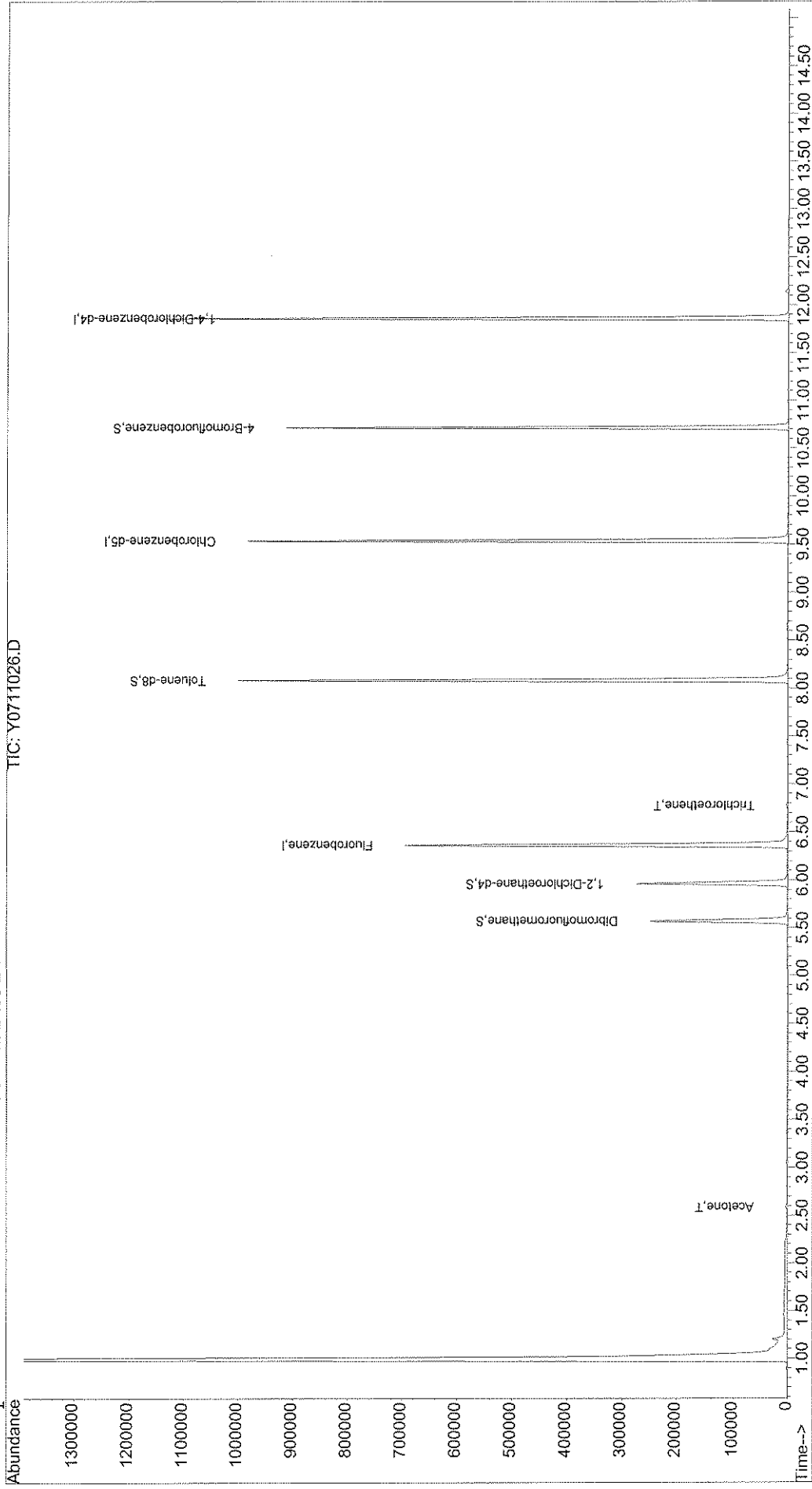
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711026.D Vial: 44  
Acq On : 11 Jul 2007 20:22 Operator: LH  
Sample : JPL47-007 Inst : Yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 12 11:56 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711026.D  
 Acq On : 11 Jul 2007 20:22  
 Sample : JPL47-007  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:56 2007

Vial: 44  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.37	96	603959	50.00	ug/l	0.00 96.97%
54) Chlorobenzene-d5	9.53	82	280071	50.00	ug/l	0.00 96.44%
74) 1,4-Dichlorobenzene-d4	11.86	152	273512	50.00	ug/l	0.00 88.54%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	162556	48.56	ug/l	0.01
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.12%
40) 1,2-Dichloroethane-d4	5.96	65	197609	50.74	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.48%
55) Toluene-d8	8.08	98	608870	48.55	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.10%
76) 4-Bromofluorobenzene	10.71	95	253451	52.78	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	3008	0.29	ug/l	92
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	69	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	715	<del>Below Cal</del>	#	61
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.	d	
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

L57/10/07

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711026.D  
 Acq On : 11 Jul 2007 20:22  
 Sample : JPL47-007  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:56 2007

Vial: 44  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	57		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	165		N.D.	
34) Chloroform	5.37	83	74		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	99		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D. d	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	1039	0.29	ug/l #	45
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.87	43	57		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	55		N.D.	
66) 1-Chlorohexane	9.53	91	973		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	129		N.D.	

45  
 11/12/07

Quantitation Report

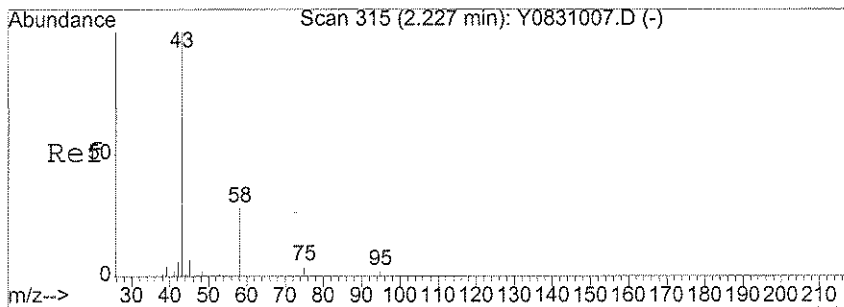
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 Acq On : 11 Jul 2007 20:22  
 Sample : JPL47-007  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:56 2007

Vial: 44  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

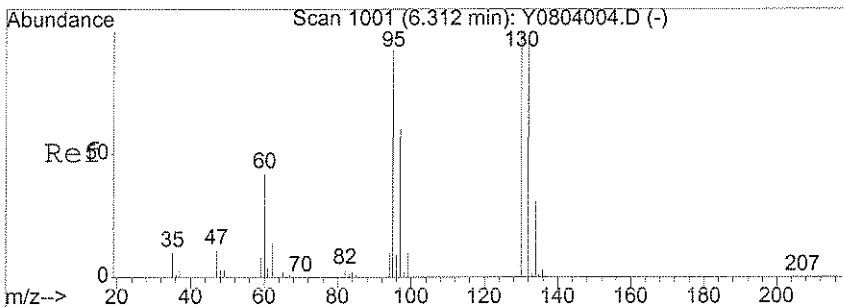
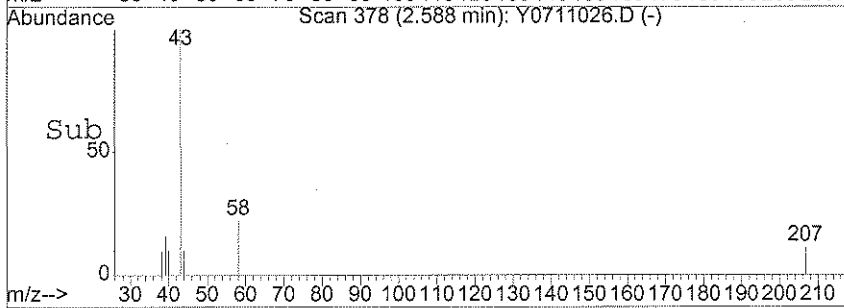
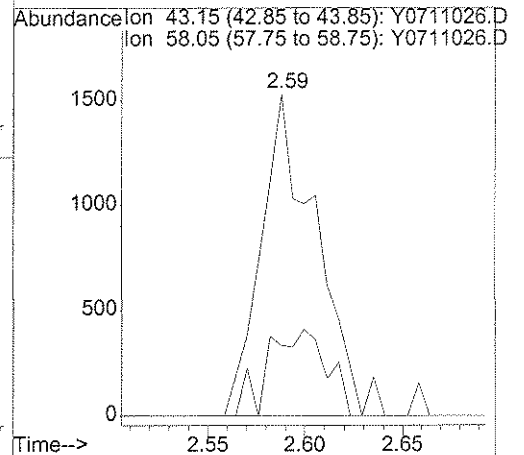
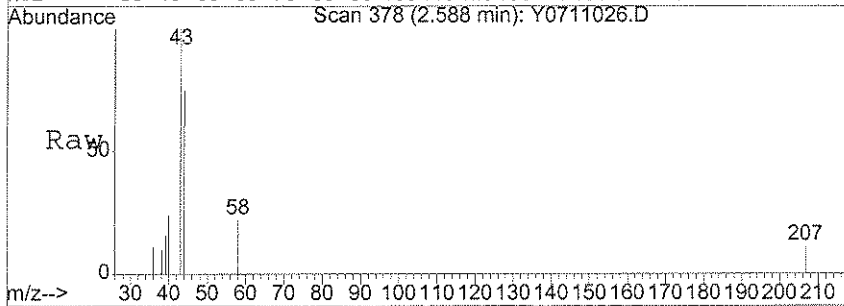
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	90		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.73	105	207		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	57		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	305		N.D.	
82) 4-Chlorotoluene	11.17	91	64		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	100		N.D.	
86) sec-butylbenzene	11.70	105	140		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	654		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	249		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



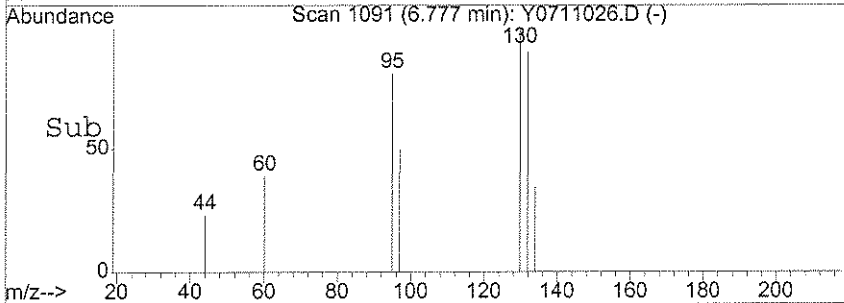
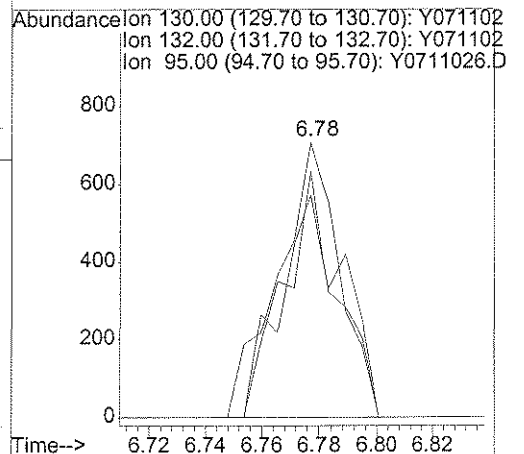
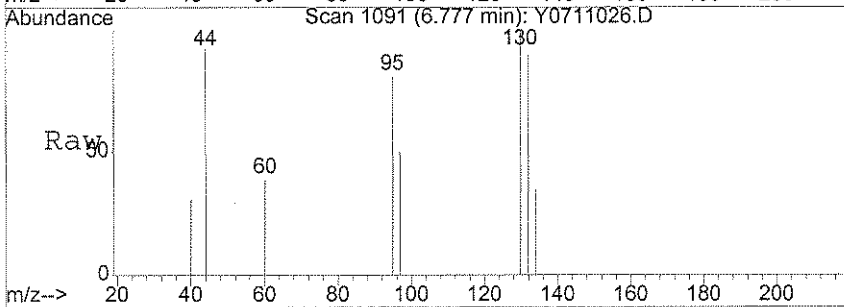
#11  
 Acetone  
 Concen: 0.29 ug/l  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.01 min  
 Lab File: Y0711026.D  
 Acq: 11 Jul 2007 20:22

Tgt Ion: 43 Resp: 3008  
 Ion Ratio Lower Upper  
 43 100  
 58 28.9 26.8 40.2



#45  
 Trichloroethene  
 Concen: 0.29 ug/l  
 RT: 6.78 min Scan# 1091  
 Delta R.T. 0.01 min  
 Lab File: Y0711026.D  
 Acq: 11 Jul 2007 20:22

Tgt Ion: 130 Resp: 1039  
 Ion Ratio Lower Upper  
 130 100  
 132 78.7 75.0 115.0  
 95 0.0 69.4 109.4#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-14-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-008  
 Lab File ID: Y0711027.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 20:47  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-14-7/2/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711027.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/11/2007 20:47

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-14-7/2/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL47-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711027.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/11/2007 20:47

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

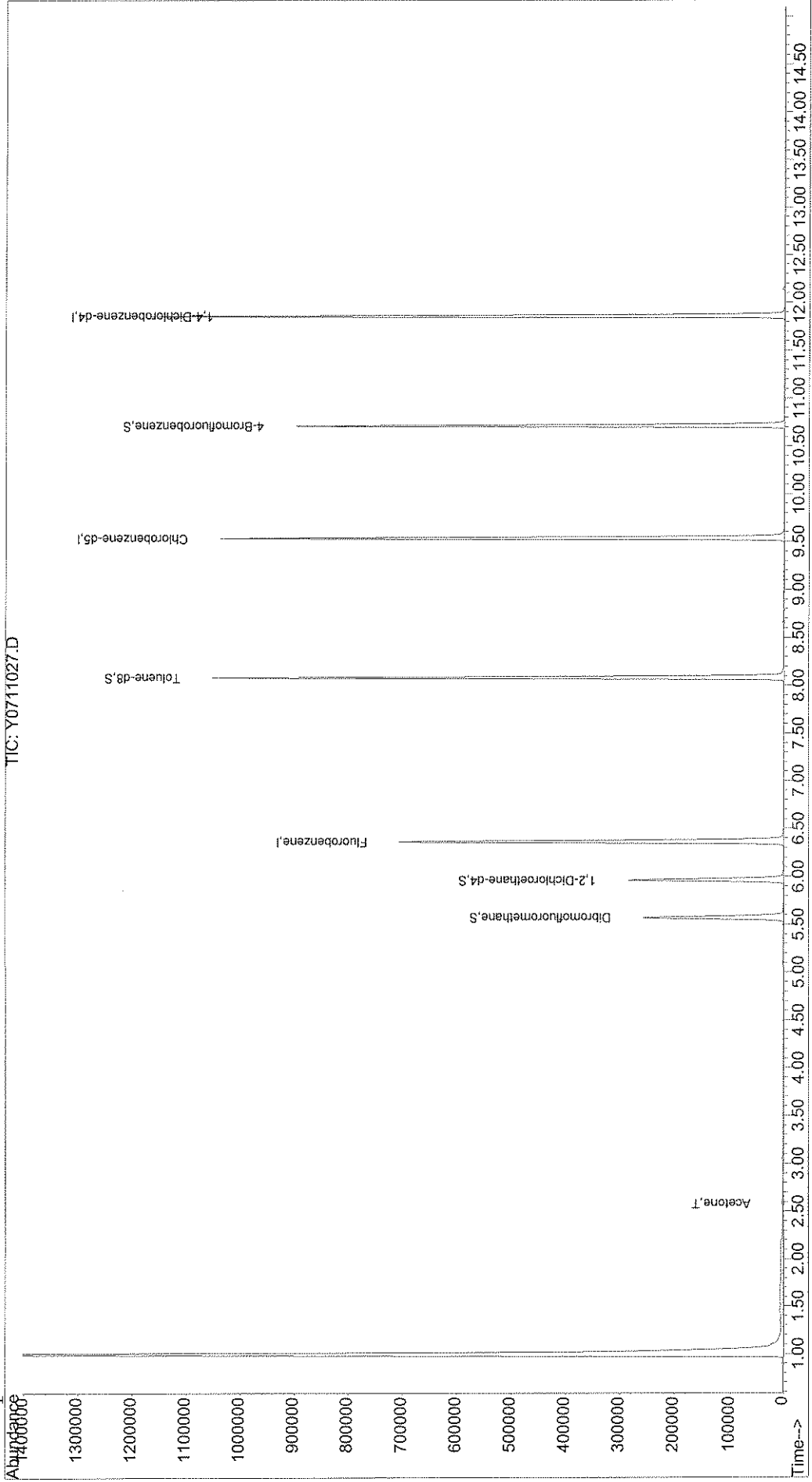
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711027.D Vial: 45  
Acq On : 11 Jul 2007 20:47 Operator: LH  
Sample : JPL47-008 Inst : Yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 12 11:57 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711027.D  
 Acq On : 11 Jul 2007 20:47  
 Sample : JPL47-008  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:57 2007

Vial: 45  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	611019	50.00	ug/l	0.00	98.11%
54) Chlorobenzene-d5	9.53	82	283509	50.00	ug/l	0.00	97.62%
74) 1,4-Dichlorobenzene-d4	11.86	152	283464	50.00	ug/l	0.00	91.76%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	165301	48.81	ug/l	0.01	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.62%	
40) 1,2-Dichloroethane-d4	5.96	65	201827	51.22	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	102.44%	
55) Toluene-d8	8.08	98	616105	48.53	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.06%	
76) 4-Bromofluorobenzene	10.71	95	256626	51.57	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	3948	1.22	ug/l #	84
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	87	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.06	84	746	<del>Below Cal</del>	#	71
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.	d	
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

LW 7/12/07

(#) = qualifier out of range (m) = manual integration  
 Y0711027.D 8260B.M Thu Jul 12 11:58:11 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711027.D  
 Acq On : 11 Jul 2007 20:47  
 Sample : JPL47-008  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:57 2007

Vial: 45  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.04	43	178		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	63		N.D.	
34) Chloroform	5.36	83	92		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	238		N.D.	
42) 1,2-Dichloroethane	5.97	62	59		N.D.	
43) Isobutanol	0.00	43	0		N.D.	d
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	339		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.14	92	73		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	260		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

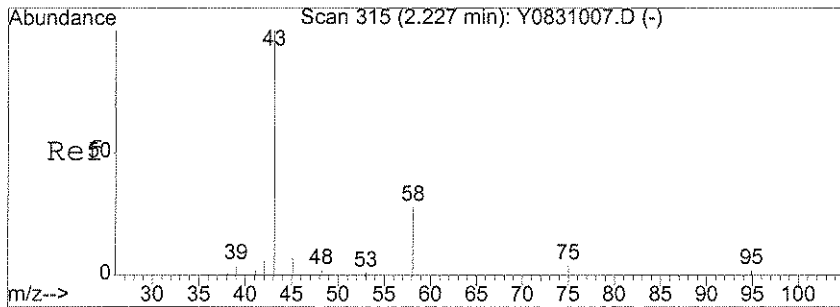
Data File : X:\MSVOA\YODA\071107\Y0711027.D  
 Acq On : 11 Jul 2007 20:47  
 Sample : JPL47-008  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:57 2007

Vial: 45  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

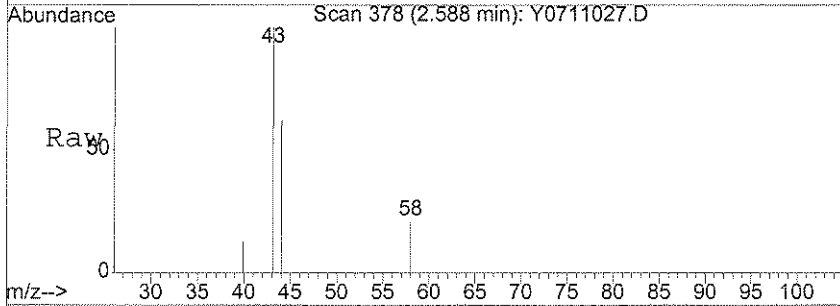
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	67		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.57	105	67		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	53		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	157		N.D.	
82) 4-Chlorotoluene	11.17	91	123		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	158		N.D.	
86) sec-butylbenzene	11.70	105	199		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	61		N.D.	
88) 4-Isopropyltoluene	11.86	119	507		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	203		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	387		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	68		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

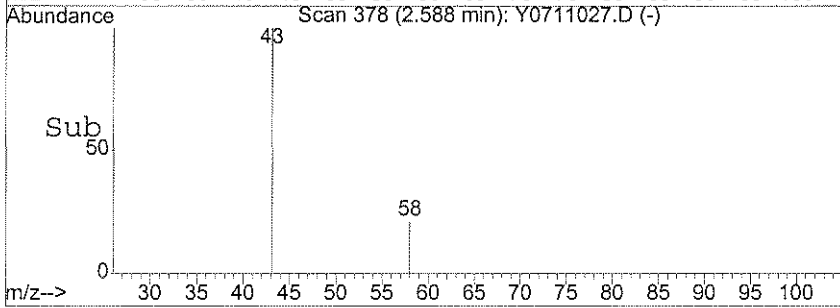
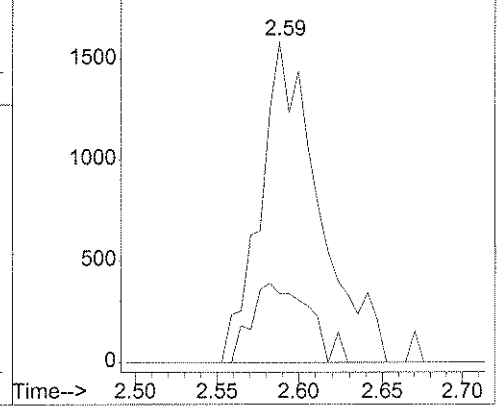


#11  
 Acetone  
 Concen: 1.22 ug/l  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.01 min  
 Lab File: Y0711027.D  
 Acq: 11 Jul 2007 20:47

Tgt Ion:	43	Resp:	3948
Ion Ratio	Lower	Upper	
43	100		
58	24.3	26.8	40.2#



Abundance Ion 43.15 (42.85 to 43.85): Y0711027.D  
 Ion 58.05 (57.75 to 58.75): Y0711027.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-14-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-009  
 Lab File ID: Y0711019.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 17:29  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-14-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-009  
 Lab File ID: Y0711019.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 17:29  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-14-7/2/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL47  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: ZB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL47-009  
 Lab File ID: Y0711019.D  
 Date Collected: 07/02/2007  
 Date/Time Analyzed: 07/11/2007 17:29  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

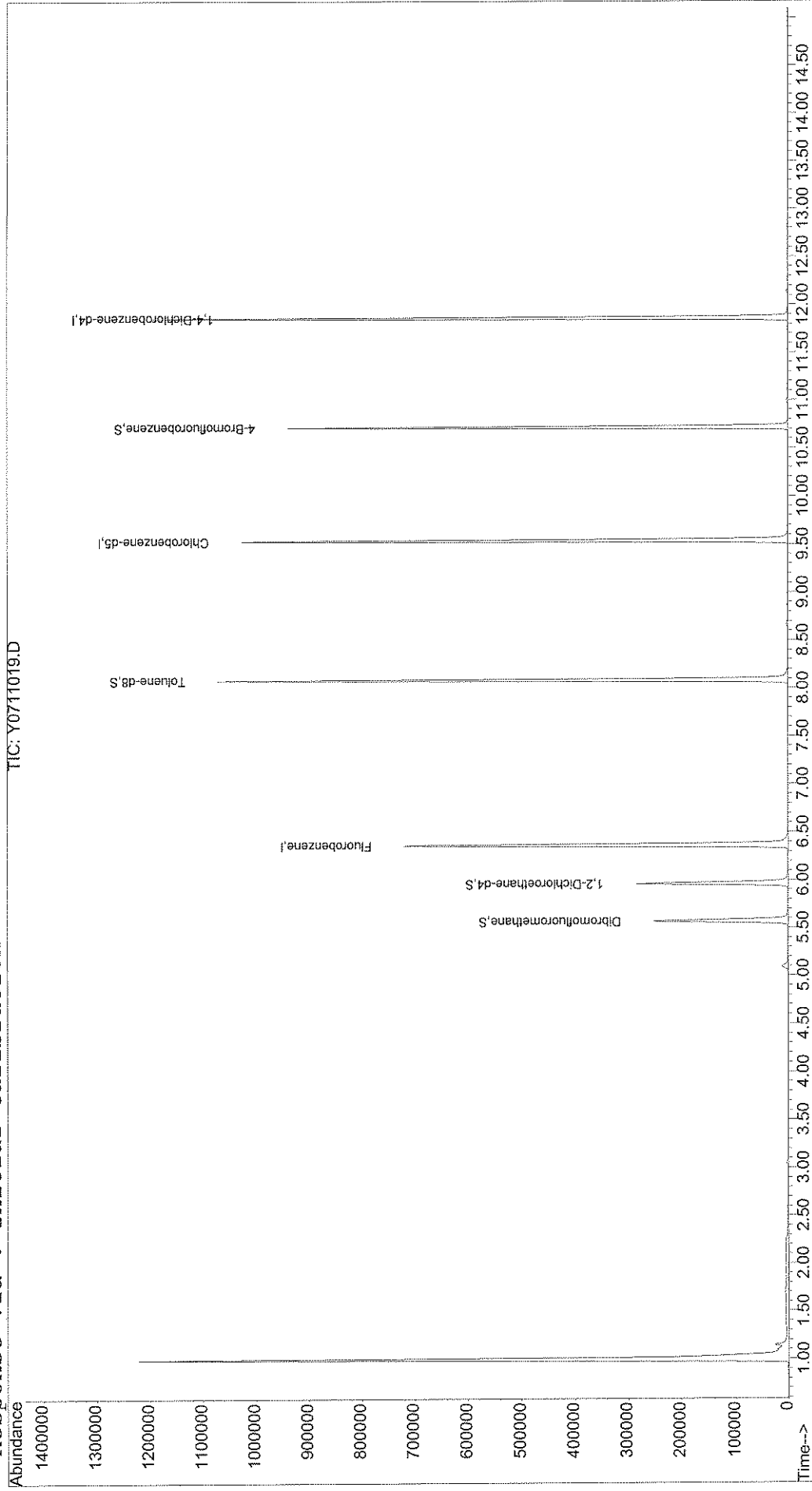
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711019.D Vial: 37  
Acq On : 11 Jul 2007 17:29 Operator: LH  
Sample : JPL47-009 Inst : yoda  
Misc : #1 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 12 11:50 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711019.D  
 Acq On : 11 Jul 2007 17:29  
 Sample : JPL47-009  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:50 2007

Vial: 37  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	620358	50.00	ug/l	0.00	99.61%
54) Chlorobenzene-d5	9.53	82	289292	50.00	ug/l	0.00	99.61%
74) 1,4-Dichlorobenzene-d4	11.86	152	286913	50.00	ug/l	0.00	92.88%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	163596	47.58	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	95.16%	
40) 1,2-Dichloroethane-d4	5.96	65	201437	50.35	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.70%	
55) Toluene-d8	8.08	98	637851	49.24	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.48%	
76) 4-Bromofluorobenzene	10.71	95	264872	52.58	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	1202	<del>Below Cal</del>	#	63
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	152	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	2.96	43	62	N.D.		
18) Methylene Chloride	3.05	84	1208	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

*11/12/07*

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711019.D  
 Acq On : 11 Jul 2007 17:29  
 Sample : JPL47-009  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:50 2007

Vial: 37  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	327		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	58		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	5.77	75	102		N.D.	
41) Benzene	6.01	78	347		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	7.16	41	53		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.14	92	407		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	77		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.88	43	56		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	84		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	396		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0711019.D 8260B.M Thu Jul 12 11:50:18 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711019.D  
 Acq On : 11 Jul 2007 17:29  
 Sample : JPL47-009  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:50 2007

Vial: 37  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	120		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.57	105	133		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.70	83	54		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	10.98	120	53		N.D.	
81) 2-Chlorotoluene	11.05	91	160		N.D.	
82) 4-Chlorotoluene	11.17	91	238		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	233		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	269		N.D.	
86) sec-butylbenzene	11.69	105	344		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	174		N.D.	
88) 4-Isopropyltoluene	11.85	119	609		N.D.	
89) 1,4-Dichlorobenzene	11.89	146	181		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	652		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	91		N.D.	
94) Hexachlorobutadiene	14.03	225	86		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

~~Below Cal # 19~~  
 N.D. d *11-10-07*  
 N.D.

**TIC FORMS**

SDG JPL47

VOLATILES ANALYSIS

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/02/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 1

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	001066-40-6	Silanol, trimethyl-	5.097	6.3	JN
02					
03					
04					
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06					
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11					
12					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710029.D Vial: 48  
 Acq On : 11 Jul 2007 00:19 Operator: DGA  
 Sample : JPL47-001 Inst : yoda  
 Misc : #4 5mL +IS/SS Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 Silanol, trimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
5.10	6.27 ug/l	58341	Fluorobenzene	464905	6.37

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	83
2			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	74
3			Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	74
4			tert-Butyldimethylsilanol	132	C6H16OSi	018173-64-3	9
5			Formamide, N-methylthio	75	C2H5NS	000000-00-0	7

Y0710029.D 8260B.M Wed Jul 11 11:41:50 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-4

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710030.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710030.D Vial: 49  
Acq On : 11 Jul 2007 00:44 Operator: DGA  
Sample : JPL47-002 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710030.D 8260B.M Wed Jul 11 11:42:08 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-3

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710031.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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11					
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13					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710031.D Vial: 50  
Acq On : 11 Jul 2007 1:08 Operator: DGA  
Sample : JPL47-003 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710031.D 8260B.M Wed Jul 11 11:42:20 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710032.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710032.D Vial: 51  
Acq On : 11 Jul 2007 1:34 Operator: DGA  
Sample : JPL47-004 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710032.D 8260B.M Wed Jul 11 11:42:28 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710033.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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09					
10					
11					
12					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710033.D Vial: 52  
Acq On : 11 Jul 2007 1:58 Operator: DGA  
Sample : JPL47-005 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710033.D 8260B.M Wed Jul 11 11:42:34 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-6-2Q07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710034.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710034.D Vial: 53  
Acq On : 11 Jul 2007 2:23 Operator: DGA  
Sample : JPL47-006 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : D:\MSDCHEM\1\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710034.D 8260B.M Wed Jul 11 11:42:42 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SB-1-7/2/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019438

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/11/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
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11					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711026.D Vial: 44  
Acq On : 11 Jul 2007 20:22 Operator: LH  
Sample : JPL47-007 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711026.D 8260B.M Thu Jul 12 13:33:14 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-14-7/2/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019438

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711027.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/11/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711027.D Vial: 45  
Acq On : 11 Jul 2007 20:47 Operator: LH  
Sample : JPL47-008 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711027.D 8260B.M Thu Jul 12 13:33:23 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-14-7/2/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019438

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL47-009

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/03/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/11/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

01	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711019.D Vial: 37  
Acq On : 11 Jul 2007 17:29 Operator: LH  
Sample : JPL47-009 Inst : yoda  
Misc : #1 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711019.D 8260B.M Thu Jul 12 13:32:43 2007



1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071007MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019410

Matrix: (SOIL/WATER) Water

Lab Sample ID: B071007MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0710014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/10/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071007\Y0710014.D Vial: 33  
Acq On : 10 Jul 2007 17:57 Operator: DGA  
Sample : B071007MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS (MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0710014.D 8260B.M Wed Jul 11 11:45:43 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071107MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL47

Run Sequence: R019438

Matrix: (SOIL/WATER) Water

Lab Sample ID: B071107MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711014.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/11/2007

GC Column: ZB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711014.D Vial: 32  
Acq On : 11 Jul 2007 15:26 Operator: LH  
Sample : B071107MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711014.D 8260B.M Thu Jul 12 13:32:30 2007

**Metals Data**

**JPL47**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
<u>MW-25-5</u>	<u>JPL47-001</u>
<u>MW-25-4</u>	<u>JPL47-002</u>
<u>MW-25-3</u>	<u>JPL47-003</u>
<u>MW-25-2</u>	<u>JPL47-004</u>
<u>MW-25-1</u>	<u>JPL47-005</u>
<u>DUPE-6-2Q07</u>	<u>JPL47-006</u>
<u>SB-1-7/2/07</u>	<u>JPL47-007</u>
<u>EB-14-7/2/07</u>	<u>JPL47-008</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: *Bill Ambacher*

Name: Bill Ambacher

Date: 8/1/07

Title: Inorganics/Metals Manager

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

Matrix (soil/water): Water

Lab Sample ID: JPL47-001

Level (low/med): LOW

Date Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	4.36			M	R019973
7440-70-2	Calcium	9410			P	R019929
7440-47-3	Chromium	1.59			M	R019973
7439-89-6	Iron	167		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	5270		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	73500		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-4

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL47Matrix (soil/water): WaterLab Sample ID: JPL47-002Level (low/med): LOWDate Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.61			M	R019973
7440-70-2	Calcium	61500			P	R019929
7440-47-3	Chromium	3.82			M	R019973
7439-89-6	Iron	211		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	18500		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	51000		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

Matrix (soil/water): Water

Lab Sample ID: JPL47-003

Level (low/med): LOW

Date Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.42			M	R019973
7440-70-2	Calcium	76500			P	R019929
7440-47-3	Chromium	5.02			M	R019973
7439-89-6	Iron	242		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	25700		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	38700		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

Matrix (soil/water): Water

Lab Sample ID: JPL47-004

Level (low/med): LOW

Date Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.56			M	R019973
7440-70-2	Calcium	75900			P	R019929
7440-47-3	Chromium	5.36			M	R019973
7439-89-6	Iron	248		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	28000		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	31400		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
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 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL47Matrix (soil/water): WaterLab Sample ID: JPL47-005Level (low/med): LOWDate Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019412
7440-70-2	Calcium	116000			P	R019411
7440-47-3	Chromium	1.70			M	R019412
7439-89-6	Iron	1110			P	R019411
7439-92-1	Lead	1.00	U		M	R019412
7439-95-4	Magnesium	35300			P	R019411
7440-09-7	Potassium	12500	U		P	R019411
7440-23-5	Sodium	32500			P	R019411

Color Before: Colorless Clarity Before: Clear Texture: \_\_\_\_\_Color After: Colorless Clarity After: Clear Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-6-2Q07

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL47Matrix (soil/water): WaterLab Sample ID: JPL47-006Level (low/med): LOWDate Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019412
7440-70-2	Calcium	116000			P	R019411
7440-47-3	Chromium	1.70			M	R019412
7439-89-6	Iron	1500			P	R019411
7439-92-1	Lead	1.00	U		M	R019412
7439-95-4	Magnesium	34500			P	R019411
7440-09-7	Potassium	12500	U		P	R019411
7440-23-5	Sodium	31700			P	R019411

Color Before: Colorless Clarity Before: Clear Texture: \_\_\_\_\_Color After: Colorless Clarity After: Clear Artifacts: No

Comment \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

SB-1-7/2/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

Matrix (soil/water): Water

Lab Sample ID: JPL47-007

Level (low/med): LOW

Date Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	5000	U		P	R019929
7440-47-3	Chromium	1.28			M	R019973
7439-89-6	Iron	100	U	E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	5000	U	*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	5000	U	*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-14-7/2/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

Matrix (soil/water): Water

Lab Sample ID: JPL47-008

Level (low/med): LOW

Date Received: 07/03/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	5000	U		P	R019929
7440-47-3	Chromium	1.04			M	R019973
7439-89-6	Iron	100	U	E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	5000	U	*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	5000	U	*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL47**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL47

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-25-5	JPL47-001
MW-25-5D	JPL47-001D
MW-25-5MS	JPL47-001MS
MW-25-5MSD	JPL47-001MSD
MW-25-4	JPL47-002
MW-25-3	JPL47-003
MW-25-3MS	JPL47-003MS
MW-25-3MSD	JPL47-003MSD
MW-25-2	JPL47-004
MW-25-1	JPL47-005
DUPE-6-2Q07	JPL47-006
SB-1-7/2/07	JPL47-007
SB-1-7/2/07D	JPL47-007D
EB-14-7/2/07	JPL47-008

Comments:

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I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Pennor

Date: 7-25-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL47  
**Sample Number:** MW-25-5 **Date/Time Collected:** 07/02/2007 07:44  
**Lab Sample ID:** JPL47-001 **Date/Time Received:** 07/03/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	9.4		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	250		2	2	07/05/2007	07/09/2007	R019253

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/17/2007	07/17/2007	R019633
Sulfate as SO4	14808-79-8	10	47		10	1.7	07/17/2007	07/18/2007	R019633
Chloride	16887-00-6	10	14		10	0.76	07/17/2007	07/18/2007	R019633

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	44		8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	76		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	07/17/2007	07/18/2007	R019637

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.050	U	0.050	0.016	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	07/03/2007	07/03/2007	R019279



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL47  
**Sample Number:** MW-25-3 **Date/Time Collected:** 07/02/2007 08:57  
**Lab Sample ID:** JPL47-003 **Date/Time Received:** 07/03/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.4		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	440		2	2	07/05/2007	07/09/2007	R019253

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	8.4		2.0	0.55	07/17/2007	07/18/2007	R019633
Sulfate as SO4	14808-79-8	10	70		10	1.7	07/17/2007	07/18/2007	R019633
Chloride	16887-00-6	10	36		10	0.76	07/17/2007	07/18/2007	R019633

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	190		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	9.3		4.0	0.56	07/17/2007	07/18/2007	R019637

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	10	9.8		0.50	0.16	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	10		0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	07/03/2007	07/03/2007	R019279



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL47  
**Sample Number:** MW-25-1 **Date/Time Collected:** 07/02/2007 10:03  
**Lab Sample ID:** JPL47-005 **Date/Time Received:** 07/03/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.2		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	590		2	2	07/05/2007	07/09/2007	R019253

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	9.9		2.0	0.55	07/17/2007	07/18/2007	R019633
Sulfate as SO4	14808-79-8	10	150		10	1.7	07/17/2007	07/18/2007	R019633
Chloride	16887-00-6	10	74		10	0.76	07/17/2007	07/18/2007	R019633

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	160		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	5.5		4.0	0.56	07/19/2007	07/20/2007	R019744

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	10	12		0.50	0.16	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	12		0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.033		0.0050	0.0012	07/03/2007	07/03/2007	R019279

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL47  
**Sample Number:** DUPE-6-2Q07 **Date/Time Collected:** 07/02/2007 00:00  
**Lab Sample ID:** JPL47-006 **Date/Time Received:** 07/03/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.0		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	580		2	2	07/05/2007	07/09/2007	R019253

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	9.9		2.0	0.55	07/17/2007	07/18/2007	R019633
Sulfate as SO4	14808-79-8	10	150		10	1.7	07/17/2007	07/18/2007	R019633
Chloride	16887-00-6	10	74		10	0.76	07/17/2007	07/18/2007	R019633

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	160		8	8	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	07/19/2007	07/20/2007	R019744

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	10	12		0.50	0.16	07/11/2007	07/11/2007	R019568
Nitrate - N	14797-55-8	1	12		0.5	0.01	07/17/2007	07/17/2007	R019623

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0073		0.0050	0.0012	07/03/2007	07/03/2007	R019279



**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL47  
**Sample Number:** SB-1-7/2/07 **Date/Time Collected:** 07/02/2007 08:43  
**Lab Sample ID:** JPL47-007 **Date/Time Received:** 07/03/2007 08:30  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.1		0.10	0.10	07/03/2007	07/03/2007	R019230

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	14		2	2	07/05/2007	07/09/2007	R019253

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/17/2007	07/18/2007	R019633
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	07/17/2007	07/18/2007	R019633
Chloride	16887-00-6	1	1.0	U	1.0	0.076	07/17/2007	07/18/2007	R019633

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2		2	2	07/12/2007	07/12/2007	R019497

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/19/2007	07/20/2007	R019744

**Method:** E353.2 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.081		0.050	0.016	07/18/2007	07/18/2007	R019648
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/20/2007	07/20/2007	R019722

**Method:** E354.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	07/03/2007	07/03/2007	R019279

**Laucks Testing Laboratories, Inc.**

**Final Results**

Client: Battelle Project: JPL Groundwater Monitoring  
 SDG Number: JPL47  
 Sample Number: EB-14-7/2/07 Date/Time Collected: 07/02/2007 09:47  
 Lab Sample ID: JPL47-008 Date/Time Received: 07/03/2007 08:30  
 Method: E150.1 Unit: pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.0		0.10	0.10	07/03/2007	07/03/2007	R019230

Method: E160.1 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	17		2	2	07/05/2007	07/09/2007	R019253

Method: E300.0 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/17/2007	07/18/2007	R019633
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	07/17/2007	07/18/2007	R019633
Chloride	16887-00-6	1	1.0	U	1.0	0.076	07/17/2007	07/18/2007	R019633

Method: E310.1 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/12/2007	07/12/2007	R019497
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2		2	2	07/12/2007	07/12/2007	R019497

Method: E314.0 Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/19/2007	07/20/2007	R019744

Method: E353.2 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.088		0.050	0.016	07/18/2007	07/18/2007	R019648
Nitrate - N	14797-55-8	1	0.5	U	0.5	0.01	07/20/2007	07/20/2007	R019722

Method: E354.1 Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	07/03/2007	07/03/2007	R019279







































**SAMPLE DATA**

SDG JPL48

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-5

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL48 Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL48-001

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0711028.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/11/2007 21:12

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-001  
 Lab File ID: Y0711028.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 21:12  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-001  
 Lab File ID: Y0711028.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 21:12  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

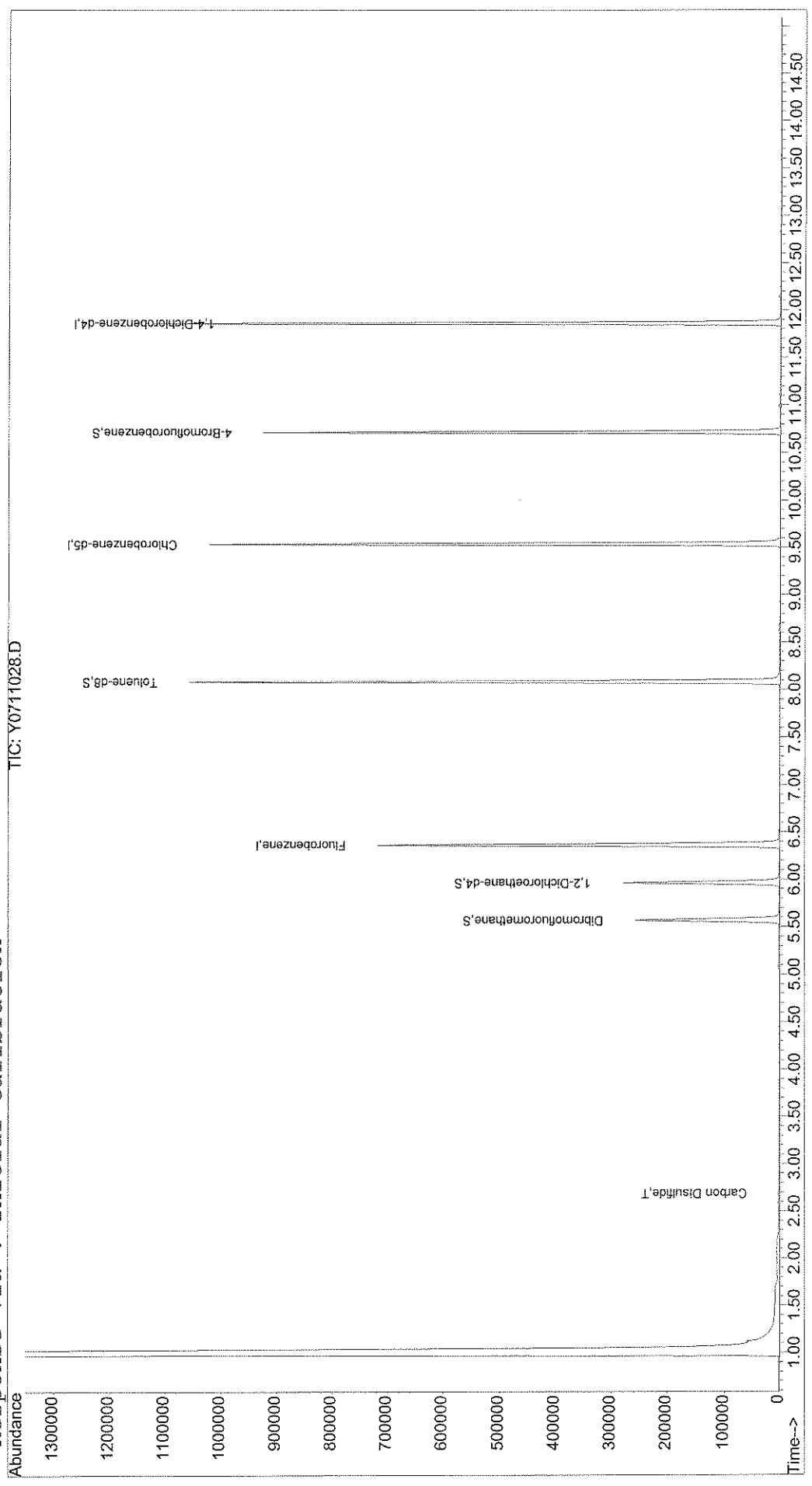
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711028.D  
Acq On : 11 Jul 2007 21:12  
Sample : JPL48-001  
Misc : #3 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 12 11:58 2007  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711028.D  
 Acq On : 11 Jul 2007 21:12  
 Sample : JPL48-001  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:58 2007

Vial: 46  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	608867	50.00	ug/l	0.00 97.76%
54) Chlorobenzene-d5	9.53	82	285465	50.00	ug/l	0.00 98.29%
74) 1,4-Dichlorobenzene-d4	11.86	152	271960	50.00	ug/l	0.00 88.04%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	163182	48.36	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.72%
40) 1,2-Dichloroethane-d4	5.96	65	199542	50.82	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.64%
55) Toluene-d8	8.08	98	627318	49.08	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.16%
76) 4-Bromofluorobenzene	10.71	95	253293	53.05	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	2378	<del>Below Cal</del>	#	86
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	3864	0.45	ug/l	100
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	562	<del>Below Cal</del>	#	62
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	3.41	53	143	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

LH 7/12/07

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711028.D  
 Acq On : 11 Jul 2007 21:12  
 Sample : JPL48-001  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:58 2007

Vial: 46  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.06	43	53		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	203		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	384		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	92		N.D.	
46) Methylcyclohexane	6.97	83	56		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	137		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.67	91	72		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

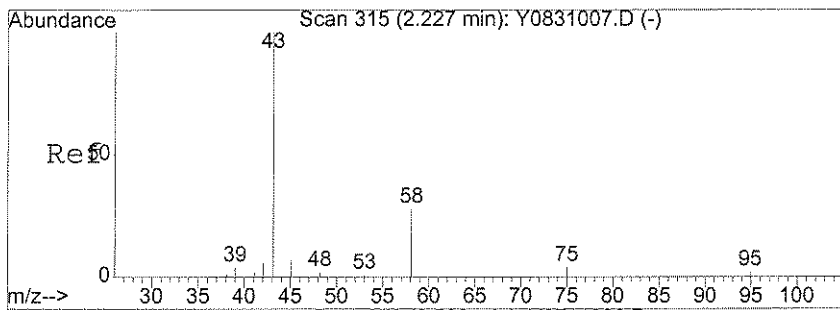
Data File : X:\MSVOA\YODA\071107\Y0711028.D  
 Acq On : 11 Jul 2007 21:12  
 Sample : JPL48-001  
 Misc : #3 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:58 2007

Vial: 46  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

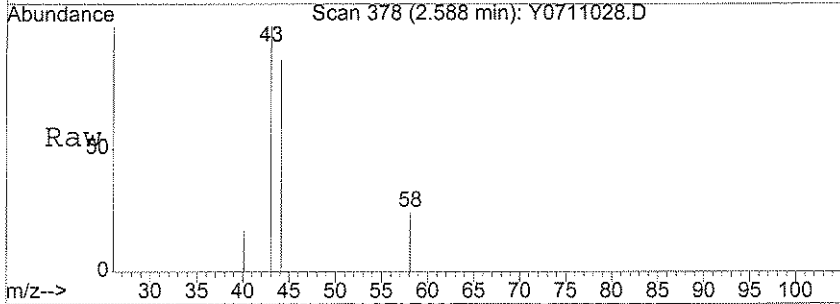
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	151		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.22	104	212		N.D.	
72) Bromoform	10.38	173	57		N.D.	
73) Isopropylbenzene	10.71	105	86		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	59		N.D.	
79) 1,2,3-Trichloropropane	10.72	110	73		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	266		N.D.	
82) 4-Chlorotoluene	10.98	91	266		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	169		N.D.	
86) sec-butylbenzene	11.68	105	109		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	93		N.D.	
88) 4-Isopropyltoluene	11.85	119	308		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	93		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	450		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.84	180	59		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

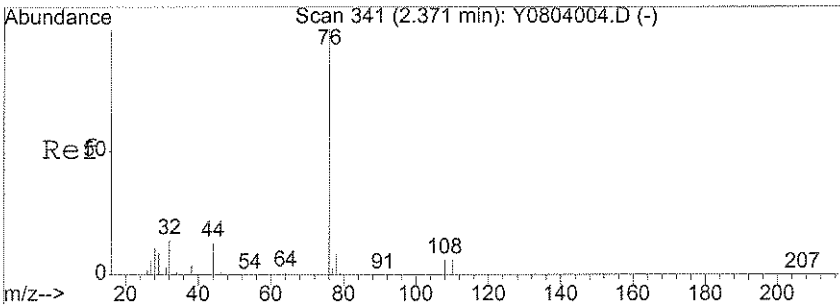
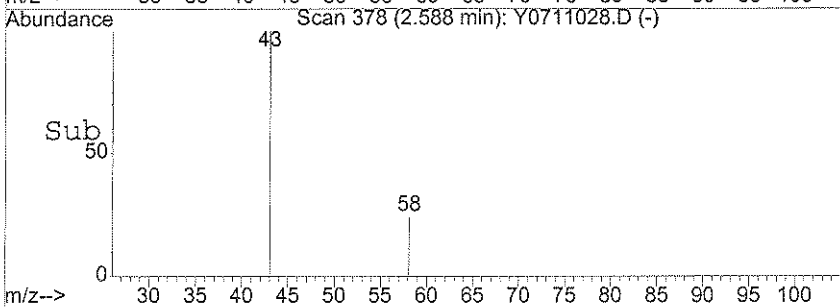
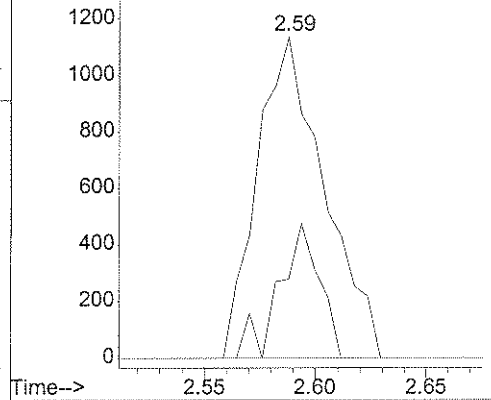


#11  
 Acetone  
 Concen: Below Cal  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.01 min  
 Lab File: Y0711028.D  
 Acq: 11 Jul 2007 21:12

Tgt Ion: 43 Resp: 2378  
 Ion Ratio Lower Upper  
 43 100  
 58 25.3 26.8 40.2#

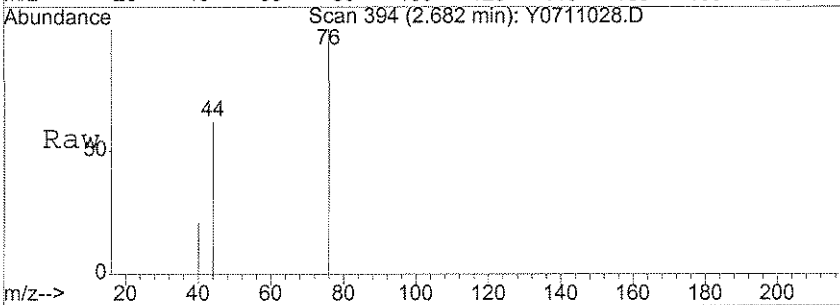


Abundance Ion 43.15 (42.85 to 43.85): Y0711028.D  
 Ion 58.05 (57.75 to 58.75): Y0711028.D

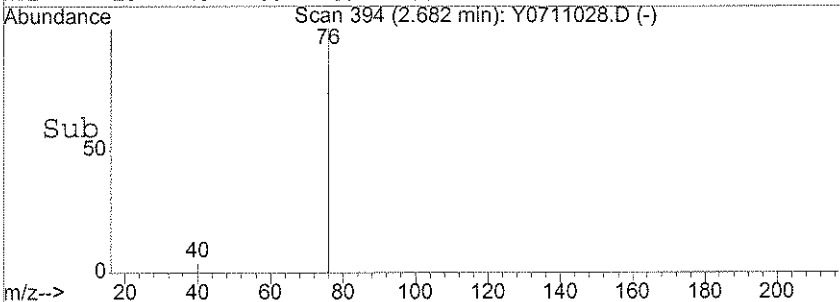
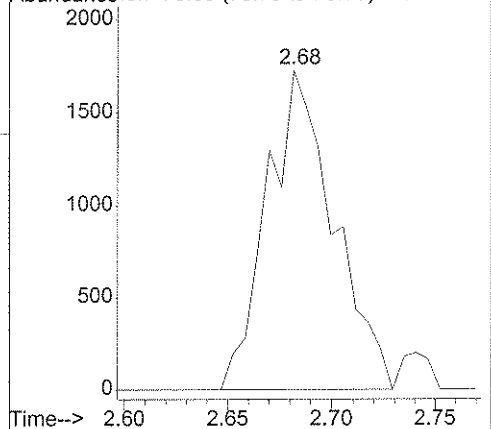


#14  
 Carbon Disulfide  
 Concen: 0.45 ug/l  
 RT: 2.68 min Scan# 394  
 Delta R.T. 0.01 min  
 Lab File: Y0711028.D  
 Acq: 11 Jul 2007 21:12

Tgt Ion: 76 Resp: 3864



Abundance Ion 76.00 (75.70 to 76.70): Y0711028.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-002  
 Lab File ID: Y0711029.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 21:36  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-4

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL48

Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL48-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711029.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/11/2007 21:36

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-4

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-002  
 Lab File ID: Y0711029.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 21:36  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

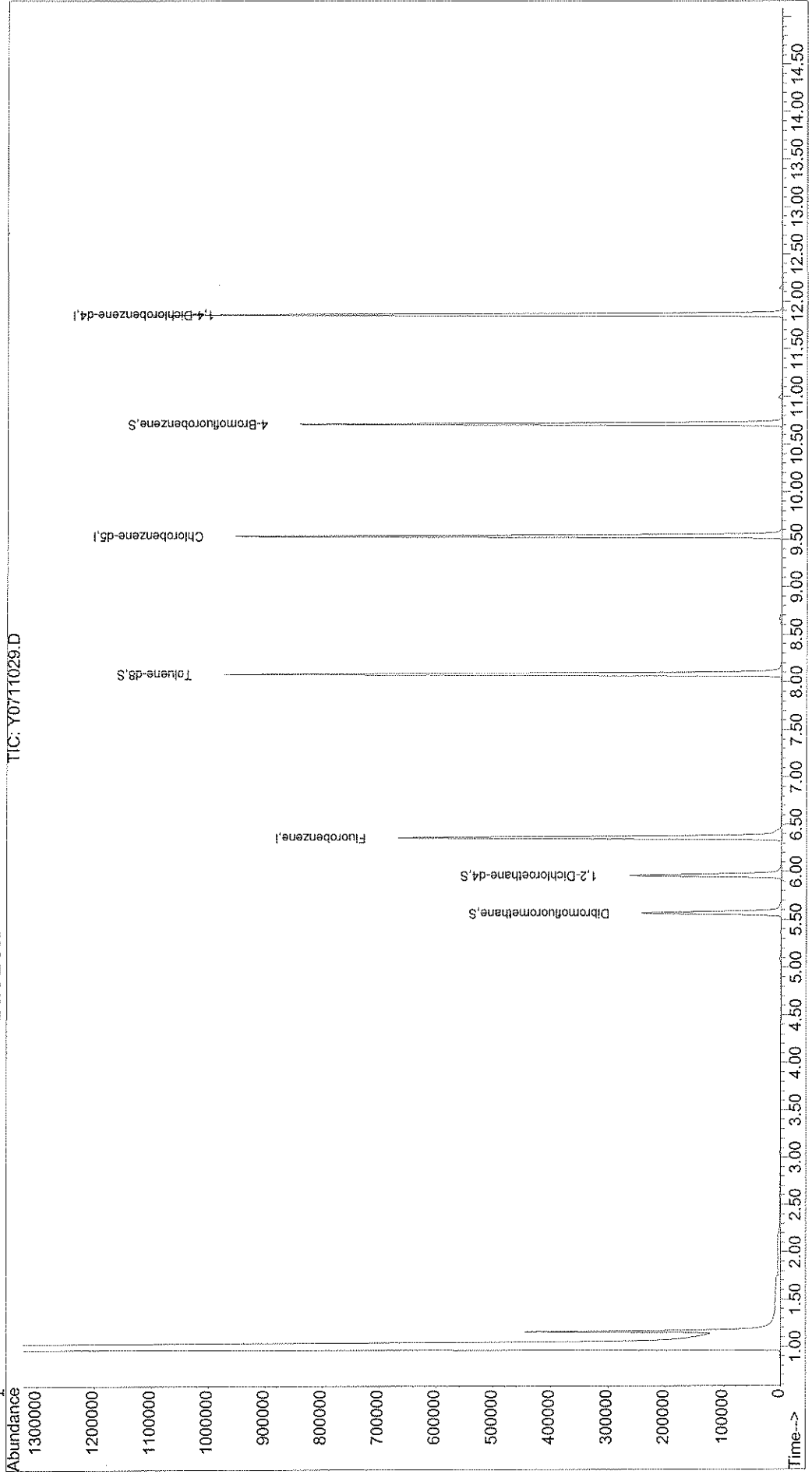
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711029.D  
Acq On : 11 Jul 2007 21:36  
Sample : JPL48-002  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 12 11:59 2007  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711029.D  
 Acq On : 11 Jul 2007 21:36  
 Sample : JPL48-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:59 2007

Vial: 47  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	596553	50.00	ug/l	0.00	95.78%
54) Chlorobenzene-d5	9.54	82	270466	50.00	ug/l	0.00	93.13%
74) 1,4-Dichlorobenzene-d4	11.86	152	261803	50.00	ug/l	0.00	84.75%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	158721	48.01	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.02%	
40) 1,2-Dichloroethane-d4	5.96	65	195963	50.94	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.88%	
55) Toluene-d8	8.08	98	594514	49.09	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.18%	
76) 4-Bromofluorobenzene	10.71	95	245573	53.43	ug/l	0.00	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	1614	<del>Below Cal</del>	#	83
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.69	76	582	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	820	<del>Below Cal</del>	#	72
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0711029.D 8260B.M Thu Jul 12 11:59:57 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711029.D  
 Acq On : 11 Jul 2007 21:36  
 Sample : JPL48-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:59 2007

Vial: 47  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	4.93	96	77		N.D.	
30) 2-Butanone	5.03	43	136		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	57		N.D.	
34) Chloroform	5.37	83	563		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	468		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	141		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	199		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.69	166	467		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	878		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	69		N.D.	

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711029.D  
 Acq On : 11 Jul 2007 21:36  
 Sample : JPL48-002  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:59 2007

Vial: 47  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	418		N.D.	
70) o-xylene	10.20	106	63		N.D.	
71) Styrene	10.21	104	71		N.D.	
72) Bromoform	10.38	173	83		N.D.	
73) Isopropylbenzene	10.71	105	693		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	10.86	120	61		N.D.	
81) 2-Chlorotoluene	10.98	91	198		N.D.	
82) 4-Chlorotoluene	11.17	91	77		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	55		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	214		N.D.	
86) sec-butylbenzene	11.70	105	71		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	470		N.D.	
88) 4-Isopropyltoluene	11.87	119	457		N.D.	
89) 1,4-Dichlorobenzene	11.89	146	512		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	441		N.D.	
91) n-Butylbenzene	12.25	91	331		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-003  
 Lab File ID: Y0711030.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 22:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.37	J
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.46	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	1.2	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-3

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL48 Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL48-003

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0711030.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/11/2007 22:00

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.48	J
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-3

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-003  
 Lab File ID: Y0711030.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 22:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

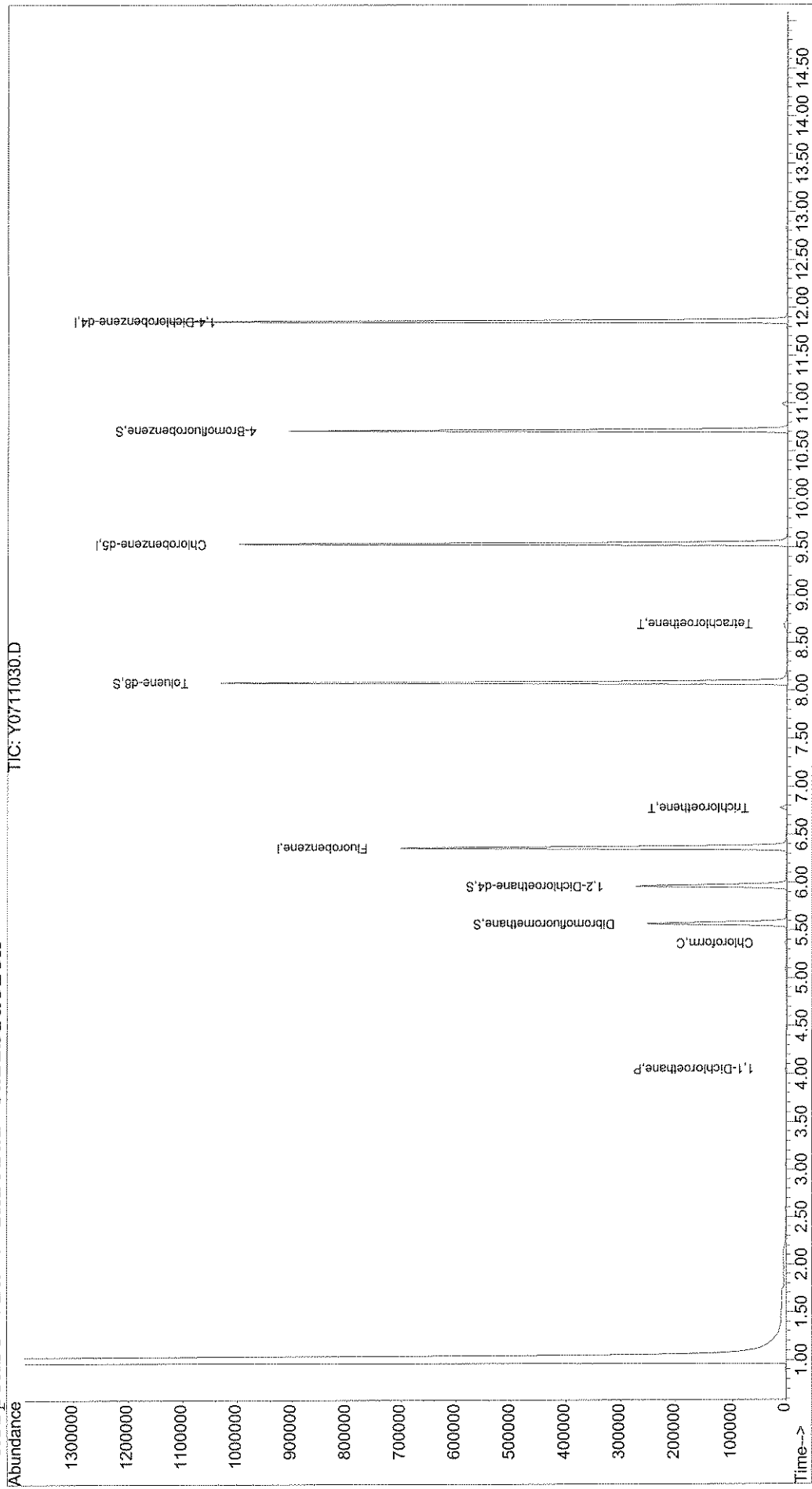
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	<u>ug/L</u>
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711030.D  
Acq On : 11 Jul 2007 22:00 Vial: 48  
Sample : JPL48-003 Operator: LH  
Misc : #4 5mL +IS/SS Inst : Yoda  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jul 12 12:00 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711030.D  
 Acq On : 11 Jul 2007 22:00  
 Sample : JPL48-003  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:00 2007

Vial: 48  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.36	96	599725	50.00	ug/l	0.00 96.29%
54) Chlorobenzene-d5	9.53	82	285286	50.00	ug/l	0.00 98.23%
74) 1,4-Dichlorobenzene-d4	11.86	152	271767	50.00	ug/l	0.00 87.97%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	164361	49.45	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.90%
40) 1,2-Dichloroethane-d4	5.96	65	199284	51.53	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.06%
55) Toluene-d8	8.08	98	610777	47.81	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.62%
76) 4-Bromofluorobenzene	10.71	95	255053	53.46	ug/l	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.48	96	54	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	1842	<u>Below Cal</u>	#	54
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	136	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	499	<del>Below Cal</del>	#	52
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	4.05	63	2240	0.37	ug/l	94

(#) = qualifier out of range (m) = manual integration  
 Y0711030.D 8260B.M Thu Jul 12 12:01:03 2007

*W 7/12/07*  
 Page 1



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711030.D  
 Acq On : 11 Jul 2007 22:00  
 Sample : JPL48-003  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:00 2007

Vial: 48  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	4.90	96	330		N.D.	
30) 2-Butanone	5.14	43	61		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	138		N.D.	
34) Chloroform	5.37	83	2875	0.46	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	522		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	4263	1.20	ug/l	99
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.34	83	367		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.15	92	324		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	1874	0.48	ug/l	97
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	68		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	148		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

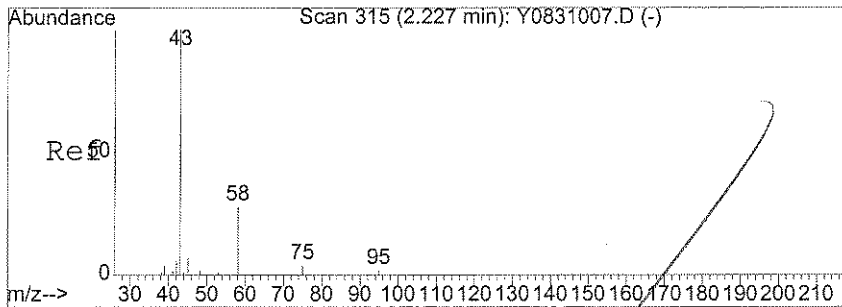
Data File : X:\MSVOA\YODA\071107\Y0711030.D  
 Acq On : 11 Jul 2007 22:00  
 Sample : JPL48-003  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:00 2007

Vial: 48  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

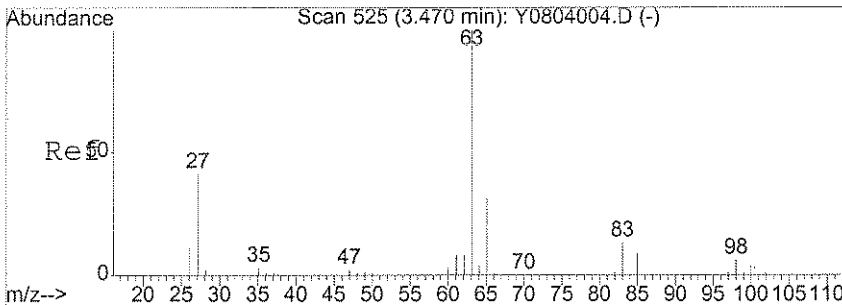
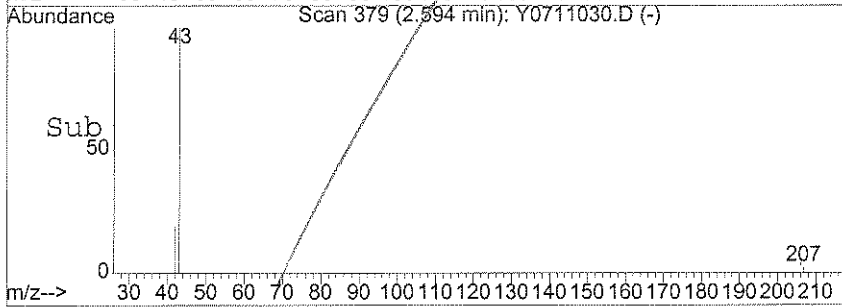
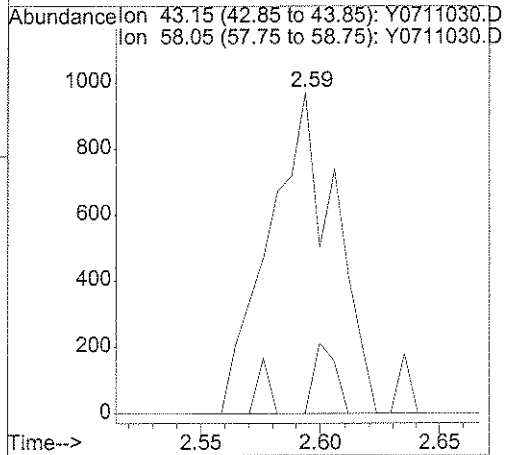
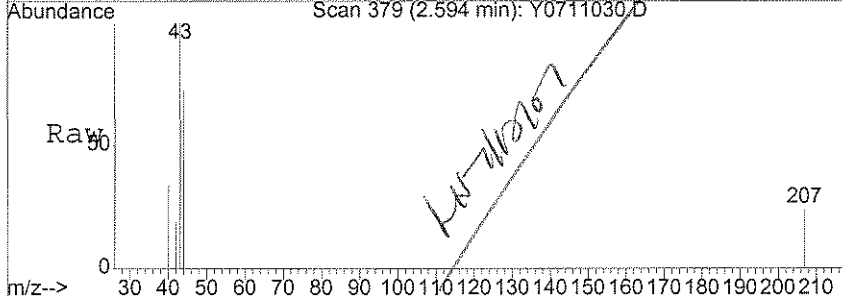
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	122		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	60		N.D.	
73) Isopropylbenzene	10.71	105	132		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	202		N.D.	
82) 4-Chlorotoluene	10.97	91	202		N.D.	
83) 1,3,5-Trimethylbenzene	11.15	105	63		N.D.	
84) tert-Butylbenzene	11.47	119	57		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	188		N.D.	
86) sec-butylbenzene	11.53	105	188		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	1088		N.D.	
88) 4-Isopropyltoluene	11.84	119	299		N.D.	
89) 1,4-Dichlorobenzene	11.79	146	1088		N.D.	
90) 1,2-Dichlorobenzene	12.24	146	543		N.D.	
91) n-Butylbenzene	12.26	91	262		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	166		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	14.33	180	715		N.D.	



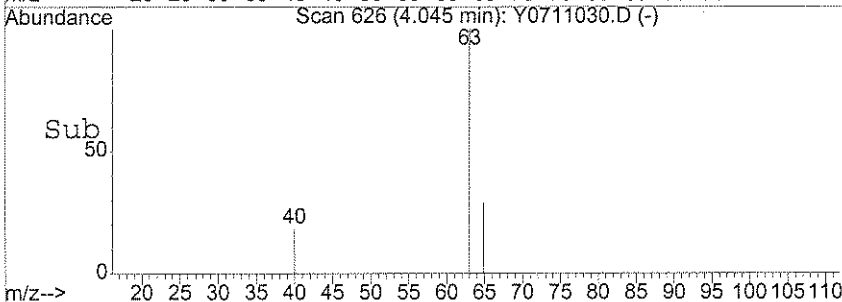
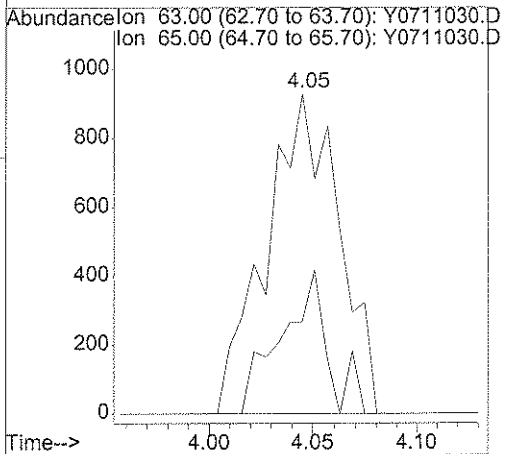
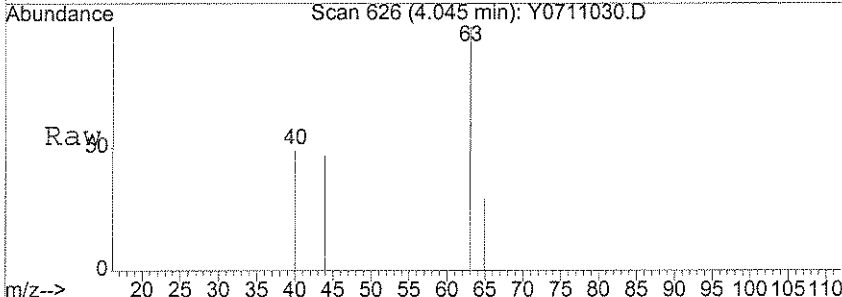
#11  
 Acetone  
 Concen: Below Cal  
 RT: 2.59 min Scan# 379  
 Delta R.T. 0.02 min  
 Lab File: Y0711030.D  
 Acq: 11 Jul 2007 22:00

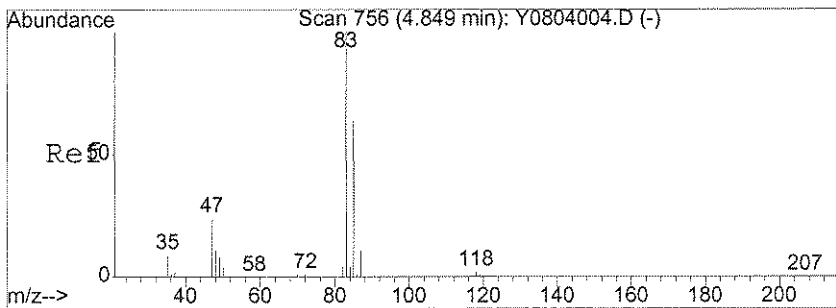
Tgt Ion: 43 Resp: 1842  
 Ion Ratio Lower Upper  
 43 100  
 58 7.1 26.8 40.2#



#23  
 1,1-Dichloroethane  
 Concen: 0.37 ug/l  
 RT: 4.05 min Scan# 626  
 Delta R.T. 0.01 min  
 Lab File: Y0711030.D  
 Acq: 11 Jul 2007 22:00

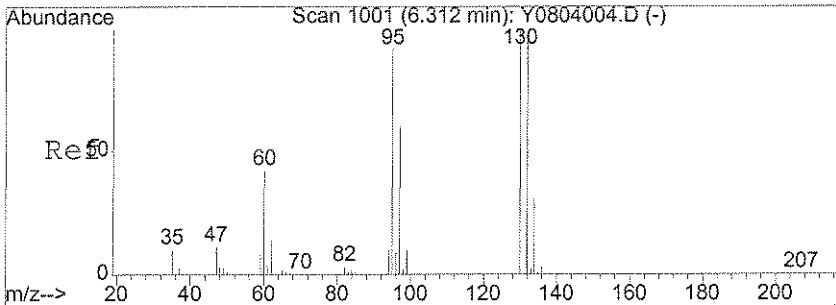
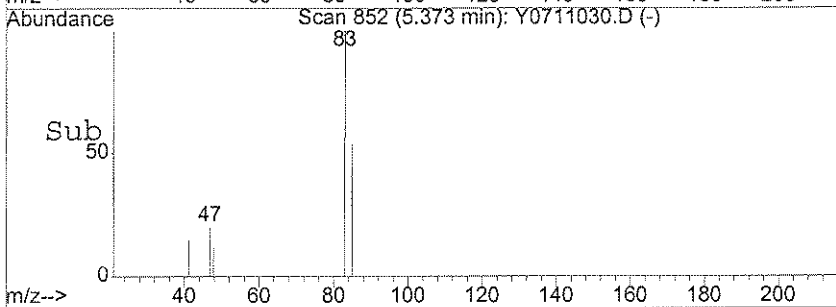
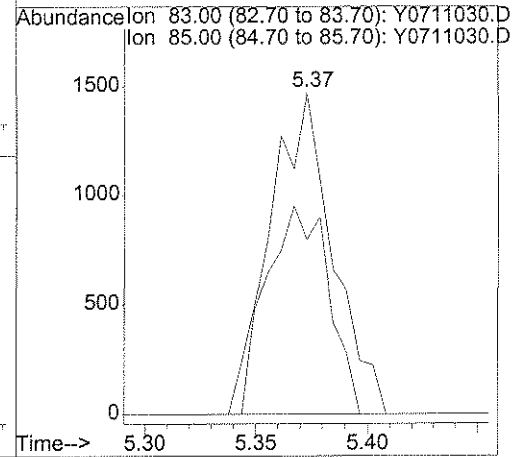
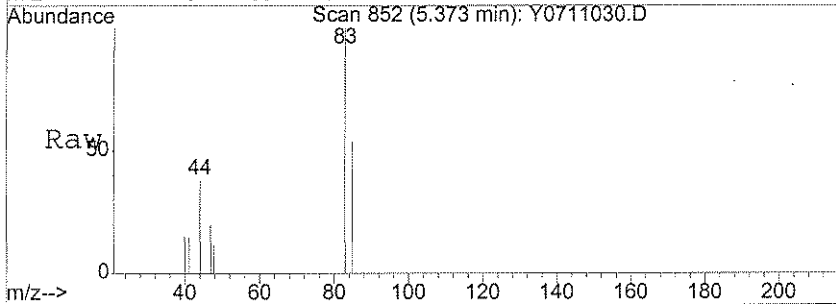
Tgt Ion: 63 Resp: 2240  
 Ion Ratio Lower Upper  
 63 100  
 65 29.1 12.3 52.3





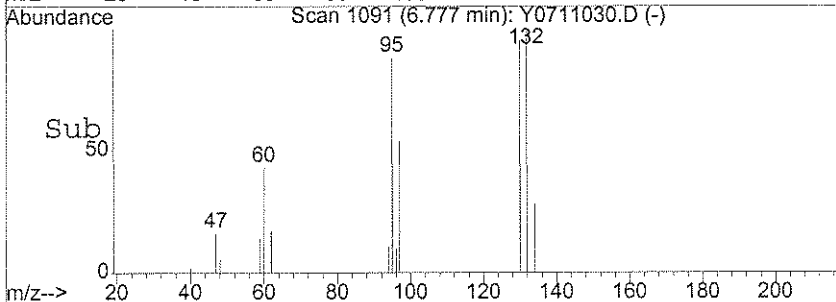
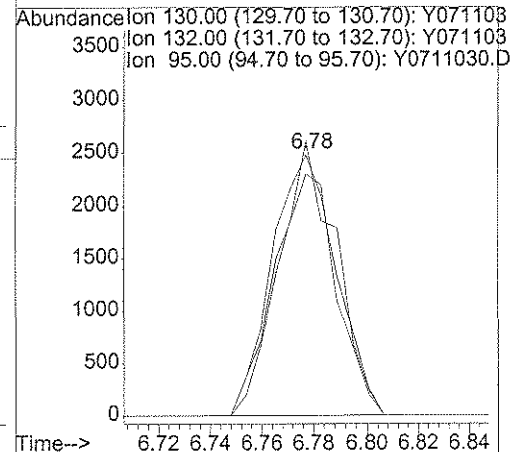
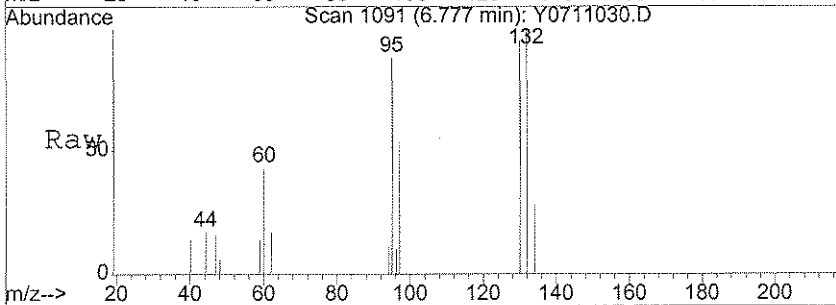
#34  
 Chloroform  
 Concen: 0.46 ug/l  
 RT: 5.37 min Scan# 852  
 Delta R.T. 0.01 min  
 Lab File: Y0711030.D  
 Acq: 11 Jul 2007 22:00

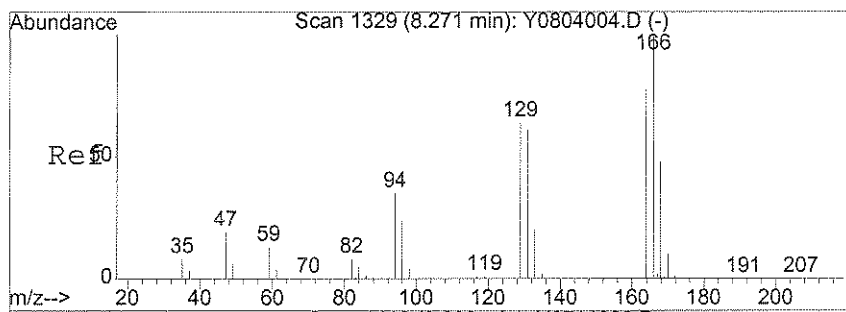
Tgt Ion	Resp	Lower	Upper
83	2875		
85	63.9	43.3	83.3



#45  
 Trichloroethene  
 Concen: 1.20 ug/l  
 RT: 6.78 min Scan# 1091  
 Delta R.T. 0.01 min  
 Lab File: Y0711030.D  
 Acq: 11 Jul 2007 22:00

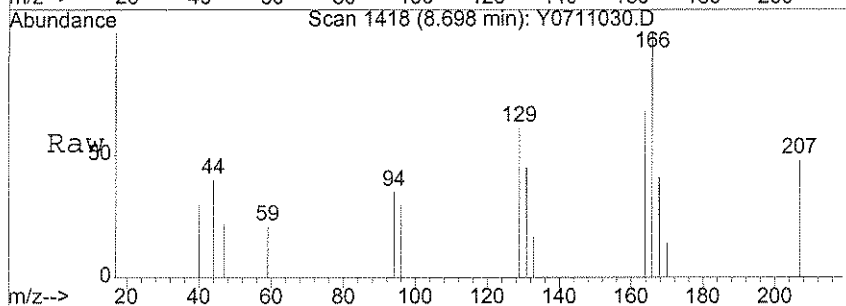
Tgt Ion	Resp	Lower	Upper
130	4263		
132	93.4	75.0	115.0
95	90.0	69.4	109.4



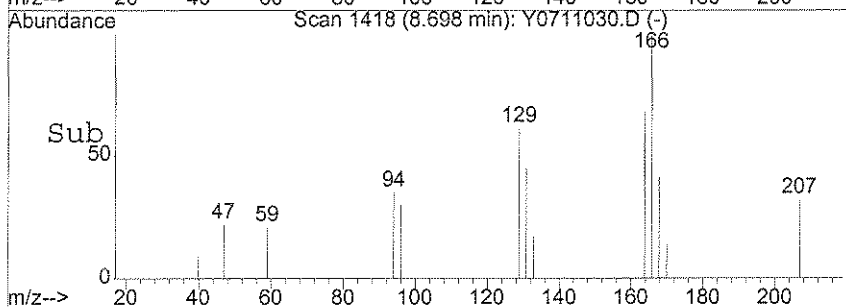
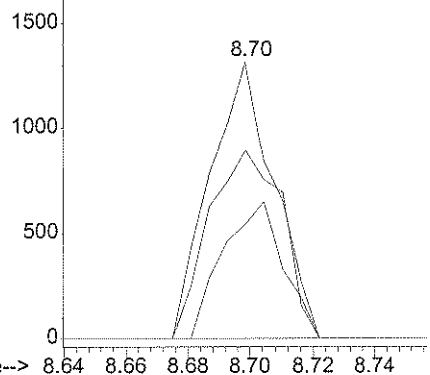


#60  
 Tetrachloroethene  
 Concen: 0.48 ug/l  
 RT: 8.70 min Scan# 1418  
 Delta R.T. -0.00 min  
 Lab File: Y0711030.D  
 Acq: 11 Jul 2007 22:00

Tgt Ion	Resp	Lower	Upper
166	1874		
166	100		
164	77.6	63.3	94.9
168	46.5	39.6	59.4



Abundance Ion 165.95 (165.65 to 166.65): Y071103  
 Ion 163.95 (163.65 to 164.65): Y071103  
 Ion 167.95 (167.65 to 168.65): Y071103



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-004  
 Lab File ID: Y0711031.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 22:25  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.28	J
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.42	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	4.8	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-2

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL48 Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL48-004

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0711031.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/11/2007 22:25

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
10061-02-	trans-1,3-Dichloropropene	0.50		U
79-00-5	1,1,2-Trichloroethane	0.50		U
127-18-4	Tetrachloroethene	0.29		J
142-28-9	1,3-Dichloropropane	0.50		U
124-48-1	Dibromochloromethane	0.50		U
106-93-4	1,2-Dibromoethane	0.50		U
108-90-7	Chlorobenzene	0.50		U
100-41-4	Ethylbenzene	0.50		U
630-20-6	1,1,1,2-Tetrachloroethane	0.50		U
179601-23	m,p-Xylene	1.0		U
95-47-6	o-Xylene	0.50		U
100-42-5	Styrene	0.50		U
75-25-2	Bromoform	0.50		U
98-82-8	Isopropylbenzene	0.50		U
79-34-5	1,1,2,2-Tetrachloroethane	0.50		U
103-65-1	n-Propylbenzene	0.50		U
108-86-1	Bromobenzene	0.50		U
96-18-4	1,2,3-Trichloropropane	0.50		U
95-49-8	2-Chlorotoluene	0.50		U
108-67-8	1,3,5-Trimethylbenzene	0.50		U
106-43-4	4-Chlorotoluene	0.50		U
98-06-6	tert-Butylbenzene	0.50		U
95-63-6	1,2,4-Trimethylbenzene	0.50		U
135-98-8	sec-Butylbenzene	0.50		U
99-87-6	4-Isopropyltoluene	0.50		U
541-73-1	1,3-Dichlorobenzene	0.50		U
106-46-7	1,4-Dichlorobenzene	0.50		U
104-51-8	n-Butylbenzene	0.50		U
95-50-1	1,2-Dichlorobenzene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL48

Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL48-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711031.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/11/2007 22:25

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

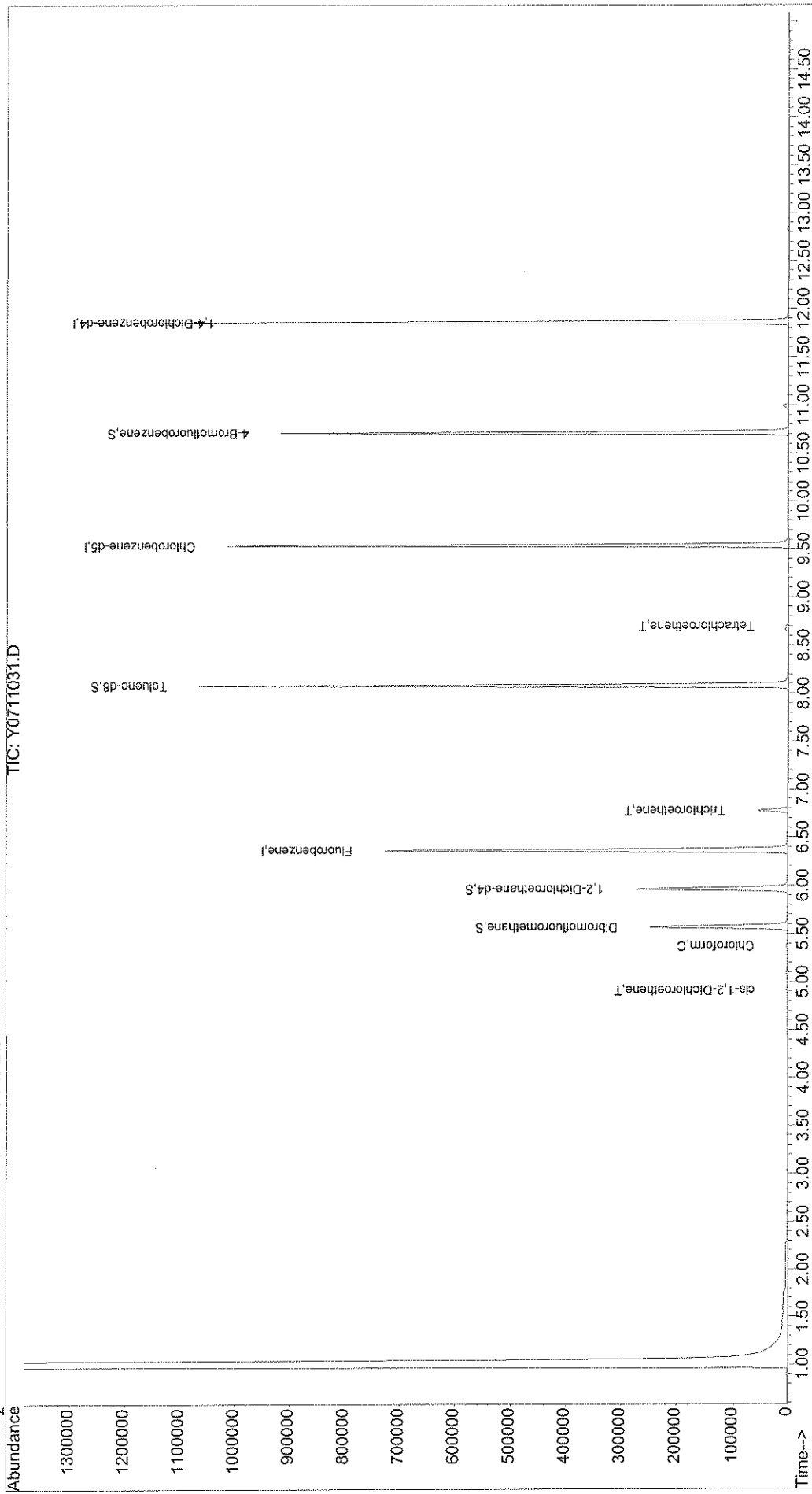
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711031.D Vial: 49  
Acq On : 11 Jul 2007 22:25 Operator: LH  
Sample : JPL48-004 Inst : Yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 12 12:01 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711031.D  
 Acq On : 11 Jul 2007 22:25  
 Sample : JPL48-004  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:01 2007

Vial: 49  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	614050	50.00	ug/l	0.00	98.59%
54) Chlorobenzene-d5	9.53	82	285956	50.00	ug/l	0.00	98.46%
74) 1,4-Dichlorobenzene-d4	11.86	152	273115	50.00	ug/l	0.00	88.41%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	163662	48.09	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.18%	
40) 1,2-Dichloroethane-d4	5.96	65	200881	50.73	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.46%	
55) Toluene-d8	8.08	98	633965	49.51	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.02%	
76) 4-Bromofluorobenzene	10.71	95	252213	52.60	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	1825	<del>Below Cal</del>	#	68
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	368	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	819	<del>Below Cal</del>		88
19) trans-1,2-Dichloroethene	3.40	96	542	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	3.48	73	61	N.D.		
23) 1,1-Dichloroethane	4.05	63	996	N.D.		

LH 7/12/07

(#) = qualifier out of range (m) = manual integration  
 Y0711031.D 8260B.M Thu Jul 12 12:02:01 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711031.D  
 Acq On : 11 Jul 2007 22:25  
 Sample : JPL48-004  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:01 2007

Vial: 49  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0	N.D.		
25) Chloroprene	0.00	53	0	N.D.		
26) Isopropyl ether	0.00	45	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	4.91	96	955	0.28	ug/l	89
30) 2-Butanone	5.04	43	287	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.37	83	2687	0.42	ug/l	92
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
37) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.01	78	349	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) Isobutanol	0.00	43	0	N.D.		
44) t-amyl methyl ether	0.00	73	0	N.D.	d	
45) Trichloroethene	6.78	130	17424	4.77	ug/l	95
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	41	0	N.D.		
50) Bromodichloromethane	7.34	83	87	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.15	92	194	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	8.70	166	1147	0.29	ug/l	92
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	8.95	43	54	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) 1-Chlorohexane	0.00	91	0	N.D.	d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	9.80	91	868	N.D.		

*LW 7/12/07*

Quantitation Report

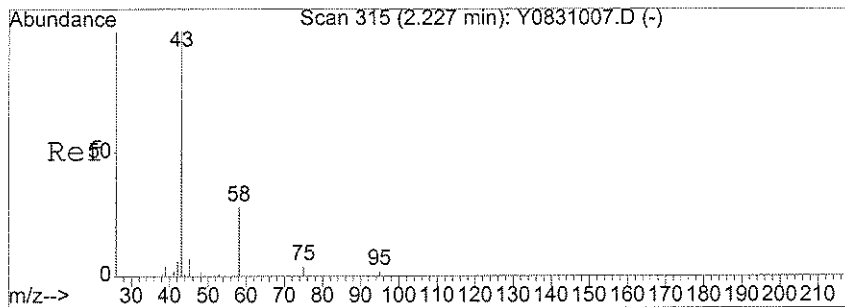
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 Acq On : 11 Jul 2007 22:25  
 Sample : JPL48-004  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:01 2007

Vial: 49  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

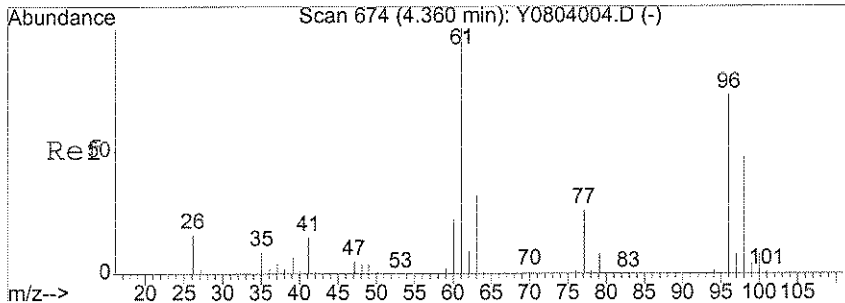
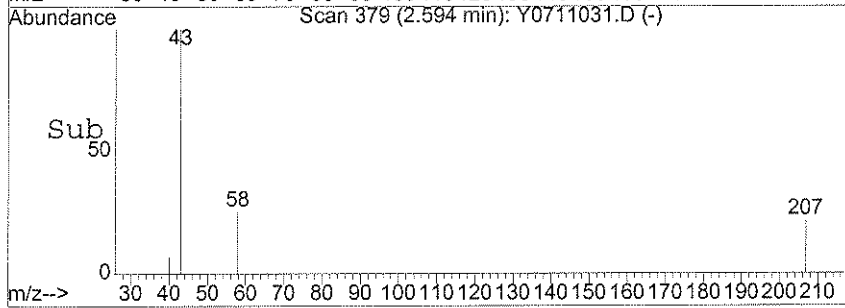
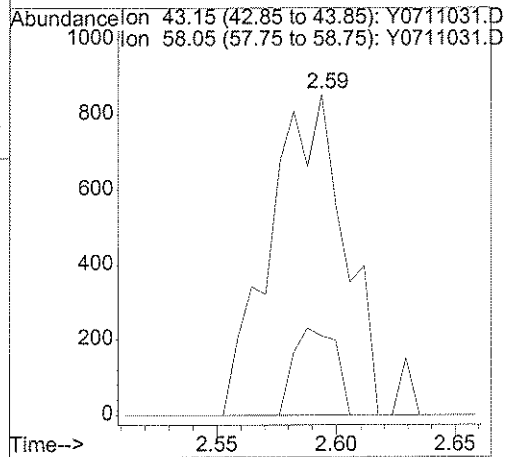
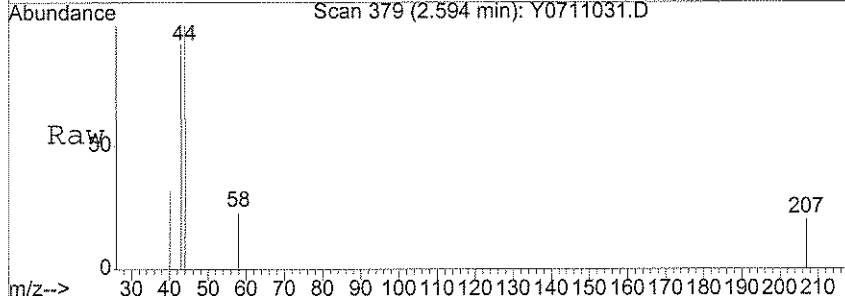
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	427		N.D.	
70) o-xylene	10.20	106	56		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.57	105	56		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	65		N.D.	
79) 1,2,3-Trichloropropane	10.72	110	67		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	78		N.D.	
82) 4-Chlorotoluene	11.16	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	54		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	138		N.D.	
86) sec-butylbenzene	11.70	105	169		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	169		N.D.	
88) 4-Isopropyltoluene	11.85	119	313		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	169		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	129		N.D.	
91) n-Butylbenzene	12.25	91	370		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	57		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	14.33	180	79		N.D.	



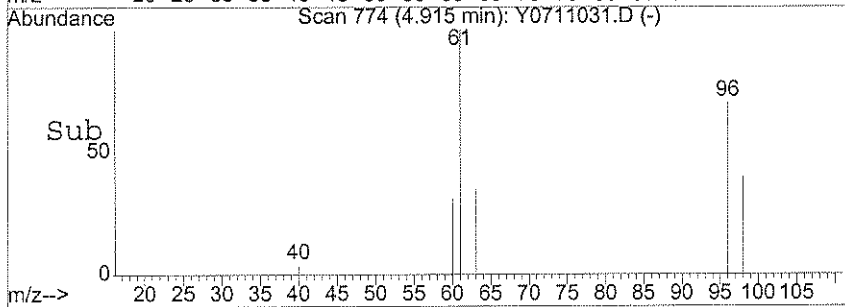
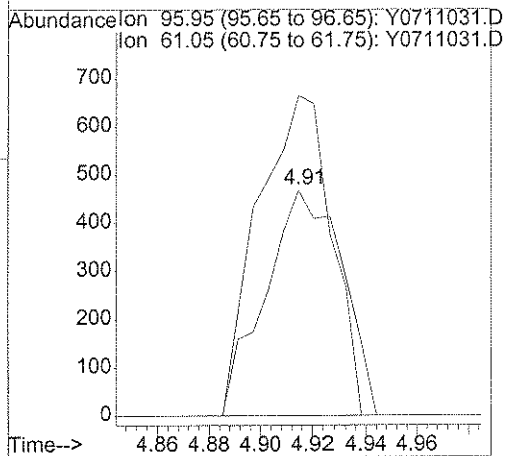
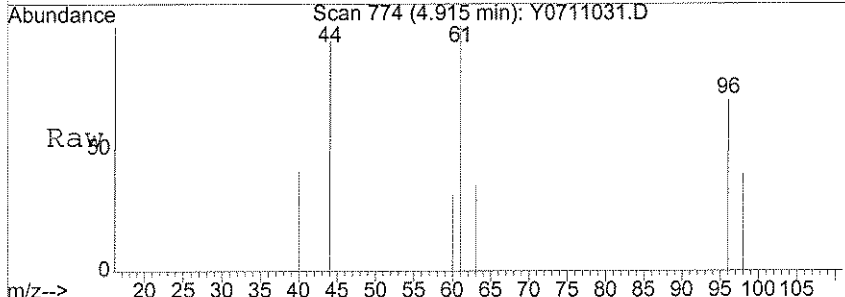
#11  
 Acetone  
 Concen: Below Cal  
 RT: 2.59 min Scan# 379  
 Delta R.T. 0.02 min  
 Lab File: Y0711031.D  
 Acq: 11 Jul 2007 22:25

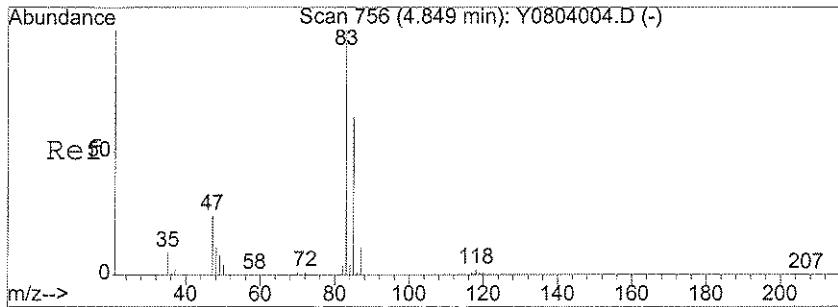
Tgt Ion:	43	Resp:	1825
Ion Ratio	Lower	Upper	
43	100		
58	15.5	26.8	40.2#



#29  
 cis-1,2-Dichloroethene  
 Concen: 0.28 ug/l  
 RT: 4.91 min Scan# 774  
 Delta R.T. 0.01 min  
 Lab File: Y0711031.D  
 Acq: 11 Jul 2007 22:25

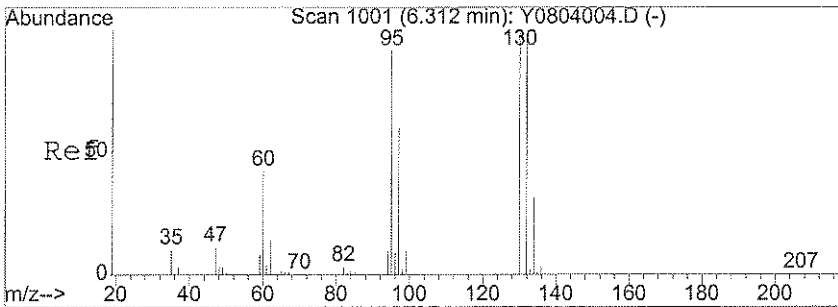
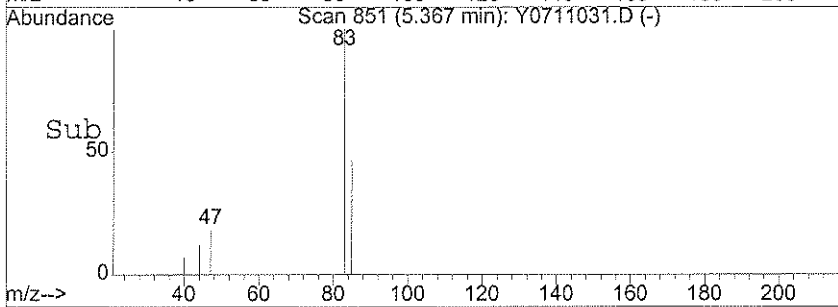
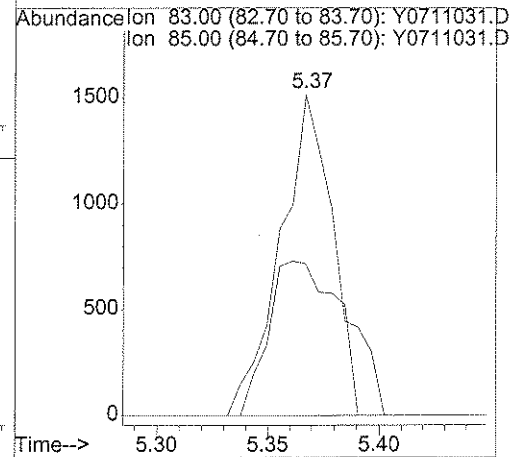
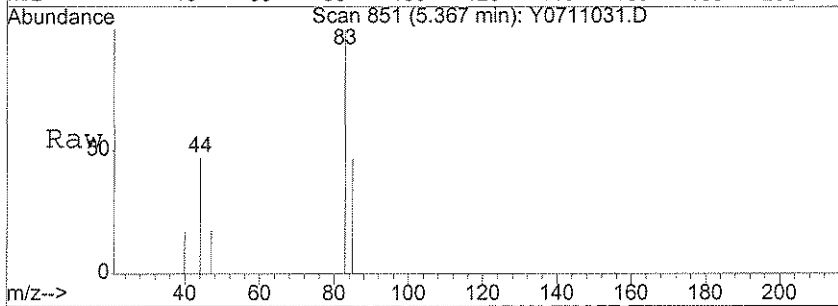
Tgt Ion:	96	Resp:	955
Ion Ratio	Lower	Upper	
96	100		
61	134.8	98.1	147.1





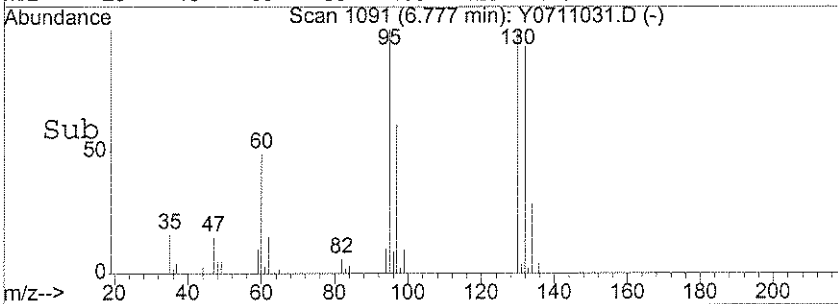
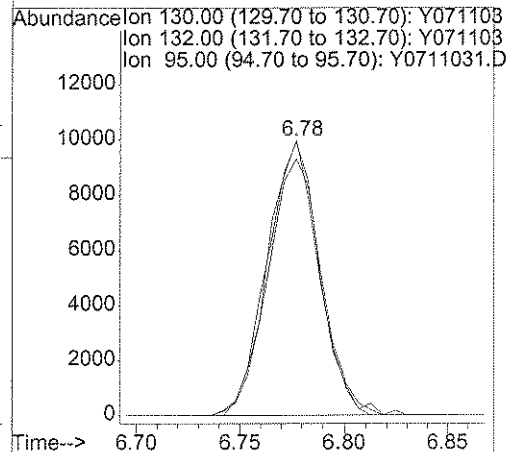
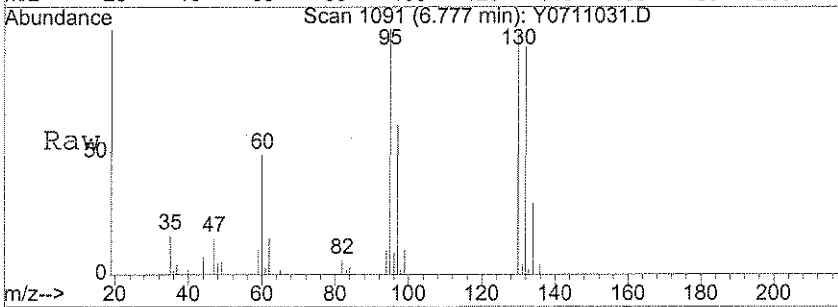
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 Chloroform  
 Concen: 0.42 ug/l  
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 Delta R.T. -0.00 min  
 Lab File: Y0711031.D  
 Acq: 11 Jul 2007 22:25

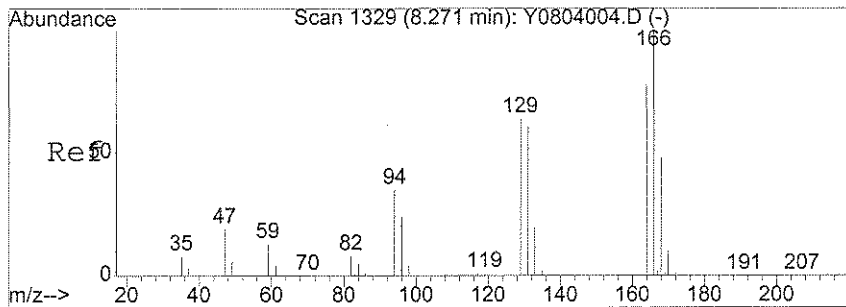
Tgt Ion: 83 Resp: 2687  
 Ion Ratio Lower Upper  
 83 100  
 85 57.3 43.3 83.3



#45  
 Trichloroethene  
 Concen: 4.77 ug/l  
 RT: 6.78 min Scan# 1091  
 Delta R.T. 0.01 min  
 Lab File: Y0711031.D  
 Acq: 11 Jul 2007 22:25

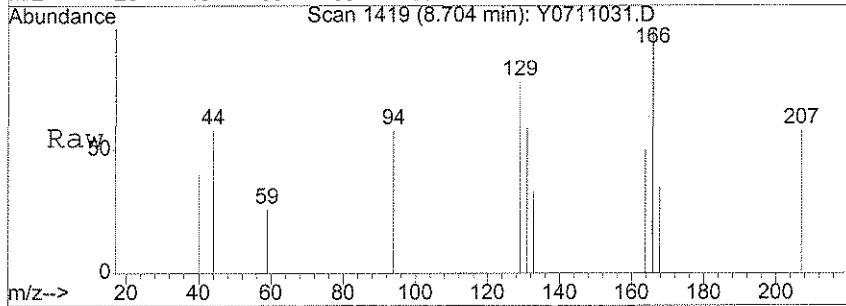
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 132 96.3 75.0 115.0  
 95 97.5 69.4 109.4



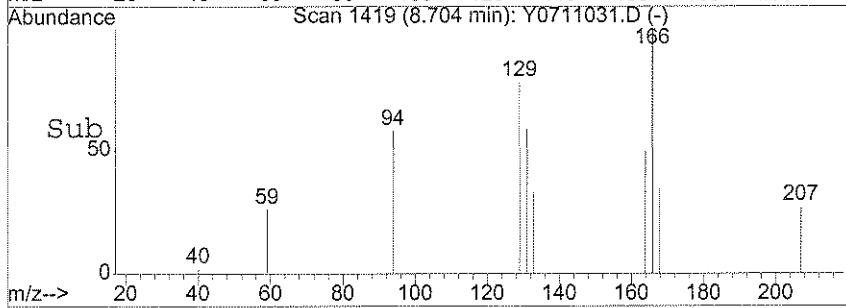
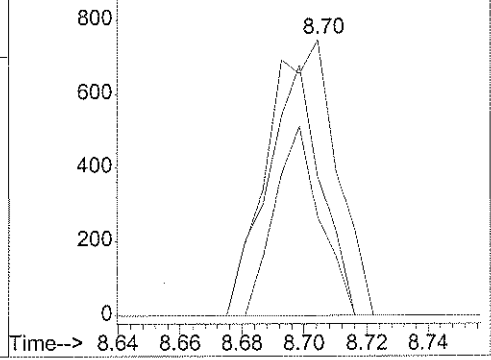


#60  
 Tetrachloroethene  
 Concen: 0.29 ug/l  
 RT: 8.70 min Scan# 1419  
 Delta R.T. 0.01 min  
 Lab File: Y0711031.D  
 Acq: 11 Jul 2007 22:25

Tgt Ion	Resp	Lower	Upper
166	1147		
166	100		
164	71.5	63.3	94.9
168	45.4	39.6	59.4



Abundance Ion 165.95 (165.65 to 166.65): Y071103  
 Ion 163.95 (163.65 to 164.65): Y071103  
 Ion 167.95 (167.65 to 168.65): Y071103



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-1

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL48

Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL48-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711032.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/11/2007 22:50

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.36	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	2.5	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-005  
 Lab File ID: Y0711032.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 22:50  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-14-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-005  
 Lab File ID: Y0711032.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 22:50  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

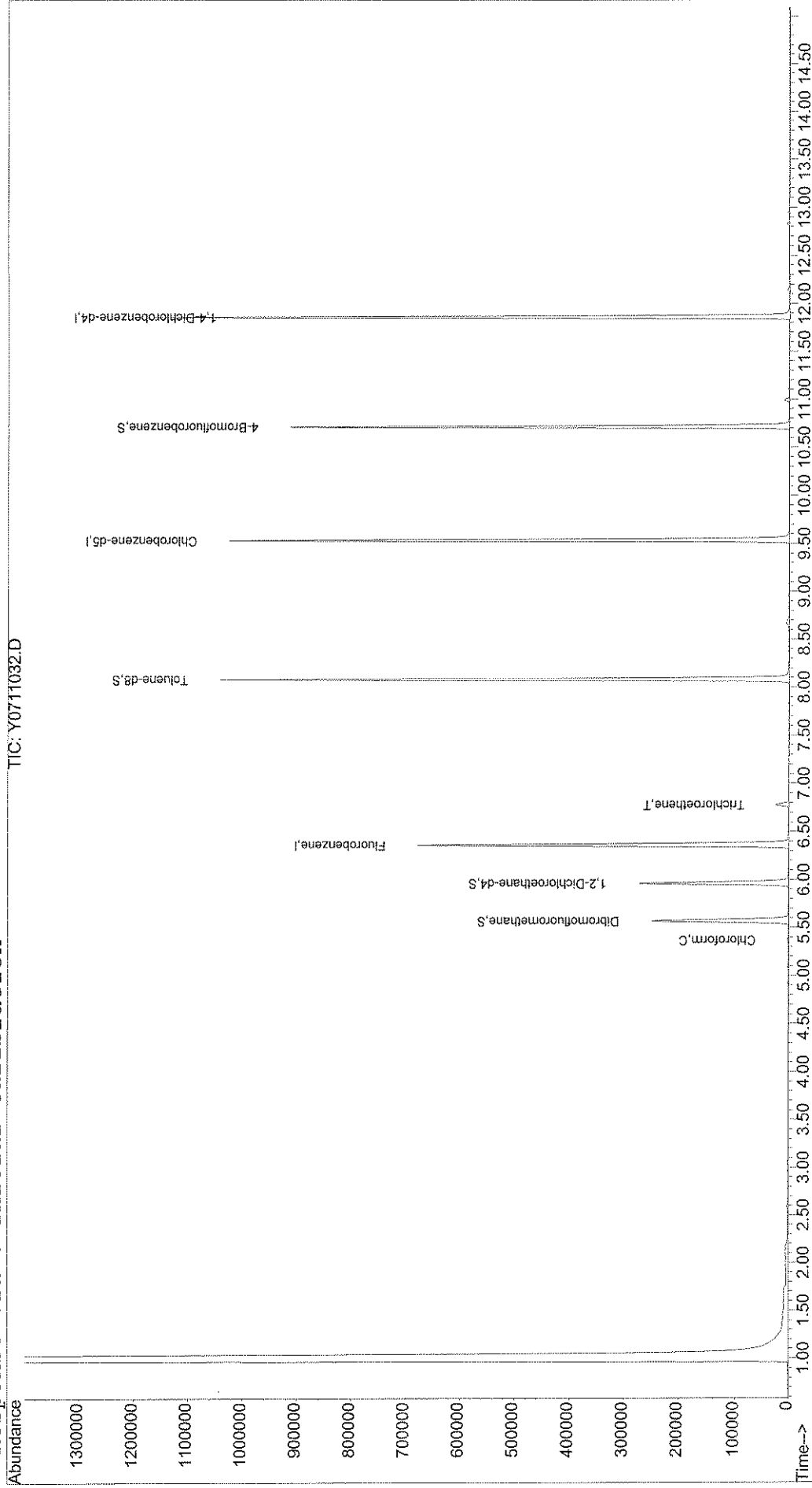
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711032.D  
Acq On : 11 Jul 2007 22:50  
Sample : JPL48-005  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 12 12:02 2007

Vial: 50  
Operator: LH  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711032.D  
 Acq On : 11 Jul 2007 22:50  
 Sample : JPL48-005  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:02 2007

Vial: 50  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)

Title : VOA 8260- 5ML Calibration 5973Y

Last Update : Thu Jun 28 10:03:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar )
1) Fluorobenzene	6.37	96	593180	50.00	ug/l	0.00	95.24%
54) Chlorobenzene-d5	9.53	82	284166	50.00	ug/l	0.00	97.85%
74) 1,4-Dichlorobenzene-d4	11.86	152	275101	50.00	ug/l	0.00	89.05%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	163489	49.73	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	99.46%	
40) 1,2-Dichloroethane-d4	5.96	65	196980	51.50	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.00%	
55) Toluene-d8	8.08	98	605318	47.57	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.14%	
76) 4-Bromofluorobenzene	10.71	95	254766	52.75	ug/l	0.00	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.59	43	2740	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.68	76	114	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	3.04	84	895	<del>Below Cal</del>	88
19) trans-1,2-Dichloroethene	3.41	96	60	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	3.48	73	67	N.D.	
23) 1,1-Dichloroethane	4.04	63	425	N.D.	

*Handwritten signature/initials*

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711032.D  
 Acq On : 11 Jul 2007 22:50  
 Sample : JPL48-005  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:02 2007

Vial: 50  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	4.91	96	803		N.D.	
30) 2-Butanone	0.00	43	0		N.D. d	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.37	83	2217	0.36	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	5.76	75	54		N.D.	
41) Benzene	6.02	78	246		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.77	130	8632	2.45	ug/l	99
46) Methylcyclohexane	6.97	83	59		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.69	166	727		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	8.96	43	220		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.81	91	146		N.D.	LH 7/12/07

Quantitation Report

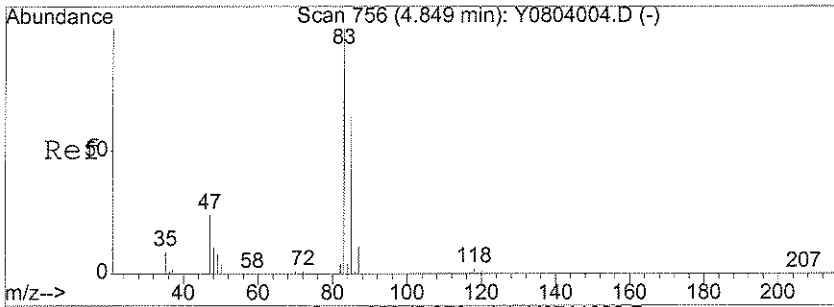
Data File : X:\MSVOA\YODA\071107\Y0711032.D  
 Acq On : 11 Jul 2007 22:50  
 Sample : JPL48-005  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:02 2007

Vial: 50  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

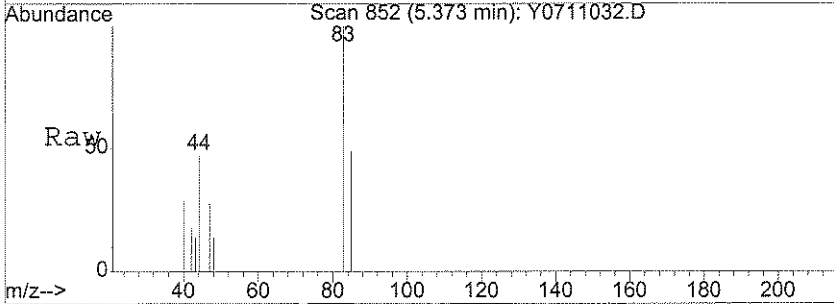
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	70		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.56	105	67		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	66		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	53		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	197		N.D.	
82) 4-Chlorotoluene	10.98	91	197		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	83		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	133		N.D.	
86) sec-butylbenzene	11.70	105	125		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	265		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	134		N.D.	
91) n-Butylbenzene	12.25	91	204		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.86	180	129		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	14.33	180	57		N.D.	

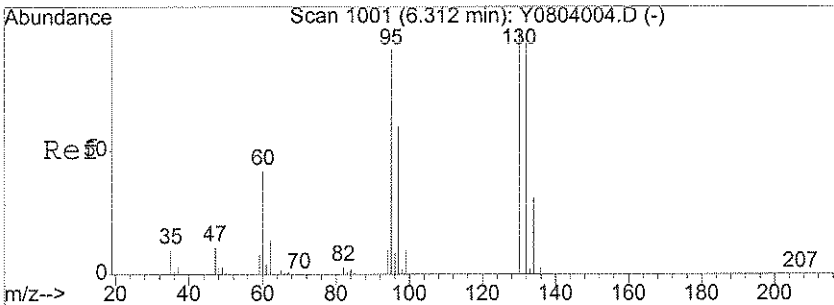
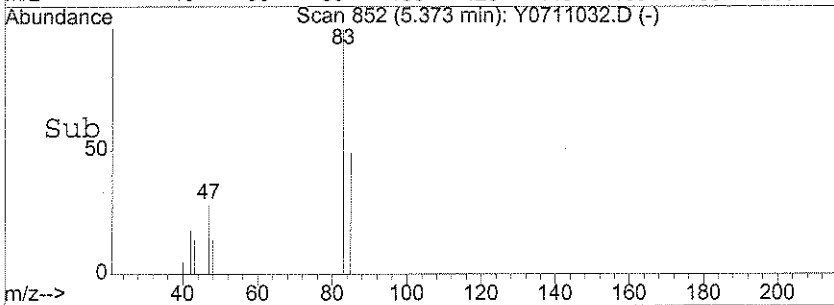
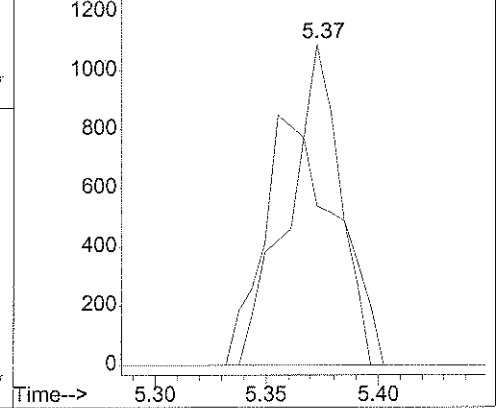


#34  
 Chloroform  
 Concen: 0.36 ug/l  
 RT: 5.37 min Scan# 852  
 Delta R.T. 0.01 min  
 Lab File: Y0711032.D  
 Acq: 11 Jul 2007 22:50

Tgt Ion	Resp	Lower	Upper
83	2217		
85	64.1	43.3	83.3

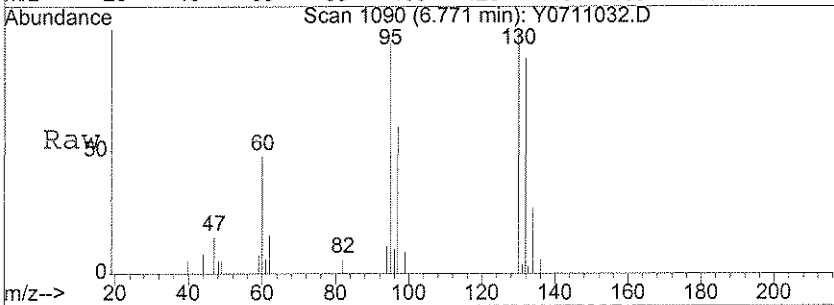


Abundance Ion 83.00 (82.70 to 83.70): Y0711032.D  
 Ion 85.00 (84.70 to 85.70): Y0711032.D

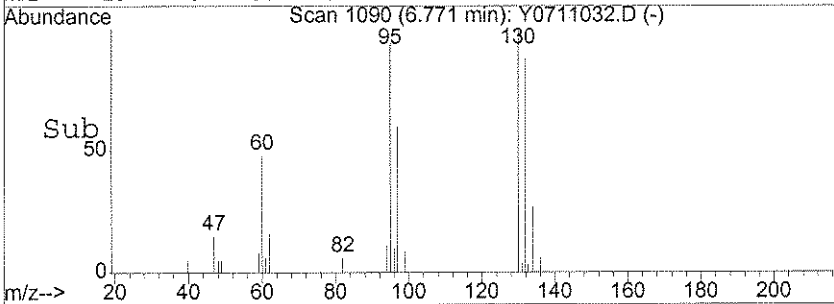
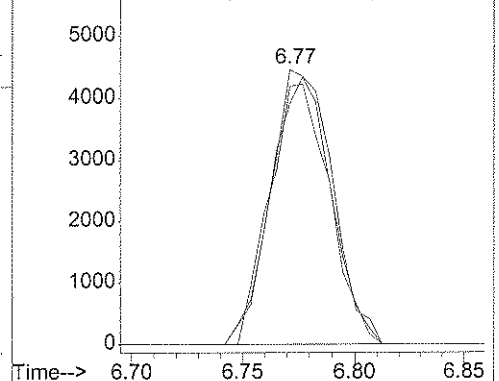


#45  
 Trichloroethene  
 Concen: 2.45 ug/l  
 RT: 6.77 min Scan# 1090  
 Delta R.T. -0.00 min  
 Lab File: Y0711032.D  
 Acq: 11 Jul 2007 22:50

Tgt Ion	Resp	Lower	Upper
130	8632		
132	94.5	75.0	115.0
95	91.6	69.4	109.4



Abundance Ion 130.00 (129.70 to 130.70): Y071103  
 Ion 132.00 (131.70 to 132.70): Y071103  
 Ion 95.00 (94.70 to 95.70): Y0711032.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-8-06/22/07

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin  
 SDG No.: JPL48 Run Sequence: R019438  
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL48-006  
 Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0711033.D  
 Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/05/2007  
 % Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/11/2007 23:14  
 GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-8-06/22/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL48

Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL48-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711033.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/11/2007 23:14

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-8-06/22/07

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL48 Run Sequence: R019438

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL48-006

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0711033.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/11/2007 23:14

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

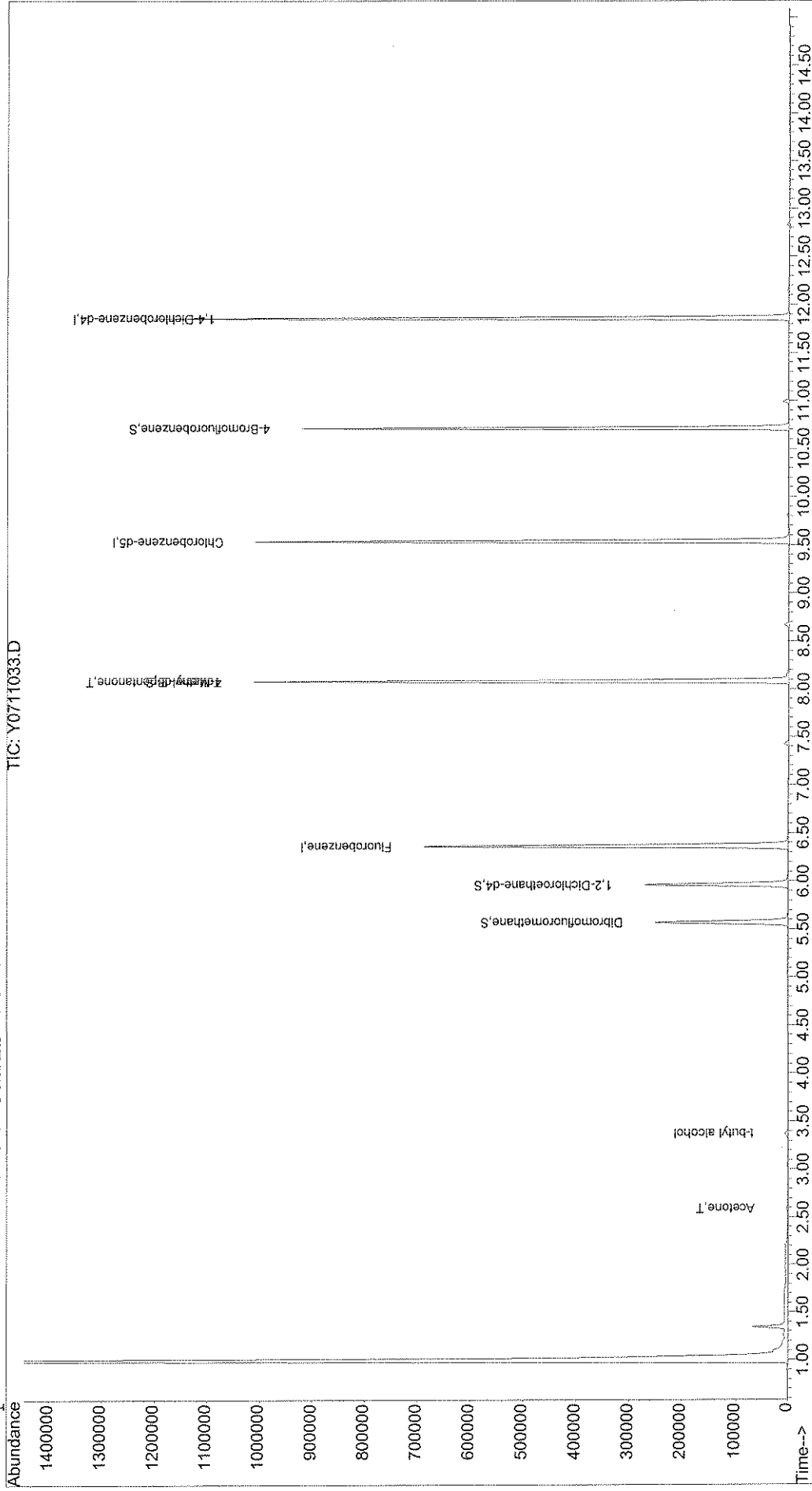
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\0711107\Y07111033.D  
Acq On : 11 Jul 2007 23:14  
Sample : JPL48-006  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 12 12:05 2007  
Vial: 51  
Operator: LH  
Inst : yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711033.D  
 Acq On : 11 Jul 2007 23:14  
 Sample : JPL48-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:05 2007

Vial: 51  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	6.37	96	595560	50.00	ug/l	0.00	95.62%
54) Chlorobenzene-d5	9.53	82	283154	50.00	ug/l	0.00	97.50%
74) 1,4-Dichlorobenzene-d4	11.86	152	282262	50.00	ug/l	0.00	91.37%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	163628	49.57	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	99.14%	
40) 1,2-Dichloroethane-d4	5.96	65	198872	51.78	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	103.56%	
55) Toluene-d8	8.08	98	602562	47.53	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.06%	
76) 4-Bromofluorobenzene	10.71	95	256145	51.69	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	4011	1.39	ug/l #	86
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	687	Below Cal	#	61
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	3.38	59	8332	27.41	ug/l #	48
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

*Handwritten signature/initials*

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711033.D  
 Acq On : 11 Jul 2007 23:14  
 Sample : JPL48-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:05 2007

Vial: 51  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	167		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	5.61	56	198		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.00	78	511		N.D.	
42) 1,2-Dichloroethane	5.97	62	56		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	201		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	8.08	43	2708	0.94	ug/l #	1
56) Toluene	8.15	92	907		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.65	97	61		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	d
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.57	91	62		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	650		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0711033.D 8260B.M Thu Jul 12 12:05:41 2007

Quantitation Report

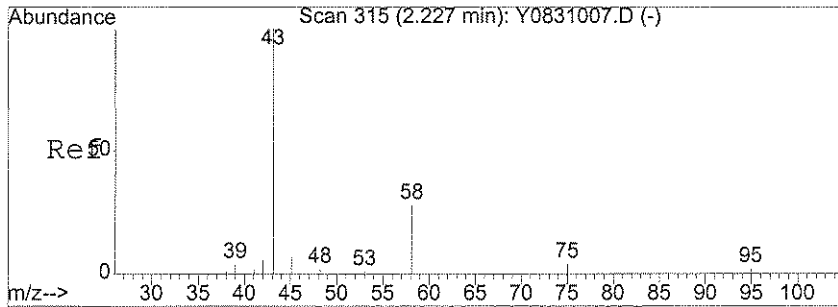
Data File : X:\MSVOA\YODA\071107\Y0711033.D  
 Acq On : 11 Jul 2007 23:14  
 Sample : JPL48-006  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 12:05 2007

Vial: 51  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

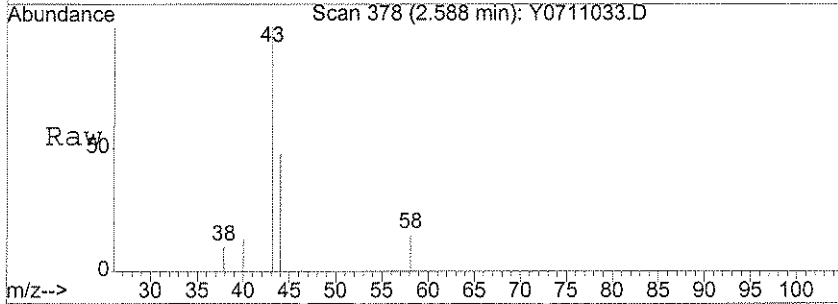
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	913		N.D.	
70) o-xylene	10.20	106	128		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	80		N.D.	
73) Isopropylbenzene	10.71	105	207		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	121		N.D.	
79) 1,2,3-Trichloropropane	10.72	110	55		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	138		N.D.	
82) 4-Chlorotoluene	10.97	91	138		N.D.	
83) 1,3,5-Trimethylbenzene	11.08	105	55		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	263		N.D.	
86) sec-butylbenzene	11.53	105	263		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	60		N.D.	
88) 4-Isopropyltoluene	11.86	119	259		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	60		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	260		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

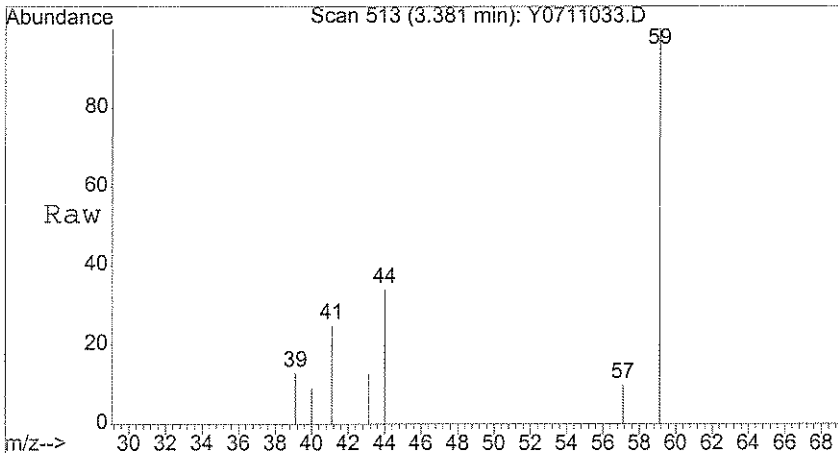
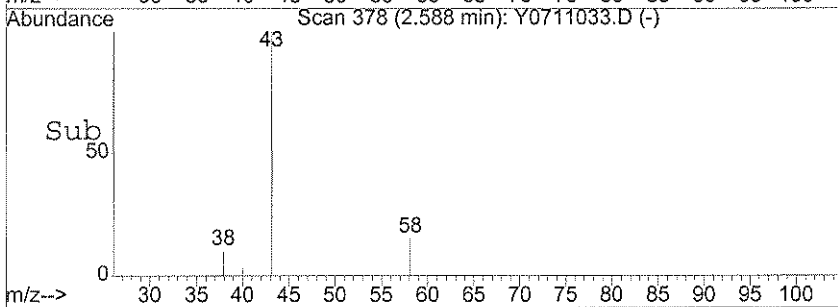
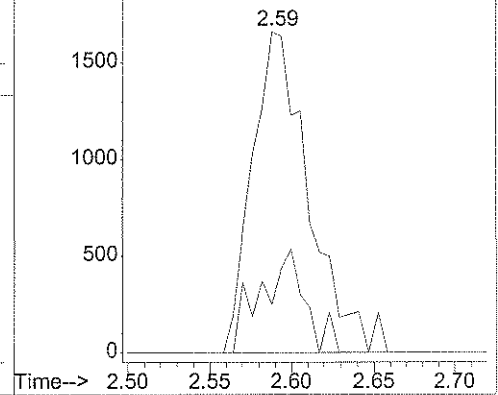


#11  
 Acetone  
 Concen: 1.39 ug/l  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.01 min  
 Lab File: Y0711033.D  
 Acq: 11 Jul 2007 23:14

Tgt Ion: 43 Resp: 4011  
 Ion Ratio Lower Upper  
 43 100  
 58 25.3 26.8 40.2#

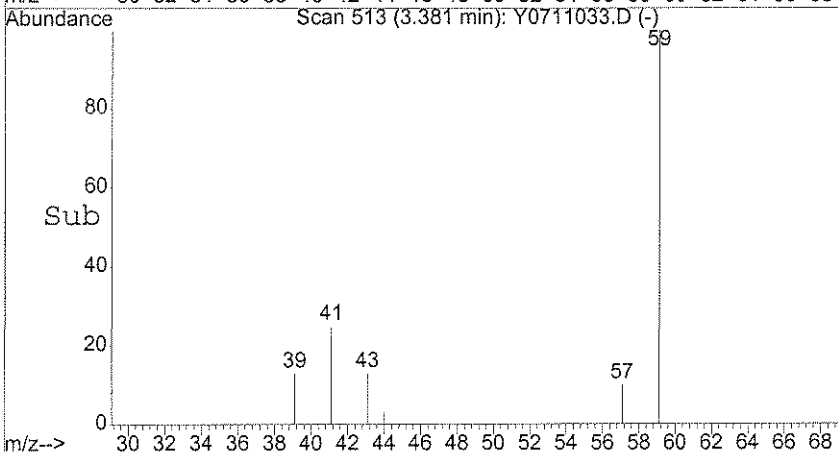


Abundance Ion 43.15 (42.85 to 43.85); Y0711033.D  
 Ion 58.05 (57.75 to 58.75); Y0711033.D

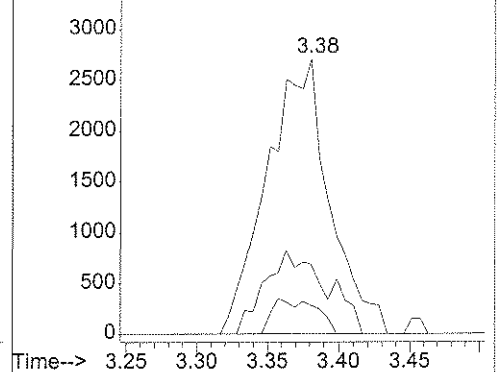


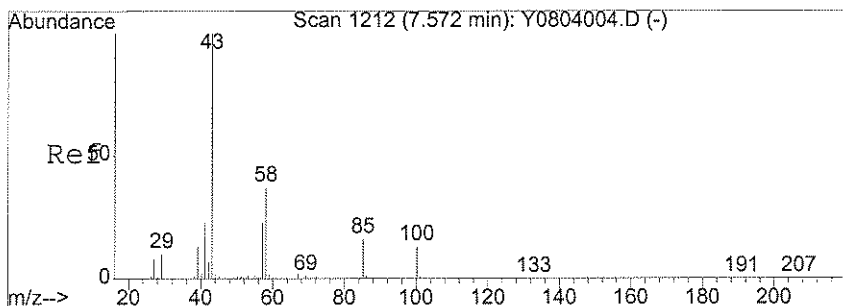
#21  
 t-butyl alcohol  
 Concen: 27.41 ug/l  
 RT: 3.38 min Scan# 513  
 Delta R.T. 0.02 min  
 Lab File: Y0711033.D  
 Acq: 11 Jul 2007 23:14

Tgt Ion: 59 Resp: 8332  
 Ion Ratio Lower Upper  
 59 100  
 41 29.6 63.8 95.8#  
 57 4.8 9.4 14.0#



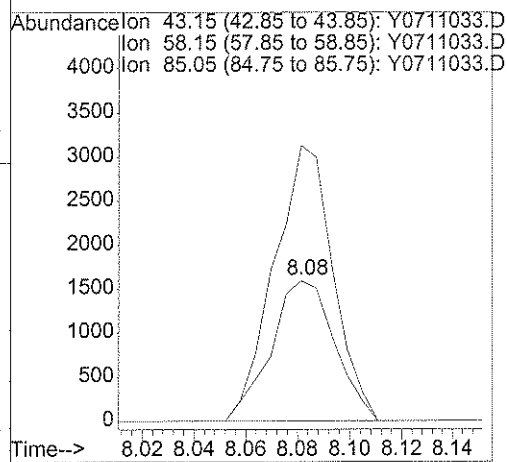
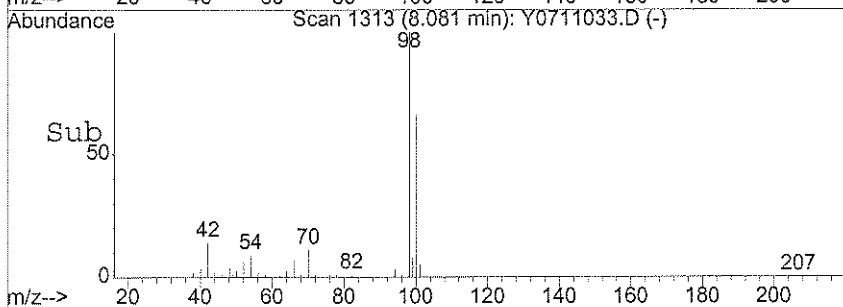
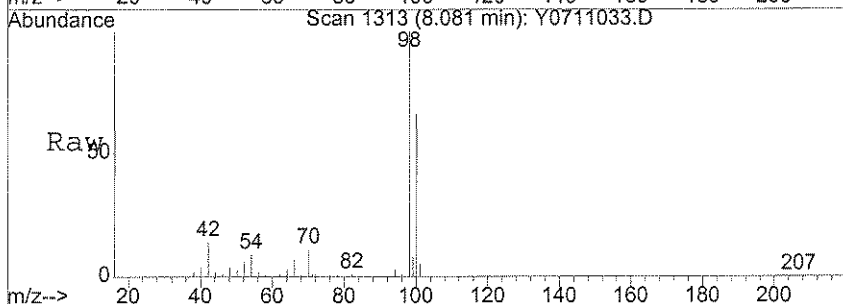
Abundance Ion 59.10 (58.80 to 59.80); Y0711033.D  
 Ion 41.10 (40.80 to 41.80); Y0711033.D  
 Ion 57.10 (56.80 to 57.80); Y0711033.D





#53  
 4-Methyl-2-pentanone  
 Concen: 0.94 ug/l  
 RT: 8.08 min Scan# 1313  
 Delta R.T. 0.06 min  
 Lab File: Y0711033.D  
 Acq: 11 Jul 2007 23:14

Tgt Ion	Ratio	Lower	Upper
43	100		
58	182.0	34.3	51.5#
85	0.0	14.3	21.5#





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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-8-6/22/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-007  
 Lab File ID: Y0711020.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 17:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-8-6/22/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-007  
 Lab File ID: Y0711020.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 17:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-8-6/22/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL48  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-007  
 Lab File ID: Y0711020.D  
 Date Collected: 07/05/2007  
 Date/Time Analyzed: 07/11/2007 17:54  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

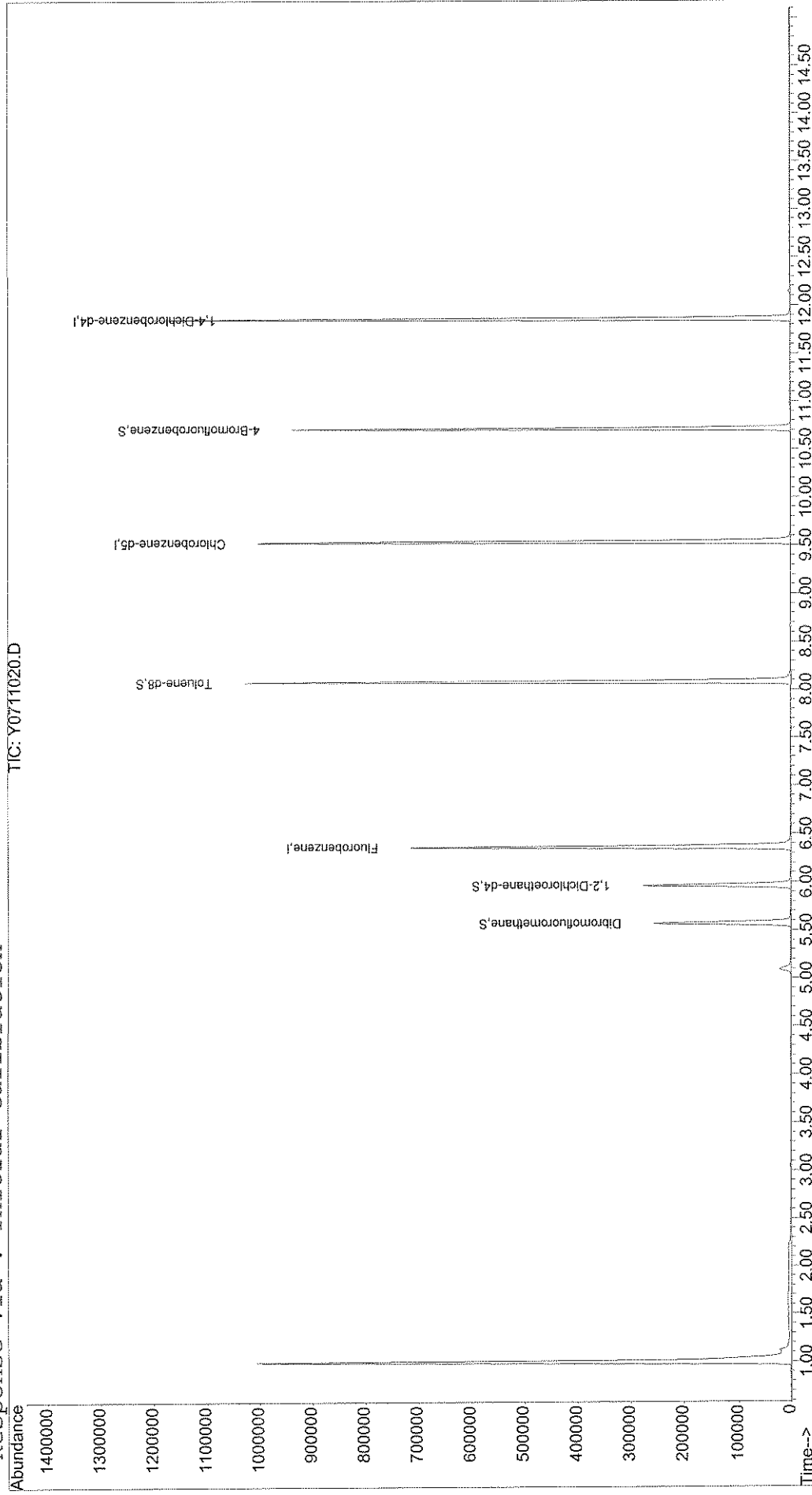
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711020.D  
Acq On : 11 Jul 2007 17:54  
Sample : JPL48-007  
Misc : #2 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 12 11:50 2007  
Vial: 38  
Operator: LH  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711020.D  
 Acq On : 11 Jul 2007 17:54  
 Sample : JPL48-007  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:50 2007

Vial: 38  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	6.37	96	617474	50.00	ug/l	0.00	99.14%
54) Chlorobenzene-d5	9.53	82	287950	50.00	ug/l	0.00	99.15%
74) 1,4-Dichlorobenzene-d4	11.86	152	287855	50.00	ug/l	0.00	93.18%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	166545	48.67	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.34%	
40) 1,2-Dichloroethane-d4	5.97	65	202676	50.90	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.80%	
55) Toluene-d8	8.08	98	620145	48.10	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.20%	
76) 4-Bromofluorobenzene	10.71	95	261945	51.83	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	1398	<del>Below Cal</del>	#	50
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	78	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	803	<del>Below Cal</del>	#	83
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

*LN 7/12/07*

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711020.D  
 Acq On : 11 Jul 2007 17:54  
 Sample : JPL48-007  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:50 2007

Vial: 38  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	255		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	97		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	5.76	75	68		N.D.	
41) Benzene	6.02	78	258		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	65		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	401		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	63		N.D.	
66) 1-Chlorohexane	9.57	91	174		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	106		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0711020.D 8260B.M Thu Jul 12 11:51:03 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071107\Y0711020.D  
 Acq On : 11 Jul 2007 17:54  
 Sample : JPL48-007  
 Misc : #2 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 12 11:50 2007

Vial: 38  
 Operator: LH  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	62		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	183		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	181		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	75		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.16	120	73		N.D.	
81) 2-Chlorotoluene	11.04	91	56		N.D.	
82) 4-Chlorotoluene	11.17	91	156		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	145		N.D.	
84) tert-Butylbenzene	11.48	119	65		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	289		N.D.	
86) sec-butylbenzene	11.69	105	300		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	93		N.D.	
88) 4-Isopropyltoluene	11.85	119	723		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	141		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	631		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.86	180	68		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	71		N.D.	

**TIC FORMS**

SDG JPL48

VOLATILES ANALYSIS



1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071107MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

SDG No.: JPL48

Matrix: (SOIL/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

Contract: JPL Groundwater Monitorin

Run Sequence: R019438

Lab Sample ID: B071107MVOWY1

Lab File ID: Y0711014.D

Date Collected: \_\_\_\_\_

Date Analyzed: 07/11/2007

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711014.D Vial: 32  
Acq On : 11 Jul 2007 15:26 Operator: LH  
Sample : B071107MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711014.D 8260B.M Thu Jul 12 13:32:30 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-8-06/22/07

Lab Name: Laucks Testing Laboratories, Inc

SDG No.: JPL48

Matrix: (SOIL/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

Contract: JPL Groundwater Monitorin

Run Sequence: R019438

Lab Sample ID: JPL48-006

Lab File ID: Y0711033.D

Date Collected: 07/06/2007

Date Analyzed: 07/11/2007

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711028.D Vial: 46  
Acq On : 11 Jul 2007 21:12 Operator: LH  
Sample : JPL48-001 Inst : yoda  
Misc : #3 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

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Y0711028.D 8260B.M Thu Jul 12 13:33:30 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-14-1
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Lab Name: Laucks Testing Laboratories, Inc

SDG No.: JPL48

Matrix: (SOIL/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

Contract: JPL Groundwater Monitorin

Run Sequence: R019438

Lab Sample ID: JPL48-005

Lab File ID: Y0711032.D

Date Collected: 07/06/2007

Date Analyzed: 07/11/2007

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711029.D Vial: 47  
Acq On : 11 Jul 2007 21:36 Operator: LH  
Sample : JPL48-002 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711029.D 8260B.M Thu Jul 12 13:33:36 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-14-2

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL48  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-004  
 Lab File ID: Y0711031.D  
 Date Collected: 07/06/2007  
 Date Analyzed: 07/11/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711030.D Vial: 48  
Acq On : 11 Jul 2007 22:00 Operator: LH  
Sample : JPL48-003 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711030.D 8260B.M Thu Jul 12 13:33:44 2007



1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-14-3

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL48  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-003  
 Lab File ID: Y0711030.D  
 Date Collected: 07/06/2007  
 Date Analyzed: 07/11/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711031.D Vial: 49  
Acq On : 11 Jul 2007 22:25 Operator: LH  
Sample : JPL48-004 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711031.D 8260B.M Thu Jul 12 13:33:51 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-14-4

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL48  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019438  
 Lab Sample ID: JPL48-002  
 Lab File ID: Y0711029.D  
 Date Collected: 07/06/2007  
 Date Analyzed: 07/11/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711032.D Vial: 50  
Acq On : 11 Jul 2007 22:50 Operator: LH  
Sample : JPL48-005 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711032.D 8260B.M Thu Jul 12 13:33:58 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-14-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL48

Run Sequence: R019438

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL48-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711028.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/06/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/11/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711033.D Vial: 51  
Acq On : 11 Jul 2007 23:14 Operator: LH  
Sample : JPL48-006 Inst : yoda  
Misc : #2 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0711033.D 8260B.M Thu Jul 12 13:34:44 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-8-6/22/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL48

Run Sequence: R019438

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL48-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0711020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/05/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/11/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 1

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

#	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	001066-40-6	Silanol, trimethyl- \$\$ Hydro	5.09	5.9	JN
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071107\Y0711020.D Vial: 38  
 Acq On : 11 Jul 2007 17:54 Operator: LH  
 Sample : JPL48-007 Inst : yoda  
 Misc : #2 5mL +IS/SS Multiplr: 1.00  
 MS Integration Params: LSCINT.P  
 Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Library : D:\DATABASE\NIST129K.L

\*\*\*\*\*  
 Peak Number 1 Silanol, trimethyl- \$\$ Hydroxy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.09	5.87 ug/l	57076	Fluorobenzene	6.37

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Silanol, trimethyl- \$\$ Hydroxytrime	90	C3H10OSi	001066-40-6	83
2			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	78
3			tert-Butyldimethylsilanol	132	C6H16OSi	018173-64-3	78
4			Formamide, N-methylthio	75	C2H5NS	000000-00-0	40
5			Silanol, trimethyl-	90	C3H10OSi	001066-40-6	38

Y0711020.D 8260B.M Thu Jul 12 13:33:02 2007



**Metals Data**

**JPL48**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL48

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
<u>MW-14-5</u>	<u>JPL48-001</u>
<u>MW-14-4</u>	<u>JPL48-002</u>
<u>MW-14-3</u>	<u>JPL48-003</u>
<u>MW-14-2</u>	<u>JPL48-004</u>
<u>MW-14-1</u>	<u>JPL48-005</u>
<u>EB-8-06/22/07</u>	<u>JPL48-006</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Cheronne Ocasio

Date: 07/28/2007

Title: metals Lead

## **Metals Analysis Data Sheets**

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-14-5

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL48Matrix (soil/water): WaterLab Sample ID: JPL48-001Level (low/med): LOWDate Received: 07/06/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.18			M	R019973
7440-70-2	Calcium	19400			P	R019929
7440-47-3	Chromium	2.53			M	R019973
7439-89-6	Iron	157		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	14600		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	33200		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No
 Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-14-4

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL48

Matrix (soil/water): Water

Lab Sample ID: JPL48-002

Level (low/med): LOW

Date Received: 07/06/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.07			M	R019973
7440-70-2	Calcium	59400			P	R019929
7440-47-3	Chromium	5.14			M	R019973
7439-89-6	Iron	218		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	21500		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	30600		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-14-3

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL48

Matrix (soil/water): Water

Lab Sample ID: JPL48-003

Level (low/med): LOW

Date Received: 07/06/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.28			M	R019973
7440-70-2	Calcium	124000			P	R019929
7440-47-3	Chromium	3.28			M	R019973
7439-89-6	Iron	535		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	51900		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	39000		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-14-2

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL48Matrix (soil/water): WaterLab Sample ID: JPL48-004Level (low/med): LOWDate Received: 07/06/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.30			M	R019973
7440-70-2	Calcium	159000			P	R019929
7440-47-3	Chromium	3.58			M	R019973
7439-89-6	Iron	639		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	58600		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	33900		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-14-1

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL48Matrix (soil/water): WaterLab Sample ID: JPL48-005Level (low/med): LOWDate Received: 07/06/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.31			M	R019973
7440-70-2	Calcium	140000			P	R019929
7440-47-3	Chromium	2.76			M	R019973
7439-89-6	Iron	956		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	48000		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	50800		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-8-06/22/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL48

Matrix (soil/water): Water

Lab Sample ID: JPL48-006

Level (low/med): LOW

Date Received: 07/06/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	5000	U		P	R019929
7440-47-3	Chromium	1.34			M	R019973
7439-89-6	Iron	100	U	E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	5000	U	*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	5000	U	*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL48**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL48

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-14-5</u>	<u>JPL48-001</u>
<u>MW-14-5D</u>	<u>JPL48-001D</u>
<u>MW-14-5MS</u>	<u>JPL48-001MS</u>
<u>MW-14-5MSD</u>	<u>JPL48-001MSD</u>
<u>MW-14-4</u>	<u>JPL48-002DL</u>
<u>MW-14-3</u>	<u>JPL48-003DL</u>
<u>MW-14-3MS</u>	<u>JPL48-003MS</u>
<u>MW-14-3MSD</u>	<u>JPL48-003MSD</u>
<u>MW-14-2</u>	<u>JPL48-004DL</u>
<u>MW-14-1D</u>	<u>JPL48-005D</u>
<u>MW-14-1</u>	<u>JPL48-005DL</u>
<u>EB-8-06/22/07</u>	<u>JPL48-006</u>
<u>EB-8-06/22/07D</u>	<u>JPL48-006D</u>

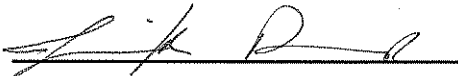
Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-25-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL48  
**Sample Number:** MW-14-5 **Date/Time Collected:** 07/05/2007 08:42  
**Lab Sample ID:** JPL48-001 **Date/Time Received:** 07/06/2007 10:00  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.4		0.10	0.10	07/06/2007	07/06/2007	R019318

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	190		2	2	07/06/2007	07/10/2007	R019327

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	2	8.9		2.0	0.15	07/17/2007	07/17/2007	R019633
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/06/2007	R019314
Sulfate as SO4	14808-79-8	1	16		1.0	0.17	07/06/2007	07/06/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8		8	8	07/16/2007	07/16/2007	R019590
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	120		8	8	07/16/2007	07/16/2007	R019590

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/19/2007	07/20/2007	R019744











**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL48  
**Sample Number:** EB-8-06/22/07 **Date/Time Collected:** 07/05/2007 10:13  
**Lab Sample ID:** JPL48-006 **Date/Time Received:** 07/06/2007 10:00  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	07/06/2007	07/06/2007	R019318

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	2	U	2	2	07/06/2007	07/10/2007	R019327

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/06/2007	07/06/2007	R019314
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	07/06/2007	07/06/2007	R019314
Chloride	16887-00-6	1	1.0	U	1.0	0.076	07/06/2007	07/06/2007	R019314

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/16/2007	07/16/2007	R019590
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2		2	2	07/16/2007	07/16/2007	R019590

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/19/2007	07/20/2007	R019744

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL49**

**JULY 31, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL49  
Date of Report: July 31, 2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-1	JPL49-001	VOA/MET/INO
MW-9	JPL49-002	VOA/MET/INO
MW-15	JPL49-003	VOA/MET/INO
DUPE-7-2Q07	JPL49-004	VOA/MET/INO
TB-16-7/9/07	JPL49-005	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

The temperature blank measured above the control limit of 6 deg C.

Several sample VOA vials were received with air bubbles less than ¼ inch in size. See cooler receipt forms for specific documentation.

## **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Continuing Calibration Verification (CCV):

In the CCV performed on 07/16/2007 the percent difference values for 4-methyl-2-pentanone exceeded 30% due to increased response. This analyte was not detected in any associated samples so no further action was taken.

#### Method Blank

Analysis of the method blank performed on 07/16/2007 resulted in the detection of methylene chloride. The presence of this analyte may be due to laboratory contamination since it is a common laboratory solvent. All sample results reported for this analyte have been "B" flagged to denote its presence in the associated method blank analysis.

#### Quality Control Analyses:

MS/MSD analyses performed on sample MW-9 yielded all recoveries and RPD values within the control limits.

MS/MSD analyses performed on sample MW-15 yielded recovery for cis-1,3-dichloropropene which slightly exceeded the control limits. Because this analyte was not detected in any of the associated samples, no further action was taken.

The blank spike analysis on 07/16/2007 yielded recovery for cis-1,3-dichloropropene which slightly exceeded the control limits. Because this analyte was not detected in any of the associated samples, no further action was taken.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

## ICP Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

## **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

## ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

For the run sequence R019929, Form 2A shows CCV recoveries for magnesium and sodium exceeding control limits of 90-110% for Method 200.7. These recoveries are within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115%. Data have been reported as is.

For the run sequence R019929, CCV2 exceeded the upper control limit of 85-115% for magnesium. No sample results for magnesium were associated with these CCVs, therefore no corrective action was required. Data have not been flagged for these events.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

For the run sequence R019973, CCV5 exceeded the upper control limits of 85-115% for lead. Samples MW-1 and DUPE-7-2Q07 contained concentrations of lead that were less than the CRDL, therefore no further corrective action was required for these samples. Samples MW-9 and MW-15 contained concentrations of lead that were greater than the CRDL. The client action level for lead is 5ug/L. Samples MW-9 and MW-15 contained concentrations of lead that were less than ½ the client action level. Samples MW-9 and MW-15 were reported as is with a possible high bias for lead. No further corrective action was required. Data have not been flagged for this event.

The matrix spike duplicate sample percent recoveries for magnesium and sodium were outside of the established control limits of 70-130% for sample MW-9. The LCSW and LCSWD recoveries were within these control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and V.

The matrix spike sample percent recoveries for magnesium and sodium were outside of the established control limits of 70-130% for sample MW-15. The LCSW and LCSWD recoveries were within these control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and V.

The matrix spike/matrix spike duplicate sample relative percent differences for magnesium and sodium were outside the control limits of  $\pm 20\%$  for sample MW-9. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

The matrix spike/matrix spike duplicate sample relative percent difference for sodium was outside the control limits of  $\pm 20\%$  for sample MW-15. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms I and VI.

The serial dilution for the element iron did not agree within 10% of the original determination after correction for dilution for sample MW-9. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### **Miscellaneous Inorganics:**

For run sequence R019809, the blank spike recovery fell outside the established control limits for the perchlorate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.



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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

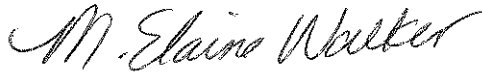
940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

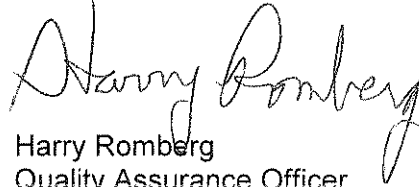
"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



M. Elaine Walker  
Project Manager

7/31/07  
(DATE)



Harry Romberg  
Quality Assurance Officer

7/31/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL49-001	07/10/2007 08:10 AM	07/09/2007 08:50 AM	MW-1	IN	IN	IN	IN	IN	IN	IN	IN	IN
*JPL49-002	07/10/2007 08:10 AM	07/09/2007 10:16 AM	MW-9	IN	IN	IN	IN	IN	IN	IN	IN	IN
*JPL49-003	07/10/2007 08:10 AM	07/09/2007 11:56 AM	MW-15	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL49-004	07/10/2007 08:10 AM	07/09/2007 12:00 AM	DUPE-7-2007	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL49-005	07/10/2007 08:10 AM	07/09/2007 12:00 AM	TB-16-7/9/07								IN	

Approved By: *[Signature]*

On: 7/10/07

Samples identified with a '\*' client has requested QC for  
**LEGEND:** -: Started, +: Completed, IN: logged In, P: Preparation, A: Analysis, X: Cancelled, PL: Pre-logged

FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

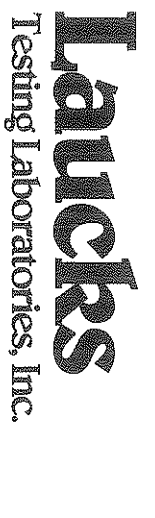
COMPANY: BATELLE  
 ADDRESS: 3990 OLD TOWN AVE, C-205  
SAN DIEGO, CA 92110  
 ATTENTION: DAVID CONNER  
 PROJECT NAME: JPL 6w MON. 2007  
 PROJECT CONTACT: DAVID CONNER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/P.O. NO.: G486090

CHAIN OF CUSTODY RECORD  
 42847

SDG # JPL 49  
 PAGE 1 OF 1

WORK ORDER ID# \_\_\_\_\_

SUBMITTED AT: \_\_\_\_\_



960 South Haney St, Seattle, WA 98108 (206) 767-5000 FAX 767-5063  
 1109 Leitch Ave, Yakima, WA 98912 (509) 253-6905 FAX 432-1265

LAB #/A#	SAMPLE ID / LOCATION	DATE	TIME
1	MW-1	7/9/07	850
	MW-9	10/16	
3	MW-15	1/15/6	
4	DUE - 7-2007	-	-
5	TR-16 - 7/19/07	-	-

LAB #/A#	SAMPLE ID / LOCATION	DATE	TIME	MATRIX: WATER, SOIL OR SPECIFY		NO. OF CONTAINERS		TESTS TO PERFORM		OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
				W	S	VOC (SLY.2)	TOTAL (200.8)	LEAD (200.8)	ARSENIC (200.8)	
1	MW-1	7/9/07	850	X	X	X	X	X	X	
	MW-9	10/16		X	X	X	X	X	X	MS/MSD
3	MW-15	1/15/6		X	X	X	X	X	X	MS/MSD
4	DUE - 7-2007	-	-	X	X	X	X	X	X	DUPLICATE
5	TR-16 - 7/19/07	-	-	X	X	X	X	X	X	TRIP BLANK

LAB #/A#	SAMPLE ID / LOCATION	DATE	TIME	W	S	VOC (SLY.2)	TOTAL (200.8)	LEAD (200.8)	ARSENIC (200.8)	C100 (314.0)	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-1	7/9/07	850	X	X	X	X	X	X	X	
	MW-9	10/16		X	X	X	X	X	X	X	MS/MSD
3	MW-15	1/15/6		X	X	X	X	X	X	X	MS/MSD
4	DUE - 7-2007	-	-	X	X	X	X	X	X	X	DUPLICATE
5	TR-16 - 7/19/07	-	-	X	X	X	X	X	X	X	TRIP BLANK

A. A standard turnaround time is assumed unless otherwise marked

B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:  
 1. USE ONE LINE PER SAMPLE  
 2. BE SPECIFIC IN TEST REQUESTS  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE

RELINQUISHED BY (SIGN AND PRINT): EMERALD TOMPKINS DATE: 7/9/07  
 RECEIVED BY (SIGN AND PRINT): SUSAN MOSS DATE: 8/10/07

BILLING INFORMATION (IF DIFFERENT THAN ABOVE)  
 NAME: BATELLE ADDRESS: 505 KING AVE  
 ATTN: EMERALD TOMPKINS CITY, STATE, ZIP: COLUMBUS OH 43201

\* RUSH TURNAROUND IS SUBJECT TO PRIOR LABORATORY APPROVAL

TURNAROUND REQUEST:  
 STD. 10-14 WORKING DAYS  
 24-48 HRS. (100% SUR)  
 72 HRS. (75% SUR)  
 5 DAYS (50% SUR)  
 OTHER:  
 TEMP.  
 CUSTODY SEAL:  Y  N  N/A

**Cooler Receipt Form**  
**Laucks Testing Laboratories, Inc.**

SDG: JPL49

Taken By: CLIENT

Cooler: AAP012

Transferred: FED EX

COC #: 42847

Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 7/10/2007

Date cooler was opened: 7/10/2007 8:10AM

**A. PRELIMINARY EXAMINATION PHASE:**

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES  
if YES, record carrier name and airbill number:
2. Were custody seals unbroken and intact at the date and time of arrival? ..... ABSENT  
Date On Custody Seal: Custody Seals Description:
3. Were custody papers sealed in a plastic bag and taped inside to the lid? ..... YES
4. Did you screen samples for radioactivity using the Geiger Counter? ..... YES
5. Were custody papers filled out properly (ink, signed, etc.)? ..... YES
6. Did you sign custody papers in the appropriate place? ..... YES
7. If required, was enough cooling material present? ..... YES
8. Have designated person initial here to acknowledge receipt of cooler: SM

**B. LOG-IN PHASE:**

Date samples were logged-in: 7/10/2007 8:30AM

Logged-in by Susan Moss (sign) Susan Moss

9. Describe type of packing in cooler:

**BUBBLE WRAP**

10. Were all bottles sealed in separate plastic bags? ..... YES
11. Were labels in good condition? ..... YES
12. Were all bottle labels complete (ID,date,time signature,preservative,etc.)? ..... YES
13. Did all bottle labels agree with custody papers? ..... YES
14. Were correct containers used for the tests indicated? ..... YES
15. Were the correct pHs observed? ..... YES
16. Was a sufficient amount of sample sent for tests indicated? ..... YES
17. Were bubbles absent in VOA samples? ..... YES
18. Temperatures: 6.5

DISCREPANCIES:

Temperature blank reading was above control limit of 6 degrees C.

Several 40 ml HCl preserved VOA vials received with <1/4" bubble. See Supplemental Sample Receipt Log for details.

**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL49

Cooler: AAP012

Temperatures: 6.5

COC #: 42847

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL49-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL49-002	0001	1000 mL cylinder, poly	7	N/A
	0002	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	500 ml cylinder, poly, HNO3	<2	N/A
	0010	500 ml cylinder, poly, HNO3	<2	N/A
JPL49-003	0001	1000 mL cylinder, poly	7	N/A
	0002	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0006	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	500 ml cylinder, poly, HNO3	<2	N/A
	0010	500 ml cylinder, poly, HNO3	<2	N/A
JPL49-004	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL49-005	0001	40 ml OTWS, clear glass, HCl	N/C	< 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL49

Cooler: AAP012

Temperatures: 6.5

COC #: 42847

Sample	Bottle #	Bottle Description	pH	Bubbles
	0002	40 ml OTWS, clear glass, HCl	N/C	None

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH



**LAUCKS TESTING LABORATORIES**

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**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

**Battelle**

**SDG No.: JPL49**

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- II. Chain-of-Custody: 9-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-243
  - A. QC Summary Data: 1-22
  - B. Sample Data: 23-73
  - C. Standards Data: 74-160
  - D. Raw QC Data: 161-226
  - E. Bench Sheets: 227-243
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  - B. Metals Analysis Data Sheets: 3-7
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Completed and checked by: Judy Ecklund Date: 7/31/07

**SAMPLE DATA**

SDG JPL49

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-001  
 Lab File ID: Y0713022.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:06  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-001  
 Lab File ID: Y0713022.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:06  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-001  
 Lab File ID: Y0713022.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:06  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

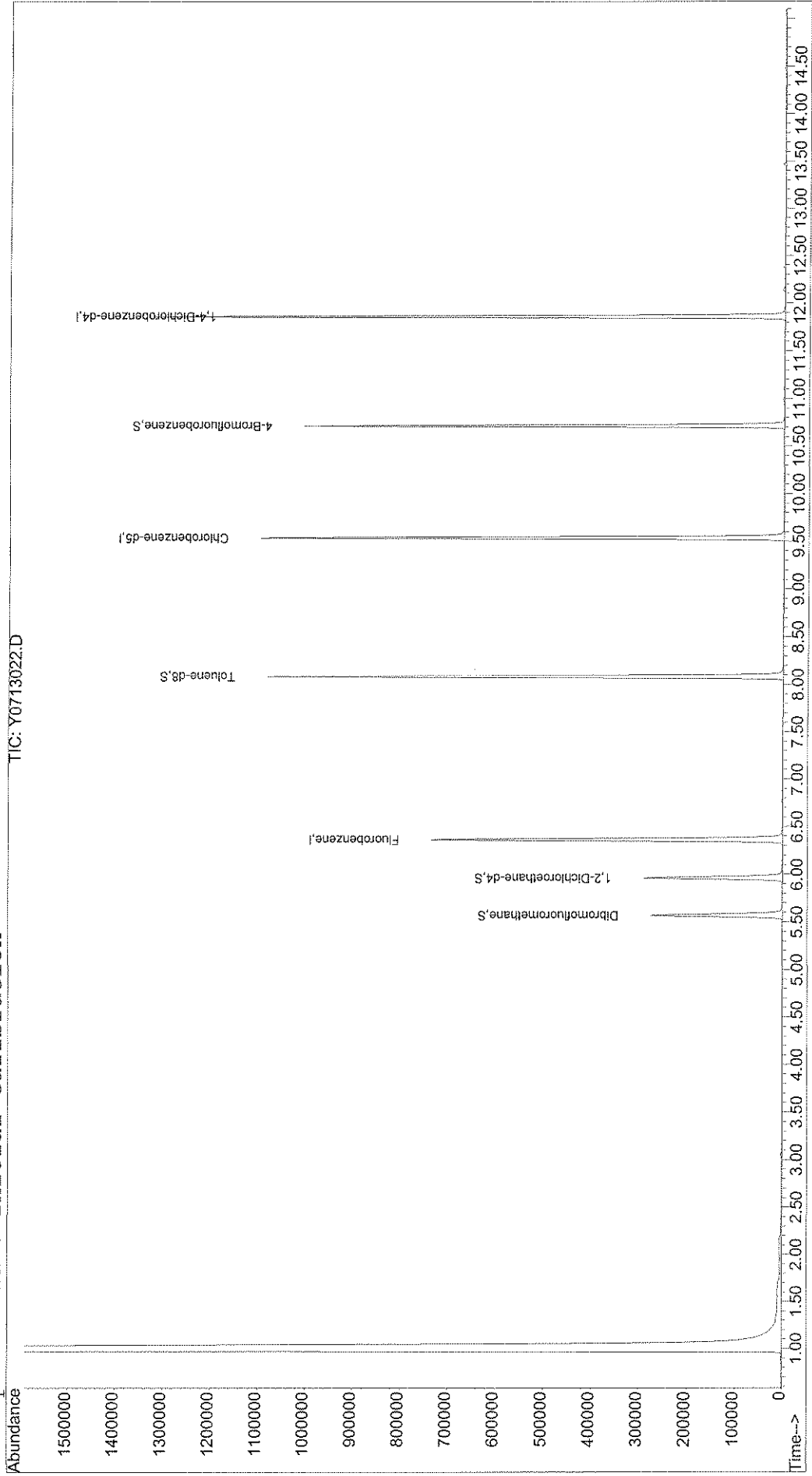
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713022.D  
Acq On : 13 Jul 2007 17:06  
Sample : JPL49-001  
Misc : #1 5mL +IS/SS  
MS Integration Params: reint.p  
Quant Time: Jul 16 7:41 2007  
Vial: 36  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713022.D  
 Acq On : 13 Jul 2007 17:06  
 Sample : JPL49-001  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:41 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	644975	50.00	ug/l	0.00	103.56%
54) Chlorobenzene-d5	9.53	82	306830	50.00	ug/l	0.00	105.65%
74) 1,4-Dichlorobenzene-d4	11.86	152	321824	50.00	ug/l	0.00	104.18%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	176455	49.36	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.72%	
40) 1,2-Dichloroethane-d4	5.96	65	207941	50.00	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.00%	
55) Toluene-d8	8.08	98	660016	48.04	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.08%	
76) 4-Bromofluorobenzene	10.71	95	290527	51.42	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.68	76	124		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713022.D  
 Acq On : 13 Jul 2007 17:06  
 Sample : JPL49-001  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:41 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	80		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	175		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	197		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	674		N.D.	
46) Methylcyclohexane	6.96	83	57		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.09	92	63		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	1122		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.81	91	365		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713022.D  
 Acq On : 13 Jul 2007 17:06  
 Sample : JPL49-001  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:41 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.56	105	112		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	10.71	156	54		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	117		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	122		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	66		N.D.	
82) 4-Chlorotoluene	11.05	91	63		N.D.	
83) 1,3,5-Trimethylbenzene	11.15	105	56		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	131		N.D.	
86) sec-butylbenzene	11.70	105	212		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	216		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	458		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-002  
 Lab File ID: Y0713023.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
75-71-8	Dichlorodifluoromethane	0.50		U
74-87-3	Chloromethane	0.50		U
75-01-4	Vinyl chloride	0.50		U
74-83-9	Bromomethane	0.50		U
75-00-3	Chloroethane	0.50		U
75-69-4	Trichlorofluoromethane	0.50		U
75-35-4	1,1-Dichloroethene	0.50		U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50		U
75-09-2	Methylene chloride	1.0		U
1634-04-4	Methyl tert-butyl ether	0.50		U
156-60-5	trans-1,2-Dichloroethene	0.50		U
75-34-3	1,1-Dichloroethane	0.50		U
594-20-7	2,2-Dichloropropane	0.50		U
156-59-2	cis-1,2-Dichloroethene	0.50		U
78-93-3	2-Butanone	5.0		U
74-97-5	Bromochloromethane	0.50		U
67-66-3	Chloroform	0.50		U
71-55-6	1,1,1-Trichloroethane	0.50		U
56-23-5	Carbon tetrachloride	0.50		U
563-58-6	1,1-Dichloropropene	0.50		U
71-43-2	Benzene	0.50		U
107-06-2	1,2-Dichloroethane	0.50		U
79-01-6	Trichloroethene	0.50		U
78-87-5	1,2-Dichloropropane	0.50		U
74-95-3	Dibromomethane	0.50		U
75-27-4	Bromodichloromethane	0.50		U
10061-01-	cis-1,3-Dichloropropene	0.50		U
108-10-1	4-Methyl-2-pentanone	5.0		U
108-88-3	Toluene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-002  
 Lab File ID: Y0713023.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:31  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9
------

Lab Name: \_\_\_\_\_

SDG No.: JPL49

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019547

Lab Sample ID: JPL49-002

Lab File ID: Y0713023.D

Date Collected: 07/09/2007

Date/Time Analyzed: 07/13/2007 17:31

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_(uL)

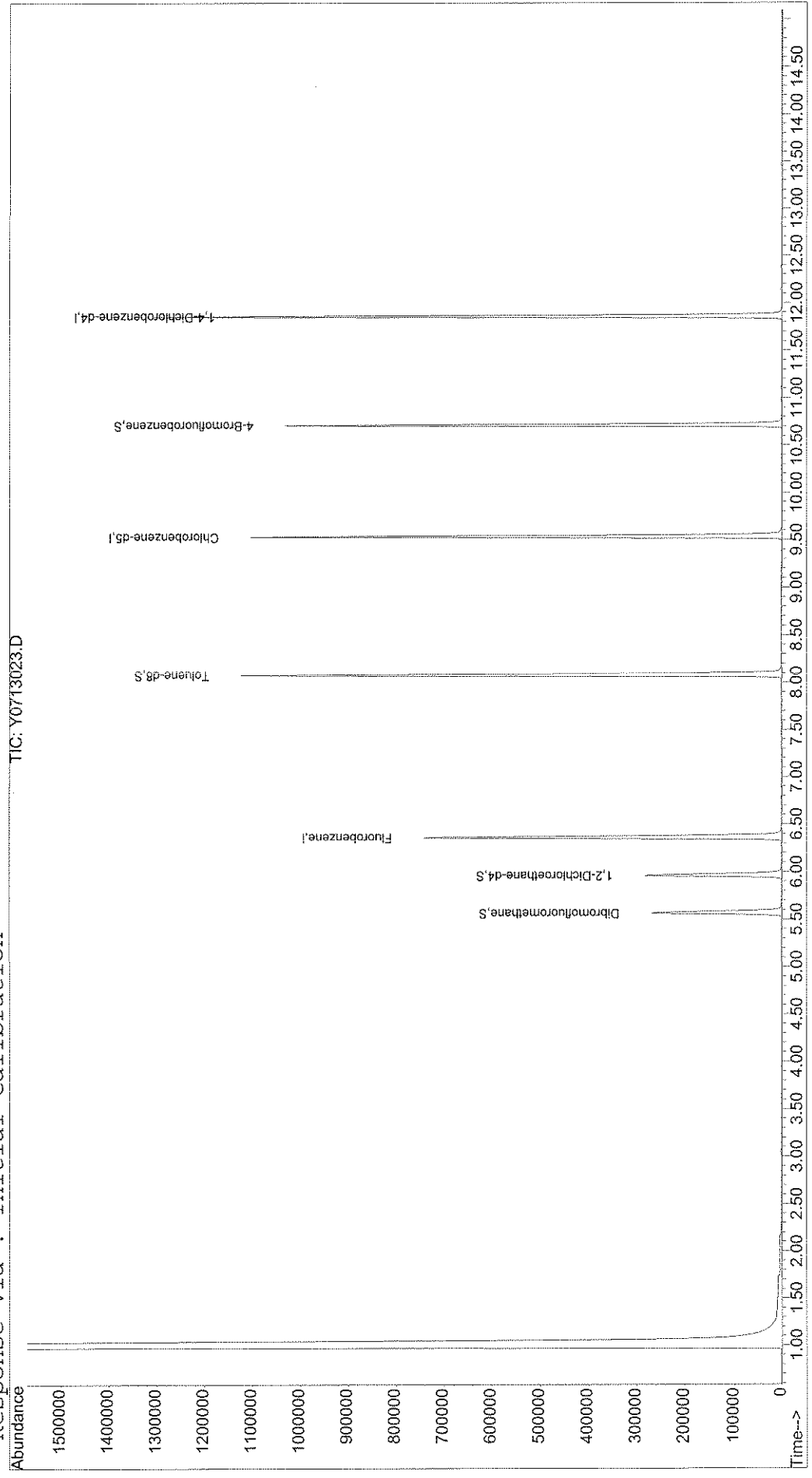
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713023.D  
Acq On : 13 Jul 2007 17:31  
Sample : JPL49-002  
Misc : #1 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 16 7:24 2007  
Vial: 37  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713023.D  
 Acq On : 13 Jul 2007 17:31  
 Sample : JPL49-002  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:24 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)

Title : VOA 8260- 5ML Calibration 5973Y

Last Update : Thu Jun 28 10:03:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	646641	50.00	ug/l	0.00	103.83%
54) Chlorobenzene-d5	9.53	82	306557	50.00	ug/l	0.00	105.56%
74) 1,4-Dichlorobenzene-d4	11.86	152	319064	50.00	ug/l	0.00	103.28%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	175079	48.85	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.70%	
40) 1,2-Dichloroethane-d4	5.96	65	209562	50.26	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.52%	
55) Toluene-d8	8.08	98	672975	49.03	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.06%	
76) 4-Bromofluorobenzene	10.71	95	283976	50.69	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.28	50	67	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	1361	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713023.D  
 Acq On : 13 Jul 2007 17:31  
 Sample : JPL49-002  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:24 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	88		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	112		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.00	78	248		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	494		N.D.	
46) Methylcyclohexane	6.98	83	62		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	92		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	8.66	97	55		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.57	112	124		N.D.	
66) 1-Chlorohexane	9.57	91	54		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	82		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713023.D  
 Acq On : 13 Jul 2007 17:31  
 Sample : JPL49-002  
 Misc : #1 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:24 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	63		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	69		N.D.	
73) Isopropylbenzene	10.57	105	114		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	69		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	65		N.D.	
80) n-Propylbenzene	11.16	120	82		N.D.	
81) 2-Chlorotoluene	10.98	91	121		N.D.	
82) 4-Chlorotoluene	11.15	91	53		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	151		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	410		N.D.	
86) sec-butylbenzene	11.70	105	146		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	55		N.D.	
88) 4-Isopropyltoluene	11.85	119	326		N.D.	
89) 1,4-Dichlorobenzene	11.87	146	113		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	347		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-003  
 Lab File ID: Y0713024.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-003  
 Lab File ID: Y0713024.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-003  
 Lab File ID: Y0713024.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 17:55  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

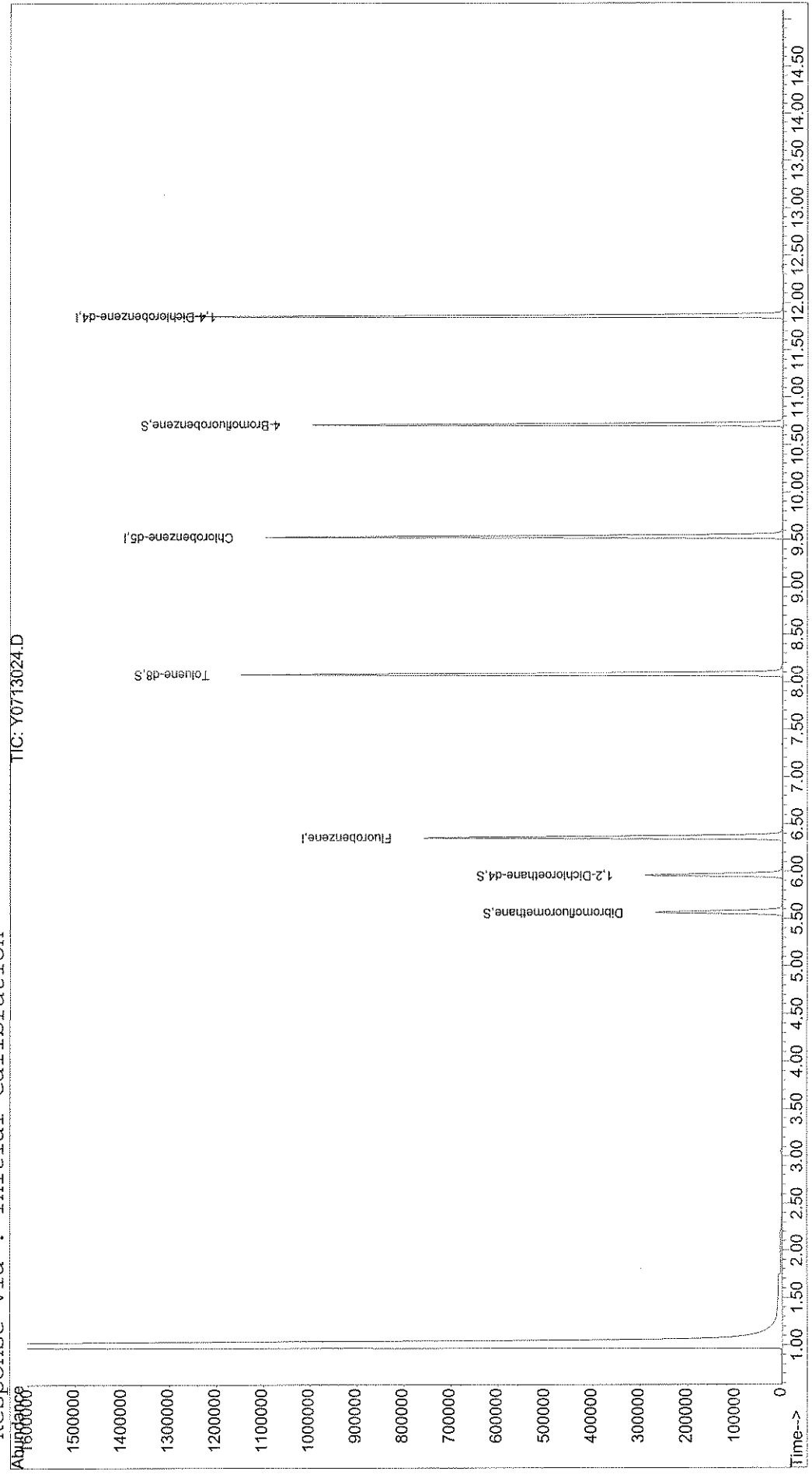
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713024.D  
Acq On : 13 Jul 2007 17:55  
Sample : JPL49-003  
Misc : #4 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 16 7:25 2007  
Vial: 38  
Operator: DGA  
Inst : yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713024.D  
 Acq On : 13 Jul 2007 17:55  
 Sample : JPL49-003  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:25 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar )
1) Fluorobenzene	6.36	96	665616	50.00	ug/l	0.00 106.87%
54) Chlorobenzene-d5	9.53	82	308318	50.00	ug/l	0.00 106.16%
74) 1,4-Dichlorobenzene-d4	11.86	152	319999	50.00	ug/l	0.00 103.59%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	175647	47.61	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	95.22%
40) 1,2-Dichloroethane-d4	5.96	65	214277	49.92	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.84%
55) Toluene-d8	8.08	98	688189	49.85	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.70%
76) 4-Bromofluorobenzene	10.71	95	281820	50.16	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.68	76	161		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	3.05	84	1345		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713024.D  
 Acq On : 13 Jul 2007 17:55  
 Sample : JPL49-003  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:25 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	265		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	129		N.D.	
34) Chloroform	5.36	83	971		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	467		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.77	130	368		N.D.	
46) Methylcyclohexane	6.96	83	123		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.34	83	1009		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	119		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	8.97	129	209		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	1003		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	67		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713024.D  
 Acq On : 13 Jul 2007 17:55  
 Sample : JPL49-003  
 Misc : #4 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:25 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	61		N.D.	
73) Isopropylbenzene	10.71	105	269		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	122		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	128		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	302		N.D.	
82) 4-Chlorotoluene	11.16	91	63		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	119		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	238		N.D.	
86) sec-butylbenzene	11.70	105	150		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	402		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	300		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-7-2Q07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL49

Run Sequence: R019547

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL49-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0713025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/09/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/13/2007 18:20

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-7-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-004  
 Lab File ID: Y0713025.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 18:20  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-7-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-004  
 Lab File ID: Y0713025.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/13/2007 18:20  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

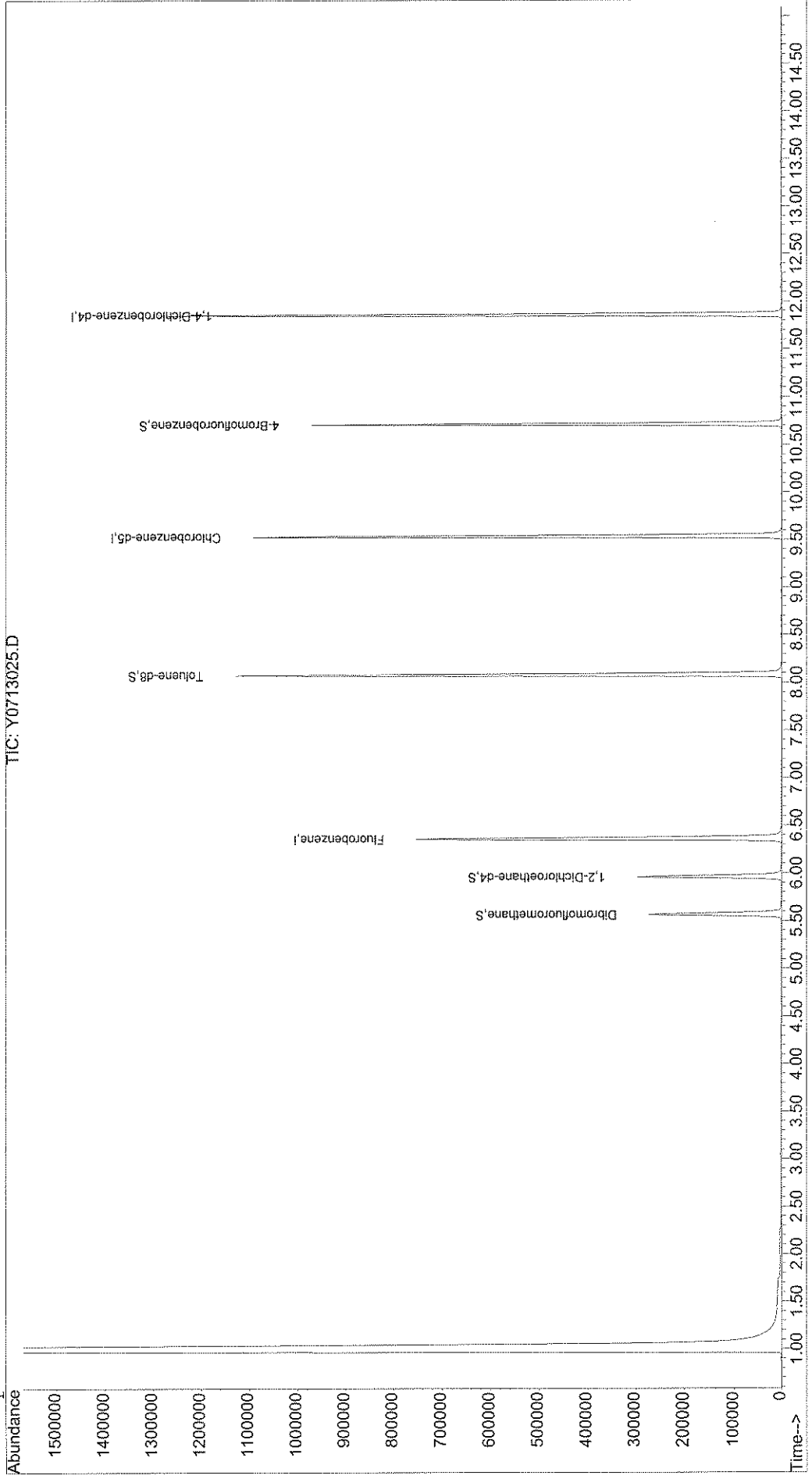
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713025.D Vial: 39  
Acq On : 13 Jul 2007 18:20 Operator: DGA  
Sample : JPL49-004 Inst : Yoda  
Misc : #5 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 16 7:27 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713025.D  
 Acq On : 13 Jul 2007 18:20  
 Sample : JPL49-004  
 Misc : #5 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:27 2007

Vial: 39  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)

Title : VOA 8260- 5ML Calibration 5973Y

Last Update : Thu Jun 28 10:03:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	655170	50.00	ug/l	0.00 105.20%
54) Chlorobenzene-d5	9.53	82	297198	50.00	ug/l	0.00 102.33%
74) 1,4-Dichlorobenzene-d4	11.86	152	309551	50.00	ug/l	0.00 100.20%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	174661	48.10	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.20%
40) 1,2-Dichloroethane-d4	5.96	65	212923	50.40	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.80%
55) Toluene-d8	8.08	98	680234	51.12	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	102.24%
76) 4-Bromofluorobenzene	10.71	95	274335	50.48	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.67	76	57		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	3.06	84	1464		N.D.	
19) trans-1,2-Dichloroethene	3.40	96	57		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713025.D  
 Acq On : 13 Jul 2007 18:20  
 Sample : JPL49-004  
 Misc : #5 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:27 2007

Vial: 39  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	65		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	279		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	323		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.57	112	71		N.D.	
66) 1-Chlorohexane	9.53	91	1097		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	115		N.D.	

Quantitation Report

Data File : X:\MSVOA\YODA\071307\Y0713025.D  
 Acq On : 13 Jul 2007 18:20  
 Sample : JPL49-004  
 Misc : #5 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 16 7:27 2007

Vial: 39  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.73	105	360		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.72	83	119		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	74		N.D.	
82) 4-Chlorotoluene	11.17	91	54		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	284		N.D.	
86) sec-butylbenzene	11.69	105	294		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	129		N.D.	
88) 4-Isopropyltoluene	11.86	119	471		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	129		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	286		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.84	180	56		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-16-7/9/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL49-005  
 Lab File ID: Y0716015.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/16/2007 12:13  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-16-7/9/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL49-005  
 Lab File ID: Y0716015.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/16/2007 12:13  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-16-7/9/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL49  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL49-005  
 Lab File ID: Y0716015.D  
 Date Collected: 07/09/2007  
 Date/Time Analyzed: 07/16/2007 12:13  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

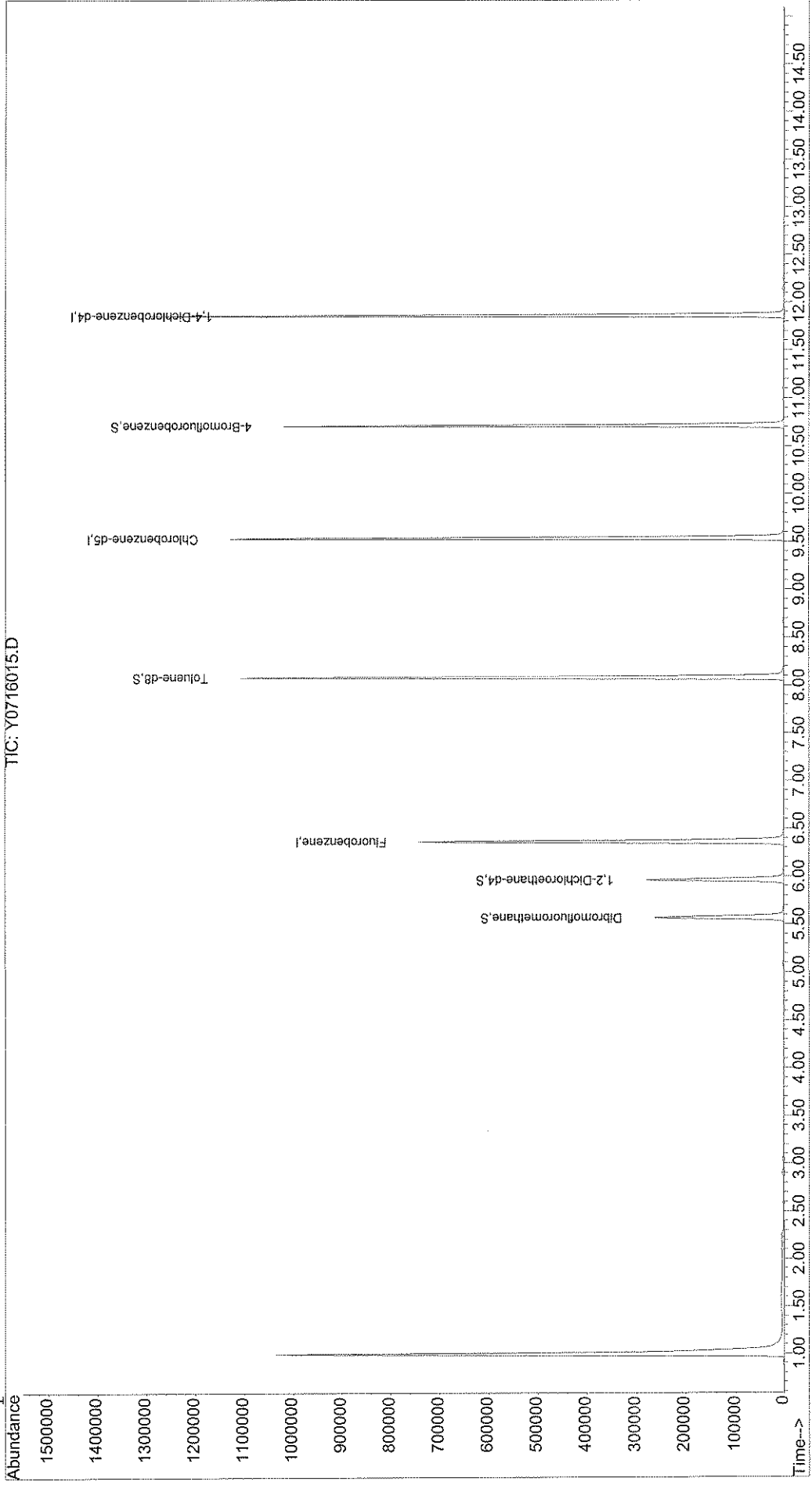
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716015.D Vial: 34  
Acq On : 16 Jul 2007 12:13 Operator: DGA  
Sample : JPL49-005 Inst : yoda  
Misc : 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 17 7:03 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716015.D  
 Acq On : 16 Jul 2007 12:13  
 Sample : JPL49-005  
 Misc : 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:03 2007

Vial: 34  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	645474	50.00	ug/l	0.00	103.64%
54) Chlorobenzene-d5	9.53	82	309689	50.00	ug/l	0.00	106.64%
74) 1,4-Dichlorobenzene-d4	11.86	152	315323	50.00	ug/l	0.00	102.07%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	171046	47.81	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	95.62%	
40) 1,2-Dichloroethane-d4	5.96	65	205287	49.32	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	98.64%	
55) Toluene-d8	8.08	98	669585	48.29	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.58%	
76) 4-Bromofluorobenzene	10.71	95	286502	51.75	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.67	76	460	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.05	84	1204	N.D.		
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716015.D  
 Acq On : 16 Jul 2007 12:13  
 Sample : JPL49-005  
 Misc : 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:03 2007

Vial: 34  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.01	43	121		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.00	78	263		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	269		N.D.	
46) Methylcyclohexane	6.97	83	108		N.D.	
47) 1,2-Dichloropropene	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.15	92	474		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	206		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	9.02	43	62		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	246		N.D.	
66) 1-Chlorohexane	9.57	91	55		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	309		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0716015.D 8260B.M Tue Jul 17 09:11:38 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716015.D  
 Acq On : 16 Jul 2007 12:13  
 Sample : JPL49-005  
 Misc : 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:03 2007

Vial: 34  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	369		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.57	105	525		N.D.	
75) trans-1,4-Dichloro-2-buten	10.71	53	54		N.D.	
77) Bromobenzene	10.72	156	54		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	10.97	120	225		N.D.	
81) 2-Chlorotoluene	11.05	91	302		N.D.	
82) 4-Chlorotoluene	11.05	91	302		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	416		N.D.	
84) tert-Butylbenzene	11.49	119	332		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	562		N.D.	
86) sec-butylbenzene	11.70	105	747		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	207		N.D.	
88) 4-Isopropyltoluene	11.85	119	1079		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	304		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	201		N.D.	
91) n-Butylbenzene	12.26	91	957		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	275		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	77		N.D.	

**TIC FORMS**

SDG JPL49

VOLATILES ANALYSIS

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL49

Run Sequence: R019547

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL49-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0713022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/13/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\071307\Y0713022.D Vial: 36  
Acq On : 13 Jul 2007 17:06 Operator: DGA  
Sample : JPL49-001 Inst : yoda  
Misc : #1 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0713022.D 8260B.M Mon Jul 16 07:44:26 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-9

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL49  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019547  
 Lab Sample ID: JPL49-002  
 Lab File ID: Y0713023.D  
 Date Collected: 07/20/2007  
 Date Analyzed: 07/13/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071307\Y0713023.D Vial: 37  
Acq On : 13 Jul 2007 17:31 Operator: DGA  
Sample : JPL49-002 Inst : yoda  
Misc : #1 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0713023.D 8260B.M Mon Jul 16 07:47:19 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-15

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL49

Run Sequence: R019547

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL49-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0713024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/20/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/13/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071307\Y0713024.D Vial: 38  
Acq On : 13 Jul 2007 17:55 Operator: DGA  
Sample : JPL49-003 Inst : yoda  
Misc : #4 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0713024.D 8260B.M Mon Jul 16 07:48:59 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-7-2Q07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL49

Run Sequence: R019547

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL49-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0713025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/10/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/13/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071307\Y0713025.D Vial: 39  
Acq On : 13 Jul 2007 18:20 Operator: DGA  
Sample : JPL49-004 Inst : yoda  
Misc : #5 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0713025.D 8260B.M Mon Jul 16 07:49:57 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-16-7/9/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL49  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL49-005  
 Lab File ID: Y0716015.D  
 Date Collected: 07/20/2007  
 Date Analyzed: 07/16/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716015.D Vial: 34  
Acq On : 16 Jul 2007 12:13 Operator: DGA  
Sample : JPL49-005 Inst : yoda  
Misc : 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716015.D 8260B.M Tue Jul 17 09:11:43 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071307MVOWY2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL49

Run Sequence: R019547

Matrix: (SOIL/WATER) Water

Lab Sample ID: B071307MVOWY2

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0713011.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/13/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071307\Y0713011.D Vial: 33  
Acq On : 13 Jul 2007 11:38 Operator: DGA  
Sample : B071307MVOWY2 Inst : yoda  
Misc : 5mL pfw+IS/SS (MV8-39-9) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : D:\MSDCHEM\1\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0713011.D 8260B.M Mon Jul 23 13:30:23 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071607MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL49

Run Sequence: R019603

Matrix: (SOIL/WATER) Water

Lab Sample ID: B071607MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0716012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/16/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716012.D Vial: 32  
Acq On : 16 Jul 2007 10:59 Operator: DGA  
Sample : B071607MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-40-19) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716012.D 8260B.M Mon Jul 23 13:27:44 2007

**Metals Data**

**JPL49**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL49

SOW No.: \_\_\_\_\_

Sample No.	Lab Sample ID
MW-1	JPL49-001
MW-9	JPL49-002
MW-9MS	JPL49-002MS
MW-9MSD	JPL49-002MSD
MW-15	JPL49-003
MW-15MS	JPL49-003MS
MW-15MSD	JPL49-003MSD
DUPE-7-2Q07	JPL49-004

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Cherisse Orsico

Date: 07/28/2007

Title: metals lead

**Metals Analysis Data Sheets**



INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL49

Matrix (soil/water): Water

Lab Sample ID: JPL49-001

Level (low/med): LOW

Date Received: 07/10/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.09			M	R019973
7440-70-2	Calcium	51600			P	R019929
7440-47-3	Chromium	4.36			M	R019973
7439-89-6	Iron	193		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	17100		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	28200		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-9

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL49

Matrix (soil/water): Water

Lab Sample ID: JPL49-002

Level (low/med): LOW

Date Received: 07/10/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	53200			P	R019929
7440-47-3	Chromium	6.64			M	R019973
7439-89-6	Iron	290		E	P	R019929
7439-92-1	Lead	2.02			M	R019973
7439-95-4	Magnesium	18800		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	26200		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-15

Lab Name: Laucks LaboratoriesContract: JPL Groundwater MonitorinLab Code: LAUCKSSDG No.: JPL49Matrix (soil/water): WaterLab Sample ID: JPL49-003Level (low/med): LOWDate Received: 07/10/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	65400			P	R019929
7440-47-3	Chromium	5.61			M	R019973
7439-89-6	Iron	249		E	P	R019929
7439-92-1	Lead	1.96			M	R019973
7439-95-4	Magnesium	22400		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	28400		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: NoComment \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-7-2Q07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL49

Matrix (soil/water): Water

Lab Sample ID: JPL49-004

Level (low/med): LOW

Date Received: 07/10/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.02			M	R019973
7440-70-2	Calcium	51200			P	R019929
7440-47-3	Chromium	2.84			M	R019973
7439-89-6	Iron	163		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	14900		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	27500		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL49**

COVER PAGE--INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL49

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-1</u>	<u>JPL49-001</u>
<u>MW-9</u>	<u>JPL49-002</u>
<u>MW-9D</u>	<u>JPL49-002D</u>
<u>MW-9MS</u>	<u>JPL49-002MS</u>
<u>MW-9MSD</u>	<u>JPL49-002MSD</u>
<u>MW-15</u>	<u>JPL49-003</u>
<u>MW-15D</u>	<u>JPL49-003D</u>
<u>MW-15MS</u>	<u>JPL49-003MS</u>
<u>MW-15MSD</u>	<u>JPL49-003MSD</u>
<u>DUPE-7-2Q07</u>	<u>JPL49-004</u>

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-26-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**











**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELLE**

**SDG NO.: JPL50**

**AUGUST 1, 2007**

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL50  
Date of Report: August 1, 2007

**SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

**Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<u>Client Sample Identification</u>	<u>Laucks Sample Identification</u>	<u>Testing Analytical Request</u>
MW-7	JPL50-001	VOA/MET/INO
MW-16	JPL50-002	VOA/SVOA/MET/INO
DUPE-8-2Q07	JPL50-003	VOA/MET/INO
TB-17-07/10/07	JPL50-004	VOA

**Analytical Request Key:**

VOA = Volatiles (524.2)  
SVOA = 1,4-Dioxane (8270)  
MET = Metals (200.8)  
INO = Perchlorate (314.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)  
Chloride, Nitrate, Nitrite, Sulfate, Ortho phosphorus (300.0)

**Sample Receipt Comments:**

The cooler temperature measured slightly above the control limit of 6 deg C.

Two of two VOA vials for TB-17-07/10/07 were received with air bubbles greater than ¼ inch in size.

**GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

#### *Semi-Volatile Organic Compounds:*

The holding time to extraction is 7 days in water and 14 days in soil calculated from the date of collection. In either case, the holding time from extraction to analysis is 40 days. All samples were extracted and analyzed within holding time.

### Volatiles Fraction:

#### Initial Calibration Verification:

Due to second source variation, dichlorodifluoromethane recovered above 25% D in the Initial calibration verification ICV062807MVOWY1. Corrective action is being taken by investigating the source of variation in the standards. Analysis of the daily second source (blank spike) S062907MVOWY1 yielded a recovery that was within 25%D, showing the system to be in control.

#### Continuing Calibration Verification (CCV):

In the CCV performed on 07/16/2007 the percent difference values for 4-methyl-2-pentanone exceeded 30% due to increased response. This analyte was not detected in any associated samples so no further action was taken.

#### Method Blank

Analysis of the method blank performed on 07/16/2007 resulted in the detection of methylene chloride. The presence of this analyte may be due to laboratory contamination since it is a common laboratory solvent. All sample results reported for this analyte have been "B" flagged to denote its presence in the associated method blank analysis.

#### Quality Control Analyses:

Analysis of the blank spike S071607MVOWY1 yielded a high recovery for cis-1,3-dichloropropene. Because the recovery was high and this analyte was not detected in the associated samples, no further action was taken.

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## Semivolatiles Fraction:

### Continuing Calibration Verification Standard Analysis:

Analysis of the CCV performed on 07/19/07 yielded a % difference value for surrogate terphenyl-d14 that exceeded 20% due to a decrease in response. Reported results for this surrogate may be biased low in the associated samples.

## **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

### ICP-MS Metals:

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

## **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Nitrite	48 hours	None
Ortho phosphorus	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

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### ICP-MS Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

For the run sequence R019929, Form 2A shows CCV recoveries for magnesium and sodium exceeding control limits of 90-110% for Method 200.7. These recoveries are within the control limits for 200.8 (85-115%). Software limitations do not allow for the control limits on the Forms 2A to be changed to 85-115%. Data have been reported as is.

For the run sequence R019973, the fifth and seventh CCVs exceeded the upper control limit for lead. All samples associated with these CCVs contained concentrations of lead that were less than the CRDL. Quality control data for lead were reported and were within control limits. No corrective action was required. Data have not been flagged for these events.

For the run sequence R019929, the second CCV exceeded the upper control limit for magnesium. No samples were associated with this CCV. No corrective action was required. Data have not been flagged for this event.

Samples in this SDG (JPL50) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate samples and serial dilution samples apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL49 or the raw data provided.

The matrix spike duplicate sample percent recoveries of sodium and magnesium were outside of the established control limits of 70-130% for sample MW-9 from SDG JPL49. As a result the MS/MSD relative percent differences were outside of the established control limits of 20%. Post-digestion spikes were performed and were within control limits. No further corrective action was required. All relevant data have been flagged with an "N" and an "\*" on Forms I and V.

The matrix spike sample percent recoveries of sodium and magnesium were outside of the established control limits of 70-130% for sample MW-15 from SDG JPL49. As a result the MS/MSD relative percent difference for magnesium was outside of the established control limits of 20%. Post-digestion spikes were performed and were within control limits. No further corrective action was required. All relevant data have been flagged with an "N" and an "\*" on Forms I and V.

The serial dilution for the element iron did not agree within 10% of the original determination after correction for dilution for sample MW-9 from JPL49. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and IX.

### Miscellaneous Inorganics:

For run sequence R019465, the initial calibration verification recovery was outside the established control limits for the nitrite analysis. All reported samples are less than the reporting limit. All other quality control elements for nitrite are within control limits. Therefore, no further action was taken.



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For run sequence R019465, the first continuing calibration blank is greater than  $\frac{1}{2}$  the reporting limit for the chloride analysis. All reported samples are greater than 20x the level in the blank. Therefore, no further action was taken.

For run sequence R019848, the blank spike recovery fell outside the established control limits for the perchlorate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

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Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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Seattle, WA 98108

### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

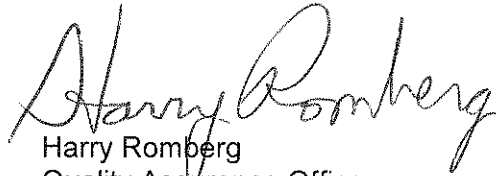
"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



M. Elaine Walker  
Project Manager

8/1/07  
(DATE)



Harry Romberg  
Quality Assurance Officer

8/1/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 Low Level NO <sub>3</sub> , NO <sub>2</sub> , Cl, SO <sub>4</sub> , OPO <sub>4</sub>	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	8270SIM-level 1,4-Dioxane (1.5 ppb RL; J to 1 ppb)	TurMet for 200.7/200.8 TurMet
JPL50-001	07/11/2007 08:20 AM	07/10/2007 09:04 AM	MW-7	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL50-002	07/11/2007 08:20 AM	07/10/2007 12:25 PM	MW-16	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN
JPL50-003	07/11/2007 08:20 AM	07/10/2007 12:00 AM	DUPE-8-2007	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL50-004	07/11/2007 08:20 AM	07/10/2007 12:00 AM	TB-17-07/10/07								IN		

Approved By: *[Signature]*

On: *[Signature]*

Samples identified with a '\*' client has requested QC for

**LEGEND:** -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

**FORM LTL-PM-8.0**

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATELLE  
 ADDRESS: 3990 OLD TOMAWAY, C-205  
SAN DIEGO, CA 92110  
 ATTENTION: DAVID COOPER  
 PROJECT NAME: JPL GW PLAN 2007  
 PROJECT CONTACT: DAVID COOPER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/P.O. NO.: 6486090

CHAIN OF CUSTODY RECORD

42846

SDG # \_\_\_\_\_

PAGE 1 OF 1

WORK ORDER ID# \_\_\_\_\_

SUBMITTED AT: \_\_\_\_\_

TESTS TO PERFORM

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS
VOC (524.2)	1
TOTAL (200.8)	1
LEAD (200.8)	1
ARSENIC (200.8)	1
CADMIUM (200.8)	1
COPPER (200.8)	1
CHLORIDE (3140)	1
CHLORIDE (100.1)	1
1,4-DIOXANE (8220)	1
NITRATE, 0-PHOSPHATE (8220)	1

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

LAB SAM	SAMPLE ID / LOCATION	DATE	TIME	LEVEL	DUPLICATE	TRIP NAME
	MW-7	7/16/07	904	W	X	
	MW-16		1215	W	X	
	DURE-8-2007			W	X	
	TR-17-07/16/07			W	X	

A. A standard turnaround time is assumed unless otherwise marked.  
 B. The laboratory may not be responsible for missed holding time for samples received with less than 30% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS  
 1. USE ONE LINE PER SAMPLE  
 2. BE SPECIFIC IN TEST REQUESTS  
 3. CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE

NAME: BATELLE  
 ADDRESS: 505 KYLE AVE  
 CITY, STATE, ZIP: COLUMBUS OH 43201

\* RUSH TURNAROUND IS SUBJECT TO PRIOR LABORATORY APPROVAL

TOTAL NO. OF CONTAINERS  
 TURNAROUND REQUEST  
 STD. 10-14 WORKING DAYS  
 24-48 HRS. (100% SUR)  
 72 HRS. (75% SUR)  
 5 DAYS (60% SUR)  
 OTHER: \_\_\_\_\_  
 TEMP: \_\_\_\_\_  
 CUSTODY SEAL:  Y  N  N/A

REINQUISHED BY (SIGN AND PRINT): MARCO ACUADA DATE: 7/16/07 TIME: 1400  
 RECEIVED BY (SIGN AND PRINT): Mike Kachur DATE: 7/16/07 TIME: 0630



940 South Hamer St, Seattle, WA 98108 (206) 757-5060 FAX 757-5063  
 1100 Leitchfield Ave, Yakima, WA 98902 (509) 248-4025 FAX 452-1265





**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

**SDG: JPL50**

**Cooler: AAD609**

**Temperatures: 8.7**

**COC #: 42846**

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL50-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL50-002	0001	1000 mL boston round, amber glass	7	N/A
	0002	1000 mL boston round, amber glass	7	N/A
	0003	1000 mL cylinder, poly	7	N/A
	0004	1000 mL cylinder, poly	7	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	40 ml OTWS, clear glass, HCl	N/C	None
	0010	40 ml OTWS, clear glass, HCl	N/C	None
	0011	500 ml cylinder, poly, HNO3	<2	N/A
	0012	500 ml cylinder, poly, HNO3	<2	N/A
JPL50-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL50-004	0001	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	> 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature                      Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH                pH must be less than 2

Base Preserved pH                pH must be greater than 12

NC                                      Not Checked for pH

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

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**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL50**

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Completed and checked by: Judy Ecklund Date: 8/2/07

**SAMPLE DATA**

SDG JPL50

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-001  
 Lab File ID: Y0716017.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:03  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	2.9	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	5.7	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-001  
 Lab File ID: Y0716017.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:03  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	9.9	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	8.0	
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-001  
 Lab File ID: Y0716017.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:03  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

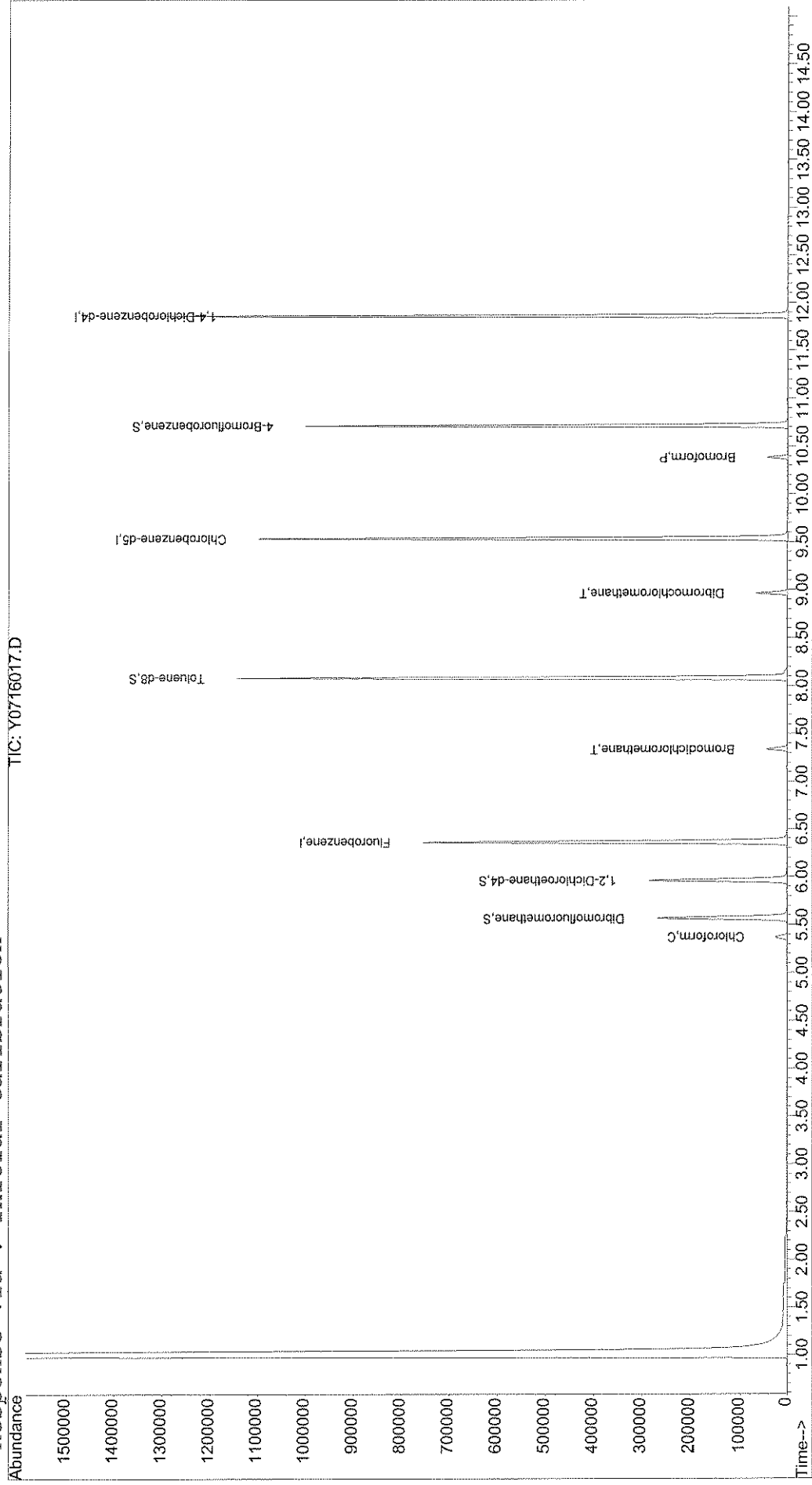
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716017.D Vial: 36  
Acq On : 16 Jul 2007 13:03 Operator: DGA  
Sample : JPL150-001 Inst : Yoda  
Misc : 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 17 7:06 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration





Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716017.D  
 Acq On : 16 Jul 2007 13:03  
 Sample : JPL50-001  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:06 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)

Title : VOA 8260- 5ML Calibration 5973Y

Last Update : Thu Jun 28 10:03:48 2007

Response via : Initial Calibration

DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	653019	50.00	ug/l	0.00	104.85%
54) Chlorobenzene-d5	9.53	82	307901	50.00	ug/l	0.00	106.02%
74) 1,4-Dichlorobenzene-d4	11.86	152	319391	50.00	ug/l	0.00	103.39%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	175656	48.53	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.06%	
40) 1,2-Dichloroethane-d4	5.96	65	212128	50.37	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.74%	
55) Toluene-d8	8.08	98	680398	49.35	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.70%	
76) 4-Bromofluorobenzene	10.71	95	282933	50.46	ug/l	0.00	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	d
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.69	76	139	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	
17) Methyl Acetate	2.99	43	56	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716017.D  
 Acq On : 16 Jul 2007 13:03  
 Sample : JPL50-001  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:06 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	56		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	182		N.D.	
34) Chloroform	5.37	83	19431	2.88	ug/l	94
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.75	117	233		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	157		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D. d	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	85		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	7.14	93	441		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.34	83	26521	5.71	ug/l	98
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.15	92	1737		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	155		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	8.96	129	31184	9.89	ug/l	97
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	83		N.D.	
66) 1-Chlorohexane	9.53	91	1183		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.68	91	158		N.D.	

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716017.D  
 Acq On : 16 Jul 2007 13:03  
 Sample : JPL50-001  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:06 2007

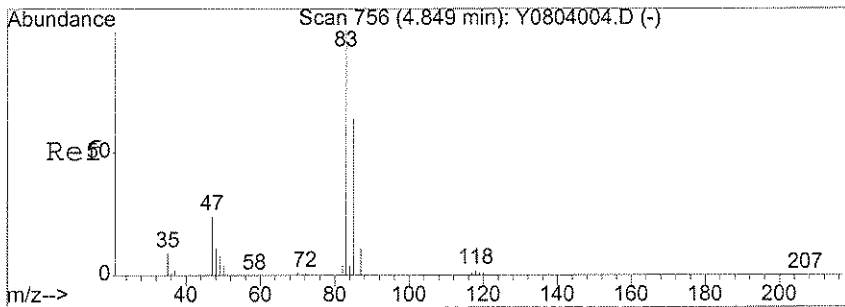
Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

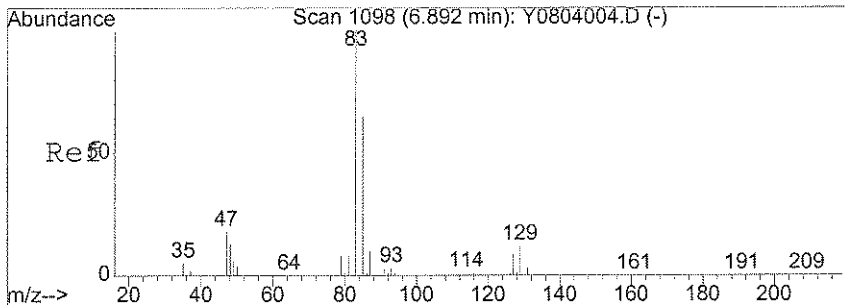
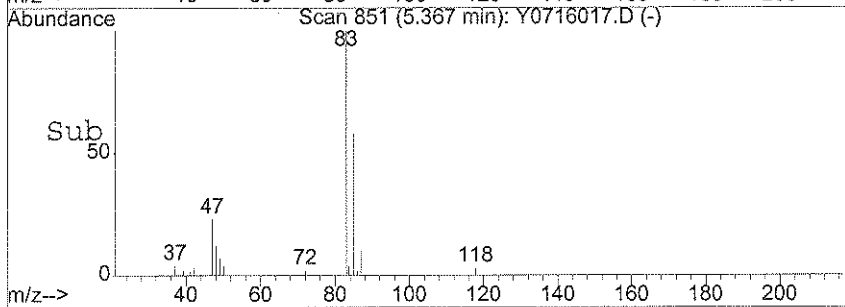
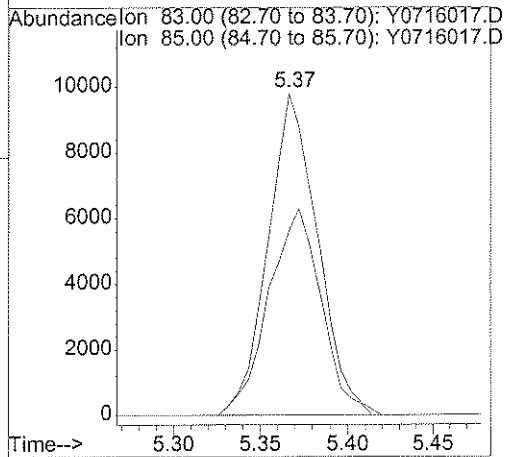
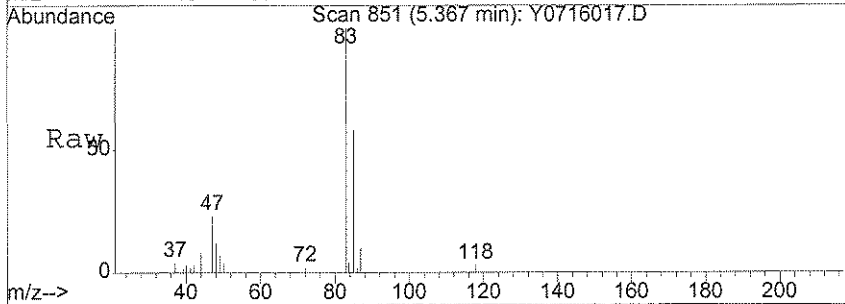
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	132		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	58		N.D.	
72) Bromoform	10.38	173	18160	7.95	ug/l	95
73) Isopropylbenzene	10.57	105	241		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	88		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.15	120	67		N.D.	
81) 2-Chlorotoluene	11.05	91	127		N.D.	
82) 4-Chlorotoluene	11.17	91	235		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	172		N.D.	
84) tert-Butylbenzene	11.48	119	151		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	389		N.D.	
86) sec-butylbenzene	11.70	105	657		N.D.	
87) 1,3-Dichlorobenzene	11.80	146	57		N.D.	
88) 4-Isopropyltoluene	11.84	119	453		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	140		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	73		N.D.	
91) n-Butylbenzene	12.26	91	620		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	130		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

*J. DGA*  
 Page 3



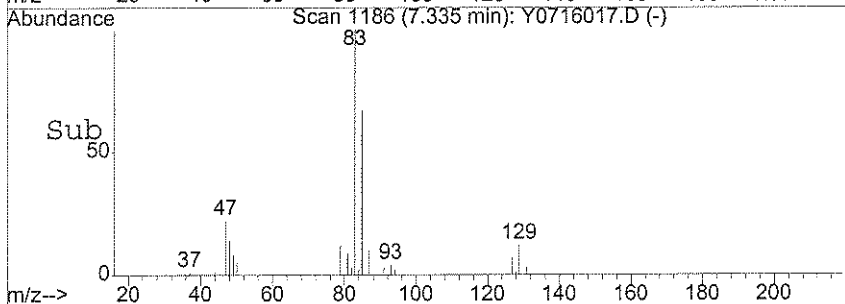
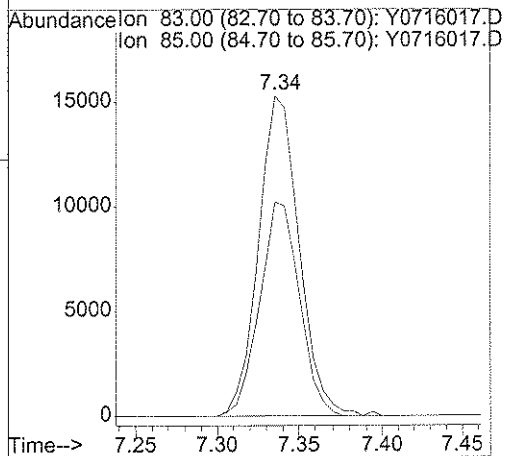
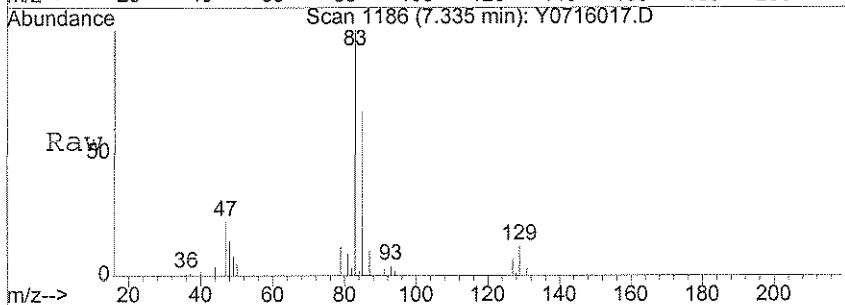
#34  
 Chloroform  
 Concen: 2.88 ug/l  
 RT: 5.37 min Scan# 851  
 Delta R.T. -0.00 min  
 Lab File: Y0716017.D  
 Acq: 16 Jul 2007 13:03

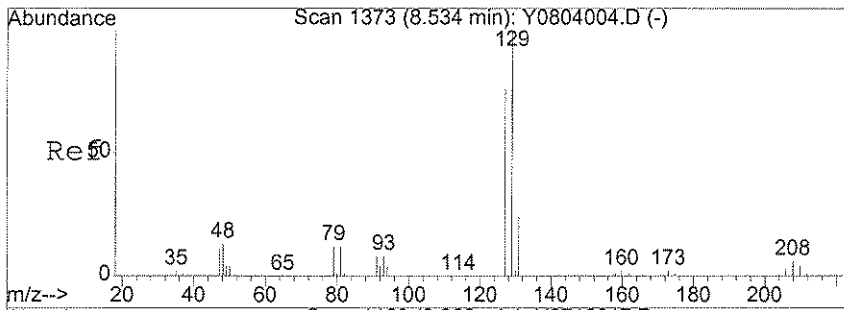
Tgt Ion: 83 Resp: 19431  
 Ion Ratio Lower Upper  
 83 100  
 85 68.0 43.3 83.3



#50  
 Bromodichloromethane  
 Concen: 5.71 ug/l  
 RT: 7.34 min Scan# 1186  
 Delta R.T. -0.00 min  
 Lab File: Y0716017.D  
 Acq: 16 Jul 2007 13:03

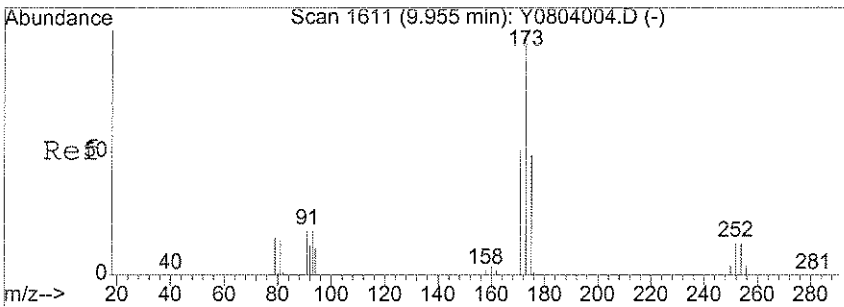
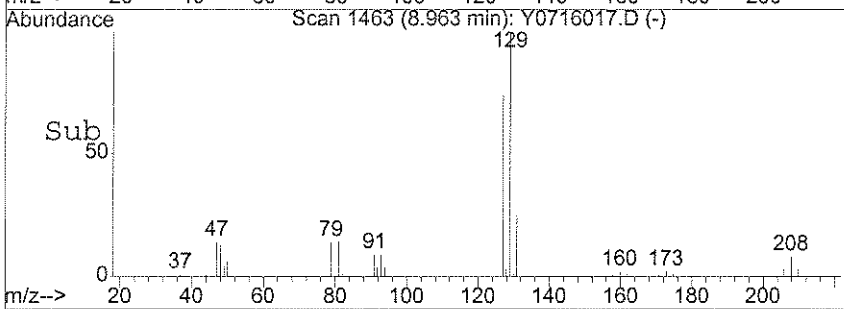
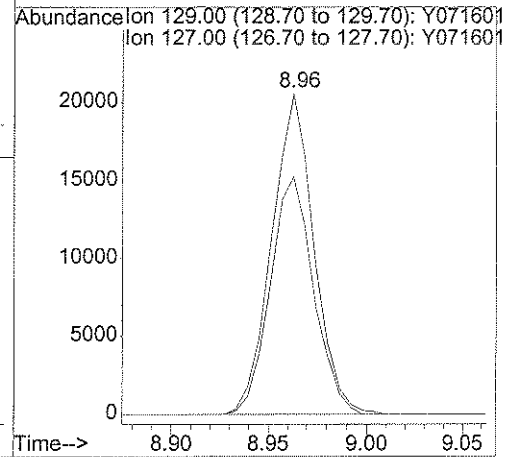
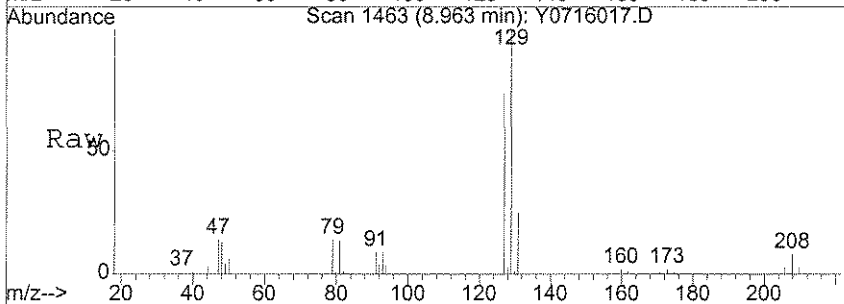
Tgt Ion: 83 Resp: 26521  
 Ion Ratio Lower Upper  
 83 100  
 85 65.4 44.2 84.2





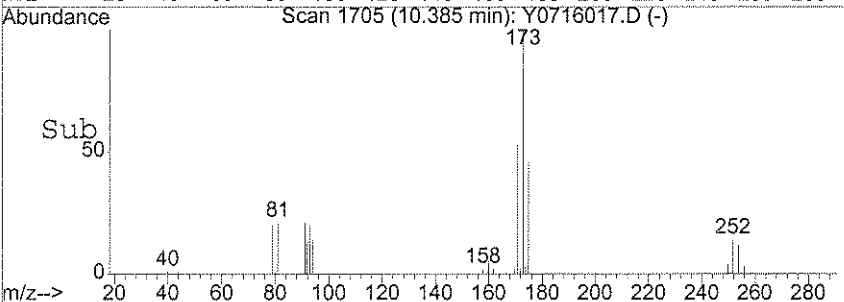
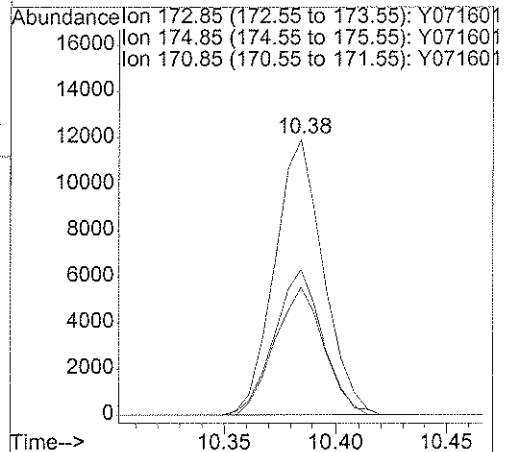
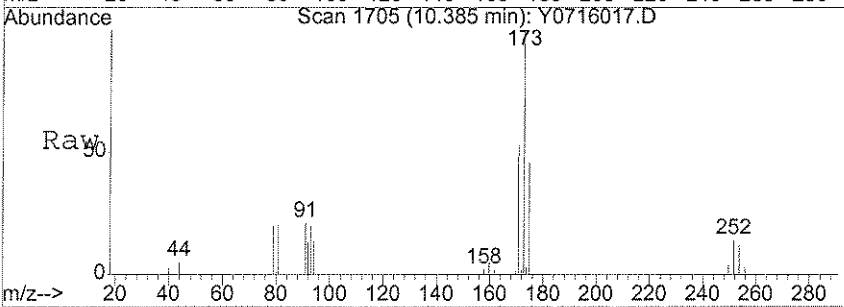
#63  
 Dibromochloromethane  
 Concen: 9.89 ug/l  
 RT: 8.96 min Scan# 1463  
 Delta R.T. -0.00 min  
 Lab File: Y0716017.D  
 Acq: 16 Jul 2007 13:03

Tgt Ion:129 Resp: 31184  
 Ion Ratio Lower Upper  
 129 100  
 127 76.0 58.9 98.9



#72  
 Bromoform  
 Concen: 7.95 ug/l  
 RT: 10.38 min Scan# 1705  
 Delta R.T. -0.00 min  
 Lab File: Y0716017.D  
 Acq: 16 Jul 2007 13:03

Tgt Ion:173 Resp: 18160  
 Ion Ratio Lower Upper  
 173 100  
 175 46.6 40.0 60.0  
 171 52.7 39.8 59.8



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-002  
 Lab File ID: Y0716018.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:28  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	2.8	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	14	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	6.6	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.63	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.54	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-002  
 Lab File ID: Y0716018.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:28  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	2.1	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16
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Lab Name: \_\_\_\_\_

SDG No.: JPL50

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019603

Lab Sample ID: JPL50-002

Lab File ID: Y0716018.D

Date Collected: 07/10/2007

Date/Time Analyzed: 07/16/2007 13:28

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

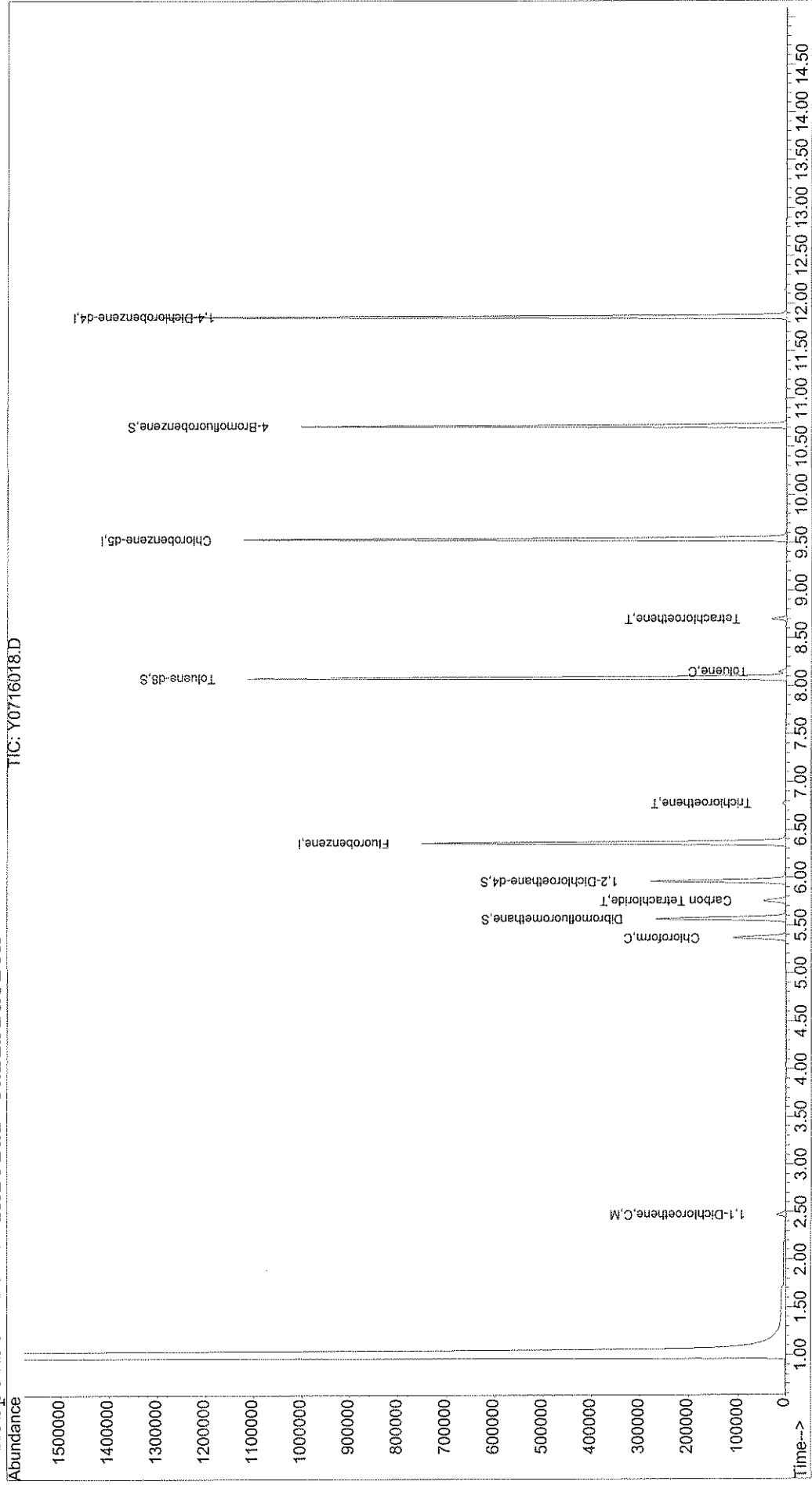
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716018.D  
Acq On : 16 Jul 2007 13:28  
Sample : JPL50-002  
Misc : 5mL +IS/SS  
MS Integration Params: rteint.p  
Quant Time: Jul 17 7:09 2007  
Vial: 37  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716018.D  
 Acq On : 16 Jul 2007 13:28  
 Sample : JPL50-002  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:09 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	642104	50.00	ug/l	0.00 103.10%
54) Chlorobenzene-d5	9.53	82	308438	50.00	ug/l	0.00 106.21%
74) 1,4-Dichlorobenzene-d4	11.86	152	317618	50.00	ug/l	0.00 102.82%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	173310	48.70	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.40%
40) 1,2-Dichloroethane-d4	5.96	65	206048	49.76	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.52%
55) Toluene-d8	8.08	98	668179	48.38	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.76%
76) 4-Bromofluorobenzene	10.71	95	282523	50.66	ug/l	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	1.98	101	79	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.46	96	7638	2.84	ug/l #	77
10) 1,1,2-Trichloro-1,2,2-trif	2.51	101	57	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	214	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	4.04	63	600	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0716018.D 8260B.M Tue Jul 17 09:20:35 2007

*[Handwritten Signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716018.D  
 Acq On : 16 Jul 2007 13:28  
 Sample : JPL50-002  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:09 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0	N.D.		
25) Chloroprene	0.00	53	0	N.D.		
26) Isopropyl ether	0.00	45	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.35	41	317	N.D.		
34) Chloroform	5.37	83	93588	14.13	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
37) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	5.75	117	31270	6.55	ug/l	99
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.01	78	211	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) Isobutanol	0.00	43	0	N.D.		
44) t-amyl methyl ether	0.00	73	0	N.D.	d	
45) Trichloroethene	6.78	130	2389	0.63	ug/l	95
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	41	0	N.D.		
50) Bromodichloromethane	0.00	83	0	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.15	92	5085	0.54	ug/l	91
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	8.58	97	74	N.D.		
60) Tetrachloroethene	8.70	166	8805	2.09	ug/l	97
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	0.00	43	0	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) Chlorobenzene	9.56	112	65	N.D.		
66) 1-Chlorohexane	9.54	91	1169	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	9.68	91	257	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0716018.D 8260B.M Tue Jul 17 09:20:36 2007

*J. 07/17/07*  
 Page 2

Quantitation Report

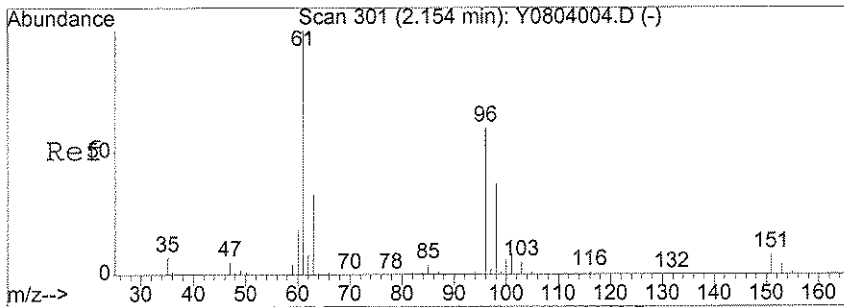
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 Acq On : 16 Jul 2007 13:28  
 Sample : JPL50-002  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:09 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

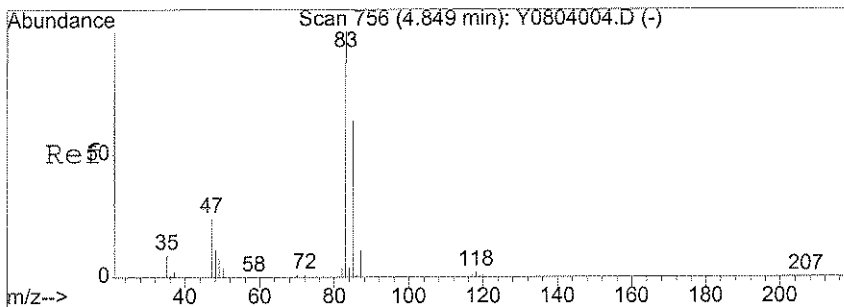
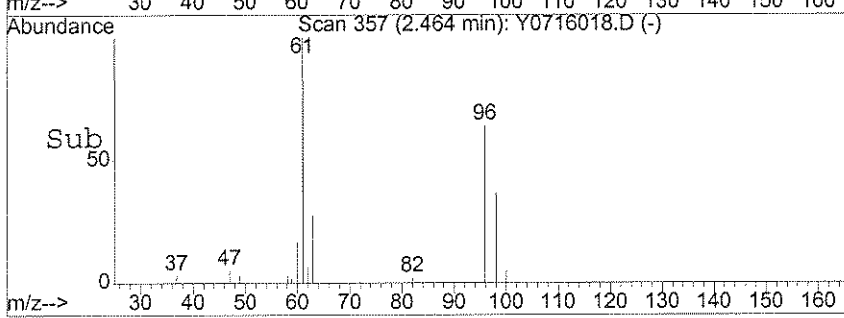
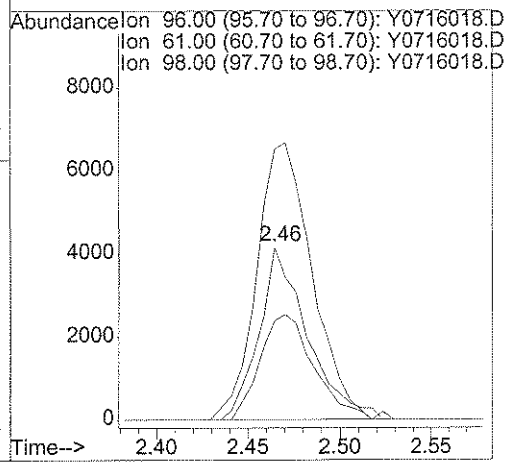
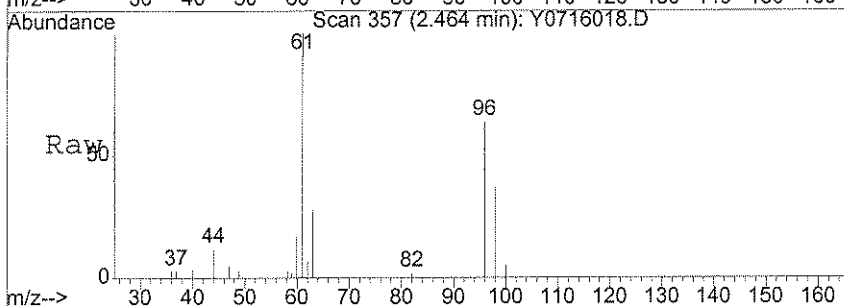
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	325		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	64		N.D.	
73) Isopropylbenzene	10.57	105	79		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	10.71	156	56		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	60		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	131		N.D.	
80) n-Propylbenzene	11.16	120	61		N.D.	
81) 2-Chlorotoluene	11.05	91	186		N.D.	
82) 4-Chlorotoluene	11.16	91	279		N.D.	
83) 1,3,5-Trimethylbenzene	11.15	105	204		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	320		N.D.	
86) sec-butylbenzene	11.70	105	526		N.D.	
87) 1,3-Dichlorobenzene	11.88	146	306		N.D.	
88) 4-Isopropyltoluene	11.85	119	609		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	306		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	700		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.86	180	124		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	55		N.D.	



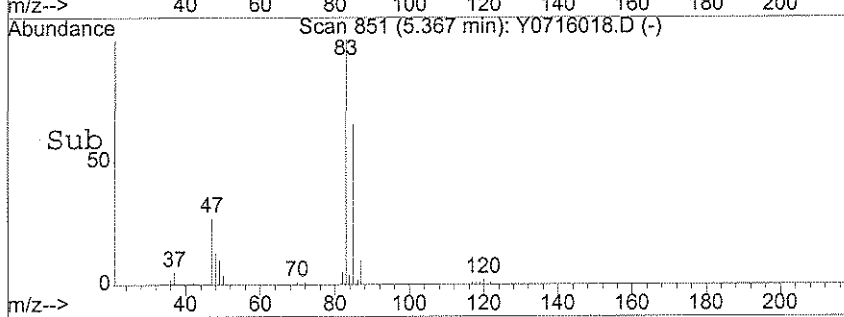
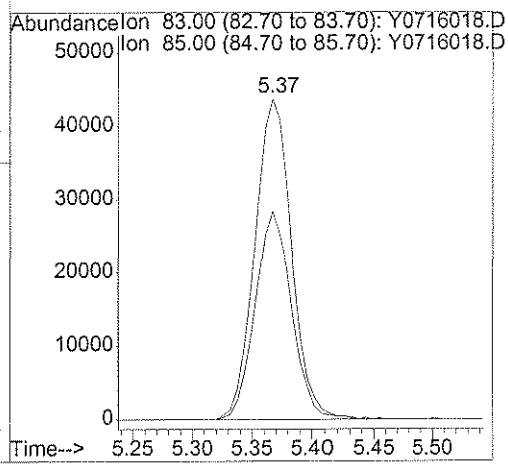
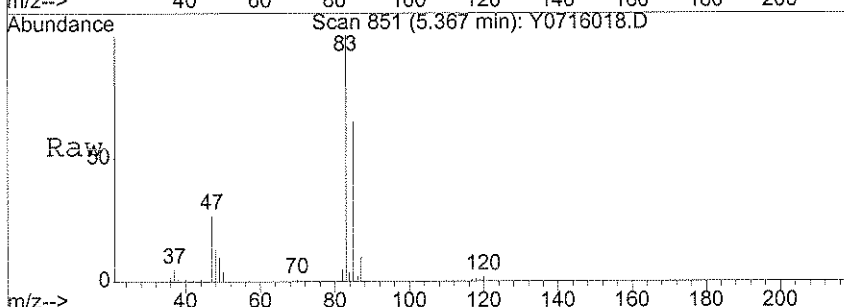
#9  
 1,1-Dichloroethene  
 Concen: 2.84 ug/l  
 RT: 2.46 min Scan# 357  
 Delta R.T. -0.00 min  
 Lab File: Y0716018.D  
 Acq: 16 Jul 2007 13:28

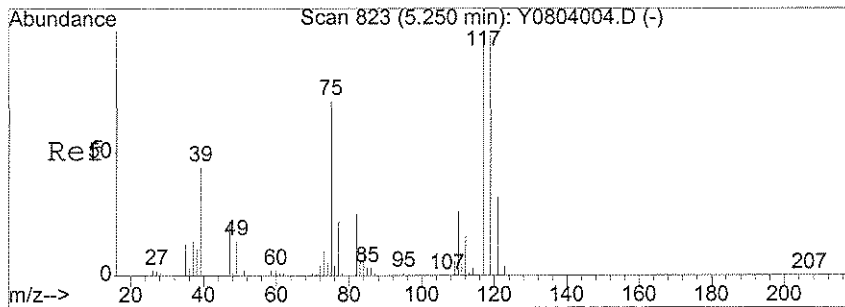
Tgt Ion	Resp	Lower	Upper
96	7638		
61	184.0	126.4	166.4#
98	67.6	43.5	83.5



#34  
 Chloroform  
 Concen: 14.13 ug/l  
 RT: 5.37 min Scan# 851  
 Delta R.T. -0.00 min  
 Lab File: Y0716018.D  
 Acq: 16 Jul 2007 13:28

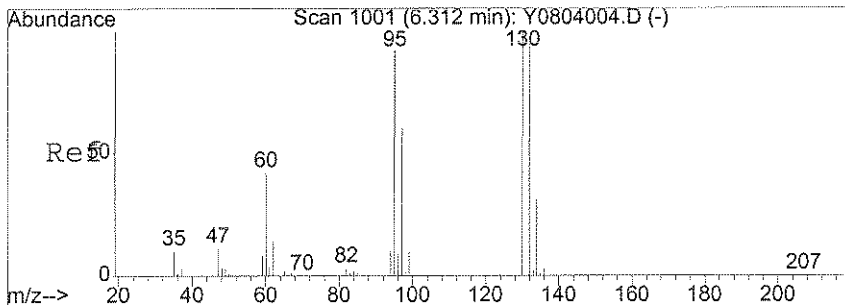
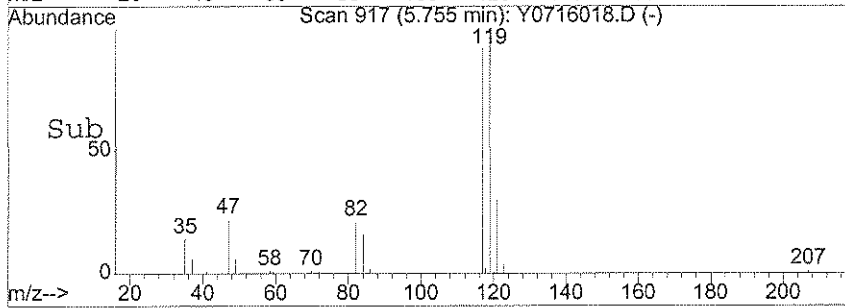
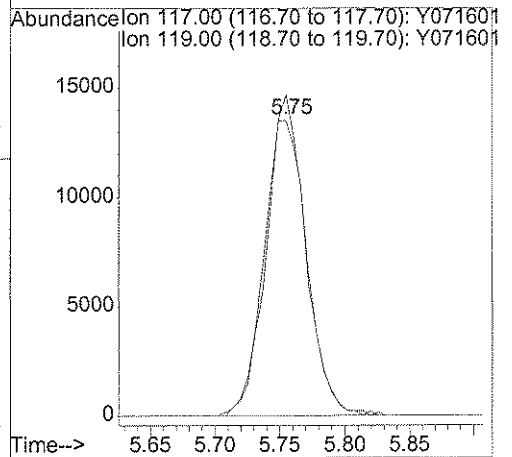
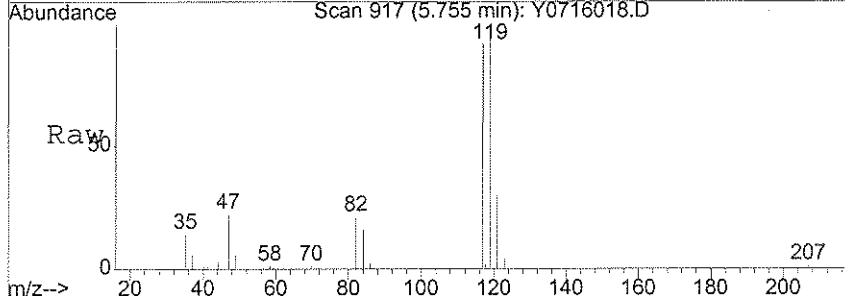
Tgt Ion	Resp	Lower	Upper
83	93588		
85	64.3	43.3	83.3





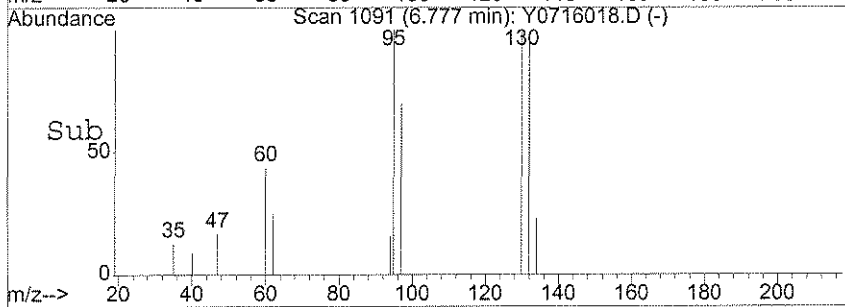
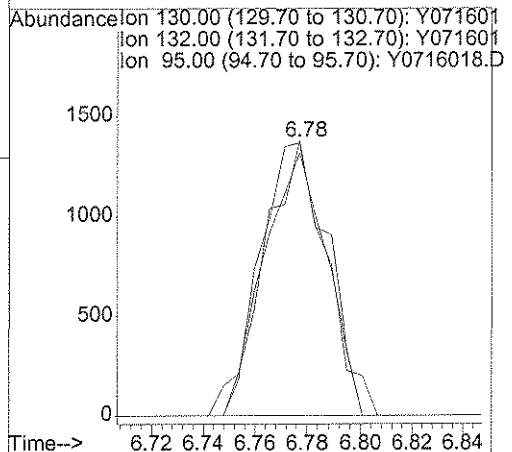
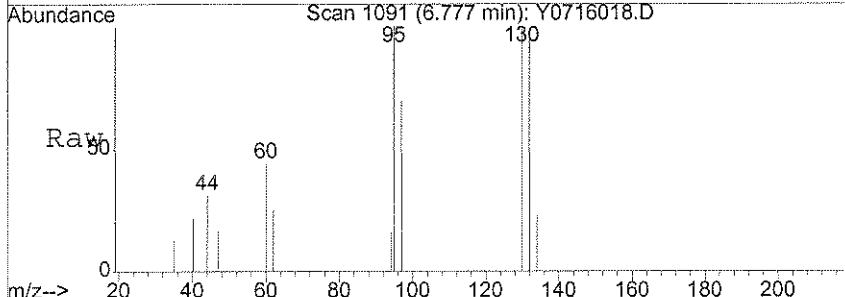
#38  
 Carbon Tetrachloride  
 Concen: 6.55 ug/l  
 RT: 5.75 min Scan# 917  
 Delta R.T. 0.01 min  
 Lab File: Y0716018.D  
 Acq: 16 Jul 2007 13:28

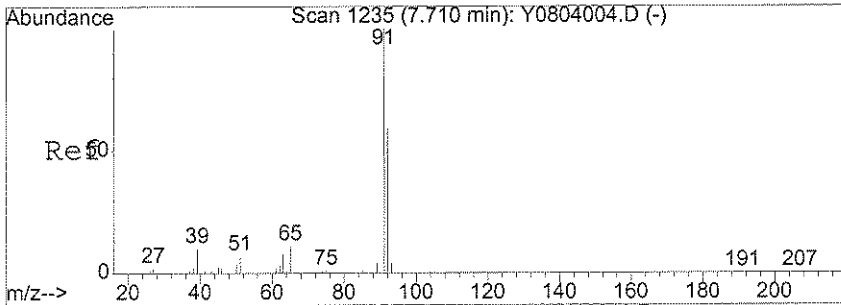
Tgt Ion: 117 Resp: 31270  
 Ion Ratio Lower Upper  
 117 100  
 119 99.2 78.2 118.2



#45  
 Trichloroethene  
 Concen: 0.63 ug/l  
 RT: 6.78 min Scan# 1091  
 Delta R.T. 0.01 min  
 Lab File: Y0716018.D  
 Acq: 16 Jul 2007 13:28

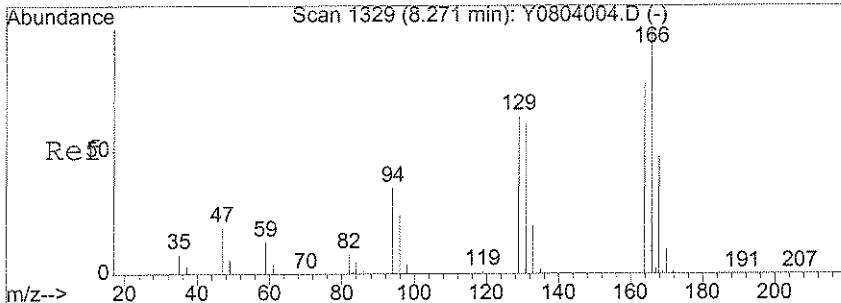
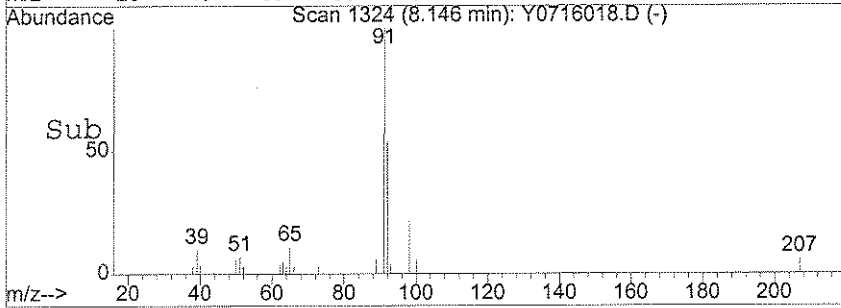
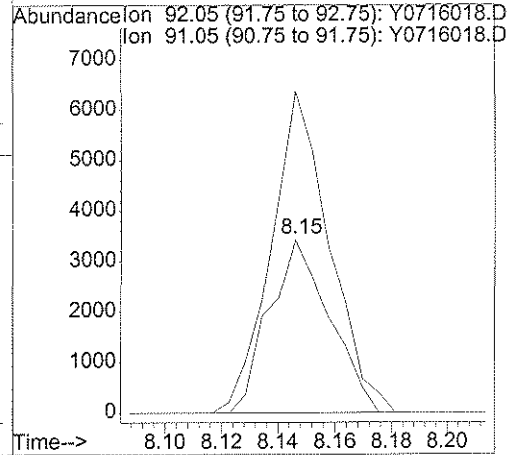
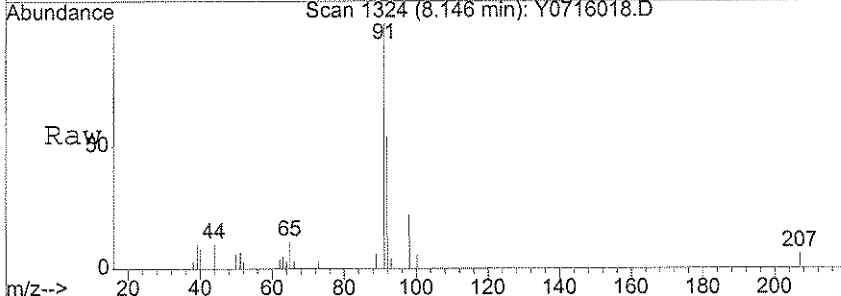
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 Ion Ratio Lower Upper  
 130 100  
 132 92.5 75.0 115.0  
 95 97.1 69.4 109.4





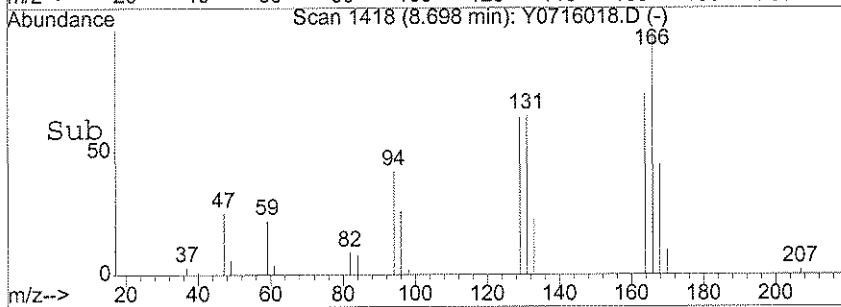
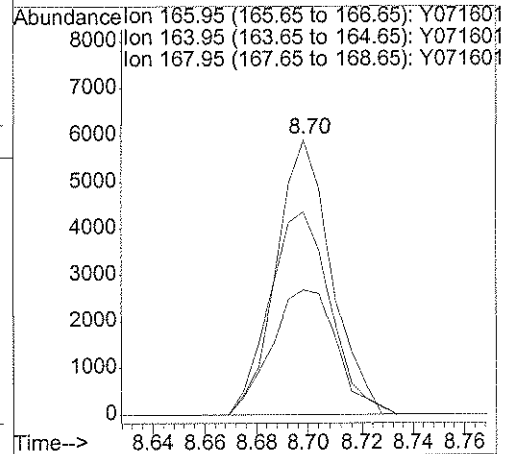
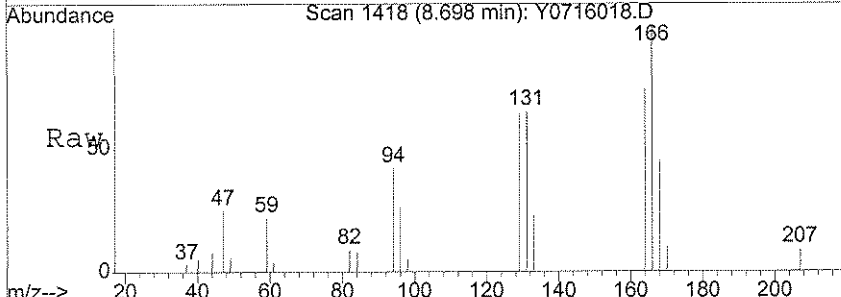
#56  
 Toluene  
 Concen: 0.54 ug/l  
 RT: 8.15 min Scan# 1324  
 Delta R.T. -0.00 min  
 Lab File: Y0716018.D  
 Acq: 16 Jul 2007 13:28

Tgt Ion: 92 Resp: 5085  
 Ion Ratio Lower Upper  
 92 100  
 91 179.5 133.7 200.5



#60  
 Tetrachloroethene  
 Concen: 2.09 ug/l  
 RT: 8.70 min Scan# 1418  
 Delta R.T. -0.00 min  
 Lab File: Y0716018.D  
 Acq: 16 Jul 2007 13:28

Tgt Ion: 166 Resp: 8805  
 Ion Ratio Lower Upper  
 166 100  
 164 77.2 63.3 94.9  
 168 52.8 39.6 59.4



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-003  
 Lab File ID: Y0716019.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:52  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	2.9	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	5.9	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-003  
 Lab File ID: Y0716019.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:52  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	9.7	
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	8.2	
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-2Q07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-003  
 Lab File ID: Y0716019.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 13:52  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

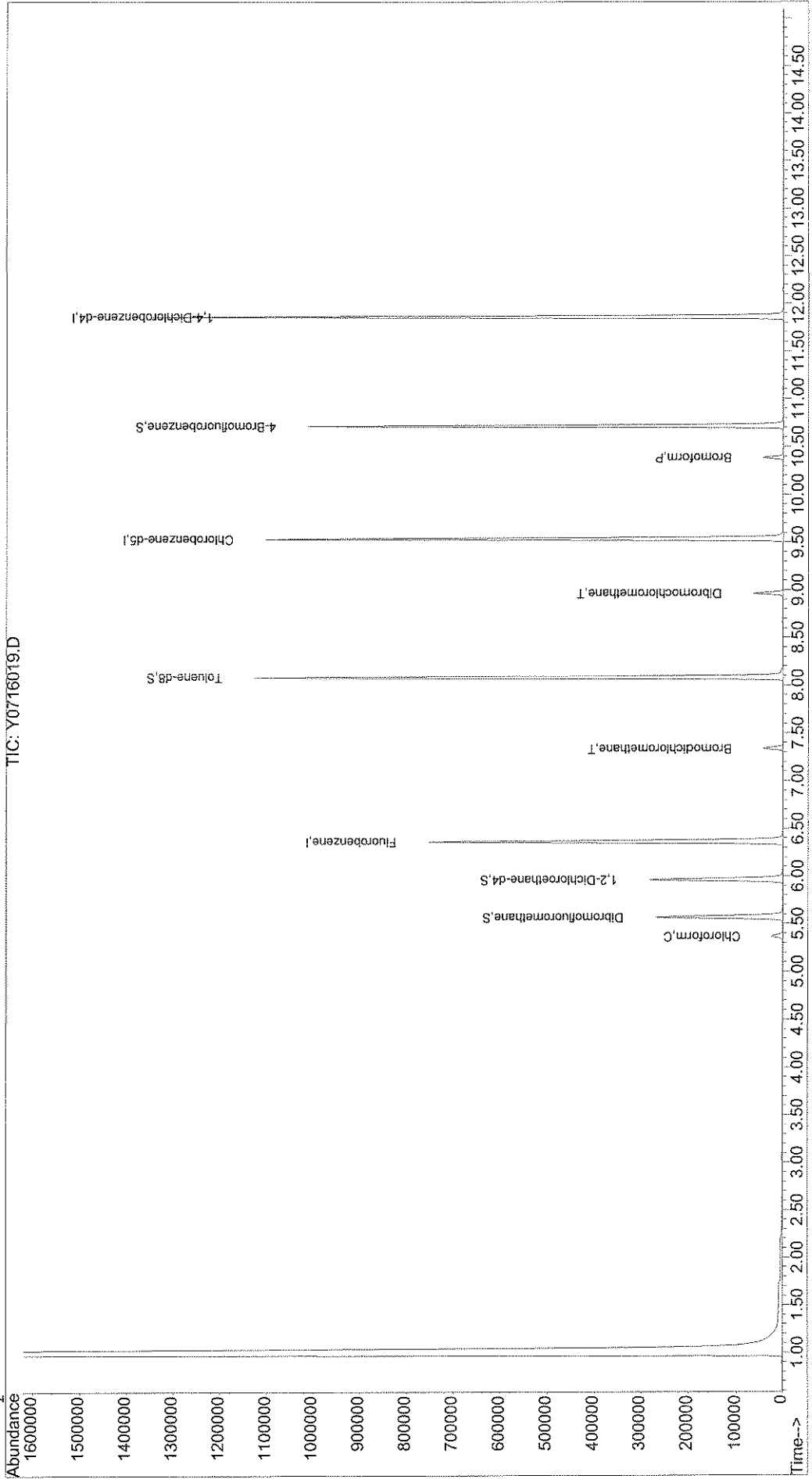
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716019.D Vial: 38  
Acq On : 16 Jul 2007 13:52 Operator: DGA  
Sample : JPL50-003 Inst : Yoda  
Misc : 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 17 7:12 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716019.D  
 Acq On : 16 Jul 2007 13:52  
 Sample : JPL50-003  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:12 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	640909	50.00	ug/l	0.00	102.91%
54) Chlorobenzene-d5	9.53	82	307723	50.00	ug/l	0.00	105.96%
74) 1,4-Dichlorobenzene-d4	11.86	152	322683	50.00	ug/l	0.00	104.46%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	170993	48.14	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.28%	
40) 1,2-Dichloroethane-d4	5.96	65	209342	50.65	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	101.30%	
55) Toluene-d8	8.08	98	670876	48.69	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.38%	
76) 4-Bromofluorobenzene	10.71	95	286112	50.50	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.66	76	73	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716019.D  
 Acq On : 16 Jul 2007 13:52  
 Sample : JPL50-003  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:12 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.36	41	258		N.D.	
34) Chloroform	5.36	83	19099	2.89	ug/l	94
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.75	117	477		N.D.	
39) 1,1-Dichloropropene	5.77	75	62		N.D.	
41) Benzene	6.01	78	62		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	73		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	7.15	93	433		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.34	83	26783	5.88	ug/l	99
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.15	92	1337		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	166		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	8.96	129	30690	9.73	ug/l	99
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	309		N.D.	
66) 1-Chlorohexane	9.54	91	1200		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	225		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0716019.D 8260B.M Tue Jul 17 09:20:57 2007

*J. M. [Signature]*  
 Page 2

Quantitation Report

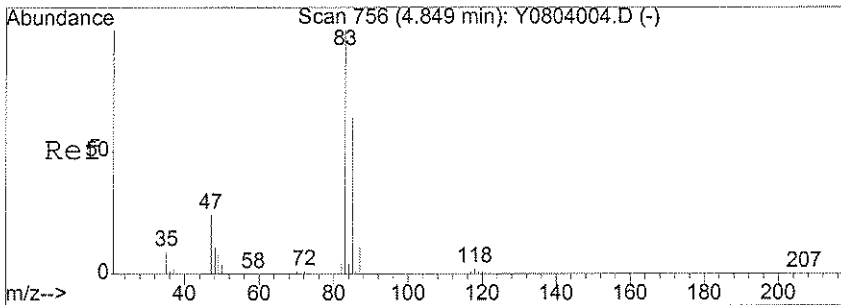
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 Acq On : 16 Jul 2007 13:52  
 Sample : JPL50-003  
 Misc : 5mL +IS/SS  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:12 2007

Vial: 38  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

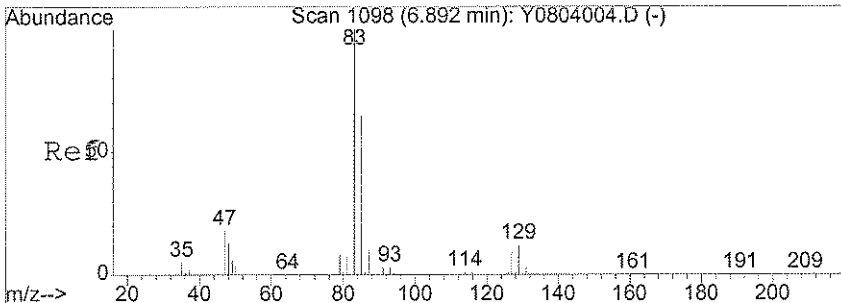
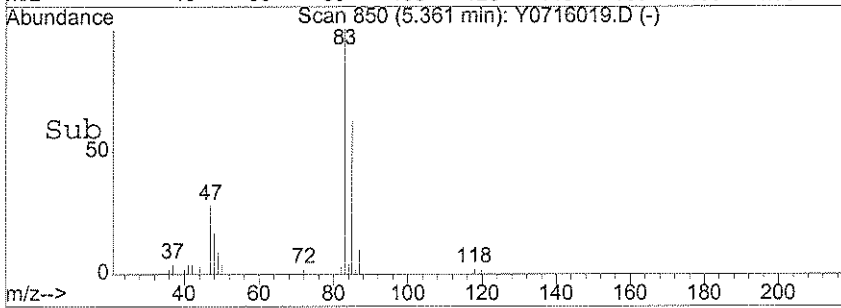
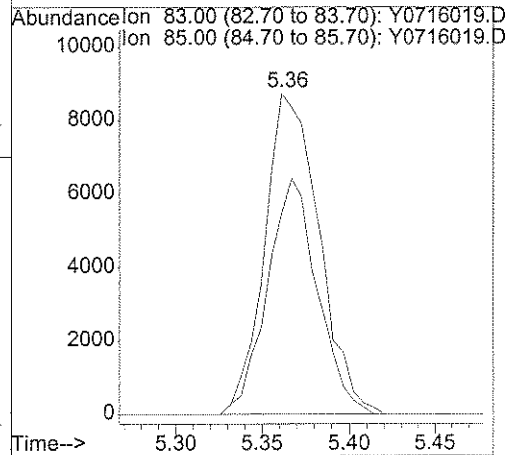
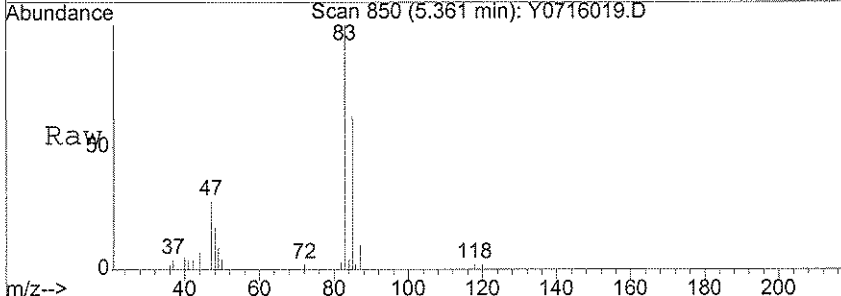
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	136		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	10.21	104	58		N.D.	
72) Bromoform	10.38	173	18728	8.20	ug/l	98
73) Isopropylbenzene	10.56	105	222		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	10.71	83	135		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	60		N.D.	
80) n-Propylbenzene	10.98	120	71		N.D.	
81) 2-Chlorotoluene	11.05	91	113		N.D.	
82) 4-Chlorotoluene	11.15	91	112		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	11.48	119	62		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	205		N.D.	
86) sec-butylbenzene	11.70	105	392		N.D.	
87) 1,3-Dichlorobenzene	11.78	146	147		N.D.	
88) 4-Isopropyltoluene	11.86	119	747		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	104		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	488		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	112		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.33	180	60		N.D.	



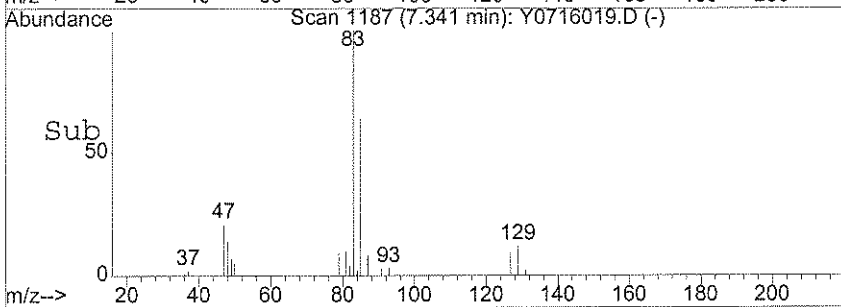
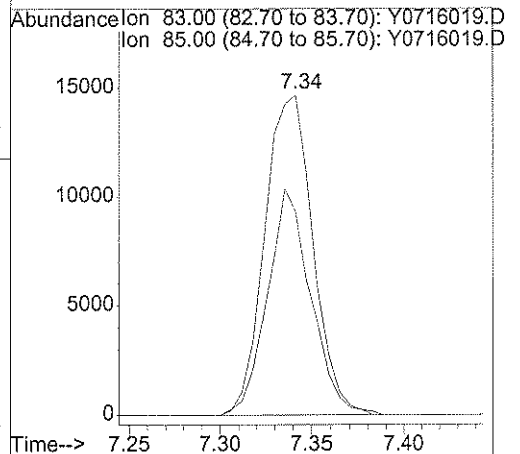
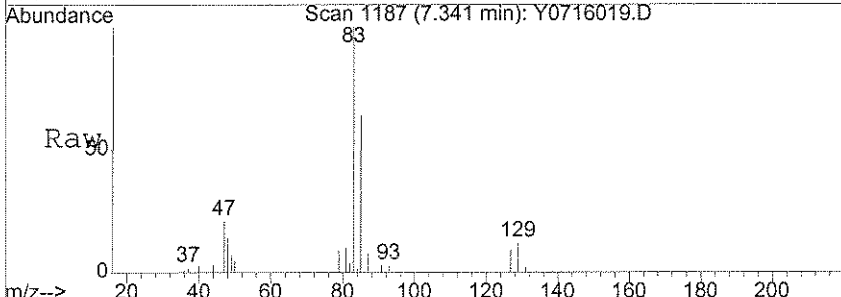
#34  
 Chloroform  
 Concen: 2.89 ug/l  
 RT: 5.36 min Scan# 850  
 Delta R.T. -0.01 min  
 Lab File: Y0716019.D  
 Acq: 16 Jul 2007 13:52

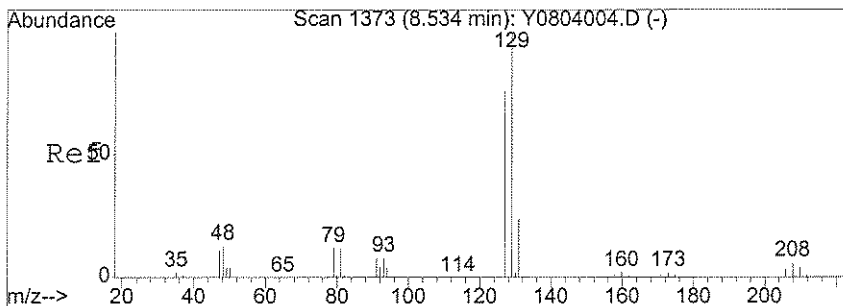
Tgt Ion: 83 Resp: 19099  
 Ion Ratio Lower Upper  
 83 100  
 85 67.8 43.3 83.3



#50  
 Bromodichloromethane  
 Concen: 5.88 ug/l  
 RT: 7.34 min Scan# 1187  
 Delta R.T. 0.01 min  
 Lab File: Y0716019.D  
 Acq: 16 Jul 2007 13:52

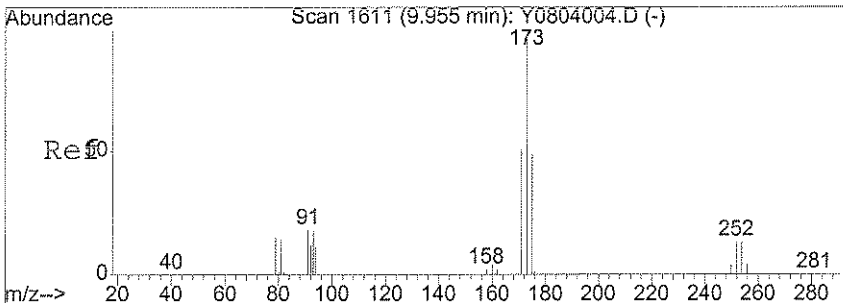
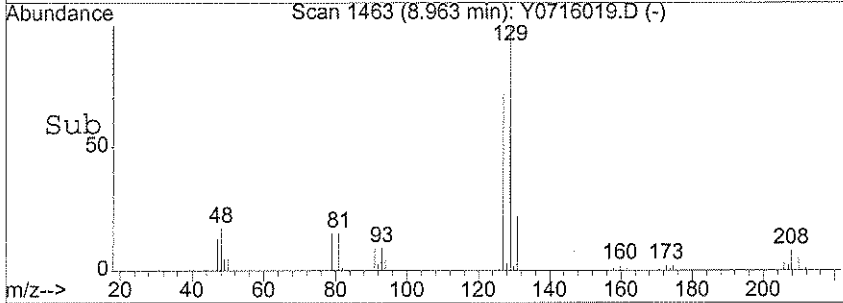
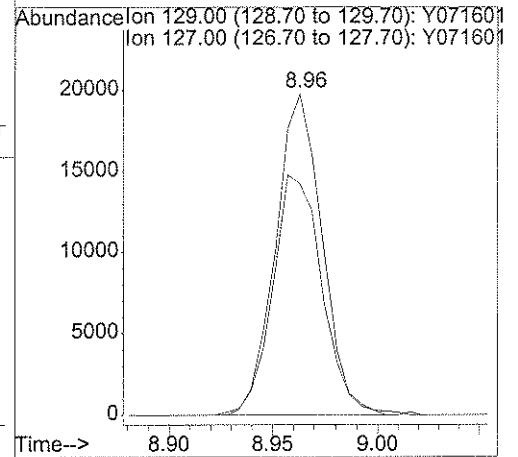
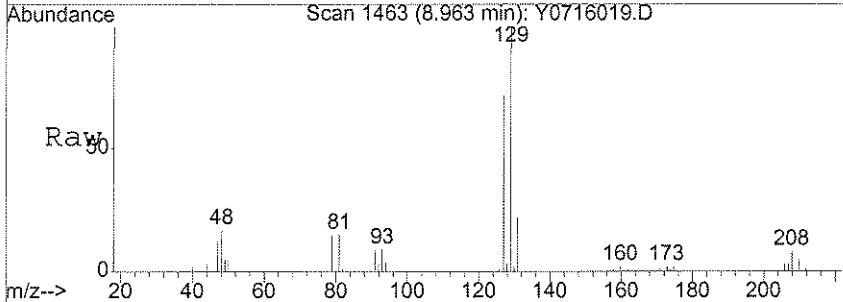
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 Ion Ratio Lower Upper  
 83 100  
 85 63.5 44.2 84.2





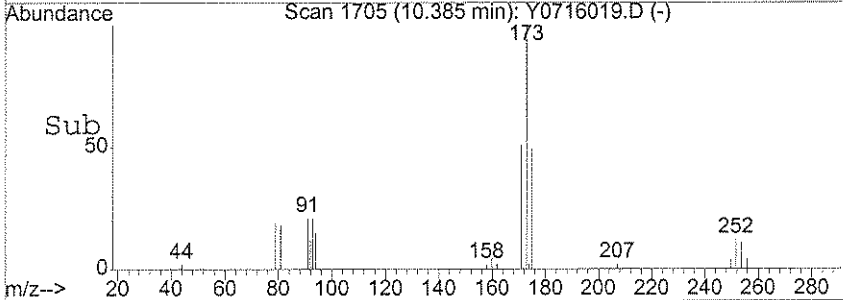
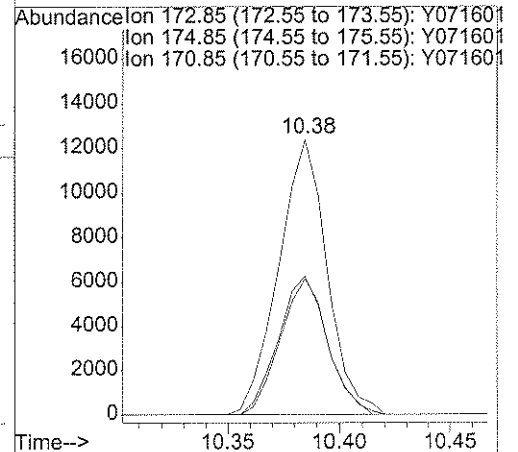
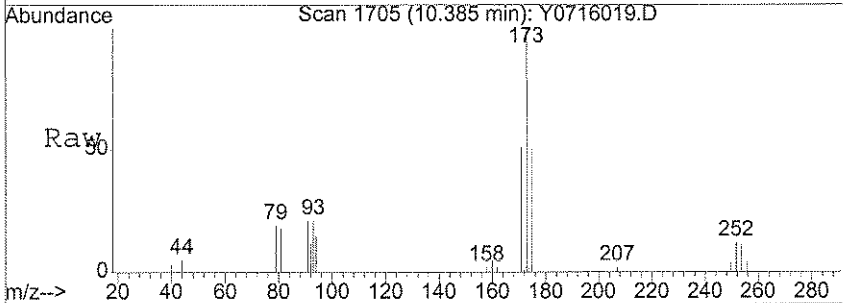
#63  
 Dibromochloromethane  
 Concen: 9.73 ug/l  
 RT: 8.96 min Scan# 1463  
 Delta R.T. -0.00 min  
 Lab File: Y0716019.D  
 Acq: 16 Jul 2007 13:52

Tgt Ion:129 Resp: 30690  
 Ion Ratio Lower Upper  
 129 100  
 127 79.7 58.9 98.9



#72  
 Bromoform  
 Concen: 8.20 ug/l  
 RT: 10.38 min Scan# 1705  
 Delta R.T. -0.00 min  
 Lab File: Y0716019.D  
 Acq: 16 Jul 2007 13:52

Tgt Ion:173 Resp: 18728  
 Ion Ratio Lower Upper  
 173 100  
 175 48.6 40.0 60.0  
 171 51.1 39.8 59.8





1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-17-07/10/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL50

Run Sequence: R019603

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL50-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0716016.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/10/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/16/2007 12:38

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-17-07/10/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-004  
 Lab File ID: Y0716016.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 12:38  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	<u>ug/L</u>	
10061-02-	trans-1,3-Dichloropropene	0.50		U
79-00-5	1,1,2-Trichloroethane	0.50		U
127-18-4	Tetrachloroethene	0.50		U
142-28-9	1,3-Dichloropropane	0.50		U
124-48-1	Dibromochloromethane	0.50		U
106-93-4	1,2-Dibromoethane	0.50		U
108-90-7	Chlorobenzene	0.50		U
100-41-4	Ethylbenzene	0.50		U
630-20-6	1,1,1,2-Tetrachloroethane	0.50		U
179601-23	m,p-Xylene	1.0		U
95-47-6	o-Xylene	0.50		U
100-42-5	Styrene	0.50		U
75-25-2	Bromoform	0.50		U
98-82-8	Isopropylbenzene	0.50		U
79-34-5	1,1,2,2-Tetrachloroethane	0.50		U
103-65-1	n-Propylbenzene	0.50		U
108-86-1	Bromobenzene	0.50		U
96-18-4	1,2,3-Trichloropropane	0.50		U
95-49-8	2-Chlorotoluene	0.50		U
108-67-8	1,3,5-Trimethylbenzene	0.50		U
106-43-4	4-Chlorotoluene	0.50		U
98-06-6	tert-Butylbenzene	0.50		U
95-63-6	1,2,4-Trimethylbenzene	0.50		U
135-98-8	sec-Butylbenzene	0.50		U
99-87-6	4-Isopropyltoluene	0.50		U
541-73-1	1,3-Dichlorobenzene	0.50		U
106-46-7	1,4-Dichlorobenzene	0.50		U
104-51-8	n-Butylbenzene	0.50		U
95-50-1	1,2-Dichlorobenzene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-17-07/10/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL50  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-004  
 Lab File ID: Y0716016.D  
 Date Collected: 07/10/2007  
 Date/Time Analyzed: 07/16/2007 12:38  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

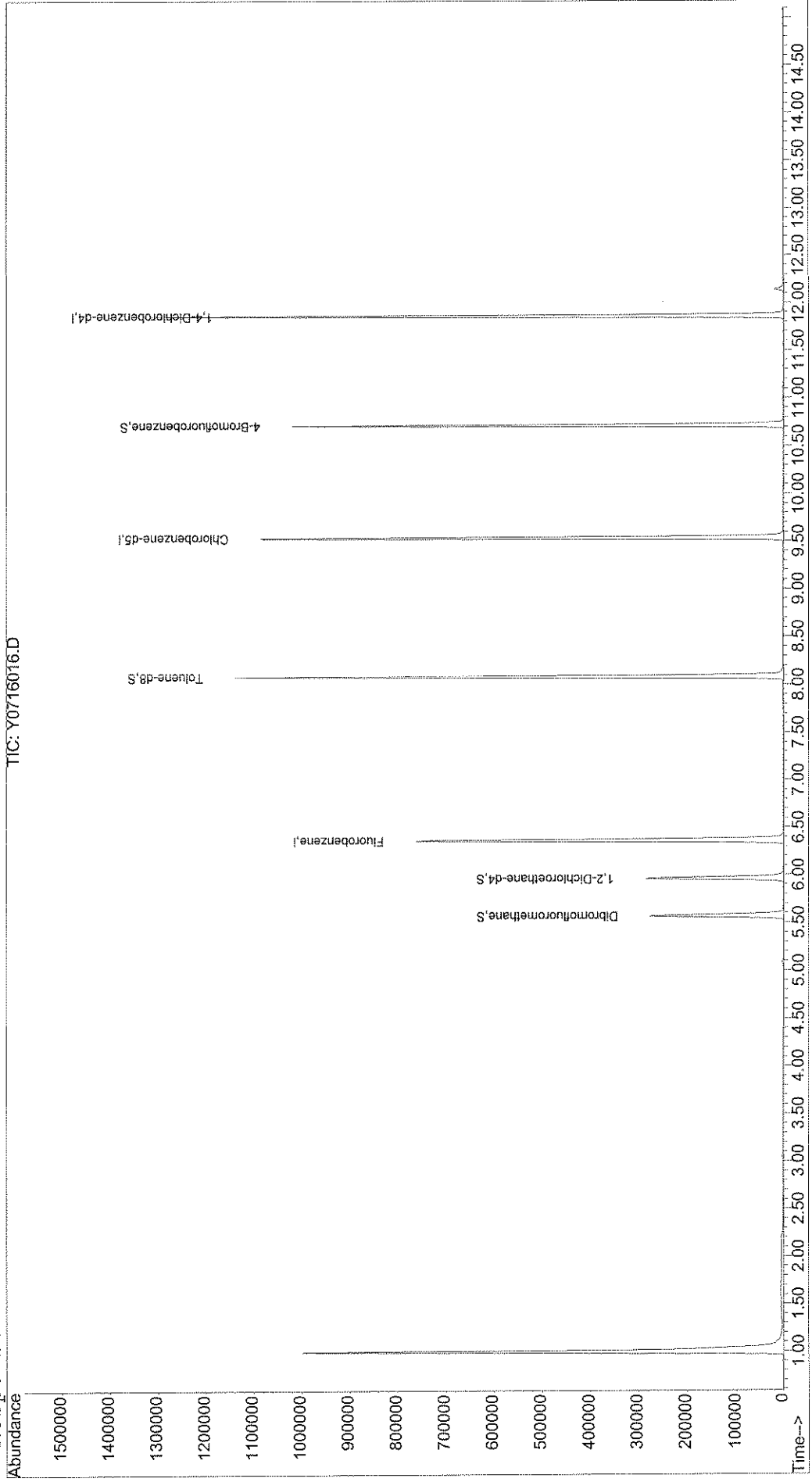
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716016.D Vial: 35  
Acq On : 16 Jul 2007 12:38 Operator: DGA  
Sample : JPL50-004 Inst : yoda  
Misc : 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 17 7:04 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jun 28 10:03:48 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716016.D  
 Acq On : 16 Jul 2007 12:38  
 Sample : JPL50-004  
 Misc : 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:04 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\062707\Y0627016.D (27 Jun 2007 18:48)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	661821	50.00	ug/l	0.00 106.26%
54) Chlorobenzene-d5	9.54	82	310802	50.00	ug/l	0.00 107.02%
74) 1,4-Dichlorobenzene-d4	11.86	152	319856	50.00	ug/l	0.00 103.54%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	178363	48.63	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	97.26%
40) 1,2-Dichloroethane-d4	5.96	65	213288	49.98	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.96%
55) Toluene-d8	8.08	98	679451	48.82	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.64%
76) 4-Bromofluorobenzene	10.71	95	284897	50.73	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	1.28	50	919		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.67	76	191		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	2.91	41	55		N.D.	
17) Methyl Acetate	2.93	43	55		N.D.	
18) Methylene Chloride	3.06	84	1702		N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716016.D  
 Acq On : 16 Jul 2007 12:38  
 Sample : JPL50-004  
 Misc : 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:04 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	419		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	61		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	394		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	165		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.16	92	443		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	57		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	9.56	112	135		N.D.	
66) 1-Chlorohexane	9.54	91	1203		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	401		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0716016.D 8260B.M Tue Jul 17 09:12:00 2007

Quantitation Report

Data File : X:\MSVOA\YODA\071607\Y0716016.D  
 Acq On : 16 Jul 2007 12:38  
 Sample : JPL50-004  
 Misc : 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 17 7:04 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jun 28 10:03:48 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.81	106	370		N.D.	
70) o-xylene	10.20	106	76		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	76		N.D.	
73) Isopropylbenzene	10.57	105	328		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	11.15	120	150		N.D.	
81) 2-Chlorotoluene	11.05	91	195		N.D.	
82) 4-Chlorotoluene	11.16	91	286		N.D.	
83) 1,3,5-Trimethylbenzene	11.15	105	105		N.D.	
84) tert-Butylbenzene	11.47	119	298		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	411		N.D.	
86) sec-butylbenzene	11.69	105	636		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	125		N.D.	
88) 4-Isopropyltoluene	11.85	119	956		N.D.	
89) 1,4-Dichlorobenzene	11.88	146	266		N.D.	
90) 1,2-Dichlorobenzene	12.25	146	54		N.D.	
91) n-Butylbenzene	12.26	91	865		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	13.85	180	351		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	d
95) Naphthalene	0.00	128	0		N.D.	d
96) 1,2,3-Trichlorobenzene	14.34	180	61		N.D.	

**TIC FORMS**

SDG JPL50

VOLATILES ANALYSIS



1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-7

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL50  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-001  
 Lab File ID: Y0716017.D  
 Date Collected: 07/21/2007  
 Date Analyzed: 07/16/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716017.D Vial: 36  
Acq On : 16 Jul 2007 13:03 Operator: DGA  
Sample : JPL50-001 Inst : yoda  
Misc : 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716017.D 8260B.M Tue Jul 17 09:12:26 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-16

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL50

Run Sequence: R019603

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL50-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0716018.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/11/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/16/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716018.D Vial: 37  
Acq On : 16 Jul 2007 13:28 Operator: DGA  
Sample : JPL50-002 Inst : yoda  
Misc : 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716018.D 8260B.M Tue Jul 17 09:20:45 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-8-2Q07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL50  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-003  
 Lab File ID: Y0716019.D  
 Date Collected: 07/21/2007  
 Date Analyzed: 07/16/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716019.D Vial: 38  
Acq On : 16 Jul 2007 13:52 Operator: DGA  
Sample : JPL50-003 Inst : yoda  
Misc : 5mL +IS/SS Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716019.D 8260B.M Tue Jul 17 09:21:02 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-17-07/10/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL50  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: JPL50-004  
 Lab File ID: Y0716016.D  
 Date Collected: 07/17/2007  
 Date Analyzed: 07/16/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716016.D Vial: 35  
Acq On : 16 Jul 2007 12:38 Operator: DGA  
Sample : JPL50-004 Inst : yoda  
Misc : 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716016.D 8260B.M Tue Jul 17 09:12:04 2007



1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B071607MVOWY1

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL50  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019603  
 Lab Sample ID: B071607MVOWY1  
 Lab File ID: Y0716012.D  
 Date Collected: \_\_\_\_\_  
 Date Analyzed: 07/16/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\071607\Y0716012.D Vial: 32  
Acq On : 16 Jul 2007 10:59 Operator: DGA  
Sample : B071607MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-40-19) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0716012.D 8260B.M Tue Jul 24 06:59:32 2007

# **SAMPLE DATA**

**SDG# JPL50**

**Semivolatiles**

1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Laucks Testing Laboratories,  
 SDG No.: JPL50  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 1030.0 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) N  
 Concentrated Extract Volume: 1000 (uL)  
 Injection Volume: 2.0 (uL)  
 GPC Cleanup: (Y/N) N pH: <2

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019778  
 Lab Sample ID: JPL50-002  
 Lab File ID: L0719006.D  
 Date Collected: 07/10/2007  
 Date Extracted: 07/16/2007  
 Date Analyzed: 07/19/2007  
 Dilution Factor: 1.0  
 Extraction: (Type) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	6.4	

Comments:

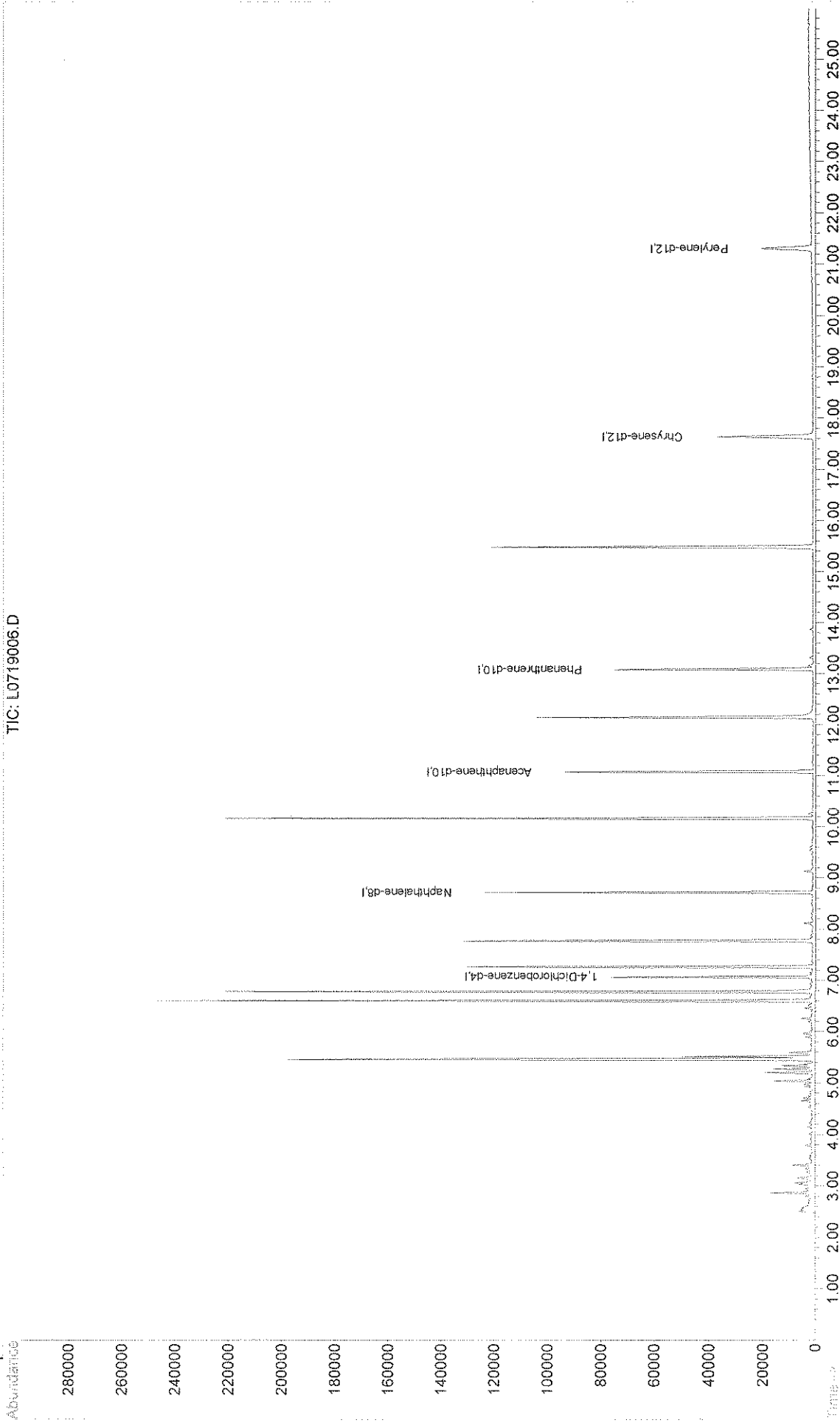
Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719006.D  
Acq On : 19 Jul 2007 13:32  
Sample : JPL50-002  
Misc : 5970L 1030ML->1ML+IS  
MS Integration Params: RTEINT.P  
Quant Time: Jul 23 9:45 2007

Vial: 4  
Operator: AP  
Inst : LOUIE  
Multiplr: 1.00  
Quant Results File: L8270.RES

Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
Title : 8270 SW846 BNA Calibration 5970L  
Last Update : Mon Jul 23 09:20:41 2007  
Response via : Initial Calibration

TIC: L0719006.D



Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719006.D  
 Acq On : 19 Jul 2007 13:32  
 Sample : JPL50-002  
 Misc : 5970L 1030ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 23 9:45 2007

Vial: 4  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 23 09:20:41 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) 1,4-Dichlorobenzene-d4	7.07	152	21163	20.00	ng/u1	0.00	NA%
24) Naphthalene-d8	8.72	136	73274	20.00	ng/u1	0.00	NA%
40) Acenaphthene-d10	11.07	164	35215	20.00	ng/u1	-0.02	NA%
68) Phenanthrene-d10	13.08	188	49961	20.00	ng/u1	-0.02	NA%
82) Chrysene-d12	17.64	240	32171	20.00	ng/u1	-0.02	NA%
92) Perylene-d12	21.30	264	21686	20.00	ng/u1	0.00	NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.47	112	83753	60.99	ng/u1	0.00	
Spiked Amount	75.000	Range 20 - 110	Recovery =	81.32%			
7) Phenol-d5	6.61	99	109394	56.67	ng/u1	0.00	
Spiked Amount	75.000	Range 10 - 115	Recovery =	75.56%			
11) 2-Chlorophenol-d4	6.79	132	92209	60.01	ng/u1	0.00	
Spiked Amount	75.000	Range 48 - 117	Recovery =	80.01%			
15) 1,2-Dichlorobenzene-d4	7.27	152	31444	30.58	ng/u1	0.00	
Spiked Amount	50.000	Range 38 - 82	Recovery =	61.16%			
25) Nitrobenzene-d5	7.77	82	70388	39.78	ng/u1	-0.01	
Spiked Amount	50.000	Range 40 - 110	Recovery =	79.56%			
46) 2-Fluorobiphenyl	10.17	172	99951	34.21	ng/u1	0.00	
Spiked Amount	50.000	Range 50 - 100	Recovery =	68.42%			
72) 2,4,6-Tribromophenol	12.14	330	19292	57.22	ng/u1	-0.02	
Spiked Amount	75.000	Range 40 - 125	Recovery =	76.29%			
85) Terphenyl-d14	15.48	244	78376	32.85	ng/u1	0.00	
Spiked Amount	50.000	Range 50 - 135	Recovery =	65.70%			

Target Compounds

	R.T.	QIon	Response	Conc	Units	Value
2) 1,4-Dioxane	3.41	88	3834	6.61	ng/u1	96
3) N-nitrosodimethylamine	3.86	74	49	N.D.		
4) Pyridine	3.84	79	26	N.D.		
6) Benzaldehyde	6.50	77	43	N.D.		
8) Phenol	6.62	94	277	N.D.		
9) Aniline	6.79	93	148	N.D.		
10) Bis(2-Chloroethyl)ether	6.79	93	148	N.D.		
12) 2-Chlorophenol	0.00	128	0	N.D.		
13) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
14) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
16) Benzyl alcohol	7.25	108	284	N.D.		
17) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
18) 2-Methylphenol	7.25	108	284	N.D.		
19) Bis(2-chloroisopropyl)ethe	7.45	45	118	N.D.		
20) 3 & 4-Methylphenol	0.00	108	0	N.D.		
21) Acetophenone	7.57	105	28	N.D.		
22) n-Nitroso-di-n-propylamine	7.66	70	28	N.D.		
23) Hexachloroethane	0.00	117	0	N.D.		
26) Nitrobenzene	7.77	77	341	N.D.		
27) Isophorone	8.10	82	27	N.D.		
28) 2-Nitrophenol	0.00	139	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 L0719006.D L8270.M Mon Jul 23 09:45:54 2007

Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719006.D  
 Acq On : 19 Jul 2007 13:32  
 Sample : JPL50-002  
 Misc : 5970L 1030ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 23 9:45 2007

Vial: 4  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 23 09:20:41 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2,4-Dimethylphenol	8.31	107	90		N.D.	
30) bis(2-Chloroethoxy)methane	8.22	93	25		N.D.	
31) Benzoic acid	0.00	105	0		N.D.	d
32) 2,4-Dichlorophenol	0.00	162	0		N.D.	
33) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
34) Naphthalene	0.00	128	0		N.D.	
35) 4-Chloroaniline	0.00	127	0		N.D.	
36) Hexachlorobutadiene	0.00	225	0		N.D.	
37) Caprolactam	9.28	113	24		N.D.	
38) 4-Chloro-3-methylphenol	0.00	107	0		N.D.	
39) 2-Methylnaphthalene	0.00	142	0		N.D.	
41) 1-Methylnaphthalene	0.00	142	0		N.D.	
42) Hexachlorocyclopentadiene	0.00	237	0		N.D.	
43) 1,2,4,5-Tetrachlorobenzene	0.00	216	0		N.D.	
44) 2,4,6-Trichlorophenol	0.00	196	0		N.D.	
45) 2,4,5-Trichlorophenol	0.00	196	0		N.D.	
47) 1,1'-Biphenyl	10.17	154	209		N.D.	
48) 2-Chloronaphthalene	0.00	162	0		N.D.	
49) 2-Nitroaniline	10.50	65	32		N.D.	
50) Dimethylphthalate	0.00	163	0		N.D.	
51) 1,4-Dinitrobenzene	0.00	168	0		N.D.	
52) 1,3-Dinitrobenzene	0.00	168	0		N.D.	
53) 2,6-Dinitrotoluene	0.00	165	0		N.D.	
54) Acenaphthylene	0.00	152	0		N.D.	
55) 1,2-Dinitrobenzene	0.00	168	0		N.D.	
56) 3-Nitroaniline	0.00	138	0		N.D.	
57) Acenaphthene	0.00	153	0		N.D.	
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	11.07	109	39		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	11.65	149	138		N.D.	
65) Fluorene	0.00	166	0		N.D.	
66) 4-Chlorophenyl-phenylether	0.00	204	0		N.D.	
67) 4-Nitroaniline	0.00	138	0		N.D.	
69) 4,6-Dinitro-2-methylphenol	0.00	198	0		N.D.	
70) N-nitrosodiphenylamine	12.14	169	634		N.D.	
71) 1,2-Diphenylhydrazine	12.01	77	26		N.D.	
73) 4-Bromophenyl-phenylether	0.00	248	0		N.D.	
74) Hexachlorobenzene	0.00	284	0		N.D.	
75) Atrazine	0.00	200	0		N.D.	
76) Pentachlorophenol	0.00	266	0		N.D.	
77) Phenanthrene	0.00	178	0		N.D.	
78) Anthracene	0.00	178	0		N.D.	
79) Carbazole	13.17	167	34		N.D.	
80) Di-n-butylphthalate	13.86	149	897		N.D.	
81) Fluoranthene	0.00	202	0		N.D.	
83) Benzidine	0.00	184	0		N.D.	
84) Pyrene	0.00	202	0		N.D.	
86) Butylbenzylphthalate	0.00	149	0		N.D.	
87) Bis(2-ethylhexyl)adipate	0.00	129	0		N.D.	
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	17.64	228	38		N.D.	

(#) = qualifier out of range (m) = manual integration  
 L0719006.D L8270.M Mon Jul 23 09:45:56 2007

Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719006.D  
 Acq On : 19 Jul 2007 13:32  
 Sample : JPL50-002  
 Misc : 5970L 1030ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 23 9:45 2007

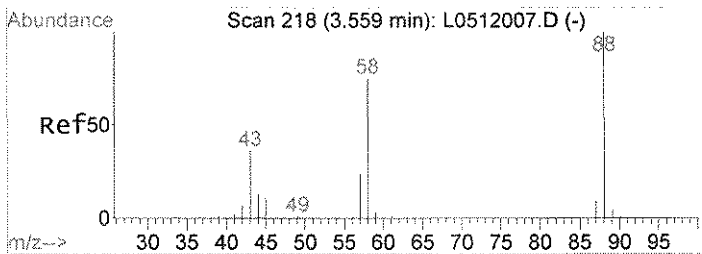
Vial: 4  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 23 09:20:41 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

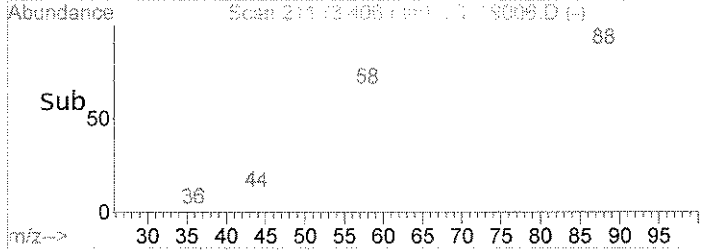
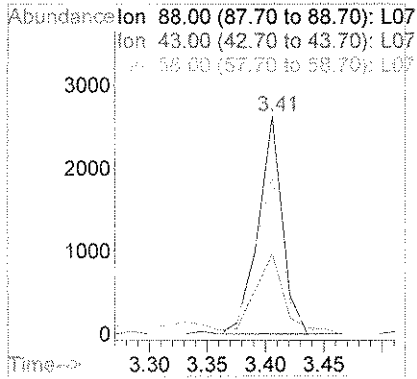
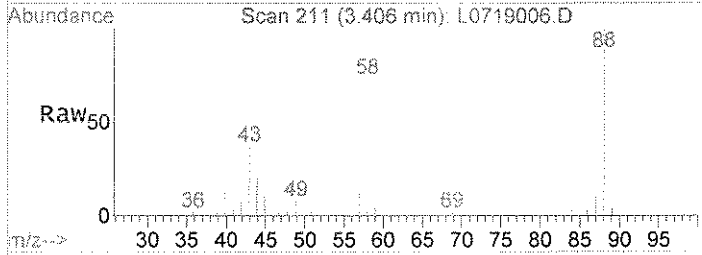
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90) bis(2-Ethylhexyl)phthalate	17.68	149	187		N.D.	
91) Chrysene	17.64	228	38		N.D.	
93) Di-n-octylphthalate	0.00	149	0		N.D.	
94) Benzo[b]fluoranthene	0.00	252	0		N.D.	
95) Benzo[k]fluoranthene	0.00	252	0		N.D.	
96) Benzo[a]pyrene	21.30	252	43		N.D.	
97) Indeno[1,2,3-cd]pyrene	0.00	276	0		N.D.	
98) Dibenz[a,h]anthracene	0.00	278	0		N.D.	
99) Benzo[g,h,i]perylene	0.00	276	0		N.D.	





#2  
 1,4-Dioxane  
 Concen: 6.61 ng/ul  
 RT: 3.41 min Scan# 211  
 Delta R.T. 0.00 min  
 Lab File: L0719006.D  
 Acq: 19 Jul 2007 13:32

Tgt Ion	Ratio	Resp	Lower	Upper
88	100	3834		
43	44.3		33.6	50.4
58	84.9		70.6	105.8



**Metals Data**

**JPL50**

SW-846

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin  
Lab Code: LAUCKS SDG No.: JPL50  
SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-7</u>	<u>JPL50-001</u>
<u>MW-16</u>	<u>JPL50-002</u>
<u>DUPE-8-2Q07</u>	<u>JPL50-003</u>

Were ICP interelement corrections applied? Yes/No YES  
Were ICP background corrections applied? Yes/No NO  
If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Joan M. Phillips  
Date: 07/30/07 Title: Chemist

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-7

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL50

Matrix (soil/water): Water

Lab Sample ID: JPL50-001

Level (low/med): LOW

Date Received: 07/11/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	54900			P	R019929
7440-47-3	Chromium	11.3			M	R019973
7439-89-6	Iron	1070		E	P	R019929
7439-92-1	Lead	1.70			M	R019973
7439-95-4	Magnesium	16600		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	23400		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-16

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL50

Matrix (soil/water): Water

Lab Sample ID: JPL50-002

Level (low/med): LOW

Date Received: 07/11/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.93			M	R019973
7440-70-2	Calcium	47400			P	R019929
7440-47-3	Chromium	9.38			M	R019973
7439-89-6	Iron	201		E	P	R019929
7439-92-1	Lead	1.00	U		M	R019973
7439-95-4	Magnesium	18200		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	25500		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-8-2Q07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL50

Matrix (soil/water): Water

Lab Sample ID: JPL50-003

Level (low/med): LOW

Date Received: 07/11/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R019973
7440-70-2	Calcium	54100			P	R019929
7440-47-3	Chromium	10.6			M	R019973
7439-89-6	Iron	351		E	P	R019929
7439-92-1	Lead	2.45			M	R019973
7439-95-4	Magnesium	17600		*N	P	R019929
7440-09-7	Potassium	5000	U		P	R019929
7440-23-5	Sodium	21900		*N	P	R019929

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL50**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL50

SOW No.: \_\_\_\_\_

Sample No.  
MW-7  
MW-16  
MW-16D  
DUPE-8-2Q07  
DUPE-8-2Q07MS  
DUPE-8-2Q07MSD

Lab Sample ID  
JPL50-001  
JPL50-002  
JPL50-002D  
JPL50-003  
JPL50-003MS  
JPL50-003MSD

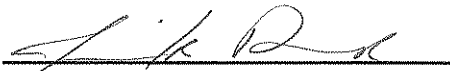
Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-31-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL50  
**Sample Number:** MW-7 **Date/Time Collected:** 07/10/2007 09:04  
**Lab Sample ID:** JPL50-001 **Date/Time Received:** 07/11/2007 08:20  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	07/11/2007	07/11/2007	R019450

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	320		2	2	07/11/2007	07/13/2007	R019456

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.60		0.040	0.055	07/11/2007	07/11/2007	R019465
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.017	07/11/2007	07/11/2007	R019465
Sulfate as SO4	14808-79-8	10	40		10	1.7	07/11/2007	07/11/2007	R019465
Chloride	16887-00-6	10	41		2.0	0.76	07/11/2007	07/11/2007	R019465
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.33	07/11/2007	07/11/2007	R019465

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/23/2007	07/23/2007	R019820
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	150		8	8	07/23/2007	07/23/2007	R019820

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	3.9		2.0	0.28	07/24/2007	07/25/2007	R019848





**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELE**

**SDG NO.: JPL51**

**AUGUST 10, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL51  
Date of Report: 8/10/2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-13	JPL51-001	SVOA/VOA/MET/INO
MW-8	JPL51-002	VOA/MET/INO
TB-18-7/11/07	JPL51-003	VOA

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
SVOA = 1,4-Dioxane (8270)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)  
Chloride, Nitrate, Nitrite, Sulfate, Ortho phosphorus (300.0)

### **Sample Receipt Comments:**

Two of six VOA vials for MW-13 were received with air bubbles greater than ¼ inch in size.

One of two VOA vials for TB-18-07/11/07 were received with air bubbles greater than ¼ inch in size.

## **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

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### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

#### *Semi-Volatile Organic Compounds:*

The holding time to extraction is 7 days in water and 14 days in soil calculated from the date of collection. In either case, the holding time from extraction to analysis is 40 days. All samples were extracted and analyzed within holding time.

### Volatiles Fraction:

#### Quality Control Analyses:

All quality control parameters were met.

### Semivolatiles Fraction:

#### Continuing Calibration Verification Standard Analysis:

Analysis of the CCV performed on 07/19/07 yielded a % difference value for the surrogate terphenyl-d14 that exceeded 20% due to a decrease in response. All surrogate recoveries were in control for the associated analyses.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

### ICP Metals:

The preparation blank for metals in soil is calculated to mg/kg by assuming a sample weight of 1.00g/100mL. Total solids of 100% are also assumed.



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On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

## SPECIFIC REMARKS ON INORGANIC ANALYSES:

### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Nitrite	48 hours	None
Ortho phosphorus	48 hours	None

### ICP-MS/ICP Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

For the run sequence R020222, the internal standard recovery for scandium (affects Cr), germanium (affects As), and terbium (affects Pb) drifted above the recommended control limit of 125% of the initial calibration standard. This is due to instrument drift which is shown in both the samples and the CCVs. Since the CCV recoveries were within control limits, even with the internal standard drifting beyond 125% of the initial calibration standard, it is assumed that the internal standard is making appropriate corrections to the results. Samples were reported only if the internal standard recovery was within 60-125% of the internal standard intensity of the previous CCV. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for these events.

For the run sequence R020230, the internal standard recovery for scandium (affects Ca, Fe, Mg, and Na) and germanium (affects K) drifted above the recommended control limit of 125% of the initial calibration standard. This is due to instrument drift which is shown in both the samples and the CCVs.

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Since the CCV recoveries were within control limits, even with the internal standard drifting beyond 125% of the initial calibration standard, it is assumed that the internal standard is making appropriate corrections to the results. Samples were reported only if the internal standard recovery was within 60-125% of the internal standard intensity of the previous CCV. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for this event.

The matrix spike sample percent recovery of calcium was outside of the established control limits of 70-130% for sample # MW-13 and MW-8. The sample concentration of this element exceeds the spike concentration by a factor of four or more, therefore no further corrective action was required. Data have not been flagged for this event.

The matrix duplicate sample relative percent differences for calcium, magnesium, and sodium were outside the control limits of  $\pm 20\%$  for sample MW-13. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms 1 and 5C.

The matrix duplicate sample relative percent differences for calcium and magnesium were outside the control limits of  $\pm 20\%$  for sample MW-8. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms 1 and 5C.

### Miscellaneous Inorganics:

For run sequence R019501, the initial calibration verification recovery was outside the established control limits for the nitrite analysis. All reported samples are less than the reporting limit. Therefore, no further action was taken.

For run sequence R019501, the initial calibration blank and first continuing calibration blank were greater than  $\frac{1}{2}$  the reporting limit for the chloride analysis. All reported samples are greater than 20x the level in the blanks. Therefore, no further action was taken.

For run sequence R019501, the matrix spike and matrix spike duplicate recoveries were outside the established control limits for the nitrite analysis. All other elements on the MS/MSD are within control. Therefore, no further action was taken.

For run sequence R019848, the blank spike recovery fell outside the established control limits for the perchlorate analysis. All other quality control elements are within control limits. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
  - J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
  - T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
  - E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
  - P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
  - C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial of confirmatory (GC/MS) analysis. See specific report comments for details.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
  - E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
  - N Spiked sample recovery not within control limits.
  - \* Duplicate analysis not within control limits.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

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RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Kara Godineaux  
Project Manager

8/10/07  
(DATE)



Harry Romberg  
Quality Assurance Officer

8/10/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 PH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 Low Level NO3, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	8270S1M-level 1,4-Dioxane (1.5 ppb RL; 3 to 1 ppb)	TurMet for 200.7/200.8 TurMet
*JPL51-001	07/12/2007 08:25 AM	07/11/2007 09:14 AM	MW-13	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN
*JPL51-002	07/12/2007 08:25 AM	07/11/2007 11:33 AM	MW-8	IN	IN	IN	IN	IN	IN	IN	IN		IN
JPL51-003	07/12/2007 08:25 AM	07/11/2007 12:00 AM	TB-18-7/11/07								IN		

Approved By: *MW*

On: *7/11/07*

Notes:

Samples identified with a '\*' client has requested QC for

LEGEND: -:Started , +:Completed , IN:Logged In , P:Preparation , A:Analysis , X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0







**Supplemental Sample Receipt Log  
Laucks Testing Laboratories**

SDG: JPL51  
Cooler: AAP008  
Temperatures: 5.2  
COC #: 42845

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL51-001	0001	1000 mL boston round, amber glass	7	N/A
	0002	1000 mL boston round, amber glass	7	N/A
	0003	1000 mL cylinder, poly	7	N/A
	0004	1000 mL cylinder, poly	7	N/A
	0005	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0006	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	40 ml OTWS, clear glass, HCl	N/C	None
	0010	40 ml OTWS, clear glass, HCl	N/C	None
	0011	500 ml cylinder, poly, HNO3	<2	N/A
	0012	500 ml cylinder, poly, HNO3	<2	N/A
JPL51-002	0001	1000 mL cylinder, poly	7	N/A
	0002	1000 mL cylinder, poly	7	N/A
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	40 ml OTWS, clear glass, HCl	N/C	None
	0007	40 ml OTWS, clear glass, HCl	N/C	None
	0008	40 ml OTWS, clear glass, HCl	N/C	None
	0009	500 ml cylinder, poly, HNO3	<2	N/A
	0010	500 ml cylinder, poly, HNO3	<2	N/A
JPL51-003	0001	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	None

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

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**ATTACHMENT B**

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**Battelle**

**SDG No.: JPL51**

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Completed and checked by:

JENNI GROSS

Date:

8/10/07

**SAMPLE DATA**

SDG JPL51

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-001  
 Lab File ID: Y0720019.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 14:28  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	1.1	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	1.4	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.72	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-001  
 Lab File ID: Y0720019.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 14:28  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.46	J
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13
-------

Lab Name: \_\_\_\_\_

SDG No.: JPL51

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DB-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_(uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019780

Lab Sample ID: JPL51-001

Lab File ID: Y0720019.D

Date Collected: 07/11/2007

Date/Time Analyzed: 07/20/2007 14:28

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

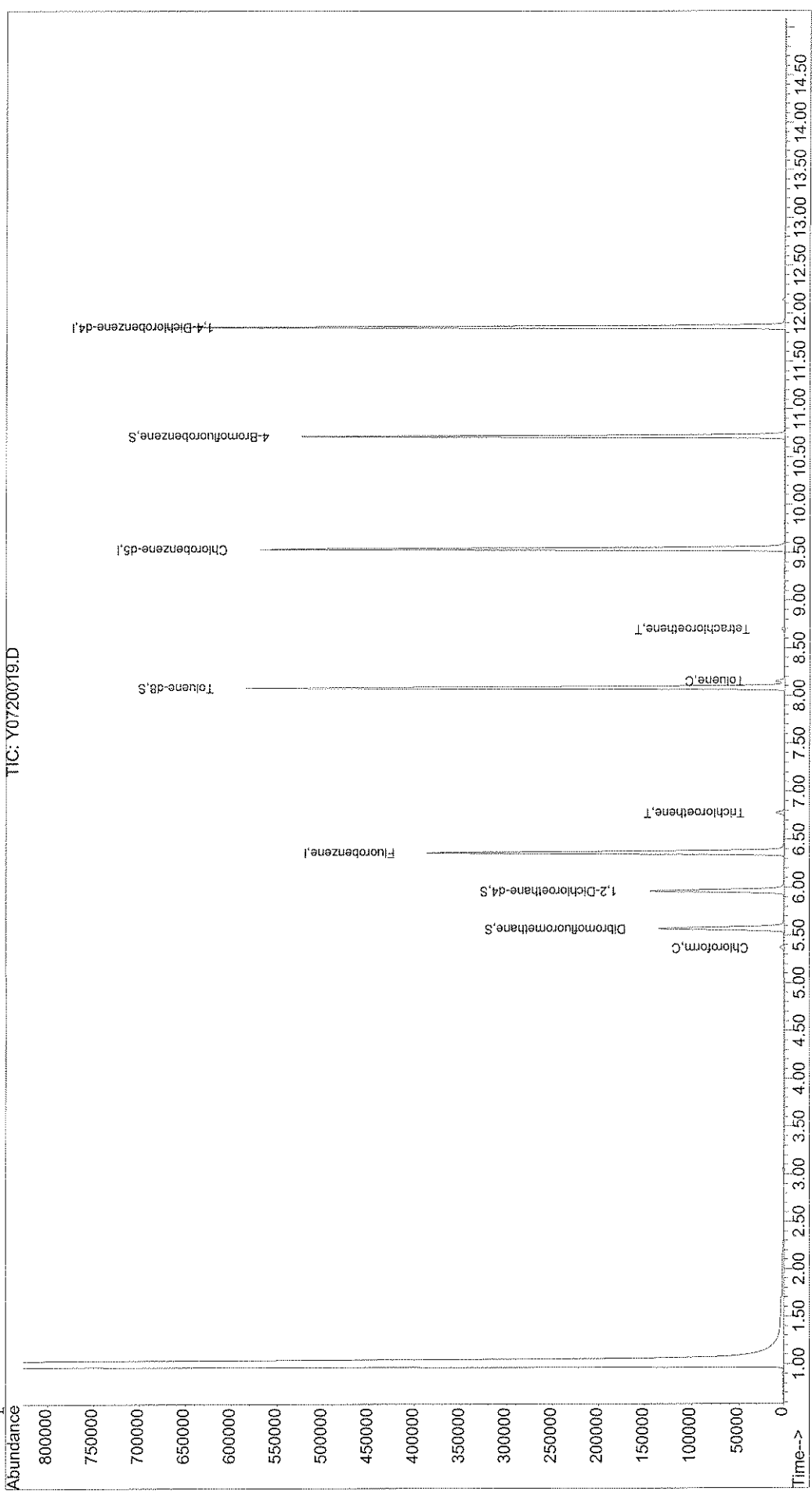
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720019.D Vial: 43  
Acq On : 20 Jul 2007 14:28 Operator: DGA  
Sample : JPL51-001 Inst : Yoda  
Misc : #6 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:42 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720019.D  
 Acq On : 20 Jul 2007 14:28  
 Sample : JPL51-001  
 Misc : #6 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:42 2007

Vial: 43  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.37	96	343770	50.00	ug/l	0.00	94.96%
54) Chlorobenzene-d5	9.53	82	164637	50.00	ug/l	0.00	91.66%
74) 1,4-Dichlorobenzene-d4	11.86	152	173759	50.00	ug/l	0.00	93.21%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	90977	49.42	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.84%	
40) 1,2-Dichloroethane-d4	5.96	65	107001	49.73	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.46%	
55) Toluene-d8	8.08	98	354128	49.65	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.30%	
76) 4-Bromofluorobenzene	10.71	95	154962	50.81	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	1.98	101	138	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	4.03	63	56	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720019.D  
 Acq On : 20 Jul 2007 14:28  
 Sample : JPL51-001  
 Misc : #6 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:42 2007

Vial: 43  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.10	43	119	Below Cal	#	57
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.37	83	3890	1.13	ug/l	98
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.76	117	55		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.02	78	56		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	3110	1.43	ug/l	90
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	8.15	92	3506	0.72	ug/l	92
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	880	0.46	ug/l	90
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.54	91	465		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.80	91	174		N.D.	

*[Handwritten signature]*  
 07/23/07  
 Page 2

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720019.D  
 Acq On : 20 Jul 2007 14:28  
 Sample : JPL51-001  
 Misc : #6 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:42 2007

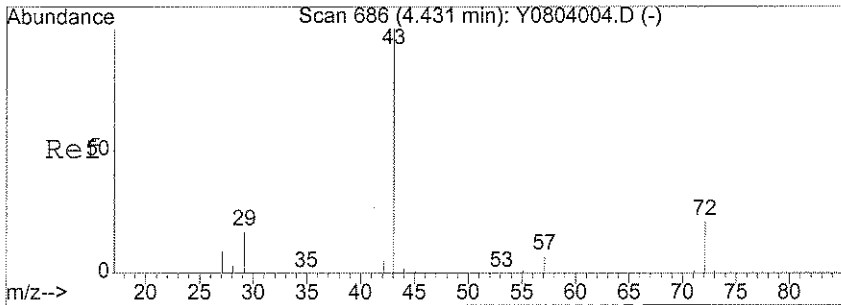
Vial: 43  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

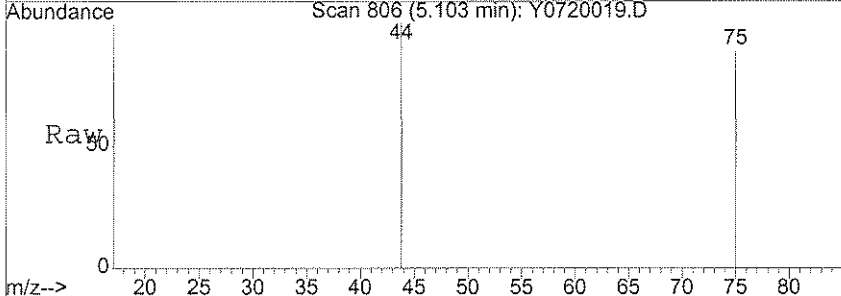
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	74		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	131		N.D.	
82) 4-Chlorotoluene	11.16	91	59		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	277		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	58		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

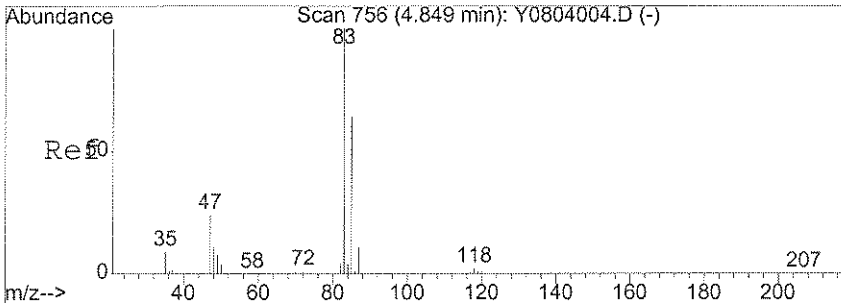
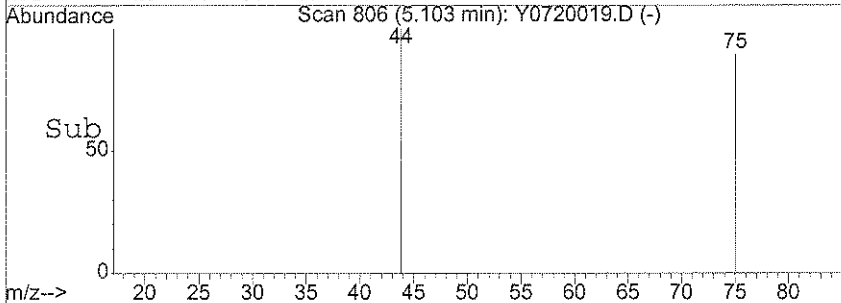
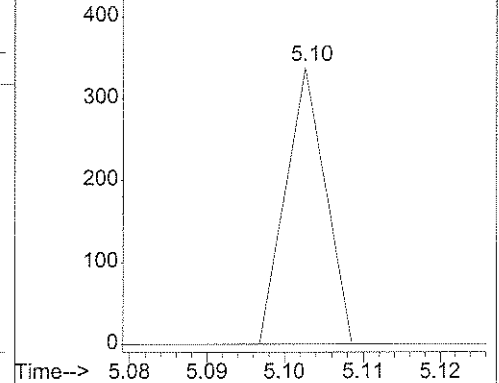


#30  
 2-Butanone  
 Concen: Below Cal  
 RT: 5.10 min Scan# 806  
 Delta R.T. 0.08 min  
 Lab File: Y0720019.D  
 Acq: 20 Jul 2007 14:28

Tgt Ion	Resp	Lower	Upper
43	119		
43	100		
72	0.0	19.8	29.6#
57	0.0	6.6	9.8#

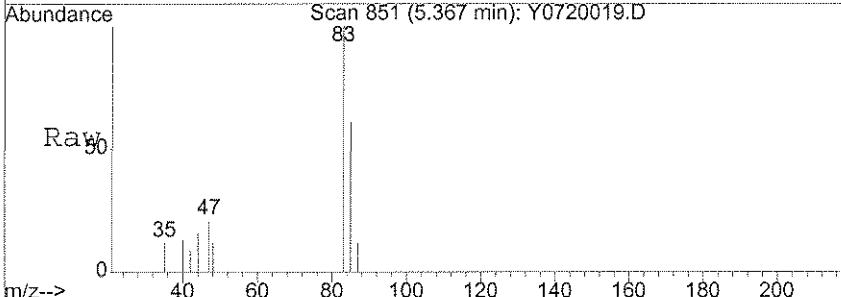


Abundance Ion 43.15 (42.85 to 43.85): Y0720019.D  
 Ion 72.15 (71.85 to 72.85): Y0720019.D  
 Ion 57.00 (56.70 to 57.70): Y0720019.D

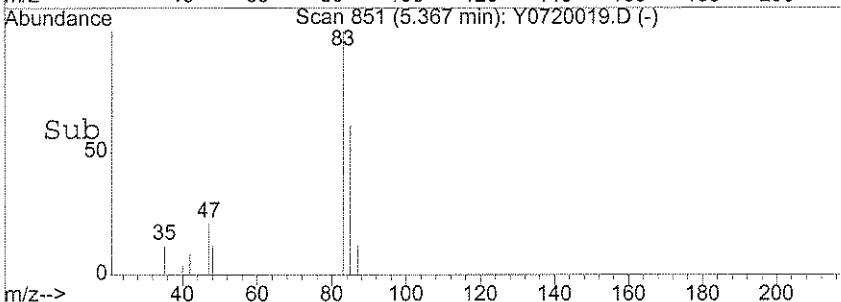
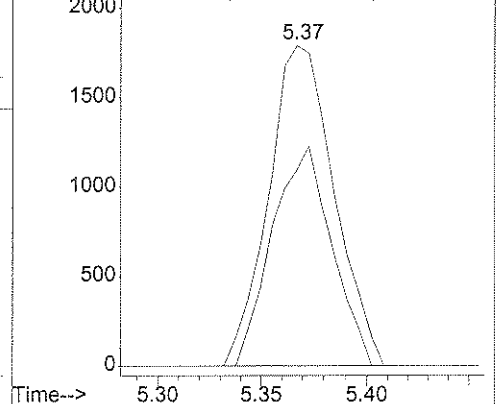


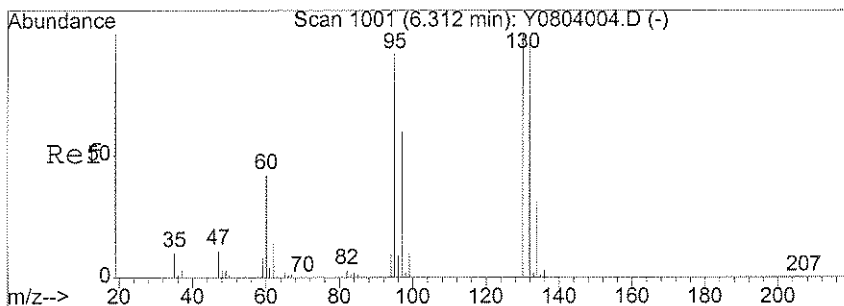
#34  
 Chloroform  
 Concen: 1.13 ug/l  
 RT: 5.37 min Scan# 851  
 Delta R.T. -0.01 min  
 Lab File: Y0720019.D  
 Acq: 20 Jul 2007 14:28

Tgt Ion	Resp	Lower	Upper
83	3890		
83	100		
85	62.0	43.3	83.3



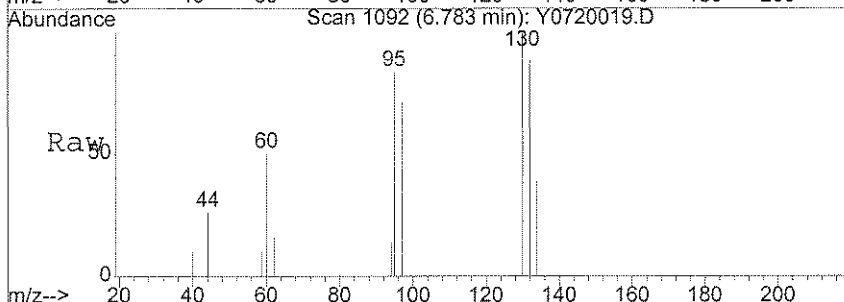
Abundance Ion 83.00 (82.70 to 83.70): Y0720019.D  
 Ion 85.00 (84.70 to 85.70): Y0720019.D



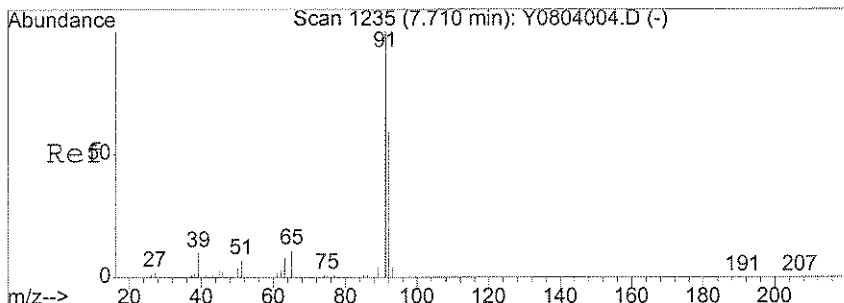
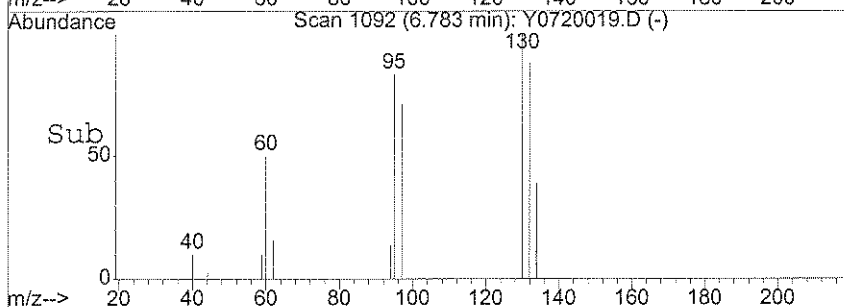
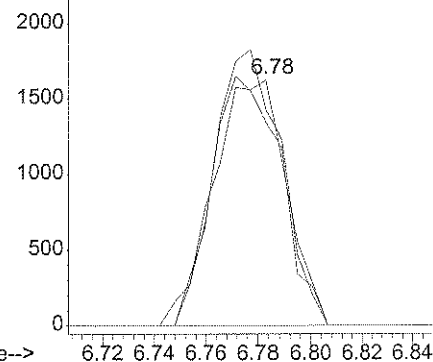


#45  
 Trichloroethene  
 Concen: 1.43 ug/l  
 RT: 6.78 min Scan# 1092  
 Delta R.T. 0.01 min  
 Lab File: Y0720019.D  
 Acq: 20 Jul 2007 14:28

Tgt Ion	Resp	Lower	Upper
130	3110		
130	100		
132	105.0	75.0	115.0
95	99.3	69.4	109.4

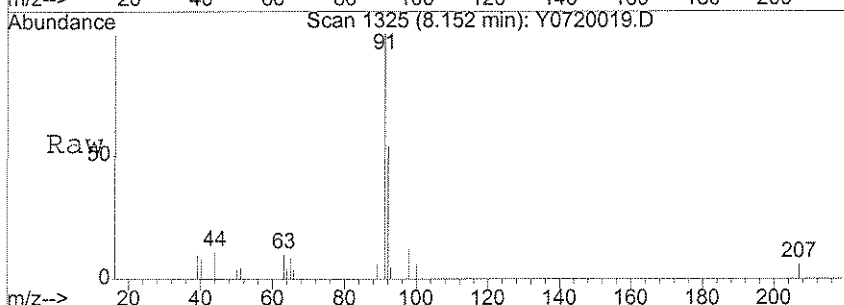


Abundance  
 Ion 130.00 (129.70 to 130.70): Y0720019.D  
 Ion 132.00 (131.70 to 132.70): Y0720019.D  
 Ion 95.00 (94.70 to 95.70): Y0720019.D

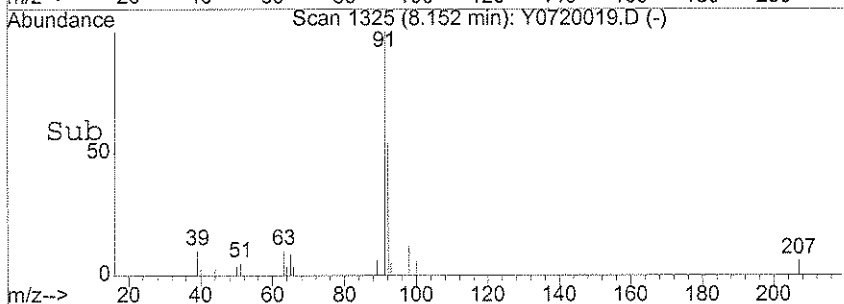
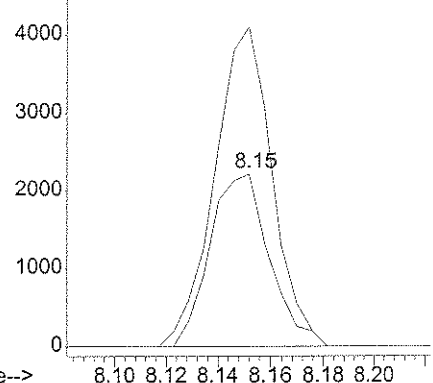


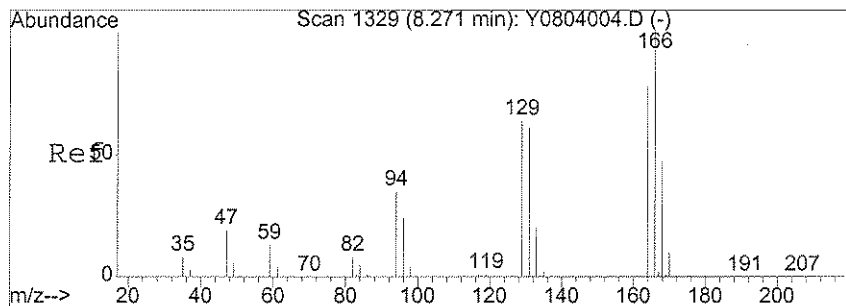
#56  
 Toluene  
 Concen: 0.72 ug/l  
 RT: 8.15 min Scan# 1325  
 Delta R.T. 0.01 min  
 Lab File: Y0720019.D  
 Acq: 20 Jul 2007 14:28

Tgt Ion	Resp	Lower	Upper
92	3506		
92	100		
91	177.9	133.7	200.5



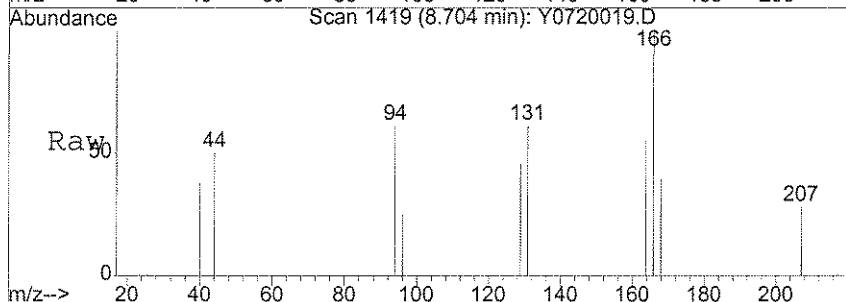
Abundance  
 Ion 92.05 (91.75 to 92.75): Y0720019.D  
 Ion 91.05 (90.75 to 91.75): Y0720019.D



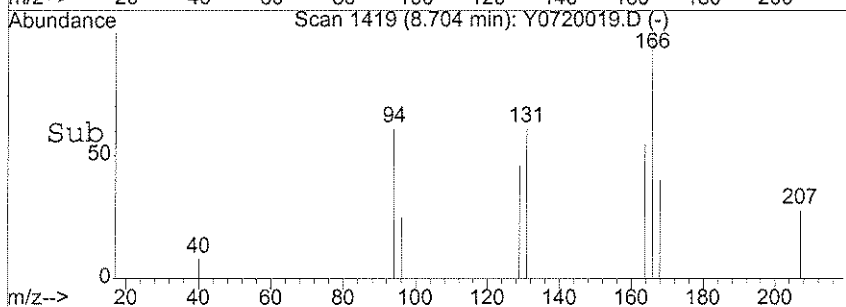
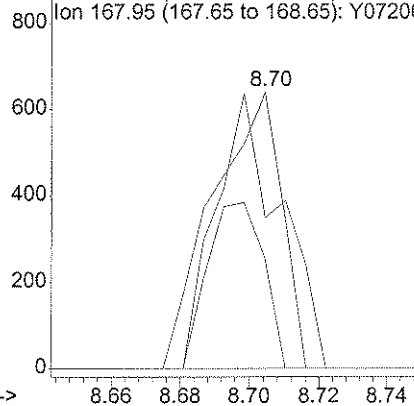


#60  
 Tetrachloroethene  
 Concen: 0.46 ug/l  
 RT: 8.70 min Scan# 1419  
 Delta R.T. 0.01 min  
 Lab File: Y0720019.D  
 Acq: 20 Jul 2007 14:28

Tgt Ion	Resp	Lower	Upper
166	100		
164	93.4	63.3	94.9
168	49.1	39.6	59.4



Abundance Ion 165.95 (165.65 to 166.65): Y072001  
 Ion 163.95 (163.65 to 164.65): Y072001  
 Ion 167.95 (167.65 to 168.65): Y072001



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-002  
 Lab File ID: Y0720011.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 11:11  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-002  
 Lab File ID: Y0720011.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 11:11  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8
------

Lab Name: \_\_\_\_\_

SDG No.: JPL51

Matrix: (SOIL/SED/WATER) Water

Sample wt/vol: 5.00 (g/mL) mL

Level: (LOW/MED) \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

GC Column: DE-624 20m ID: 0.18 (mm)

Soil Extract Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin

Run Sequence: R019780

Lab Sample ID: JPL51-002

Lab File ID: Y0720011.D

Date Collected: 07/11/2007

Date/Time Analyzed: 07/20/2007 11:11

Dilution Factor: 1.0

Soil Aliquot Volume: \_\_\_\_\_ (uL)

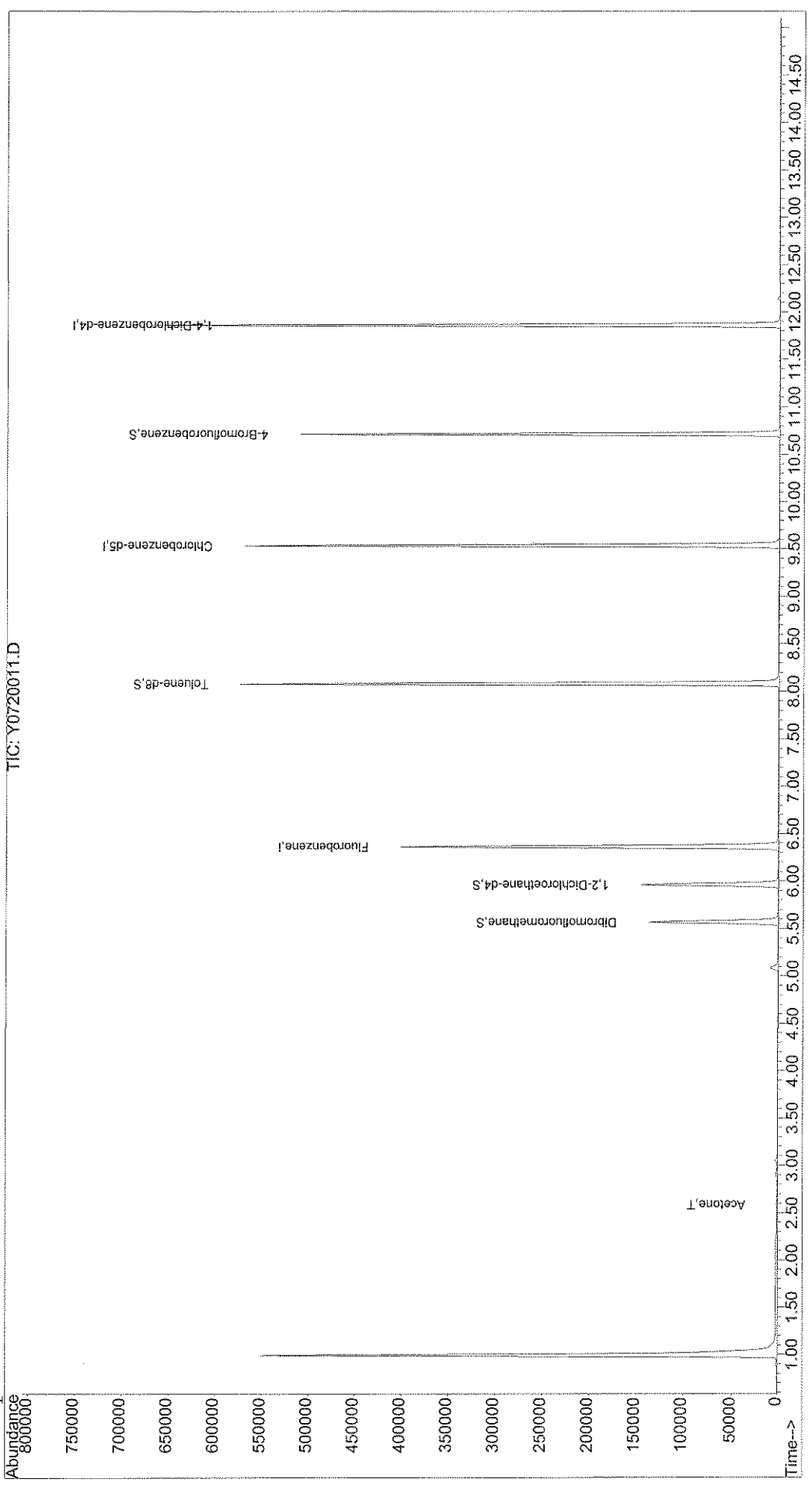
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720011.D  
Acq On : 20 Jul 2007 11:11  
Sample : JPL51-002  
Misc : #2 5mL +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:25 2007  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720011.D  
 Acq On : 20 Jul 2007 11:11  
 Sample : JPL51-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:25 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)

Title : VOA 8260- 5ML Calibration 5973Y

Last Update : Thu Jul 19 10:37:37 2007

Response via : Initial Calibration

DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	348006	50.00	ug/l	0.00 96.13%
54) Chlorobenzene-d5	9.53	82	166546	50.00	ug/l	0.00 92.72%
74) 1,4-Dichlorobenzene-d4	11.86	152	170499	50.00	ug/l	0.00 91.46%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	92177	49.46	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.92%
40) 1,2-Dichloroethane-d4	5.96	65	106619	48.95	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	97.90%
55) Toluene-d8	8.08	98	356704	49.44	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.88%
76) 4-Bromofluorobenzene	10.71	95	151890	50.75	ug/l	0.00

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.59	43	1465	0.31 ug/l #	48
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.68	76	132	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	d
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Y0720011.D 8260B.M Tue Jul 24 16:09:44 2007

8 07/24 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720011.D  
 Acq On : 20 Jul 2007 11:11  
 Sample : JPL51-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:25 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	194	Below Cal	#	57
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.01	78	128		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	57		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	8.14	92	125		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	532		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.69	91	107		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

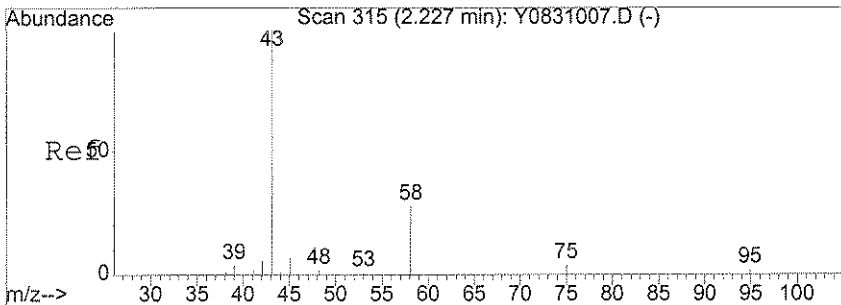
Data File : X:\MSVOA\YODA\072007\Y0720011.D  
 Acq On : 20 Jul 2007 11:11  
 Sample : JPL51-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:25 2007

Vial: 35  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

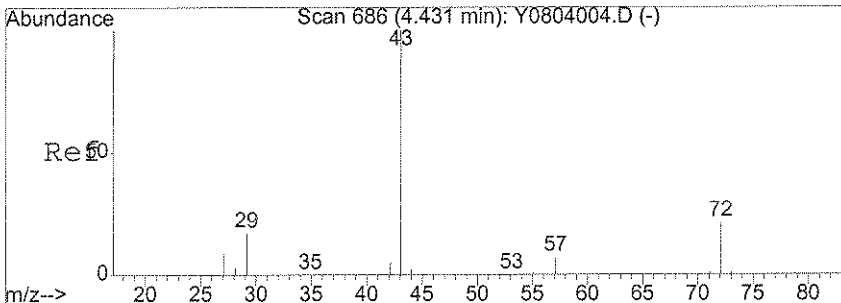
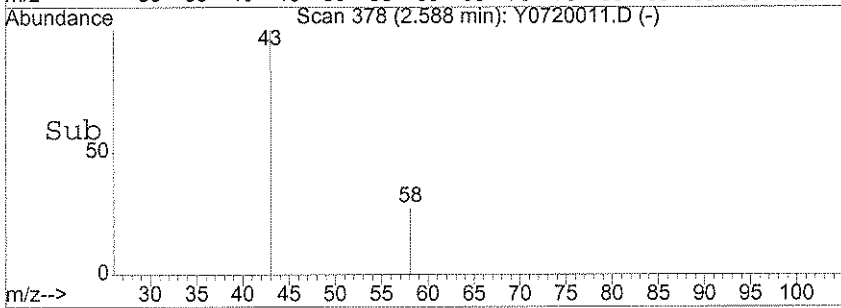
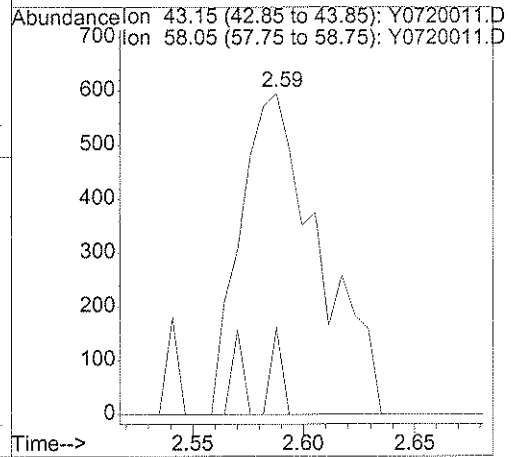
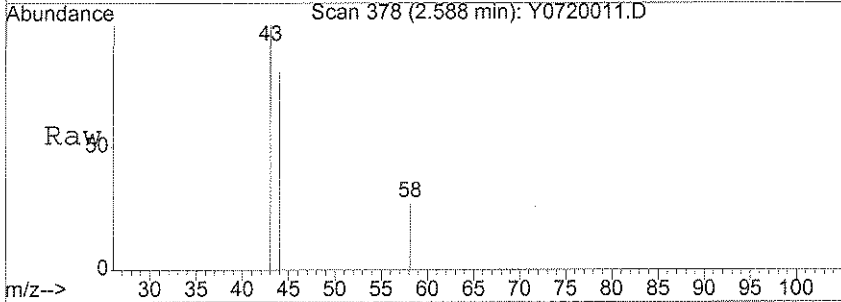
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.57	105	55		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	136		N.D.	
82) 4-Chlorotoluene	11.17	91	200		N.D.	
83) 1,3,5-Trimethylbenzene	11.17	105	67		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.52	105	139		N.D.	
86) sec-butylbenzene	11.69	105	288		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	322		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	183		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	14.03	225	58		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



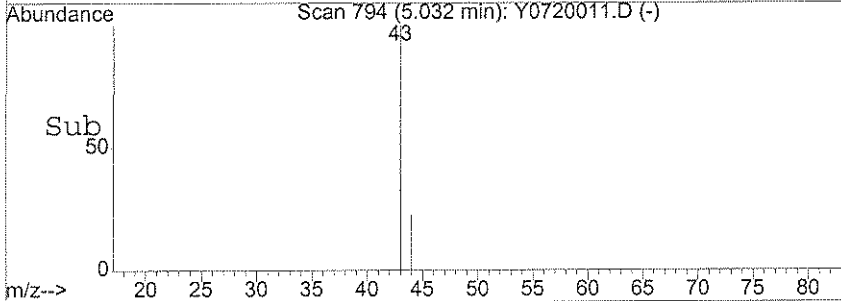
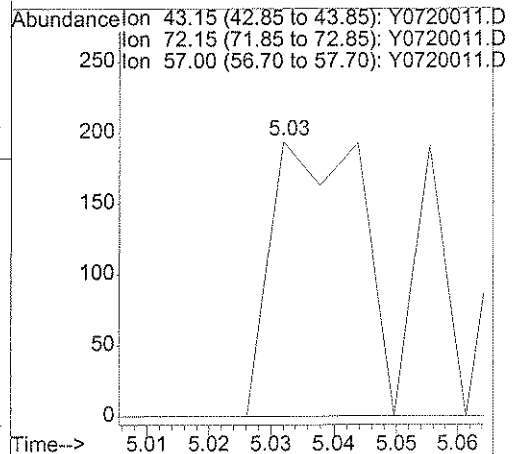
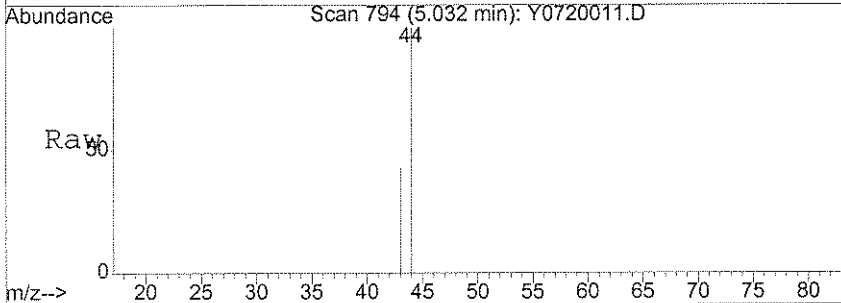
#11  
 Acetone  
 Concen: 0.31 ug/l  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.00 min  
 Lab File: Y0720011.D  
 Acq: 20 Jul 2007 11:11

Tgt Ion: 43 Resp: 1465  
 Ion Ratio Lower Upper  
 43 100  
 58 3.9 26.8 40.2#



#30  
 2-Butanone  
 Concen: Below Cal  
 RT: 5.03 min Scan# 794  
 Delta R.T. 0.01 min  
 Lab File: Y0720011.D  
 Acq: 20 Jul 2007 11:11

Tgt Ion: 43 Resp: 194  
 Ion Ratio Lower Upper  
 43 100  
 72 0.0 19.8 29.6#  
 57 0.0 6.6 9.8#



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-18-7/11/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-003  
 Lab File ID: Y0720020.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 14:53  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.64	
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.31	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.60	



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-18-7/11/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-003  
 Lab File ID: Y0720020.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 14:53  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-18-7/11/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL51  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-003  
 Lab File ID: Y0720020.D  
 Date Collected: 07/11/2007  
 Date/Time Analyzed: 07/20/2007 14:53  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

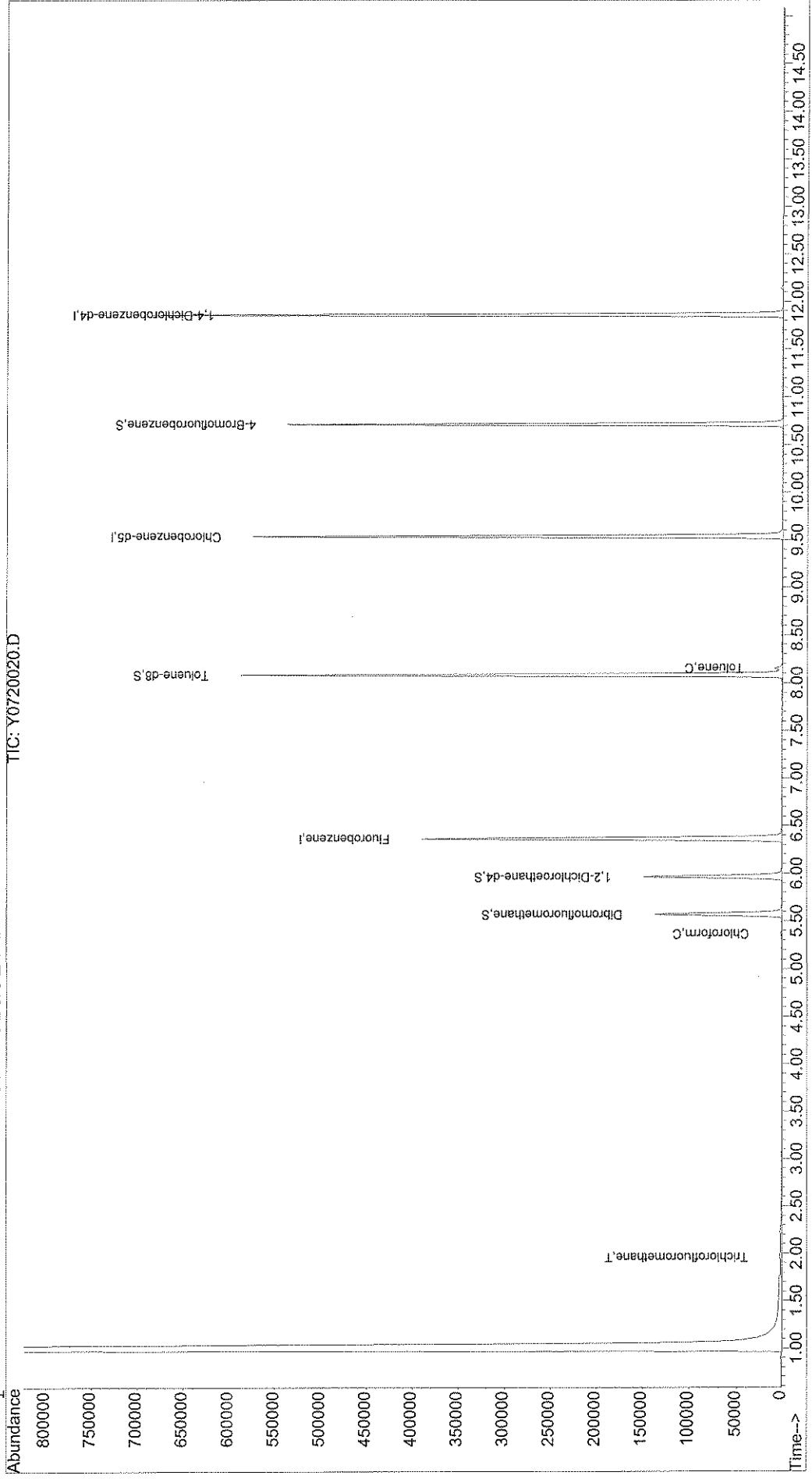
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720020.D  
Acq On : 20 Jul 2007 14:53  
Sample : JPL51-003  
Misc : #7 5mL +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:47 2007  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720020.D  
 Acq On : 20 Jul 2007 14:53  
 Sample : JPL51-003  
 Misc : #7 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:47 2007

Vial: 44  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	341828	50.00	ug/l	0.00 94.42%
54) Chlorobenzene-d5	9.53	82	167761	50.00	ug/l	0.00 93.40%
74) 1,4-Dichlorobenzene-d4	11.86	152	175933	50.00	ug/l	0.00 94.38%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	92364	50.45	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	100.90%
40) 1,2-Dichloroethane-d4	5.96	65	105912	49.50	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.00%
55) Toluene-d8	8.08	98	349851	48.14	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.28%
76) 4-Bromofluorobenzene	10.71	95	158389	51.29	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	1.96	101	1805	0.64	ug/l #	93
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0720020.D 8260B.M Mon Jul 23 10:22:33 2007

*Jr* 07/23/07  
 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720020.D  
 Acq On : 20 Jul 2007 14:53  
 Sample : JPL51-003  
 Misc : #7 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:47 2007

Vial: 44  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0	N.D.		
25) Chloroprene	0.00	53	0	N.D.		
26) Isopropyl ether	0.00	45	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.36	83	1051	0.31	ug/l	91
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
37) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	5.76	117	112	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	0.00	78	0	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) Isobutanol	0.00	43	0	N.D.		
44) t-amyl methyl ether	0.00	73	0	N.D.	d	
45) Trichloroethene	6.78	130	144	N.D.		
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	41	0	N.D.		
50) Bromodichloromethane	7.34	83	196	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.15	92	2965	0.60	ug/l	94
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	0.00	166	0	N.D.		
61) 1,3-Dichloropropene	0.00	76	0	N.D.		
62) 2-Hexanone	0.00	43	0	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) 1-Chlorohexane	0.00	91	0	N.D.	d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	9.80	91	86	N.D.		

Quantitation Report

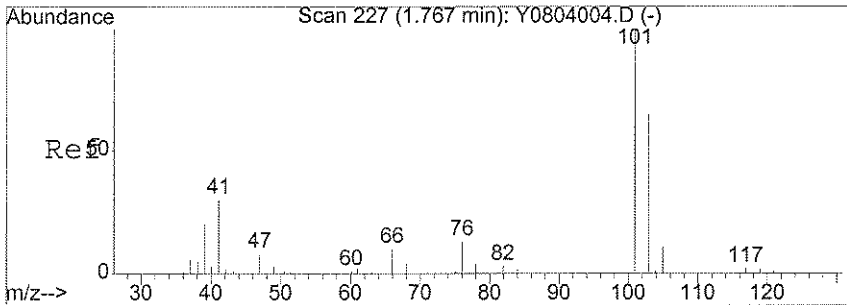
Data File : X:\MSVOA\YODA\072007\Y0720020.D  
 Acq On : 20 Jul 2007 14:53  
 Sample : JPL51-003  
 Misc : #7 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:47 2007

Vial: 44  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

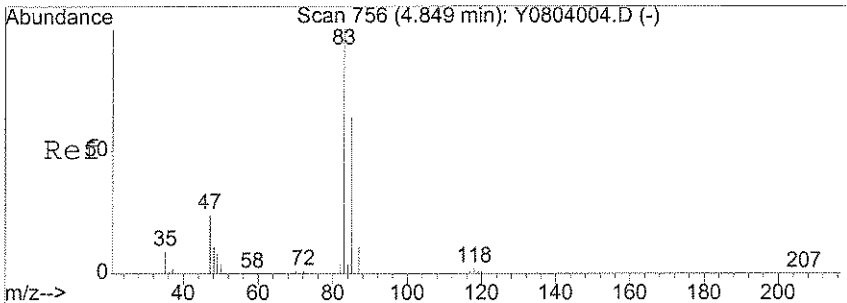
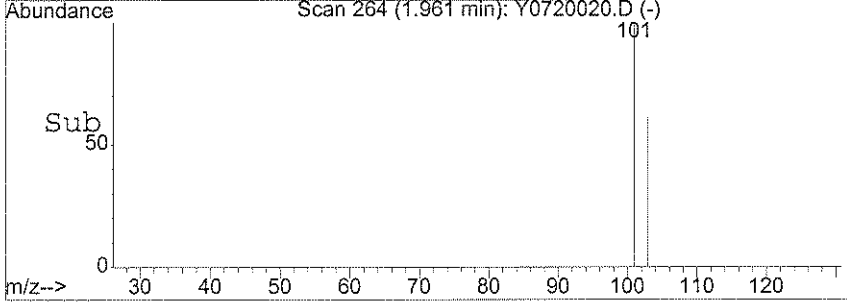
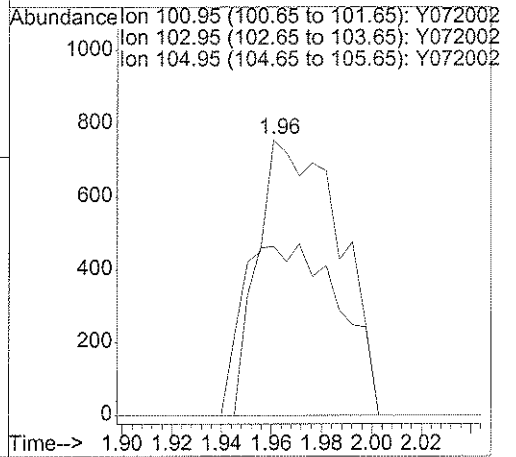
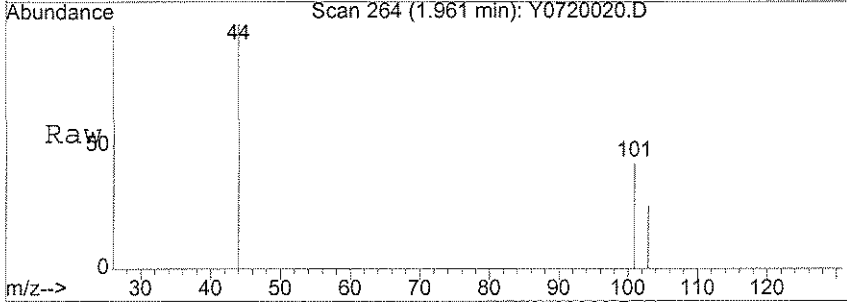
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.72	105	196		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.84	119	57		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	172		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



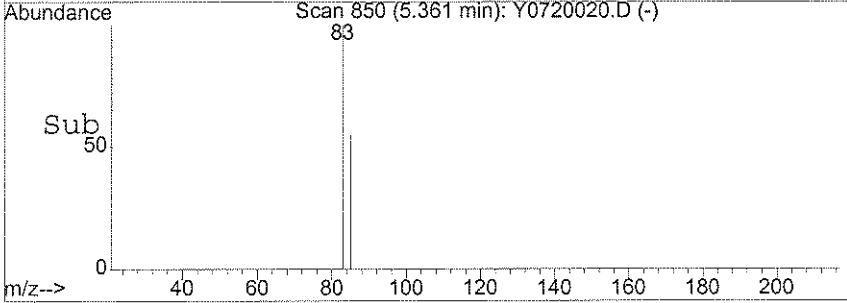
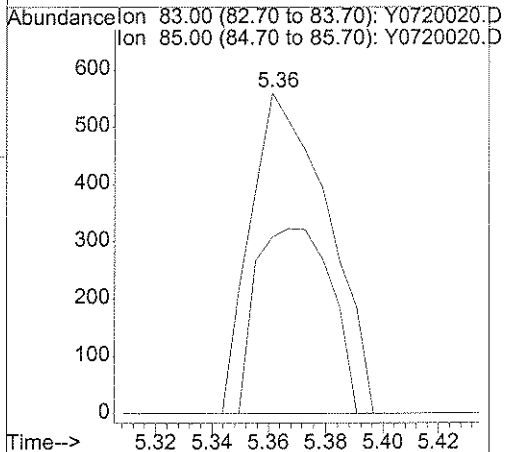
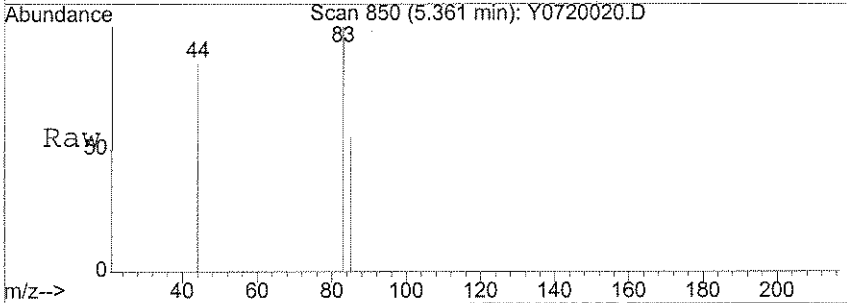
#7  
 Trichlorofluoromethane  
 Concen: 0.64 ug/l  
 RT: 1.96 min Scan# 264  
 Delta R.T. -0.01 min  
 Lab File: Y0720020.D  
 Acq: 20 Jul 2007 14:53

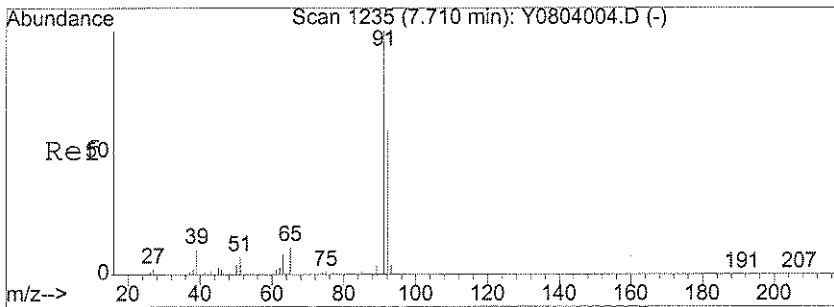
Tgt Ion	Resp	Lower	Upper
101	1805		
103	64.8	53.4	80.2
105	0.0	9.3	13.9#



#34  
 Chloroform  
 Concen: 0.31 ug/l  
 RT: 5.36 min Scan# 850  
 Delta R.T. -0.01 min  
 Lab File: Y0720020.D  
 Acq: 20 Jul 2007 14:53

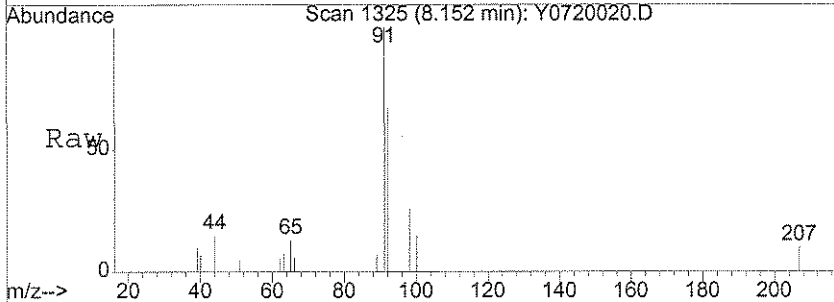
Tgt Ion	Resp	Lower	Upper
83	1051		
85	56.1	43.3	83.3



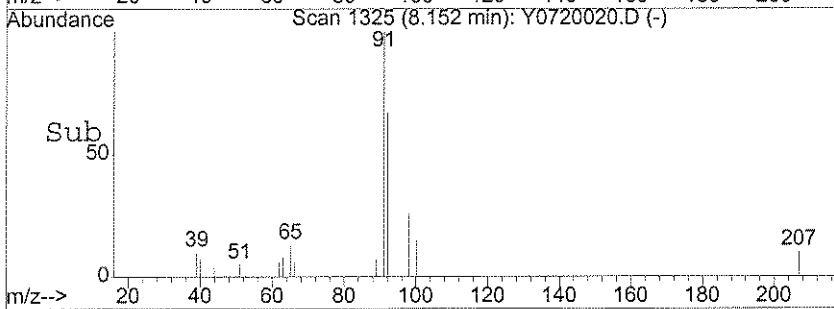
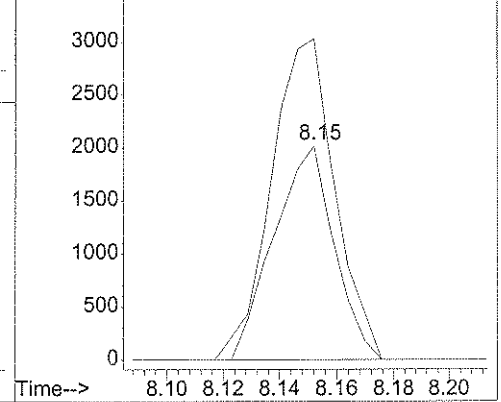


#56  
 Toluene  
 Concen: 0.60 ug/l  
 RT: 8.15 min Scan# 1325  
 Delta R.T. 0.01 min  
 Lab File: Y0720020.D  
 Acq: 20 Jul 2007 14:53

Tgt Ion: 92 Resp: 2965  
 Ion Ratio Lower Upper  
 92 100  
 91 158.6 133.7 200.5



Abundance Ion 92.05 (91.75 to 92.75): Y0720020.D  
 3500 Ion 91.05 (90.75 to 91.75): Y0720020.D





**TIC FORMS**

SDG JPL51

VOLATILES ANALYSIS

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-13

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL51

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL51-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720019.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/22/2007 *MC 7/21/07*

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720019.D Vial: 43  
Acq On : 20 Jul 2007 14:28 Operator: DGA  
Sample : JPL51-001 Inst : yoda  
Misc : #6 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720019.D 8260B.M Mon Jul 23 07:43:51 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-8

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL51  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL51-002  
 Lab File ID: Y0720011.D  
 Date Collected: 07/12/2007 *mc 7/21/07*  
 Date Analyzed: 07/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720011.D Vial: 35  
Acq On : 20 Jul 2007 11:11 Operator: DGA  
Sample : JPL51-002 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720011.D 8260B.M Mon Jul 23 07:26:30 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-18-7/11/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL51

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL51-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720020.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007 *mc 7/31/07*

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720020.D Vial: 44  
Acq On : 20 Jul 2007 14:53 Operator: DGA  
Sample : JPL51-003 Inst : yoda  
Misc : #7 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720020.D 8260B.M Tue Jul 24 17:32:34 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B072007MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL51

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: B072007MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720008.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720008.D Vial: 32  
Acq On : 20 Jul 2007 9:58 Operator: DGA  
Sample : B072007MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-40-19) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720008.D 8260B.M Mon Jul 23 10:28:21 2007

# **SAMPLE DATA**

**SDG# JPL51**

**Semivolatiles**

1  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13
-------

Lab Name: Laucks Testing Laboratories,  
 SDG No.: JPL51  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 1020.0 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: \_\_\_\_\_ Decanted: (Y/N) N  
 Concentrated Extract Volume: 1000 (uL)  
 Injection Volume: 2.0 (uL)  
 GPC Cleanup: (Y/N) N pH: <2

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019778  
 Lab Sample ID: JPL51-001  
 Lab File ID: L0719007.D  
 Date Collected: 07/11/2007  
 Date Extracted: 07/16/2007  
 Date Analyzed: 07/19/2007  
 Dilution Factor: 1.0  
 Extraction: (Type) CONT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	2.0	

Comments:

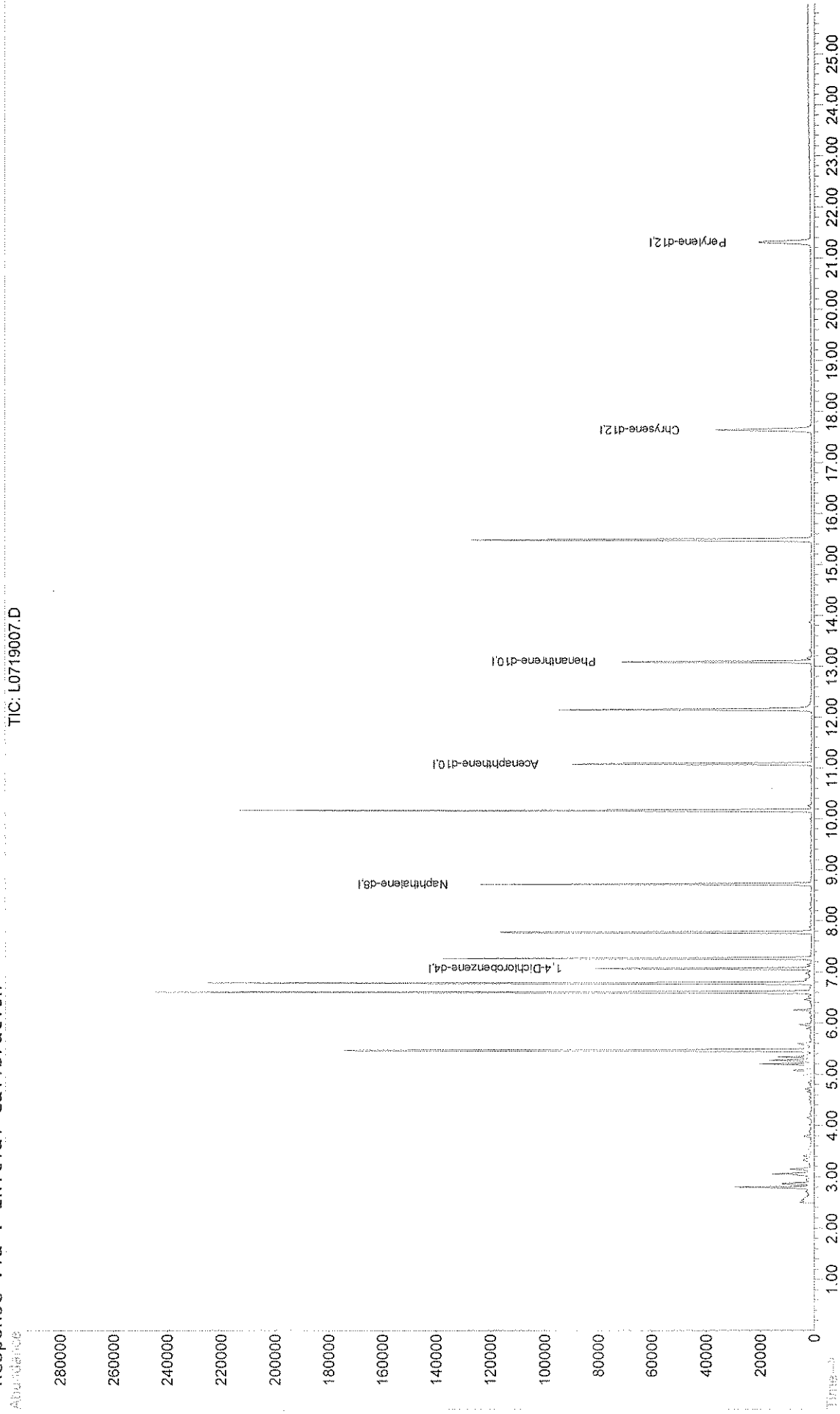
Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719007.D  
Acq On : 19 Jul 2007 14:10  
Sample : JPL51-001  
Misc : 5970L 1020ML->1ML+IS  
MS Integration Params: RTEINT.P  
Quant Time: Jul 23 9:46 2007

Vial: 5  
Operator: AP  
Inst : LOUIE  
Multiplier: 1.00

Quant Results File: L8270.RES

Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
Title : 8270 Sw846 BNA Calibration 5970L  
Last Update : Mon Jul 23 09:20:41 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719007.D  
 Acq On : 19 Jul 2007 14:10  
 Sample : JPL51-001  
 Misc : 5970L 1020ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 23 9:46 2007

Vial: 5  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 23 09:20:41 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) 1,4-Dichlorobenzene-d4	7.07	152	22246	20.00	ng/u1	0.00 NA%
24) Naphthalene-d8	8.72	136	71835	20.00	ng/u1	0.00 NA%
40) Acenaphthene-d10	11.07	164	35320	20.00	ng/u1	-0.02 NA%
68) Phenanthrene-d10	13.09	188	50654	20.00	ng/u1	0.00 NA%
82) Chrysene-d12	17.64	240	32499	20.00	ng/u1	-0.02 NA%
92) Perylene-d12	21.30	264	22019	20.00	ng/u1	0.00 NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.47	112	78195	54.17	ng/u1	0.00
Spiked Amount	75.000	Range 20 - 110	Recovery =	72.23%		
7) Phenol-d5	6.61	99	103738	51.12	ng/u1	0.00
Spiked Amount	75.000	Range 10 - 115	Recovery =	68.16%		
11) 2-Chlorophenol-d4	6.79	132	87695	54.29	ng/u1	0.00
Spiked Amount	75.000	Range 48 - 117	Recovery =	72.39%		
15) 1,2-Dichlorobenzene-d4	7.27	152	29856	27.62	ng/u1	0.00
Spiked Amount	50.000	Range 38 - 82	Recovery =	55.24%		
25) Nitrobenzene-d5	7.78	82	67655	39.00	ng/u1	0.00
Spiked Amount	50.000	Range 40 - 110	Recovery =	78.00%		
46) 2-Fluorobiphenyl	10.17	172	95374	32.54	ng/u1	0.00
Spiked Amount	50.000	Range 50 - 100	Recovery =	65.08%		
72) 2,4,6-Tribromophenol	12.14	330	17784	52.03	ng/u1	-0.02
Spiked Amount	75.000	Range 40 - 125	Recovery =	69.37%		
85) Terphenyl-d14	15.48	244	82225	34.12	ng/u1	0.00
Spiked Amount	50.000	Range 50 - 135	Recovery =	68.24%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	3.41	88	1211	1.99	ng/u1#	✓ 89
3) N-nitrosodimethylamine	3.68	74	27	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	6.61	77	181	N.D.		
8) Phenol	6.62	94	226	N.D.		
9) Aniline	6.79	93	160	N.D.		
10) Bis(2-Chloroethyl)ether	6.79	93	160	N.D.		
12) 2-Chlorophenol	0.00	128	0	N.D.		
13) 1,3-Dichlorobenzene	0.00	146	0	N.D.		
14) 1,4-Dichlorobenzene	0.00	146	0	N.D.		
16) Benzyl alcohol	7.27	108	248	N.D.		
17) 1,2-Dichlorobenzene	0.00	146	0	N.D.		
18) 2-Methylphenol	7.27	108	248	N.D.		
19) Bis(2-chloroisopropyl)ethe	7.47	45	77	N.D.		
20) 3 & 4-Methylphenol	0.00	108	0	N.D.		
21) Acetophenone	0.00	105	0	N.D.		
22) n-Nitroso-di-n-propylamine	7.57	70	26	N.D.		
23) Hexachloroethane	0.00	117	0	N.D.		
26) Nitrobenzene	7.78	77	266	N.D.		
27) Isophorone	0.00	82	0	N.D.		
28) 2-Nitrophenol	0.00	139	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 L0719007.D L8270.M Mon Jul 23 09:47:09 2007

Quantitation Report

Data File : X:\MSABN\LOUIE\071907\L0719007.D  
 Acq On : 19 Jul 2007 14:10  
 Sample : JPL51-001  
 Misc : 5970L 1020ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 23 9:46 2007

Vial: 5  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 23 09:20:41 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2,4-Dimethylphenol	0.00	107	0		N.D.	
30) bis(2-Chloroethoxy)methane	8.24	93	24		N.D.	
31) Benzoic acid	8.31	105	94	2.37	ng/u1#NOL	58
32) 2,4-Dichlorophenol	0.00	162	0		N.D.	
33) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
34) Naphthalene	8.55	128	29		N.D.	
35) 4-Chloroaniline	0.00	127	0		N.D.	
36) Hexachlorobutadiene	0.00	225	0		N.D.	
37) Caprolactam	0.00	113	0		N.D.	
38) 4-Chloro-3-methylphenol	9.56	107	30		N.D.	
39) 2-Methylnaphthalene	0.00	142	0		N.D.	
41) 1-Methylnaphthalene	0.00	142	0		N.D.	
42) Hexachlorocyclopentadiene	0.00	237	0		N.D.	
43) 1,2,4,5-Tetrachlorobenzene	0.00	216	0		N.D.	
44) 2,4,6-Trichlorophenol	0.00	196	0		N.D.	
45) 2,4,5-Trichlorophenol	0.00	196	0		N.D.	
47) 1,1'-Biphenyl	10.17	154	181		N.D.	
48) 2-Chloronaphthalene	0.00	162	0		N.D.	
49) 2-Nitroaniline	10.33	65	27		N.D.	
50) Dimethylphthalate	0.00	163	0		N.D.	
51) 1,4-Dinitrobenzene	0.00	168	0		N.D.	
52) 1,3-Dinitrobenzene	0.00	168	0		N.D.	
53) 2,6-Dinitrotoluene	0.00	165	0		N.D.	
54) Acenaphthylene	0.00	152	0		N.D.	
55) 1,2-Dinitrobenzene	0.00	168	0		N.D.	
56) 3-Nitroaniline	10.85	138	24		N.D.	
57) Acenaphthene	0.00	153	0		N.D.	
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	11.25	109	21		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	11.66	149	56		N.D.	
65) Fluorene	0.00	166	0		N.D.	
66) 4-Chlorophenyl-phenylether	0.00	204	0		N.D.	
67) 4-Nitroaniline	0.00	138	0		N.D.	
69) 4,6-Dinitro-2-methylphenol	0.00	198	0		N.D.	
70) N-nitrosodiphenylamine	12.14	169	658		N.D.	
71) 1,2-Diphenylhydrazine	12.14	77	192		N.D.	
73) 4-Bromophenyl-phenylether	0.00	248	0		N.D.	
74) Hexachlorobenzene	0.00	284	0		N.D.	
75) Atrazine	0.00	200	0		N.D.	
76) Pentachlorophenol	0.00	266	0		N.D.	
77) Phenanthrene	0.00	178	0		N.D.	
78) Anthracene	0.00	178	0		N.D.	
79) Carbazole	0.00	167	0		N.D.	
80) Di-n-butylphthalate	13.86	149	863		N.D.	
81) Fluoranthene	0.00	202	0		N.D.	
83) Benzidine	14.90	184	19		N.D.	
84) Pyrene	0.00	202	0		N.D.	
86) Butylbenzylphthalate	0.00	149	0		N.D.	
87) Bis(2-ethylhexyl)adipate	0.00	129	0		N.D.	
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	17.64	228	36		N.D.	

(#) = qualifier out of range (m) = manual integration  
 L0719007.D L8270.M Mon Jul 23 09:47:10 2007

Quantitation Report

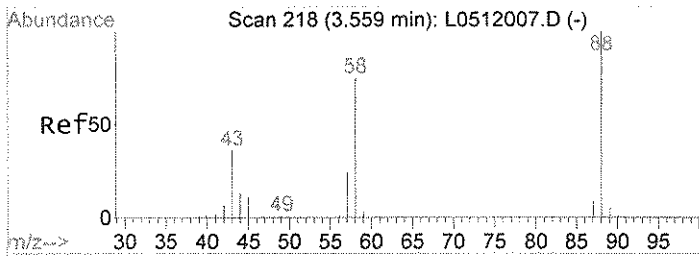
Data File : X:\MSABN\LOUIE\071907\L0719007.D  
 Acq On : 19 Jul 2007 14:10  
 Sample : JPL51-001  
 Misc : 5970L 1020ML->1ML+IS  
 MS Integration Params: RTEINT.P  
 Quant Time: Jul 23 9:46 2007

Vial: 5  
 Operator: AP  
 Inst : LOUIE  
 Multiplr: 1.00

Quant Results File: L8270.RES

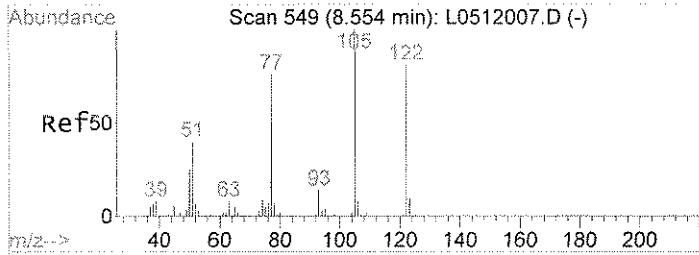
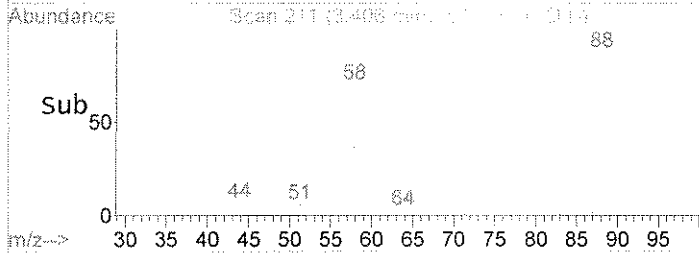
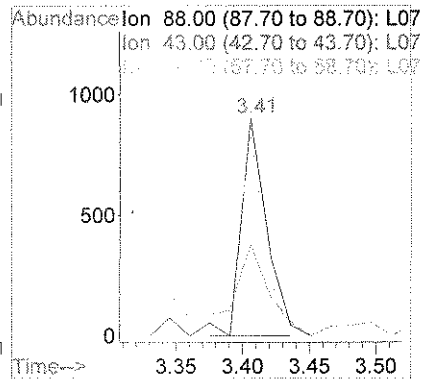
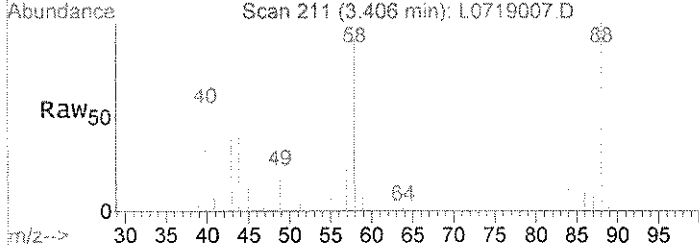
Quant Method : X:\MSABN\LOUIE\QUANT\L8270.M (RTE Integrator)  
 Title : 8270 SW846 BNA Calibration 5970L  
 Last Update : Mon Jul 23 09:20:41 2007  
 Response via : Initial Calibration  
 DataAcq Meth : METHOD.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
90) bis(2-Ethylhexyl)phthalate	0.00	149	0		N.D.	d
91) Chrysene	17.64	228	36		N.D.	
93) Di-n-octylphthalate	0.00	149	0		N.D.	
94) Benzo[b]fluoranthene	0.00	252	0		N.D.	
95) Benzo[k]fluoranthene	0.00	252	0		N.D.	
96) Benzo[a]pyrene	21.30	252	35		N.D.	
97) Indeno[1,2,3-cd]pyrene	0.00	276	0		N.D.	
98) Dibenz[a,h]anthracene	0.00	278	0		N.D.	
99) Benzo[g,h,i]perylene	0.00	276	0		N.D.	



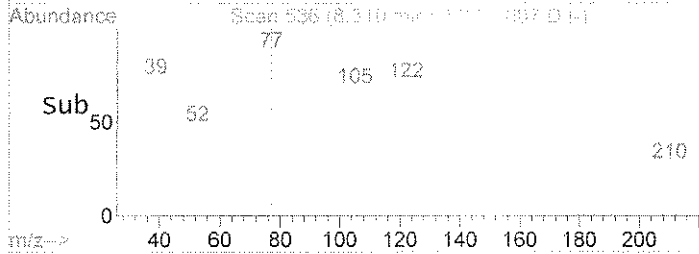
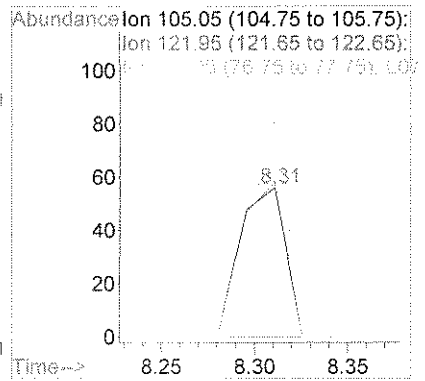
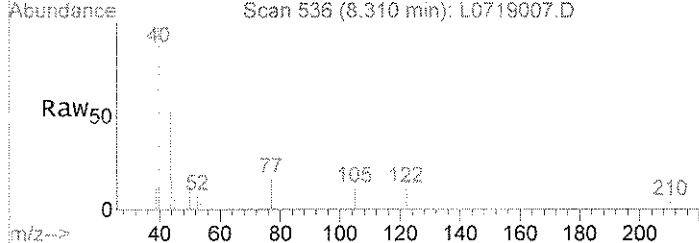
#2  
 1,4-Dioxane  
 Concen: 1.99 ng/ul  
 RT: 3.41 min Scan# 211  
 Delta R.T. 0.00 min  
 Lab File: L0719007.D  
 Acq: 19 Jul 2007 14:10

Tgt Ion	Resp	Lower	Upper
88	1211		
43	59.7	33.6	50.4#
58	91.1	70.6	105.8



#31  
 Benzoic acid  
 Concen: 2.37 ng/ul  
 RT: 8.31 min Scan# 536  
 Delta R.T. -0.08 min  
 Lab File: L0719007.D  
 Acq: 19 Jul 2007 14:10

Tgt Ion	Resp	Lower	Upper
105	94		
122	103.6	66.8	100.2#
77	146.4	71.7	107.5#





**Metals Data**

**JPL51**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL51

SOW No.: \_\_\_\_\_

Sample No.
MW-13
MW-13MS
MW-13MSD
MW-8
MW-8MS
MW-8MSD

Lab Sample ID
JPL51-001
JPL51-001MS
JPL51-001MSD
JPL51-002
JPL51-002MS
JPL51-002MSD

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Bill Ambacher

Name: Bill Ambacher

Date: 8/8/07

Title: Inorganics/Metals Manager

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-13

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL51

Matrix (soil/water): Water

Lab Sample ID: JPL51-001

Level (low/med): LOW

Date Received: 07/12/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	65200		*	P	R020230
7440-47-3	Chromium	66.2			M	R020222
7439-89-6	Iron	100	U		P	R020230
7439-92-1	Lead	22.2			M	R020222
7439-95-4	Magnesium	23100		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	28700		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-8

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL51

Matrix (soil/water): Water

Lab Sample ID: JPL51-002

Level (low/med): LOW

Date Received: 07/12/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	50800		*	P	R020230
7440-47-3	Chromium	13.2			M	R020222
7439-89-6	Iron	100	U		P	R020230
7439-92-1	Lead	3.24			M	R020222
7439-95-4	Magnesium	18500		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	18300		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL51**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL51

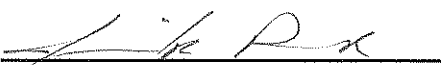
SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-13</u>	<u>JPL51-001</u>
<u>MW-13D</u>	<u>JPL51-001D</u>
<u>MW-13MS</u>	<u>JPL51-001MS</u>
<u>MW-13MSD</u>	<u>JPL51-001MSD</u>
<u>MW-8</u>	<u>JPL51-002</u>
<u>MW-8D</u>	<u>JPL51-002D</u>
<u>MW-8MS</u>	<u>JPL51-002MS</u>
<u>MW-8MSD</u>	<u>JPL51-002MSD</u>

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-31-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**



**Laucks Testing Laboratories, Inc.**

Final Results

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL51  
**Sample Number:** MW-13 **Date/Time Collected:** 07/11/2007 09:14  
**Lab Sample ID:** JPL51-001 **Date/Time Received:** 07/12/2007 08:25  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.8		0.10	0.10	07/12/2007	07/12/2007	R019502

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	430		2	2	07/17/2007	07/19/2007	R019598

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	7.2		0.40	0.55	07/12/2007	07/12/2007	R019501
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.017	07/12/2007	07/12/2007	R019501
Sulfate as SO4	14808-79-8	10	67		10	1.7	07/12/2007	07/12/2007	R019501
Chloride	16887-00-6	10	36		2.0	0.76	07/12/2007	07/12/2007	R019501
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.33	07/12/2007	07/12/2007	R019501

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/23/2007	07/23/2007	R019820
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	180		8	8	07/23/2007	07/23/2007	R019820

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	270		4.0	0.56	07/24/2007	07/25/2007	R019848

**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL51  
**Sample Number:** MW-8 **Date/Time Collected:** 07/11/2007 11:33  
**Lab Sample ID:** JPL51-002 **Date/Time Received:** 07/12/2007 08:25  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.9		0.10	0.10	07/12/2007	07/12/2007	R019502

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	300		2	2	07/17/2007	07/19/2007	R019598

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	3.9		0.040	0.055	07/12/2007	07/12/2007	R019501
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.017	07/12/2007	07/12/2007	R019501
Sulfate as SO4	14808-79-8	10	57		10	1.7	07/12/2007	07/12/2007	R019501
Chloride	16887-00-6	10	28		2.0	0.76	07/12/2007	07/12/2007	R019501
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.33	07/12/2007	07/12/2007	R019501

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/23/2007	07/23/2007	R019820
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	130		8	8	07/23/2007	07/23/2007	R019820

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	130		2.0	0.28	07/24/2007	07/25/2007	R019848

**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELE**

**SDG NO.: JPL52**

**AUGUST 10, 2007**

# LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL52  
Date of Report: 8/10/2007

## **SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

### **Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<b><u>Client Sample Identification</u></b>	<b><u>Laucks Sample Identification</u></b>	<b><u>Testing Analytical Request</u></b>
MW-26-2	JPL52-001	VOA/MET/INO
MW-26-1	JPL52-002	VOA/MET/INO
EB-15-7/12/07	JPL52-003	VOA/MET/INO
TB-19-7/12/07	JPL52-004	VOA
MW-10	JPL52-005	VOA/MET/INO

### **Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

### **Sample Receipt Comments:**

One of three VOA vials for EB-15-7/12/07 contained an air bubble less than ¼ inch in size.

One of two VOA vials for TB-19-7/12/07 contained an air bubble greater than ¼ inch in size.

## **GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Quality Control Analyses:

All quality control parameters were met.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP Metals:

The preparation blank for metals in soil is calculated to mg/kg by assuming a sample weight of 1.00g/100mL. Total solids of 100% are also assumed.

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

### ICP-MS/ICP Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

Samples in this SDG (JPL52) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate samples and serial dilution samples apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL51 or the raw data provided.

For the run sequence R020222, the internal standard recovery for scandium (affects Cr), germanium (affects As), and terbium (affects Pb) drifted above the recommended control limit of 125% of the initial calibration standard. This is due to instrument drift which is shown in both the samples and the CCVs. Since the CCV recoveries were within control limits, even with the internal standard drifting beyond 125% of the initial calibration standard, it is assumed that the internal standard is making appropriate corrections to the results. Samples were reported only if the internal standard recovery was within 60-125% of the internal standard intensity of the previous CCV. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for these events.

For the run sequence R020230, the internal standard recovery for scandium (affects Ca, Fe, Mg, and Na) and germanium (affects K) drifted above the recommended control limit of 125% of the initial calibration standard. This is due to instrument drift which is shown in both the samples and the CCVs. Since the CCV recoveries were within control limits, even with the internal standard drifting beyond 125% of the initial calibration standard, it is assumed that the internal standard is making appropriate corrections to the results. Samples were reported only if the internal standard recovery was within 60-

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

125% of the internal standard intensity of the previous CCV. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for this event.

The matrix spike sample percent recovery of calcium was outside of the established control limits of 70-130% for sample # MW-13 and MW-8. The sample concentration of this element exceeds the spike concentration by a factor of four or more, therefore no further corrective action was required. Data have not been flagged for this event.

The matrix duplicate sample relative percent differences for calcium, magnesium, and sodium were outside the control limits of  $\pm 20\%$  for sample MW-13. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms 1 and 5C.

The matrix duplicate sample relative percent differences for calcium and magnesium were outside the control limits of  $\pm 20\%$  for sample MW-8. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms 1 and 5C.

### **Miscellaneous Inorganics:**

For run sequence R019746, the fourth continuing calibration verification was outside the established control limits for the nitrate analysis. No reported samples were bracketed by this CCV. Therefore, no further action was taken.

For run sequence R019848, the blank spike recovery was outside established control limits for the perchlorate analysis. All other quality control elements were within control limits. Therefore, no further action was taken.

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
- J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
- E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
- C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.



## LAUCKS TESTING LABORATORIES

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

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Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Kara Godineaux  
Project Manager

8/10/07  
(DATE)



Harry Romberg  
Quality Assurance Officer

8/10/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

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**ATTACHMENT A**

Chain-of-Custody Copies

LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICS (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL52-001	07/13/2007 08:15 AM	07/12/2007 10:25 AM	MW-26-2	A+	A-	IN	IN	IN	IN	IN	IN	IN
JPL52-002	07/13/2007 08:15 AM	07/12/2007 11:02 AM	MW-26-1	A+	A-	IN	IN	IN	IN	IN	IN	IN
JPL52-003	07/13/2007 08:15 AM	07/12/2007 10:43 AM	EB-15-7/12/07	A+	A-	IN	IN	IN	IN	IN	IN	IN
JPL52-004	07/13/2007 08:15 AM	07/12/2007 12:00 AM	TB-19-7/12/07								IN	
JPL52-005	07/13/2007 08:15 AM	07/12/2007 08:49 AM	MW-10	A+	A-	IN	IN	IN	IN	IN	IN	IN

Approved By: *[Signature]*

On: *2/17/07*

Samples identified with a '\*' client has requested QC for  
**LEGEND:** -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

FORM LTL-PM-8.0





**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL52

Cooler: AAD613

Temperatures: 3.6

COC #: 42861

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL52-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL52-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL52-003	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL52-004	0001	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	None
JPL52-005	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

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**ATTACHMENT B**

Index



**LAUCKS TESTING LABORATORIES**

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**Battelle**

**SDG No.: JPL52**

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Completed and checked by:

JENNI GROSS

Date:

8/10/07

**SAMPLE DATA**

SDG JPL52

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-001  
 Lab File ID: Y0720021.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 15:17  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-2

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-001  
 Lab File ID: Y0720021.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 15:17  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-2

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL52-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 15:17

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

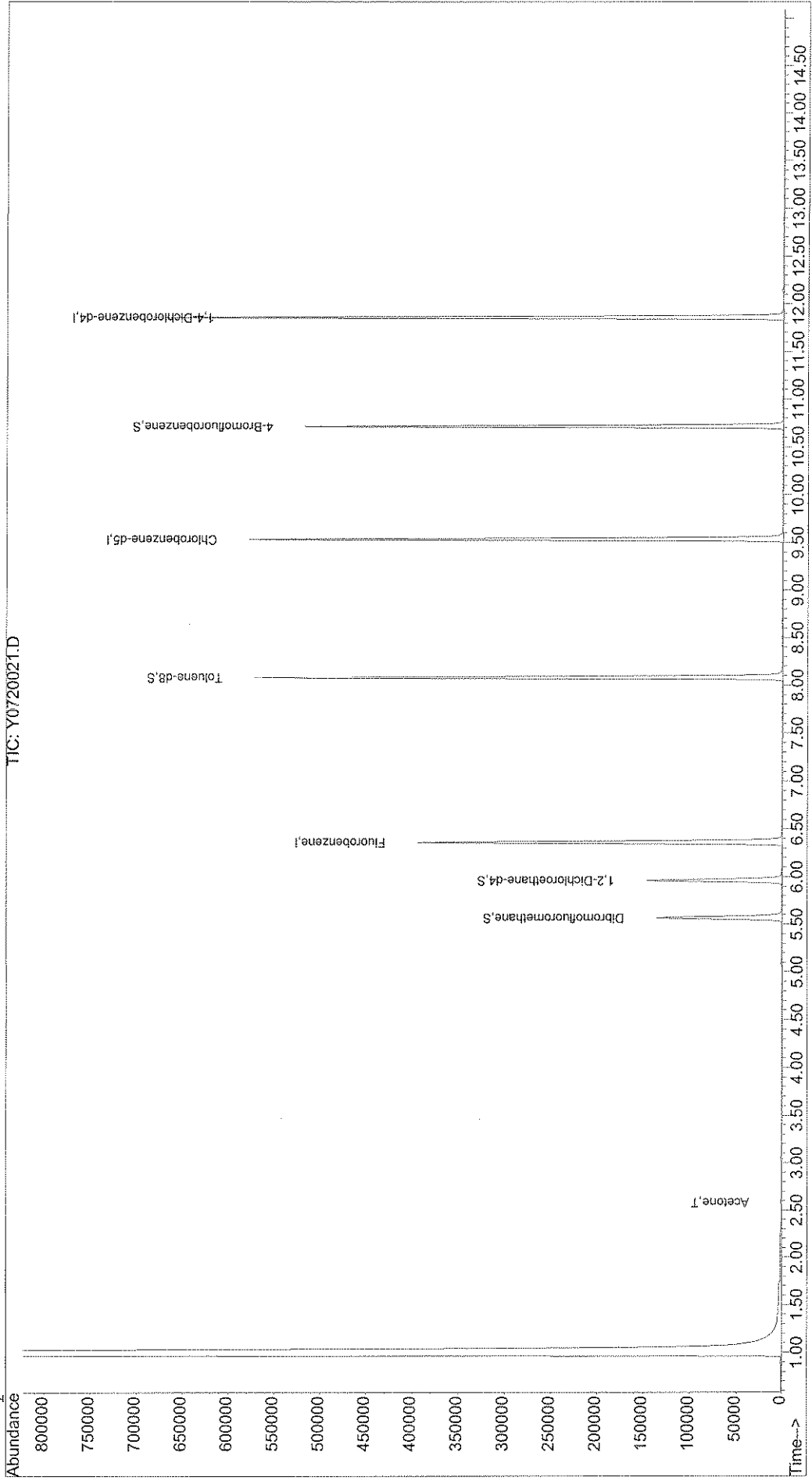
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720021.D Vial: 45  
Acq On : 20 Jul 2007 15:17 Operator: DGA  
Sample : JPL52-001 Inst : yoda  
Misc : #7 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:49 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720021.D  
 Acq On : 20 Jul 2007 15:17  
 Sample : JPL52-001  
 Misc : #7 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:49 2007

Vial: 45  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	338030	50.00	ug/l	0.00	93.37%
54) Chlorobenzene-d5	9.53	82	169508	50.00	ug/l	0.00	94.37%
74) 1,4-Dichlorobenzene-d4	11.86	152	171809	50.00	ug/l	0.00	92.16%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	91066	50.30	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	100.60%	
40) 1,2-Dichloroethane-d4	5.96	65	106138	50.16	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.32%	
55) Toluene-d8	8.08	98	347723	47.35	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	94.70%	
76) 4-Bromofluorobenzene	10.71	95	153880	51.02	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.58	43	1433	0.33	ug/l	93
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	260	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0720021.D 8260B.M Mon Jul 23 07:49:18 2007

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720021.D  
 Acq On : 20 Jul 2007 15:17  
 Sample : JPL52-001  
 Misc : #7 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:49 2007

Vial: 45  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0	N.D.		
25) Chloroprene	0.00	53	0	N.D.		
26) Isopropyl ether	0.00	45	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.	d	
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	0.00	83	0	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
37) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.01	78	54	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) Isobutanol	0.00	43	0	N.D.		
44) t-amyl methyl ether	0.00	73	0	N.D.	d	
45) Trichloroethene	0.00	130	0	N.D.		
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	41	0	N.D.		
50) Bromodichloromethane	0.00	83	0	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	0.00	92	0	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	0.00	166	0	N.D.		
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	0.00	43	0	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) 1-Chlorohexane	9.53	91	589	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	9.80	91	56	N.D.		

(#) = qualifier out of range (m) = manual integration



Quantitation Report

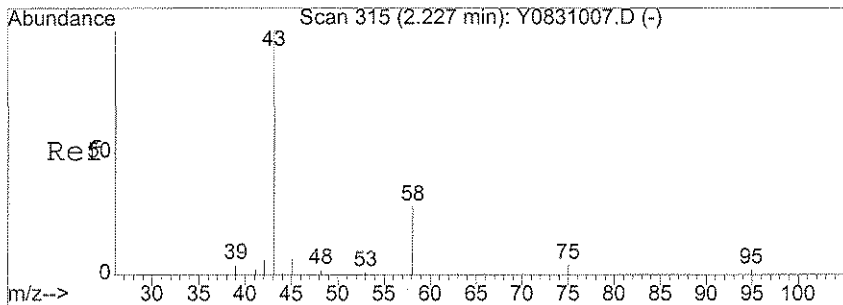
Data File : X:\MSVOA\YODA\072007\Y0720021.D  
 Acq On : 20 Jul 2007 15:17  
 Sample : JPL52-001  
 Misc : #7 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:49 2007

Vial: 45  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

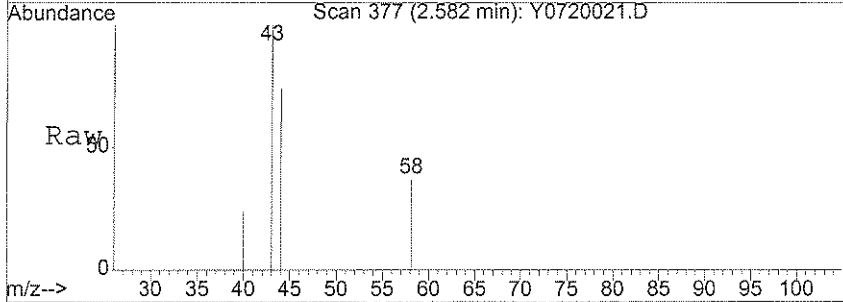
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	220		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	56		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.69	105	54		N.D.	
86) sec-butylbenzene	11.69	105	54		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	0.00	119	0		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	58		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

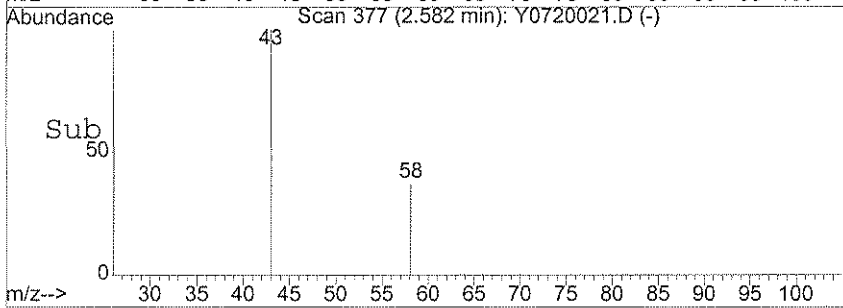
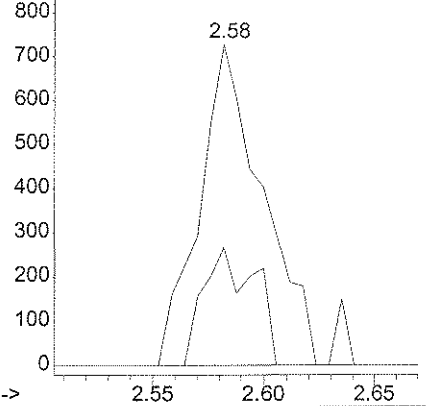


#11  
 Acetone  
 Concen: 0.33 ug/l  
 RT: 2.58 min Scan# 377  
 Delta R.T. -0.01 min  
 Lab File: Y0720021.D  
 Acq: 20 Jul 2007 15:17

Tgt Ion: 43 Resp: 1433  
 Ion Ratio Lower Upper  
 43 100  
 58 29.7 26.8 40.2



Abundance Ion 43.15 (42.85 to 43.85): Y0720021.D  
 Ion 58.05 (57.75 to 58.75): Y0720021.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-002  
 Lab File ID: Y0720022.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 15:42  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-1

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL52 Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL52-002

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0720022.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/20/2007 15:42

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-1

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-002  
 Lab File ID: Y0720022.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 15:42  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

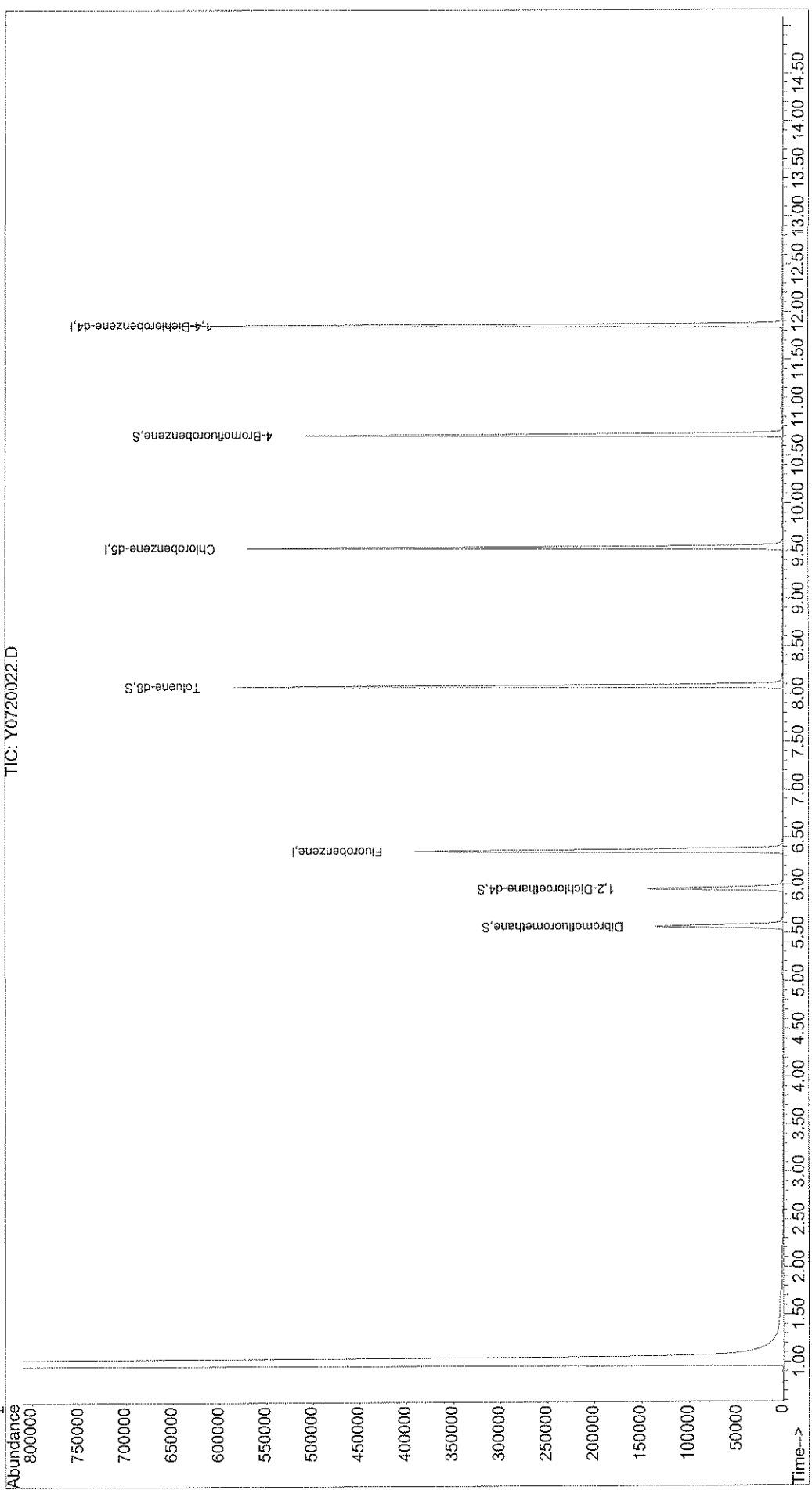
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720022.D Vial: 46  
Acq On : 20 Jul 2007 15:42 Operator: DGA  
Sample : JPL52-002 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:51 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720022.D  
 Acq On : 20 Jul 2007 15:42  
 Sample : JPL52-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:51 2007

Vial: 46  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	346635	50.00	ug/l	0.00 95.75%
54) Chlorobenzene-d5	9.53	82	167279	50.00	ug/l	0.00 93.13%
74) 1,4-Dichlorobenzene-d4	11.86	152	170879	50.00	ug/l	0.00 91.67%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	89896	48.43	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	96.86%
40) 1,2-Dichloroethane-d4	5.96	65	106690	49.17	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	98.34%
55) Toluene-d8	8.08	98	357789	49.37	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.74%
76) 4-Bromofluorobenzene	10.71	95	152658	50.89	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	0.00	50	0		N.D.	
4) Vinyl Chloride	0.00	62	0		N.D.	
5) Bromomethane	0.00	96	0		N.D.	
6) Chloroethane	0.00	64	0		N.D.	
7) Trichlorofluoromethane	0.00	101	0		N.D.	
8) Acrolein	0.00	56	0		N.D.	
9) 1,1-Dichloroethene	0.00	96	0		N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0		N.D.	
11) Acetone	0.00	43	0		N.D.	d
12) Iodomethane	0.00	142	0		N.D.	
13) Bromoethane	0.00	108	0		N.D.	
14) Carbon Disulfide	2.68	76	213		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	41	0		N.D.	
17) Methyl Acetate	0.00	43	0		N.D.	
18) Methylene Chloride	0.00	84	0		N.D.	d
19) trans-1,2-Dichloroethene	0.00	96	0		N.D.	
20) Acrylonitrile	0.00	53	0		N.D.	
21) t-butyl alcohol	0.00	59	0		N.D.	
22) Methyl tert-butyl ether	0.00	73	0		N.D.	
23) 1,1-Dichloroethane	0.00	63	0		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720022.D  
 Acq On : 20 Jul 2007 15:42  
 Sample : JPL52-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:51 2007

Vial: 46  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.37	83	133		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.00	78	56		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	6.78	130	204		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	248		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	482		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.80	91	256		N.D.	

(#) = qualifier out of range (m) = manual integration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720022.D  
 Acq On : 20 Jul 2007 15:42  
 Sample : JPL52-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:51 2007

Vial: 46  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.72	105	191		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	10.71	110	53		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.70	105	54		N.D.	
86) sec-butylbenzene	11.70	105	54		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	54		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	56		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-15-7/12/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-003  
 Lab File ID: Y0720023.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 16:07  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-15-7/12/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL52-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720023.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 16:07

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-15-7/12/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_(uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-003  
 Lab File ID: Y0720023.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 16:07  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_(uL)

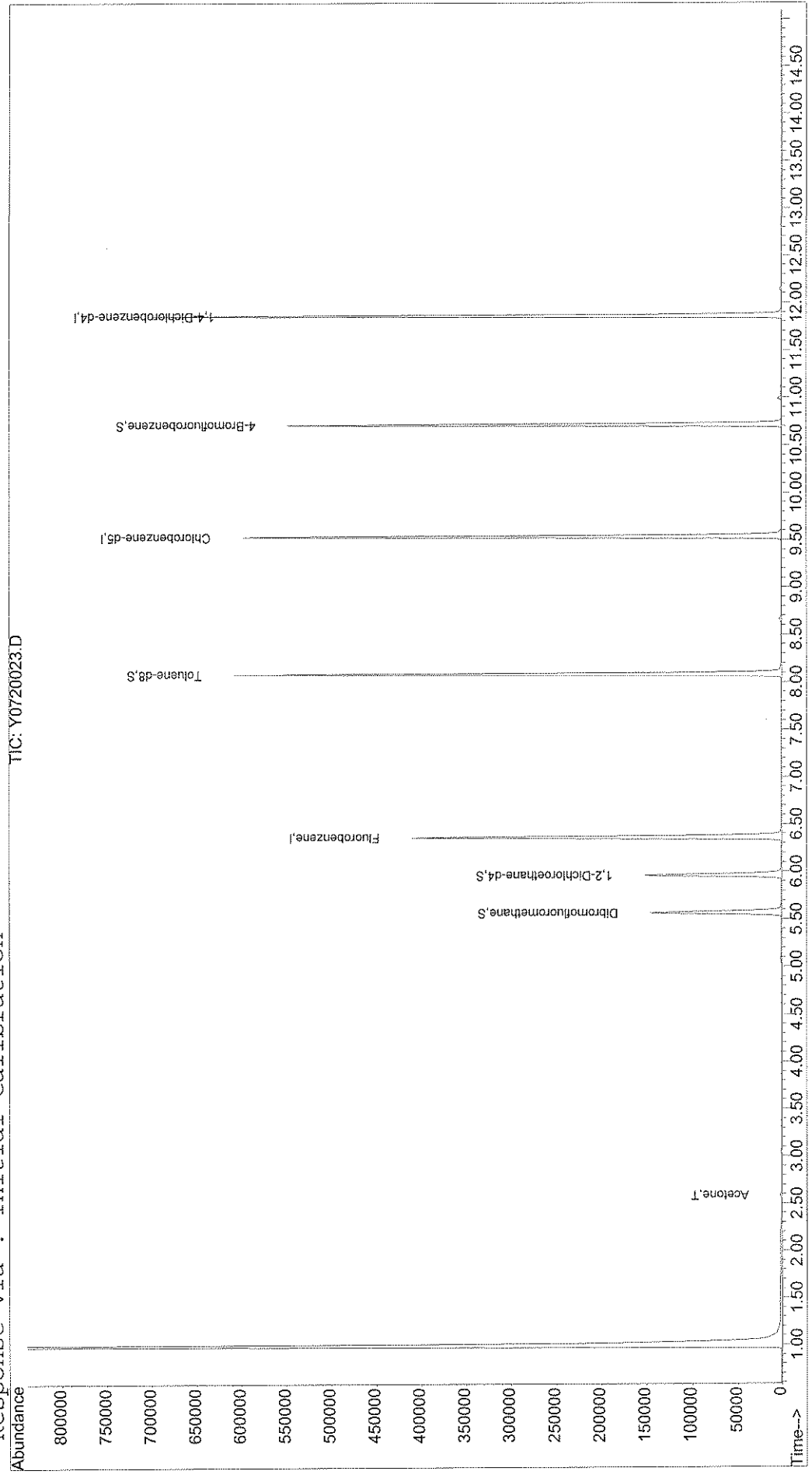
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720023.D  
Acq On : 20 Jul 2007 16:07  
Sample : JPL52-003  
Misc : #2 5mL +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:52 2007  
Vial: 47  
Operator: DGA  
Inst : yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260 - 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720023.D  
 Acq On : 20 Jul 2007 16:07  
 Sample : JPL52-003  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:52 2007

Vial: 47  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	357742	50.00	ug/l	0.00	98.82%
54) Chlorobenzene-d5	9.53	82	174018	50.00	ug/l	0.00	96.88%
74) 1,4-Dichlorobenzene-d4	11.86	152	178476	50.00	ug/l	0.00	95.74%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	94126	49.13	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.26%	
40) 1,2-Dichloroethane-d4	5.96	65	111724	49.89	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.78%	
55) Toluene-d8	8.08	98	371713	49.31	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.62%	
76) 4-Bromofluorobenzene	10.71	95	160487	51.23	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	2882	2.30	ug/l #	79
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.	d	
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration  
 Y0720023.D 8260B.M Mon Jul 23 07:53:04 2007

*[Handwritten signature]*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720023.D
Acq On : 20 Jul 2007 16:07
Sample : JPL52-003
Misc : #2 5mL +IS/SS(524)
MS Integration Params: rteint.p
Quant Time: Jul 23 7:52 2007

Vial: 47
Operator: DGA
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Jul 19 10:37:37 2007
Response via : Initial Calibration
DataAcq Meth : 8260B

Table with 7 columns: Compound, R.T., QIon, Response, Conc, Unit, Qvalue. Lists 68 compounds with their respective retention times, ionization values, and response levels.

(#) = qualifier out of range (m) = manual integration
Y0720023.D 8260B.M Mon Jul 23 07:53:04 2007

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720023.D  
 Acq On : 20 Jul 2007 16:07  
 Sample : JPL52-003  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:52 2007

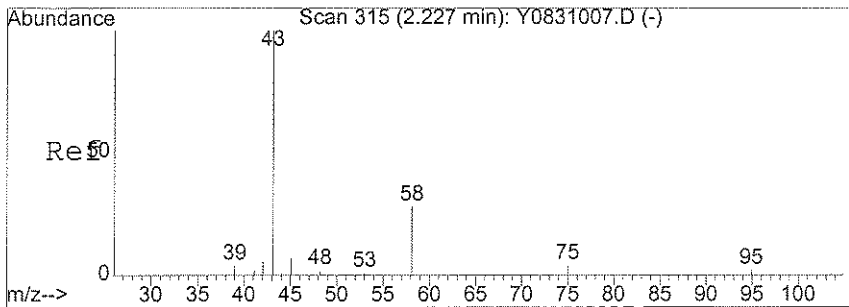
Vial: 47  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

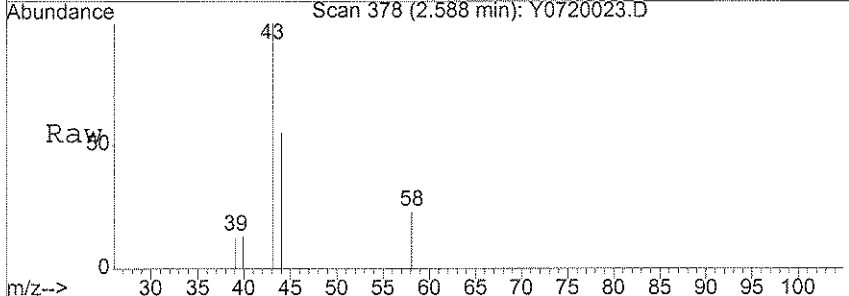
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	111		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.54	105	61		N.D.	
86) sec-butylbenzene	11.54	105	61		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.85	119	62		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	0.00	91	0		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



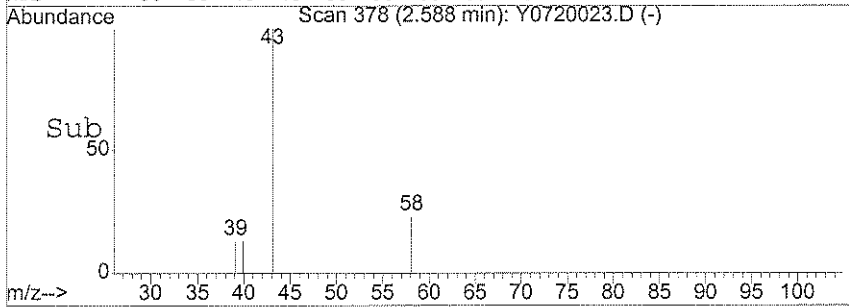
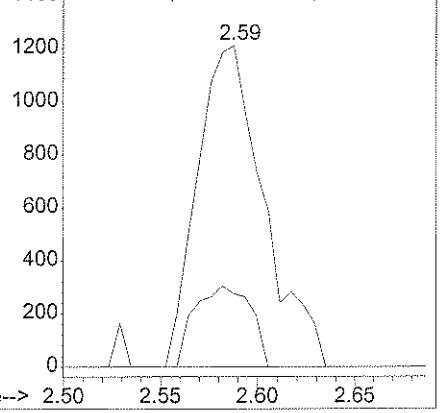


#11  
 Acetone  
 Concen: 2.30 ug/l  
 RT: 2.59 min Scan# 378  
 Delta R.T. 0.00 min  
 Lab File: Y0720023.D  
 Acq: 20 Jul 2007 16:07

Tgt Ion:	43	Resp:	2882
Ion Ratio	Lower	Upper	
43	100		
58	21.3	26.8	40.2#



Abundance Ion 43.15 (42.85 to 43.85); Y0720023.D  
 1400 Ion 58.05 (57.75 to 58.75); Y0720023.D



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-19-7/12/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL52-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 11:35

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-19-7/12/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-004  
 Lab File ID: Y0720012.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 11:35  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-19-7/12/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL52-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 11:35

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

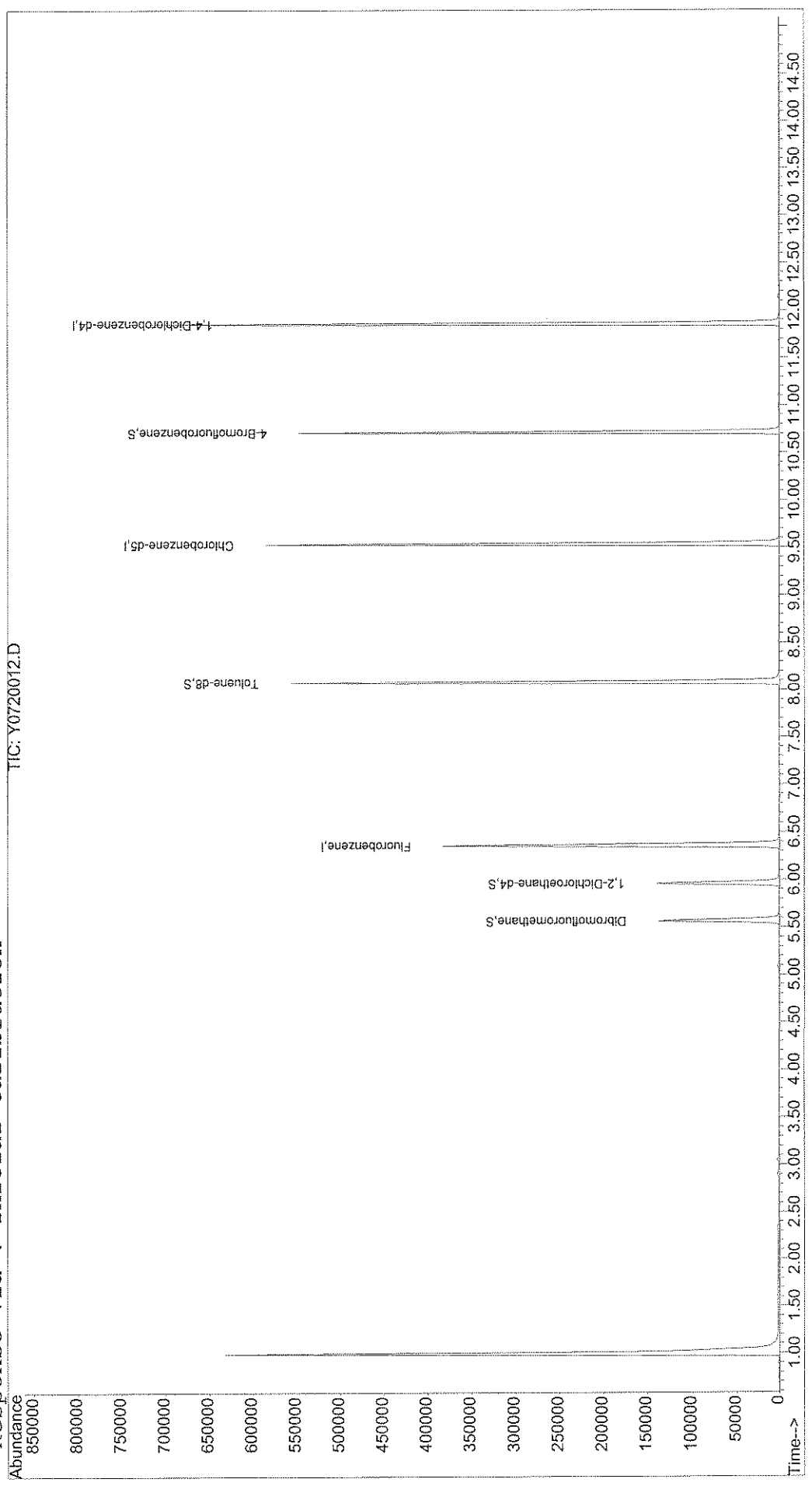
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720012.D Vial: 36  
Acq On : 20 Jul 2007 11:35 Operator: DGA  
Sample : JPL52-004 Inst : Yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:27 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720012.D  
 Acq On : 20 Jul 2007 11:35  
 Sample : JPL52-004  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:27 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	334686	50.00	ug/l	0.00 92.45%
54) Chlorobenzene-d5	9.53	82	167463	50.00	ug/l	0.00 93.23%
74) 1,4-Dichlorobenzene-d4	11.86	152	173370	50.00	ug/l	0.00 93.00%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	90854	50.69	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	101.38%
40) 1,2-Dichloroethane-d4	5.96	65	104905	50.08	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.16%
55) Toluene-d8	8.08	98	340739	46.97	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	93.94%
76) 4-Bromofluorobenzene	10.71	95	158255	52.00	ug/l	0.00

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.59	43	1206	N.D.		
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.68	76	183	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720012.D  
 Acq On : 20 Jul 2007 11:35  
 Sample : JPL52-004  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:27 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	5.03	43	222	Below Cal	#	57
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	0.00	78	0		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.54	91	562		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.80	91	236		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720012.D  
 Acq On : 20 Jul 2007 11:35  
 Sample : JPL52-004  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:27 2007

Vial: 36  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	9.80	106	75		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.73	105	88		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.97	91	204		N.D.	
82) 4-Chlorotoluene	11.16	91	55		N.D.	
83) 1,3,5-Trimethylbenzene	11.16	105	63		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.69	105	195		N.D.	
86) sec-butylbenzene	11.69	105	195		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	60		N.D.	
88) 4-Isopropyltoluene	11.85	119	350		N.D.	
89) 1,4-Dichlorobenzene	11.79	146	60		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	341		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL52-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 16:32

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.66	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.71	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	4.5	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.44	J

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: \_\_\_\_\_  
 SDG No.: JPL52  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-005  
 Lab File ID: Y0720024.D  
 Date Collected: 07/12/2007  
 Date/Time Analyzed: 07/20/2007 16:32  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
10061-02-	trans-1,3-Dichloropropene	0.50		U
79-00-5	1,1,2-Trichloroethane	0.50		U
127-18-4	Tetrachloroethene	1.2		
142-28-9	1,3-Dichloropropane	0.50		U
124-48-1	Dibromochloromethane	0.50		U
106-93-4	1,2-Dibromoethane	0.50		U
108-90-7	Chlorobenzene	0.50		U
100-41-4	Ethylbenzene	0.50		U
630-20-6	1,1,1,2-Tetrachloroethane	0.50		U
179601-23	m,p-Xylene	1.0		U
95-47-6	o-Xylene	0.50		U
100-42-5	Styrene	0.50		U
75-25-2	Bromoform	0.50		U
98-82-8	Isopropylbenzene	0.50		U
79-34-5	1,1,2,2-Tetrachloroethane	0.50		U
103-65-1	n-Propylbenzene	0.50		U
108-86-1	Bromobenzene	0.50		U
96-18-4	1,2,3-Trichloropropane	0.50		U
95-49-8	2-Chlorotoluene	0.50		U
108-67-8	1,3,5-Trimethylbenzene	0.50		U
106-43-4	4-Chlorotoluene	0.50		U
98-06-6	tert-Butylbenzene	0.50		U
95-63-6	1,2,4-Trimethylbenzene	0.50		U
135-98-8	sec-Butylbenzene	0.50		U
99-87-6	4-Isopropyltoluene	0.50		U
541-73-1	1,3-Dichlorobenzene	0.50		U
106-46-7	1,4-Dichlorobenzene	0.50		U
104-51-8	n-Butylbenzene	0.50		U
95-50-1	1,2-Dichlorobenzene	0.50		U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL52-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 16:32

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

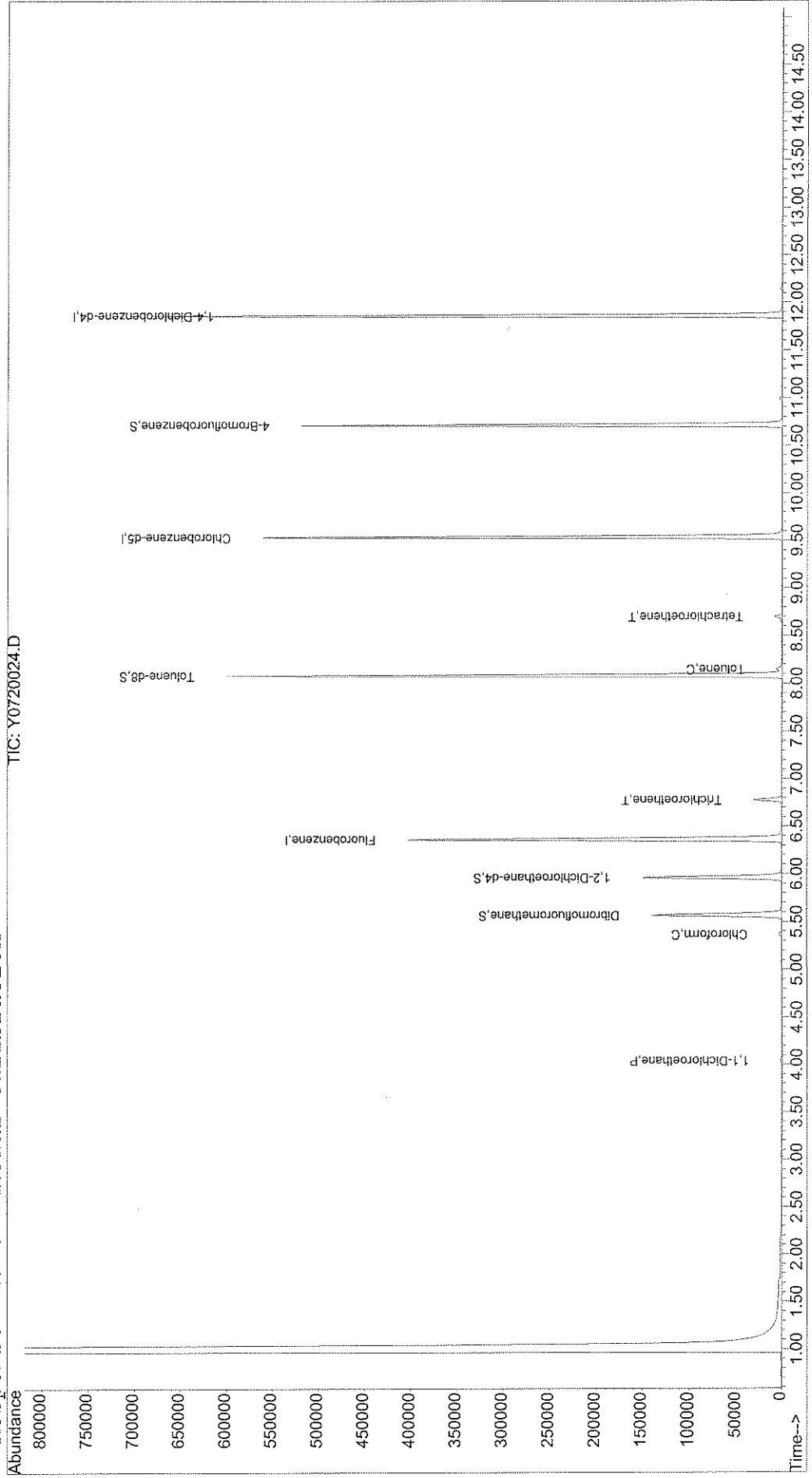
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720024.D  
Acq On : 20 Jul 2007 16:32 Vial: 48  
Sample : JPL52-005 Operator: DGA  
Misc : #2 5mL +IS/SS(524) Inst : Yoda  
MS Integration Params: rteint.p Multiplr: 1.00  
Quant Time: Jul 23 7:54 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720024.D  
 Acq On : 20 Jul 2007 16:32  
 Sample : JPL52-005  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:54 2007

Vial: 48  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	351242	50.00	ug/l	0.00 97.02%
54) Chlorobenzene-d5	9.53	82	168886	50.00	ug/l	0.00 94.02%
74) 1,4-Dichlorobenzene-d4	11.86	152	169822	50.00	ug/l	0.00 91.10%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	92390	49.12	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.24%
40) 1,2-Dichloroethane-d4	5.96	65	107996	49.12	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	98.24%
55) Toluene-d8	8.08	98	362031	49.48	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.96%
76) 4-Bromofluorobenzene	10.71	95	154440	51.81	ug/l	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	1.98	101	71	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	4.04	63	2517	0.66	ug/l	81

(#) = qualifier out of range (m) = manual integration  
 Y0720024.D 8260B.M Mon Jul 23 07:54:48 2007

*J 07/23/07*  
 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720024.D  
 Acq On : 20 Jul 2007 16:32  
 Sample : JPL52-005  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:54 2007

Vial: 48  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0	N.D.		
25) Chloroprene	0.00	53	0	N.D.		
26) Isopropyl ether	0.00	45	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.36	41	68	N.D.		
34) Chloroform	5.37	83	2509	0.71	ug/l	92
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
37) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	5.75	117	69	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.01	78	66	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) Isobutanol	0.00	43	0	N.D.		
44) t-amyl methyl ether	0.00	73	0	N.D.	d	
45) Trichloroethene	6.77	130	10088	4.54	ug/l	96
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	41	0	N.D.		
50) Bromodichloromethane	0.00	83	0	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	8.15	92	2188	0.44	ug/l	87
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	8.70	166	2434	1.23	ug/l	97
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	9.09	43	120	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) 1-Chlorohexane	9.53	91	497	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	9.81	91	55	N.D.		

*J. O. 7/23/07*  
 Page 2

Quantitation Report

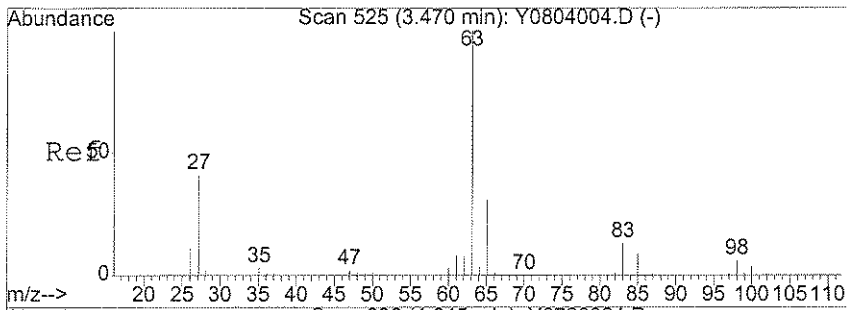
Data File : X:\MSVOA\YODA\072007\Y0720024.D  
 Acq On : 20 Jul 2007 16:32  
 Sample : JPL52-005  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:54 2007

Vial: 48  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

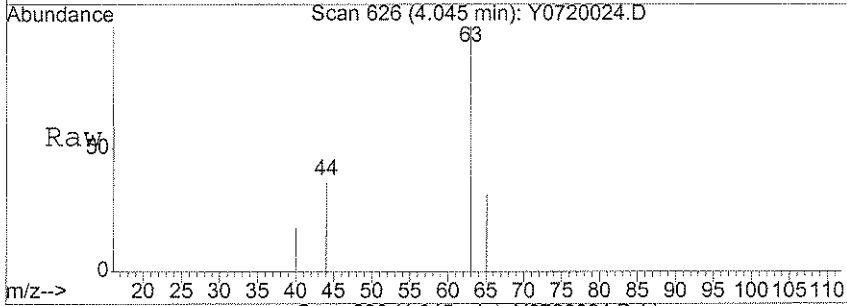
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	125		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.53	105	65		N.D.	
86) sec-butylbenzene	11.69	105	117		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	0.00	119	0		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	60		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

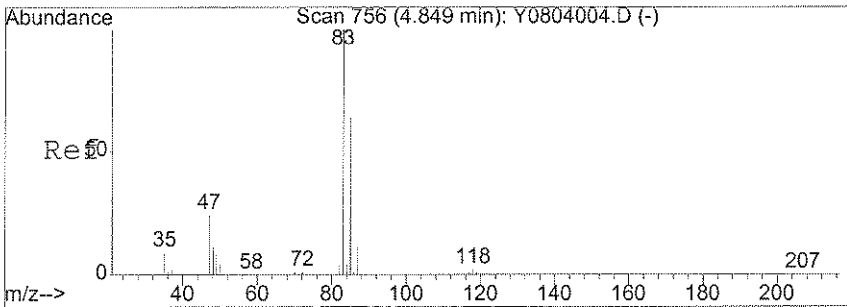
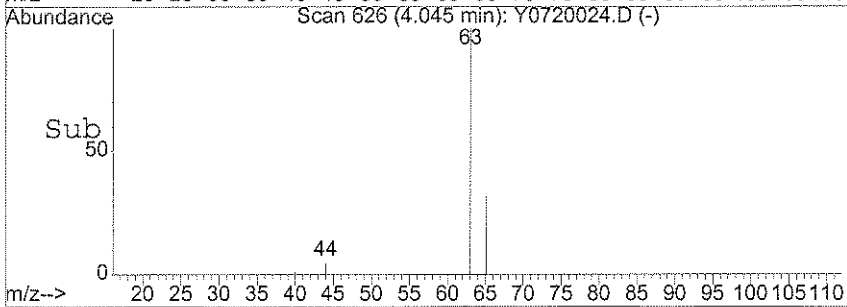
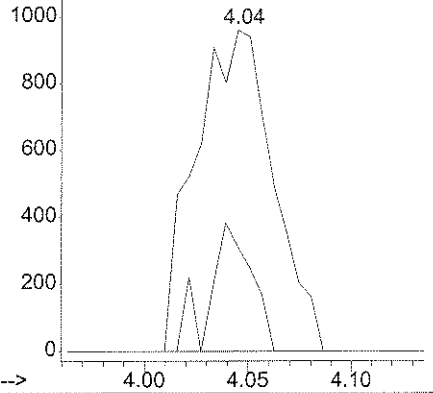


#23  
 1,1-Dichloroethane  
 Concen: 0.66 ug/l  
 RT: 4.04 min Scan# 626  
 Delta R.T. -0.00 min  
 Lab File: Y0720024.D  
 Acq: 20 Jul 2007 16:32

Tgt Ion: 63 Resp: 2517  
 Ion Ratio Lower Upper  
 63 100  
 65 21.5 12.3 52.3

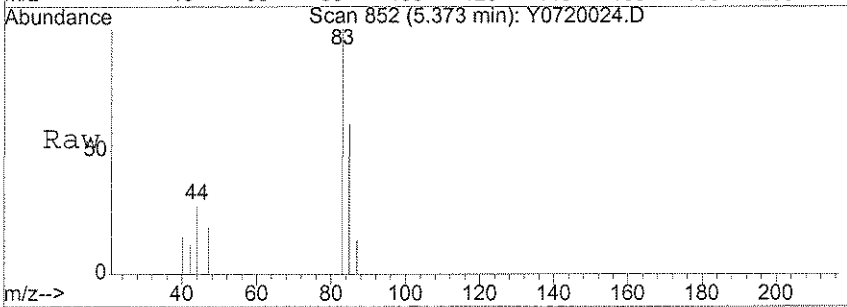


Abundance Ion 63.00 (62.70 to 63.70): Y0720024.D  
 Ion 65.00 (64.70 to 65.70): Y0720024.D

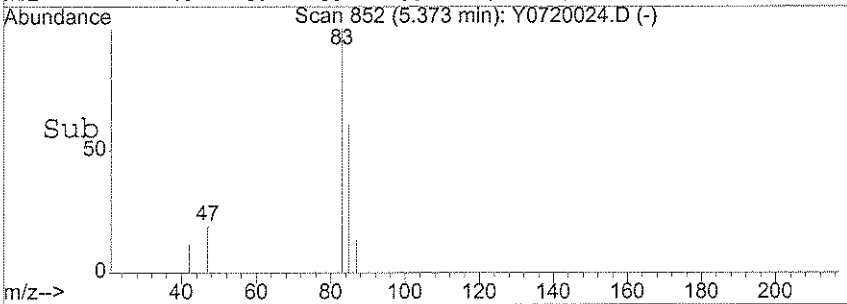
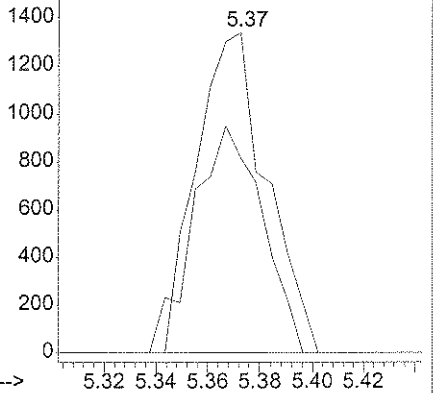


#34  
 Chloroform  
 Concen: 0.71 ug/l  
 RT: 5.37 min Scan# 852  
 Delta R.T. -0.00 min  
 Lab File: Y0720024.D  
 Acq: 20 Jul 2007 16:32

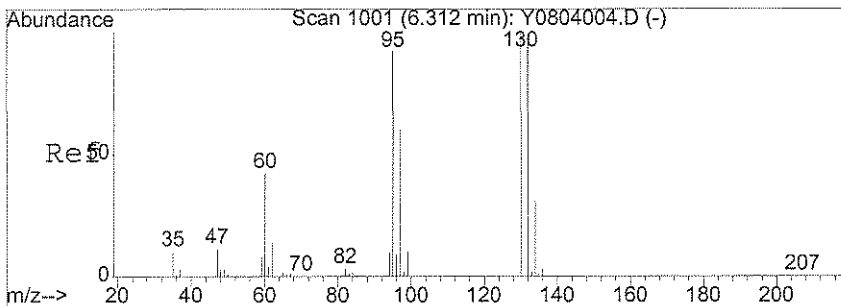
Tgt Ion: 83 Resp: 2509  
 Ion Ratio Lower Upper  
 83 100  
 85 69.9 43.3 83.3



Abundance Ion 83.00 (82.70 to 83.70): Y0720024.D  
 Ion 85.00 (84.70 to 85.70): Y0720024.D

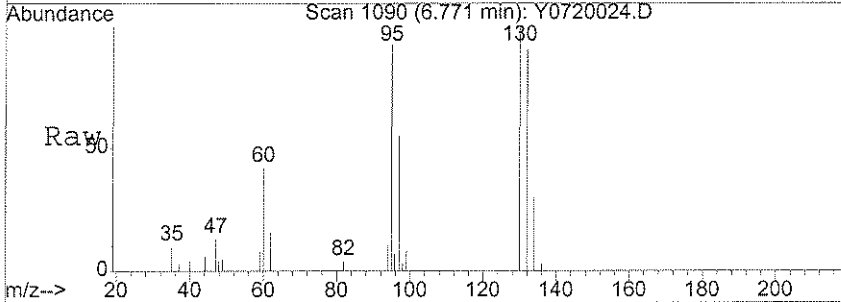




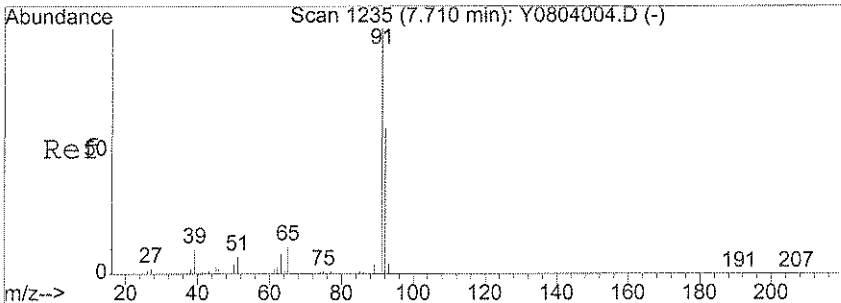
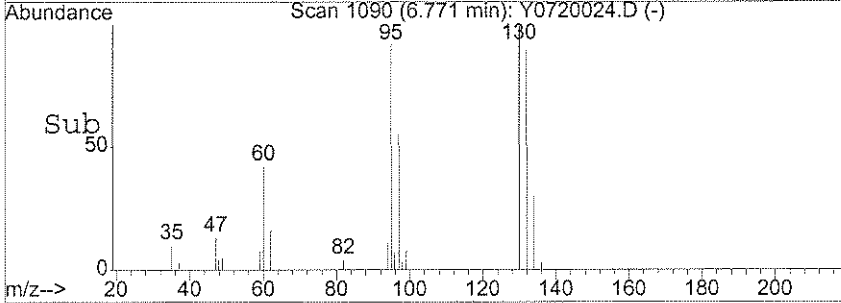
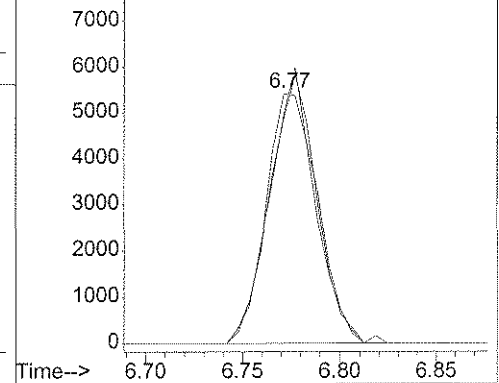


#45  
 Trichloroethene  
 Concen: 4.54 ug/l  
 RT: 6.77 min Scan# 1090  
 Delta R.T. -0.01 min  
 Lab File: Y0720024.D  
 Acq: 20 Jul 2007 16:32

Tgt Ion	Ratio	Lower	Upper	Resp
130	100			10088
132	97.4	75.0	115.0	
95	94.9	69.4	109.4	

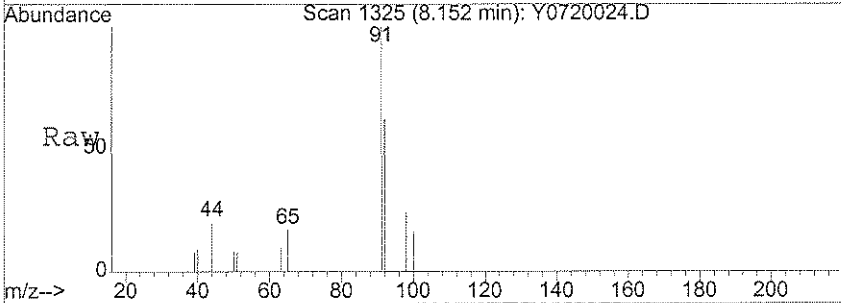


Abundance  
 Ion 130.00 (129.70 to 130.70): Y072002  
 Ion 132.00 (131.70 to 132.70): Y072002  
 Ion 95.00 (94.70 to 95.70): Y0720024.D

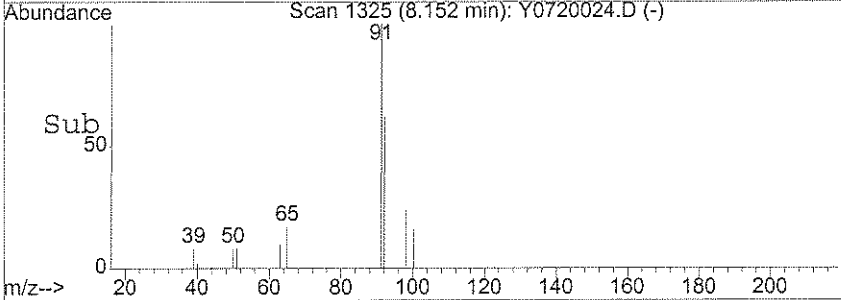
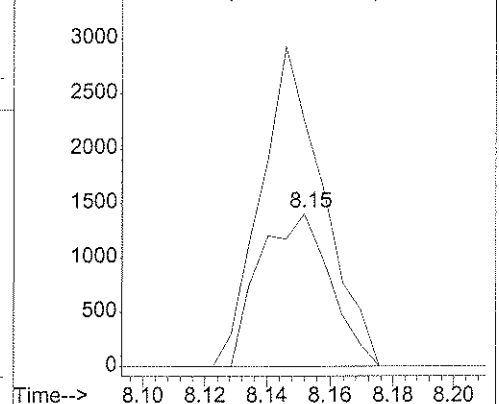


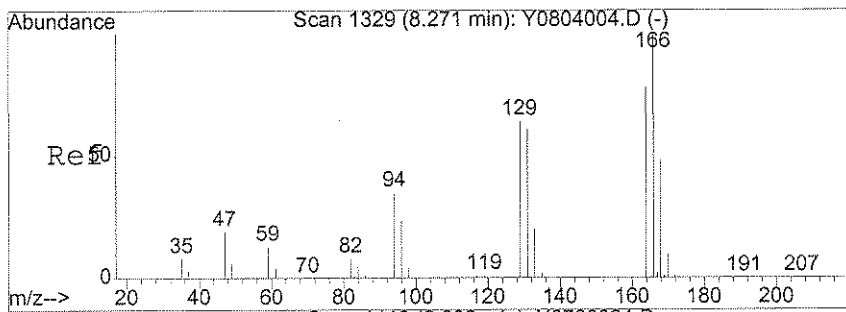
#56  
 Toluene  
 Concen: 0.44 ug/l  
 RT: 8.15 min Scan# 1325  
 Delta R.T. 0.01 min  
 Lab File: Y0720024.D  
 Acq: 20 Jul 2007 16:32

Tgt Ion	Ratio	Lower	Upper	Resp
92	100			2188
91	185.3	133.7	200.5	



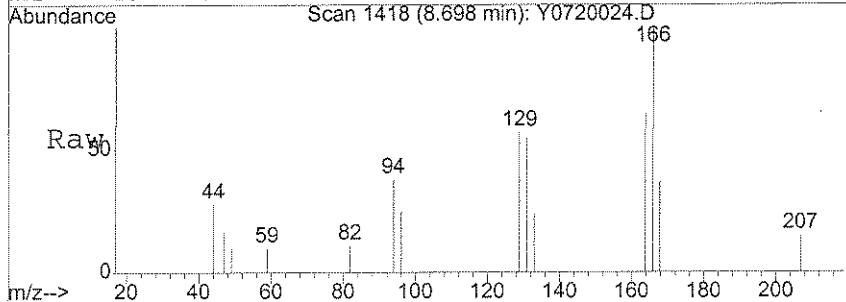
Abundance  
 Ion 92.05 (91.75 to 92.75): Y0720024.D  
 Ion 91.05 (90.75 to 91.75): Y0720024.D



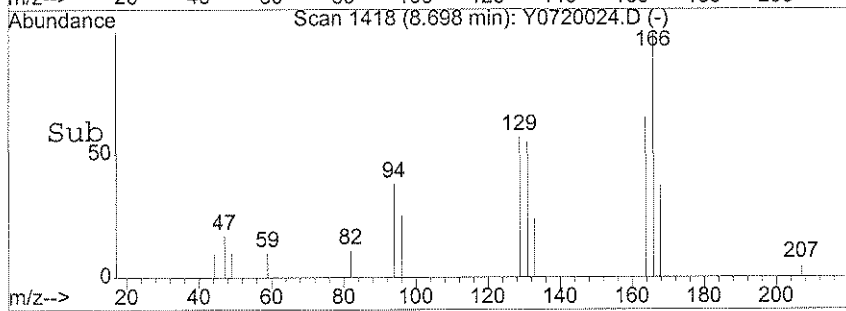
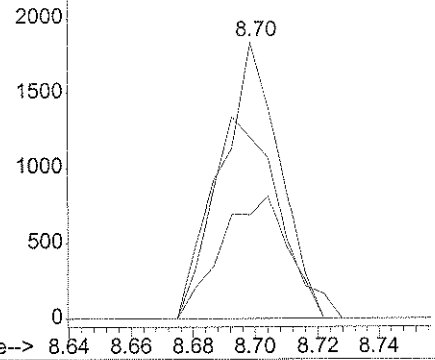


#60  
 Tetrachloroethene  
 Concen: 1.23 ug/l  
 RT: 8.70 min Scan# 1418  
 Delta R.T. 0.00 min  
 Lab File: Y0720024.D  
 Acq: 20 Jul 2007 16:32

Tgt Ion	Resp	Lower	Upper
166	2434		
166	100		
164	82.7	63.3	94.9
168	50.4	39.6	59.4



Abundance Ion 165.95 (165.65 to 166.65): Y072002  
 2500 Ion 163.95 (163.65 to 164.65): Y072002  
 Ion 167.95 (167.65 to 168.65): Y072002



**TIC FORMS**

SDG JPL52

VOLATILES ANALYSIS

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-26-2

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL52-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720021.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/23/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720021.D Vial: 45  
Acq On : 20 Jul 2007 15:17 Operator: DGA  
Sample : JPL52-001 Inst : yoda  
Misc : #7 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720021.D 8260B.M Mon Jul 23 07:49:27 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-26-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL52-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720022.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/23/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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09				
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11				
12				
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29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720022.D Vial: 46  
Acq On : 20 Jul 2007 15:42 Operator: DGA  
Sample : JPL52-002 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720022.D 8260B.M Wed Jul 25 15:02:47 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-15-7/12/07

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL52  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL52-003  
 Lab File ID: Y0720023.D  
 Date Collected: 07/13/2007  
 Date Analyzed: 07/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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30				

Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720023.D Vial: 47  
Acq On : 20 Jul 2007 16:07 Operator: DGA  
Sample : JPL52-003 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720023.D 8260B.M Mon Jul 23 07:53:09 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-19-7/12/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL52-004

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720012.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/12/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720012.D Vial: 36  
Acq On : 20 Jul 2007 11:35 Operator: DGA  
Sample : JPL52-004 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720012.D 8260B.M Mon Jul 23 07:27:48 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL52-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720024.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/23/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720024.D Vial: 48  
Acq On : 20 Jul 2007 16:32 Operator: DGA  
Sample : JPL52-005 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720024.D 8260B.M Mon Jul 23 07:54:53 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B072007MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL52

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: B072007MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720008.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720008.D Vial: 32  
Acq On : 20 Jul 2007 9:58 Operator: DGA  
Sample : B072007MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-40-19) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720008.D 8260B.M Mon Jul 23 10:28:21 2007

**Metals Data**

**JPL52**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin  
 Lab Code: LAUCKS SDG No.: JPL52  
 SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-26-2</u>	<u>JPL52-001</u>
<u>MW-26-1</u>	<u>JPL52-002</u>
<u>EB-15-7/12/07</u>	<u>JPL52-003</u>
<u>MW-10</u>	<u>JPL52-005</u>

Were ICP interelement corrections applied? Yes/No YES  
 Were ICP background corrections applied? Yes/No NO  
 If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: *Bill Ambacher* Name: Bill Ambacher  
 Date: 8/8/07 Title: Inorganics/Metals Manager

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-26-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL52

Matrix (soil/water): Water

Lab Sample ID: JPL52-001

Level (low/med): LOW

Date Received: 07/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.95			M	R020222
7440-70-2	Calcium	39600		*	P	R020230
7440-47-3	Chromium	2.09			M	R020222
7439-89-6	Iron	581			P	R020230
7439-92-1	Lead	1.00	U		M	R020222
7439-95-4	Magnesium	14200		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	40200		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-26-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL52

Matrix (soil/water): Water

Lab Sample ID: JPL52-002

Level (low/med): LOW

Date Received: 07/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	77400		*	P	R020230
7440-47-3	Chromium	1.00	U		M	R020222
7439-89-6	Iron	100	U		P	R020230
7439-92-1	Lead	1.00	U		M	R020222
7439-95-4	Magnesium	30700		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	25400		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-15-7/12/07

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL52

Matrix (soil/water): Water

Lab Sample ID: JPL52-003

Level (low/med): LOW

Date Received: 07/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	5000	U	*	P	R020230
7440-47-3	Chromium	1.00	U		M	R020222
7439-89-6	Iron	100	U		P	R020230
7439-92-1	Lead	1.00	U		M	R020222
7439-95-4	Magnesium	5000	U	*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	5000	U	*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-10

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL52

Matrix (soil/water): Water

Lab Sample ID: JPL52-005

Level (low/med): LOW

Date Received: 07/13/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	126000		*	P	R020274
7440-47-3	Chromium	14.0			M	R020222
7439-89-6	Iron	100	U		P	R020230
7439-92-1	Lead	1.11			M	R020222
7439-95-4	Magnesium	41400		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	31500		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL52**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL52

SOW No.: \_\_\_\_\_

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-26-2</u>	<u>JPL52-001</u>
<u>MW-26-2D</u>	<u>JPL52-001D</u>
<u>MW-26-2MS</u>	<u>JPL52-001MS</u>
<u>MW-26-2MSD</u>	<u>JPL52-001MSD</u>
<u>MW-26-1D</u>	<u>JPL52-002D</u>
<u>MW-26-1</u>	<u>JPL52-002DL</u>
<u>EB-15-7/12/07</u>	<u>JPL52-003</u>
<u>EB-15-7/12/07D</u>	<u>JPL52-003D</u>
<u>MW-10</u>	<u>JPL52-005DL</u>
<u>MW-10MS</u>	<u>JPL52-005MS</u>
<u>MW-10MSD</u>	<u>JPL52-005MSD</u>

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Penner

Date: 7-31-07

Title: Inorganics Lead



## **Inorganic Analysis Data Sheets**





**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL52  
**Sample Number:** EB-15-7/12/07 **Date/Time Collected:** 07/12/2007 10:43  
**Lab Sample ID:** JPL52-003 **Date/Time Received:** 07/13/2007 08:15  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.8		0.10	0.10	07/13/2007	07/13/2007	R019610

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	21		2	2	07/17/2007	07/19/2007	R019598

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	07/13/2007	07/13/2007	R019516
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	07/13/2007	07/13/2007	R019516
Chloride	16887-00-6	1	1.0	U	1.0	0.076	07/20/2007	07/20/2007	R019746

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2	U	2	2	07/23/2007	07/23/2007	R019820
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2	U	2	2	07/23/2007	07/23/2007	R019820

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	07/24/2007	07/25/2007	R019848



**LAUCKS TESTING LABORATORIES**

**SAMPLE DATA PACKAGE**

**BATTELE**

**SDG NO.: JPL53**

**AUGUST 10, 2007**

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

To: Battelle  
Project Name: JPL Groundwater  
SDG No.: JPL53  
Date of Report: 8/10/2007

**SAMPLE RECEIPT, IDENTIFICATION, AND GENERAL COMMENTS:**

**Sample Receipt and Identification:**

The samples submitted under the laboratory number(s) indicated above were identified and analyzed as tabulated below. The samples were collected and received on the dates noted on the enclosed chain-of-custody copies, Attachment A.

<u>Client Sample Identification</u>	<u>Laucks Sample Identification</u>	<u>Testing Analytical Request</u>
MW-5	JPL53-001	VOA/MET/INO
MW-6	JPL53-002	VOA/MET/INO
TB-15-7/6/07	JPL53-003	VOA

**Analytical Request Key:**

VOA = Volatiles (524.2)  
MET = Metals (200.7/200.8)  
INO = Perchlorate (314.0)  
Chloride, Nitrate, Sulfate (300.0)  
Alkalinity (310.1)  
Total Dissolved Solids (160.1)  
pH (150.1)

**Sample Receipt Comments:**

The following discrepancies were noted in association with the receipt of these samples.

Two of three volatiles bottles submitted for JPL53-002 contained bubbles of less than 1/4 inch in size. Two of three volatiles bottles submitted for JPL53-003 contained bubbles of greater than 1/4 inch in size.

**GENERAL REMARKS ON ORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON ORGANIC ANALYSIS."

## LAUCKS TESTING LABORATORIES

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Seattle, WA 98108

### Manual Integrations:

One or more analytes may have been manually integrated on the data system quantitation reports. All manual integrations have been flagged, initialed, and dated by the analyst. A list of the manual integration flags is detailed below.

M	Manual integration due to irregular peak shape
MS	Manual integration due to split peak
MR	Manual integration due to retention time shift
MI	Manual integration of correct isomer
MT	Manual integration due to peak tailing
MB	Manual integration due to irregular baseline

### Holding Time Compliance:

#### *Volatile Organic Compounds:*

The holding time is 14 days calculated from date of collection in both soil and water samples. All samples were analyzed within holding time.

### Volatiles Fraction:

#### Quality Control Analyses:

All quality control parameters were met.

### **GENERAL REMARKS ON INORGANIC ANALYSES:**

The following comments describe general analysis conditions. For remarks specific to the samples reported in this case, see "SPECIFIC REMARKS ON INORGANIC ANALYSES."

#### ICP Metals:

The preparation blank for metals in soil is calculated to mg/kg by assuming a sample weight of 1.00g/100mL. Total solids of 100% are also assumed.

On the first timed and dated page of each ICP-MS run, the data to be reported or rejected will be tabulated for that run.

### **SPECIFIC REMARKS ON INORGANIC ANALYSES:**

#### Holding Time Compliance:

Laucks calculates holding time compliance for inorganic determinations using the date on which reportable data were acquired.



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Seattle, WA 98108

### Metals:

The holding time for metals is six months from the date of collection, excepting mercury, which is 28 days. All analyses were performed within holding time.

### Miscellaneous:

The following analytes do not have a Contract Laboratory Program holding time. The holding times tabulated below derive from the relevant EPA methods and are applicable when the sample was appropriately preserved and/or cooled. All samples submitted followed the preservation guidelines unless explicitly noted otherwise.

<u>Analyte</u>	<u>Holding Time</u>	<u>Violations</u>
Perchlorate	28 days	None
Chloride	28 days	None
Sulfate	28 days	None
Nitrate	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	24 hours	None

### ICP-MS/ICP Metals:

All elements were analyzed by Method 200.8 on the ICP-MS due to the ICP-Trace instrument (Method 200.7) being out of production.

Samples in this SDG (JPL53) were prepared along with other client samples and sample-level QC was performed on a batch-level basis. Although samples from this SDG were not selected for sample-level QC, comments regarding matrix spike/matrix spike duplicate samples and serial dilution samples apply to all samples digested and analyzed together. Sample level QC and analytical time can be seen on Form 14. For QC results, see SDG JPL51 or the raw data provided.

For the run sequence R020222, the internal standard recovery for scandium (affects Cr), germanium (affects As), and terbium (affects Pb) drifted above the recommended control limit of 125% of the initial calibration standard. This is due to instrument drift which is shown in both the samples and the CCVs. Since the CCV recoveries were within control limits, even with the internal standard drifting beyond 125% of the initial calibration standard, it is assumed that the internal standard is making appropriate corrections to the results. Samples were reported only if the internal standard recovery was within 60-125% of the internal standard intensity of the previous CCV. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for these events.

For the run sequence R020230, the internal standard recovery for scandium (affects Ca, Fe, Mg, and Na) and germanium (affects K) drifted above the recommended control limit of 125% of the initial calibration standard. This is due to instrument drift which is shown in both the samples and the CCVs. Since the CCV recoveries were within control limits, even with the internal standard drifting beyond 125% of the initial calibration standard, it is assumed that the internal standard is making appropriate corrections to the results. Samples were reported only if the internal standard recovery was within 60-

## LAUCKS TESTING LABORATORIES

940 S. Harney  
Seattle, WA 98108

125% of the internal standard intensity of the previous CCV. Therefore, no corrective action was taken. Data have been reported as is and have not been flagged for this event.

The matrix spike sample percent recovery of calcium was outside of the established control limits of 70-130% for sample # MW-13 and MW-8. The sample concentration of this element exceeds the spike concentration by a factor of four or more, therefore no further corrective action was required. Data have not been flagged for this event.

The matrix duplicate sample relative percent differences for calcium, magnesium, and sodium were outside the control limits of  $\pm 20\%$  for sample MW-13. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms 1 and 5C.

The matrix duplicate sample relative percent differences for calcium and magnesium were outside the control limits of  $\pm 20\%$  for sample MW-8. No further corrective action was required. All relevant data have been flagged with an "\*" on Forms 1 and 5C.

### **Miscellaneous Inorganics:**

For run sequence R019746, the fourth continuing calibration verification was outside the established control limits for the nitrate analysis. No reported samples were bracketed by this CCV. Therefore, no further action was taken.

For run sequence R019848, the blank spike recovery was outside established control limits for the perchlorate analysis. All other quality control elements were within control limits. Therefore, no further action was taken.

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### ABBREVIATIONS

Several abbreviations can appear in our reports. The most commonly employed abbreviations are as follows:

- U The analyte of interest was not detected to the limit of detection indicated.
- SDL Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL Practical Quantitation Limit. The limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- DB Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR As-Received. The value has not been normalized for moisture.

### ORGANIC ANALYSES:

- B When used in relation to organics fractions, the "B" flag indicates that the analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The "B" flag is applied without regard to the relative concentrations detected in the blank and sample.
- J The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.
- E The flagged value was reported from an analysis that exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- P When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the higher value.
- C The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

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### INORGANIC ANALYSES:

- J The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" shall be entered.
- E The reported value is estimated because of the presence of interference. The serial dilution was not within control limits.
- N Spiked sample recovery not within control limits.
- \* Duplicate analysis not within control limits.

CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

RELEASE OF DATA

Laucks certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

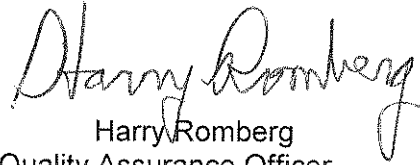
"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Respectfully submitted,



Kara Godineaux  
Project Manager

8/10/07  
(DATE)



Harry Romberg  
Quality Assurance Officer

8/10/07  
(DATE)

*HOW TO CONTACT US:*

All Laucks Testing Laboratories staff members can be reached at the same telephone and facsimile numbers: (206) 767-5060 by phone, (206) 767-5063 by FAX.

*REQUESTS FOR DUPLICATE COPIES:*

This packet has been checked for accuracy. All pages are present and in sequential order. Please see Attachment B for a detailed record.

In the event that duplicate data copies are needed, Laucks will accommodate your request at a fee of twenty-five cents (\$0.25) per copy, plus shipping. If the data are in storage, there will also be a fee for retrieval.

**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT A**

Chain-of-Custody Copies

**LAUCKS TESTING LABORATORIES, INC. - SAMPLE CONFIRMATION LOG**

Sample ID (SDG-#)	VTSR	Collected On	Client ID	150.1 pH	160.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, Cl, SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL53-001	07/14/2007 09:50 AM	07/13/2007 09:20 AM	MW-5	A+	A-	IN	IN	A-	IN	IN	IN	A-
JPL53-002	07/14/2007 09:50 AM	07/13/2007 12:55 PM	MW-6	A+	A-	IN	IN	IN	IN	IN	IN	IN
JPL53-003	07/14/2007 09:50 AM	07/13/2007 12:00 AM	TB-15-7/6/07								IN	

Approved By:

On:

Notes:

Samples identified with a '\*' client has requested QC for

**LEGEND:** -:Started, +:Completed, IN:Logged In, P:Preparation, A:Analysis, X:Cancelled, PL:Pre-logged

**FORM LTL-PM-8.0**

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BATELLE  
 ADDRESS: 3990 Old Town Ave, C-205  
SAW DIEGO, CA 92110  
 ATTENTION: DAVID COANER  
 PROJECT NAME: JPL GW MON 2007  
 PROJECT CONTACT: DAVID COANER  
 TELEPHONE: 619-726-7311 FAX: \_\_\_\_\_  
 JOB/P.O. NO.: 6486090

CHAIN OF CUSTODY RECORD

SDG # \_\_\_\_\_

43103

WORK ORDER ID#

JPL53

PAGE 1 OF 1

SUBMITTED AT:

940 South Haney St, Seattle, WA 98108 (206) 757-5060 FAX 767-5065  
 108 Lehigh Ave, Tarkenton, VA 98902 (509) 286-4695 FAX 452-1265



TESTS TO PERFORM

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS	VOL (5L/20L)	TOTAL G (200.0)	LEAD (200.0)	ARSENIC (200.0)	COPPER (200.0)	CHLORIDE (200.0)	PHOSPHORUS (200.0)	SILICA (200.0)
W S	X	X	X	X	X	X	X	X	X
MW-6	X	X	X	X	X	X	X	X	X
TR-15 - 7/6/57	X	X	X	X	X	X	X	X	X

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

LAB#	SAMPLE ID / LOCATION	DATE	TIME	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-5	7/13/57	1220	W S	
2	MW-6	7/13/57	1255	X	
3	TR-15 - 7/6/57	7/13/57	1255	X	TRIP BLANK

A. A standard turnaround time is assumed unless otherwise marked.

B. The laboratory may not be responsible for missed holding time for samples received with less than 50% of the analytical hold time remaining. Please contact the laboratory for further information.

INSTRUCTIONS:

- USE ONE LINE PER SAMPLE
- BE SPECIFIC IN TEST REQUESTS
- CHECK OFF TESTS TO BE PERFORMED FOR EACH SAMPLE

RELINQUISHED BY (SIGN AND PRINT): MARCUS MENDOSA DATE: 7/13/57 TIME: 1400

NAME: BATELLE ADDRESS: 505 KING AVE  
 ATTN: GELAIN TAMPKINS CITY, STATE, ZIP: COLUMBUS OH 43201

\* RUSH TURNAROUND IS SUBJECT TO PRIOR LABORATORY APPROVAL

TURNAROUND REQUEST

STD. 10-14 WORKING DAYS

24-48 HRS. (100% SUR)

72 HRS. (75% SUR)

5 DAYS (60% SUR)

OTHER: \_\_\_\_\_

TEMP: \_\_\_\_\_

CUSTODY SEAL:  Y  N  N/A





**Supplemental Sample Receipt Log**  
**Laucks Testing Laboratories**

SDG: JPL53

Cooler: aad617

Temperatures: 4.2

COC #: 43103

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL53-001	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	None
	0003	40 ml OTWS, clear glass, HCl	N/C	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL53-002	0001	1000 mL cylinder, poly	7	N/A
	0002	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0003	40 ml OTWS, clear glass, HCl	N/C	< 1/4
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL53-003	0001	40 ml OTWS, clear glass, HCl	N/C	> 1/4
	0002	40 ml OTWS, clear glass, HCl	N/C	> 1/4

Allowable temperature and pH ranges (neutral pH defined as a value between 5 and 9)

Temperature Allowable temperature range is 4+/- 2 degrees Celsius

Acid Preserved pH pH must be less than 2

Base Preserved pH pH must be greater than 12

NC Not Checked for pH

**LAUCKS TESTING LABORATORIES**  
940 S. Harney  
Seattle, WA 98108

**ATTACHMENT B**

Index

**LAUCKS TESTING LABORATORIES**

940 S. Harney  
Seattle, WA 98108

**Battelle**

**SDG No.: JPL53**

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Completed and checked by: JENNI GROSS Date: 8/10/07

**SAMPLE DATA**

SDG JPL53

VOLATILES ANALYSIS

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL53

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL53-001

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720025.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/13/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 16:57

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.68	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.95	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL53  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL53-001  
 Lab File ID: Y0720025.D  
 Date Collected: 07/13/2007  
 Date/Time Analyzed: 07/20/2007 16:57  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: \_\_\_\_\_  
 SDG No.: JPL53  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL53-001  
 Lab File ID: Y0720025.D  
 Date Collected: 07/13/2007  
 Date/Time Analyzed: 07/20/2007 16:57  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

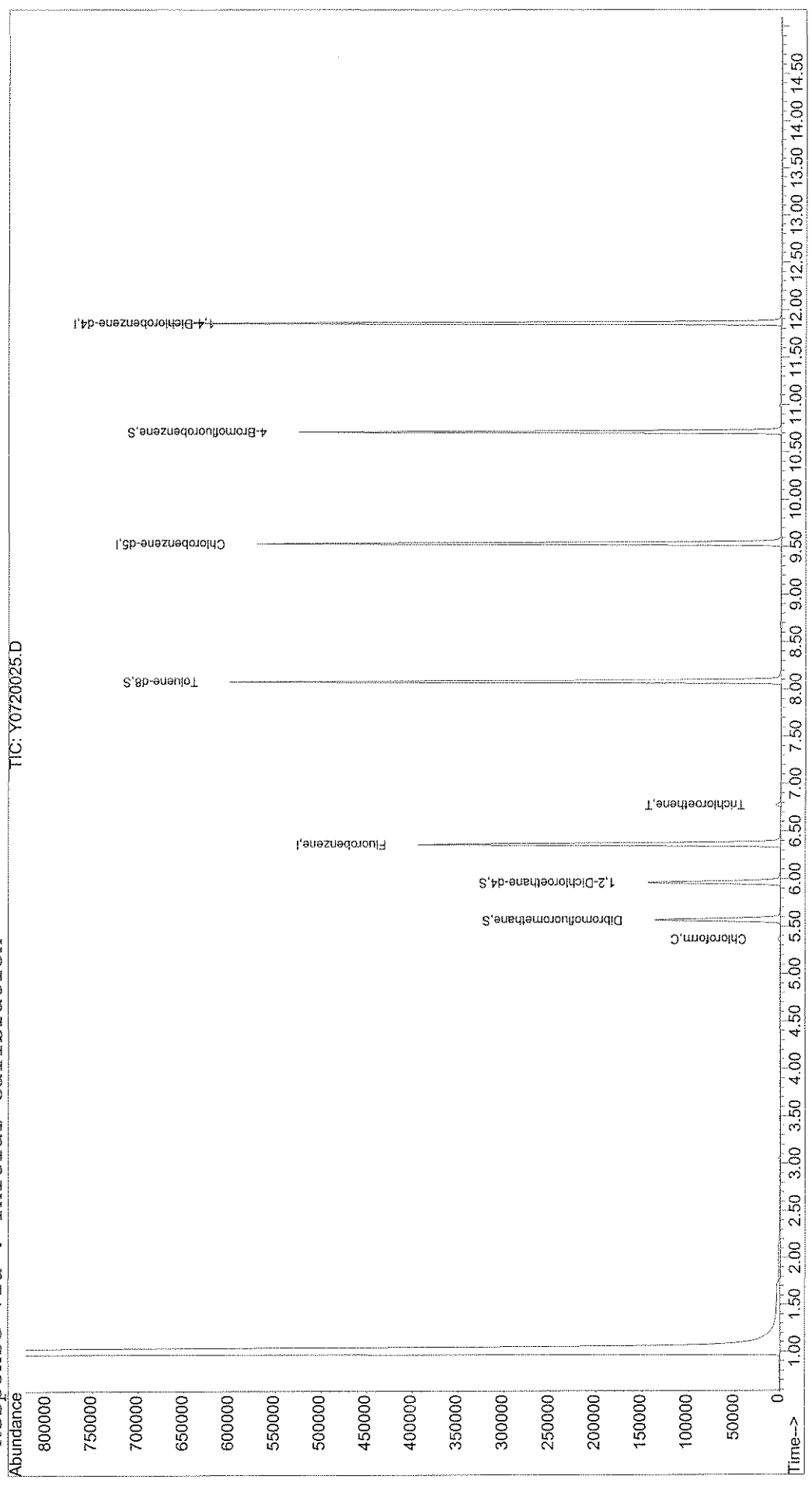
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720025.D  
Acq On : 20 Jul 2007 16:57  
Sample : JPL53-001  
Misc : #2 5mL +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 23 8:17 2007  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720025.D  
 Acq On : 20 Jul 2007 16:57  
 Sample : JPL53-001  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 8:17 2007

Vial: 49  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	341625	50.00	ug/l	0.00	94.36%
54) Chlorobenzene-d5	9.53	82	168714	50.00	ug/l	0.00	93.93%
74) 1,4-Dichlorobenzene-d4	11.86	152	168623	50.00	ug/l	0.00	90.46%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	90223	49.31	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	98.62%	
40) 1,2-Dichloroethane-d4	5.96	65	106759	49.93	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.86%	
55) Toluene-d8	8.08	98	359716	49.21	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.42%	
76) 4-Bromofluorobenzene	10.71	95	152586	51.55	ug/l	0.00	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	0.00	96	0	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	3.49	73	62	N.D.		
23) 1,1-Dichloroethane	0.00	63	0	N.D.		

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720025.D  
 Acq On : 20 Jul 2007 16:57  
 Sample : JPL53-001  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 8:17 2007

Vial: 49  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	5.37	83	2343	0.68	ug/l	96
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	5.75	117	216		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.00	78	124		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D. d	
45) Trichloroethene	6.78	130	2059	0.95	ug/l	97
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	7.33	83	60		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	8.70	166	454		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	561		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.53	91	561		N.D.	

(#) = qualifier out of range (m) = manual integration  
 Y0720025.D 8260B.M Mon Jul 23 08:17:28 2007

*J. G. [Signature]*  
 Page 2

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720025.D  
 Acq On : 20 Jul 2007 16:57  
 Sample : JPL53-001  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 8:17 2007

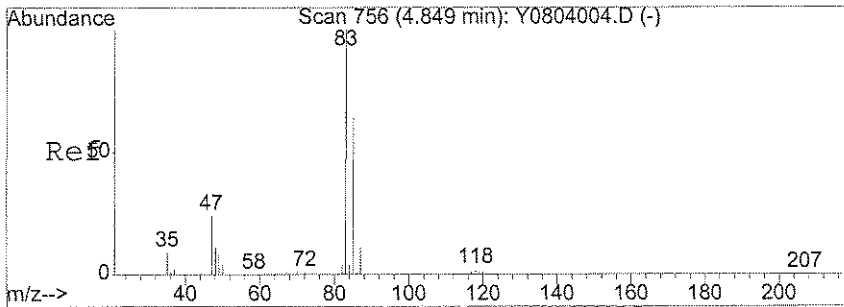
Vial: 49  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

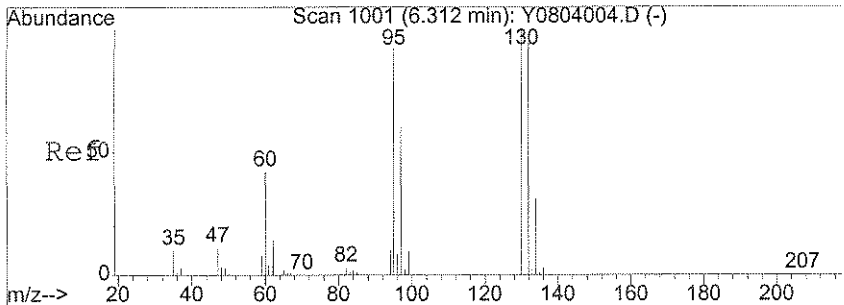
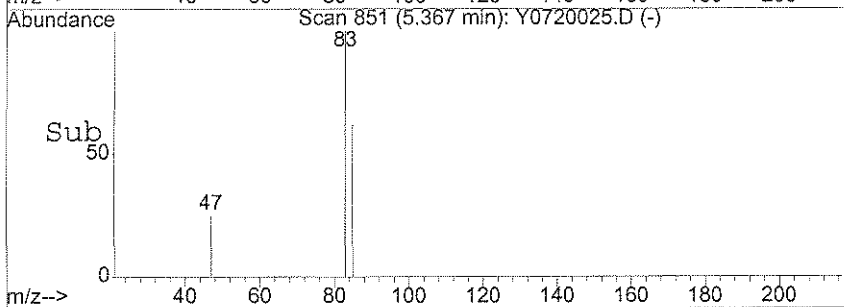
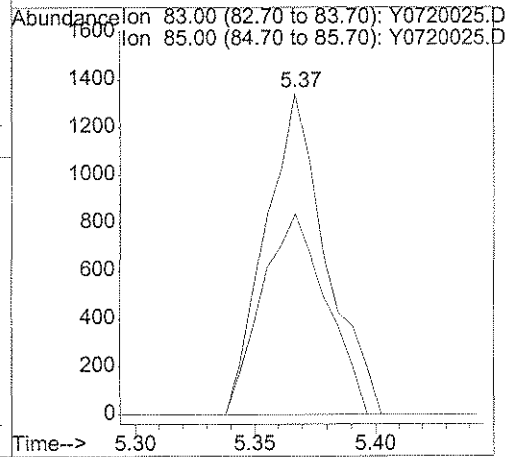
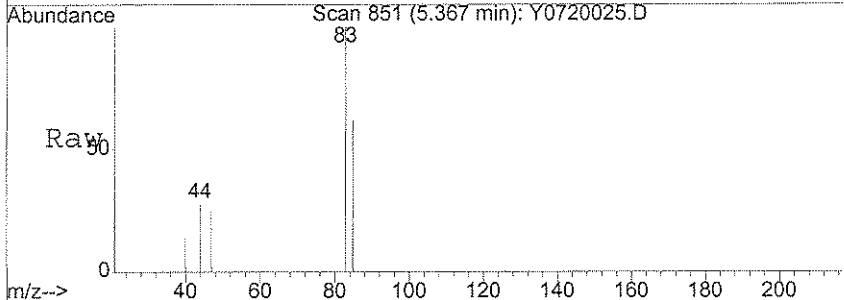
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.70	105	195		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.70	105	54		N.D.	
86) sec-butylbenzene	11.70	105	54		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	11.86	119	65		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	0.00	91	0		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration



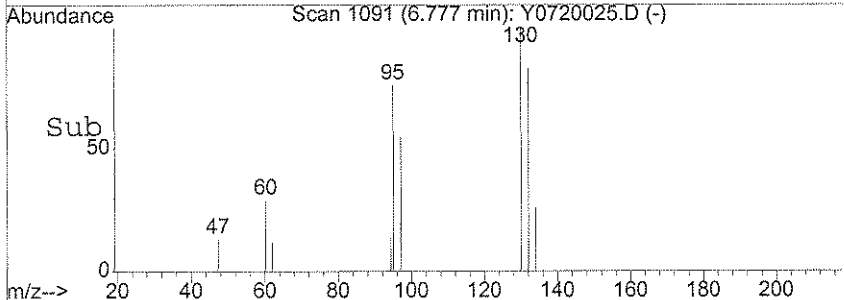
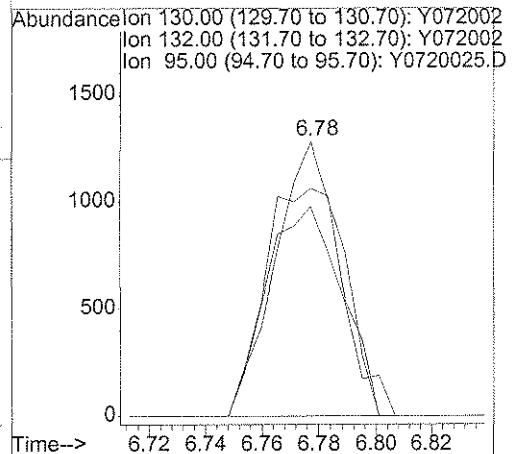
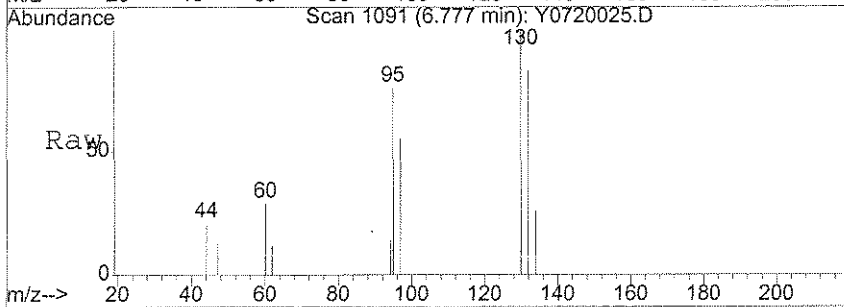
#34  
 Chloroform  
 Concen: 0.68 ug/l  
 RT: 5.37 min Scan# 851  
 Delta R.T. -0.01 min  
 Lab File: Y0720025.D  
 Acq: 20 Jul 2007 16:57

Tgt Ion: 83 Resp: 2343  
 Ion Ratio Lower Upper  
 83 100  
 85 66.7 43.3 83.3



#45  
 Trichloroethene  
 Concen: 0.95 ug/l  
 RT: 6.78 min Scan# 1091  
 Delta R.T. 0.00 min  
 Lab File: Y0720025.D  
 Acq: 20 Jul 2007 16:57

Tgt Ion: 130 Resp: 2059  
 Ion Ratio Lower Upper  
 130 100  
 132 98.8 75.0 115.0  
 95 87.1 69.4 109.4



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-6

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL53 Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL53-002

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0720026.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/13/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/20/2007 17:22

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.37	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.68	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.52	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	1.3	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-6

Lab Name: \_\_\_\_\_ Contract: JPL Groundwater Monitorin

SDG No.: JPL53 Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL53-002

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: Y0720026.D

Level: (LOW/MED) \_\_\_\_\_ Date Collected: 07/13/2007

% Moisture: not dec. \_\_\_\_\_ Date/Time Analyzed: 07/20/2007 17:22

GC Column: DB-624 20m ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	1.5	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-6

Lab Name: \_\_\_\_\_  
 SDG No.: JPL53  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL53-002  
 Lab File ID: Y0720026.D  
 Date Collected: 07/13/2007  
 Date/Time Analyzed: 07/20/2007 17:22  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

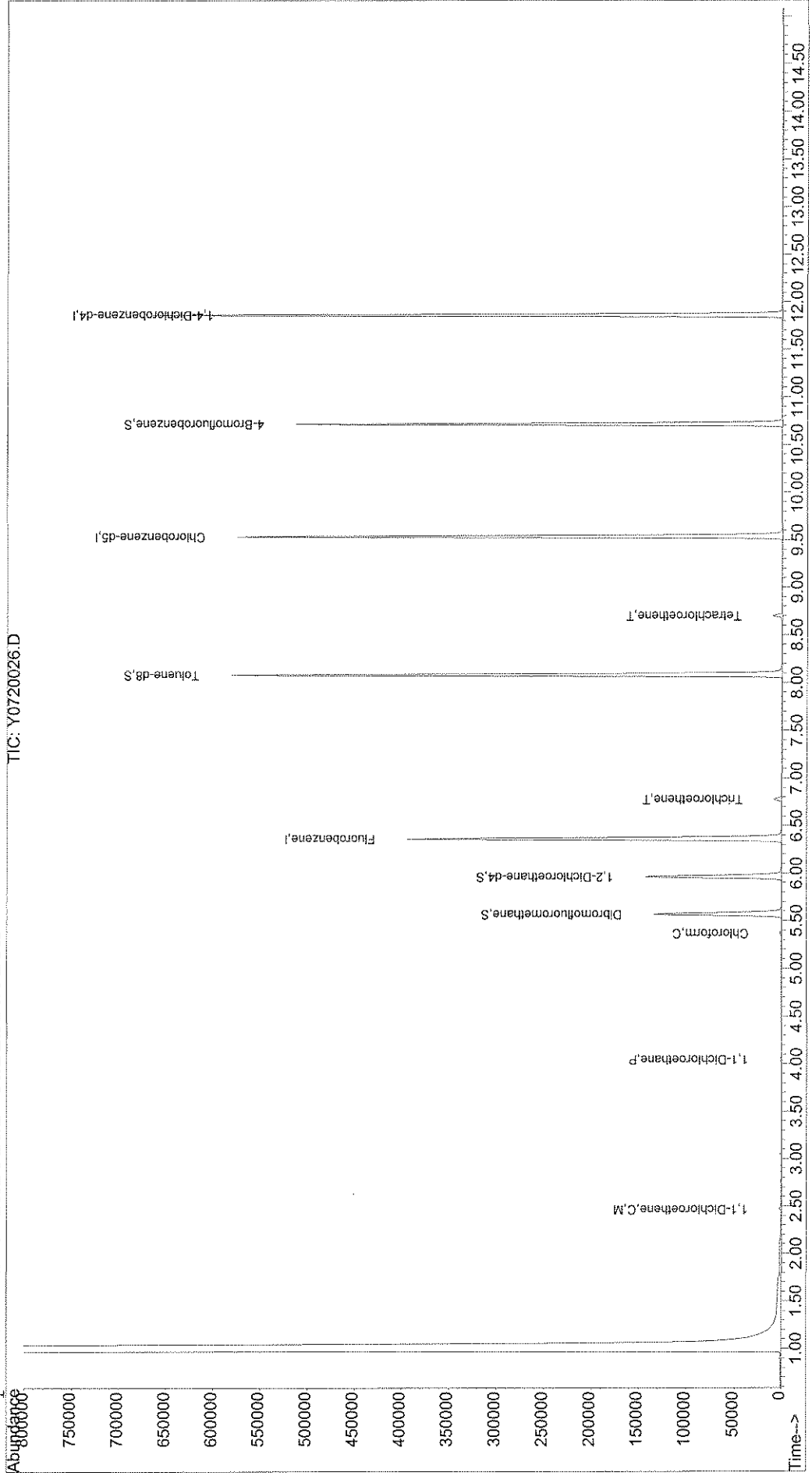
Comments:



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720026.D Vial: 50  
 Acq On : 20 Jul 2007 17:22 Operator: DGA  
 Sample : JPL53-002 Inst : Yoda  
 Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 9:05 2007 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260 - 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720026.D  
 Acq On : 20 Jul 2007 17:22  
 Sample : JPL53-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 9:05 2007

Vial: 50  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar )
1) Fluorobenzene	6.36	96	339189	50.00	ug/l	0.00	93.69%
54) Chlorobenzene-d5	9.53	82	166285	50.00	ug/l	0.00	92.58%
74) 1,4-Dichlorobenzene-d4	11.86	152	171241	50.00	ug/l	0.00	91.86%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	90299	49.71	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	99.42%	
40) 1,2-Dichloroethane-d4	5.96	65	107036	50.42	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.84%	
55) Toluene-d8	8.08	98	358273	49.73	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.46%	
76) 4-Bromofluorobenzene	10.71	95	154536	51.41	ug/l	0.00	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	0.00	50	0	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.47	96	591	0.37	ug/l	# 39
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	0.00	43	0	N.D.	d	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	0.00	76	0	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	d	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	0.00	53	0	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		
23) 1,1-Dichloroethane	4.05	63	2512	0.68	ug/l	88

(#) = qualifier out of range (m) = manual integration  
 Y0720026.D 8260B.M Mon Jul 23 09:05:45 2007

*[Handwritten signature]*  
 8/23/07  
 Page 1

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720026.D  
 Acq On : 20 Jul 2007 17:22  
 Sample : JPL53-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 9:05 2007

Vial: 50  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0	N.D.		
25) Chloroprene	0.00	53	0	N.D.		
26) Isopropyl ether	0.00	45	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	0.00	96	0	N.D.		
30) 2-Butanone	0.00	43	0	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	0.00	41	0	N.D.		
34) Chloroform	5.37	83	1776	0.52	ug/l	98
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
37) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	0.00	78	0	N.D.		
42) 1,2-Dichloroethane	0.00	62	0	N.D.		
43) Isobutanol	0.00	43	0	N.D.		
44) t-amyl methyl ether	0.00	73	0	N.D.	d	
45) Trichloroethene	6.78	130	2814	1.31	ug/l	92
46) Methylcyclohexane	0.00	83	0	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	0.00	41	0	N.D.		
50) Bromodichloromethane	0.00	83	0	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	0.00	75	0	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	0.00	92	0	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	8.70	166	2991	1.53	ug/l	98
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	0.00	43	0	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) Chlorobenzene	0.00	112	0	N.D.		
66) 1-Chlorohexane	9.53	91	529	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		
68) Ethylbenzene	9.53	91	529	N.D.		

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720026.D  
 Acq On : 20 Jul 2007 17:22  
 Sample : JPL53-002  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 9:05 2007

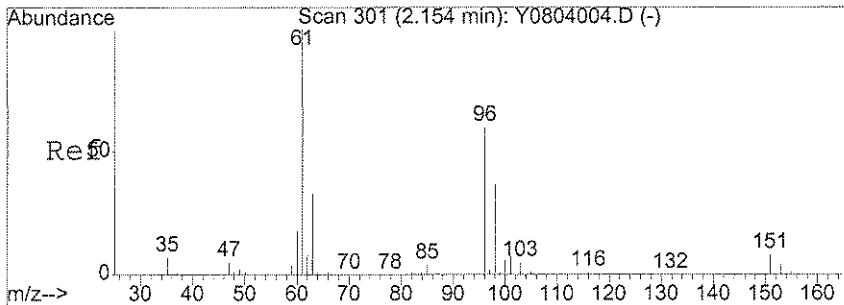
Vial: 50  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

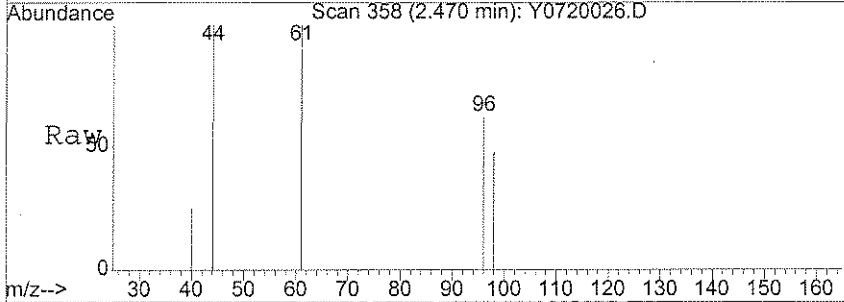
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	10.38	173	56		N.D.	
73) Isopropylbenzene	0.00	105	0		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	0.00	91	0		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	
86) sec-butylbenzene	0.00	105	0		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	0.00	119	0		N.D.	
89) 1,4-Dichlorobenzene	0.00	146	0		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.26	91	67		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

(#) = qualifier out of range (m) = manual integration

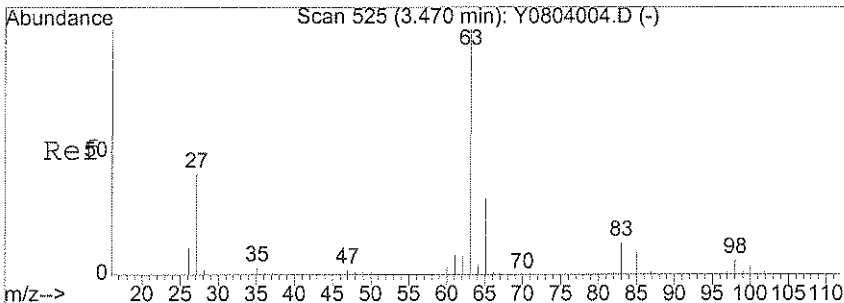
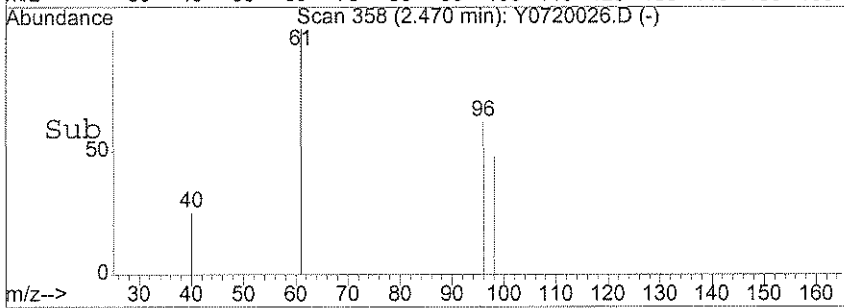
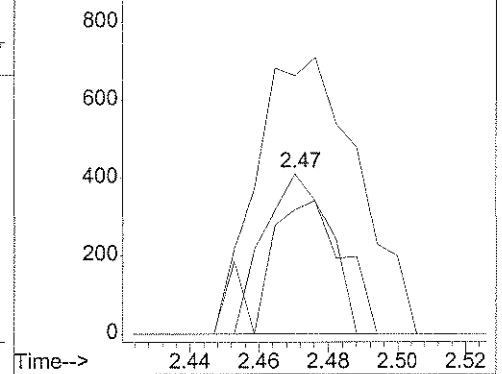


#9  
 1,1-Dichloroethene  
 Concen: 0.37 ug/l  
 RT: 2.47 min Scan# 358  
 Delta R.T. 0.01 min  
 Lab File: Y0720026.D  
 Acq: 20 Jul 2007 17:22

Tgt Ion	Resp	Lower	Upper
96	100		
61	244.2	126.4	166.4#
98	81.4	43.5	83.5

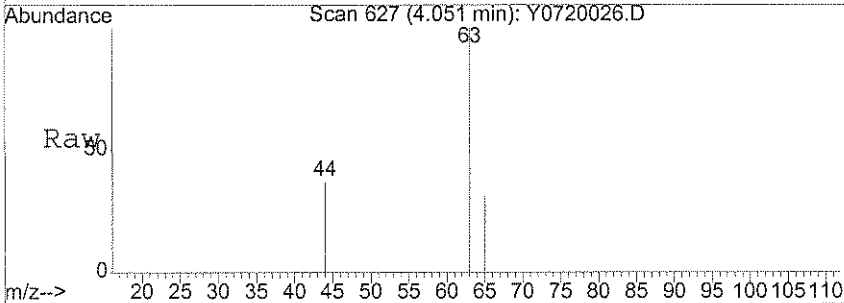


Abundance Ion 96.00 (95.70 to 96.70): Y0720026.D  
 Ion 61.00 (60.70 to 61.70): Y0720026.D  
 Ion 98.00 (97.70 to 98.70): Y0720026.D

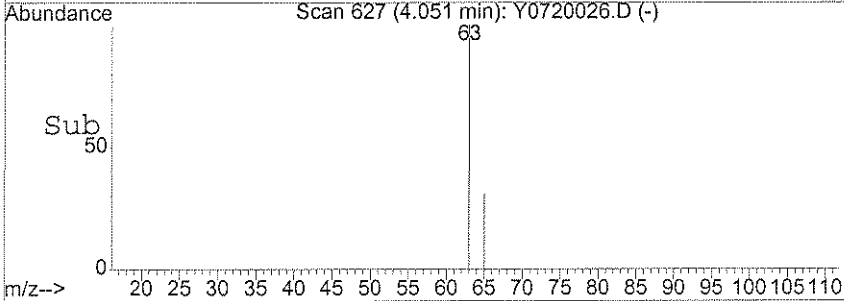
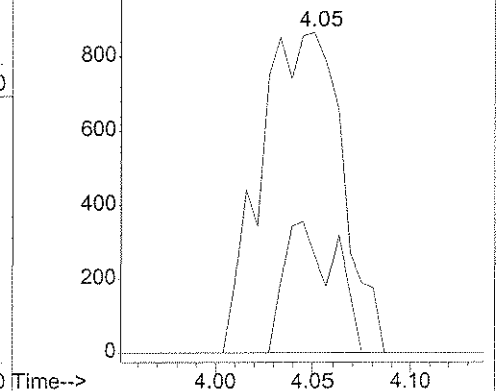


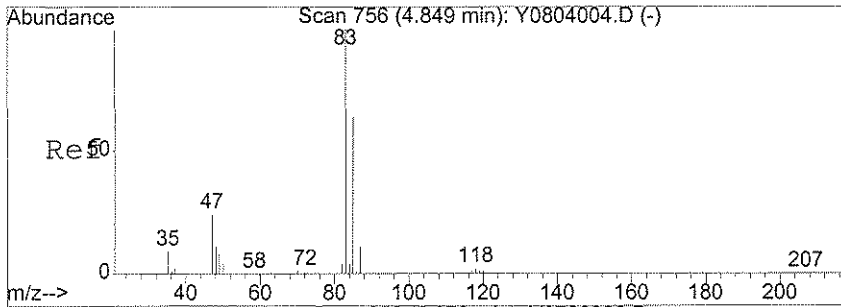
#23  
 1,1-Dichloroethane  
 Concen: 0.68 ug/l  
 RT: 4.05 min Scan# 627  
 Delta R.T. 0.01 min  
 Lab File: Y0720026.D  
 Acq: 20 Jul 2007 17:22

Tgt Ion	Resp	Lower	Upper
63	100		
65	25.4	12.3	52.3



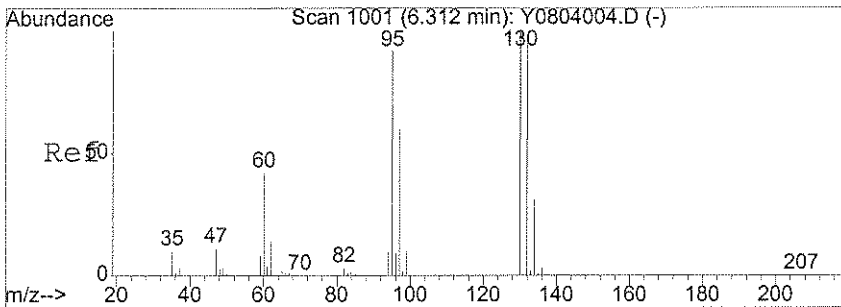
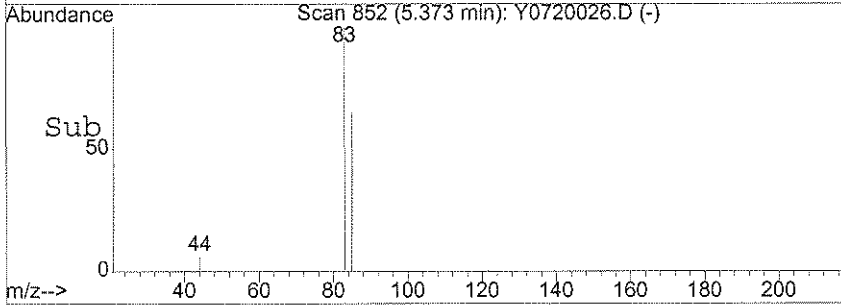
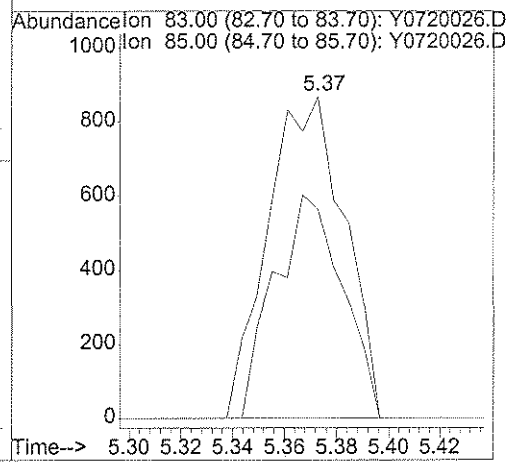
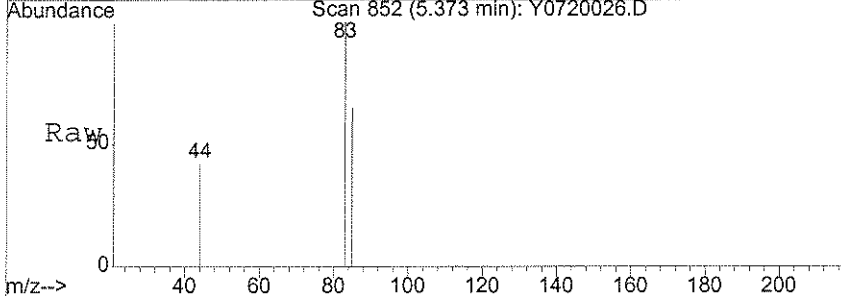
Abundance Ion 63.00 (62.70 to 63.70): Y0720026.D  
 Ion 65.00 (64.70 to 65.70): Y0720026.D





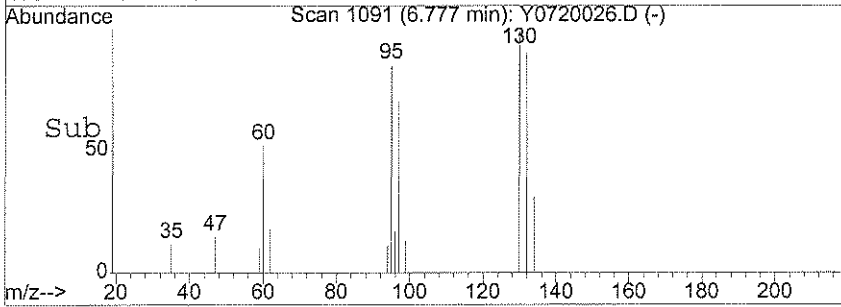
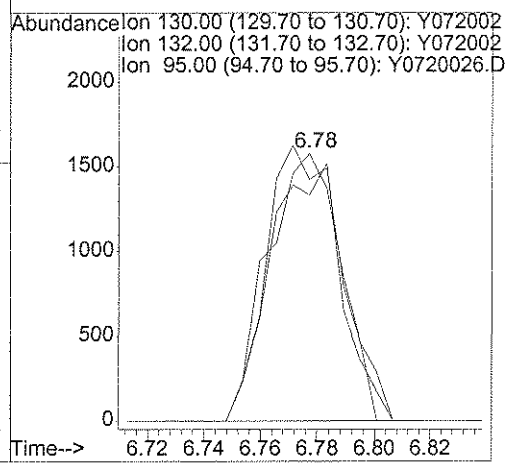
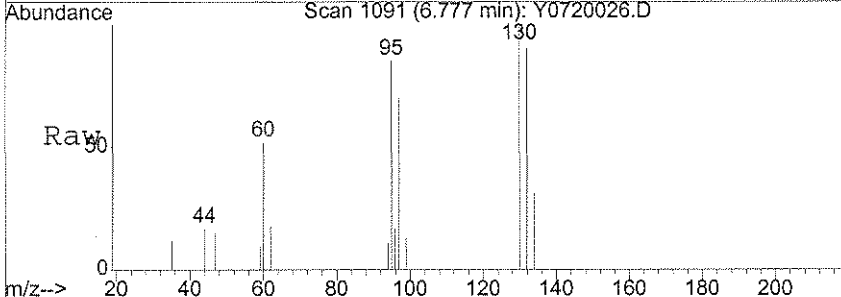
#34  
 Chloroform  
 Concen: 0.52 ug/l  
 RT: 5.37 min Scan# 852  
 Delta R.T. 0.00 min  
 Lab File: Y0720026.D  
 Acq: 20 Jul 2007 17:22

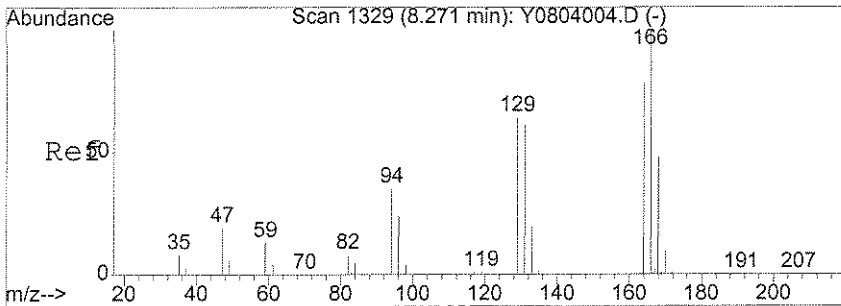
Tgt Ion: 83 Resp: 1776  
 Ion Ratio Lower Upper  
 83 100  
 85 61.7 43.3 83.3



#45  
 Trichloroethene  
 Concen: 1.31 ug/l  
 RT: 6.78 min Scan# 1091  
 Delta R.T. 0.00 min  
 Lab File: Y0720026.D  
 Acq: 20 Jul 2007 17:22

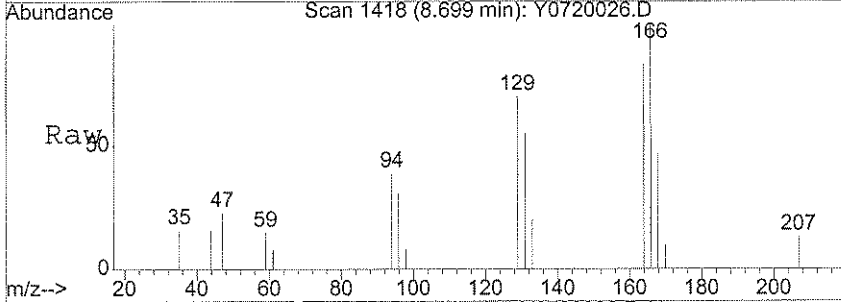
Tgt Ion: 130 Resp: 2814  
 Ion Ratio Lower Upper  
 130 100  
 132 105.2 75.0 115.0  
 95 94.1 69.4 109.4



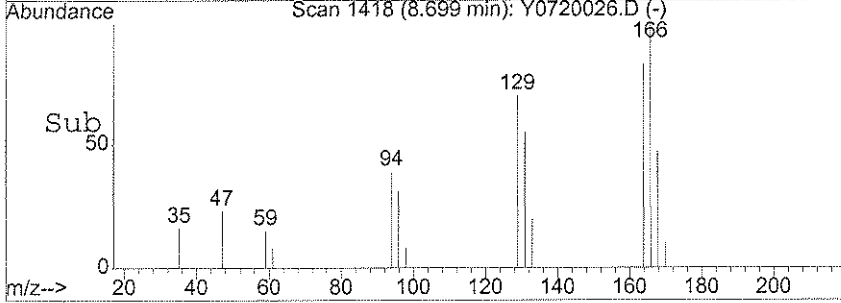
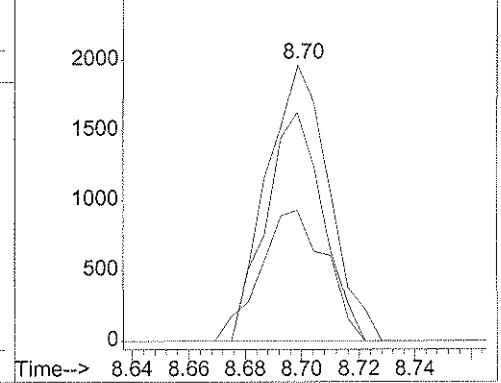


#60  
 Tetrachloroethene  
 Concen: 1.53 ug/l  
 RT: 8.70 min Scan# 1418  
 Delta R.T. 0.00 min  
 Lab File: Y0720026.D  
 Acq: 20 Jul 2007 17:22

Tgt Ion	Resp	Lower	Upper
166	2991		
166	100		
164	76.2	63.3	94.9
168	49.8	39.6	59.4



Abundance  
 Ion 165.95 (165.65 to 166.65): Y072002  
 Ion 163.95 (163.65 to 164.65): Y072002  
 Ion 167.95 (167.65 to 168.65): Y072002



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-15-7/6/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL53  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL53-003  
 Lab File ID: Y0720013.D  
 Date Collected: 07/13/2007  
 Date/Time Analyzed: 07/20/2007 12:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	1.0	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U



1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-15-7/6/07

Lab Name: \_\_\_\_\_

Contract: JPL Groundwater Monitorin

SDG No.: JPL53

Run Sequence: R019780

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL53-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720013.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/13/2007

% Moisture: not dec. \_\_\_\_\_

Date/Time Analyzed: 07/20/2007 12:00

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) <u>ug/L</u>	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-15-7/6/07

Lab Name: \_\_\_\_\_  
 SDG No.: JPL53  
 Matrix: (SOIL/SED/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Heated Purge: (Y/N) N

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL53-003  
 Lab File ID: Y0720013.D  
 Date Collected: 07/13/2007  
 Date/Time Analyzed: 07/20/2007 12:00  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)

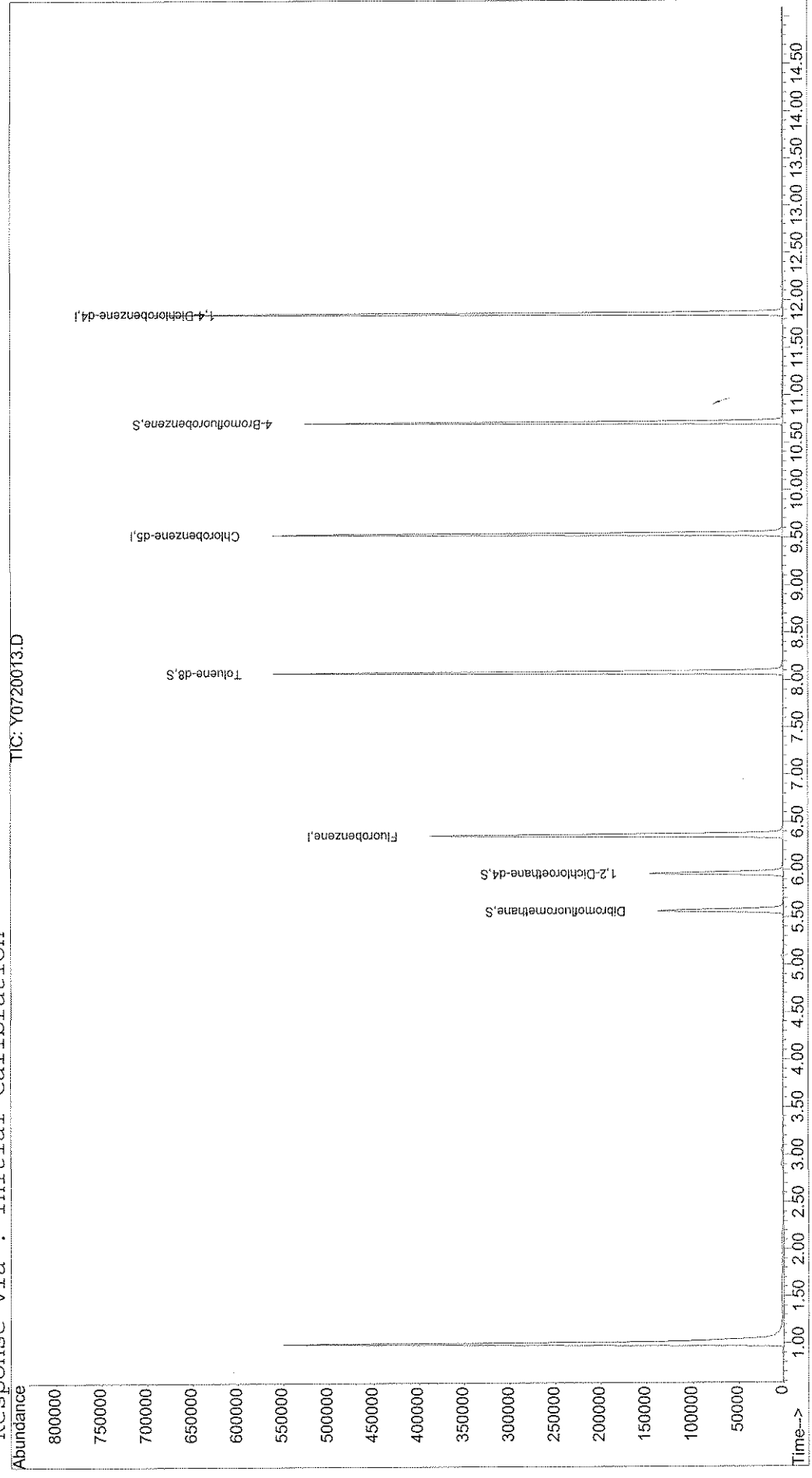
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
96-12-8	1,2-Dibromo-3-chloropropane	0.50		U
120-82-1	1,2,4-Trichlorobenzene	0.50		U
87-68-3	Hexachlorobutadiene	0.50		U
91-20-3	Naphthalene	0.50		U
87-61-6	1,2,3-Trichlorobenzene	0.50		U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720013.D  
Acq On : 20 Jul 2007 12:00  
Sample : JPL53-003  
Misc : #2 5mL +IS/SS(524)  
MS Integration Params: rteint.p  
Quant Time: Jul 23 7:28 2007  
Vial: 37  
Operator: DGA  
Inst : Yoda  
Multiplr: 1.00  
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Last Update : Thu Jul 19 10:37:37 2007  
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720013.D  
 Acq On : 20 Jul 2007 12:00  
 Sample : JPL53-003  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:28 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B  
 IS QA File : X:\MSVOA\YODA\071807\Y0718030.D (18 Jul 2007 18:01)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar )
1) Fluorobenzene	6.36	96	340571	50.00	ug/l	0.00 94.07%
54) Chlorobenzene-d5	9.53	82	163998	50.00	ug/l	0.00 91.30%
74) 1,4-Dichlorobenzene-d4	11.86	152	174218	50.00	ug/l	0.00 93.46%

System Monitoring Compounds

36) Dibromofluoromethane	5.57	111	91585	50.21	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	100.42%
40) 1,2-Dichloroethane-d4	5.96	65	107249	50.31	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	100.62%
55) Toluene-d8	8.08	98	341244	48.03	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	96.06%
76) 4-Bromofluorobenzene	10.71	95	156512	51.18	ug/l	0.00

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.59	43	1363	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.68	76	70	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	41	0	N.D.	d
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	3.05	84	938	Below Cal	# 80
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720013.D  
 Acq On : 20 Jul 2007 12:00  
 Sample : JPL53-003  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:28 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	0.00	45	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	0.00	96	0		N.D.	
30) 2-Butanone	0.00	43	0		N.D.	d
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	0.00	41	0		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.03	78	122		N.D.	
42) 1,2-Dichloroethane	0.00	62	0		N.D.	
43) Isobutanol	0.00	43	0		N.D.	
44) t-amyl methyl ether	0.00	73	0		N.D.	d
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	0.00	75	0		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	0.00	92	0		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	0.00	43	0		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	0.00	112	0		N.D.	
66) 1-Chlorohexane	9.53	91	538		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	
68) Ethylbenzene	9.81	91	280		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\072007\Y0720013.D  
 Acq On : 20 Jul 2007 12:00  
 Sample : JPL53-003  
 Misc : #2 5mL +IS/SS(524)  
 MS Integration Params: rteint.p  
 Quant Time: Jul 23 7:28 2007

Vial: 37  
 Operator: DGA  
 Inst : yoda  
 Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
 Title : VOA 8260- 5ML Calibration 5973Y  
 Last Update : Thu Jul 19 10:37:37 2007  
 Response via : Initial Calibration  
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	10.71	105	145		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	110	0		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	10.98	91	190		N.D.	
82) 4-Chlorotoluene	10.98	91	190		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	0.00	119	0		N.D.	
85) 1,2,4-Trimethylbenzene	11.69	105	171		N.D.	
86) sec-butylbenzene	11.69	105	171		N.D.	
87) 1,3-Dichlorobenzene	11.79	146	70		N.D.	
88) 4-Isopropyltoluene	11.85	119	283		N.D.	
89) 1,4-Dichlorobenzene	11.79	146	70		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	12.25	91	217		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	0.00	180	0		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	0.00	180	0		N.D.	

**TIC FORMS**

SDG JPL53

VOLATILES ANALYSIS

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories, Inc  
 SDG No.: JPL53  
 Matrix: (SOIL/WATER) Water  
 Sample wt/vol: 5.00 (g/mL) mL  
 Level: (LOW/MED) \_\_\_\_\_  
 % Moisture: not dec. \_\_\_\_\_  
 GC Column: DB-624 20m ID: 0.18 (mm)  
 Soil Extract Volume: \_\_\_\_\_ (uL)  
 Number TICs Found: 0

Contract: JPL Groundwater Monitorin  
 Run Sequence: R019780  
 Lab Sample ID: JPL53-001  
 Lab File ID: Y0720025.D  
 Date Collected: 07/14/2007  
 Date Analyzed: 07/20/2007  
 Dilution Factor: 1.0  
 Soil Aliquot Volume: \_\_\_\_\_ (uL)  
 CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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Comments:



Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720025.D Vial: 49  
Acq On : 20 Jul 2007 16:57 Operator: DGA  
Sample : JPL53-001 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720025.D 8260B.M Mon Jul 23 08:17:43 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-6

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL53

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL53-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720026.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/24/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720026.D Vial: 50  
Acq On : 20 Jul 2007 17:22 Operator: DGA  
Sample : JPL53-002 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720026.D 8260B.M Mon Jul 23 09:05:54 2007

1 TIC  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-15-7/6/07

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL53

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL53-003

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720013.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: 07/24/2007  
*8/1/07*

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720013.D Vial: 37  
Acq On : 20 Jul 2007 12:00 Operator: DGA  
Sample : JPL53-003 Inst : yoda  
Misc : #2 5mL +IS/SS(524) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720013.D 8260B.M Mon Jul 23 07:29:25 2007

1 TIC  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B072007MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL53

Run Sequence: R019780

Matrix: (SOIL/WATER) Water

Lab Sample ID: B072007MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y0720008.D

Level: (LOW/MED) \_\_\_\_\_

Date Collected: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 07/20/2007

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs Found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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09					
10					
11					
12					
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26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\072007\Y0720008.D Vial: 32  
Acq On : 20 Jul 2007 9:58 Operator: DGA  
Sample : B072007MVOWY1 Inst : yoda  
Misc : 5mL pfw+IS/SS(MV8-40-19) Multiplr: 1.00  
MS Integration Params: LSCINT.P  
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)  
Title : VOA 8260- 5ML Calibration 5973Y  
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

\*\*\*\*\*  
Y0720008.D 8260B.M Mon Jul 23 10:28:21 2007

**Metals Data**

**JPL53**



COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL53

SOW No.: \_\_\_\_\_

Sample No.
MW-5
MW-6

Lab Sample ID
JPL53-001
JPL53-002

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Bill Ambacher

Name: Bill Ambacher

Date: 8/8/07

Title: Inorganics/Metals Manager

## **Metals Analysis Data Sheets**

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL53

Matrix (soil/water): Water

Lab Sample ID: JPL53-001

Level (low/med): LOW

Date Received: 07/14/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	55200		*	P	R020230
7440-47-3	Chromium	15.7			M	R020222
7439-89-6	Iron	1000			P	R020230
7439-92-1	Lead	2.72			M	R020222
7439-95-4	Magnesium	18400		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	21700		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-6

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL53

Matrix (soil/water): Water

Lab Sample ID: JPL53-002

Level (low/med): LOW

Date Received: 07/14/2007

% Solids: \_\_\_\_\_

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R020222
7440-70-2	Calcium	134000		*	P	R020274
7440-47-3	Chromium	2.27			M	R020222
7439-89-6	Iron	100	U		P	R020230
7439-92-1	Lead	1.27			M	R020222
7439-95-4	Magnesium	43000		*	P	R020230
7440-09-7	Potassium	5000	U		P	R020230
7440-23-5	Sodium	37200		*	P	R020230

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: No

Comment \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Miscellaneous Inorganic Data**

**JPL53**

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL53

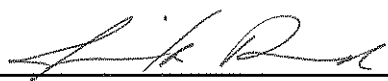
SOW No.: \_\_\_\_\_

Sample No.  
MW-5  
MW-5D  
MW-5MS  
MW-5MSD  
MW-6  
MW-6D

Lab Sample ID  
JPL53-001  
JPL53-001D  
JPL53-001MS  
JPL53-001MSD  
JPL53-002  
JPL53-002Dup

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Jennifer Pennar

Date: 7-31-07

Title: Inorganics Lead

## **Inorganic Analysis Data Sheets**





**Laucks Testing Laboratories, Inc.**

**Final Results**

**Client:** Battelle **Project:** JPL Groundwater Monitoring  
**SDG Number:** JPL53  
**Sample Number:** MW-6 **Date/Time Collected:** 07/13/2007 12:55  
**Lab Sample ID:** JPL53-002 **Date/Time Received:** 07/14/2007 09:50  
**Method:** E150.1 **Unit:** pH Units

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.7		0.10	0.10	07/14/2007	07/14/2007	R019612

**Method:** E160.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	790		2	2	07/17/2007	07/19/2007	R019598

**Method:** E300.0 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	12		2.0	0.55	07/14/2007	07/14/2007	R019609
Sulfate as SO4	14808-79-8	10	170		10	1.7	07/14/2007	07/14/2007	R019609
Chloride	16887-00-6	20	120		20	1.5	07/20/2007	07/20/2007	R019746

**Method:** E310.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	4	8	U	8	8	07/23/2007	07/23/2007	R019820
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	4	220		8	8	07/23/2007	07/23/2007	R019820

**Method:** E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	07/24/2007	07/25/2007	R019848

June 18, 2007

David Conner  
Battelle  
3990 Old Town Ave., Suite C-205  
San Diego, CA 92110

**RE: JPL Groundwater Monitoring 2Q07/Project #G486090**

Dear David:

Enclosed are the results of the samples submitted to our laboratory on June 12-15, 2007. For your reference, these analyses have been assigned our service request number P0700571.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains \_\_\_\_\_ pages.

Columbia Analytical Services is certified for environmental analyses by NELAP (certificate number: 02115CA) and Arizona Department of Health Services (License number: AZ0694).

If you have any questions, please call me at (805) 577-2086.

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Sue Anderson  
Project Chemist

SA

**CAS CSR #P0700571**

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# Columbia Analytical Services, Inc.

## Acronyms

<b>8015M</b>	California DHS LUFT Method
<b>ASTM</b>	American Society for Testing and Materials
<b>BOD</b>	Biochemical Oxygen Demand
<b>BTEX</b>	Benzene/Toluene/Ethylbenzene/Xylenes
<b>CAM</b>	California Assessment Metals
<b>CAS Number</b>	Chemical Abstract Service Registry Number
<b>CFC</b>	Chlorofluorocarbon
<b>COD</b>	Chemical Oxygen Demand
<b>CRDL</b>	Contract Required Detection Limit
<b>D</b>	Detected; result must be greater than zero.
<b>DL</b>	Detected; result must be greater than the detection limit.
<b>DLCS</b>	Duplicate Laboratory Control Sample
<b>DMS</b>	Duplicate Matrix Spike
<b>DOH or DHS</b>	Department of Health Services
<b>ELAP</b>	Environmental Laboratory Accreditation Program
<b>EPA</b>	U.S. Environmental Protection Agency
<b>GC</b>	Gas Chromatography
<b>GC/MS</b>	Gas Chromatography/Mass Spectrometry
<b>IC</b>	Ion Chromatography
<b>ICB</b>	Initial Calibration Blank sample
<b>ICP</b>	Inductively Coupled Plasma atomic emission spectrometry
<b>ICV</b>	Initial Calibration Verification sample
<b>LCS</b>	Laboratory Control Sample
<b>LUFT</b>	Leaking Underground Fuel Tank
<b>M</b>	Modified
<b>MBAS</b>	Methylene Blue Active Substances
<b>MDL</b>	Method Detection Limit
<b>MRL</b>	Method Reporting Limit
<b>MS</b>	Matrix Spike
<b>MTBE</b>	Methyl- <i>tert</i> -Butyl Ether
<b>NA</b>	Not Applicable
<b>NC</b>	Not Calculated
<b>ND</b>	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
<b>NTU</b>	Nephelometric Turbidity Units
<b>ppb</b>	Parts Per Billion
<b>ppm</b>	Parts Per Million
<b>PQL</b>	Practical Quantitation Limit
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RPD</b>	Relative Percent Difference
<b>SIM</b>	Selected Ion Monitoring
<b>SM</b>	<i>Standard Methods for the Examination of Water and Wastewater</i> , 18th Ed., 1992.
<b>STLC</b>	Solubility Threshold Limit Concentration
<b>SW</b>	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846</i> , Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TDS</b>	Total Dissolved Solids
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TSS</b>	Total Suspended Solids
<b>TTLC</b>	Total Threshold Limit Concentration
<b>VOA</b>	Volatile Organic Analyte(s)

## Qualifiers

<b>U</b>	Undetected at or above MDL/MRL (PQL).
<b>J</b>	Estimated concentration. Analyte detected above MDL, but below MRL (PQL).
<b>B</b>	Hit above MRL (PQL) also found in Method Blank.
<b>E</b>	Analyte concentration above high point of ICAL.
<b>N</b>	Presumptive evidence of compound.
<b>D</b>	Result from dilution.
<b>X</b>	See case narrative.

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07/G486090  
Sample Matrix: Water  
Service Request No.: P07000571  
Date Received: 6/12-15/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

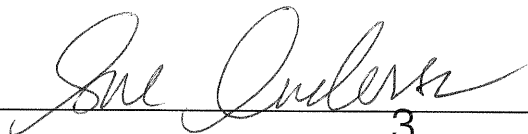
Sample Receipt

The samples were received for analysis at Columbia Analytical Services on 6/12-15/07. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored at 4°C upon receipt at the laboratory.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

Approved by



Date

6/18/07

Client: Battelle  
Project: JPL Groundwater Monitoring 2007/G486090

Service Request: P0700571

### SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P0700571-001	MW-21-5	06/12/07	07:54
P0700571-002	MW-21-4	06/12/07	08:38
P0700571-003	MW-21-3	06/12/07	09:17
P0700571-004	MW-21-2	06/12/07	09:54
P0700571-005	MW-21-1	06/12/07	10:56
P0700571-006	DUPE-1-2Q07	06/12/07	00:00
P0700571-007	EB-1-6/12/07	06/12/07	10:43
P0700571-008	MW-19-5	06/14/07	07:48
P0700571-009	MW-19-4	06/14/07	08:26
P0700571-010	MW-19-3	06/14/07	09:03
P0700571-011	MW-19-2	06/14/07	09:39
P0700571-012	MW-19-1	06/14/07	10:17
P0700571-013	EB-2-6/14/07	06/14/07	10:01
P0700571-014	MW-18-5	06/15/07	08:18
P0700571-015	MW-18-4	06/15/07	09:02
P0700571-016	MW-18-3	06/15/07	09:40
P0700571-017	MW-18-2	06/15/07	10:17
P0700571-018	MW-18-1	06/15/07	10:55
P0700571-019	EB-3-6/15/07	06/15/07	10:40



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555 PAGE 1 OF 1 CAS Contact

<b>Project Name</b> JPL GW MW 2007 <b>Project Number</b> 6486090 <b>Project Manager</b> DAVID CORNER <b>Company/Address</b> BATTLELLE 3990 OLD TOWN AVE., C-205 SAN DIEGO, CA 92110 <b>Phone #</b> 619-726-7311 <b>Sampler's Signature</b> MARGO MENDOZA		<b>ANALYSIS REQUESTED (Include Method Number and Container Preservative)</b> PRESERVATIVE: 0 TPB Gas (purgable) 8015m Fuel Char. 8015m (extractable) 8021 / 602 Halogenated Volatiles 8260 VOA by GCMS 8260 / 624 SemivOA by GCMS 8270 / 625 Pesticides 8081 / 8082 / 608 PCBs 8081 / 8082 / 608 CCR Metals (17) 6010 / 6020 / 7000 / 2007 / 2008 (CIV) (791)		<b>REMARKS/ALTERNATE DESCRIPTION</b> Preservative Key 0. NONE 1. HCl 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4 8. Other					
<b>CLIENT SAMPLE ID</b> MW-21-5 MW-21-4 MW-21-3 MW-21-2 MW-21-1 DUPE - 1 - 2007 EB-1 - 6/12/07		<b>LAB ID</b> 1 2 3 4 5 6 7		<b>SAMPLING DATE</b> 6/12/07 838 917 954 1056 — 1043		<b>MATRIX</b> W           		<b>NUMBER OF CONTAINERS</b> 1 1 1 1 1 1 1	
<b>SPECIAL INSTRUCTIONS/COMMENTS</b>		<b>TURNAROUND REQUIREMENTS</b> RUSH (SURCHARGES APPLY) PLEASE CIRCLE WORK DAYS: 1 2 3 4 STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE		<b>REPORT REQUIREMENTS</b> I. Results Only II. Results + OC Summaries (LCS, DUP, MS/MSD as required) III. Results + OC and Calibration Summaries IV. Data Validation Report with Raw Data MRL Yes No POL/MDLU Yes No Ecata Yes No		<b>INVOICE INFORMATION</b> PO# 207 SWZ 6/12/07 BILL TO: BATELLE GERALD TOMPKINS 505 KING AVE COLUMBUS, OH 43201 Lab No: PD700571			
<b>SAMPLE RECEIPT: CONDITION/COOLER TEMP:</b> RELINQUISHED BY: MARGO MENDOZA Signature: MARGO MENDOZA Printed Name: MARGO MENDOZA Firm: GEOSCIENCE Date/Time: 6/12/07 1231		<b>RECEIVED BY:</b> Signature: [Signature] Printed Name: [Name] Firm: [Firm] Date/Time: 6/12/07 1320		<b>CUSTOMER SEALS: Y N</b> RELINQUISHED BY: [Signature] Signature: [Signature] Printed Name: [Name] Firm: [Firm] Date/Time: 6/12/07 1320		<b>RECEIVED BY:</b> Signature: [Signature] Printed Name: [Name] Firm: [Firm] Date/Time: [Date/Time]			







# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555      PAGE 1 OF 1      CAS Contact

<p><b>Project Name</b> JPL GW MON 2007</p> <p><b>Project Manager</b> DAVID CONNER</p> <p><b>Company/Address</b> BATTLELLE 3990 OLD TOWN AVE, C-205 SAN DIEGO, CA 92110</p> <p><b>Phone #</b> 619-726-7311</p> <p><b>Sampler's Signature</b> MARGO MENDOZA</p>	<p><b>Project Number</b> 6486090</p> <p><b>Report CC</b></p> <p><b>Sampler's Printed Name</b> MARGO MENDOZA</p>	<p><b>ANALYSIS REQUESTED (Include Method Number and Container Preservative)</b></p> <p>TPH Gas 8015m (purgeable) <input type="checkbox"/> Fuel Char. <input type="checkbox"/> BTEX <input type="checkbox"/> MTBE <input type="checkbox"/> Halogenated Volatiles 8260 <input type="checkbox"/> VOA by GCMS <input type="checkbox"/> Oxygenates <input type="checkbox"/> SemVOA by GCMS 8270 / 625 <input type="checkbox"/> Pesticides <input type="checkbox"/> PCBs <input type="checkbox"/> 8081 / 8082 / 608 CCR Metals (17) 6010 / 6020 / 7000 / 2007 / 2008 <input type="checkbox"/> (7916) TA 0</p>	<p><b>PRESERVATIVE</b></p> <p><b>NUMBER OF CONTAINERS</b></p> <p><b>Preservative Key</b> 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn Acetate 6. MeOH 7. NaHSO4 8. Other _____</p> <p><b>REMARKS/ALTERNATE DESCRIPTION</b></p>
<p><b>CLIENT SAMPLE ID</b></p> <p>MW-18-5 MW-18-4 MW-18-3 MW-18-2 MW-18-1 EB-3 - 6/15/07</p>	<p><b>LAB ID</b></p> <p>14 15 16 17 18 19</p>	<p><b>SAMPLING DATE</b></p> <p>6/15/07 902 1017 1055 1040</p>	<p><b>MATRIX</b></p> <p>W          </p>
<p><b>SPECIAL INSTRUCTIONS/COMMENTS</b></p>			
<p><b>TURNAROUND REQUIREMENTS</b></p> <p>____ RUSH (SURCHARGES APPLY)</p> <p><b>PLEASE CIRCLE WORK DAYS</b></p> <p>1 2 3 4</p> <p>____ STANDARD</p> <p><b>REQUESTED FAX DATE</b> _____</p> <p><b>REQUESTED REPORT DATE</b> _____</p>		<p><b>REPORT REQUIREMENTS</b></p> <p>____ I. Results Only</p> <p>____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)</p> <p>____ III. Results + QC and Calibration Summaries</p> <p>____ IV. Data Validation Report with Raw Data</p> <p>MPL Yes ___ No ___ POL/MDL/J Yes ___ No ___ Ectala Yes ___ No ___</p>	
<p><b>RECEIVED BY</b> Signature: <i>[Signature]</i> Printed Name: MARGO MENDOZA Firm: CAS Date/Time: 6/15/07 1209</p>		<p><b>RECEIVED BY</b> Signature: <i>[Signature]</i> Printed Name: JENNIFER KURTZ Firm: CAS Date/Time: 6/15/07 1310</p>	
<p><b>INVOICE INFORMATION</b></p> <p>PO# _____</p> <p>BILL TO: BATTLELLE GEMALD TOMPKINS 505 KING AVE COLUMBUS, OH 43201 Lab No: P0700571</p>		<p><b>RECEIVED BY</b></p>	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700571

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700571-001.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-002.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-003.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-004.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-005.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-006.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-007.01	06/12/2007	1342	SMO / SANDERSON	
	06/12/2007	1405	In Lab / RWONG	
	06/12/2007	1534	P-37 / RWONG	
P0700571-008.01	06/14/2007	1303	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1638	P-37 / RWONG	
P0700571-009.01	06/14/2007	1303	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1638	P-37 / RWONG	
P0700571-010.01	06/14/2007	1303	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1638	P-37 / RWONG	
P0700571-011.01	06/14/2007	1303	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1639	P-37 / RWONG	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700571

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700571-012.01	06/14/2007	1303	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1639	P-37 / RWONG	
P0700571-012.02	06/14/2007	1305	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1639	P-37 / RWONG	
P0700571-013.01	06/14/2007	1303	SMO / LKUKITA	
	06/14/2007	1359	In Lab / RWONG	
	06/14/2007	1639	P-37 / RWONG	
P0700571-014.01	06/15/2007	1310	SMO / LKUKITA	
	06/15/2007	1412	In Lab / RWONG	
	06/15/2007	1652	P-37 / RWONG	
P0700571-015.01	06/15/2007	1310	SMO / LKUKITA	
	06/15/2007	1412	In Lab / RWONG	
	06/15/2007	1652	P-37 / RWONG	
P0700571-016.01	06/15/2007	1310	SMO / LKUKITA	
	06/15/2007	1412	In Lab / RWONG	
	06/15/2007	1652	P-37 / RWONG	
P0700571-017.01	06/15/2007	1310	SMO / LKUKITA	
	06/15/2007	1412	In Lab / RWONG	
	06/15/2007	1652	P-37 / RWONG	
P0700571-018.01	06/15/2007	1310	SMO / LKUKITA	
	06/15/2007	1412	In Lab / RWONG	
	06/15/2007	1652	P-37 / RWONG	
P0700571-019.01	06/15/2007	1310	SMO / LKUKITA	
	06/15/2007	1413	In Lab / RWONG	
	06/15/2007	1652	P-37 / RWONG	

**DIVIDER SHEET**

**ANALYTICAL DATA**  
**FOR**

**Hexavalent Chromium**

---

**ANALYSIS**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client :** Battelle  
**Project Name :** JPL Groundwater Monitoring 2Q07  
**Project Number :** G486090  
**Sample Matrix :** WATER

**Service Request :** P0700571  
**Date Collected :** 06/12-15/07  
**Date Received :** 06/12-15/07

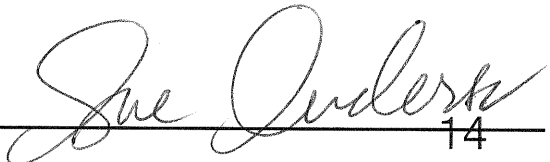
Chromium, Hexavalent

**Prep Method :** None  
**Analysis Method :** 7196A  
**Test Notes :**

**Units :** mg/L (ppm)  
**Basis :** NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-21-5	P0700571-001	0.01	0.005	1	NA	06/12/07 14:55	ND	
MW-21-4	P0700571-002	0.01	0.005	1	NA	06/12/07 14:55	ND	
MW-21-3	P0700571-003	0.01	0.005	1	NA	06/12/07 14:55	ND	
MW-21-2	P0700571-004	0.01	0.005	1	NA	06/12/07 14:55	ND	
MW-21-1	P0700571-005	0.01	0.005	1	NA	06/12/07 14:55	ND	
DUPE-1-2Q07	P0700571-006	0.01	0.005	1	NA	06/12/07 14:55	ND	
EB-1-6/12/07	P0700571-007	0.01	0.005	1	NA	06/12/07 14:55	ND	
MW-19-5	P0700571-008	0.01	0.005	1	NA	06/14/07 15:45	ND	
MW-19-4	P0700571-009	0.01	0.005	1	NA	06/14/07 15:45	ND	
MW-19-3	P0700571-010	0.01	0.005	1	NA	06/14/07 15:45	0.005	J
MW-19-2	P0700571-011	0.01	0.005	1	NA	06/14/07 15:45	0.01	
MW-19-1	P0700571-012	0.01	0.005	1	NA	06/14/07 15:45	0.008	J
EB-2-6/14/07	P0700571-013	0.01	0.005	1	NA	06/14/07 15:45	ND	
MW-18-5	P0700571-014	0.01	0.005	1	NA	06/15/07 14:45	ND	
MW-18-4	P0700571-015	0.01	0.005	1	NA	06/15/07 14:45	ND	
MW-18-3	P0700571-016	0.01	0.005	1	NA	06/15/07 14:45	ND	
MW-18-2	P0700571-017	0.01	0.005	1	NA	06/15/07 14:45	ND	
MW-18-1	P0700571-018	0.01	0.005	1	NA	06/15/07 14:45	ND	
EB-3-6/15/07	P0700571-019	0.01	0.005	1	NA	06/15/07 14:45	ND	
Method Blank	P0700571-MB	0.01	0.005	1	NA	06/12/07 14:55	ND	
Method Blank	P0700571-MB	0.01	0.005	1	NA	06/14/07 15:45	ND	
Method Blank	P0700571-MB	0.01	0.005	1	NA	06/15/07 14:45	ND	

J Estimated concentration. The result is less than the PQL but greater than the MDL.

Approved By  Date: 6/18/07

July 19, 2007

David Conner  
Battelle  
3990 Old Town Ave., Suite C-205  
San Diego, CA 92110

**RE: JPL Groundwater Monitoring 2Q07/Project #G486090**

Dear David:

Enclosed are the results of the samples submitted to our laboratory on June 18-22, 2007. The samples were sent out for partial analysis to our Kelso facility. Please find their report attached. For your reference, these analyses have been assigned our service request number P0700590.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 229 pages.

Columbia Analytical Services is certified for environmental analyses by NELAP (certificate number: 02115CA) and Arizona Department of Health Services (License number: AZ0694).

If you have any questions, please call me at (805) 577-2086.

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Sue Anderson  
Project Chemist

SA



**CAS CSR #P0700590**

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CAS-Kelso Report..... 57-229

# Columbia Analytical Services, Inc.

## Acronyms

<b>8015M</b>	California DHS LUFT Method
<b>ASTM</b>	American Society for Testing and Materials
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<b>DOH or DHS</b>	Department of Health Services
<b>ELAP</b>	Environmental Laboratory Accreditation Program
<b>EPA</b>	U.S. Environmental Protection Agency
<b>GC</b>	Gas Chromatography
<b>GC/MS</b>	Gas Chromatography/Mass Spectrometry
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<b>LCS</b>	Laboratory Control Sample
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<b>M</b>	Modified
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<b>MRL</b>	Method Reporting Limit
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<b>MTBE</b>	Methyl- <i>tert</i> -Butyl Ether
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<b>NTU</b>	Nephelometric Turbidity Units
<b>ppb</b>	Parts Per Billion
<b>ppm</b>	Parts Per Million
<b>PQL</b>	Practical Quantitation Limit
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<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RPD</b>	Relative Percent Difference
<b>SIM</b>	Selected Ion Monitoring
<b>SM</b>	<i>Standard Methods for the Examination of Water and Wastewater</i> ; 18th Ed., 1992.
<b>STLC</b>	Solubility Threshold Limit Concentration
<b>SW</b>	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods</i> ; SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TDS</b>	Total Dissolved Solids
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TSS</b>	Total Suspended Solids
<b>TTLC</b>	Total Threshold Limit Concentration
<b>VOA</b>	Volatile Organic Analyte(s)

## Qualifiers

<b>U</b>	Undetected at or above MDL/MRL (PQL).
<b>J</b>	Estimated concentration. Analyte detected above MDL, but below MRL (PQL).
<b>B</b>	Hit above MRL (PQL) also found in Method Blank.
<b>E</b>	Analyte concentration above high point of ICAL.
<b>N</b>	Presumptive evidence of compound.
<b>D</b>	Result from dilution.
<b>X</b>	See case narrative.



COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090  
**Sample Matrix:** Water  
**Service Request No.:** P07000590  
**Date Received:** 6/18-22/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

The samples were received for analysis at Columbia Analytical Services on 6/18-22/07. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored at 4°C upon receipt at the laboratory.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

Approved by



Date

6/27/07

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07/G486090

Service Request: P0700590

### SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P0700590-001	MW-20-5	06/18/07	07:57
P0700590-002	MW-20-4	06/18/07	08:38
P0700590-003	MW-20-3	06/18/07	09:17
P0700590-004	MW-20-2	06/18/07	09:52
P0700590-005	MW-20-1	06/18/07	10:31
P0700590-006	DUPE-2-2Q07	06/18/07	00:00
P0700590-007	EB-4-6/18/07	06/18/07	10:12
P0700590-008	MW-17-5	06/19/07	07:50
P0700590-009	MW-17-4	06/19/07	08:47
P0700590-010	MW-17-3	06/19/07	10:15
P0700590-011	MW-17-2	06/19/07	11:17
P0700590-012	MW-17-1	06/19/07	11:51
P0700590-013	DUPE-3-2Q07	06/19/07	00:00
P0700590-014	EB-5-6/19/07	06/19/07	11:37
P0700590-015	MW-22-5	06/20/07	07:45
P0700590-016	MW-22-4	06/20/07	08:25
P0700590-017	MW-22-3	06/20/07	09:03
P0700590-018	MW-22-2	06/20/07	09:42
P0700590-019	MW-22-1	06/20/07	10:20
P0700590-020	EB-6-6/20/07	06/20/07	10:04
P0700590-021	MW-3-5	06/21/07	07:55
P0700590-022	MW-3-4	06/21/07	08:39
P0700590-023	MW-3-3	06/21/07	09:18
P0700590-024	MW-3-2	06/21/07	10:17
P0700590-025	MW-3-1	06/21/07	11:25
P0700590-026	DUPE-4-2Q07	06/21/07	00:00
P0700590-027	EB-7-06/21/07	06/21/07	11:03
P0700590-028	MW-14-5	06/22/07	07:49
P0700590-029	MW-14-4	06/22/07	08:28
P0700590-030	MW-14-3	06/22/07	09:06
P0700590-031	MW-14-2	06/22/07	09:45
P0700590-032	MW-14-1	06/22/07	10:24
P0700590-033	EB-8-06/22/07	06/22/07	10:05



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 X02 • FAX (818) 587-5555

PAGE 1 OF 1

CAS Contact

<b>Project Name</b> JPL GW MON 2007		<b>Project Number</b> 6486090		<b>ANALYSIS REQUESTED (Include Method Number and Container Preservative)</b>	
<b>Project Manager</b> DAVID CONNER		<b>Report CC</b>		0	
<b>Company/Address</b> BATELLE 3990 OLD TOWN AVE., C-205 SAN DIEGO, CA 92110		<b>Phone #</b> 619-726-7311		<b>FAX#</b>	
<b>Sampler's Signature</b> 		<b>Sampler's Printed Name</b> MARG MENDOZA		<b>Preservative Key</b> 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4 8. Other	
<b>CLIENT SAMPLE ID</b>		<b>LAB ID</b>		<b>REMARKS/ALTERNATE DESCRIPTION</b>	
MW-20-5	1	6/18/07	757	W	TPH Gas 8015m (purgeable) 8015m (extractable) BTEX <input type="checkbox"/> MTBE <input type="checkbox"/> Halogenated Volatiles 8260 / 624 VOA by GCMS <input type="checkbox"/> Oxygenates <input type="checkbox"/> 8270 / 625 SemiVOA by GCMS 8081 / 8082 PCBs <input type="checkbox"/> 608 CCR Metals (17) 6010 / 6020 / 7000 / 2007 / 2008 (VIA 7156)
MW-20-4	2		838		
MW-20-3	3		917		
MON-20-2	4		952		
MW-20-1	5		1031		
DUP-2-2007	6				Duplicate
EB-4-6/18/07	7		1012		Equip Blame
<b>SPECIAL INSTRUCTIONS/COMMENTS</b>					
See OAPP <input type="checkbox"/>		<b>TURNAROUND REQUIREMENTS</b> RUSH (SURCHARGES APPLY) PLEASE CIRCLE WORK DAYS 1 2 3 4 STANDARD		<b>REPORT REQUIREMENTS</b> I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data MRL Yes ___ No ___ POL/MDL/ Yes ___ No ___ Edata Yes ___ No ___	
<b>SAMPLE RECEIPT: CONDITION/COOLER TEMP:</b>		<b>RECEIVED BY</b> 		<b>RECEIVED BY</b> 	
<b>RELINQUISHED BY</b> 		<b>RELINQUISHED BY</b> 		<b>RELINQUISHED BY</b> 	
<b>Signature</b> MARG MENDOZA		<b>Signature</b> Audrey Weston		<b>Signature</b>	
<b>Printed Name</b> MARG MENDOZA		<b>Printed Name</b> Audrey Weston		<b>Printed Name</b>	
<b>Firm</b> BATELLE		<b>Firm</b> CAS		<b>Firm</b>	
<b>Date/Time</b> 6/18/07 / 1226		<b>Date/Time</b> 6/18/07 1325		<b>Date/Time</b>	
<b>Lab No.</b> 508 KING AVE COLUMBUS, OH 43261 90700590		<b>Requested Report Date</b>		<b>Requested Report Date</b>	



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 X02 • FAX (818) 587-5555

CAS Contact

PAGE 1 OF 1

Project Name <b>JPL GW MON 2007</b>		Project Number <del>6486090</del> <b>6486090</b>	
Project Manager <b>DAVID CONNER</b>		Report CC	
Company/Address <b>3990 OLD TOWN AVE., C-205 SAN DIEGO, CA 92110</b>			
Phone # <b>619-726-7311</b>	FAX#	Sampler's Printed Name <b>MARGO MENDOZA</b>	
Sampler's Signature <i>[Signature]</i>		Sampler's Printed Name <b>MARGO MENDOZA</b>	
CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	MATRIX
MW-17-5	8	6/19/07 7:50	W
MW-17-4	9	8:47	1
MW-17-3	10	10:15	1
MW-17-2	11	11:17	1
MW-17-1	12	11:57	1
DUP-3-2007	13	—	—
EB-5-6/19/07	14	11:57	1

SPECIAL INSTRUCTIONS/COMMENTS	TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY)	REPORT REQUIREMENTS I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data	INVOICE INFORMATION
	PLEASE CIRCLE WORK DAYS 1 2 3 4 STANDARD	MRL Yes No PQL/MDLJ Yes No Edata Yes No	PO# <b>240643</b> BILL TO: <b>BATELLE</b> <b>GEORGE TOMPKINS</b> <b>505 KING AVE</b> <b>COLUMBUS, OH 43201</b> Lab No: <b>P0700590</b>

RECEIVED BY <i>[Signature]</i> Signature <b>MARGO MENDOZA</b> Printed Name <b>GEORGE</b> Firm <b>6/19/07 1310</b> Date/Time	RECEIVED BY <i>[Signature]</i> Signature <b>MARGO MARTINEZ</b> Printed Name <b>CAS</b> Firm <b>6/19/07 1310</b> Date/Time	RECEIVED BY <i>[Signature]</i> Signature <b>JOE GULLONE</b> Printed Name <b>JOE GULLONE</b> Firm <b>6/19/07 1400</b> Date/Time
---	---	--

RELINQUISHED BY	RELINQUISHED BY	RELINQUISHED BY
Signature <i>[Signature]</i> Printed Name <b>MARGO MENDOZA</b> Firm <b>6/19/07 1310</b> Date/Time	Signature <i>[Signature]</i> Printed Name <b>MARGO MARTINEZ</b> Firm <b>6/19/07 1400</b> Date/Time	Signature <i>[Signature]</i> Printed Name <b>JOE GULLONE</b> Firm <b>6/19/07 1400</b> Date/Time

ANALYSIS REQUESTED (Include Method Number and Container Preservative)	PRESERVATIVE	NUMBER OF CONTAINERS
TPH Gas 8015m (purgeable) TPH Diesel Fuel Char. 8015m (extractable) BTX 8021 / 8022 Halogenated Volatiles 8260 VOA by GC/MS 8260 / 824 SemVOA by GC/MS 8270 / 825 Pesticides 8081 / 8082 / 608 PCBs 8081 / 8082 / 608 CCR Metals 17) 6010 / 6020 / 7000 / 200.7 / 200.8 ACMA (1235) ACMA (7196)	0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn, Acetate 6. MeOH 7. NaHSO4 8. Other	00 00

REMARKS/ALTERNATE DESCRIPTION
DUPLICATE EQUIP. BANK



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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CAS Contact

PAGE 1 OF 1

Project Name: JPL GW MON 2007 Project Number: 4486090

Project Manager: DAVID CONNER Report CC: 0

Company/Address: BATTELLE

3990 OLD TOWN AVE., C-205

SAN DIEGO, CA 92110

Phone #: 619-726-7311 FAX#:

Sampler's Signature: MARCO MENDOZA Sampler's Printed Name: MARCO MENDOZA

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 0

NUMBER OF CONTAINERS: (75) 17

TPH Gas 8015m (purgeable)  TPH Diesel Fuel Char.  8015m (extractable)  BTX  MTBE  8021 / 802 Halogenated Volatiles  8260 VOA by GCMS  8260 / 824 Semivolatile Oxygenates  8270 / 825 Pesticides  8081 / 8082 / 608 PCBs  8081 / 8082 / 608 CCR Metals (17)  6010 / 6020 / 7000 / 2007 / 2008 (CV)

Preservative Key: 0. NONE, 1. HCL, 2. HNO3, 3. H2SO4, 4. NaOH, 5. Zn. Acetate, 6. MeOH, 7. NaHSO4, 8. Other

REMARKS/ALTERNATE DESCRIPTION: EQUIP BLANK

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX
MW-22-5	15	6/20/07	745	W
MW-22-4	16		825	
MW-22-3	17		903	
MW-22-2	18		942	
MW-22-1	19		1004	
EB-6-6/20/07	20		1004	

SPECIAL INSTRUCTIONS/COMMENTS:

TURNAROUND REQUIREMENTS: RUSH (SURCHARGES APPLY)  STANDARD

PLEASE CIRCLE WORK DAYS: 1 2 3 4

REPORT REQUIREMENTS: I. Results Only  II. Results + QC Summaries (LCS, DUP, MS/MSD as required)  III. Results + QC and Calibration Summaries  IV. Data Validation Report with Raw Data

MRL: Yes  No  PQL/MDL/L: Yes  No  Edata: Yes  No

REQUESTED FAX DATE:  REQUESTED REPORT DATE:

RECEIVED BY: DAVID CONNER Signature: DAVID CONNER Printed Name: DAVID CONNER Firm: BATTELLE Date/Time: 6/20/07 11:42

RECEIVED BY: MARCO MENDOZA Signature: MARCO MENDOZA Printed Name: MARCO MENDOZA Firm: GEOSON Date/Time: 6/20/07 13:40

CUSTODY SEALS: Y N

RECEIVED BY: DAVID CONNER Signature: DAVID CONNER Printed Name: DAVID CONNER Firm: BATTELLE Date/Time: 6/20/07 13:40

RECEIVED BY: DAVID CONNER Signature: DAVID CONNER Printed Name: DAVID CONNER Firm: BATTELLE Date/Time: 6/20/07 13:40

INVOICE INFORMATION: PO# 240643 BILL TO: BATTELLE GERALD TEMPLINS 505 KING AVE COLUMBUS, OH 43201 Lab No: PT700590



2655 Park Center Drive, Suite A  
 Simi Valley, California 93065  
 Phone (805) 526-7161  
 Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle  
 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. 20700590  
 CAS Contact:

Company Name & Address (Reporting Information)		Project Name		Analysis Method and/or Analytes		Preservative Key	
BATTLE 3990 OLD TOWN AVE. C-205 SAN DIEGO, CA 92110		JPL GIN MON 2007 Project Number 6486090		0 (912)		0 None 1 HCL 2 HNO3 3 H2SO4 4 NaOH 5 Zn Acetate 6 Asc Acid 7 Other	
Project Manager DAVID CONNER Phone 619-726-7311 Fax		P.O. # / Billing Information BATTLE (PO# 210643) GERARD THOMPSON 505 KYLE AVE COLLETON, OH 43201		Preservative Code			
Email Address for Result Reporting MARY.MENDOZA		Sampler (Print & Sign) MARY.MENDOZA		TPH Gas 8015B <input type="checkbox"/> TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC 8015M <input type="checkbox"/> (Subcontracted) Semi-Volatile Organics GC/MS 625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)			
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Remarks	
MW-3-5	21	6/2/07	755	W	1		
MW-3-4	22	839			1		
MW-3-3	23	918			2		
MW-3-2	24	1017			1		
MW-3-1	25	1125			1	MMSD / LEVEL II QC	
DUPE-4-2007	26				1	DUPLICATE	
EB-7-06/21/07	27	1103			1	EQUIP. BLANK	

Report Tier Levels - please select  
 Tier I - (Results/Default if not specified) \_\_\_\_\_  
 Tier II - (Results + QC) \_\_\_\_\_  
 Tier III - (Data Validation Package) 10% Surcharge \_\_\_\_\_  
 Tier V - (client specified) \_\_\_\_\_

MRL required Yes / No \_\_\_\_\_  
 MDL / PQL / J required Yes / No \_\_\_\_\_  
 EDD required Yes / No \_\_\_\_\_  
 Type: \_\_\_\_\_

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 6/4/07	Time: 12:37	Received by: (Signature)	Date: 6/4/07	Time: 13:29
Relinquished by: (Signature)	Date: 6/4/07	Time: 13:29	Received by: (Signature)	Date: 6/4/07	Time: 13:29
Relinquished by: (Signature)	Date: _____	Time: _____	Received by: (Signature)	Date: _____	Time: _____

Cooler / Blank / Ice / No Ice \_\_\_\_\_  
 Temperature \_\_\_\_\_ °C



2655 Park Center Drive, Suite A  
 Simi Valley, California 93065  
 Phone (805) 526-7161  
 Fax (805) 526-7270

Company Name & Address (Reporting Information) <b>BATTELLE</b> 3990 OLD TOWN AVE. C-205 SAN DIEGO, CA 92110		Project Name SPL GWMON 2207		Requested Turnaround Time in Business Days (Surcharges) please circle 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard		CAS Project No. <b>20700590</b>	
Project Manager <b>DAVID CONNER</b>		Project Number 6486090		Analysis Method and/or Analytes		CAS Contact:	
Phone 619-726-7311		PO # / Billing Information <b>BATTELLE (PO#210643)</b> <b>GERARD THOMPSON</b> 505 KING AVE COLUMBUS OH, 43201		Preservative Code		Preservative Key	
Fax		Sampler (Print & Sign) <b>MARCUS MENDOZA</b>		TPH Gas 8015B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/>		0 None	
Email Address for Result Reporting		Matrix		TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted)		1 HCL	
Laboratory ID Number		Number of Containers		TPH FC <input type="checkbox"/> 8015M (Subcontracted)		2 HNO3	
Date Collected		Time Collected		625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)		3 H2SO4	
Client Sample ID		Date Collected		Semi-Volatile Organics GC/MS		4 NaOH	
MW-14-5		6/29/07		0749		5 Zn Acetate	
MW-14-4		0828		0906		6 Asc Acid	
MW-14-3		0906		0945		7 Other	
MW-14-2		1024		1005		Remarks	
MW-14-1		1005		1005		EQMP-BLANK	
EB-8-06/22/07		33		33			

**Report Tier Levels - please select**

Tier I - (Results/Default if not specified) \_\_\_\_\_

Tier II - (Results + QC) \_\_\_\_\_

Tier III - (Data Validation Package) 10% Surcharge \_\_\_\_\_

Tier V - (client specified) \_\_\_\_\_

MPL required Yes / No \_\_\_\_\_

MDL / PQL / J required Yes / No \_\_\_\_\_

EDD required Yes / No \_\_\_\_\_

Type: \_\_\_\_\_

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature) \_\_\_\_\_ Date: 6/29/07 Time: 11:57 AM

Relinquished by: (Signature) \_\_\_\_\_ Date: 6/29/07 Time: 12:36 PM

Relinquished by: (Signature) \_\_\_\_\_ Date: 6/29/07 Time: 12:36 PM

Cooler / Blank / Ice / No Ice \_\_\_\_\_

Temperature \_\_\_\_\_ °C

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700590

Bottle ID	Received	Date	Time	Sample Location / User	Disposed On
P0700590-001.01	06/18/07*	06/19/2007	1408	SMO / LKUKITA	* DUE TO COMPUTER ISSUES SMO RECEIVED 6/18/07 BUT UNABLE TO ENTER IN SYSTEM UNTIL 6/19/07.  LABELED BY HAND FOLLOWING STD CONVENTION FOR LAB TO TAKE SAMPLES  6/18/07 1330 Inlab / RWONG  6/18/07 1600 P-37 / RWONG  Sma 7/19/07
P0700590-002.01		06/19/2007	1408	SMO / LKUKITA	
P0700590-003.01		06/19/2007	1408	SMO / LKUKITA	
P0700590-004.01		06/19/2007	1408	SMO / LKUKITA	
P0700590-005.01		06/19/2007	1408	SMO / LKUKITA	
P0700590-006.01		06/19/2007	1408	SMO / LKUKITA	
P0700590-007.01		06/19/2007	1408	SMO / LKUKITA	
P0700590-008.01		06/19/2007	1408	SMO / LKUKITA	
		06/19/2007	1421	In Lab / RWONG	
		06/19/2007	1515	P-37 / RWONG	
P0700590-009.01		06/19/2007	1408	SMO / LKUKITA	
		06/19/2007	1421	In Lab / RWONG	
		06/19/2007	1515	P-37 / RWONG	
P0700590-009.04		06/19/2007	1408	SMO / LKUKITA	
		06/19/2007	1445	SUBBED / SANDERSON	
		06/20/2007	1059	K-HERK-A5 / AJUELL	
		06/27/2007	1607	In Lab / RHAYES	
		06/27/2007	1613	K-HERK-A5 / RHAYES	
		07/03/2007	0840	Custodian / KSMITH	
		07/03/2007	1041	In Lab / MBLACK	
		07/03/2007	1722	K-HERK-A5 / LRAVERT	
P0700590-009.05		06/19/2007	1410	SMO / LKUKITA	
		06/19/2007	1445	SUBBED / SANDERSON	
		06/20/2007	1059	K-HERK-A5 / AJUELL	
P0700590-010.01		06/19/2007	1408	SMO / LKUKITA	
		06/19/2007	1421	In Lab / RWONG	
		06/19/2007	1515	P-37 / RWONG	
P0700590-011.01		06/19/2007	1408	SMO / LKUKITA	
		06/19/2007	1421	In Lab / RWONG	
		06/19/2007	1515	P-37 / RWONG	



# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700590

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700590-012.01	06/19/2007	1408	SMO / LKUKITA	
	06/19/2007	1421	In Lab / RWONG	
	06/19/2007	1515	P-37 / RWONG	
P0700590-013.01	06/19/2007	1408	SMO / LKUKITA	
	06/19/2007	1421	In Lab / RWONG	
	06/19/2007	1515	P-37 / RWONG	
P0700590-014.01	06/19/2007	1408	SMO / LKUKITA	
	06/19/2007	1421	In Lab / RWONG	
	06/19/2007	1515	P-37 / RWONG	
P0700590-015.01	06/20/2007	1343	SMO / LKUKITA	
	06/20/2007	1355	In Lab / RWONG	
	06/20/2007	1525	P-37 / RWONG	
P0700590-016.01	06/20/2007	1343	SMO / LKUKITA	
	06/20/2007	1355	In Lab / RWONG	
	06/20/2007	1525	P-37 / RWONG	
P0700590-017.01	06/20/2007	1343	SMO / LKUKITA	
	06/20/2007	1355	In Lab / RWONG	
	06/20/2007	1525	P-37 / RWONG	
P0700590-018.01	06/20/2007	1343	SMO / LKUKITA	
	06/20/2007	1355	In Lab / RWONG	
	06/20/2007	1525	P-37 / RWONG	
P0700590-019.01	06/20/2007	1343	SMO / LKUKITA	
	06/20/2007	1355	In Lab / RWONG	
	06/20/2007	1525	P-37 / RWONG	
P0700590-020.01	06/20/2007	1343	SMO / LKUKITA	
	06/20/2007	1355	In Lab / RWONG	
	06/20/2007	1525	P-37 / RWONG	
P0700590-021.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-022.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700590

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700590-023.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-023.02	06/21/2007	1334	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-024.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-025.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-026.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-027.01	06/21/2007	1330	SMO / LKUKITA	
	06/21/2007	1343	In Lab / RWONG	
	06/21/2007	1601	P-37 / RWONG	
P0700590-028.01	06/22/2007	1227	SMO / LKUKITA	
	06/22/2007	1441	In Lab / SANDERSON	
	06/22/2007	1737	P-37 / SANDERSON	
P0700590-029.01	06/22/2007	1227	SMO / LKUKITA	
	06/22/2007	1441	In Lab / SANDERSON	
	06/22/2007	1737	P-37 / SANDERSON	
P0700590-030.01	06/22/2007	1227	SMO / LKUKITA	
	06/22/2007	1440	In Lab / SANDERSON	
	06/22/2007	1737	P-37 / SANDERSON	
P0700590-031.01	06/22/2007	1227	SMO / LKUKITA	
	06/22/2007	1440	In Lab / SANDERSON	
	06/22/2007	1737	P-37 / SANDERSON	
P0700590-032.01	06/22/2007	1227	SMO / LKUKITA	
	06/22/2007	1440	In Lab / SANDERSON	
	06/22/2007	1737	P-37 / SANDERSON	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700590

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700590-033.01	06/22/2007	1227	SMO / LKUKITA	
	06/22/2007	1440	In Lab / SANDERSON	
	06/22/2007	1737	P-37 / SANDERSON	

**DIVIDER SHEET**

**ANALYTICAL DATA**

**FOR**

**Hexavalent Chromium**

---

**ANALYSIS**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client :** Battelle  
**Project Name :** JPL Groundwater Monitoring 2Q07  
**Project Number :** G486090  
**Sample Matrix :** WATER

**Service Request :** P0700590  
**Date Collected :** 06/18-22/07  
**Date Received :** 06/18-22/07


Chromium, Hexavalent

**Prep Method :** None  
**Analysis Method :** 7196A  
**Test Notes :**

**Units :** mg/L (ppm)  
**Basis :** NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-20-5	P0700590-001	0.01	0.005	1	NA	06/18/07	ND	
MW-20-4	P0700590-002	0.01	0.005	1	NA	06/18/07	ND	
MW-20-3	P0700590-003	0.01	0.005	1	NA	06/18/07	ND	
MW-20-2	P0700590-004	0.01	0.005	1	NA	06/18/07	ND	
MW-20-1	P0700590-005	0.01	0.005	1	NA	06/18/07	ND	
DUPE-2-2Q07	P0700590-006	0.01	0.005	1	NA	06/18/07	0.006	J
EB-4-6/18/07	P0700590-007	0.01	0.005	1	NA	06/18/07	ND	
MW-17-5	P0700590-008	0.01	0.005	1	NA	06/19/07	ND	
MW-17-4	P0700590-009	0.01	0.005	1	NA	06/19/07	ND	
MW-17-3	P0700590-010	0.01	0.005	1	NA	06/19/07	ND	
MW-17-2	P0700590-011	0.01	0.005	1	NA	06/19/07	ND	
MW-17-1	P0700590-012	0.01	0.005	1	NA	06/19/07	ND	
DUPE-3-2Q07	P0700590-013	0.01	0.005	1	NA	06/19/07	ND	
EB-5-6/19/07	P0700590-014	0.01	0.005	1	NA	06/19/07	ND	
MW-22-5	P0700590-015	0.01	0.005	1	NA	06/20/07	ND	
MW-22-4	P0700590-016	0.01	0.005	1	NA	06/20/07	ND	
MW-22-3	P0700590-017	0.01	0.005	1	NA	06/20/07	ND	
MW-22-2	P0700590-018	0.01	0.005	1	NA	06/20/07	ND	
MW-22-1	P0700590-019	0.01	0.005	1	NA	06/20/07	ND	
EB-6-6/20/07	P0700590-020	0.01	0.005	1	NA	06/20/07	ND	
MW-3-5	P0700590-021	0.01	0.005	1	NA	06/21/07	ND	
MW-3-4	P0700590-022	0.01	0.005	1	NA	06/21/07	ND	
MW-3-3	P0700590-023	0.01	0.005	1	NA	06/21/07	ND	
MW-3-2	P0700590-024	0.01	0.005	1	NA	06/21/07	ND	
MW-3-1	P0700590-025	0.01	0.005	1	NA	06/21/07	ND	
DUPE-4-2Q07	P0700590-026	0.01	0.005	1	NA	06/21/07	ND	
EB-7-06/21/07	P0700590-027	0.01	0.005	1	NA	06/21/07	ND	
MW-14-5	P0700590-028	0.01	0.005	1	NA	06/22/07	ND	
MW-14-4	P0700590-029	0.01	0.005	1	NA	06/22/07	ND	
MW-14-3	P0700590-030	0.01	0.005	1	NA	06/22/07	ND	

J Estimated concentration. The result is less than the PQL but greater than the MDL.

Approved By  Date: 6/27/07

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client :** Battelle  
**Project Name :** JPL Groundwater Monitoring 2Q07  
**Project Number :** G486090  
**Sample Matrix :** WATER

**Service Request :** P0700590  
**Date Collected :** 06/18-22/07  
**Date Received :** 06/18-22/07

Chromium, Hexavalent

**Prep Method :** None  
**Analysis Method :** 7196A  
**Test Notes :**

**Units :** mg/L (ppm)  
**Basis :** NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-14-2	P0700590-031	0.01	0.005	1	NA	06/22/07	ND	
MW-14-1	P0700590-032	0.01	0.005	1	NA	06/22/07	ND	
EB-8-06/22/07	P0700590-033	0.01	0.005	1	NA	06/22/07	ND	
Method Blank	P0700590-MB	0.01	0.005	1	NA	06/18/07	ND	
Method Blank	P0700590-MB	0.01	0.005	1	NA	06/19/07	ND	
Method Blank	P0700590-MB	0.01	0.005	1	NA	06/20/07	ND	
Method Blank	P0700590-MB	0.01	0.005	1	NA	06/21/07	ND	
Method Blank	P0700590-MB	0.01	0.005	1	NA	06/22/07	ND	

Approved By

  
 \_\_\_\_\_  
 21

Date :

  
 \_\_\_\_\_

**DIVIDER SHEET**

**CAS-KELSO REPORT**

---

**ANALYSIS**

July 18, 2007

Analytical Report for Service Request No: P0700590

Sue Anderson  
Columbia Analytical Services  
2655 Park Center Drive  
Suite A  
Simi Valley, CA 93065

**RE: JPL Groundwater Monitoring 2Q07/G486090**

Dear Sue:

Enclosed are the results of the sample(s) submitted to our laboratory on June 18, 2007. For your reference, these analyses have been assigned our service request number P0700590.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at [EErickson@kelso.caslab.com](mailto:EErickson@kelso.caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**

Elissa Erickson  
Project Chemist

EE/lb

Page 1 of 170



## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

### Inorganic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
  - i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
  - i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
  - i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

## Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07  
Sample Matrix: Water

Service Request No.: P0700590  
Date Received: 6/20

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water sample was received for analysis at Columbia Analytical Services, Kelso on 6/20/07. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Nitrosamines by EPA Method 521

**Matrix Spike Recovery Exceptions:**

The matrix spike recovery of N-Nitrosodimethylamine for sample Batch QCMS and Batch QCDMS was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by

*ELISSA E*

Date

*7-18-07*

**Chain of Custody  
Documentation**

Organic Analysis:  
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07/G486090

Service Request: P0700590

Cover Page - Organic Analysis Data Package  
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-17-4	P0700590-009	06/19/2007	06/19/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Loren E. Portwood

Name: Loren Portwood

Date: 7/18/07

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090  
 Sample Matrix: Water

Service Request: P0700590  
 Date Collected: 06/19/2007  
 Date Received: 06/19/2007

Nitrosamines by EPA 521

Sample Name: MW-17-4  
 Lab Code: P0700590-009  
 Extraction Method: METHOD  
 Analysis Method: 521

Units: ng/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	2.0		2.0	1.4	1	06/27/07	07/17/07	KWG0707222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	78	70-130	07/17/07	Acceptable

Comments:



July 19, 2007

David Conner  
Battelle  
3990 Old Town Ave., Suite C-205  
San Diego, CA 92110

**RE: JPL Groundwater Monitoring 2Q07/Project #G486090**

Dear David:

Enclosed are the results of the samples submitted to our laboratory on June 25-29, 2007. The samples were sent out for partial analysis to our Kelso facility. Please find their report attached. For your reference, these analyses have been assigned our service request number P0700602.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 267 pages.

Columbia Analytical Services is certified for environmental analyses by NELAP (certificate number: 02115CA) and Arizona Department of Health Services (License number: AZ0694).

If you have any questions, please call me at (805) 577-2086.

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Sue Anderson  
Project Chemist

SA

CAS CSR #P0700602

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# Columbia Analytical Services, Inc.

## Acronyms

<b>8015M</b>	California DHS LUFT Method
<b>ASTM</b>	American Society for Testing and Materials
<b>BOD</b>	Biochemical Oxygen Demand
<b>BTEX</b>	Benzene/Toluene/Ethylbenzene/Xylenes
<b>CAM</b>	California Assessment Metals
<b>CAS Number</b>	Chemical Abstract Service Registry Number
<b>CFC</b>	Chlorofluorocarbon
<b>COD</b>	Chemical Oxygen Demand
<b>CRDL</b>	Contract Required Detection Limit
<b>D</b>	Detected; result must be greater than zero.
<b>DL</b>	Detected; result must be greater than the detection limit.
<b>DLCS</b>	Duplicate Laboratory Control Sample
<b>DMS</b>	Duplicate Matrix Spike
<b>DOH or DHS</b>	Department of Health Services
<b>ELAP</b>	Environmental Laboratory Accreditation Program
<b>EPA</b>	U.S. Environmental Protection Agency
<b>GC</b>	Gas Chromatography
<b>GC/MS</b>	Gas Chromatography/Mass Spectrometry
<b>IC</b>	Ion Chromatography
<b>ICB</b>	Initial Calibration Blank sample
<b>ICP</b>	Inductively Coupled Plasma atomic emission spectrometry
<b>ICV</b>	Initial Calibration Verification sample
<b>LCS</b>	Laboratory Control Sample
<b>LUFT</b>	Leaking Underground Fuel Tank
<b>M</b>	Modified
<b>MBAS</b>	Methylene Blue Active Substances
<b>MDL</b>	Method Detection Limit
<b>MRL</b>	Method Reporting Limit
<b>MS</b>	Matrix Spike
<b>MTBE</b>	Methyl- <i>tert</i> -Butyl Ether
<b>NA</b>	Not Applicable
<b>NC</b>	Not Calculated
<b>ND</b>	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
<b>NTU</b>	Nephelometric Turbidity Units
<b>ppb</b>	Parts Per Billion
<b>ppm</b>	Parts Per Million
<b>PQL</b>	Practical Quantitation Limit
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RPD</b>	Relative Percent Difference
<b>SIM</b>	Selected Ion Monitoring
<b>SM</b>	<i>Standard Methods for the Examination of Water and Wastewater</i> , 18th Ed., 1992.
<b>STLC</b>	Solubility Threshold Limit Concentration
<b>SW</b>	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods</i> SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TDS</b>	Total Dissolved Solids
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TSS</b>	Total Suspended Solids
<b>TTLC</b>	Total Threshold Limit Concentration
<b>VOA</b>	Volatile Organic Analyte(s)

## Qualifiers

<b>U</b>	Undetected at or above MDL/MRL (PQL).
<b>J</b>	Estimated concentration. Analyte detected above MDL, but below MRL (PQL).
<b>B</b>	Hit above MRL (PQL) also found in Method Blank.
<b>E</b>	Analyte concentration above high point of ICAL.
<b>N</b>	Presumptive evidence of compound.
<b>D</b>	Result from dilution.
<b>X</b>	See case narrative.

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07/G486090  
Sample Matrix: Water

Service Request No.: P07000602  
Date Received: 6/25-29/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

The samples were received for analysis at Columbia Analytical Services on 6/25-29/07. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored at 4°C upon receipt at the laboratory.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

Approved by



Date

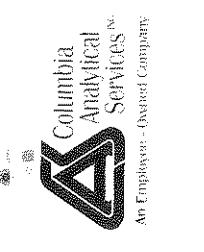
7/3/07

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P0700602-001	MW-4-5	06/25/07	07:43
P0700602-002	MW-4-4	06/25/07	08:18
P0700602-003	MW-4-3	06/25/07	08:53
P0700602-004	MW-4-2	06/25/07	09:26
P0700602-005	MW-4-1	06/25/07	10:03
P0700602-006	EB-9-6/25/07	06/25/07	09:46
P0700602-007	MW-12-5	06/26/07	07:36
P0700602-008	MW-12-4	06/26/07	08:13
P0700602-009	MW-12-3	06/26/07	08:45
P0700602-010	MW-12-2	06/26/07	09:17
P0700602-011	MW-12-1	06/26/07	10:03
P0700602-012	DUPE-5-2Q07	06/26/07	00:00
P0700602-013	EB-10-6/26/07	06/26/07	09:42
P0700602-014	MW-23-5	06/27/07	07:36
P0700602-015	MW-23-4	06/27/07	08:13
P0700602-016	MW-23-3	06/27/07	08:49
P0700602-017	MW-23-2	06/27/07	09:21
P0700602-018	MW-23-1	06/27/07	10:10
P0700602-019	EB-11-6/27/07	06/27/07	09:51
P0700602-020	MW-24-5	06/28/07	07:33
P0700602-021	MW-24-4	06/28/07	08:29
P0700602-022	MW-24-3	06/28/07	09:04
P0700602-023	MW-24-2	06/28/07	09:39
P0700602-024	MW-24-1	06/28/07	10:23
P0700602-025	EB-12-6/28/07	06/28/07	10:36
P0700602-026	MW-11-5	06/29/07	08:08
P0700602-027	MW-11-4	06/29/07	07:39
P0700602-028	MW-11-3	06/29/07	09:05
P0700602-029	MW-11-2	06/29/07	09:39
P0700602-030	MW-11-1	06/29/07	10:20
P0700602-031	EB-13-6/29/07	06/29/07	10:00

# Water & Soil - Chain of Custody Record & Analytical Service Request

**2655 Park Center Drive, Suite A**  
**Simi Valley, California 93065**  
**Phone (805) 526-7161**  
**Fax (805) 526-7270**



<b>Company Name &amp; Address (Reporting Information)</b> BATTLE 3990 OLD TOWN AVE, C-205 SAN DIEGO, CA 92110		<b>Project Name</b> SR 6th Nov 2007 Project Number 6786090		<b>Requested Turnaround Time in Business Days (Surcharges) please circle</b> 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard		<b>CAS Project No.</b> 20700602 <b>CAS Contact:</b>	
<b>Project Manager</b> DAVID COLLIER Phone: 619-726-7311 Email Address for Result Reporting		<b>PO # / Billing Information</b> BATTLE (P.# 210645) CERRAJO TOMPKINS 505 KING AVE. COLUMBIUS OH. 43201		<b>Analysis Method and/or Analytes</b>		<b>Preservative Key</b> 0 None 1 HCL 2 HNO3 3 H2SO4 4 NaOH 5 Zn Acetate 6 Asc Acid 7 Other	
<b>Volatiles GCMs</b> 624 <input type="checkbox"/> 8260B <input type="checkbox"/> Oxygenates <input type="checkbox"/> TPH Gas <input type="checkbox"/>		<b>TPH Gas 8015B</b> BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/>		<b>TPH Diesel 8015B</b> <input type="checkbox"/> (Subcontracted)		<b>TPH Diesel Low Level 8015B</b> <input type="checkbox"/> (Subcontracted)	
<b>Semi-Volatiles GCMs</b> TPH FC <input type="checkbox"/> 8015M (Subcontracted)		<b>TPH Volatile Organics GCMs</b> 625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)		<b>Preservative Code</b>		<b>Remarks</b>	
<b>Client Sample ID</b> MW-4-5 MW-4-4 MW-4-3 MW-4-2 MW-4-1 Eb-9 - 6 12567		<b>Laboratory ID Number</b> 1 2 3 4 5 6		<b>Date Collected</b> 6/29/07 7/18 8/3 9/26 10/3		<b>Time Collected</b> 743 818 853 926 1003	
<b>Matrix</b> W W W W W		<b>Number of Containers</b> 1 1 1 3 1		(796) (195) (196) (195)		LEVEL II WCL EQUIP. BLANK	

**Report Tier Levels - please select**  
 Tier I - (Results/Default if not specified) \_\_\_  
 Tier II - (Results + QC) \_\_\_  
 Tier III - (Data Validation Package) 10% Surcharge  
 Tier V - (client specified) TIER V FULL DATA PACKAGE

MRL required Yes / No  
 EDD required Yes / No  
 Type: GUETACKER

Received by: (Signature) [Signature] Date: 6/29/07 Time: 11:10

Received by: (Signature) [Signature] Date: 6/29/07 Time: 11:25

Received by: (Signature) [Signature] Date: 6/29/07 Time: 11:25

Relinquished by: (Signature) [Signature]

Relinquished by: (Signature) [Signature]

Relinquished by: (Signature) [Signature]

Project Requirements (MRLs, QAPP)  
 Cooler / Blank / Ice / No Ice  
 Temperature: \_\_\_ °C

# Water & Soil - Chain of Custody Record & Analytical Service Request



2655 Park Center Drive, Suite A  
Simi Valley, California 93065  
Phone (805) 526-7161  
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle  
 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. 20700602  
 CAS Contact: \_\_\_\_\_

Company Name & Address (Reporting Information)		Project Name		Analysis Method and/or Analytes		Preservative Key
BARTHELLE 3990 OLD TOWN AVE. C-205 SAN DIEGO, CA 92110		SPL 61W NOV 2007		0		
Project Manager DAVID CONNER		Project Number 6486090		Preservative Code		Remarks
Phone 619-726-7311		P.O. # / Billing Information BARTHELLE (PO# 21644) GERARD TOMPKINS 505 KING AVE. COLUMBUS OH 43201		Volatile Organics GC/MS 624 <input type="checkbox"/> 820B <input type="checkbox"/> Oxygenates <input type="checkbox"/> TPH Gas <input type="checkbox"/>		
Email Address for Result Reporting		Sampler (Print & Sign)		TPH Gas 8015B <input type="checkbox"/> BTX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/>		
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	
MW-12-5	17	6/26/07	736	W	1	
MW-12-4	18	6/13	813	↑	1	
MW-12-3	19	8/45	917	↑	1	
MW-12-2	10	9/17	1003	↑	1	
MW-12-1	11			↑	1	
DUP-5-2007	12					Duplicate
EG-10-6/26/07	13		942			EQUIP BLANK

**Report Tier Levels - please select**

Tier I - (Results/Default if not specified) \_\_\_\_\_  
 Tier II - (Results + QC) \_\_\_\_\_  
 Tier III - (Data Validation Package) 10% Surcharge \_\_\_\_\_  
 Tier V - (client specified) \_\_\_\_\_

MRL required Yes/No  Yes  No  
 MDL / PQL / J required Yes/No  Yes  No  
 EDD required Yes/No  Yes  No  
 Type: Geobucket

Relinquished by: (Signature) \_\_\_\_\_ Date: 6/26/07 Time: 11:52  
 Relinquished by: (Signature) \_\_\_\_\_ Date: 6/26/07 Time: 11:52  
 Relinquished by: (Signature) \_\_\_\_\_ Date: 6/26/07 Time: 11:52

Project Requirements (MRLs, QAPP) \_\_\_\_\_  
 Cooler / Blank / Ice / No Ice \_\_\_\_\_  
 Temperature \_\_\_\_\_ °C



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555      PAGE 1 OF 1

CAS Contact

Project Name <b>JPL GW Mon 2007</b>	Project Number <b>6486090</b>	<b>ANALYSIS REQUESTED (Include Method Number and Container Preservative)</b>	
Project Manager <b>DAVID CANNON</b>	Report CC		
Company Address <b>BATTLE</b>			
<b>3990 Old Town Ave, C-205</b>			
<b>SAN DIEGO, CA 92110</b>			
Phone # <b>619-726-7311</b>	FAX#		
Sampler's Signature <b>MARK MENDOZA</b>	Sampler's Printed Name <b>MARK MENDOZA</b>		

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	PRESERVATIVE	ANALYSIS REQUESTED (Include Method Number and Container Preservative)		REMARKS/ ALTERNATE DESCRIPTION
							TPH Gas (purgeable) 8015m	TPH Diesel Fuel Char. 8015m (extractable)	
MW-23-5	14	6/27/07	736	W	1	TPH Gas (purgeable) 8015m	TPH Diesel Fuel Char. 8015m (extractable)	8015m (purgeable) 8015m (extractable)	
MW-23-4	15		813		1				
MW-23-3	16		849		1				
MW-23-2	17		921		2				
MW-23-1	18		1010		2				
EB-11-6/27/07	19		951		1				EQUIP. BLANK

SPECIAL INSTRUCTIONS/COMMENTS  	TURNAROUND REQUIREMENTS RUSH (SURCHARGES APPLY) PLEASE CIRCLE WORK DAYS 1 2 3 4 STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE	REPORT REQUIREMENTS I. Results Only II. Results + QC Summaries (LCS, DUP, MS/MSD as required) III. Results + QC and Calibration Summaries IV. Data Validation Report with Raw Data MRL Yes No POL/INDUJ Yes No Ecata Yes No	INVOICE INFORMATION PO# <b>240643</b> BILL TO: <b>BATTLE</b> <b>GENERAL TRUCKING</b> <b>505 KING AVE</b> <b>COLUMBIA, OH 43001</b> Lab No. <b>PO700602</b>
RECEIVED BY <b>MARK MENDOZA</b> Signature <b>MARK MENDOZA</b> Printed Name <b>6/27/07 1153</b> Date/Time	RECEIVED BY <b>DAVID CANNON</b> Signature <b>DAVID CANNON</b> Printed Name <b>6/27/07 1255</b> Date/Time	RELINQUISHED BY <b>MARK MENDOZA</b> Signature <b>MARK MENDOZA</b> Printed Name <b>6/27/07 1255</b> Date/Time	RECEIVED BY Signature Printed Name Date/Time





# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555 PAGE 1 OF 1

CAS Contact

Project Name <b>JPL GW MWN 2007</b> Project Number <b>6486090</b>		ANALYSIS REQUESTED (Include Method Number and Container Preservative) PRESERVATIVE TPB Gas 8015m (purgeable) 8015m (extractable) BTEX T MTBE T 8021 / 602 Halogenated Volatiles 8260 VOA by GCMS T 8260 / 624 8260 / 624 SemiVOA by GCMS 8270 / 625 Pesticides T 8081 / 8082 / 608 PCBs T 6010 / 6020 / 7000 / 2007 / 2008 CCR Metals (17) W V (796) NMA (1650)		PREPARATIVE NUMBER OF CONTAINERS 1 1 3 1		MATRIX W       	
Company/Address <b>DAVID GARNER</b> <b>BATTELLE</b> <b>3990 OLD TOWN AVE, C-205</b> <b>SAN DIEGO, CA 92112</b>		Project Manager <b>DAVID GARNER</b> Report CC <b>BATTELLE</b>		Project Number <b>6486090</b>			
Phone # <b>619-726-7311</b>		FAX # <b>92112</b>		Project Number <b>6486090</b>			
Sampler's Signature <b>MARCO MENDOZA</b>		Sampler's Printed Name <b>MARCO MENDOZA</b>		Project Number <b>6486090</b>			
CLIENT SAMPLE ID <b>MW-24-5</b>	LAB ID <b>20</b>	SAMPLING DATE <b>6/28/07</b>	SAMPLING TIME <b>733</b>	MATRIX <b>W</b>	NUMBER OF CONTAINERS <b>1</b>		
<b>MW-24-4</b>	<b>21</b>	<b>829</b>	<b>904</b>	<b> </b>	<b>1</b>		
<b>MW-24-3</b>	<b>22</b>	<b>904</b>	<b>939</b>	<b> </b>	<b>3</b>		
<b>MW-24-2</b>	<b>23</b>	<b>1023</b>	<b>1023</b>	<b> </b>	<b>1</b>		
<b>MW-24-1</b>	<b>24</b>	<b>1036</b>	<b>1036</b>	<b> </b>	<b>1</b>		
<b>EB-12-6 128/07</b>	<b>25</b>	<b>1036</b>	<b>1036</b>	<b> </b>	<b>1</b>		
SPECIAL INSTRUCTIONS/COMMENTS <b>LEVEL III OC</b> <b>EQUIP BLANK</b>							
PRESERVATIVE KEY 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn Acetate 6. MeOH 7. NaHSO4 8. Other		REMARKS/ ALTERNATE DESCRIPTION					

REPORT REQUIREMENTS I. Results Only II. Results + OC Summaries (LCS, DUP, MSMSD as required) III. Results + OC and Calibration Summaries IV. Data Validation Report with Raw Data MRL Yes ___ No ___ POL/MDLJ Yes ___ No ___ Edata Yes ___ No ___	INVOICE INFORMATION PO# <b>240643</b> BILL TO: <b>BATTELLE</b> <b>GEORGE TOWNSHIP</b> <b>505 KING AVE</b> <b>COLUMBUS, OH 43201</b> Lab No: <b>1070000</b>
TURNAROUND REQUIREMENTS PLEASE RUSH (SURCHARGES APPLY) PLEASE CIRCLE WORK DAYS 1 2 3 4 STANDARD REQUESTED FAX DATE REQUESTED REPORT DATE	RELINQUISHED BY Signature Printed Name Firm Date/Time

RECEIVED BY <b>DAVID GARNER</b> Signature Printed Name Firm Date/Time	RECEIVED BY <b>DAVID GARNER</b> Signature Printed Name Firm Date/Time
--	--

SAMPLE RECEIPT: CONDITION/COOLER TEMP. RELINQUISHED BY <b>MARCO MENDOZA</b> Signature Printed Name Firm Date/Time	RECEIVED BY <b>DAVID GARNER</b> Signature Printed Name Firm Date/Time
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# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700602

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700602-001.01	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1342	P-37 / LKUKITA	
	06/25/2007	1347	In Lab / RWONG	
	06/25/2007	1544	P-37 / RWONG	
P0700602-002.01	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1342	P-37 / LKUKITA	
	06/25/2007	1348	In Lab / RWONG	
	06/25/2007	1544	P-37 / RWONG	
P0700602-003.01	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1342	P-37 / LKUKITA	
	06/25/2007	1347	In Lab / RWONG	
	06/25/2007	1544	P-37 / RWONG	
P0700602-004.01	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1342	P-37 / LKUKITA	
	06/25/2007	1348	In Lab / RWONG	
	06/25/2007	1544	P-37 / RWONG	
P0700602-005.01	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1341	SUBBED / LKUKITA	
	06/26/2007	1415	K-SAM-91 / AJUELL	
P0700602-005.02	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1341	SUBBED / LKUKITA	
	06/26/2007	1415	K-SAM-91 / AJUELL	
	06/27/2007	1607	In Lab / RHAYES	
	06/27/2007	1614	K-SAM-91 / RHAYES	
P0700602-005.03	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1342	P-37 / LKUKITA	
	06/25/2007	1348	In Lab / RWONG	
	06/25/2007	1544	P-37 / RWONG	
P0700602-006.01	06/25/2007	1305	SMO / LKUKITA	
	06/25/2007	1342	P-37 / LKUKITA	
	06/25/2007	1348	In Lab / RWONG	
	06/25/2007	1544	P-37 / RWONG	
P0700602-007.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090

Service Request: P0700602

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700602-008.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	
P0700602-009.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	
P0700602-010.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	
P0700602-011.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	
P0700602-012.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	
P0700602-013.01	06/26/2007	1226	SMO / LKUKITA	
	06/26/2007	1304	In Lab / RWONG	
	06/26/2007	1524	P-37 / RWONG	
P0700602-014.01	06/27/2007	1257	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1440	P-37 / RWONG	
P0700602-015.01	06/27/2007	1257	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1441	P-37 / RWONG	
P0700602-016.01	06/27/2007	1257	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1441	P-37 / RWONG	
P0700602-017.01	06/27/2007	1257	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1441	P-37 / RWONG	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090

Service Request: P0700602

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700602-018.01	06/27/2007	1257	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1440	P-37 / RWONG	
P0700602-018.02	06/27/2007	1259	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1440	P-37 / RWONG	
P0700602-019.01	06/27/2007	1257	SMO / LKUKITA	
	06/27/2007	1313	P-37 / LKUKITA	
	06/27/2007	1324	In Lab / RWONG	
	06/27/2007	1440	P-37 / RWONG	
P0700602-020.01	06/28/2007	1249	SMO / LKUKITA	
P0700602-021.01	06/28/2007	1249	SMO / LKUKITA	
	06/28/2007	1628	P-37 / RWONG	
P0700602-022.01	06/28/2007	1249	SMO / LKUKITA	
	06/28/2007	1628	P-37 / RWONG	
P0700602-023.01	06/28/2007	1249	SMO / LKUKITA	
	06/28/2007	1628	P-37 / RWONG	
P0700602-024.01	06/28/2007	1249	SMO / LKUKITA	
	06/29/2007	1731	K-HERK-G3 / ARYNEVICH	
P0700602-024.02	06/28/2007	1249	SMO / LKUKITA	
	06/29/2007	1731	K-HERK-G3 / ARYNEVICH	
	07/03/2007	0840	Custodian / KSMITH	
	07/03/2007	1041	In Lab / MBLACK	
	07/03/2007	1724	K-HERK-G3 / LRAVERT	
P0700602-024.04	06/28/2007	1249	SMO / LKUKITA	
	06/28/2007	1628	P-37 / RWONG	
P0700602-025.01	06/28/2007	1249	SMO / LKUKITA	
	06/28/2007	1628	P-37 / RWONG	
P0700602-026.01	06/29/2007	1251	SMO / LKUKITA	
	06/29/2007	1303	In Lab / RWONG	
	06/29/2007	1512	P-37 / RWONG	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700602

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700602-027.01	06/29/2007	1251	SMO / LKUKITA	
	06/29/2007	1303	In Lab / RWONG	
	06/29/2007	1541	P-37 / RWONG	
P0700602-028.01	06/29/2007	1251	SMO / LKUKITA	
	06/29/2007	1303	In Lab / RWONG	
	06/29/2007	1542	P-37 / RWONG	
P0700602-029.01	06/29/2007	1251	SMO / LKUKITA	
	06/29/2007	1303	In Lab / RWONG	
	06/29/2007	1541	P-37 / RWONG	
P0700602-030.01	06/29/2007	1251	SMO / LKUKITA	
	06/29/2007	1303	In Lab / RWONG	
	06/29/2007	1541	P-37 / RWONG	
P0700602-031.01	06/29/2007	1251	SMO / LKUKITA	
	06/29/2007	1303	In Lab / RWONG	
	06/29/2007	1541	P-37 / RWONG	

**DIVIDER SHEET**

**ANALYTICAL DATA**  
**FOR**

**Hexavalent Chromium**

---

**ANALYSIS**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

Client : Battelle  
 Project Name : JPL Groundwater Monitoring 2Q07  
 Project Number : G486090  
 Sample Matrix : WATER

Service Request : P0700602  
 Date Collected : 06/25-29/07  
 Date Received : 06/25-29/07

Chromium, Hexavalent

Prep Method : None  
 Analysis Method : 7196A  
 Test Notes :

Units : mg/L (ppm)  
 Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-4-5	P0700602-001	0.01	0.005	1	NA	06/25/07 14:50	ND	
MW-4-4	P0700602-002	0.01	0.005	1	NA	06/25/07 14:50	ND	
MW-4-3	P0700602-003	0.01	0.005	1	NA	06/25/07 14:50	ND	
MW-4-2	P0700602-004	0.01	0.005	1	NA	06/25/07 14:50	ND	
MW-4-1	P0700602-005	0.01	0.005	1	NA	06/25/07 14:50	ND	
EB-9-6/25/07	P0700602-006	0.01	0.005	1	NA	06/25/07 14:50	ND	
MW-12-5	P0700602-007	0.01	0.005	1	NA	06/26/07 14:10	ND	
MW-12-4	P0700602-008	0.01	0.005	1	NA	06/26/07 14:10	ND	
MW-12-3	P0700602-009	0.01	0.005	1	NA	06/26/07 14:10	ND	
MW-12-2	P0700602-010	0.01	0.005	1	NA	06/26/07 14:10	ND	
MW-12-1	P0700602-011	0.01	0.005	1	NA	06/26/07 14:10	ND	
DUPE-5-2Q07	P0700602-012	0.01	0.005	1	NA	06/26/07 14:10	ND	
EB-10-6/26/07	P0700602-013	0.01	0.005	1	NA	06/26/07 14:10	ND	
MW-23-5	P0700602-014	0.01	0.005	1	NA	06/27/07 14:10	ND	
MW-23-4	P0700602-015	0.01	0.005	1	NA	06/27/07 14:10	ND	
MW-23-3	P0700602-016	0.01	0.005	1	NA	06/27/07 14:10	ND	
MW-23-2	P0700602-017	0.01	0.005	1	NA	06/27/07 14:10	ND	
MW-23-1	P0700602-018	0.01	0.005	1	NA	06/27/07 14:10	ND	
EB-11-6/27/07	P0700602-019	0.01	0.005	1	NA	06/27/07 14:10	ND	
MW-24-5	P0700602-020	0.01	0.005	1	NA	06/28/07 13:55	ND	
MW-24-4	P0700602-021	0.01	0.005	1	NA	06/28/07 13:55	ND	
MW-24-3	P0700602-022	0.01	0.005	1	NA	06/28/07 13:55	ND	
MW-24-2	P0700602-023	0.01	0.005	1	NA	06/28/07 13:55	ND	
MW-24-1	P0700602-024	0.01	0.005	1	NA	06/28/07 13:55	ND	
EB-12-6/28/07	P0700602-025	0.01	0.005	1	NA	06/28/07 13:55	ND	
MW-11-5	P0700602-026	0.01	0.005	1	NA	06/29/07 14:55	ND	
MW-11-4	P0700602-027	0.01	0.005	1	NA	06/29/07 14:55	ND	
MW-11-3	P0700602-028	0.01	0.005	1	NA	06/29/07 14:55	ND	
MW-11-2	P0700602-029	0.01	0.005	1	NA	06/29/07 14:55	ND	
MW-11-1	P0700602-030	0.01	0.005	1	NA	06/29/07 14:55	ND	

Approved By 

Date : 7/3/07



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle  
Project Name : JPL Groundwater Monitoring 2Q07  
Project Number : G486090  
Sample Matrix : WATER

Service Request : P0700602  
Date Collected : 06/25-29/07  
Date Received : 06/25-29/07

Chromium, Hexavalent

Prep Method : None  
Analysis Method : 7196A  
Test Notes :

Units : mg/L (ppm)  
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
EB-13-6/29/07	P0700602-031	0.01	0.005	1	NA	06/29/07 14:55	ND	
Method Blank	P0700602-MB	0.01	0.005	1	NA	06/25/07 14:50	ND	
Method Blank	P0700602-MB	0.01	0.005	1	NA	06/26/07 14:10	ND	
Method Blank	P0700602-MB	0.01	0.005	1	NA	06/27/07 14:10	ND	
Method Blank	P0700602-MB	0.01	0.005	1	NA	06/28/07 13:55	ND	
Method Blank	P0700602-MB	0.01	0.005	1	NA	06/29/07 14:55	ND	

Approved By

  
21

Date :

7/3/07

**DIVIDER SHEET**

**CAS-KELSO REPORT**

---

**ANALYSIS**

July 18, 2007

Analytical Report for Service Request No: P0700602

Sue Anderson  
2655 Park Center Drive  
Suite A  
Simi Valley, CA 93065

**RE: JPL Groundwater Monitoring 2Q07/G486090**

Dear David:

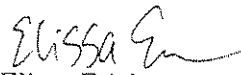
Enclosed are the results of the samples submitted to our laboratory on June 25, 2007. This report includes analyses performed on samples from our previous service request number Sue Anderson. For your reference, these analyses have been assigned our service request number P0700602.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at [EErickson@kelso.caslab.com](mailto:EErickson@kelso.caslab.com).

Respectfully submitted,

**Columbia Analytical Services, Inc.**

  
Elissa Erickson  
Project Chemist

EE/dj

Page 1 of 209

## Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

### Inorganic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

## Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Bartelle  
Project: JPL Groundwater Monitoring 2Q07  
Sample Matrix: Water

Service Request No.: P0700602  
Date Received: 6/26-6/29/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services on 6/26-6/29/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Nitrosamines by EPA Method 521

**Matrix Spike Recovery Exceptions:**

The matrix spike recovery of N-Nitrosodimethylamine for samples Batch QCMS, Batch QCDMS, and MW-24-1DMS was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

The Method Blank KWG0707389-4 contained low levels of N-Nitrosodimethylamine above the Method Reporting Limit (MRL). All sample results are less than the Method Reporting Limit (MRL). No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by Elissa Erickson Date 7-18-07

**Chain of Custody  
Documentation**



CAS Contact: **She Anderson**

Project Name: JPL Groundwater Monitoring 2007  
 Project Number: 0486090  
 Project Manager: David Conner  
 Company: Battelle

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample		Date Received	Sent To
				Date	Time		
P0700602-005	MW-4-1	2	Water	06/25/07	1003	06/25/07	KELSO
Nitrosamines 521							
IV							

Test Comments  
 Nitrosamines - 521 P0700602-005

NDMA

**Folder Comments:**  
 Note: Geotracker files for client's internal data base. LogCode is BAT but they do not have any Global ID. EDD sent to Betsy Cutler (cutler@battelle.org) via file share site  
<https://fx.battelle.org>

Special Instructions/Comments		Turnaround Requirements	Report Requirements	Invoice Information
Special Instructions/Comments  Turnaround Requirements RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 STANDARD Requested FAX Date: _____ Requested Report Date: 07/16/07		Report Requirements I Results Only II Results + QC Summaries III Results + QC and Calibration Summaries IV Data Validation Report with Raw Data POL/MDL/ EDD N Y	PO# P0700602 Bill to	

Relinquished By: *[Signature]* Received By: *[Signature]* 06-29-07  
 Addbill Number: \_\_\_\_\_

**Intra-Network Chain of Custody**  
 2655 Park Center Drive, Suite A - Simi Valley, CA 93065 • 805-526-7161 • FAX 805-526-7270

CAS Contact: Sue Anderson

Project Name: JPL Groundwater Monitoring 2007  
 Project Number: G486090  
 Project Manager: David Connor  
 Company: Battelle

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample		Date Received	Sent To
				Date	Time		
P0700602-024	MW-24-1	2	Water	06/28/07	1023	06/28/07	KELSO
							Nitrosamines 521
							IV

Test Comments: Nitrosamines - 521 P0700602-024 NDMA,NDPA & NDPPA

Folder Comments: Note: Geotracker files for client's internal data base. LogCode is BAT but they do not have any Global ID. EDD sent to Betsy Currie (currie@battelle.org) via file share site <https://k.battelle.org>

Special Instructions/Comments	Turnaround Requirements _____ RESM (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 <input checked="" type="checkbox"/> STANDARD	Report Requirements I. Results Only _____ II. Results + QC Summaries _____ III. Results + QC and Calibration Summaries _____ <input checked="" type="checkbox"/> IV. Data Validation Report with Raw Data	Invoice Information PO# P0700602 Bill to
	Requested FAX Date _____ Requested Report Date <u>07/19/07</u>	POL/MDL/J _____ EDD <u>X</u>	

Relinquished By: *[Signature]* Received By: *[Signature]* CAS 1000  
 C.A.R. 117 1425 *oct/19/07* Airbill Number: \_\_\_\_\_

Organic Analysis:  
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07/G486090

Service Request: P0700602

Cover Page - Organic Analysis Data Package  
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-24-1MS	KWG0707389-1	06/28/2007	06/28/2007
MW-24-1DMS	KWG0707389-2	06/28/2007	06/28/2007
MW-4-1	P0700602-005	06/25/2007	06/25/2007
MW-24-1	P0700602-024	06/28/2007	06/28/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Loren Portwood

Date: 7/18/02

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090  
 Sample Matrix: Water

Service Request: P0700602  
 Date Collected: 06/25/2007  
 Date Received: 06/25/2007

Nitrosamines by EPA 521

Sample Name: MW-4-1  
 Lab Code: P0700602-005  
 Extraction Method: METHOD  
 Analysis Method: 521

Units: ng/L  
 Basis: NA  
 Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND U	2.0	1.4	1	06/27/07	06/28/07	KWG0707222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	77	70-130	06/28/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090  
 Sample Matrix: Water

Service Request: P0700602  
 Date Collected: 06/28/2007  
 Date Received: 06/28/2007

Nitrosamines by EPA 521

Sample Name: MW-24-1  
 Lab Code: P0700602-024  
 Extraction Method: METHOD  
 Analysis Method: 521

Units: ng/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	2.0	BJ	2.0	1.4	1	07/03/07	07/17/07	KWG0707389	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	88	70-130	07/17/07	Acceptable

Comments:

July 10, 2007

David Conner  
Battelle  
3990 Old Town Ave., Suite C-205  
San Diego, CA 92110

**RE: JPL Groundwater Monitoring 2Q07/Project #G486090**

Dear David:

Enclosed are the results of the samples submitted to our laboratory on July 2 & 6, 2007. For your reference, these analyses have been assigned our service request number P0700619.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 32 pages.

Columbia Analytical Services is certified for environmental analyses by NELAP (certificate number: 02115CA) and Arizona Department of Health Services (License number: AZ0694).

If you have any questions, please call me at (805) 577-2086.

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Sue Anderson  
Project Chemist

SA

**CAS CSR #P0700619**

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# Columbia Analytical Services, Inc.

## Acronyms

<b>8015M</b>	California DHS LUFT Method
<b>ASTM</b>	American Society for Testing and Materials
<b>BOD</b>	Biochemical Oxygen Demand
<b>BTEX</b>	Benzene/Toluene/Ethylbenzene/Xylenes
<b>CAM</b>	California Assessment Metals
<b>CAS Number</b>	Chemical Abstract Service Registry Number
<b>CFC</b>	Chlorofluorocarbon
<b>COD</b>	Chemical Oxygen Demand
<b>CRDL</b>	Contract Required Detection Limit
<b>D</b>	Detected; result must be greater than zero.
<b>DL</b>	Detected; result must be greater than the detection limit.
<b>DLCS</b>	Duplicate Laboratory Control Sample
<b>DMS</b>	Duplicate Matrix Spike
<b>DOH or DHS</b>	Department of Health Services
<b>ELAP</b>	Environmental Laboratory Accreditation Program
<b>EPA</b>	U.S. Environmental Protection Agency
<b>GC</b>	Gas Chromatography
<b>GC/MS</b>	Gas Chromatography/Mass Spectrometry
<b>IC</b>	Ion Chromatography
<b>ICB</b>	Initial Calibration Blank sample
<b>ICP</b>	Inductively Coupled Plasma atomic emission spectrometry
<b>ICV</b>	Initial Calibration Verification sample
<b>LCS</b>	Laboratory Control Sample
<b>LUFT</b>	Leaking Underground Fuel Tank
<b>M</b>	Modified
<b>MBAS</b>	Methylene Blue Active Substances
<b>MDL</b>	Method Detection Limit
<b>MRL</b>	Method Reporting Limit
<b>MS</b>	Matrix Spike
<b>MTBE</b>	Methyl- <i>tert</i> -Butyl Ether
<b>NA</b>	Not Applicable
<b>NC</b>	Not Calculated
<b>ND</b>	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
<b>NTU</b>	Nephelometric Turbidity Units
<b>ppb</b>	Parts Per Billion
<b>ppm</b>	Parts Per Million
<b>PQL</b>	Practical Quantitation Limit
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RPD</b>	Relative Percent Difference
<b>SIM</b>	Selected Ion Monitoring
<b>SM</b>	<i>Standard Methods for the Examination of Water and Wastewater</i> , 18th Ed., 1992.
<b>STLC</b>	Solubility Threshold Limit Concentration
<b>SW</b>	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods</i> SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TDS</b>	Total Dissolved Solids
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TSS</b>	Total Suspended Solids
<b>TTLC</b>	Total Threshold Limit Concentration
<b>VOA</b>	Volatile Organic Analyte(s)

## Qualifiers

<b>U</b>	Undetected at or above MDL/MRL (PQL).
<b>J</b>	Estimated concentration. Analyte detected above MDL, but below MRL (PQL).
<b>B</b>	Hit above MRL (PQL) also found in Method Blank.
<b>E</b>	Analyte concentration above high point of ICAL.
<b>N</b>	Presumptive evidence of compound.
<b>D</b>	Result from dilution.
<b>X</b>	See case narrative.

**COLUMBIA ANALYTICAL SERVICES, INC.**

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090  
**Sample Matrix:** Water

**Service Request No.:** P07000619  
**Date Received:** 7/2 & 6/07

**CASE NARRATIVE**

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

**Sample Receipt**

The samples were received for analysis at Columbia Analytical Services on 7/2 & 6/07. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored at 4°C upon receipt at the laboratory.

**Hexavalent Chromium by EPA Method 7196A**

No anomalies were encountered during this analysis.

Approved by



Date



**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700619

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P0700619-001	MW-25-5	07/02/07	07:44
P0700619-002	MW-25-4	07/02/07	08:22
P0700619-003	MW-25-3	07/02/07	08:57
P0700619-004	MW-25-2	07/02/07	09:28
P0700619-005	MW-25-1	07/02/07	10:03
P0700619-006	DUPE-6-2Q07	07/02/07	00:00
P0700619-007	SB-1-7/2/07	07/02/07	08:43
P0700619-008	EB-14-7/2/07	07/02/07	09:47
P0700619-009	MW-5	07/06/07	08:55
P0700619-010	MW-6	07/06/07	11:40



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 X02 • FAX (818) 587-5555

PAGE 1 OF 1

CAS Contact

Project Name: JRL GW MON. 2007 Project Number: 6486090  
 Project Manager: DAVID CONNER Report CC:  
 Company/Address: BATELLE  
3990 OLD TOWN AVE., C-205  
SAN DIEGO, CA 92110  
 Phone #: 619-726-7311 FAX#:  
 Sampler's Signature: MARCO MENDOZA Sampler's Printed Name: MARCO MENDOZA

ANALYSIS REQUESTED (Include Method Number and Container Preservative)  
 PRESERVATIVE: 0  
 ANALYSIS REQUESTED:  
 TPH Gas 8015m (purgeable)   
 TPH Diesel 8015m (extractable)   
 BTEX 8021 / 602 MTBE   
 Halogenated Volatiles 8260 / 602   
 VOA by GC/MS 8260 / 624   
 SemivOA by GC/MS 8270 / 625   
 Pesticides 8081 / 8082 / 608   
 PCBs 8081 / 8082 / 608   
 CCR Metals (17) 6010 / 6020 / 7000 / 200.7 / 200.8   
 Preservative Key:  
 0. NONE  
 1. HCL  
 2. HNO3  
 3. H2SO4  
 4. H2O2  
 5. Zn Acetate  
 6. MeOH  
 7. NaHSO4  
 8. Other \_\_\_\_\_

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	REMARKS/ ALTERNATE DESCRIPTION
MW-25-5	1	7/26/07	744	W	1	LEVEL IV QC
MW-25-4	2	822				
MW-25-3	3	857				
MW-25-2	4	928				
MW-25-1	5	1003				
DUPE-6-2007	6					DUPLICATE
SB-1-7/26/07	7	843				SOURCE BLANK
EB-14-7/26/07	8	947				EQUIP. BLANK

SPECIAL INSTRUCTIONS/COMMENTS: \_\_\_\_\_

TURNAROUND REQUIREMENTS:  
 RUSH (SURCHARGES APPLY) \_\_\_\_\_  
 PLEASE CIRCLE WORK DAYS: 1 2 3 4  
 STANDARD  
 REQUESTED FAX DATE: \_\_\_\_\_  
 REQUESTED REPORT DATE: \_\_\_\_\_

REPORT REQUIREMENTS:  
 I. Results Only \_\_\_\_\_  
 II. Results + QC Summaries (LCS, DUP, MS/MSD as required) \_\_\_\_\_  
 III. Results + QC and Calibration Summaries \_\_\_\_\_  
 IV. Data Validation Report with Raw Data \_\_\_\_\_  
 MRL Yes \_\_\_ No \_\_\_  
 PQL/MDLJ Yes \_\_\_ No \_\_\_  
 Edata Yes \_\_\_ No \_\_\_

INVOICE INFORMATION:  
 PO# 240643  
 BILL TO: BATELLE  
GERALD TOMPKINS  
505 KING AVE  
COLUMBUS, OH 43201  
 Lab No: P0700619

See GAPP

SAMPLE RECEIPT: CONDITION/COOLER/TEMP: \_\_\_\_\_

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: <u>MARCO MENDOZA</u> Printed Name: <u>MARCO MENDOZA</u> Firm: <u>GEOSON</u> Date/Time: <u>7/26/07 1151</u>	Signature: <u>DAVID CONNER</u> Printed Name: <u>DAVID CONNER</u> Firm: <u>BATELLE</u> Date/Time: <u>7/26/07 1151</u>	Signature: <u>LOUIS KYKITA</u> Printed Name: <u>LOUIS KYKITA</u> Firm: <u>CAS</u> Date/Time: <u>7/26/07 1255</u>	Signature: <u>DAVID CONNER</u> Printed Name: <u>DAVID CONNER</u> Firm: <u>BATELLE</u> Date/Time: <u>7/26/07 1255</u>

RELINQUISHED BY: \_\_\_\_\_ RECEIVED BY: \_\_\_\_\_

Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Firm: \_\_\_\_\_ Date/Time: \_\_\_\_\_



# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700619

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700619-001.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-002.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-003.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-004.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-005.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-006.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-007.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-008.01	07/02/2007	1303	SMO / LKUKITA	
	07/02/2007	1332	P-37 / LKUKITA	
	07/02/2007	1334	In Lab / RWONG	
	07/02/2007	1637	P-37 / RWONG	
P0700619-009.01	07/06/2007	1313	SMO / LKUKITA	
	07/06/2007	1324	P-37 / LKUKITA	
	07/06/2007	1329	In Lab / RWONG	
	07/06/2007	1650	P-37 / RWONG	

5A

**Columbia Analytical Services, Inc.**  
**Chain of Custody Report**

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700619

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700619-010.01	07/06/2007	1313	SMO / LKUKITA	
	07/06/2007	1324	P-37 / LKUKITA	
	07/06/2007	1329	In Lab / RWONG	
	07/06/2007	1649	P-37 / RWONG	

**5B**

**DIVIDER SHEET**

**ANALYTICAL DATA**  
**FOR**

**Hexavalent Chromium**

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**ANALYSIS**



**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client :** Battelle  
**Project Name :** JPL Groundwater Monitoring 2Q07  
**Project Number :** G486090  
**Sample Matrix :** WATER


**Service Request :** P0700619  
**Date Collected :** 07/02-06/07  
**Date Received :** 07/02-06/07

Chromium, Hexavalent

**Prep Method :** None  
**Analysis Method :** 7196A  
**Test Notes :**

**Units :** mg/L (ppm)  
**Basis :** NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-25-5	P0700619-001	0.01	0.005	1	NA	07/02/07 15:25	ND	
MW-25-4	P0700619-002	0.01	0.005	1	NA	07/02/07 15:25	ND	
MW-25-3	P0700619-003	0.01	0.005	1	NA	07/02/07 15:25	ND	
MW-25-2	P0700619-004	0.01	0.005	1	NA	07/02/07 15:25	ND	
MW-25-1	P0700619-005	0.01	0.005	1	NA	07/02/07 15:25	ND	
DUPE-6-2Q07	P0700619-006	0.01	0.005	1	NA	07/02/07 15:25	ND	
SB-1-7/2/07	P0700619-007	0.01	0.005	1	NA	07/02/07 15:25	ND	
EB-14-7/2/07	P0700619-008	0.01	0.005	1	NA	07/02/07 15:25	ND	
MW-5	P0700619-009	0.01	0.005	1	NA	07/06/07 15:46	ND	
MW-6	P0700619-010	0.01	0.005	1	NA	07/06/07 15:46	ND	
Method Blank	P0700619-MB	0.01	0.005	1	NA	07/02/07 15:25	ND	
Method Blank	P0700619-MB	0.01	0.005	1	NA	07/06/07 15:46	ND	

Approved By 

Date : 7/19/07

July 20, 2007

David Conner  
Battelle  
3990 Old Town Ave., Suite C-205  
San Diego, CA 92110

**RE: JPL Groundwater Monitoring 2Q07/Project #G486090**

Dear David:

Enclosed are the results of the samples submitted to our laboratory on July 9-12, 2007. For your reference, these analyses have been assigned our service request number P0700624.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 174 pages.

Columbia Analytical Services is certified for environmental analyses by NELAP (certificate number: 02115CA) and Arizona Department of Health Services (License number: AZ0694).

If you have any questions, please call me at (805) 577-2086.

Respectfully submitted,

**Columbia Analytical Services, Inc.**



Sue Anderson  
Project Chemist

SA

**CAS CSR #P0700624**

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# Columbia Analytical Services, Inc.

## Acronyms

<b>8015M</b>	California DHS LUFT Method
<b>ASTM</b>	American Society for Testing and Materials
<b>BOD</b>	Biochemical Oxygen Demand
<b>BTEX</b>	Benzene/Toluene/Ethylbenzene/Xylenes
<b>CAM</b>	California Assessment Metals
<b>CAS Number</b>	Chemical Abstract Service Registry Number
<b>CFC</b>	Chlorofluorocarbon
<b>COD</b>	Chemical Oxygen Demand
<b>CRDL</b>	Contract Required Detection Limit
<b>D</b>	Detected; result must be greater than zero.
<b>DL</b>	Detected; result must be greater than the detection limit.
<b>DLCS</b>	Duplicate Laboratory Control Sample
<b>DMS</b>	Duplicate Matrix Spike
<b>DOH or DHS</b>	Department of Health Services
<b>ELAP</b>	Environmental Laboratory Accreditation Program
<b>EPA</b>	U.S. Environmental Protection Agency
<b>GC</b>	Gas Chromatography
<b>GC/MS</b>	Gas Chromatography/Mass Spectrometry
<b>IC</b>	Ion Chromatography
<b>ICB</b>	Initial Calibration Blank sample
<b>ICP</b>	Inductively Coupled Plasma atomic emission spectrometry
<b>ICV</b>	Initial Calibration Verification sample
<b>LCS</b>	Laboratory Control Sample
<b>LUFT</b>	Leaking Underground Fuel Tank
<b>M</b>	Modified
<b>MBAS</b>	Methylene Blue Active Substances
<b>MDL</b>	Method Detection Limit
<b>MRL</b>	Method Reporting Limit
<b>MS</b>	Matrix Spike
<b>MTBE</b>	Methyl- <i>tert</i> -Butyl Ether
<b>NA</b>	Not Applicable
<b>NC</b>	Not Calculated
<b>ND</b>	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
<b>NTU</b>	Nephelometric Turbidity Units
<b>ppb</b>	Parts Per Billion
<b>ppm</b>	Parts Per Million
<b>PQL</b>	Practical Quantitation Limit
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RPD</b>	Relative Percent Difference
<b>SIM</b>	Selected Ion Monitoring
<b>SM</b>	<i>Standard Methods for the Examination of Water and Wastewater</i> ; 18th Ed., 1992.
<b>STLC</b>	Solubility Threshold Limit Concentration
<b>SW</b>	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods</i> ; SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TDS</b>	Total Dissolved Solids
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TSS</b>	Total Suspended Solids
<b>TTLC</b>	Total Threshold Limit Concentration
<b>VOA</b>	Volatile Organic Analyte(s)

## Qualifiers

<b>U</b>	Undetected at or above MDL/MRL (PQL).
<b>J</b>	Estimated concentration. Analyte detected above MDL, but below MRL (PQL).
<b>B</b>	Hit above MRL (PQL) also found in Method Blank.
<b>E</b>	Analyte concentration above high point of ICAL.
<b>N</b>	Presumptive evidence of compound.
<b>D</b>	Result from dilution.
<b>X</b>	See case narrative.

COLUMBIA ANALYTICAL SERVICES, INC.

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090  
**Sample Matrix:** Water

**Service Request No.:** P07000624  
**Date Received:** 7/9-12/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

**Sample Receipt**

The samples were received for analysis at Columbia Analytical Services on 7/9-12/07. No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored at 4°C upon receipt at the laboratory.

**Hexavalent Chromium by EPA Method 7196A**

No anomalies were encountered during this analysis.

Approved by



Date

7/19/07

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700624

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P0700624-001	MW-1	07/09/07	08:50
P0700624-002	MW-9	07/09/07	10:16
P0700624-003	MW-15	07/09/07	11:56
P0700624-004	DUPE-7-2Q07	07/09/07	00:00
P0700624-005	MW-7	07/10/07	09:04
P0700624-006	MW-16	07/10/07	12:25
P0700624-007	DUPE-8-2Q07	07/10/07	00:00
P0700624-008	MW-13	07/11/07	09:14
P0700624-009	MW-8	07/11/07	11:33
P0700624-010	MW-26-2	07/12/07	10:25
P0700624-011	MW-26-1	07/12/07	11:02
P0700624-012	EB-15-7/12/07	07/12/07	10:43
P0700624-013	MW-10	07/12/07	08:40

# Water & Soil - Chain of Custody Record & Analytical Service Request



2655 Park Center Drive, Suite A  
 Simi Valley, California 93065  
 Phone (805) 526-7161  
 Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle  
 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0600624  
 CAS Contact:

Company Name & Address (Reporting Information)	Project Name	Analysis Method and/or Analytes				Preservative Key
		Preservative Code				
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Remarks
MW-1	1	7/19/07	850	W	1	
MW-9	2	10/16			2	MS/MSD
MW-15	3	11/56			2	MS/MSD
DUPE-7-2007	4				1	DUPLICATE

Company Name & Address (Reporting Information)		Project Information	
BATTLE 3990 OLD TOWN AVE, C-205 SAN DIEGO, CA 92110		SPL GW MON 2007	
Project Manager DAVID CONNER Phone 619-726-7311 Fax		Project Number 6486090	
Email Address for Result Reporting		Sampler (Print & Sign)	
P.O. # / Billing Information BATTLE GERALD TOMPKINS 505 KING AVE. COLUMBUS, OH 43201			

Analysis Method and/or Analytes		Preservative Code		Preservative Key
Preservative Code		Preservative Key		
624 <input type="checkbox"/> Volatile Organics GC/MS	8260B <input type="checkbox"/> Oxygenates	0	0	0 None
TPH Gas 8015B <input type="checkbox"/>	TPH Gas <input type="checkbox"/>			1 HCL
BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/>	TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted)			2 HNO3
TPH Diesel 8015B <input type="checkbox"/> (Subcontracted)	TPH Diesel 8015M <input type="checkbox"/> (Subcontracted)			3 H2SO4
TPH FC 8015M <input type="checkbox"/> (Subcontracted)	Semi-Volatile Organics GC/MS			4 NaOH
625 <input type="checkbox"/> (Subcontracted)	8270C <input type="checkbox"/> (Subcontracted)			5 Zn Acetate
				6 Asc Acid
				7 Other

**Report Tier Levels - please select**  
 Tier I - (Results/Default if not specified) \_\_\_\_\_  
 Tier II - (Results + QC) \_\_\_\_\_  
 Tier III - (Data Validation Package) 10% Surcharge \_\_\_\_\_  
 Tier V - (client specified) \_\_\_\_\_

MRL required Yes / No \_\_\_\_\_  
 MDL / POL / J required Yes / No \_\_\_\_\_  
 EDD required Yes / No \_\_\_\_\_  
 Type: \_\_\_\_\_

Relinquished by: (Signature) \_\_\_\_\_ Date: 7/19/07 Time: 13:01  
 Relinquished by: (Signature) \_\_\_\_\_ Date: 7/19/07 Time: 13:40  
 Relinquished by: (Signature) \_\_\_\_\_ Date: 7/19/07 Time: 15:40

Project Requirements (MRLs, QAPP)  
 Cooler / Blank / Ice / No Ice \_\_\_\_\_  
 Temperature \_\_\_\_\_ °C





# Water & Soil - Chain of Custody Record & Analytical Service Request



2655 Park Center Drive, Suite A  
 Simi Valley, California 93065  
 Phone (805) 526-7161  
 Fax (805) 526-7270

<b>Company Name &amp; Address (Reporting Information)</b> BATTLE 3990 OLD TOWN AVE, C-205 SAN DIEGO, CA 92110		<b>Project Name</b> SPL GW MON 2007		<b>Requested Turnaround Time in Business Days (Surcharges) please circle</b> 1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard		<b>CAS Project No.</b> 20700624	
<b>Project Manager</b> DAVID CONNER		<b>Project Number</b> 6486090		<b>Analysis Method and/or Analytes</b>		<b>CAS Contact:</b>	
<b>Phone</b> 619-726-7311		<b>Fax</b>		<b>Preservative Code</b>		<b>Preservative Key</b> 0 None 1 HCL 2 HNO3 3 H2SO4 4 NaOH 5 Zn Acetate 6 Asc Acid 7 Other	
<b>Email Address for Result Reporting</b>		<b>Sampler (Print &amp; Sign)</b>		Volatile Organics G/MS 624 <input type="checkbox"/> 8260B <input type="checkbox"/> Oxygenates <input type="checkbox"/> TPH Gas <input type="checkbox"/>		<b>Remarks</b> MS/MSD, LEVEL QC	
<b>Client Sample ID</b> MW-13		<b>Laboratory ID Number</b> 8	<b>Date Collected</b> 7/11/07	<b>Time Collected</b> 914	<b>Matrix</b> W	<b>Number of Containers</b> 6	Semi-Volatile Organics G/MS 625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)
MW-8		9	1133			2	TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
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							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
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							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							Semi-Volatile Organics G/MS 625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)
							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							Semi-Volatile Organics G/MS 625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)
							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							Semi-Volatile Organics G/MS 625 <input type="checkbox"/> 8270C <input type="checkbox"/> (Subcontracted)
							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel 8015B <input type="checkbox"/> (Subcontracted) BTEX 8021B <input type="checkbox"/> MTBE 8021B <input type="checkbox"/> TPH Gas 8015B <input type="checkbox"/>
							TPH Diesel Low Level 8015B <input type="checkbox"/> (Subcontracted) TPH FC <input type="checkbox"/> 8015M (Subcontracted)
							Semi-Volatile Organics G/MS 625 <input type="checkbox"/> 8



# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 X02 • FAX (818) 587-5555

PAGE 1 OF 1

CAS Contact

Project Name <b>JPL GW Mon. 2007</b>		Project Number <b>6486090</b>	
Project Manager <b>DAVID CONNER</b>		Report CC	
Company/Address <b>BATIELLE</b>			
3990 OLD TOWN AVE., C-205			
SAN DIEGO, CA 92110			
Phone # <b>619-726-7311</b>	FAX#		
Sampler's Signature <b>MARCO MENDOZA</b>		Sampler's Printed Name <b>MARCO MENDOZA</b>	

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX
MW-26-2	10	7/12/07	1025	W
MW-26-1	11	7/12/07	1102	W
EG015-715707	12	7/12/07	1043	W
MW-10	13	7/12/07	849	W

ANALYSIS REQUESTED (Include Method Number and Container Preservative)	PRESERVATIVE	NUMBER OF CONTAINERS	REMARKS/ALTERNATE DESCRIPTION
	<input type="checkbox"/> PFH Gas <input type="checkbox"/> PFH Gas (purgeable) <input type="checkbox"/> 8015m (extractable) <input type="checkbox"/> Fuel Char. <input type="checkbox"/> 8015m (purgeable) <input type="checkbox"/> BTX <input type="checkbox"/> MTBE <input type="checkbox"/> 8021 / 602 <input type="checkbox"/> Halogenated Volatiles <input type="checkbox"/> 8260 <input type="checkbox"/> VOA by GCMS <input type="checkbox"/> 8260 / 624 <input type="checkbox"/> SemVOA by GCMS <input type="checkbox"/> 8270 / 625 <input type="checkbox"/> Pesticides <input type="checkbox"/> 8081 / 8082 / 608 <input type="checkbox"/> PCBs <input type="checkbox"/> 8081 / 8082 / 608 <input type="checkbox"/> CCR Metals (17) <input type="checkbox"/> 6010 / 6020 / 7000 / 2007 / 2008 <input type="checkbox"/> (9617)	0	Preservative Key 0. NONE 1. HCL 2. HNO3 3. H2SO4 4. NaOH 5. Zn. Acetate 6. MeOH 7. NaHSO4 8. Other _____  LEVEL IV QC  EQUIP. BLANK

SPECIAL INSTRUCTIONS/COMMENTS	TURNAROUND REQUIREMENTS	REPORT REQUIREMENTS	INVOICE INFORMATION
	<input type="checkbox"/> RUSH (SURCHARGES APPLY)  PLEASE CIRCLE WORK DAYS 1 2 3 4 <input type="checkbox"/> STANDARD  REQUESTED FAX DATE _____ REQUESTED REPORT DATE _____	<input type="checkbox"/> I. Results Only <input type="checkbox"/> II. Results + QC Summaries (LCS, DUP, MS/MSD as required) <input type="checkbox"/> III. Results + QC and Calibration Summaries <input type="checkbox"/> IV. Data Validation Report with Raw Data  MRL: Yes ___ No ___ POL/MDL/J: Yes ___ No ___ Edata: Yes ___ No ___	PO# <b>240643</b> BILL TO: <b>BATIELLE</b> <b>GERARD TOMPkins</b> <b>505 KING AVE.</b> <b>COLUMBUS, OH 43201</b> Lab No: <b>P0700624</b>

RECEIVED BY	RECEIVED BY	CUSTOMY SEALS: Y N
Signature: <b>David Conner</b>	Signature: <b>Samie L...</b>	RELINQUISHED BY
Printed Name: <b>DAVID CONNER</b>	Printed Name: <b>SAMIE L...</b>	Signature: <b>Connie K...</b>
Firm: <b>CAS</b>	Firm: <b>CAS</b>	Printed Name: <b>CONNIE K...</b>
Date/Time: <b>7/12/07 12:16</b>	Date/Time: <b>7/12/07 13:24</b>	Firm: <b>CAS</b>
		Date/Time: <b>7/12/07 13:24</b>

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700624

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700624-001.01	07/09/2007	1353	SMO / LKUKITA	
	07/09/2007	1407	P-37 / LKUKITA	
	07/09/2007	1410	In Lab / RWONG	
	07/09/2007	1709	P-37 / RWONG	
P0700624-002.01	07/09/2007	1353	SMO / LKUKITA	
	07/09/2007	1407	P-37 / LKUKITA	
	07/09/2007	1410	In Lab / RWONG	
	07/09/2007	1709	P-37 / RWONG	
P0700624-002.02	07/09/2007	1353	SMO / LKUKITA	
	07/09/2007	1407	P-37 / LKUKITA	
P0700624-003.01	07/09/2007	1353	SMO / LKUKITA	
	07/09/2007	1407	P-37 / LKUKITA	
	07/09/2007	1410	In Lab / RWONG	
	07/09/2007	1709	P-37 / RWONG	
P0700624-003.02	07/09/2007	1353	SMO / LKUKITA	
	07/09/2007	1407	P-37 / LKUKITA	
P0700624-004.01	07/09/2007	1353	SMO / LKUKITA	
	07/09/2007	1407	P-37 / LKUKITA	
	07/09/2007	1410	In Lab / RWONG	
	07/09/2007	1709	P-37 / RWONG	
P0700624-005.04	07/10/2007	1411	SMO / LKUKITA	
	07/10/2007	1431	In Lab / DCASTILLO	
	07/10/2007	1727	P-37 / RWONG	
P0700624-006.01	07/10/2007	1411	SMO / LKUKITA	
	07/10/2007	1440	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
P0700624-006.02	07/10/2007	1411	SMO / LKUKITA	
	07/10/2007	1440	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
	07/16/2007	0844	Custodian / KSMITH	
	07/16/2007	1111	In Lab / LPORTWOOD	
	07/16/2007	1619	K-HERK-C5 / SBEATLEY	
P0700624-006.03	07/10/2007	1411	SMO / LKUKITA	
	07/10/2007	1440	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700624

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0700624-006.03	07/16/2007	0844	Custodian / KSMITH	
	07/16/2007	1111	In Lab / LPORTWOOD	
	07/16/2007	1631	K-HERK-C5 / LRAVERT	
P0700624-006.04	07/10/2007	1411	SMO / LKUKITA	
	07/10/2007	1440	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
P0700624-006.05	07/10/2007	1413	SMO / LKUKITA	
	07/10/2007	1431	In Lab / DCASTILLO	
	07/10/2007	1727	P-37 / RWONG	
P0700624-006.06	07/10/2007	1417	SMO / LKUKITA	
	07/10/2007	1440	P-37 / LKUKITA	
P0700624-007.04	07/10/2007	1411	SMO / LKUKITA	
	07/10/2007	1431	In Lab / DCASTILLO	
	07/10/2007	1727	P-37 / RWONG	
P0700624-008.01	07/11/2007	1325	SMO / LKUKITA	
	07/11/2007	1407	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
P0700624-008.02	07/11/2007	1325	SMO / LKUKITA	
	07/11/2007	1407	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
P0700624-008.03	07/11/2007	1325	SMO / LKUKITA	
	07/11/2007	1407	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
	07/16/2007	0844	Custodian / KSMITH	
	07/16/2007	1111	In Lab / LPORTWOOD	
	07/16/2007	1619	K-HERK-C5 / SBEATLEY	
P0700624-008.04	07/11/2007	1325	SMO / LKUKITA	
	07/11/2007	1407	SUBBED / LKUKITA	
	07/12/2007	1626	K-HERK-C5 / AJUELL	
	07/16/2007	0844	Custodian / KSMITH	
	07/16/2007	1111	In Lab / LPORTWOOD	
	07/16/2007	1631	K-HERK-C5 / LRAVERT	
P0700624-008.05	07/11/2007	1326	SMO / LKUKITA	
	07/11/2007	1427	In Lab / RWONG	
	07/11/2007	1714	P-37 / RWONG	

# Columbia Analytical Services, Inc.

## Chain of Custody Report

**Client:** Battelle  
**Project:** JPL Groundwater Monitoring 2Q07/G486090

**Service Request:** P0700624

<b>Bottle ID</b>	<b>Date</b>	<b>Time</b>	<b>Sample Location / User</b>	<b>Disposed On</b>
P0700624-008.06	07/11/2007	1326	SMO / LKUKITA	
	07/11/2007	1408	P-37 / LKUKITA	
P0700624-009.01	07/11/2007	1325	SMO / LKUKITA	
	07/11/2007	1427	In Lab / RWONG	
	07/11/2007	1714	P-37 / RWONG	
P0700624-009.02	07/11/2007	1332	SMO / LKUKITA	
	07/11/2007	1408	P-37 / LKUKITA	
P0700624-010.01	07/12/2007	1327	SMO / LKUKITA	
	07/12/2007	1352	In Lab / RWONG	
	07/12/2007	1621	P-37 / RWONG	
P0700624-011.01	07/12/2007	1327	SMO / LKUKITA	
	07/12/2007	1352	In Lab / RWONG	
	07/12/2007	1621	P-37 / RWONG	
P0700624-012.01	07/12/2007	1327	SMO / LKUKITA	
	07/12/2007	1352	In Lab / RWONG	
	07/12/2007	1621	P-37 / RWONG	
P0700624-013.01	07/12/2007	1327	SMO / LKUKITA	
	07/12/2007	1352	In Lab / RWONG	
	07/12/2007	1621	P-37 / RWONG	

**DIVIDER SHEET**

**ANALYTICAL DATA**  
**FOR**

**Hexavalent Chromium**

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**ANALYSIS**

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client :** Battelle  
**Project Name :** JPL Groundwater Monitoring 2Q07  
**Project Number :** G486090  
**Sample Matrix :** WATER

**Service Request :** P0700624  
**Date Collected :** 07/09-12/07  
**Date Received :** 07/09-12/07

Chromium, Hexavalent

**Prep Method :** None  
**Analysis Method :** 7196A  
**Test Notes :**

**Units :** mg/L (ppm)  
**Basis :** NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-1	P0700624-001	0.01	0.005	1	NA	07/09/07 16:30	ND	
MW-9	P0700624-002	0.01	0.005	1	NA	07/09/07 16:30	ND	
MW-15	P0700624-003	0.01	0.005	1	NA	07/09/07 16:30	ND	
DUPE-7-2Q07	P0700624-004	0.01	0.005	1	NA	07/09/07 16:30	ND	
MW-7	P0700624-005	0.01	0.005	1	NA	07/10/07 16:30	0.006	J
MW-16	P0700624-006	0.01	0.005	1	NA	07/10/07 16:30	ND	
DUPE-8-2Q07	P0700624-007	0.01	0.005	1	NA	07/10/07 16:30	0.009	J
MW-13	P0700624-008	0.02	0.01	2	NA	07/11/07 16:50	0.066	
MW-8	P0700624-009	0.01	0.005	1	NA	07/11/07 16:50	ND	
MW-26-2	P0700624-010	0.01	0.005	1	NA	07/12/07 15:05	ND	
MW-26-1	P0700624-011	0.01	0.005	1	NA	07/12/07 15:05	ND	
EB-15-7/12/07	P0700624-012	0.01	0.005	1	NA	07/12/07 15:05	ND	
MW-10	P0700624-013	0.01	0.005	1	NA	07/12/07 15:05	ND	
Method Blank	P0700624-MB	0.01	0.005	1	NA	07/09/07 16:30	ND	
Method Blank	P0700624-MB	0.01	0.005	1	NA	07/10/07 16:30	ND	
Method Blank	P0700624-MB	0.01	0.005	1	NA	07/11/07 16:50	ND	
Method Blank	P0700624-MB	0.01	0.005	1	NA	07/12/07 15:05	ND	

J Estimated concentration. The result is less than the PQL but greater than the MDL.

Approved By

  
 \_\_\_\_\_ 17

Date :

  
 \_\_\_\_\_

**DIVIDER SHEET**

**CAS-KELSO REPORT**

---

**ANALYSIS**



July 20, 2007

Analytical Report for Service Request No: P0700624

Sue Anderson  
Columbia Analytical Services  
2655 Park Center Drive  
Suite A  
Simi Valley, CA 93065

**RE: JPL Groundwater Monitoring 2Q07/G486090**

Dear Sue:

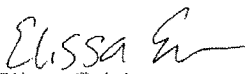
Enclosed are the results of the sample(s) submitted to our laboratory on July 09, 2007. For your reference, these analyses have been assigned our service request number P0700624.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at [EErickson@kelso.caslab.com](mailto:EErickson@kelso.caslab.com).

Respectfully submitted,

Columbia Analytical Services, Inc.

  
Elissa Erickson  
Project Chemist

EE/cb

Page 1 of 10

### Inorganic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

### Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

## Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle  
Project: JPL Groundwater Monitoring 2Q07  
Sample Matrix: water

Service Request No.: P0700624  
Date Received: 7/12/07

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services, Kelso on 7/12/07. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Nitrosamines by EPA Method 521

**Matrix Spike Recovery Exceptions:**

The matrix spike recovery of N-Nitrosodimethylamine for sample MW-13MS was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential low bias in this matrix. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by Elissa Em

Date 7-20-07

**Chain of Custody  
Documentation**

**Intra-Network Chain of Custody**  
 2655 Park Center Drive, Suite A • Simi Valley, CA 93065 • 805-526-7161 • FAX 805-526-7270

CAS Contact: Sue Anderson

Project Name: JPL Groundwater Monitoring 2007  
 Project Number: G486090  
 Project Manager: David Conner  
 Company: Battelle

Lab Code	Client Sample ID	# of Cont.	Matrix	Sample			Send To
				Date	Time	Received	
P0700624-006	MW-16	4	Water	07/10/07	1225	07/10/07	KELSO
P0700624-008	MW-13	4	Water	07/11/07	0914	07/11/07	KELSO
							Nitrosamines 521
							IV
							IV

Test Comments  
 Nitrosamines - 521 P0700624-006 NDMA Only  
 Run MS/MSD on this sample  
 Nitrosamines - 521 P0700624-008 NDMA only  
 MS/MSD on this sample

**Folder Comments:**  
 Note: Geotracker files for client's internal data base. LogCode is BAT but they do not have any Global ID. EDD sent to Betsy Curie (curiee@battelle.org) via file share site  
<https://fx.battelle.org>

Special Instructions/Comments		Turnaround Requirements <input type="checkbox"/> RUSH (Surcharges Apply) PLEASE CIRCLE WORKDAYS 1 2 3 4 5 <input checked="" type="checkbox"/> STANDARD Requested FAX Date _____ Requested Report Date <u>08/01/07</u>		Report Requirements <input type="checkbox"/> I. Results Only <input type="checkbox"/> II. Results + QC Summaries <input type="checkbox"/> III. Results + QC and Calibration Summaries <input checked="" type="checkbox"/> IV. Data Validation Report with Raw Data POL/MDL/ <u>Y</u> EDD <u>Y</u>		Invoice Information PO# P0700624 Bill to	
-------------------------------	--	---	--	---	--	---	--

Relinquished By: [Signature] Received By: [Signature] Airbill Number: \_\_\_\_\_  
 Date: 7/11/07

Organic Analysis:  
Nitrosamines by EPA 521

Summary Package

Sample and QC Results



Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090

Service Request: P0700624

Cover Page - Organic Analysis Data Package  
 Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-16MS	KWG0707757-1	07/10/2007	07/10/2007
MW-16DMS	KWG0707757-2	07/10/2007	07/10/2007
MW-13MS	KWG0707757-3	07/11/2007	07/11/2007
MW-13DMS	KWG0707757-4	07/11/2007	07/11/2007
MW-16	P0700624-006	07/10/2007	07/10/2007
MW-13	P0700624-008	07/11/2007	07/11/2007

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Loan Portwood

Date: 7/18/07

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090  
 Sample Matrix: Water

Service Request: P0700624  
 Date Collected: 07/10/2007  
 Date Received: 07/10/2007

Nitrosamines by EPA 521

Sample Name: MW-16  
 Lab Code: P0700624-006  
 Extraction Method: METHOD  
 Analysis Method: 521

Units: ng/L  
 Basis: NA  
 Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	07/16/07	07/17/07	KWG0707757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	84	70-130	07/17/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle  
 Project: JPL Groundwater Monitoring 2Q07/G486090  
 Sample Matrix: Water

Service Request: P0700624  
 Date Collected: 07/11/2007  
 Date Received: 07/11/2007

Nitrosamines by EPA 521

Sample Name: MW-13 Units: ng/L  
 Lab Code: P0700624-008 Basis: NA  
 Extraction Method: METHOD Level: Low  
 Analysis Method: 521

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	1.5	J	2.0	1.4	1	07/16/07	07/17/07	KWG0707757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	77	70-130	07/17/07	Acceptable

Comments: