

Metals Data

JPL106

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

SOW No.: _____

Sample No.	Lab Sample ID
MW-3-5	JPL106-001
MW-3-4	JPL106-002
MW-3-3	JPL106-003
MW-3-2	JPL106-004
MW-3-1	JPL106-005
MW-3-1MS	JPL106-005MS
MW-3-1MSD	JPL106-005MSD
EB-09-05/06/08	JPL106-006

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: Bill Ambacher

Name: Bill Ambacher

Date: 6/14/08

Title: Inorganics Technical Director

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-5

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL106Matrix (soil/water): WaterLab Sample ID: JPL106-001Level (low/med): LOWDate Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.42			M	R028287
7440-70-2	Calcium	25100		E	P	R028697
7440-47-3	Chromium	4.79			M	R028287
7439-89-6	Iron	4080		*N	P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	10700		E	P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	62300		E	P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 9:22

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

Matrix (soil/water): Water

Lab Sample ID: JPL106-002

Level (low/med): LOW

Date Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.30			M	R028287
7440-70-2	Calcium	24100		E	P	R028697
7440-47-3	Chromium	4.96			M	R028287
7439-89-6	Iron	407		*N	P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	10200		E	P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	50200		E	P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 9:22

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-3

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL106Matrix (soil/water): WaterLab Sample ID: JPL106-003Level (low/med): LOWDate Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.03			M	R028287
7440-70-2	Calcium	34100		E	P	R028697
7440-47-3	Chromium	2.53			M	R028287
7439-89-6	Iron	100	U	*N	P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	17600		E	P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	41500		E	P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/14/2008 9:22

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

Matrix (soil/water): Water

Lab Sample ID: JPL106-004

Level (low/med): LOW

Date Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	61800		E	P	R028697
7440-47-3	Chromium	4.18			M	R028287
7439-89-6	Iron	243		*N	P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	21600		E	P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	21600		E	P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 9:22

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-1

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL106Matrix (soil/water): WaterLab Sample ID: JPL106-005Level (low/med): LOWDate Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028382
7440-70-2	Calcium	67100		E	P	R028697
7440-47-3	Chromium	4.45			M	R028382
7439-89-6	Iron	277		*N	P	R028697
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	23300		E	P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	27400		E	P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/14/2008 9:22

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-09-05/06/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

Matrix (soil/water): Water

Lab Sample ID: JPL106-006

Level (low/med): LOW

Date Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	5000	U	E	P	R028697
7440-47-3	Chromium	1.49			M	R028287
7439-89-6	Iron	100	U	*N	P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	5000	U	E	P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	5000	U	E	P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 9:22

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL106

July 2, 2008

ADDENDUM - METALS

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL106
Date of Report: June 16, 2008
Date of Addendum: July 2, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-3-5	JPL106-001	VOA/MET/INO
MW-3-4	JPL106-002	VOA/MET/INO
MW-3-3	JPL106-003	VOA/MET/INO
MW-3-2	JPL106-004	VOA/MET/INO
MW-3-1	JPL106-005	VOA/MET/INO
EB-09-05/06/08	JPL106-006	VOA/MET/INO
TB-09-05/06/08	JPL106-007	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

We assert that the results reported here relate only to the samples listed in this report.

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples. Two of two volatiles bottles submitted for TB-09-05/06/08 contained bubbles of greater than 1/4 inch in size. All samples submitted for pH analysis were received after the analytical holding time had expired.

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

Volatiles Fraction:

Quality Control Analyses:

MS/MSD analyses performed on sample MW-3-1 yielded all recoveries and RPD values within the control limits. Except for cis-1,3-dichloropropene, which recovered high, all spiking analytes in the blank spike analysis recovered within control limits. Because cis-1,3-dichloropropene was not detected in any of the associated samples, no further action was taken.

All other 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."

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ICP Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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	15 minutes	All samples

ICP Metals:

For the run sequence R028697, the ICV exceeded the upper control limit for potassium. All samples contained concentrations of potassium that were less than the CRDL. Quality control data for potassium were reported and were within control limits. No corrective action was required. Data have not been flagged for this event.

The matrix spike sample and matrix spike duplicate sample percent recoveries of iron were outside of the established control limits of 70-130% for sample MW-3-1. Laboratory control samples were

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

analyzed and were within control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and 5C.

The matrix spike sample and matrix spike duplicate sample relative percent difference for iron was outside the control limits of $\pm 20\%$ for sample MW-3-1. No further corrective action was required. All relevant data have been flagged with an "*" on Forms I and 5C.

The serial dilution for the elements calcium, magnesium, and sodium did not agree within 10% of the original determination after correction for dilution for sample MW-3-1. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and 9.

Addendum Comments:

Due to a spiking error for iron, sample MW-3-1 was reanalyzed for iron. The reanalysis data has been provided in an addendum data package. The following comments apply to the reanalysis run sequence, R029050.

For the run sequence R029050, the third CCV exceeded the upper control for iron. Only the matrix spike duplicate sample was associated with this CCV, and the results were within the control limits. Data have not been flagged for this event.

The serial dilution sample for iron was prepared at a ten fold dilution instead of a five fold dilution. Serial dilution results passed. Therefore, no further corrective action was taken. Data have not been flagged for this event.

ICP-MS Metals:

For the run sequence R028287, CCV4 exceeded control limits. CCV4 was re-analyzed and was within control limits. Due to this corrective action, one extra injection time was added, with a total of eleven injection times, between CCV3/CCB3 and CCV4/CCB4. Re-analyzed data was reported for CCV4. No further corrective action was taken. Data have not been flagged for this event.

Miscellaneous Inorganics:

For run sequence R027918, the third continuing calibration verification recovered high for chloride. All bracketed samples were less than the reporting limit. Therefore, no further action was taken.

For run sequence R027961, the blank spike recovered low for the orthophosphate analysis. No samples were reported for this element. Therefore, no further action was taken.

Pace Analytical Services, Inc.

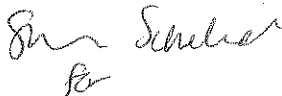
940 S. Harney
Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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

7/2/08

(DATE)



Harry Romberg
Quality Assurance Officer

7/2/08

(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Addendum Metals Data

JPL106

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

SOW No.: _____

Sample No.
<u>MW-3-1</u>
<u>MW-3-1MS</u>
<u>MW-3-1MSD</u>

Lab Sample ID
<u>JPL106-005</u>
<u>JPL106-005MS</u>
<u>JPL106-005MSD</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: 6/27/08

Title: Inorganics Technical Director

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-3-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

Matrix (soil/water): Water

Lab Sample ID: JPL106-005

Level (low/med): LOW

Date Received: 05/07/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7439-89-6	Iron	244			P	R029050

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/25/2008 13:54

Miscellaneous Inorganic Data

JPL106

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL106

SOW No.: _____

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-3-5</u>	<u>JPL106-001</u>
<u>MW-3-4</u>	<u>JPL106-002</u>
<u>MW-3-3</u>	<u>JPL106-003</u>
<u>MW-3-2</u>	<u>JPL106-004</u>
<u>MW-3-1</u>	<u>JPL106-005</u>
<u>MW-3-1D</u>	<u>JPL106-005D</u>
<u>MW-3-1MS</u>	<u>JPL106-005MS</u>
<u>MW-3-1MSD</u>	<u>JPL106-005MSD</u>
<u>EB-09-05/06/08</u>	<u>JPL106-006</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 Millsap

Date: 6/6/08

Title: Inorganic Chemist

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-5 **Date/Time Collected:** 05/06/2008 08:08
Lab Sample ID: JPL106-001 **Date/Time Received:** 05/07/2008 10:30

Method/Qbatch*: E150.1/29123 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.5		0.10	0.10	05/07/2008	05/07/2008	R027904

Method/Qbatch*: E160.1/29130 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	200		2.0	2.0	05/08/2008	05/12/2008	R027914

Method/Qbatch*: E300.0/29134 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/07/2008	05/08/2008	R027918
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/07/2008	05/08/2008	R027918
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/07/2008	05/08/2008	R027918
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/07/2008	05/08/2008	R027918

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	10	13		10	0.76	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29422 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/19/2008	05/19/2008	R028193
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/19/2008	05/19/2008	R028193

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-5 **Date/Time Collected:** 05/06/2008 08:08
Lab Sample ID: JPL106-001 **Date/Time Received:** 05/07/2008 10:30
Method/Qbatch*: E314.0/29574 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/23/2008	05/27/2008	R028321

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-4 **Date/Time Collected:** 05/06/2008 08:49
Lab Sample ID: JPL106-002 **Date/Time Received:** 05/07/2008 10:30

Method/Qbatch*: E150.1/29123 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.8		0.10	0.10	05/07/2008	05/07/2008	R027904

Method/Qbatch*: E160.1/29130 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	180		2.0	2.0	05/08/2008	05/12/2008	R027914

Method/Qbatch*: E300.0/29134 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027918\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/07/2008	05/07/2008	R027918
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/07/2008	05/07/2008	R027918
Sulfate as SO4	14808-79-8	1	1.9		1.0	0.17	05/07/2008	05/07/2008	R027918
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/07/2008	05/07/2008	R027918

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	10	14		10	0.76	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29422 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/19/2008	05/19/2008	R028193
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	190		2.0	2.0	05/19/2008	05/19/2008	R028193

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-4 **Date/Time Collected:** 05/06/2008 08:49
Lab Sample ID: JPL106-002 **Date/Time Received:** 05/07/2008 10:30
Method/Qbatch*: E314.0/29574 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/23/2008	05/27/2008	R028321

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-3 **Date/Time Collected:** 05/06/2008 09:35
Lab Sample ID: JPL106-003 **Date/Time Received:** 05/07/2008 10:30

Method/Qbatch*: E150.1/29123 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.0		0.10	0.10	05/07/2008	05/07/2008	R027904

Method/Qbatch*: E160.1/29130 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	250		2.0	2.0	05/08/2008	05/12/2008	R027914

Method/Qbatch*: E300.0/29134 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027918\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/07/2008	05/07/2008	R027918
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/07/2008	05/07/2008	R027918
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/07/2008	05/08/2008	R027918
Sulfate as SO4	14808-79-8	10	47		10	1.7	05/07/2008	05/08/2008	R027918

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	10	26		10	0.76	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29422 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/19/2008	05/19/2008	R028193
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	160		2.0	2.0	05/19/2008	05/19/2008	R028193

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-3 Date/Time Collected: 05/06/2008 09:35
Lab Sample ID: JPL106-003 Date/Time Received: 05/07/2008 10:30
Method/Qbatch*: E314.0/29574 Unit: ug/L
Instrument: Ion Chromatograph (2) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/23/2008	05/27/2008	R028321

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-2 **Date/Time Collected:** 05/06/2008 10:15
Lab Sample ID: JPL106-004 **Date/Time Received:** 05/07/2008 10:30

Method/Qbatch*: E150.1/29123 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.5		0.10	0.10	05/07/2008	05/07/2008	R027904

Method/Qbatch*: E160.1/29130 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	310		2.0	2.0	05/08/2008	05/12/2008	R027914

Method/Qbatch*: E300.0/29134 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027918\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	2.5		0.20	0.055	05/07/2008	05/08/2008	R027918
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/07/2008	05/08/2008	R027918
Sulfate as SO4	14808-79-8	10	51		10	1.7	05/07/2008	05/08/2008	R027918
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/07/2008	05/08/2008	R027918

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	10	30		10	0.76	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29422 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/19/2008	05/19/2008	R028193
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	180		2.0	2.0	05/19/2008	05/19/2008	R028193

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-2RX Date/Time Collected: 05/06/2008 10:15
Lab Sample ID: JPL106-004 Date/Time Received: 05/07/2008 10:30
Method/Qbatch*: E314.0/29618 Unit: ug/L
Instrument: Ion Chromatograph (2) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	10	270		10	1.4	05/27/2008	05/28/2008	R028359

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
 SDG Number: JPL106
 Sample Number: MW-3-1 Date/Time Collected: 05/06/2008 10:55
 Lab Sample ID: JPL106-005 Date/Time Received: 05/07/2008 10:30

Method/Qbatch*: E150.1/29123 Unit: pH Units
 Instrument: pH meter (1) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	05/07/2008	05/07/2008	R027904

Method/Qbatch*: E160.1/29130 Unit: mg/L
 Instrument: Balance (01) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	310		2.0	2.0	05/08/2008	05/12/2008	R027914

Method/Qbatch*: E300.0/29134 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R027918\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.3		0.20	0.055	05/07/2008	05/08/2008	R027918
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/07/2008	05/08/2008	R027918
Sulfate as SO4	14808-79-8	10	53		10	1.7	05/07/2008	05/08/2008	R027918
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/07/2008	05/08/2008	R027918

Method/Qbatch*: E300.0/29174 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	10	30		10	0.76	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29422 Unit: mg/L
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/19/2008	05/19/2008	R028193
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/19/2008	05/19/2008	R028193

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: MW-3-1 Date/Time Collected: 05/06/2008 10:55
Lab Sample ID: JPL106-005 Date/Time Received: 05/07/2008 10:30
Method/Qbatch*: E314.0/29574 Unit: ug/L
Instrument: Ion Chromatograph (2) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0		2.0	0.28	05/23/2008	05/27/2008	R028321

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring

SDG Number: JPL106

Sample Number: EB-09-05/06/08 **Date/Time Collected:** 05/06/2008 10:37

Lab Sample ID: JPL106-006 **Date/Time Received:** 05/07/2008 10:30

Method/Qbatch*: E150.1/29123 **Unit:** pH Units

Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	05/07/2008	05/07/2008	R027904

Method/Qbatch*: E160.1/29130 **Unit:** mg/L

Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	2.0	U	2.0	2.0	05/08/2008	05/12/2008	R027914

Method/Qbatch*: E300.0/29134 **Unit:** mg/L

Instrument: Ion Chromatograph (2) **File:** R027918\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/07/2008	05/08/2008	R027918
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/07/2008	05/08/2008	R027918
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/07/2008	05/08/2008	R027918
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/07/2008	05/08/2008	R027918
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/07/2008	05/08/2008	R027918

Method/Qbatch*: E310.1/29422 **Unit:** mg/L

Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/19/2008	05/19/2008	R028193
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0		2.0	2.0	05/19/2008	05/19/2008	R028193

*QBatch=QC/Preparation Batch

FORM LTL-RSR-27.0

Date Printed: 6/6/2008 15:53

INO - 14

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
SDG Number: JPL106
Sample Number: EB-09-05/06/08 Date/Time Collected: 05/06/2008 10:37
Lab Sample ID: JPL106-006 Date/Time Received: 05/07/2008 10:30
Method/Qbatch*: E314.0/29618 Unit: ug/L
Instrument: Ion Chromatograph (2) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	05/27/2008	05/28/2008	R028359

*QBatch=QC/Preparation Batch

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL107

June 16, 2008

Pace Analytical Services, Inc.
 940 S. Harney
 Seattle, WA 98108

To: Battelle
 Project Name: JPL Groundwater
 SDG No.: JPL107
 Date of Report: June 16, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-12-5	JPL107-001	VOA/MET/INO
MW-12-4	JPL107-002	VOA/MET/INO
MW-12-3	JPL107-003	VOA/MET/INO
MW-12-2	JPL107-004	VOA/MET/INO
MW-12-1	JPL107-005	VOA/MET/INO
EB-10-05/07/08	JPL107-006	VOA/MET/INO
TB-10-05/07/08	JPL107-007	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

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940 S. Harney
Seattle, WA 98108

We assert that the results reported here relate only to the samples listed in this report.

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples. One of two volatiles bottles submitted for TB-10-05/07/08 contained bubbles of greater than 1/4 inch in size. All samples submitted for pH analysis were received after the analytical holding time had expired.

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

Volatiles Fraction:

Quality Control Analysis:

MS/MSD analyses were not performed due to insufficient sample volume. Except for cis-1,3-dichloropropene, which recovered high, all spiking analytes in the blank spike analysis recovered within control limits. Because cis-1,3-dichloropropene was not detected in any of the associated samples, no further action was taken.

All other quality control parameters were met.

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940 S. Harney
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 Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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	15 minutes	All samples

ICP Metals:

For the run sequence R028697, the ICV exceeded the upper control limit for potassium. All samples contained concentrations of potassium that were less than the CRDL. Quality control data for potassium were reported and were within control limits. No corrective action was required. Data have not been flagged for this event.

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ICP-MS Metals:

For the run sequence R028287, CCV4 exceeded control limits. CCV4 was re-analyzed and was within control limits. Due to this corrective action, one extra injection time was added, with a total of eleven injection times, between CCV3/CCB3 and CCV4/CCB4. Re-analyzed data were reported for CCV4. No further corrective action was taken. Data have not been flagged for this event.

Miscellaneous Inorganics:

In the run sequence R027961 for "300.0 Anions", the matrix spikes and matrix spike duplicates exceeded the established lower control limits for orthophosphate and nitrate. Since all of the other quality control samples were in control, 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.
 - ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.
- Z Denotes data deemed unusable by the analyst.

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

Pace Analytical Services, Inc.


940 S. Harney
Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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,


for
Kara Godineaux
Project Manager

6/17/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/17/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG

Sample #	VTSR	Collected On	Client ID	150.1 pH	160.1 Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300.0 NO3, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICS (JPL Special list)	TurMet for 200.7/200.8 TurMet
WD JPL107-001	05/08/2008 08:30 AM	05/07/2008 07:51 AM	MW-12-5	A-	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL107-002	05/08/2008 08:30 AM	05/07/2008 08:32 AM	MW-12-4	A-	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL107-003	05/08/2008 08:30 AM	05/07/2008 09:12 AM	MW-12-3	A-	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL107-004	05/08/2008 08:30 AM	05/07/2008 09:57 AM	MW-12-2	A-	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL107-005	05/08/2008 08:30 AM	05/07/2008 10:38 AM	MW-12-1	A-	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL107-006	05/08/2008 08:30 AM	05/07/2008 10:21 AM	EB-10-	A-	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL107-007	05/08/2008 08:30 AM	05/07/2008 12:00 AM	TB-10-								IN	IN

Approved By:
Notes:

On:

Samples identified with a "*" client has requested QC for

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

FORM LTL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BOTTLE
 ADDRESS: 3990 OLD FAWN AVE, C-205
SAN DIEGO, CA 92110
 ATTENTION: DAVID CANNON
 PROJECT NAME: SPE SAN HOV 2808
 PROJECT CONTACT: DAVID CANNON
 TELEPHONE: 619-726-7311 FAX: _____
 JOB/PO. NO.: 6486090/214319

CHAIN OF CUSTODY RECORD SDG # _____
 46064
 WORK ORDER ID# SP1107
 TEST 1202

PAGE 1 OF 1
 SUBMITTED AT: _____
 TESTS TO PERFORM

Lauck's
 Testing Laboratories, Inc.
 9415 South Hammer St. Seattle, WA 98148 (206) 767-5000 FAX 206-5063
 11111 Federal Ave. Yakima, WA 98902 (509) 245-4605 FAX 509-225-1265

MATRIX: WATER, SOIL OR SPECIFY

MATRIX	NO. OF CONTAINERS	TESTS TO PERFORM
VOC (674.2)	1	
TOTAL CR (600.8)	1	
LEAD (600.8)	1	
ARSENIC (600.8)	1	
CHROMIUM (600.8)	1	
CADMIUM (600.8)	1	
COPPER (600.8)	1	
IRON (600.8)	1	
MANGANESE (600.8)	1	
NICKEL (600.8)	1	
SILICA (600.8)	1	
ZINC (600.8)	1	

LABS#	SAMPLE ID / LOCATION	DATE	TIME	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-12-5	5/07/08	0751	W 5	
2	MW-12-4		0832	X X X X X X X X	
3	MW-12-3		0912	X X X X X X X X	
4	MW-12-2		0957	X X X X X X X X	
5	MW-12-1		1038	X X X X X X X X	
6	EB-10 - 05/07/08		1021	X X X X X X X X	EMULSIFIER Blank
7	TR-10 - 05/07/08			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.

REINQUISHED BY (SIGN AND PRINT): _____

NAME: BOTTLE
 ATTN: DAVID CANNON
 ADDRESS: 505 KINLA AVE
 CITY, STATE, ZIP: COLUMBIUS OH 43201

DATE: 05/07/08
 TIME: 1350
 RECEIVED BY (SIGN AND PRINT): RACHEL FRANK

DATE: 5/8/08
 TIME: 5:30

BILLING INFORMATION (IF DIFFERENT THAN ABOVE)
 * 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

Cooler Receipt Form
Pace Analytical Services, Inc.

SDG: JPL107
Cooler: AAD821
COC #: 64064
Project: JPL Groundwater Monitoring (Battelle)

Taken By: Client
Transferred: FedEx

Date samples were received at the laboratory: 5/8/2008
Date cooler was opened: 5/8/2008 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: 865543091364
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? **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: RF

B. LOG-IN PHASE:

Date samples were logged-in: 5/8/2008 9:45AM
Logged-in by Rachel Frank (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? **NO**
18. Temperatures: 2.7

DISCREPANCIES:

Sample 7 has 1 of 2 Trip Blanks w/bubbles >1/4"
Sample 1 was received out of hold for PH, sample 2 and 3 went out of hold for PH while I was logging the samples in, and samples 4-6 are close to hold time for PH.

Date Printed: 5/8/2008 9:50

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL107
Cooler: AAD821
Temperatures: 2.7
COC #: 64064

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL107-001	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
JPL107-002	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
JPL107-003	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
JPL107-004	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
JPL107-005	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
JPL107-006	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
JPL107-007	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
Pace Analytical Services, Inc.**

SDG: JPL107
Cooler: AAD821
Temperatures: 2.7
COC #: 64064

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 \pm 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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

Battelle

SDG No.: JPL107

- I. Narrative: 2-8
- II. Chain-of-Custody: 9-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-245
 - A. QC Summary Data: 1-9
 - B. Sample Data: 10-100
 - C. Standards Data: 101-217
 - D. Raw QC Data: 218-238
 - E. Bench Sheets: 239-245
- V. Metals Data: MET- 1-238
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-9
 - C. Quality Control Data: 10-42
 - D. Quarterly Verification of Instrument Parameters: 43-53
 - E. Raw Data: 54-228
 - F. Digestion & Distillation Logs: 229-238
- VI. Miscellaneous Inorganics Data: INO 1-212
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-15
 - C. Quality Control Data: 16-37
 - D. Raw Data: 38-212
- VII. Forms Summary: SUM- 1-139

Completed and checked by: Judy Ecklund Date: 6/17/08

QC SUMMARY

SDG #JPL107

Volatiles Analysis

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinSDG No.: JPL107Run Sequence: R027990Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL107-005) MW-12-1	109	110	97		0
(JPL107-004) MW-12-2	108	109	99		0
(JPL107-003) MW-12-3	110	106	97		0
(JPL107-002) MW-12-4	106	109	96		0
(JPL107-001) MW-12-5	106	108	99		0
(JPL107-006) EB-10-05/07/08	108	110	99		0
(JPL107-007) TB-10-05/07/08	107	108	99		0
(B050908MVOWY2) B050908MVOWY2	107	108	97		0
(S050908MVOWY1) S050908MVOWY1	99	113	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: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R027990 SDG No.: JPL107
 BS Lab Sample ID: S050908MVOWY1
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	45.54	91		60-140
Chloromethane	50.0	41.29	83		60-140
Vinyl chloride	50.0	44.93	90		60-140
Bromomethane	50.0	46.46	93		60-140
Chloroethane	50.0	45.85	92		60-140
Trichlorofluoromethane	50.0	51.1	102		60-140
1,1-Dichloroethene	50.0	49.71	99		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.61	101		60-140
Methylene chloride	50.0	44.71	89		60-140
Methyl tert-butyl ether	50.0	48.82	98		60-140
trans-1,2-Dichloroethene	50.0	45.59	91		60-140
1,1-Dichloroethane	50.0	44.23	88		60-140
2,2-Dichloropropane	50.0	52.35	105		60-140
cis-1,2-Dichloroethene	50.0	46.21	92		60-140
2-Butanone	50.0	59.72	119		60-140
Bromochloromethane	50.0	46.13	92		60-140
Chloroform	50.0	43.82	88		60-140
1,1,1-Trichloroethane	50.0	48.89	98		60-140
Carbon tetrachloride	50.0	50.67	101		60-140
1,1-Dichloropropene	50.0	53.89	108		60-140
Benzene	50.0	48.21	96		60-140
1,2-Dichloroethane	50.0	48.95	98		60-140
Trichloroethene	50.0	49.06	98		60-140
1,2-Dichloropropane	50.0	49.63	99		60-140
Dibromomethane	50.0	48.73	97		60-140
Bromodichloromethane	50.0	52.15	104		60-140
cis-1,3-Dichloropropene	50.0	75.1	150	*	60-140
4-Methyl-2-pentanone	50.0	57.47	115		60-140
Toluene	50.0	49.77	100		60-140
trans-1,3-Dichloropropene	50.0	55.78	112		60-140
1,1,2-Trichloroethane	50.0	47.25	95		60-140
Tetrachloroethene	50.0	47.89	96		60-140
1,3-Dichloropropane	50.0	51.6	103		60-140
Dibromochloromethane	50.0	52.3	105		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 63 outside limits

COMMENTS:

Date Printed: 5/20/2008 11:57

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R027990 SDG No.: JPL107
 BS Lab Sample ID: S050908MVOWY1
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	51.85	104		60-140
Chlorobenzene	50.0	46.95	94		60-140
Ethylbenzene	50.0	47.54	95		60-140
1,1,1,2-Tetrachloroethane	50.0	42.06	84		60-140
m,p-Xylene	100	96.09	96		60-140
o-Xylene	50.0	45.98	92		60-140
Styrene	50.0	48.89	98		60-140
Bromoform	50.0	44.63	89		60-140
Isopropylbenzene	50.0	48.58	97		60-140
1,1,2,2-Tetrachloroethane	50.0	48.15	96		60-140
n-Propylbenzene	50.0	53.86	108		60-140
Bromobenzene	50.0	51.64	103		60-140
1,2,3-Trichloropropane	50.0	47.74	95		60-140
2-Chlorotoluene	50.0	51.03	102		60-140
1,3,5-Trimethylbenzene	50.0	50.35	101		60-140
4-Chlorotoluene	50.0	52.54	105		60-140
tert-Butylbenzene	50.0	51.5	103		60-140
1,2,4-Trimethylbenzene	50.0	49.66	99		60-140
sec-Butylbenzene	50.0	51.3	103		60-140
4-Isopropyltoluene	50.0	55.59	111		60-140
1,3-Dichlorobenzene	50.0	45.67	91		60-140
1,4-Dichlorobenzene	50.0	44.45	89		60-140
n-Butylbenzene	50.0	50.32	101		60-140
1,2-Dichlorobenzene	50.0	43.92	88		60-140
1,2-Dibromo-3-chloropropane	50.0	44.72	89		60-140
1,2,4-Trichlorobenzene	50.0	47.23	94		60-140
Hexachlorobutadiene	50.0	48.54	97		60-140
Naphthalene	50.0	49.62	99		60-140
1,2,3-Trichlorobenzene	50.0	46.25	93		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 63 outside limits

COMMENTS:

Date Printed: 5/20/2008 11:57

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B050908MVOWY2

Lab Name Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL107

Lab File ID: Y0509011.D

Lab Sample ID: B050908MVOWY2

Date Analyzed: 05/09/2008

Time Analyzed: 16:52

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

Heated Purge: (Y/N) N

Instrument ID: 5973Y

Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S050908MVOWY1	S050908MVOWY1	Y0509006.D	05/09/2008	14:48	R027990
02	TB-10-05/07/08	JPL107-007	Y0509012.D	05/09/2008	17:17	R027990
03	EB-10-05/07/08	JPL107-006	Y0509014.D	05/09/2008	18:06	R027990
04	MW-12-5	JPL107-001	Y0509016.D	05/09/2008	18:56	R027990
05	MW-12-4	JPL107-002	Y0509017.D	05/09/2008	19:20	R027990
06	MW-12-3	JPL107-003	Y0509018.D	05/09/2008	19:45	R027990
07	MW-12-2	JPL107-004	Y0509019.D	05/09/2008	20:10	R027990
08	MW-12-1	JPL107-005	Y0509020.D	05/09/2008	20:35	R027990
09						
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30						

COMMENTS: _____

VOA - 5

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBY5

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1310 SDG No.: JPL107
 Lab File ID: Y0414036.D BFB Injection Date: 04/14/2008
 Instrument ID: 5973Y BFB Injection Time: 21:43
 GC Column DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	17.8
75	30% to 60% of mass 95	48.1
95	base peak. 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	99.4
175	5% to 9% of mass 17	7.2()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.4()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	VSTD0.3	VSTD0.3	Y0414037.D	04/14/2008	22:08
02	VSTD0.5	VSTD0.5	Y0414038.D	04/14/2008	22:33
03	VSTD001	VSTD001	Y0414039.D	04/14/2008	22:58
04	VSTD005	VSTD005	Y0414040.D	04/14/2008	23:22
05	VSTD010	VSTD010	Y0414041.D	04/14/2008	23:47
06	VSTD050	VSTD050	Y0414042.D	04/15/2008	00:12
07	VSTD100	VSTD100	Y0414043.D	04/15/2008	00:36
08	VSTD200	VSTD200	Y0414044.D	04/15/2008	01:01
09					
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18					
19					
20					
21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBY1

Lab Name: Pace Analytical Services Contract: _____
 Run Sequence: R027335 SDG No.: ~~NEEDS~~ JPL107 OKH 5/20/08
 Lab File ID: Y0415011.D BFB Injection Date: 04/15/2008
 Instrument ID: 5973Y BFB Injection Time: 09:55
 GC Column DE-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18
75	30% to 60% of mass 95	48.6
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.6
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	94.8
175	5% to 9% of mass 17	8.3()1
176	greater than 95%, but less than 101% of mass 174	99.1()1
177	5% to 9% of mass 176	6.1()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	S041508MVOWY2	S041508MVOWY2	Y0415015.D	04/15/2008	11:39
02					
03					
04					
05					
06					
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08					
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21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

IB050908MVOWY1/BFB

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R027990 SDG No.: JPL107
 Lab File ID: Y0509004.d BFB Injection Date: 05/09/2008
 Instrument ID: 5973Y BFB Injection Time: 13:58
 GC Column DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18.9
75	30% to 60% of mass 95	50
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	7
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	101.1
175	5% to 9% of mass 17	7()1
176	greater than 95%, but less than 101% of mass 174	97.6()1
177	5% to 9% of mass 176	6.5()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	VSTD050Y1	VSTD050Y1	Y0509005.D	05/09/2008	14:23
02	S050908MVOWY1	S050908MVOWY1	Y0509006.D	05/09/2008	14:48
03	B050908MVOWY2	B050908MVOWY2	Y0509011.D	05/09/2008	16:52
04	TB-10-05/07/08	JPL107-007	Y0509012.D	05/09/2008	17:17
05	EB-10-05/07/08	JPL107-006	Y0509014.D	05/09/2008	18:06
06	MW-12-5	JPL107-001	Y0509016.D	05/09/2008	18:56
07	MW-12-4	JPL107-002	Y0509017.D	05/09/2008	19:20
08	MW-12-3	JPL107-003	Y0509018.D	05/09/2008	19:45
09	MW-12-2	JPL107-004	Y0509019.D	05/09/2008	20:10
10	MW-12-1	JPL107-005	Y0509020.D	05/09/2008	20:35
11					
12					
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15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R027990 SDG No.: JPL107
 Client Sample No. (VSTD050##): VSTD050Y1 Date Analyzed: 05/09/2008
 Lab File ID (Standard): Y0509005.D Time Analyzed: 14:23
 Instrument ID: 5973Y Heated Purge: (Y/N) N
 GC Column: DB-624 20m ID: 0.18 (mm)

	IS1 (FBZ) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	476404	8.23	249051	11.68	300326	13.61
UPPER LIMIT	952808	8.28	498102	11.73	600652	13.66
LOWER LIMIT	238202	8.18	124525.5	11.63	150163	13.56
CLIENT SAMPLE NO.						
01 S050908MVOWY1	449053	8.23	239864	11.68	287876	13.61
02 B050908MVOWY2	407838	8.23	203732	11.68	260784	13.61
03 TB-10-05/07/08	411104	8.23	203294	11.68	261898	13.61
04 EB-10-05/07/08	405660	8.23	203881	11.68	262039	13.61
05 MW-12-5	405330	8.23	201691	11.68	263807	13.61
06 MW-12-4	443389	8.23	231844	11.68	287362	13.61
07 MW-12-3	396761	8.23	202801	11.68	261610	13.61
08 MW-12-2	408016	8.23	202364	11.68	264914	13.61
09 MW-12-1	410490	8.23	210571	11.68	268357	13.61
10						
11						
12						
13						
14						
15						
16						
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 # JPL107

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-001
 Lab File ID: Y0509016.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 18:56
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.83	
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	0.30	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-001
 Lab File ID: Y0509016.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 18:56
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-001
 Lab File ID: Y0509016.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 18:56
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

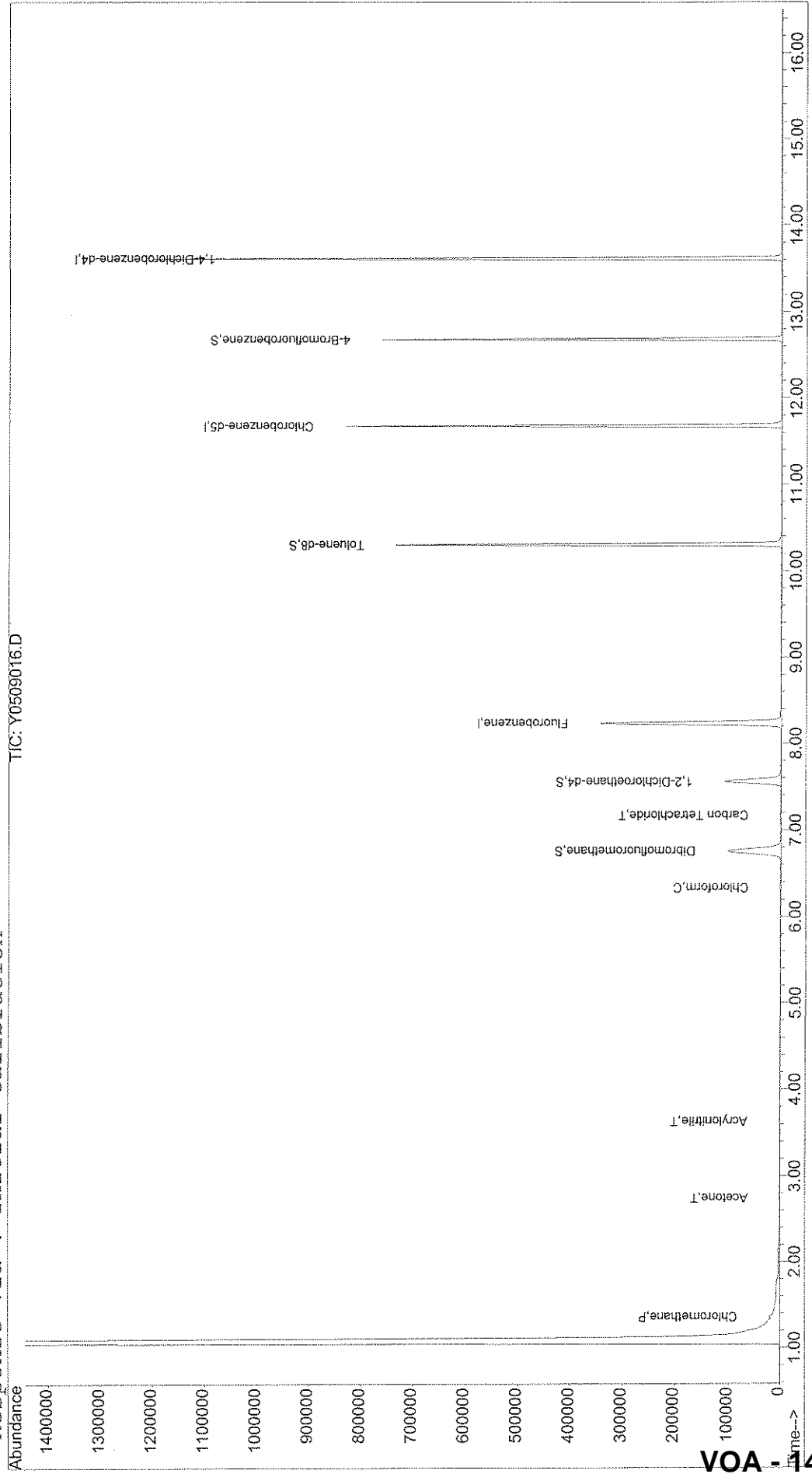
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509016.D
Acq On : 9 May 2008 18:56
Sample : JPL107-001
Misc : #3 5mL+IS/SS (MV8-45-10)
MS Integration Params: rteint.p
Quant Time: May 12 13:02 2008
Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



VOA - 14

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509016.D
 Acq On : 9 May 2008 18:56
 Sample : JPL107-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:02 2008

Vial: 12
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	405330	50.00	ug/l	0.00	79.38%
54) Chlorobenzene-d5	11.68	82	201691	50.00	ug/l	0.00	82.46%
74) 1,4-Dichlorobenzene-d4	13.61	152	263807	50.00	ug/l	0.00	75.27%

System Monitoring Compounds

36) Dibromofluoromethane	6.76	111	133735	50.44	ug/l	0.00	
Spiked Amount	50.000						
Range	85 - 115		Recovery	=	100.88%		
40) 1,2-Dichloroethane-d4	7.56	65	133937	52.89	ug/l	0.00	
Spiked Amount	50.000						
Range	70 - 120		Recovery	=	105.78%		
55) Toluene-d8	10.30	98	432785	49.56	ug/l	0.00	
Spiked Amount	50.000						
Range	85 - 120		Recovery	=	99.12%		
76) 4-Bromofluorobenzene	12.68	95	186021	54.24	ug/l	0.00	
Spiked Amount	50.000						
Range	75 - 120		Recovery	=	108.48%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.36	50	4050	0.83	ug/l	97
4) Vinyl Chloride	1.47	62	80	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	2.75	43	897	0.93	ug/l #	60
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.89	76	896	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	3.29	84	63	Below Cal	#	1
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	3.64	53	1062	1.06	ug/l #	17
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	3.69	73	59	N.D.		

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509016.D
 Acq On : 9 May 2008 18:56
 Sample : JPL107-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:02 2008

Vial: 12
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0	N.D.	
24) Vinyl acetate	0.00	43	0	N.D.	
25) Chloroprene	0.00	53	0	N.D.	
26) Isopropyl ether	4.49	45	59	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	5.63	43	158	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	6.33	83	2200	0.36 ug/l #	67
35) 1,1,1-Trichloroethane	6.74	97	53	N.D.	
37) Cyclohexane	0.00	56	0	N.D.	
38) Carbon Tetrachloride	7.17	117	1285	0.30 ug/l	97
39) 1,1-Dichloropropene	0.00	75	0	N.D.	
41) Benzene	7.65	78	459	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.	
45) Trichloroethene	8.81	130	87	N.D.	
46) Methylcyclohexane	9.06	83	125	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	9.92	63	53	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	10.37	92	59	N.D.	
57) trans-1,3-Dichloropropene	10.40	75	65	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	11.05	43	61	N.D.	
63) Dibromochloromethane	0.00	129	0	N.D.	
64) 1,2-Dibromoethane	0.00	107	0	N.D.	
65) Chlorobenzene	11.70	112	196	N.D.	
66) 1-Chlorohexane	0.00	91	0	N.D. d	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	

Qent 5/13/08

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509016.D
 Acq On : 9 May 2008 18:56
 Sample : JPL107-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:02 2008

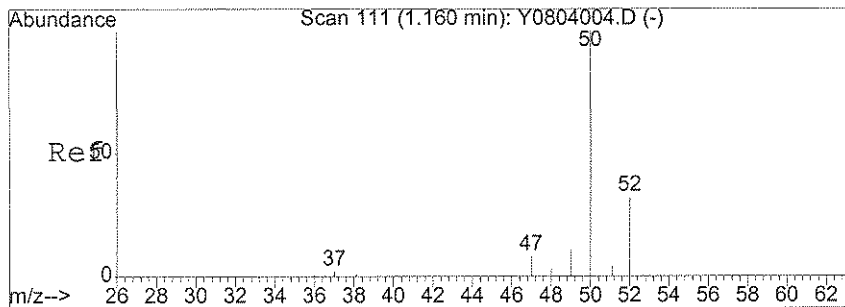
Vial: 12
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

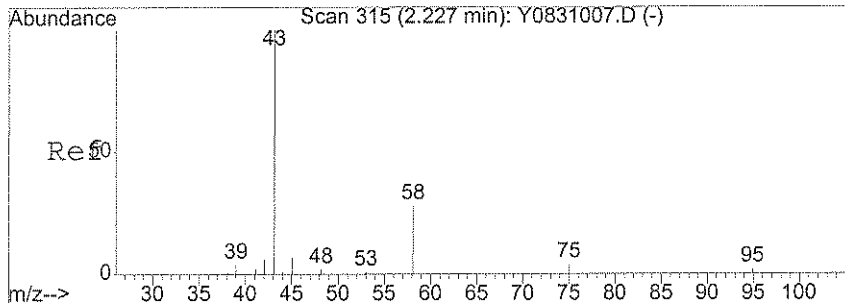
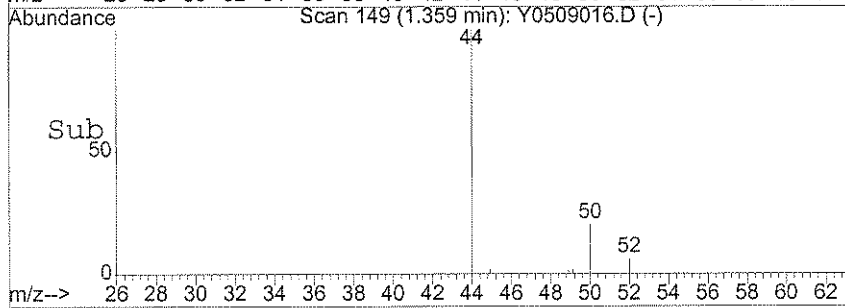
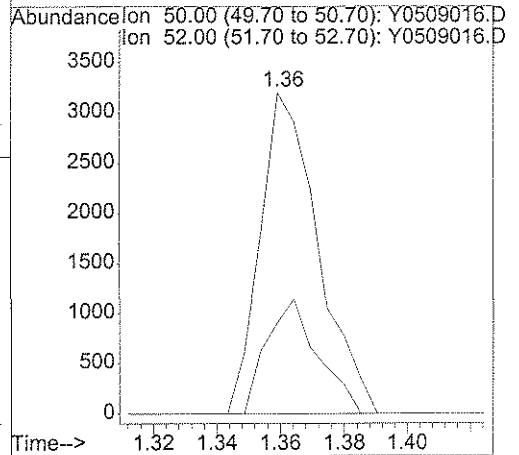
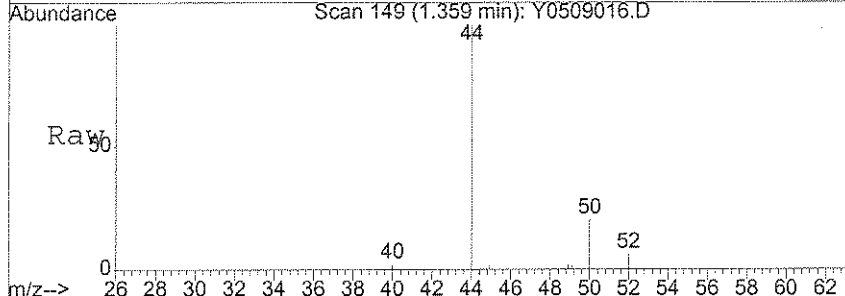
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.92	91	673		N.D.	
69) m,p-Xylene	11.91	106	206		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	1093		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.69	105	61		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.68	156	129		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.68	83	63		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	12.90	120	56		N.D.	
81) 2-Chlorotoluene	12.89	91	208		N.D.	
82) 4-Chlorotoluene	13.06	91	54		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	55		N.D.	
88) 4-Isopropyltoluene	13.60	119	319		N.D.	
89) 1,4-Dichlorobenzene	13.62	146	102		N.D.	
90) 1,2-Dichlorobenzene	13.62	146	102		N.D.	
91) n-Butylbenzene	13.91	91	513		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.16	180	294		N.D.	
94) Hexachlorobutadiene	15.30	225	73		N.D.	
95) Naphthalene	15.36	128	116		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	104		N.D.	

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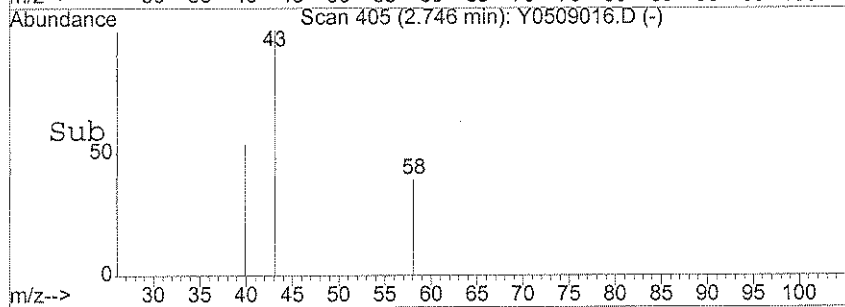
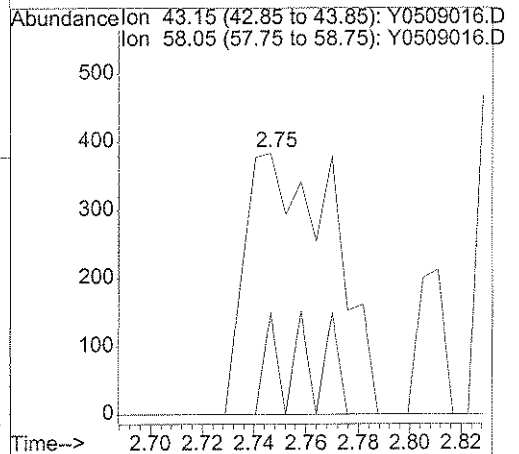
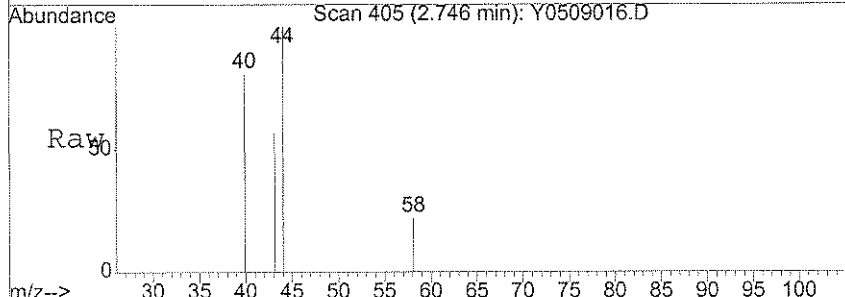
#3
 Chloromethane
 Concen: 0.83 ug/l
 RT: 1.36 min Scan# 149
 Delta R.T. -0.01 min
 Lab File: Y0509016.D
 Acq: 9 May 2008 18:56

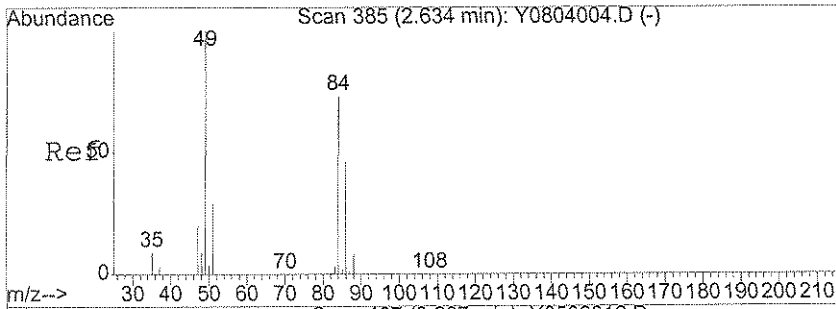
Tgt Ion: 50 Resp: 4050
 Ion Ratio Lower Upper
 50 100
 52 31.6 13.0 53.0



#11
 Acetone
 Concen: 0.93 ug/l
 RT: 2.75 min Scan# 405
 Delta R.T. 0.01 min
 Lab File: Y0509016.D
 Acq: 9 May 2008 18:56

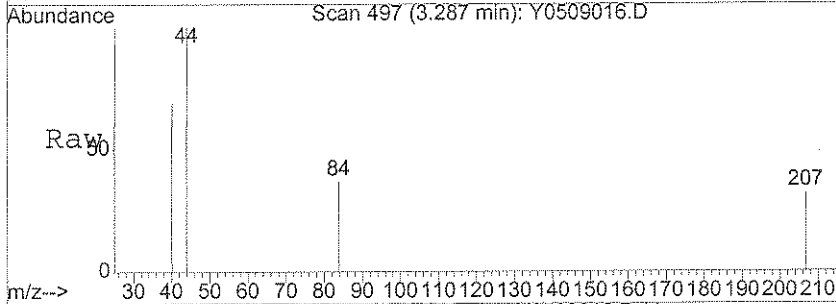
Tgt Ion: 43 Resp: 897
 Ion Ratio Lower Upper
 43 100
 58 5.9 21.3 31.9#



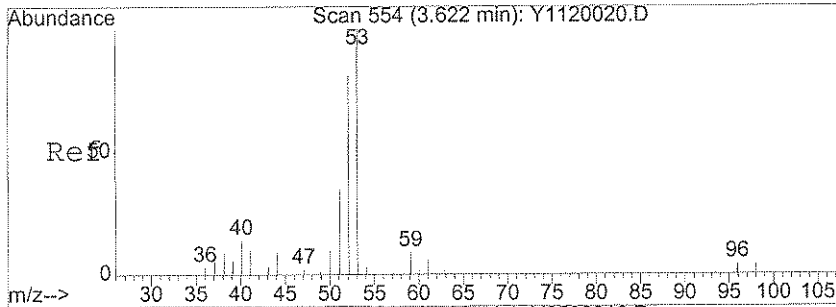
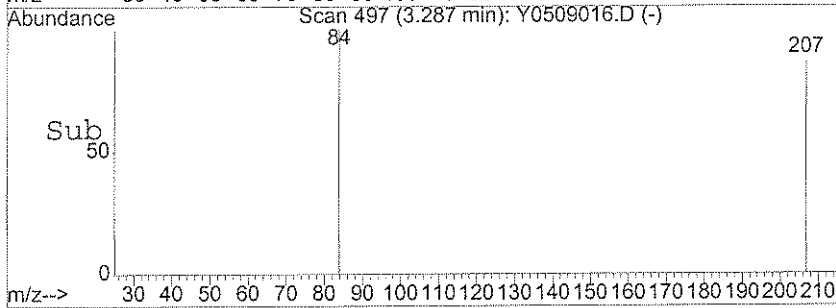
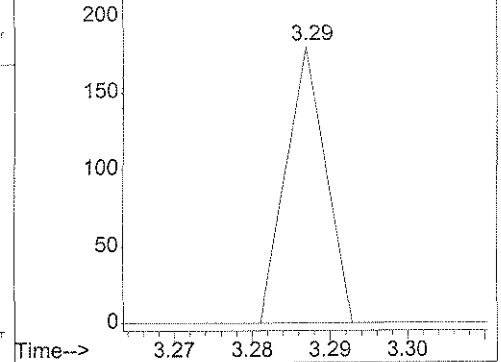


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.29 min Scan# 497
 Delta R.T. 0.02 min
 Lab File: Y0509016.D
 Acq: 9 May 2008 18:56

Tgt Ion	Ratio	Lower	Upper
84	100		
49	0.0	112.5	152.5#
86	0.0	39.5	79.5#

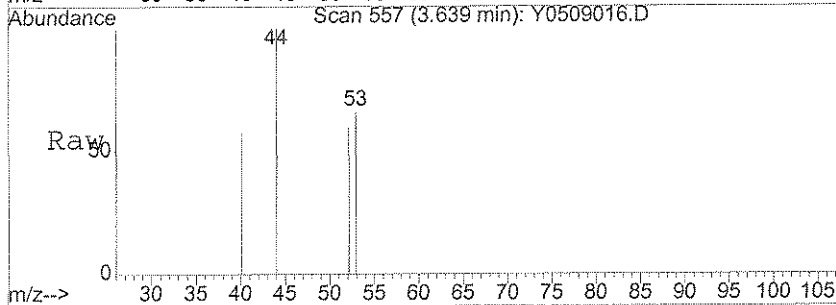


Abundance
 Ion 84.00 (83.70 to 84.70): Y0509016.D
 Ion 49.00 (48.70 to 49.70): Y0509016.D
 Ion 86.00 (85.70 to 86.70): Y0509016.D

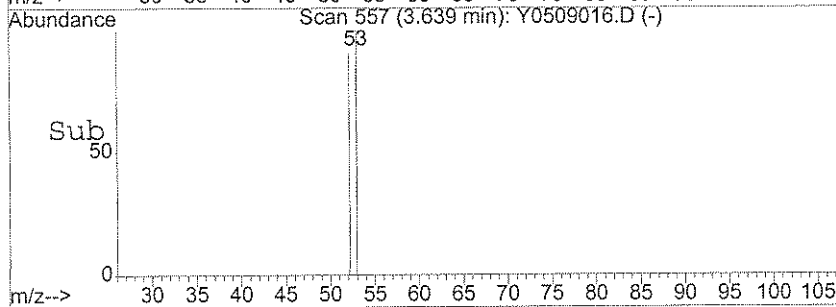
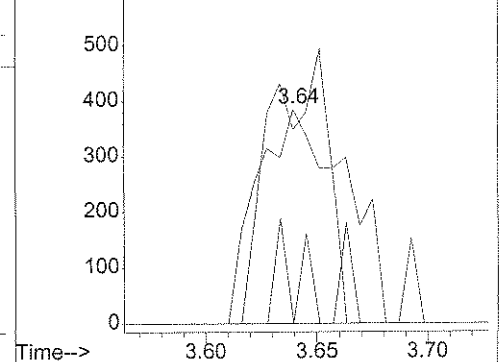


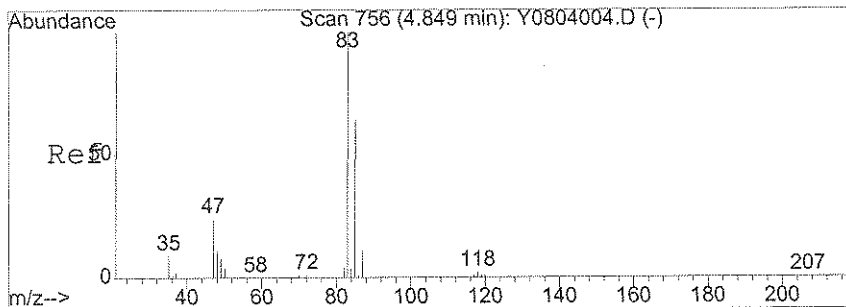
#20
 Acrylonitrile
 Concen: 1.06 ug/l
 RT: 3.64 min Scan# 557
 Delta R.T. 0.02 min
 Lab File: Y0509016.D
 Acq: 9 May 2008 18:56

Tgt Ion	Ratio	Lower	Upper
53	100		
52	44.6	0.0	0.0#
51	11.7	72.2	108.4#



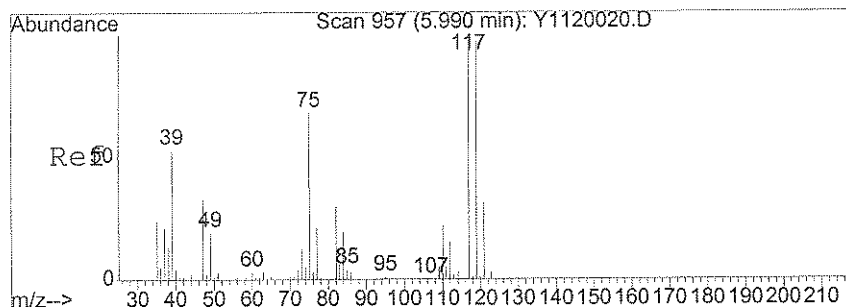
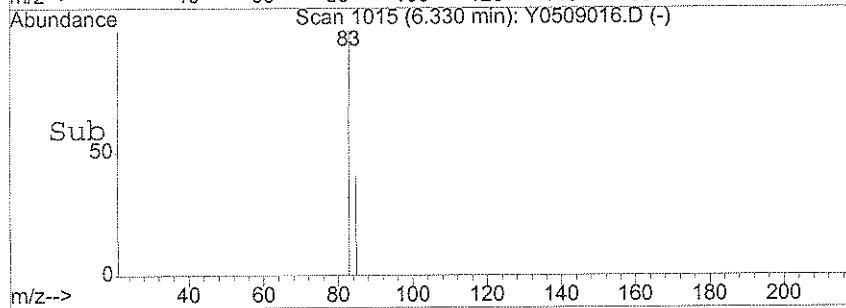
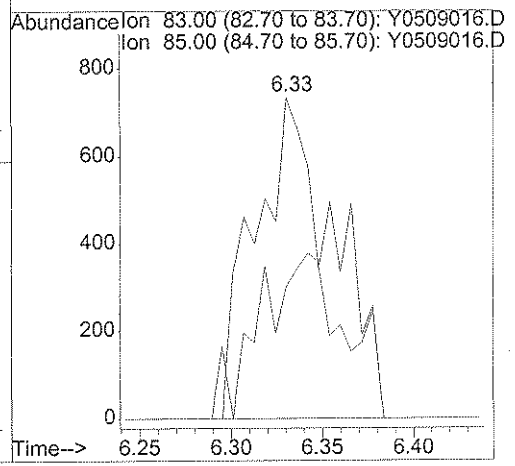
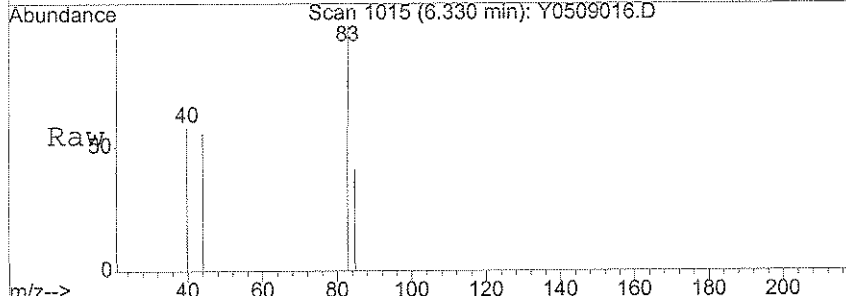
Abundance
 Ion 53.05 (52.75 to 53.75): Y0509016.D
 Ion 52.05 (51.75 to 52.75): Y0509016.D
 Ion 51.05 (50.75 to 51.75): Y0509016.D





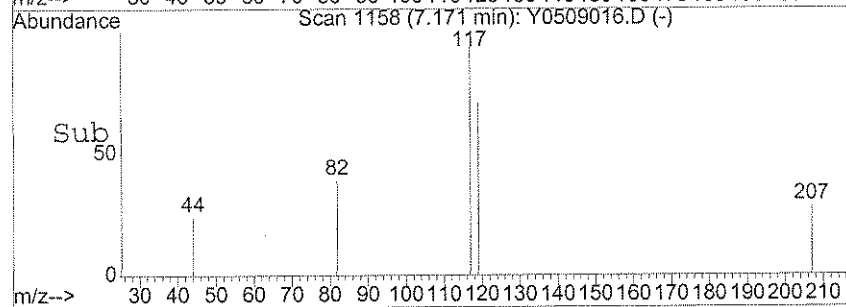
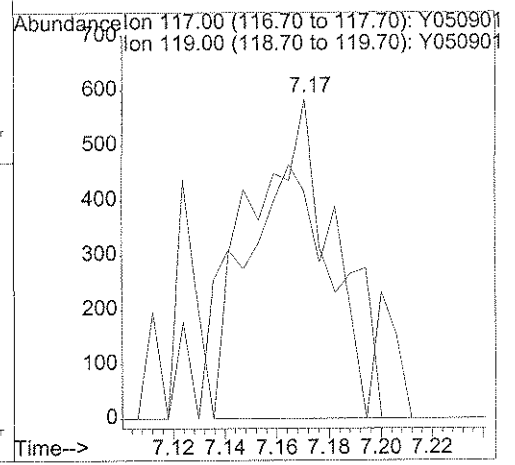
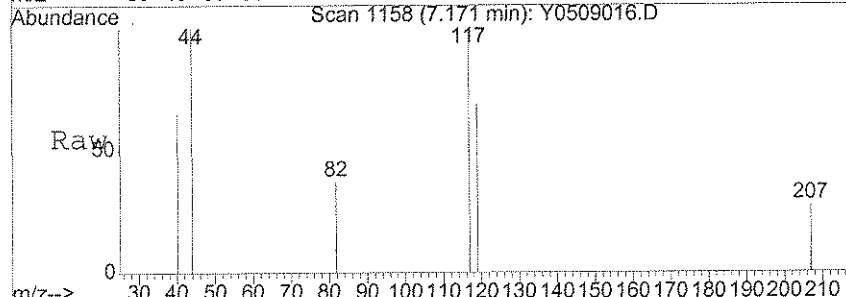
#34
 Chloroform
 Concen: 0.36 ug/l
 RT: 6.33 min Scan# 1015
 Delta R.T. -0.01 min
 Lab File: Y0509016.D
 Acq: 9 May 2008 18:56

Tgt Ion: 83 Resp: 2200
 Ion Ratio Lower Upper
 83 100
 85 37.7 43.3 83.3#



#38
 Carbon Tetrachloride
 Concen: 0.30 ug/l
 RT: 7.17 min Scan# 1158
 Delta R.T. 0.01 min
 Lab File: Y0509016.D
 Acq: 9 May 2008 18:56

Tgt Ion: 117 Resp: 1285
 Ion Ratio Lower Upper
 117 100
 119 95.7 78.2 118.2



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-002
 Lab File ID: Y0509017.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 19:20
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</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	0.65	
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	0.38	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-002
 Lab File ID: Y0509017.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 19:20
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-002
 Lab File ID: Y0509017.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 19:20
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

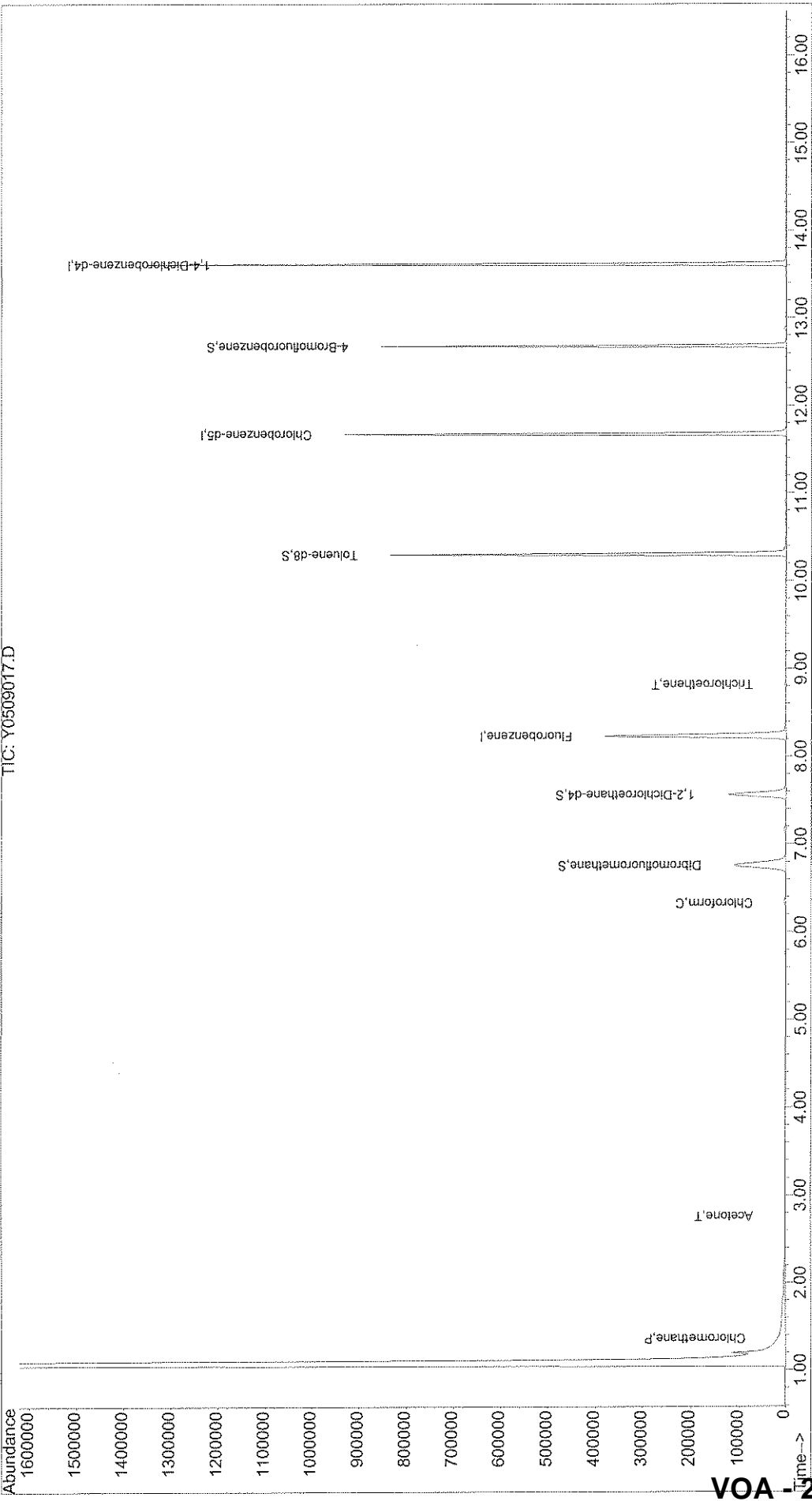
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509017.D Vial: 13
Acq On : 9 May 2008 19:20 Operator: DGA
Sample : JPL107-002 Inst : Yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:04 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:04 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar)
1) Fluorobenzene	8.23	96	443389	50.00	ug/l	0.00 86.83%
54) Chlorobenzene-d5	11.68	82	231844	50.00	ug/l	0.00 94.79%
74) 1,4-Dichlorobenzene-d4	13.61	152	287362	50.00	ug/l	0.00 82.00%

System Monitoring Compounds

36) Dibromofluoromethane	6.77	111	150444	51.87	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	103.74%
40) 1,2-Dichloroethane-d4	7.56	65	147309	53.17	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.34%
55) Toluene-d8	10.30	98	481245	47.94	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.88%
76) 4-Bromofluorobenzene	12.68	95	203361	54.44	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	108.88%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.37	50	954	0.18 ug/l	< 1/2 PQL
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	2.76	43	578	0.55 ug/l	# 67
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.89	76	758	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	3.27	84	156	Below Cal	# 68
19) trans-1,2-Dichloroethene	3.67	96	57	N.D.	
20) Acrylonitrile	3.65	53	108	N.D.	
21) t-butyl alcohol	0.00	59	0	N.D.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	

Qvalue
Q=1/2 PQL
Q=1/2 PQL

(#) = qualifier out of range (m) = manual integration
 Y0509017.D Y8260W.M Mon May 12 13:04:19 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:04 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0	N.D.	
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	5.74	43	53	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	6.33	83	4330mS	0.65 ug/l #	73
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
37) Cyclohexane	0.00	56	0	N.D.	
38) Carbon Tetrachloride	7.17	117	382	N.D.	
39) 1,1-Dichloropropene	0.00	75	0	N.D.	
41) Benzene	7.64	78	111	N.D.	
42) 1,2-Dichloroethane	7.68	62	67	N.D.	
43) Isobutanol	0.00	43	0	N.D. d	
44) t-amyl methyl ether	0.00	73	0	N.D.	
45) Trichloroethene	8.82	130	1353	0.38 ug/l #	86
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	10.20	43	81	N.D.	
56) Toluene	10.37	92	75	N.D.	
57) trans-1,3-Dichloropropene	10.74	75	58	N.D.	
58) Ethyl methacrylate	0.00	69	0	N.D.	
59) 1,1,2-Trichloroethane	10.59	97	67	N.D.	
60) Tetrachloroethene	0.00	166	0	N.D.	
61) 1,3-Dichloropropane	0.00	76	0	N.D.	
62) 2-Hexanone	10.95	43	104	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.	

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:04 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.80	91	207		N.D.	
69) m,p-Xylene	11.91	106	142		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	252		N.D.	
72) Bromoform	12.70	173	158		N.D.	
73) Isopropylbenzene	12.56	105	280		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	12.68	83	74		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.96	91	240		N.D.	
82) 4-Chlorotoluene	13.04	91	56		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.63	146	190		N.D.	
88) 4-Isopropyltoluene	13.60	119	420		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	190		N.D.	
90) 1,2-Dichlorobenzene	13.92	146	54		N.D.	
91) n-Butylbenzene	13.91	91	498		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.37	75	53		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	259		N.D.	
94) Hexachlorobutadiene	15.31	225	185		N.D.	
95) Naphthalene	15.36	128	83		N.D.	
96) 1,2,3-Trichlorobenzene	15.57	180	221		N.D.	

Qent 5/13/08

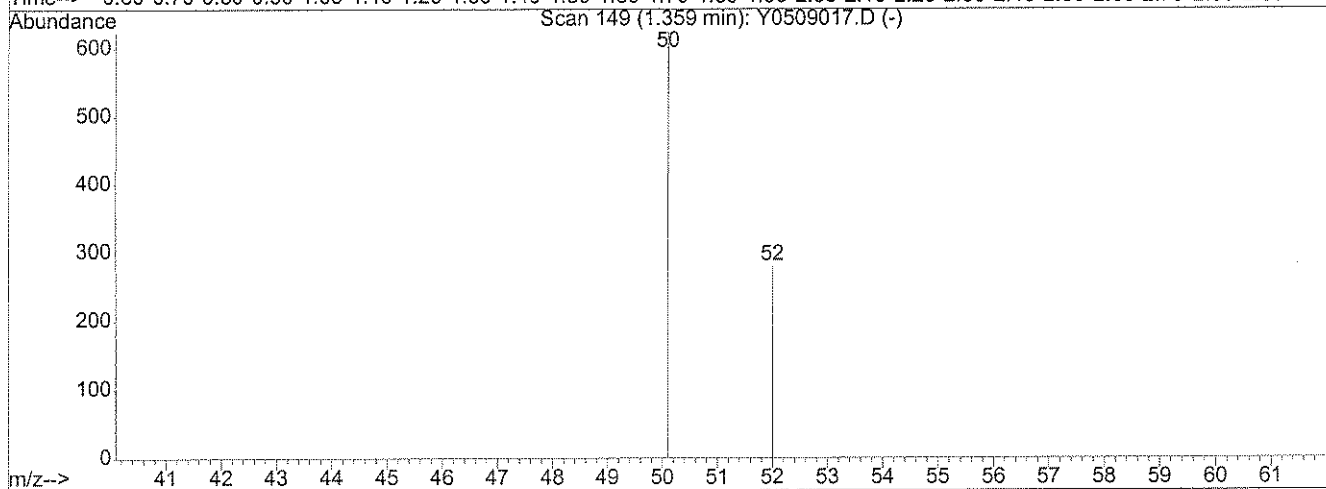
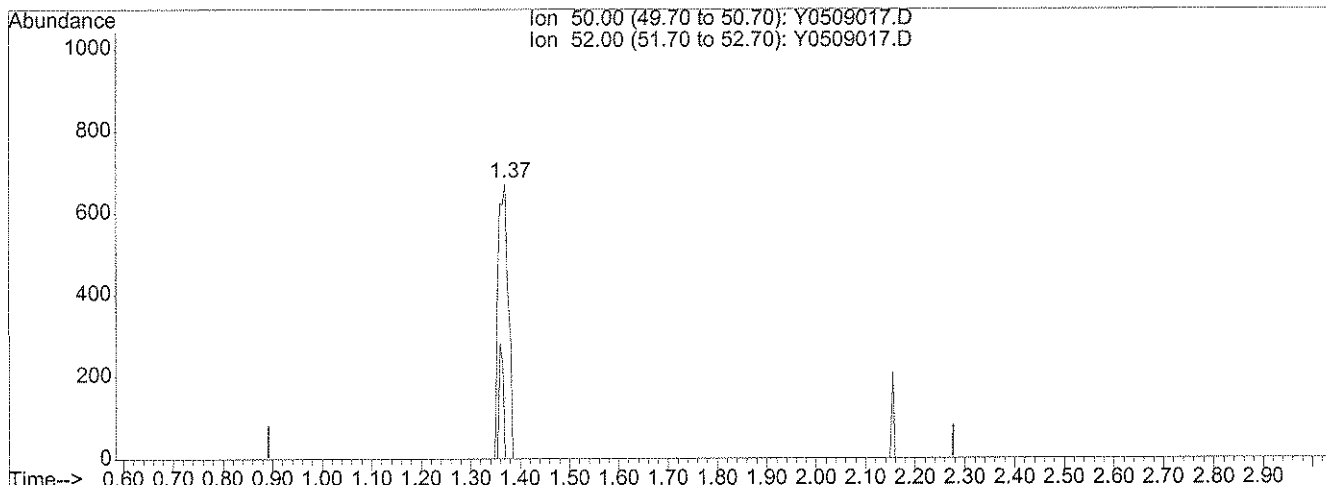
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:04 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Multiple Level Calibration



TIC: Y0509017.D

(3) Chloromethane (P)

1.37min 0.18ug/l

response 954

Ion	Exp%	Act%
50.00	100	100
52.00	33.00	16.88
0.00	0.00	0.00
0.00	0.00	0.00

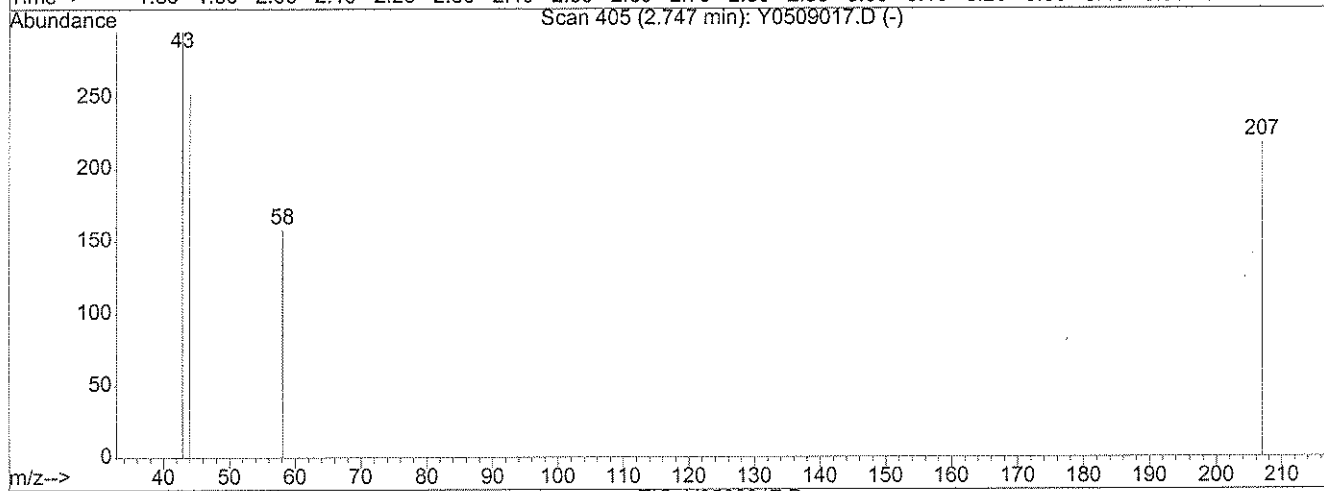
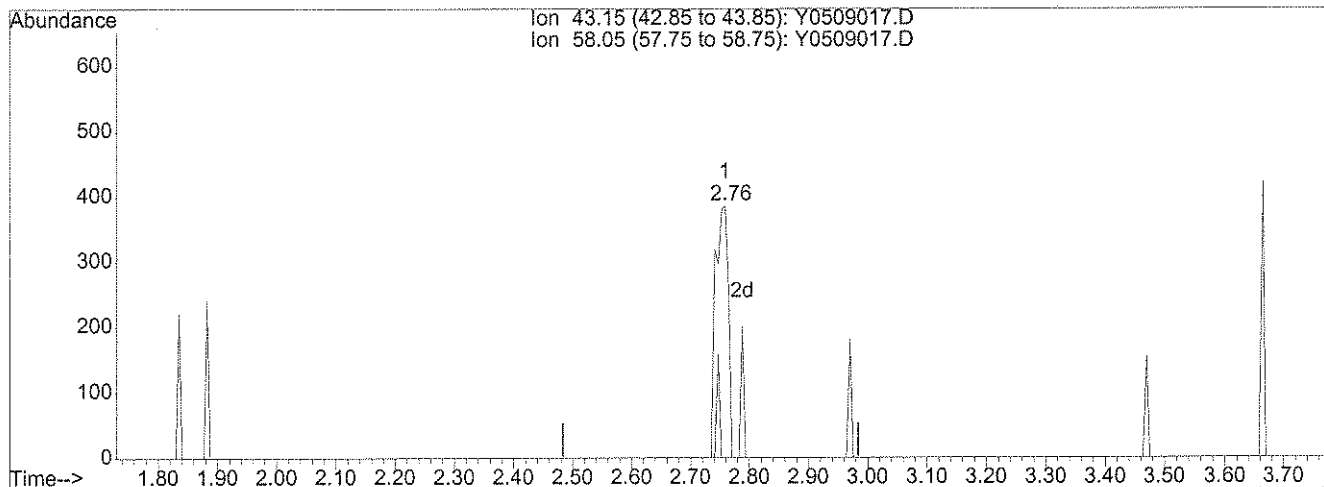
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:04 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration



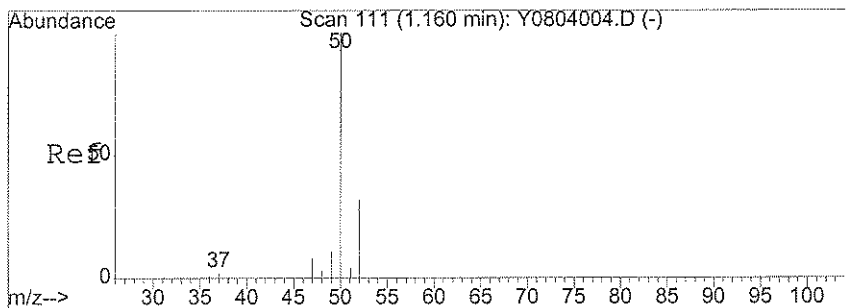
TIC: Y0509017.D

(11) Acetone (T)

2.76min 0.55ug/l

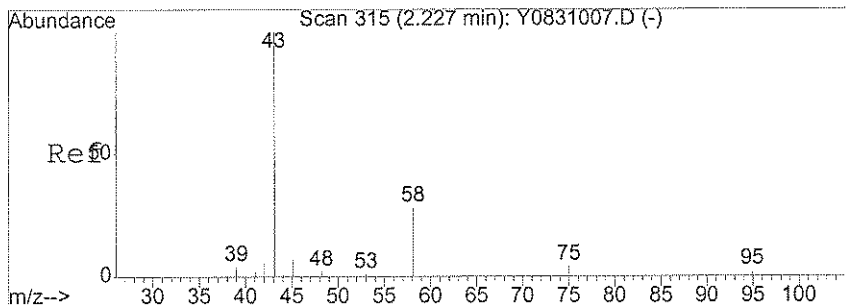
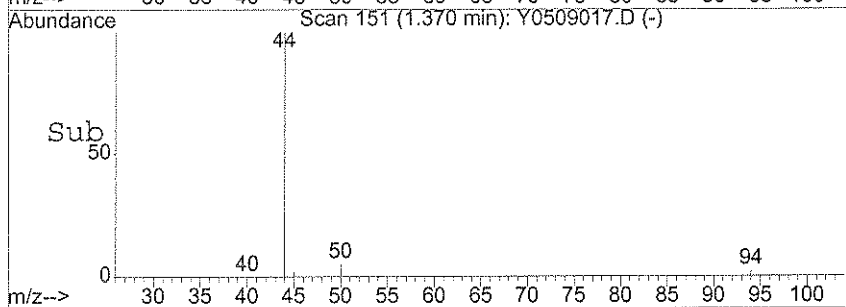
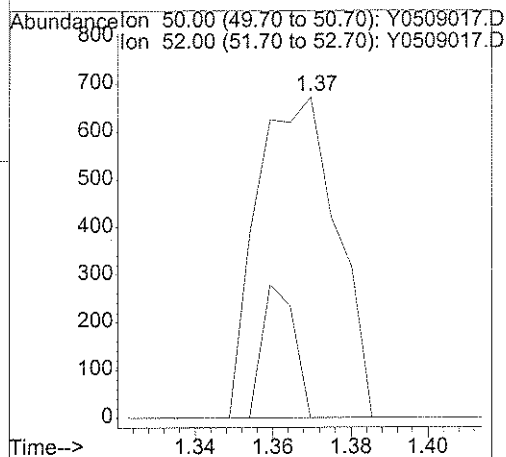
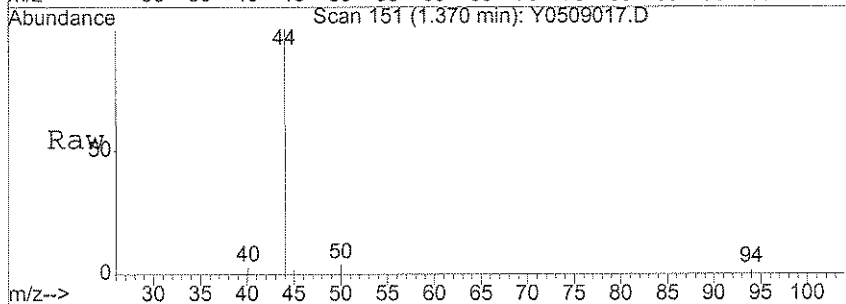
response 578

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	9.69#
0.00	0.00	0.00
0.00	0.00	0.00



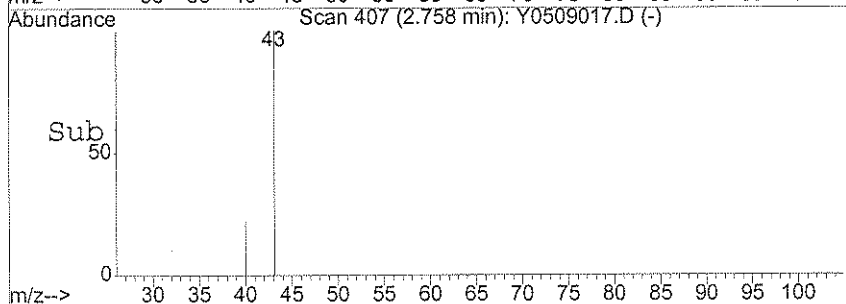
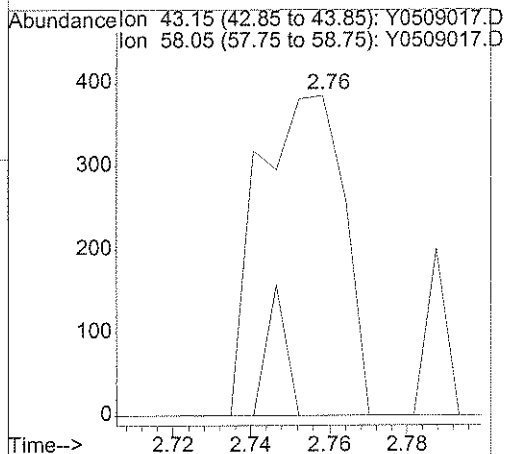
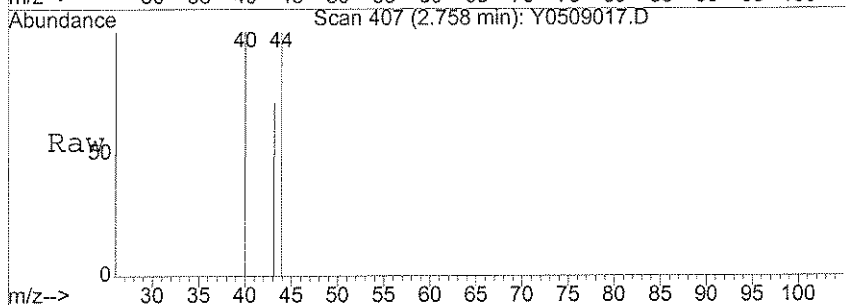
#3
 Chloromethane
 Concen: 0.18 ug/l
 RT: 1.37 min Scan# 151
 Delta R.T. 0.00 min
 Lab File: Y0509017.D
 Acq: 9 May 2008 19:20

Tgt Ion: 50 Resp: 954
 Ion Ratio Lower Upper
 50 100
 52 16.9 13.0 53.0



#11
 Acetone
 Concen: 0.55 ug/l
 RT: 2.76 min Scan# 407
 Delta R.T. 0.02 min
 Lab File: Y0509017.D
 Acq: 9 May 2008 19:20

Tgt Ion: 43 Resp: 578
 Ion Ratio Lower Upper
 43 100
 58 9.7 21.3 31.9#



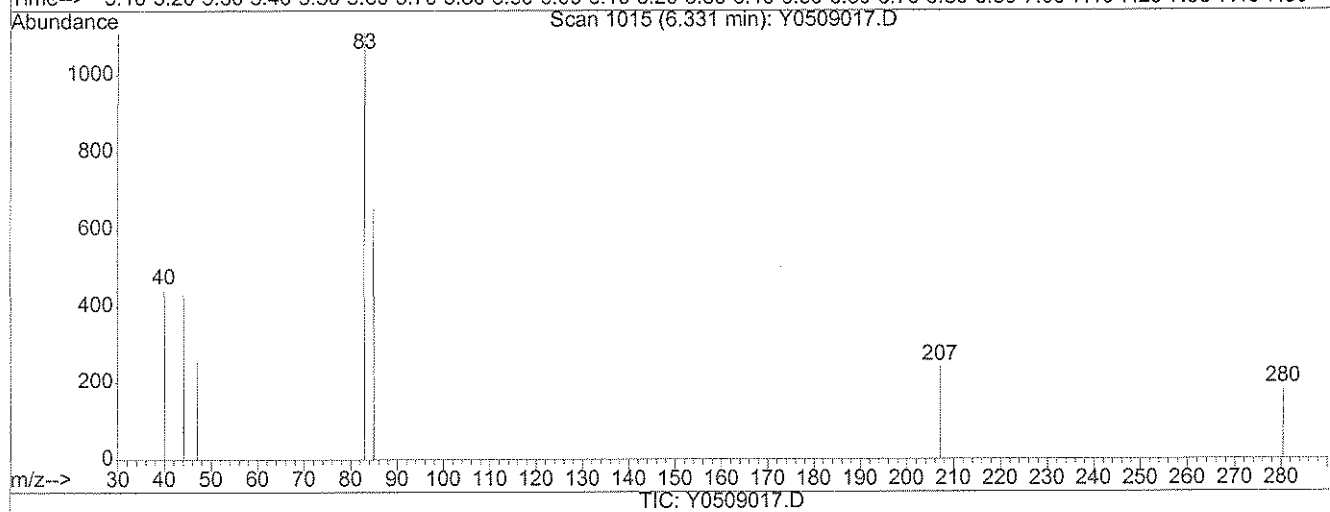
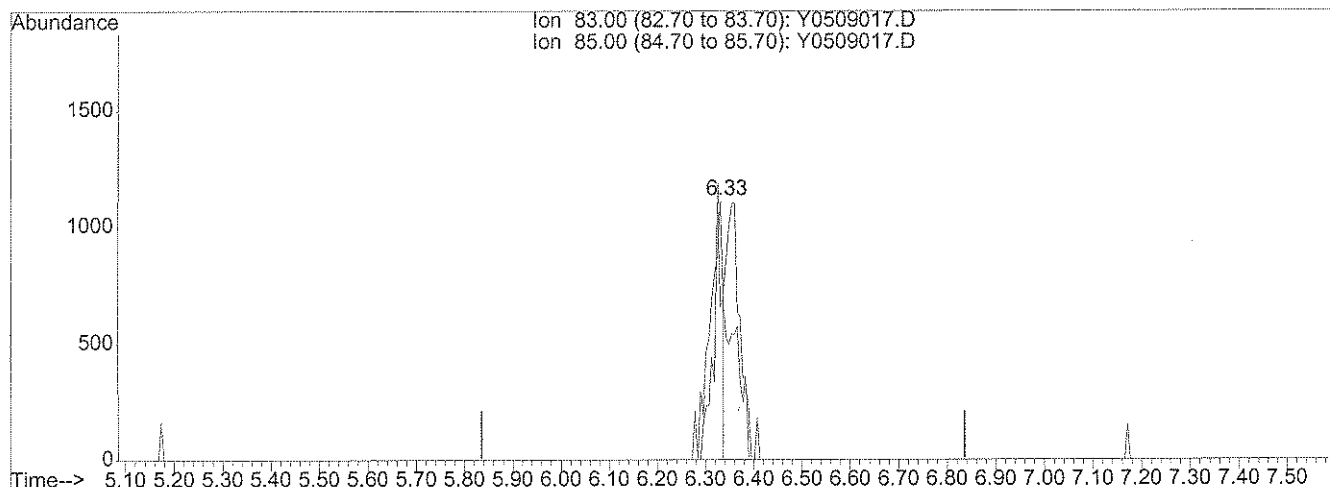
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:03 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Multiple Level Calibration



(34) Chloroform (C)

6.33min 0.31ug/l

response 2072

ion	Exp%	Act%
83.00	100	100
85.00	63.30	84.60#
0.00	0.00	0.00
0.00	0.00	0.00

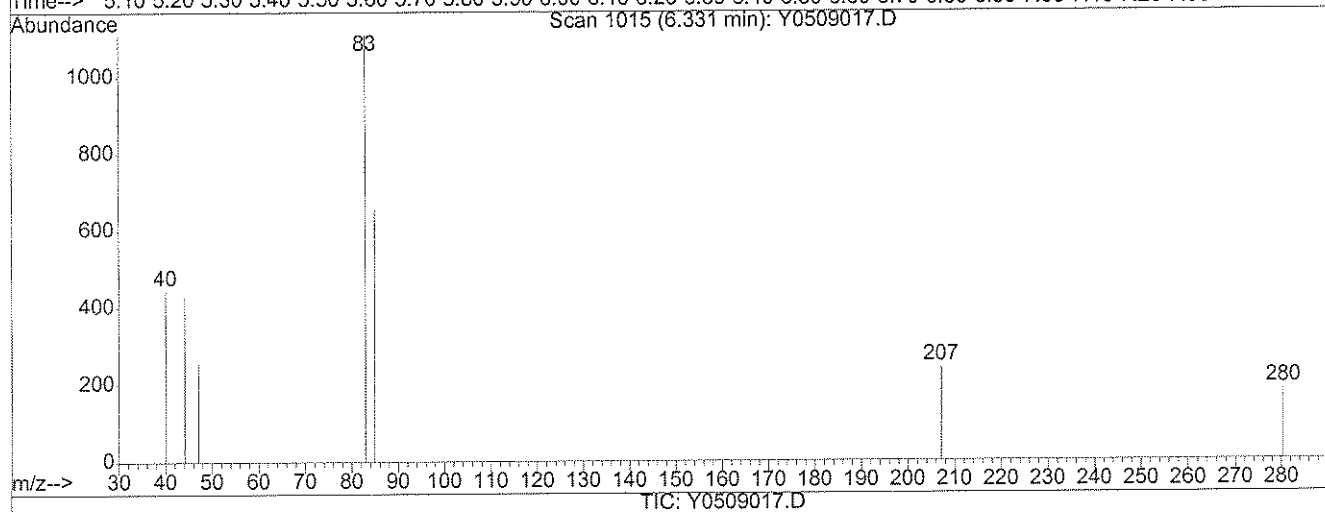
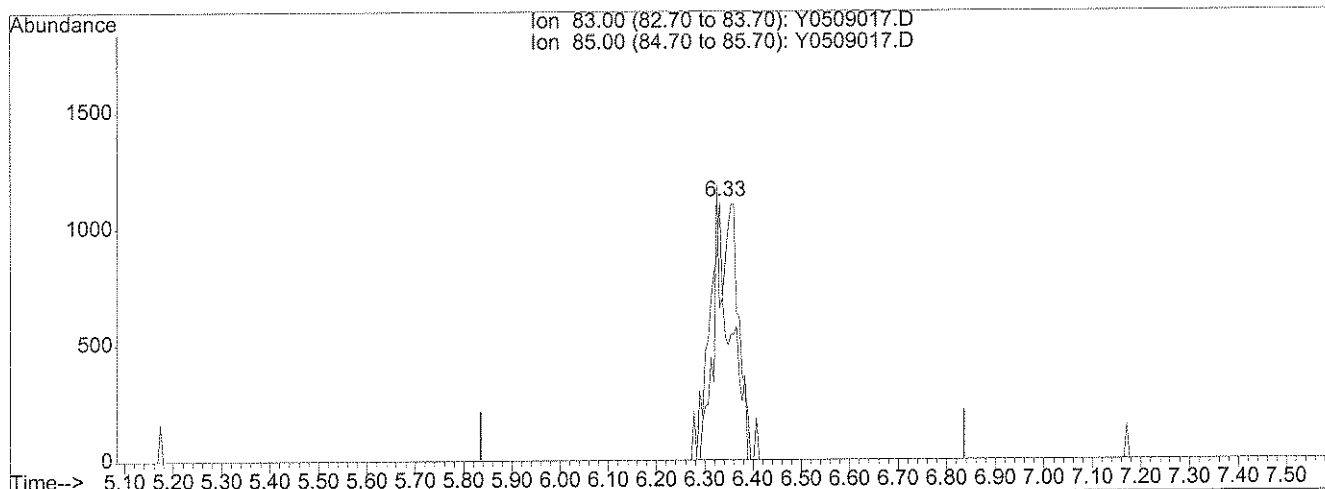
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509017.D
 Acq On : 9 May 2008 19:20
 Sample : JPL107-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:03 2008

Vial: 13
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Multiple Level Calibration

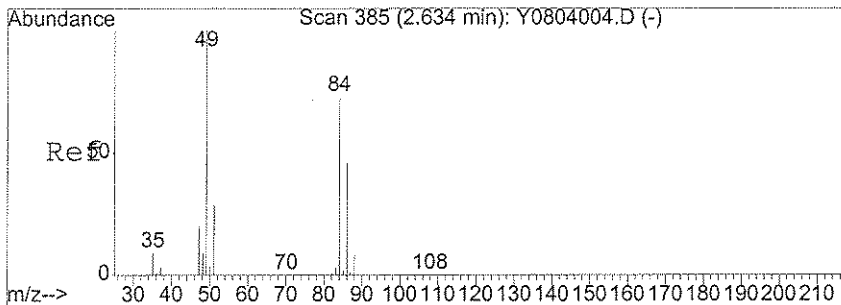


(34) Chloroform (C)

6.33min 0.65ug/l m

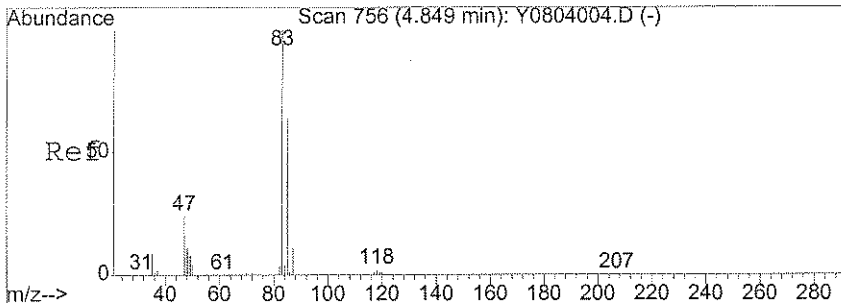
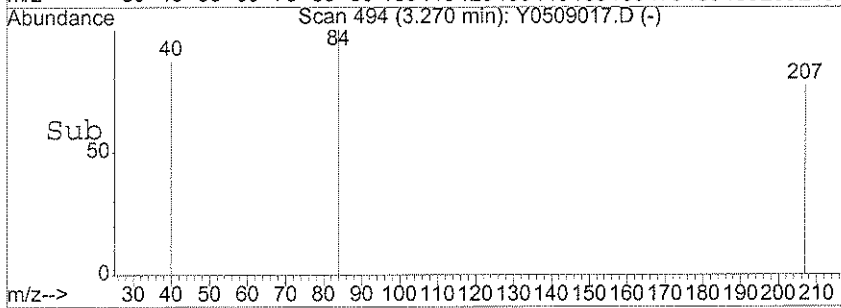
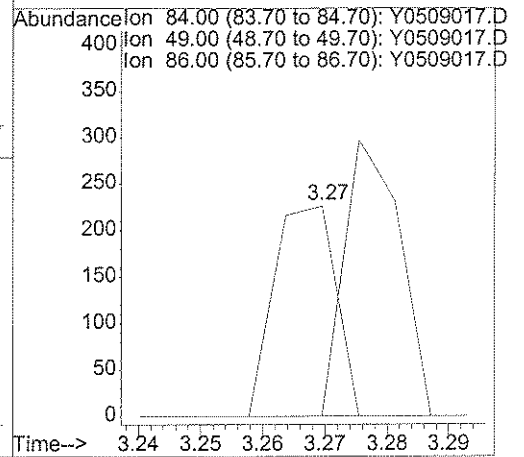
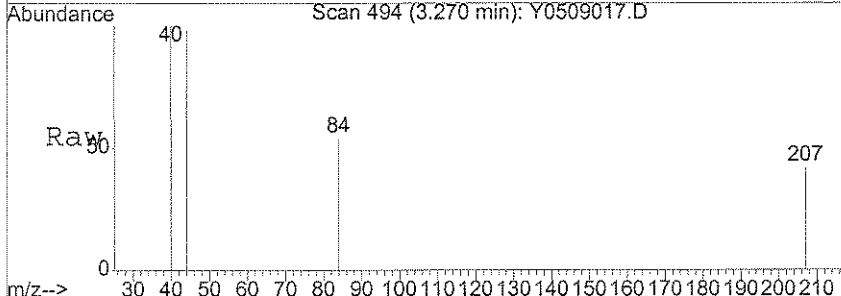
response 4330

Ion	Exp%	Act%
83.00	100	100
85.00	63.30	40.48#
0.00	0.00	0.00
0.00	0.00	0.00



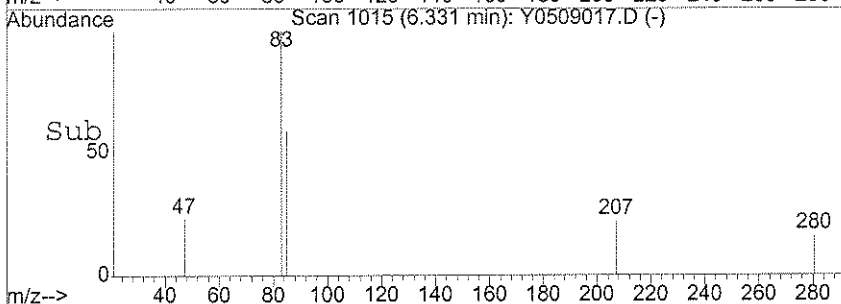
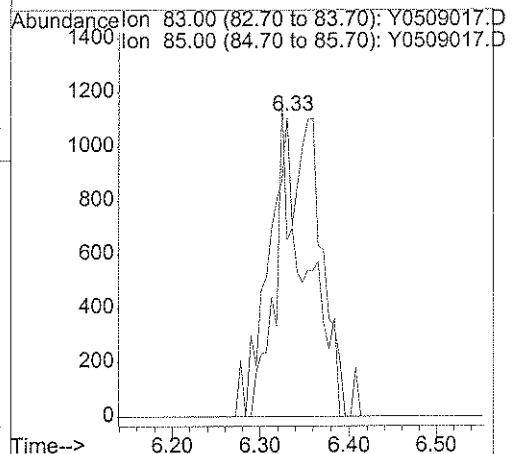
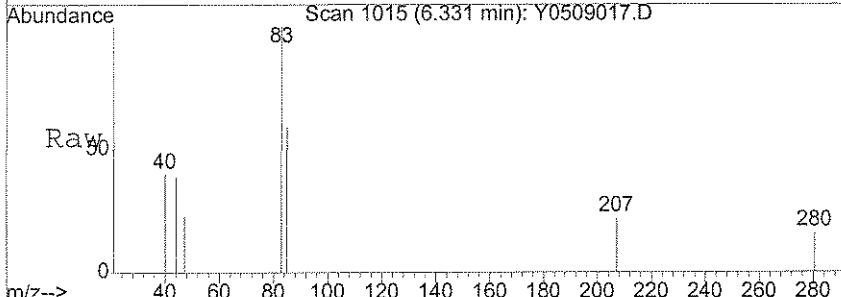
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.27 min Scan# 494
 Delta R.T. 0.00 min
 Lab File: Y0509017.D
 Acq: 9 May 2008 19:20

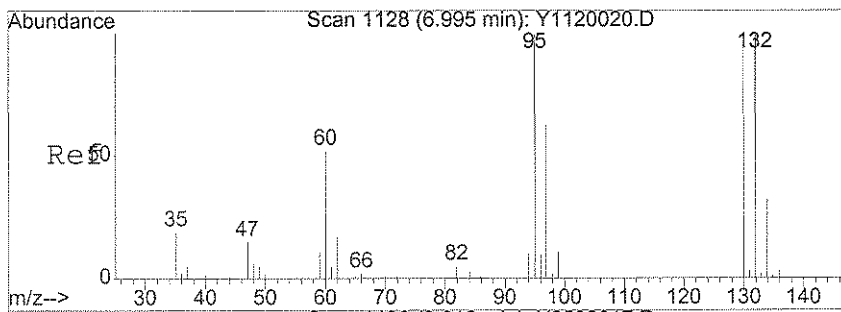
Tgt Ion	Resp	Lower	Upper
84	156		
84	100		
49	119.2	112.5	152.5
86	0.0	39.5	79.5#



#34
 Chloroform
 Concen: 0.65 ug/l m
 RT: 6.33 min Scan# 1015
 Delta R.T. -0.01 min
 Lab File: Y0509017.D
 Acq: 9 May 2008 19:20

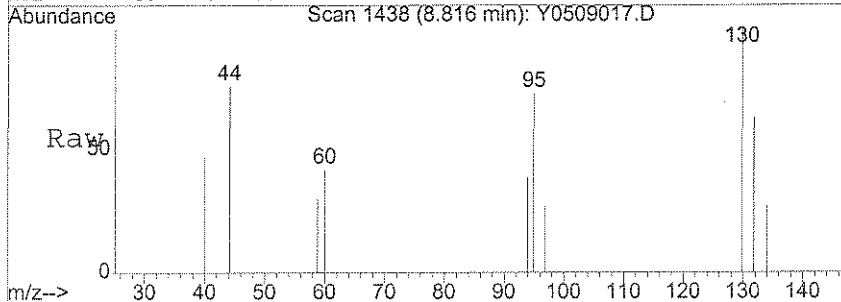
Tgt Ion	Resp	Lower	Upper
83	4330		
83	100		
85	40.5	43.3	83.3#



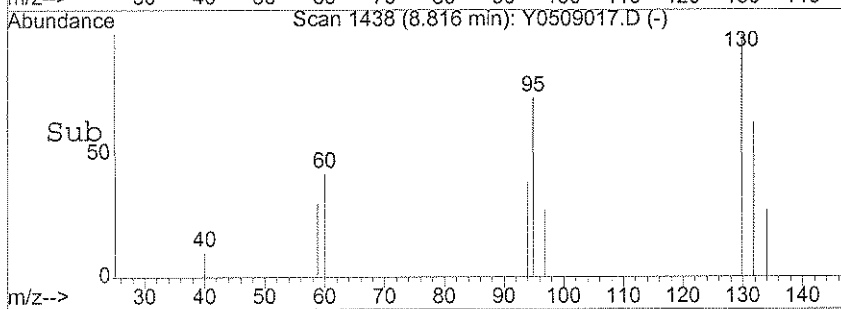
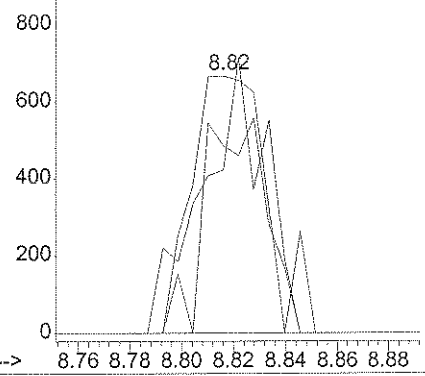


#45
 Trichloroethene
 Concen: 0.38 ug/l
 RT: 8.82 min Scan# 1438
 Delta R.T. 0.00 min
 Lab File: Y0509017.D
 Acq: 9 May 2008 19:20

Tgt Ion	Resp	Lower	Upper
130	100		
132	88.5	75.0	115.0
95	69.0	69.4	109.4#



Abundance
 Ion 130.00 (129.70 to 130.70): Y0509017.D
 Ion 132.00 (131.70 to 132.70): Y0509017.D
 Ion 95.00 (94.70 to 95.70): Y0509017.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-003
 Lab File ID: Y0509018.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 19:45
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	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	1.4	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.65	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-003
 Lab File ID: Y0509018.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 19:45
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-003
 Lab File ID: Y0509018.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 19:45
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

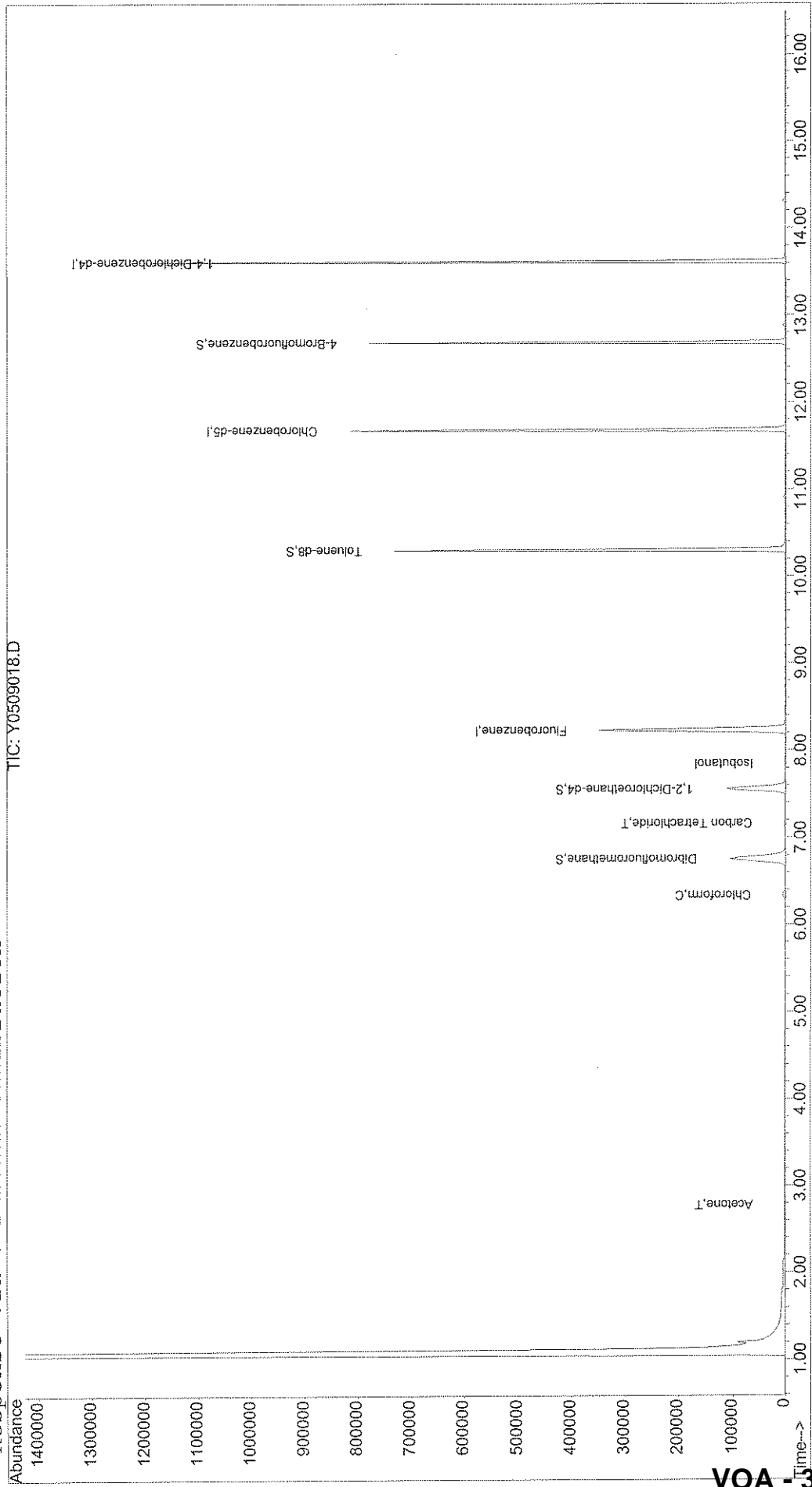
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509018.D Vial: 14
Acq On : 9 May 2008 19:45 Operator: DGA
Sample : JPL107-003 Inst : Yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:06 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:06 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	396761	50.00	ug/l	0.00	77.70%
54) Chlorobenzene-d5	11.68	82	202801	50.00	ug/l	0.00	82.91%
74) 1,4-Dichlorobenzene-d4	13.61	152	261610	50.00	ug/l	0.00	74.65%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	135843	52.34	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	104.68%	
40) 1,2-Dichloroethane-d4	7.56	65	136780	55.18	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	110.36%	
55) Toluene-d8	10.30	98	427303	48.66	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.32%	
76) 4-Bromofluorobenzene	12.68	95	179815	52.87	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	105.74%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.36	50	486	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.79	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	2.69	101	57	N.D.		
11) Acetone	2.78	43	1167mS	1.24	ug/l #	77
12) Iodomethane	2.85	142	65	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.88	76	679	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	0.00	84	0	N.D.		
19) trans-1,2-Dichloroethene	3.66	96	65	N.D.		
20) Acrylonitrile	3.63	53	77	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:06 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0	N.D.	
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	5.48	43	101	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	6.33	83	8176	1.37 ug/l #	72
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
37) Cyclohexane	0.00	56	0	N.D.	
38) Carbon Tetrachloride	7.17	117	2754m ³	0.65 ug/l #	49
39) 1,1-Dichloropropene	0.00	75	0	N.D.	
41) Benzene	7.65	78	109	N.D.	
42) 1,2-Dichloroethane	0.00	62	0	N.D.	
43) Isobutanol	7.85	43	309	2.63 ug/l #	17
44) t-amyl methyl ether	0.00	73	0	N.D.	
45) Trichloroethene	8.82	130	198	N.D.	
46) Methylcyclohexane	9.06	83	73	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	10.83	76	64	N.D.	
62) 2-Hexanone	10.80	43	60	N.D.	
63) Dibromochloromethane	10.91	129	60	N.D.	
64) 1,2-Dibromoethane	0.00	107	0	N.D.	
65) Chlorobenzene	11.69	112	66	N.D.	
66) 1-Chlorohexane	11.71	91	55	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\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:06 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.71	91	55		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	280		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.56	105	53		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.70	156	115		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	13.04	120	99		N.D.	
81) 2-Chlorotoluene	12.90	91	392		N.D.	
82) 4-Chlorotoluene	13.05	91	53		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.55	146	77		N.D.	
88) 4-Isopropyltoluene	13.59	119	353		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	115		N.D.	
90) 1,2-Dichlorobenzene	13.63	146	115		N.D.	
91) n-Butylbenzene	13.91	91	344		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	259		N.D.	
94) Hexachlorobutadiene	15.31	225	313		N.D.	
95) Naphthalene	15.36	128	139		N.D.	
96) 1,2,3-Trichlorobenzene	15.55	180	250		N.D.	

Quant 5/13/08

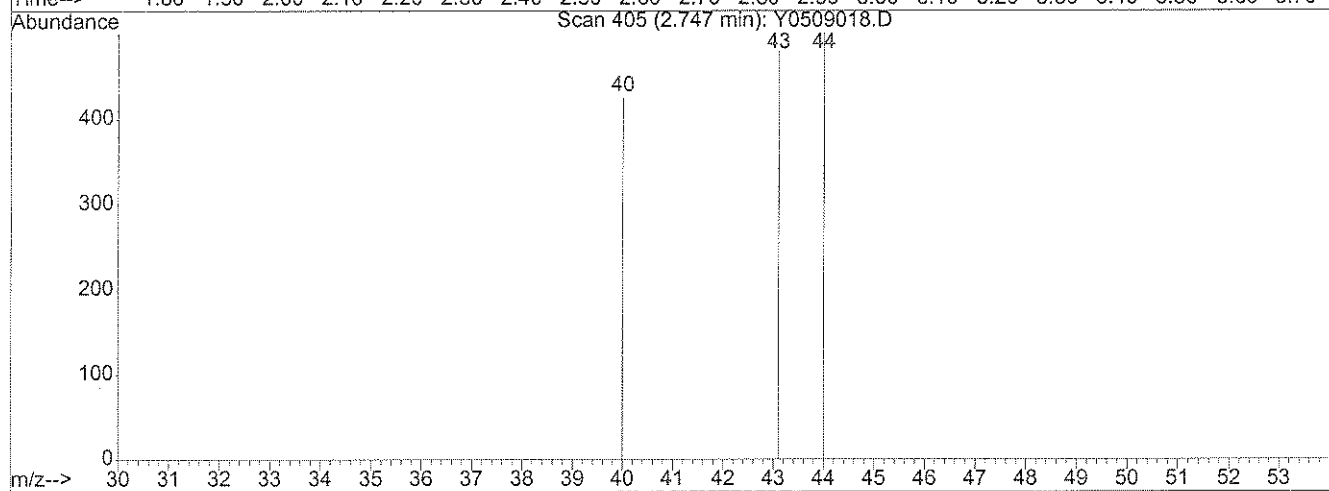
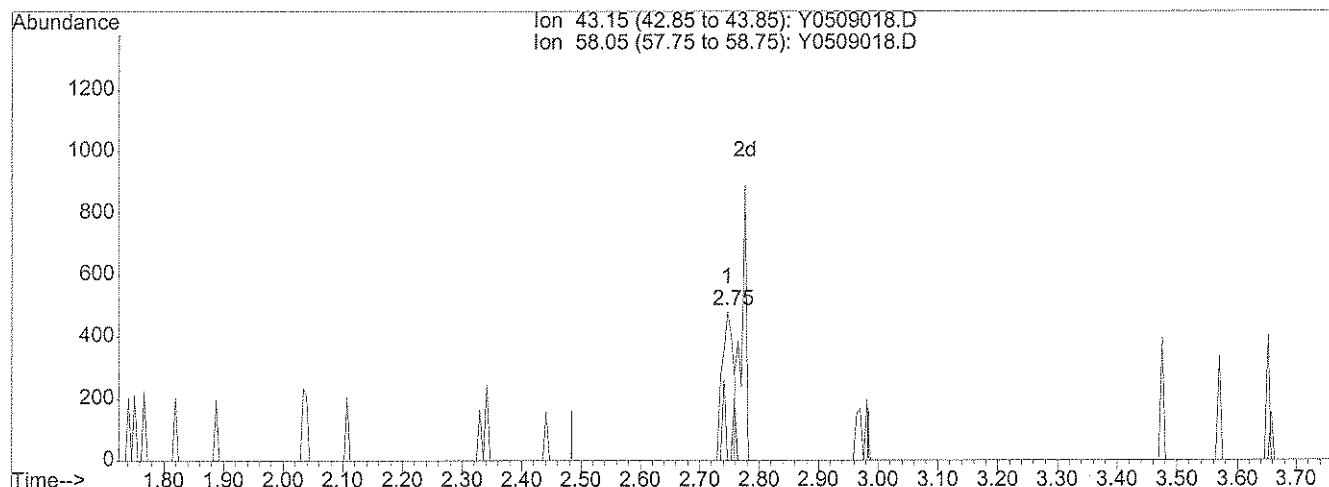
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 12:42 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration



TIC: Y0509018.D

(11) Acetone (T)

2.75min 0.67ug/l

response 632

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	14.87#
0.00	0.00	0.00
0.00	0.00	0.00

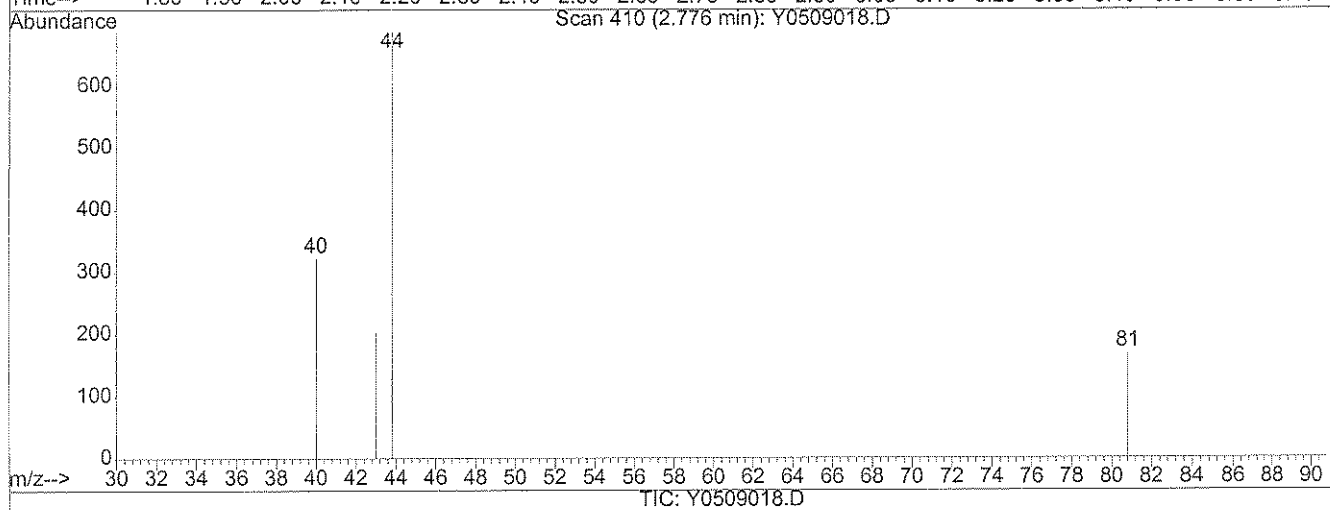
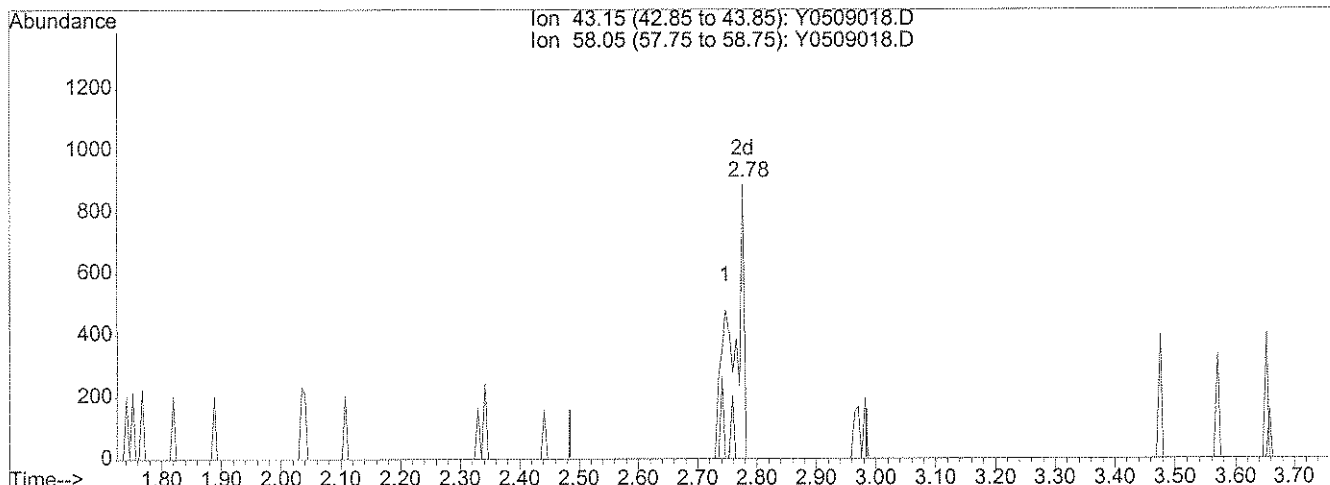
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:04 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

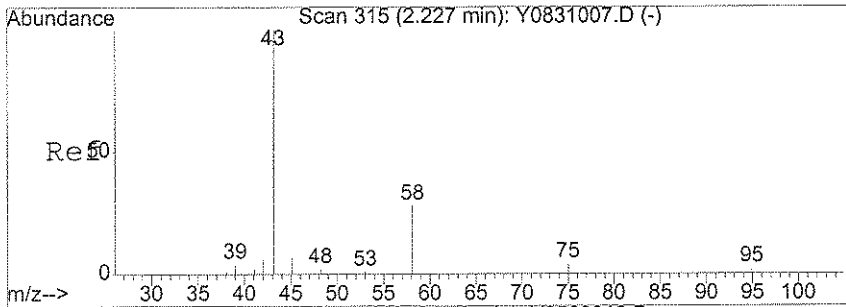


(11) Acetone (T)

2.78min 1.24ug/l m

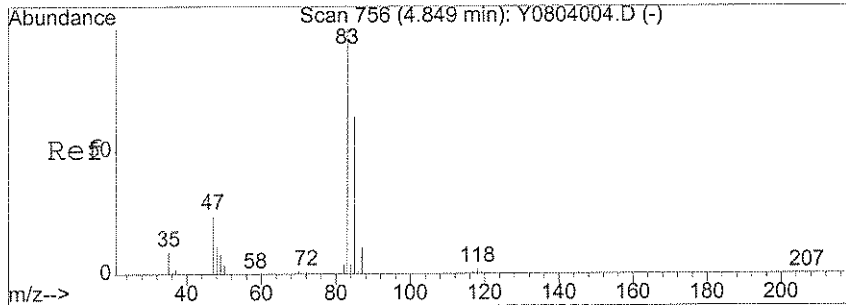
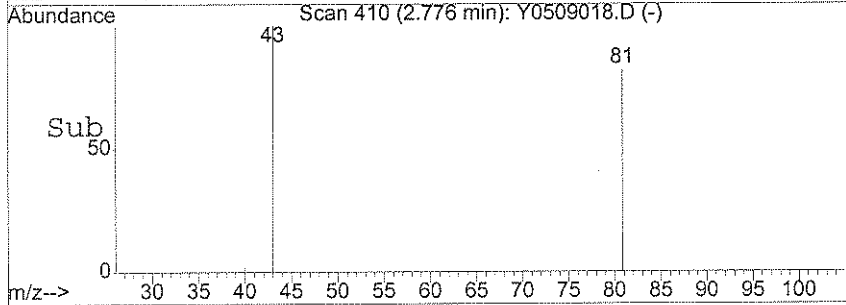
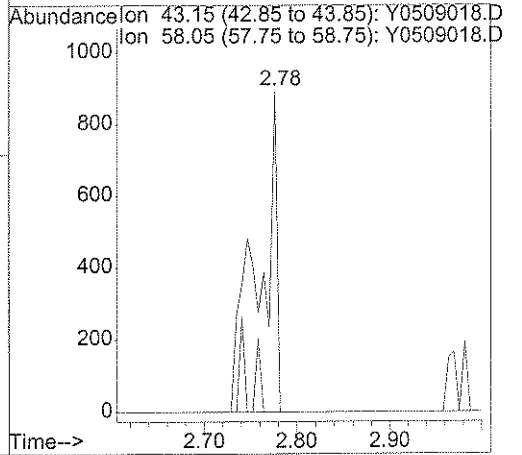
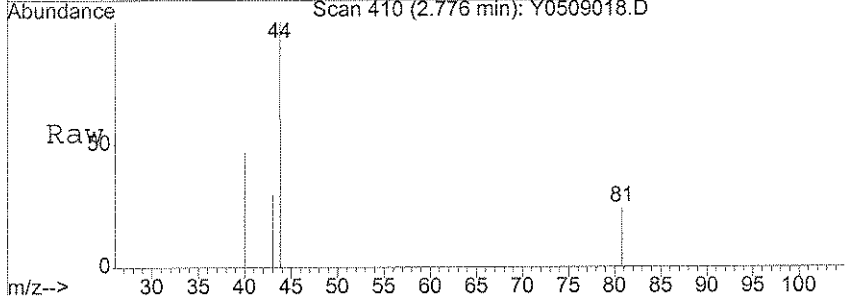
response 1167

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	8.05#
0.00	0.00	0.00
0.00	0.00	0.00



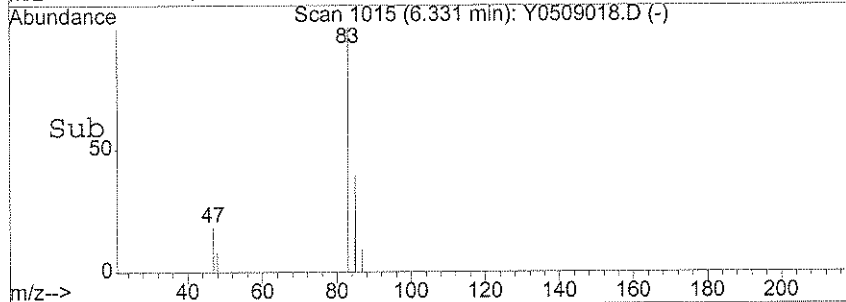
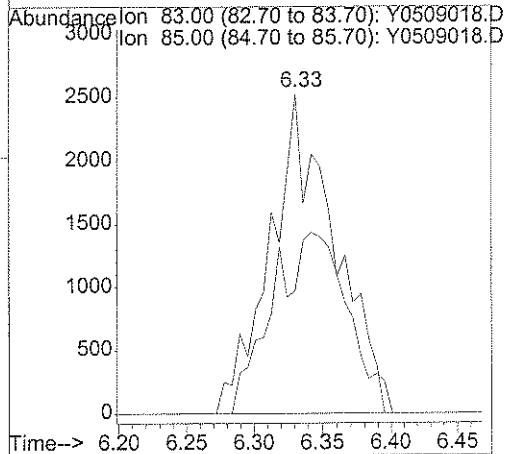
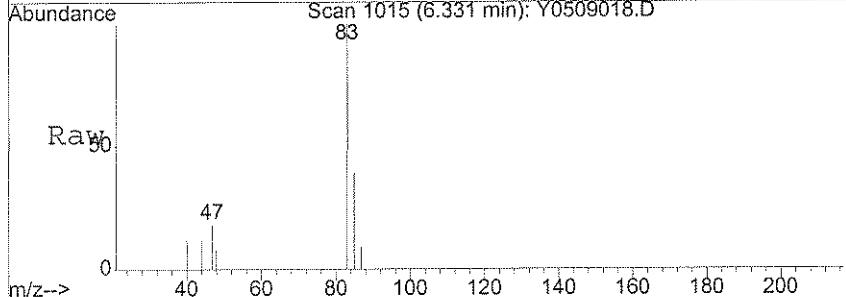
#11
 Acetone
 Concen: 1.24 ug/l m
 RT: 2.78 min Scan# 410
 Delta R.T. 0.04 min
 Lab File: Y0509018.D
 Acq: 9 May 2008 19:45

Tgt Ion: 43	Resp: 1167
Ion Ratio Lower	Upper
43 100	
58 8.1	21.3 31.9#



#34
 Chloroform
 Concen: 1.37 ug/l
 RT: 6.33 min Scan# 1015
 Delta R.T. -0.01 min
 Lab File: Y0509018.D
 Acq: 9 May 2008 19:45

Tgt Ion: 83	Resp: 8176
Ion Ratio Lower	Upper
83 100	
85 41.2	43.3 83.3#



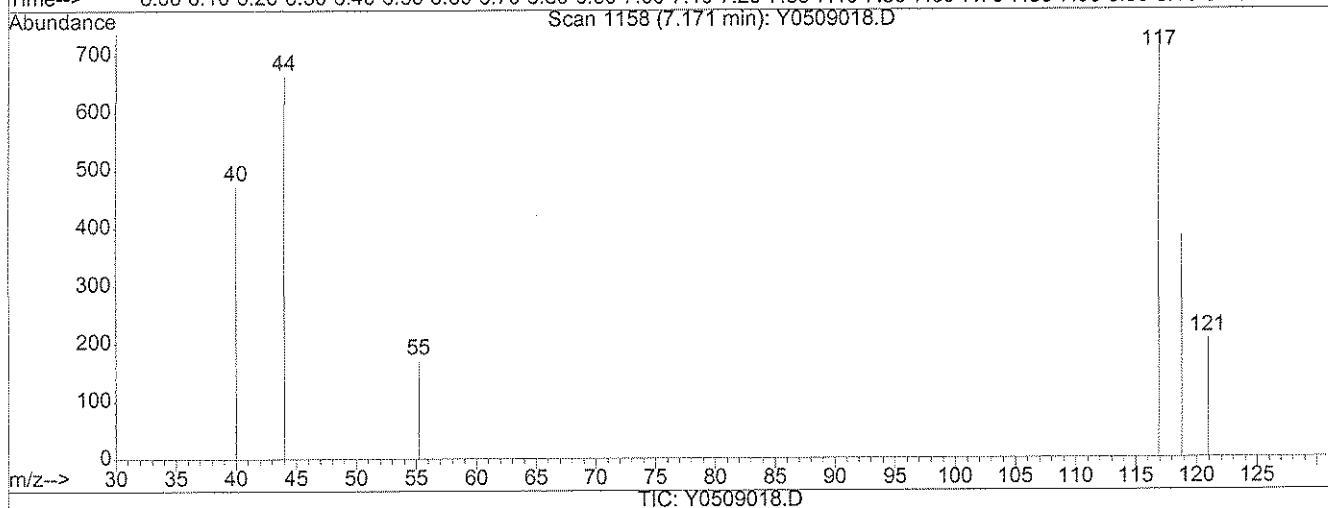
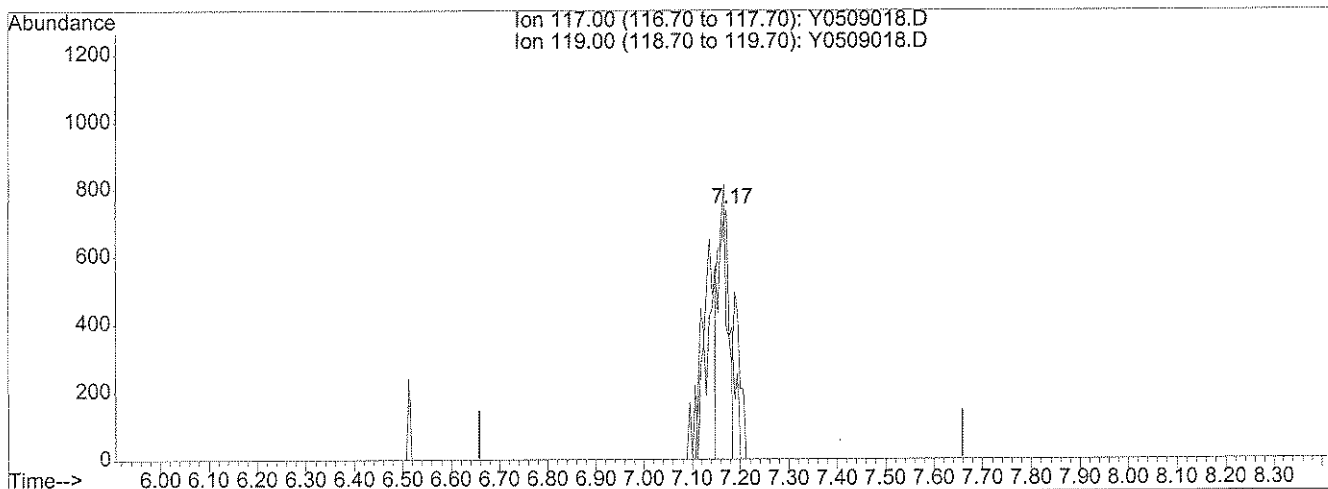
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:05 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Multiple Level Calibration



(38) Carbon Tetrachloride (T)

7.17min 0.28ug/l

response 1172

Ion	Exp%	Act%
117.00	100	100
119.00	98.20	148.55#
0.00	0.00	0.00
0.00	0.00	0.00

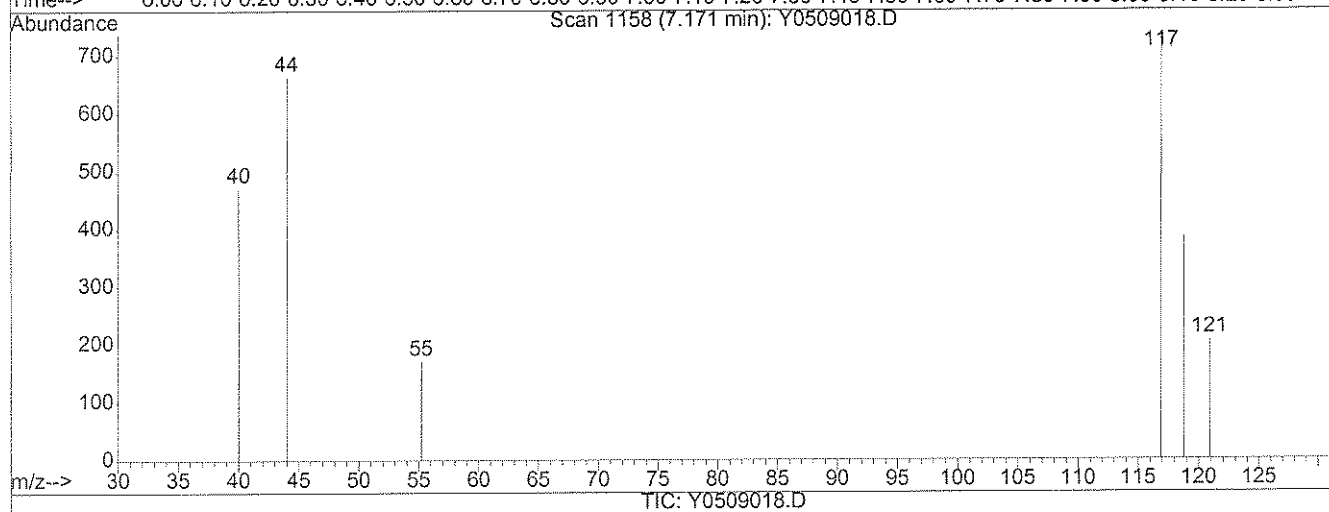
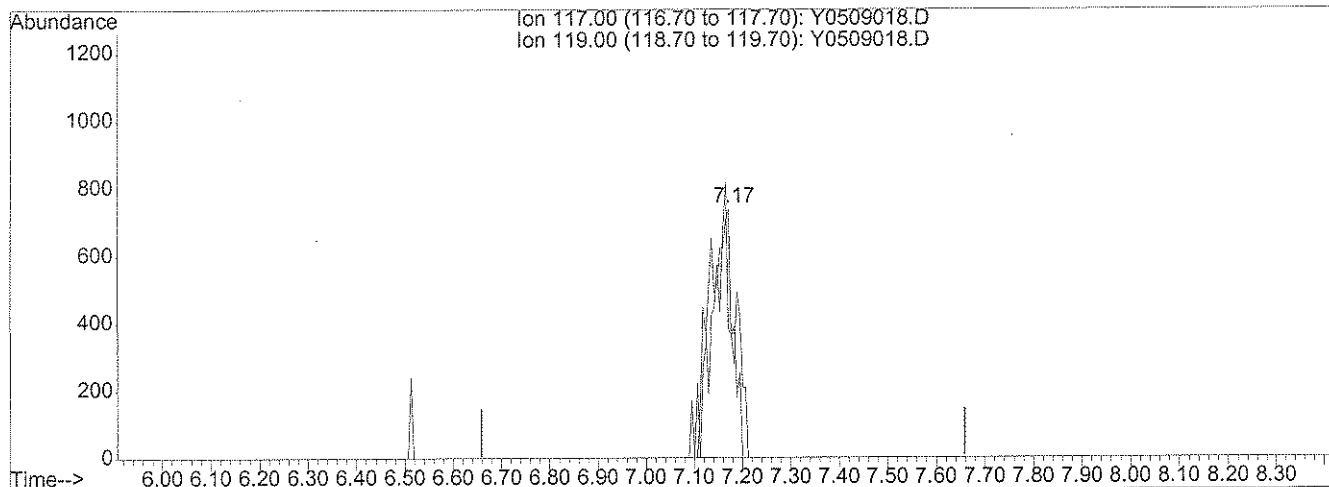
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509018.D
 Acq On : 9 May 2008 19:45
 Sample : JPL107-003
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:06 2008

Vial: 14
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Multiple Level Calibration

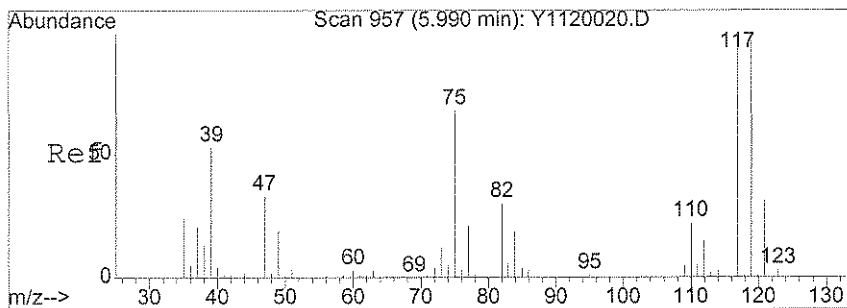


(38) Carbon Tetrachloride (T)

7.17min 0.65ug/l m

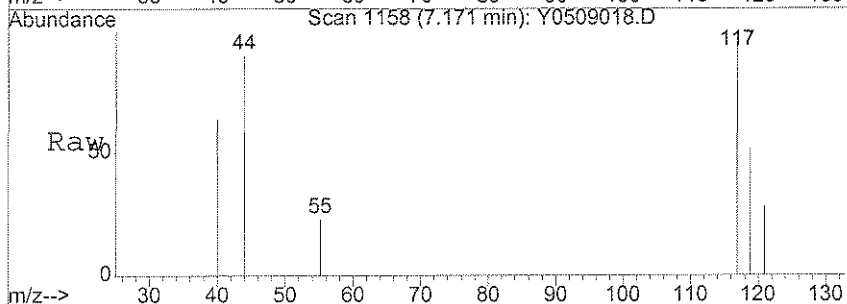
response 2754

Ion	Exp%	Act%
117.00	100	100
119.00	98.20	63.22#
0.00	0.00	0.00
0.00	0.00	0.00

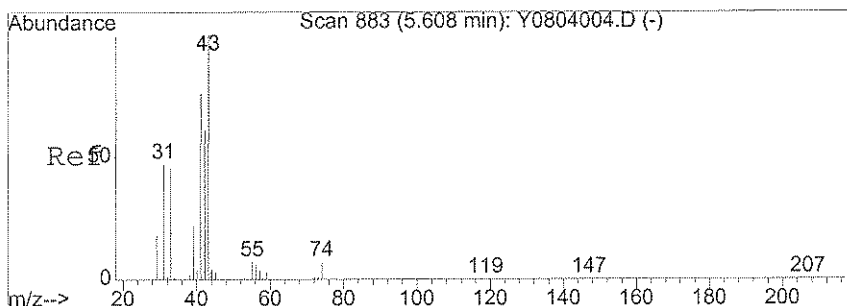
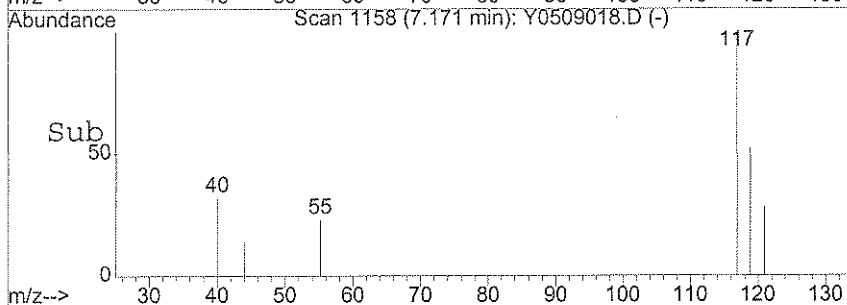
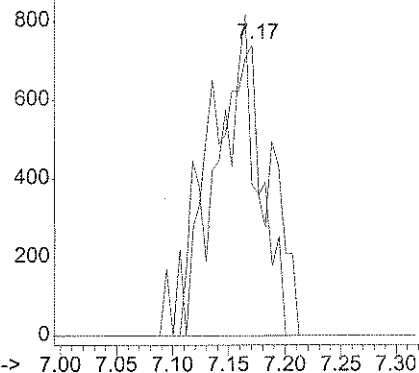


#38
 Carbon Tetrachloride
 Concen: 0.65 ug/l m
 RT: 7.17 min Scan# 1158
 Delta R.T. 0.01 min
 Lab File: Y0509018.D
 Acq: 9 May 2008 19:45

Tgt Ion: 117 Resp: 2754
 Ion Ratio Lower Upper
 117 100
 119 63.2 78.2 118.2#

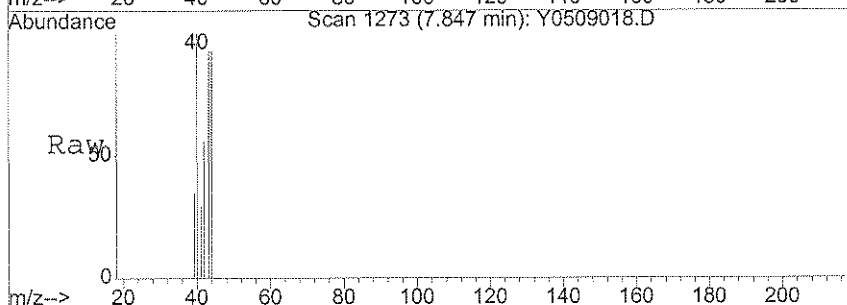


Abundance Ion 117.00 (116.70 to 117.70): Y0509018.D
 Ion 119.00 (118.70 to 119.70): Y0509018.D

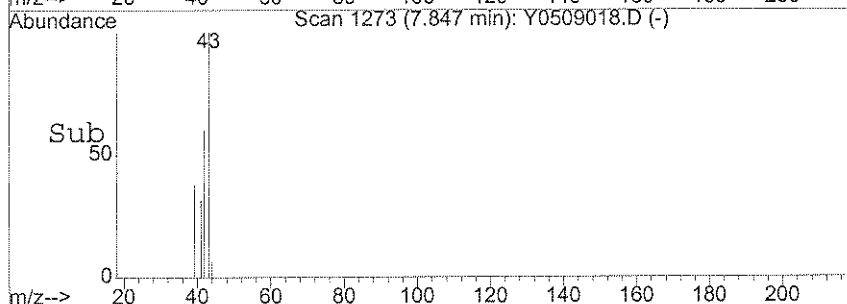
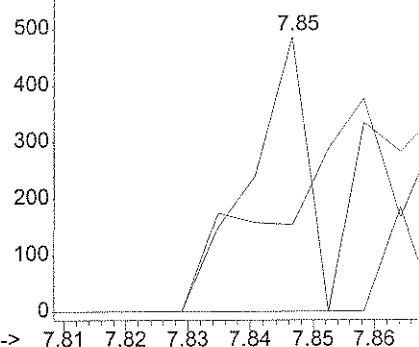


#43
 Isobutanol
 Concen: 2.63 ug/l
 RT: 7.85 min Scan# 1273
 Delta R.T. -0.01 min
 Lab File: Y0509018.D
 Acq: 9 May 2008 19:45

Tgt Ion: 43 Resp: 309
 Ion Ratio Lower Upper
 43 100
 41 0.0 60.6 91.0#
 74 0.0 5.8 8.8#



Abundance Ion 43.20 (42.90 to 43.90): Y0509018.D
 Ion 41.20 (40.90 to 41.90): Y0509018.D
 Ion 74.10 (73.80 to 74.80): Y0509018.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-004
 Lab File ID: Y0509019.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 20:10
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-004
 Lab File ID: Y0509019.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 20:10
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-004
 Lab File ID: Y0509019.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 20:10
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

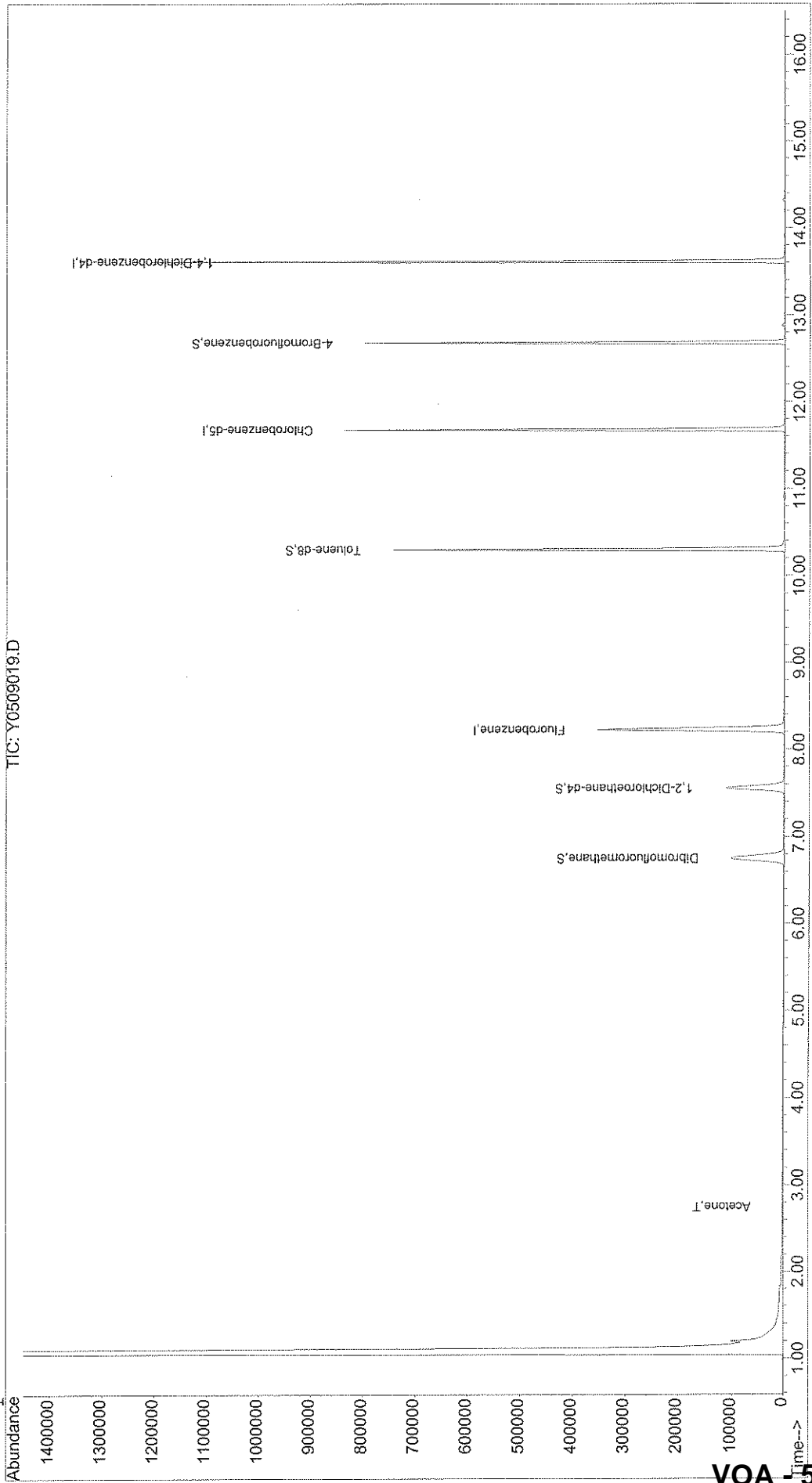
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509019.D Vial: 15
Acq On : 9 May 2008 20:10 Operator: DGA
Sample : JPL107-004 Inst : Yoda
Misc : #4 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:08 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509019.D
 Acq On : 9 May 2008 20:10
 Sample : JPL107-004
 Misc : #4 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:08 2008

Vial: 15
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	408016	50.00	ug/l	0.00	79.91%
54) Chlorobenzene-d5	11.68	82	202364	50.00	ug/l	0.00	82.73%
74) 1,4-Dichlorobenzene-d4	13.61	152	264914	50.00	ug/l	0.00	75.59%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	137241	51.42	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	102.84%	
40) 1,2-Dichloroethane-d4	7.56	65	137861	54.08	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	108.16%	
55) Toluene-d8	10.30	98	435259	49.67	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.34%	
76) 4-Bromofluorobenzene	12.68	95	187939	54.57	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	109.14%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.35	50	456	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	2.71	101	75	N.D.		
11) Acetone	2.75	43	834	0.86 ug/l #	62	
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.90	76	680	N.D.		
15) Allyl chloride	3.09	76	53	N.D.		
16) Acetonitrile	0.00	40	0	N.D. d		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.26	84	73	Below Cal #	44	
19) trans-1,2-Dichloroethene	3.70	96	61	N.D.		
20) Acrylonitrile	3.64	53	133	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		

Qent 5/12/08

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509019.D
 Acq On : 9 May 2008 20:10
 Sample : JPL107-004
 Misc : #4 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:08 2008

Vial: 15
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.54	77	61		N.D.	
29) cis-1,2-Dichloroethene	5.51	96	63		N.D.	
30) 2-Butanone	5.57	43	125		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	6.34	83	60		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	7.15	117	445		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	7.62	78	53		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.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	9.03	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	10.17	43	165		N.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	10.93	97	56		N.D.	
60) Tetrachloroethene	10.91	166	191		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	11.24	43	111		N.D.	
63) Dibromochloromethane	10.91	129	63		N.D.	
64) 1,2-Dibromoethane	11.34	107	61		N.D.	
65) Chlorobenzene	11.71	112	77		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Qm 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509019.D Y8260W.M Mon May 12 13:09:01 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509019.D
 Acq On : 9 May 2008 20:10
 Sample : JPL107-004
 Misc : #4 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:08 2008

Vial: 15
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	116		N.D.	
69) m,p-Xylene	11.92	106	54		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	139		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.56	105	57		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.69	156	226		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.69	83	94		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.96	91	117		N.D.	
82) 4-Chlorotoluene	13.04	91	54		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	150		N.D.	
88) 4-Isopropyltoluene	13.59	119	176		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	58		N.D.	
90) 1,2-Dichlorobenzene	13.63	146	58		N.D.	
91) n-Butylbenzene	13.91	91	310		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.18	180	305		N.D.	
94) Hexachlorobutadiene	15.30	225	135		N.D.	
95) Naphthalene	15.36	128	59		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	55		N.D.	

DM 5/12/08

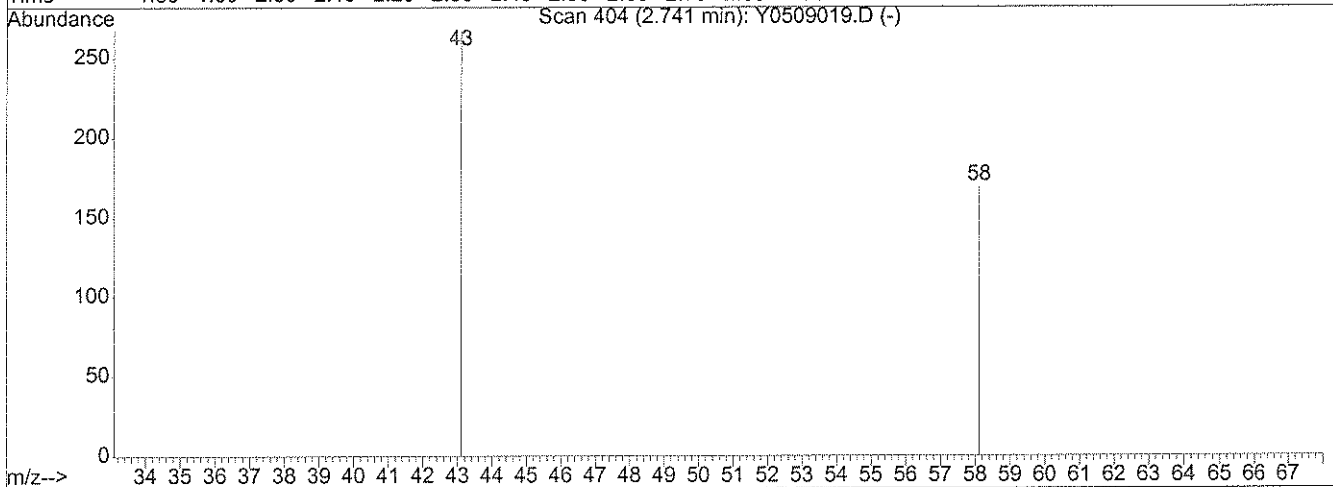
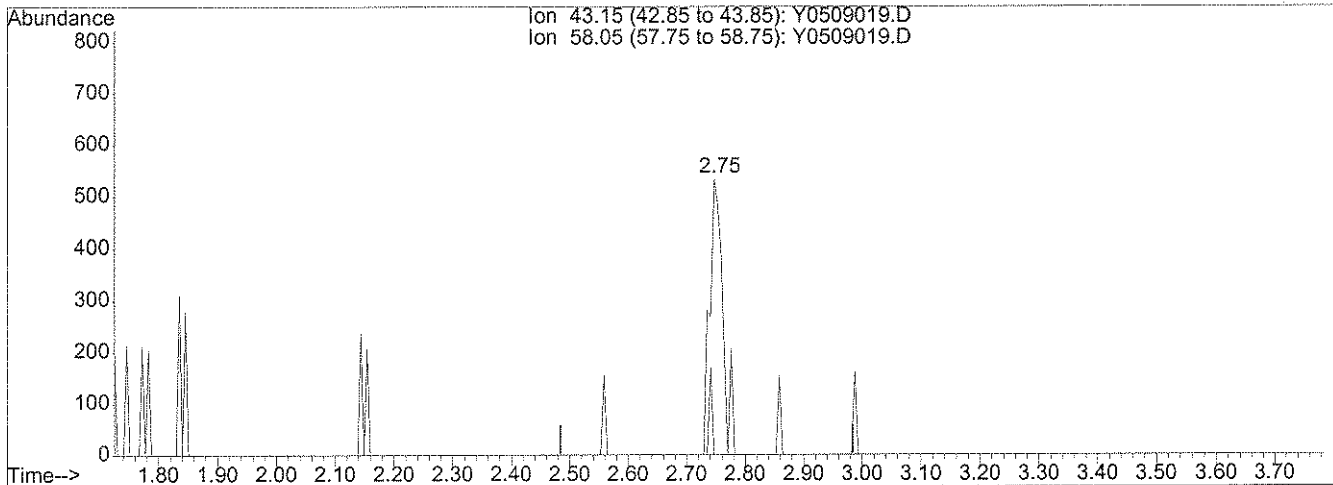
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509019.D
 Acq On : 9 May 2008 20:10
 Sample : JPL107-004
 Misc : #4 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:08 2008

Vial: 15
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

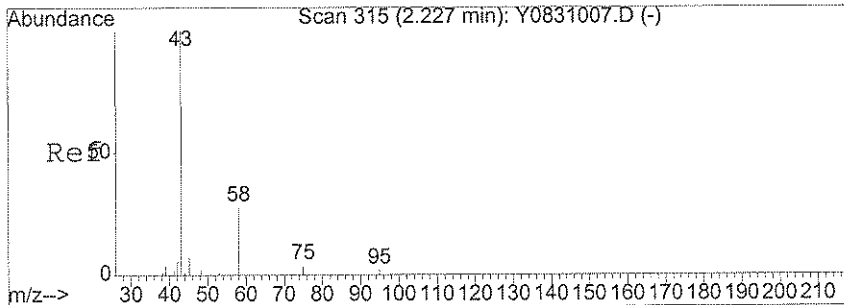


(11) Acetone (T)

2.75min 0.86ug/l

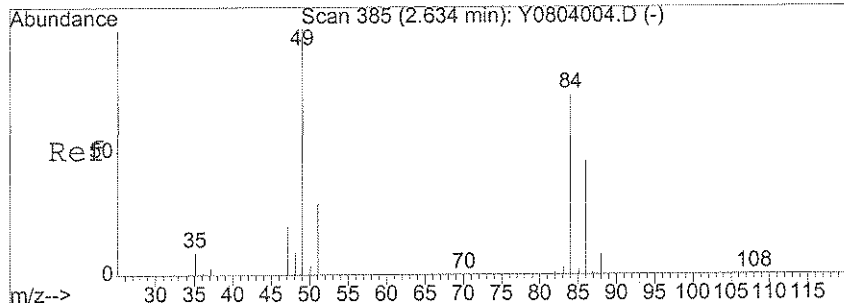
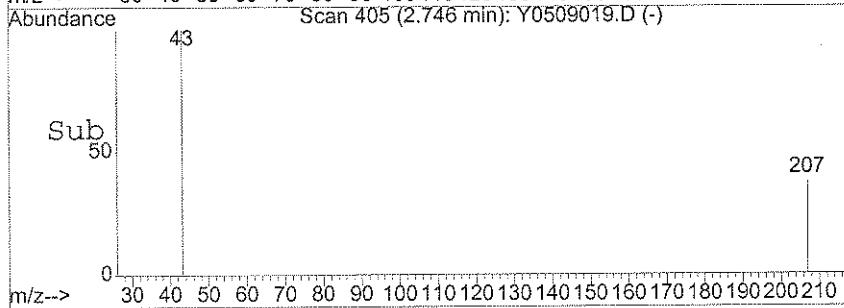
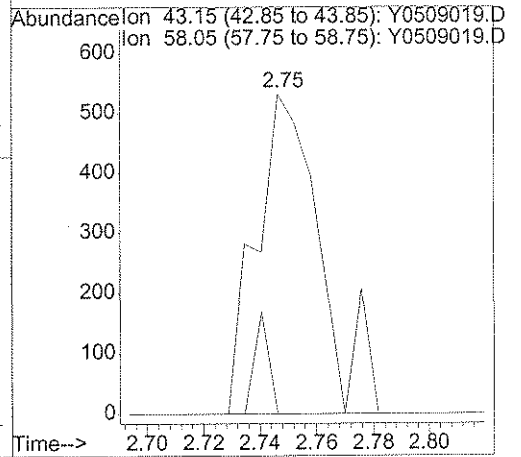
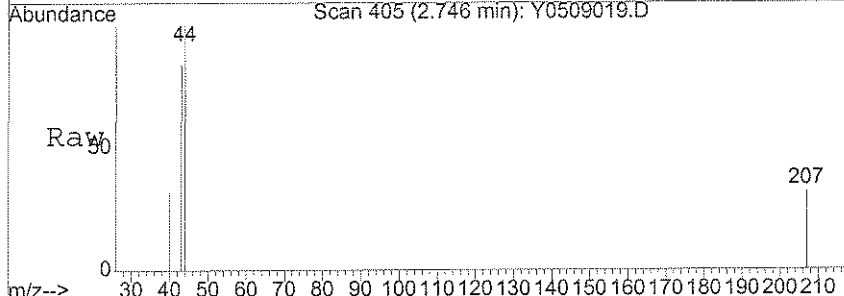
response 834

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	7.19#
0.00	0.00	0.00
0.00	0.00	0.00



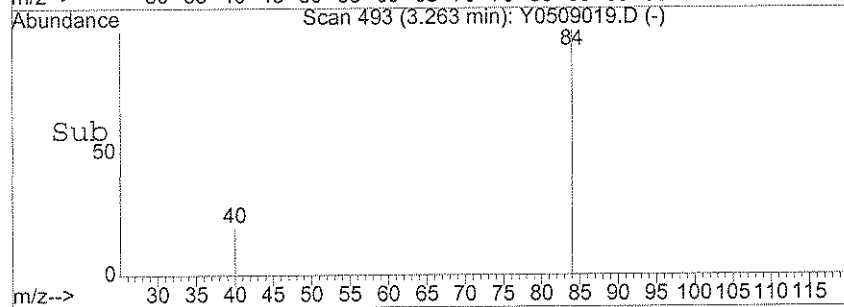
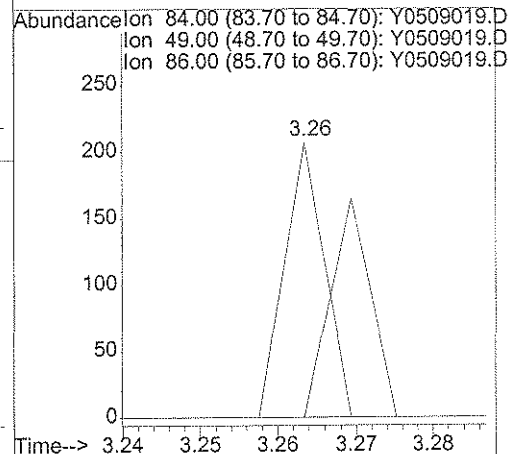
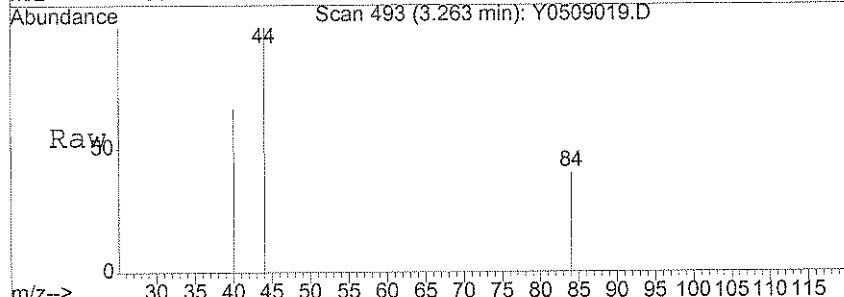
#11
 Acetone
 Concen: 0.86 ug/l
 RT: 2.75 min Scan# 405
 Delta R.T. 0.01 min
 Lab File: Y0509019.D
 Acq: 9 May 2008 20:10

Tgt Ion: 43 Resp: 834
 Ion Ratio Lower Upper
 43 100
 58 7.2 21.3 31.9#



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.26 min Scan# 493
 Delta R.T. -0.01 min
 Lab File: Y0509019.D
 Acq: 9 May 2008 20:10

Tgt Ion: 84 Resp: 73
 Ion Ratio Lower Upper
 84 100
 49 79.5 112.5 152.5#
 86 0.0 39.5 79.5#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-005
 Lab File ID: Y0509020.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 20:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-005
 Lab File ID: Y0509020.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 20:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-005
 Lab File ID: Y0509020.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 20:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

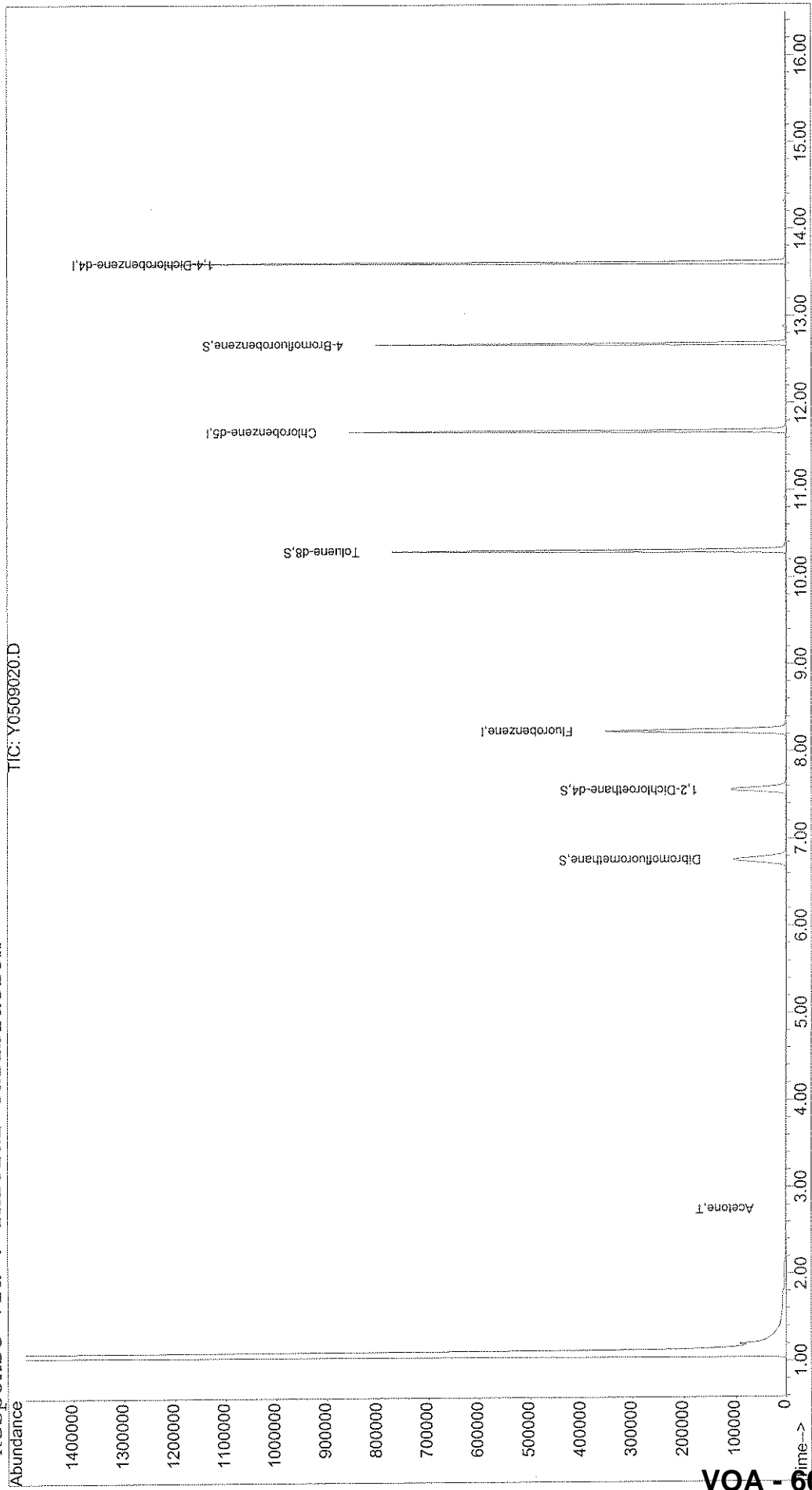
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509020.D Vial: 16
Acq On : 9 May 2008 20:35 Operator: DGA
Sample : JPL107-005 Inst : Yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:37 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



VOA - 60

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509020.D
 Acq On : 9 May 2008 20:35
 Sample : JPL107-005
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:37 2008

Vial: 16
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	410490	50.00	ug/l	0.00	80.39%
54) Chlorobenzene-d5	11.68	82	210571	50.00	ug/l	0.00	86.09%
74) 1,4-Dichlorobenzene-d4	13.61	152	268357	50.00	ug/l	0.00	76.57%

System Monitoring Compounds

36) Dibromofluoromethane	6.76	111	136717	50.91	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	101.82%	
40) 1,2-Dichloroethane-d4	7.56	65	140077	54.62	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.24%	
55) Toluene-d8	10.30	98	443725	48.67	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.34%	
76) 4-Bromofluorobenzene	12.68	95	192573	55.20	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	110.40%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.36	50	621	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	2.71	101	54	N.D.		
11) Acetone	2.75	43	817	0.84	ug/l #	61
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.89	76	609	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.09	43	60	N.D.		
18) Methylene Chloride	3.28	84	86	Below Cal	#	18
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	3.65	53	111	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509020.D
 Acq On : 9 May 2008 20:35
 Sample : JPL107-005
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:37 2008

Vial: 16
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.68	43	123		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	6.32	83	59		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
37) Cyclohexane	6.84	56	75		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	7.68	78	61		N.D.	
42) 1,2-Dichloroethane	7.56	62	56		N.D.	
43) Isobutanol	0.00	43	0		N.D.	d
44) t-amyl methyl ether	0.00	73	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	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	10.37	92	54		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	10.92	166	112		N.D.	
61) 1,3-Dichloropropane	10.74	76	63		N.D.	
62) 2-Hexanone	11.01	43	109		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.69	112	56		N.D.	
66) 1-Chlorohexane	11.71	91	59		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

QAM 5/12/08

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509020.D
 Acq On : 9 May 2008 20:35
 Sample : JPL107-005
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:37 2008

Vial: 16
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	175		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	114		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.68	105	503		N.D.	
75) trans-1,4-Dichloro-2-buten	12.68	53	70		N.D.	
77) Bromobenzene	12.68	156	170		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.89	91	66		N.D.	
82) 4-Chlorotoluene	13.05	91	150		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	79		N.D.	
88) 4-Isopropyltoluene	13.59	119	304		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	182		N.D.	
90) 1,2-Dichlorobenzene	13.63	146	182		N.D.	
91) n-Butylbenzene	13.92	91	312		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	145		N.D.	
94) Hexachlorobutadiene	15.31	225	170		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	183		N.D.	

QMA 5/13/08

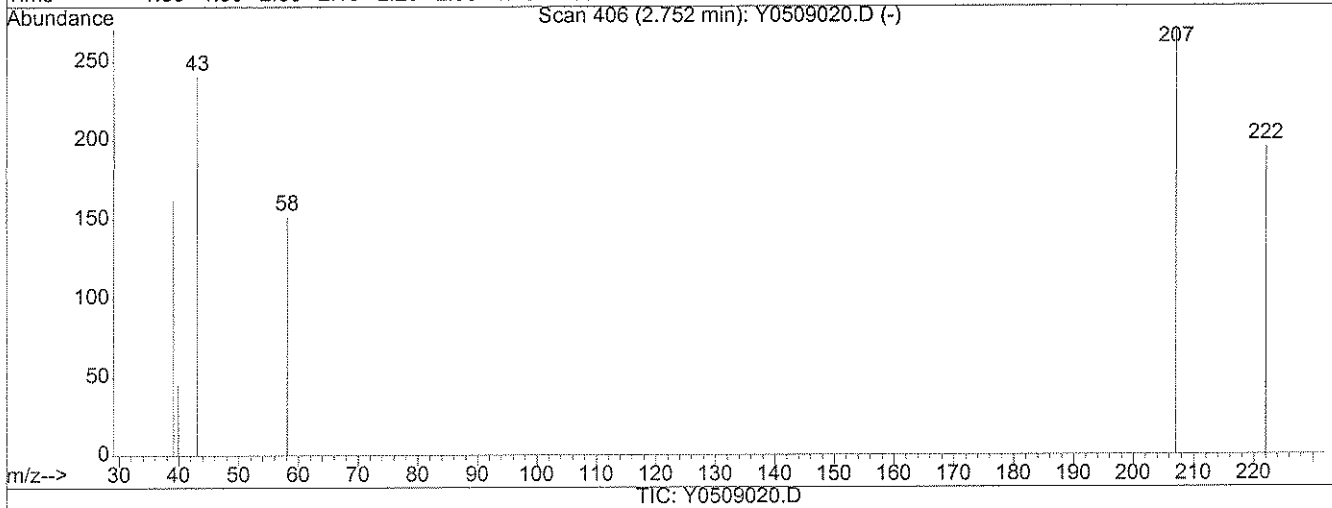
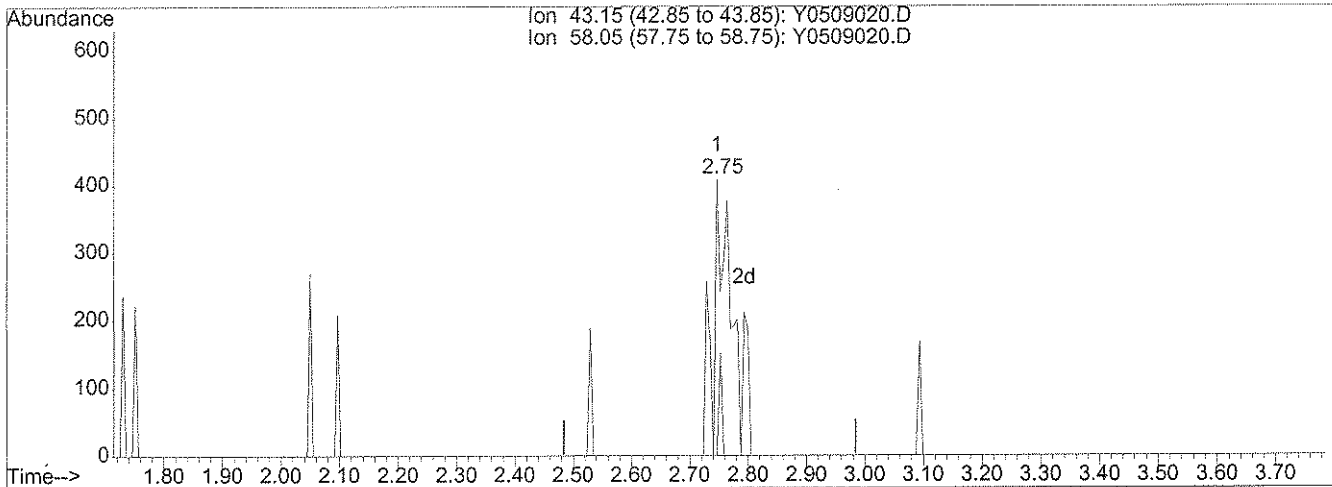
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509020.D
 Acq On : 9 May 2008 20:35
 Sample : JPL107-005
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:37 2008

Vial: 16
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

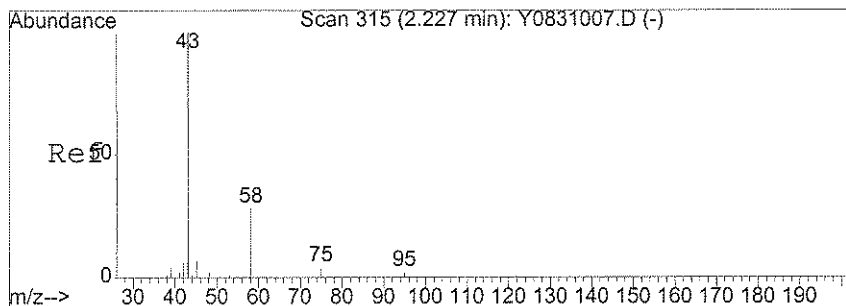


(11) Acetone (T)

2.75min 0.84ug/l

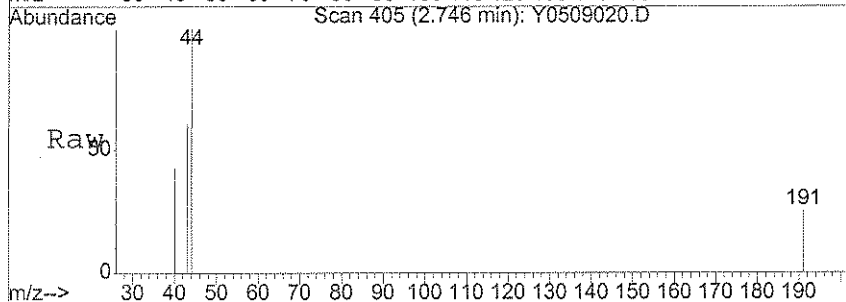
response 817

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	6.61#
0.00	0.00	0.00
0.00	0.00	0.00

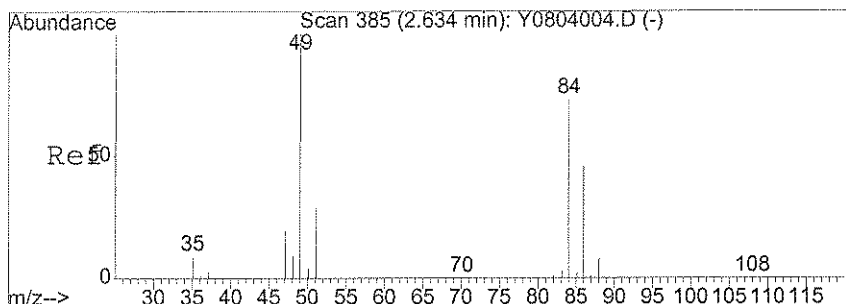
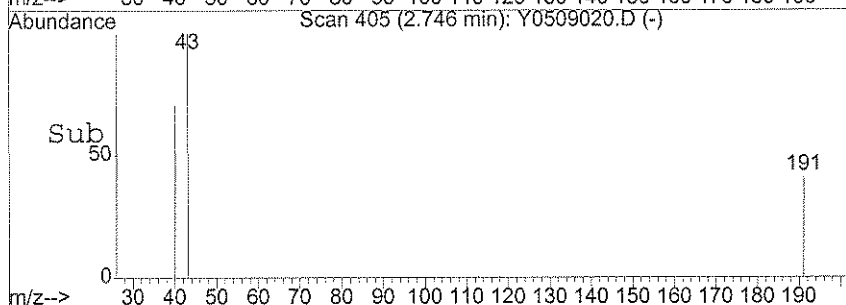
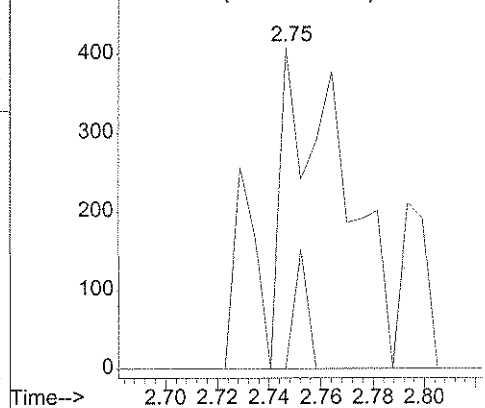


#11
 Acetone
 Concen: 0.84 ug/l
 RT: 2.75 min Scan# 405
 Delta R.T. 0.01 min
 Lab File: Y0509020.D
 Acq: 9 May 2008 20:35

Tgt Ion: 43 Resp: 817
 Ion Ratio Lower Upper
 43 100
 58 6.6 21.3 31.9#

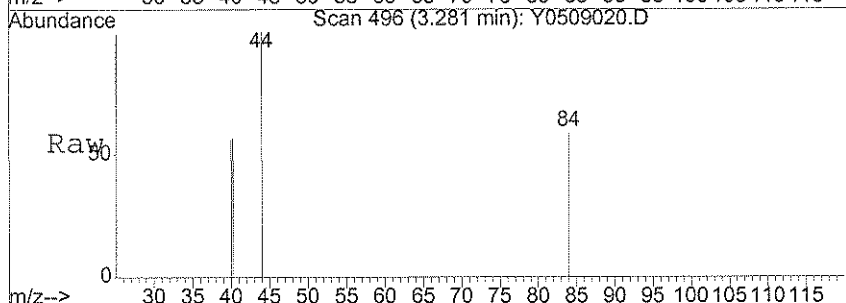


Abundance Ion 43.15 (42.85 to 43.85): Y0509020.D
 Ion 58.05 (57.75 to 58.75): Y0509020.D

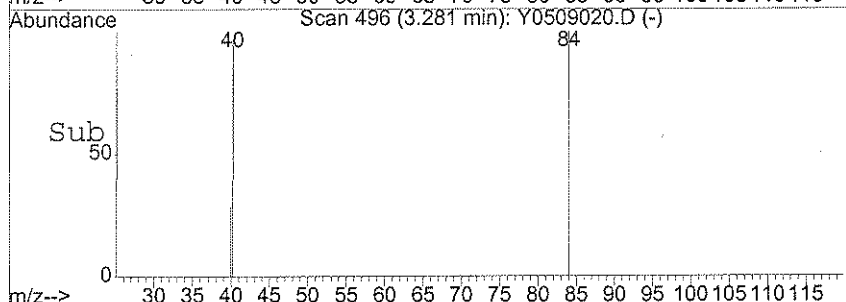
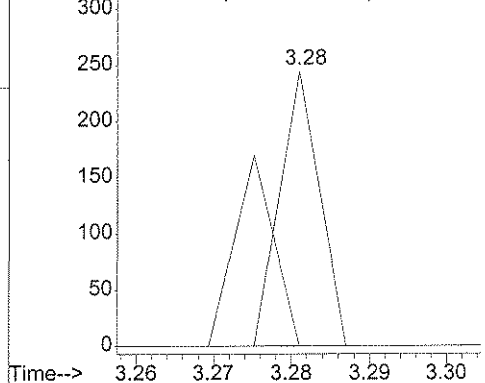


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.28 min Scan# 496
 Delta R.T. 0.01 min
 Lab File: Y0509020.D
 Acq: 9 May 2008 20:35

Tgt Ion: 84 Resp: 86
 Ion Ratio Lower Upper
 84 100
 49 0.0 112.5 152.5#
 86 69.8 39.5 79.5



Abundance Ion 84.00 (83.70 to 84.70): Y0509020.D
 Ion 49.00 (48.70 to 49.70): Y0509020.D
 Ion 86.00 (85.70 to 86.70): Y0509020.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-006
 Lab File ID: Y0509014.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 18:06
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-006
 Lab File ID: Y0509014.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 18:06
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-006
 Lab File ID: Y0509014.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 18:06
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

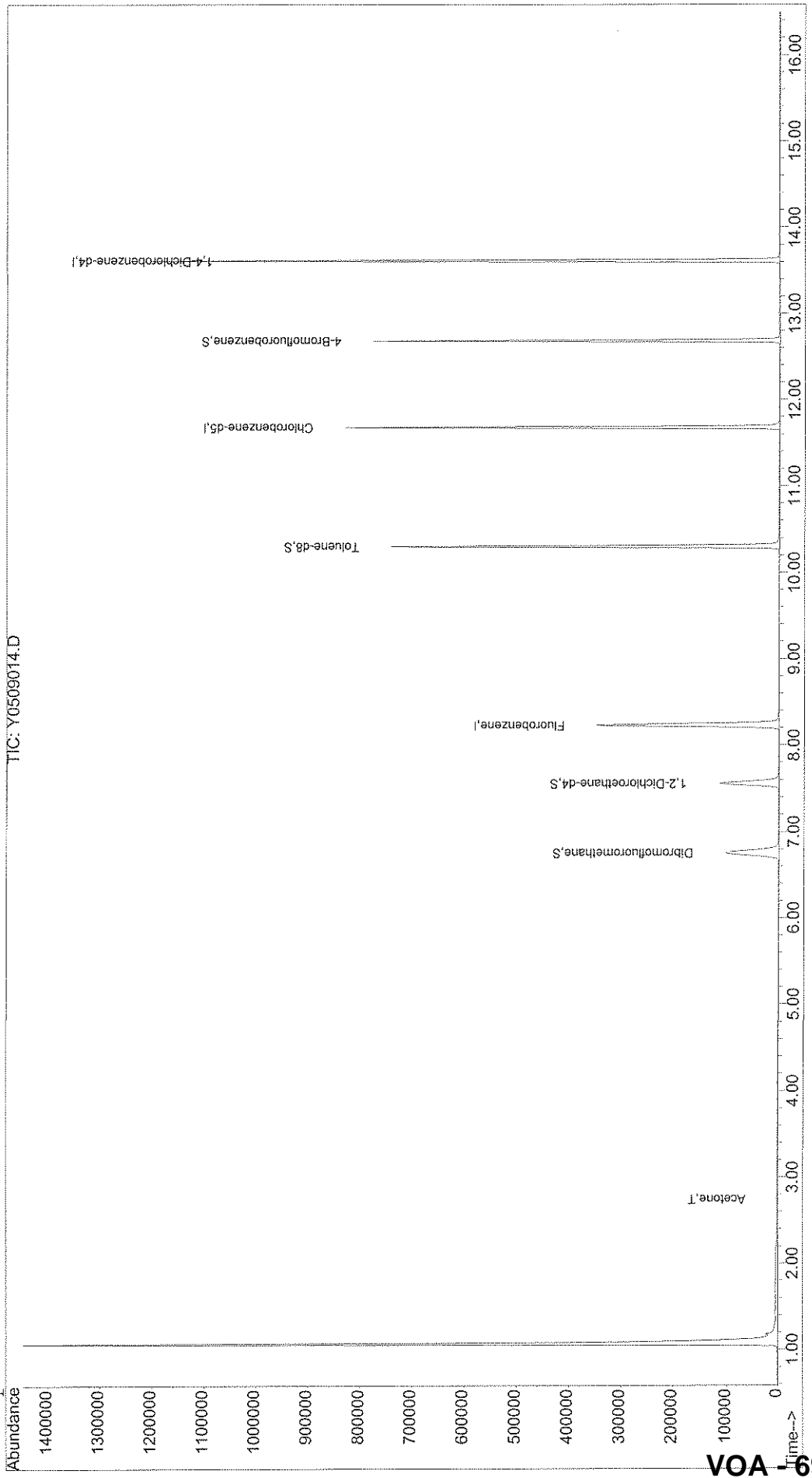
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509014.D Vial: 10
Acq On : 9 May 2008 18:06 Operator: DGA
Sample : JPL107-006 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:00 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509014.D
 Acq On : 9 May 2008 18:06
 Sample : JPL107-006
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:00 2008

Vial: 10
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	405660	50.00	ug/l	0.00	79.44%
54) Chlorobenzene-d5	11.68	82	203881	50.00	ug/l	0.00	83.35%
74) 1,4-Dichlorobenzene-d4	13.61	152	262039	50.00	ug/l	0.00	74.77%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	136097	51.29	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	102.58%	
40) 1,2-Dichloroethane-d4	7.56	65	136637	53.91	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	107.82%	
55) Toluene-d8	10.30	98	437330	49.54	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.08%	
76) 4-Bromofluorobenzene	12.68	95	187911	55.16	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	110.32%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.35	50	561	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.80	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	2.75	43	1501mS	1.56	ug/l #	87
12) Iodomethane	2.82	142	64	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.89	76	675	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	3.22	43	60	N.D.		
18) Methylene Chloride	3.27	84	78	Below Cal	#	1
19) trans-1,2-Dichloroethene	3.64	96	59	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.		

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509014.D
 Acq On : 9 May 2008 18:06
 Sample : JPL107-006
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:00 2008

Vial: 10
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.60	96	54		N.D.	
30) 2-Butanone	5.71	43	65		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	6.36	83	55		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	7.65	78	212		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.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	9.06	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	41	0		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	9.67	63	55		N.D.	
52) cis-1,3-Dichloropropene	10.05	75	61		N.D.	
53) 4-Methyl-2-pentanone	10.17	43	130		N.D.	
56) Toluene	10.36	92	234		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	11.02	97	57		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	11.09	43	53		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.71	112	69		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Handwritten signature and date: 5/13/08

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509014.D
 Acq On : 9 May 2008 18:06
 Sample : JPL107-006
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:00 2008

Vial: 10
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	176		N.D.	
69) m,p-Xylene	11.92	106	77		N.D.	
70) o-xylene	12.25	106	68		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.57	105	59		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.68	156	68		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.67	83	54		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.96	91	78		N.D.	
82) 4-Chlorotoluene	13.05	91	223		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	62		N.D.	
88) 4-Isopropyltoluene	13.60	119	402		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	206		N.D.	
90) 1,2-Dichlorobenzene	13.93	146	281		N.D.	
91) n-Butylbenzene	13.91	91	787		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.86	75	74		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	366		N.D.	
94) Hexachlorobutadiene	15.30	225	258		N.D.	
95) Naphthalene	15.36	128	389		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	406		N.D.	

QUM 5/13/08

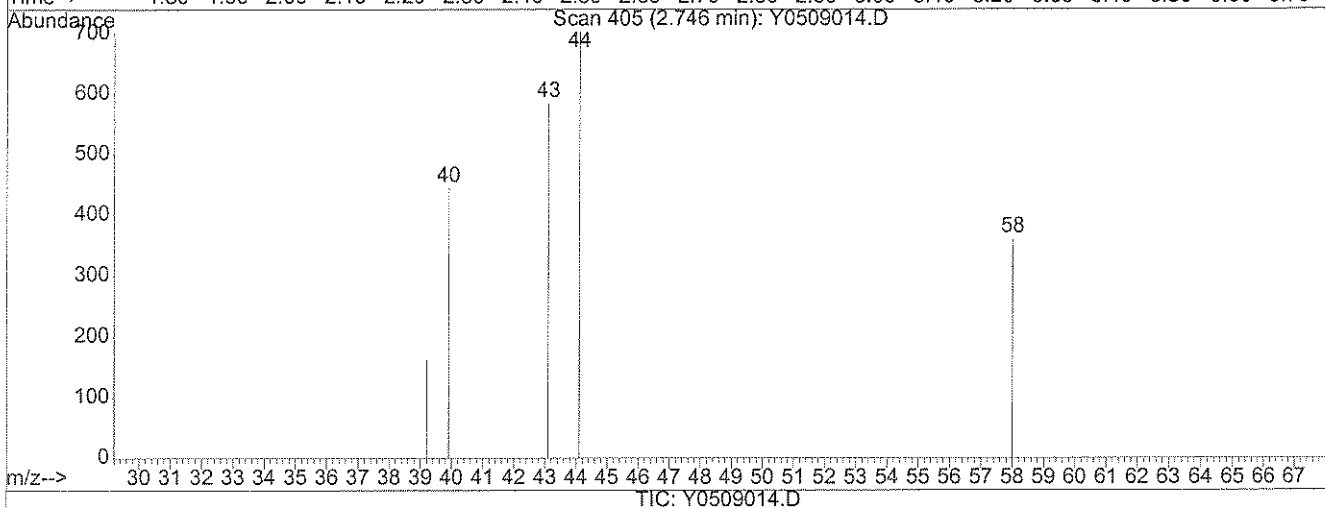
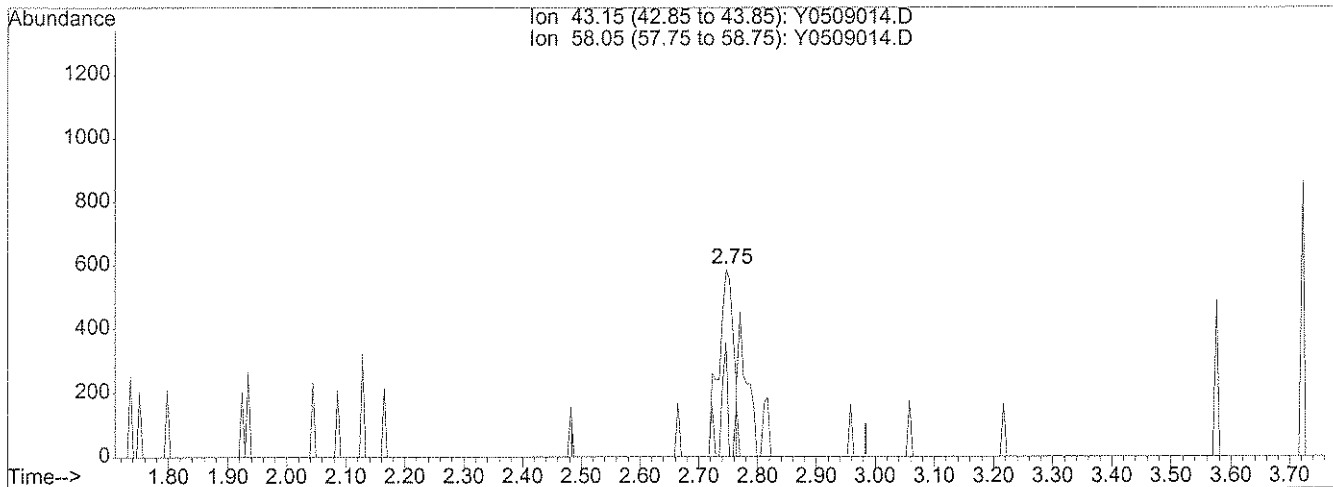
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509014.D
 Acq On : 9 May 2008 18:06
 Sample : JPL107-006
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 12:37 2008

Vial: 10
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration



(11) Acetone (T)

2.75min 1.07ug/l

response 1037

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	20.15#
0.00	0.00	0.00
0.00	0.00	0.00

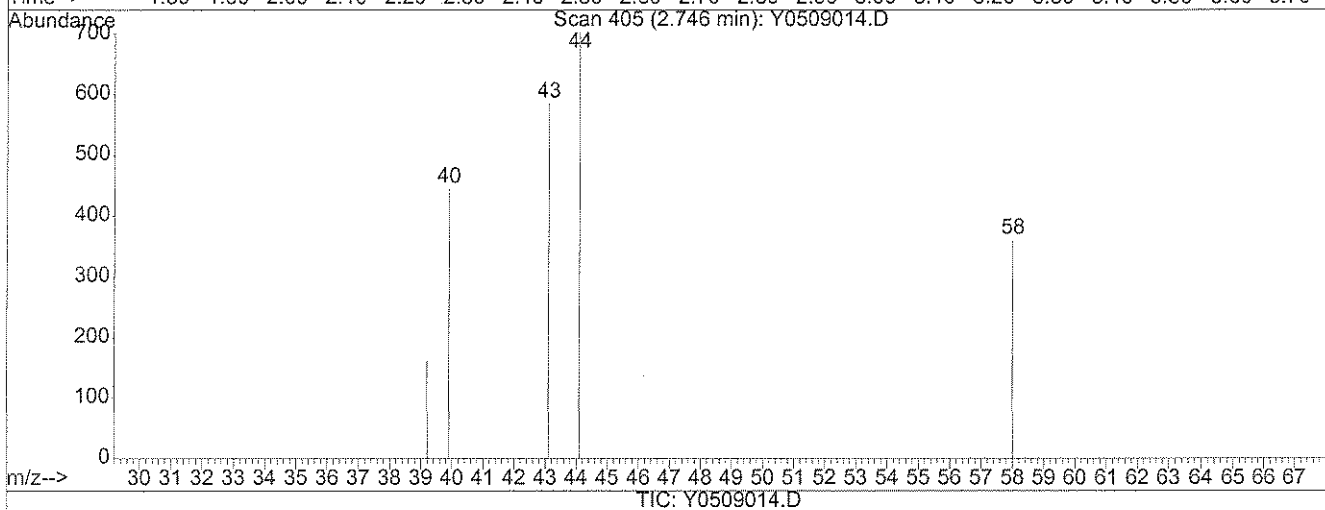
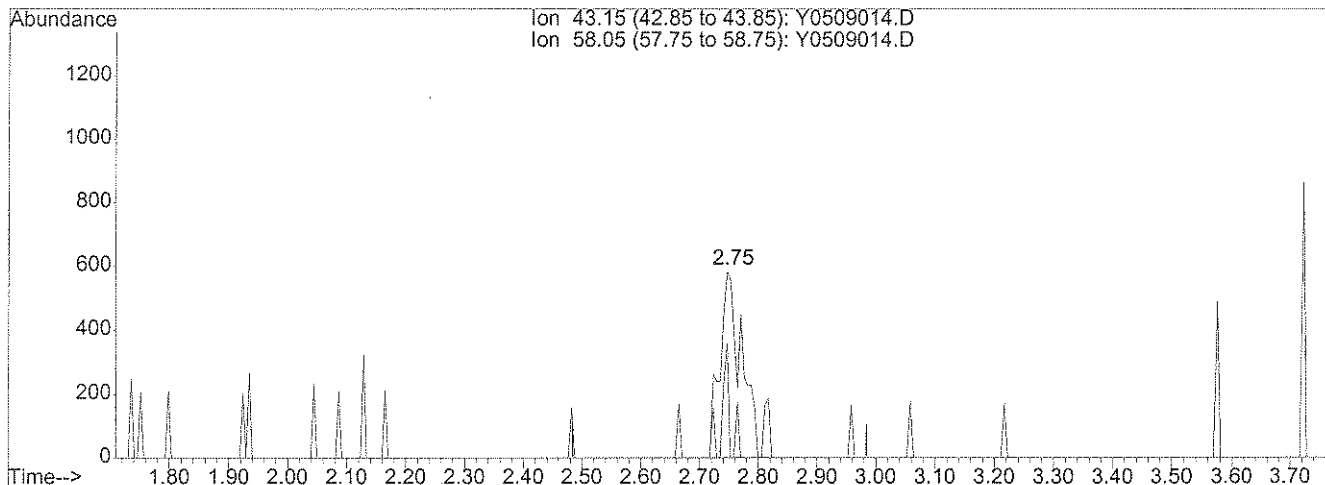
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509014.D
 Acq On : 9 May 2008 18:06
 Sample : JPL107-006
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:00 2008

Vial: 10
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

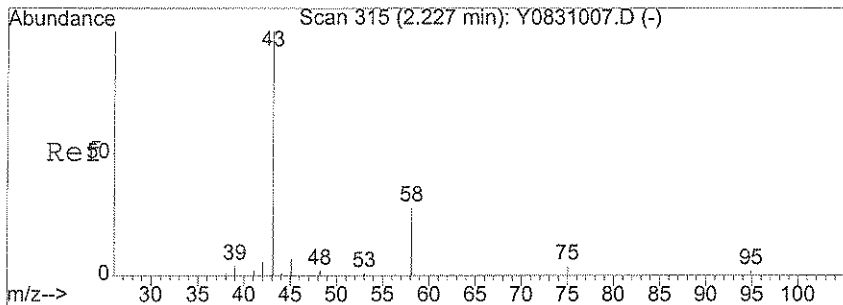


(11) Acetone (T)

2.75min 1.56ug/l m

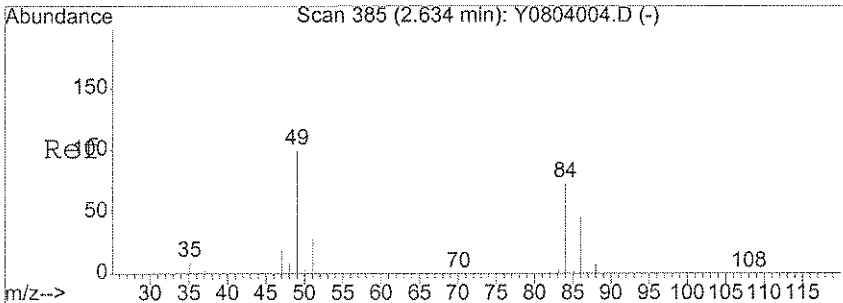
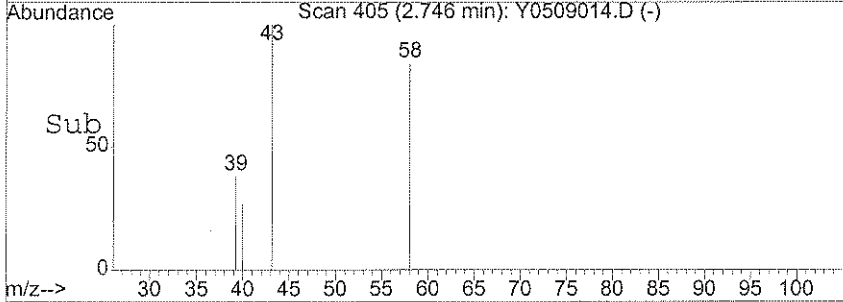
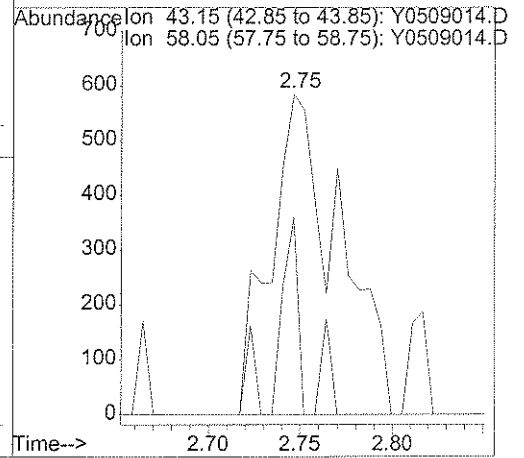
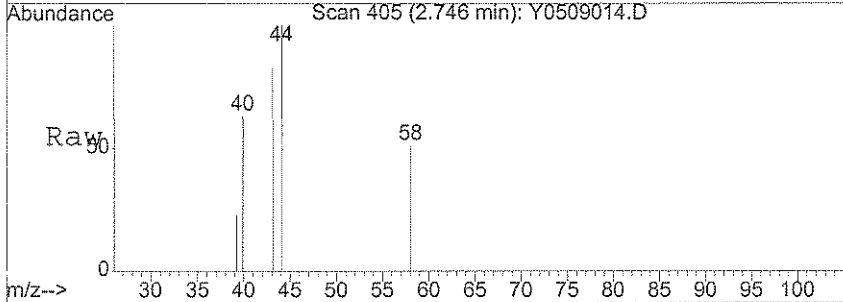
response 1501

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	13.92#
0.00	0.00	0.00
0.00	0.00	0.00



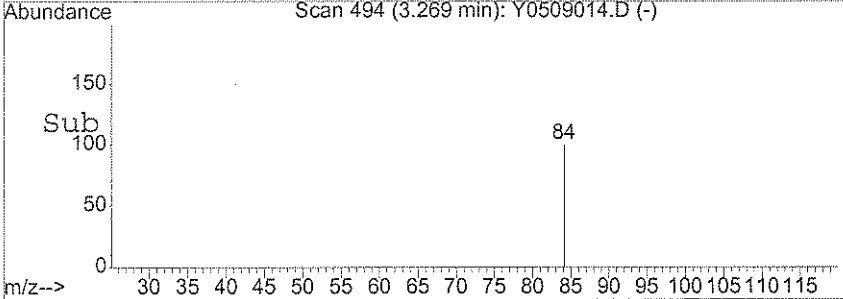
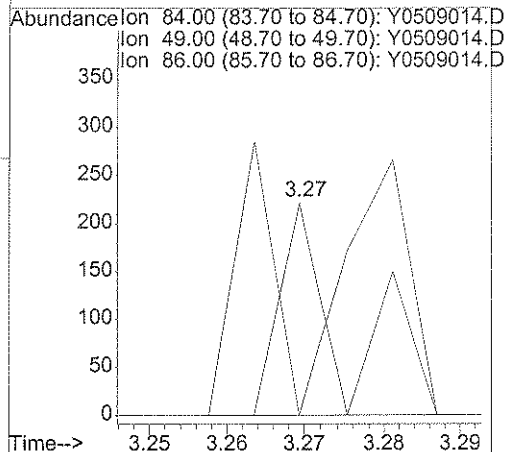
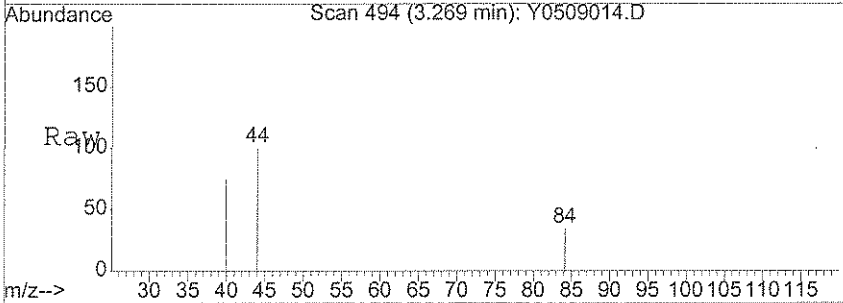
#11
 Acetone
 Concen: 1.56 ug/l m
 RT: 2.75 min Scan# 405
 Delta R.T. 0.01 min
 Lab File: Y0509014.D
 Acq: 9 May 2008 18:06

Tgt Ion: 43 Resp: 1501
 Ion Ratio Lower Upper
 43 100
 58 13.9 21.3 31.9#



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.27 min Scan# 494
 Delta R.T. 0.00 min
 Lab File: Y0509014.D
 Acq: 9 May 2008 18:06

Tgt Ion: 84 Resp: 78
 Ion Ratio Lower Upper
 84 100
 49 0.0 112.5 152.5#
 86 129.5 39.5 79.5#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-007
 Lab File ID: Y0509012.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 17:17
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-007
 Lab File ID: Y0509012.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 17:17
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-007
 Lab File ID: Y0509012.D
 Date Collected: 05/07/2008
 Date/Time Analyzed: 05/09/2008 17:17
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

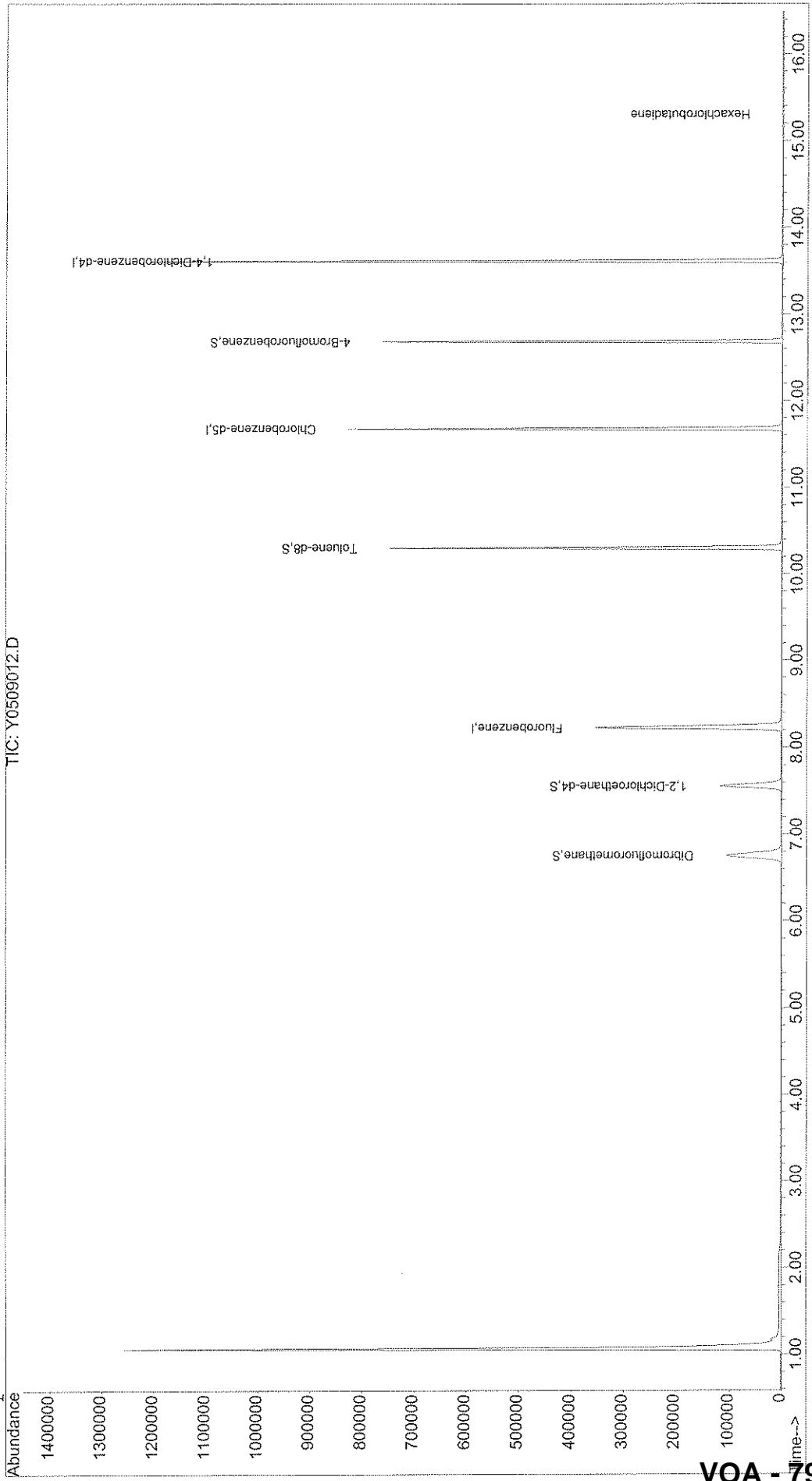
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509012.D
Acq On : 9 May 2008 17:17 Vial: 8
Sample : JPL107-007 TB Operator: DGA
Misc : #2 5mL+IS/SS(MV8-45-10) Inst : Yoda
MS Integration Params: rteint.p Multiplr: 1.00
Quant Time: May 12 10:32 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509012.D
 Acq On : 9 May 2008 17:17
 Sample : JPL107-007 TB
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 10:32 2008

Vial: 8
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	411104	50.00	ug/l	0.00	80.51%
54) Chlorobenzene-d5	11.68	82	203294	50.00	ug/l	0.00	83.11%
74) 1,4-Dichlorobenzene-d4	13.61	152	261898	50.00	ug/l	0.00	74.73%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	137339	51.07	ug/l	-0.01	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	102.14%	
40) 1,2-Dichloroethane-d4	7.56	65	137442	53.51	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	107.02%	
55) Toluene-d8	10.30	98	436263	49.56	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.12%	
76) 4-Bromofluorobenzene	12.68	95	184261	54.12	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	108.24%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0		N.D.	
3) Chloromethane	1.36	50	192		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	2.70	101	197		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	2.89	76	729		N.D.	
15) Allyl chloride	0.00	76	0		N.D.	
16) Acetonitrile	0.00	40	0		N.D.	d
17) Methyl Acetate	3.15	43	74		N.D.	
18) Methylene Chloride	3.29	84	60		Below Cal	# 65
19) trans-1,2-Dichloroethene	3.67	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	0.00	73	0		N.D.	

QANT 5/13/08

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509012.D
 Acq On : 9 May 2008 17:17
 Sample : JPL107-007 TB
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 10:32 2008

Vial: 8
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.58	43	73		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	6.00	41	58		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	6.70	97	56		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	7.64	78	63		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.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	9.06	83	65		N.D.	
47) 1,2-Dichloropropane	8.95	63	60		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	9.49	83	62		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	10.38	92	329		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	11.13	43	118		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.71	112	54		N.D.	
66) 1-Chlorohexane	11.71	91	64		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Quant 5/12/08

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509012.D
 Acq On : 9 May 2008 17:17
 Sample : JPL107-007 TB
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 10:32 2008

Vial: 8
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

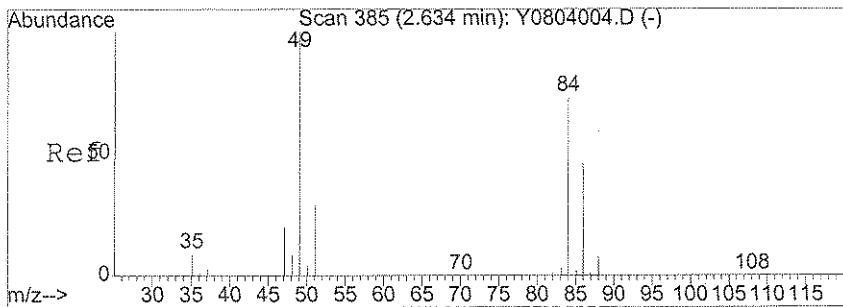
Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.80	91	54		N.D.	
69) m,p-Xylene	11.91	106	71		N.D.	
70) o-xylene	12.25	106	75		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.56	105	294		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	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.96	91	239		N.D.	
82) 4-Chlorotoluene	13.05	91	300		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.57	146	54		N.D.	
88) 4-Isopropyltoluene	13.59	119	638		N.D.	
89) 1,4-Dichlorobenzene	13.62	146	243		N.D.	
90) 1,2-Dichlorobenzene	13.92	146	137		N.D.	
91) n-Butylbenzene	13.92	91	713		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.52	75	66		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	743		N.D.	
94) Hexachlorobutadiene	15.31	225	478	0.20	ug/l	# < 1/2 PQL
95) Naphthalene	15.36	128	394		N.D.	26
96) 1,2,3-Trichlorobenzene	15.56	180	369		N.D.	

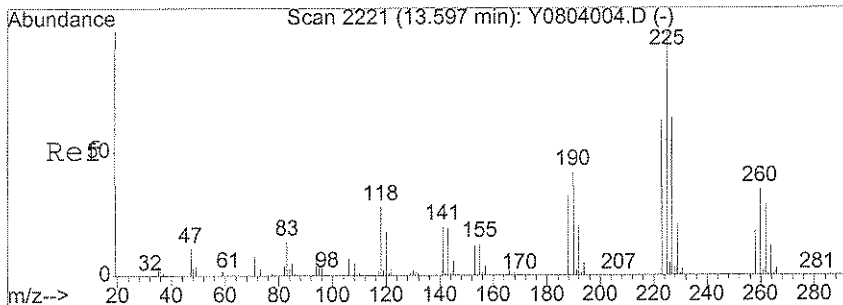
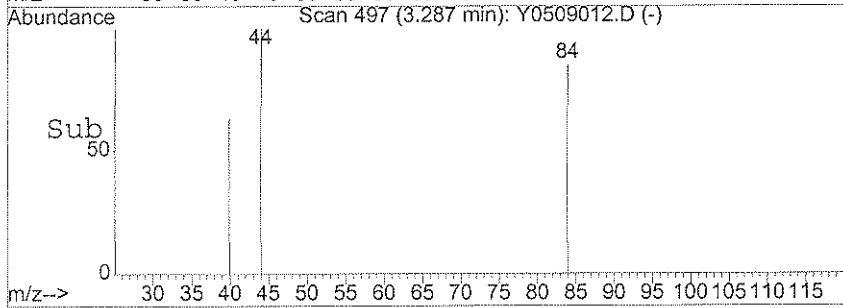
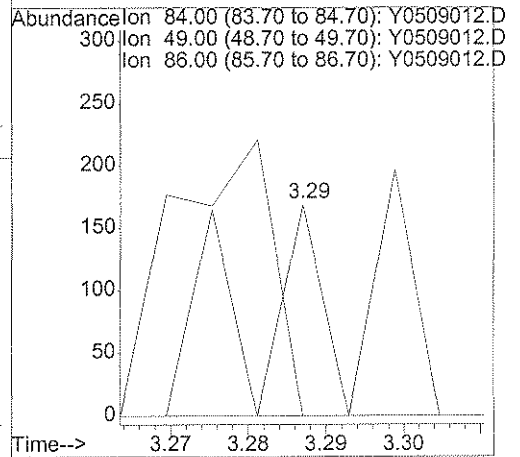
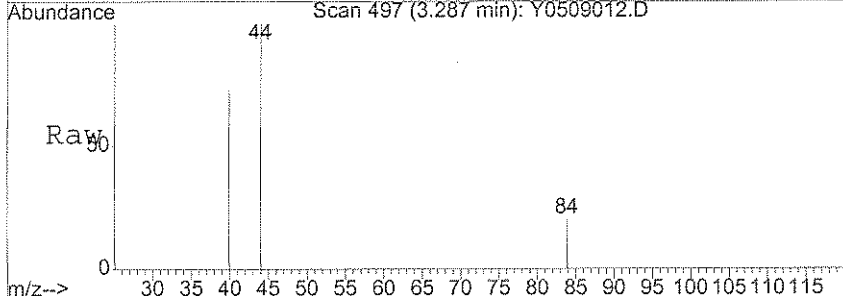
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26
DGA 5/13/08

Handwritten: DGA 5/13/08



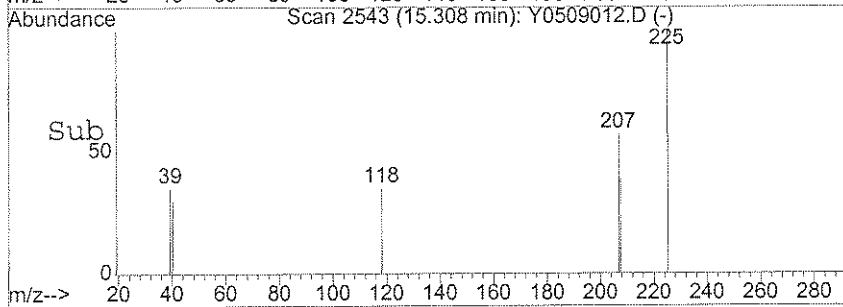
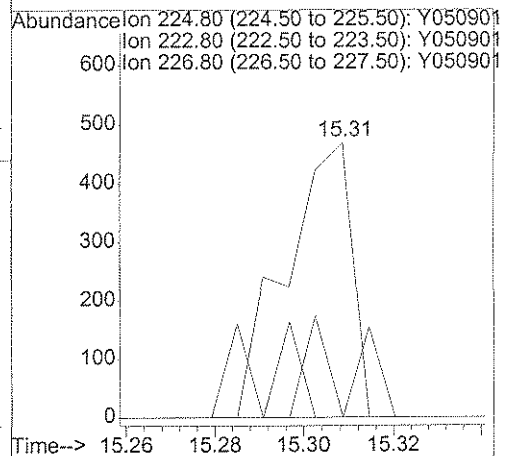
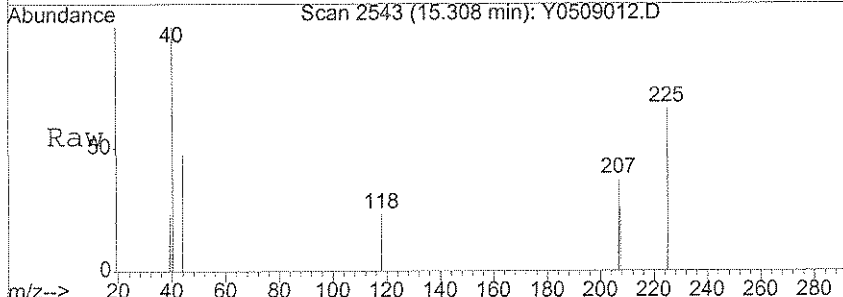
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.29 min Scan# 497
 Delta R.T. 0.02 min
 Lab File: Y0509012.D
 Acq: 9 May 2008 17:17

Tgt Ion	Resp	Lower	Upper
84	100		
49	115.0	112.5	152.5
86	0.0	39.5	79.5#



#94
 Hexachlorobutadiene
 Concen: 0.20 ug/l
 RT: 15.31 min Scan# 2543
 Delta R.T. 0.01 min
 Lab File: Y0509012.D
 Acq: 9 May 2008 17:17

Tgt Ion	Resp	Lower	Upper
225	100		
223	0.0	50.2	75.2#
227	11.5	50.2	75.4#



TIC DATA

SDG #JPL107

Volatiles Analysis

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-5

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-001
 Lab File ID: Y0509016.D
 Date Collected: 05/07/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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16				
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29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509016.D Vial: 12
Acq On : 9 May 2008 18:56 Operator: DGA
Sample : JPL107-001 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509016.D Y8260W.M Mon May 12 13:03:12 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-4

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-002
 Lab File ID: Y0509017.D
 Date Collected: 05/07/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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					
13					
14					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509017.D Vial: 13
Acq On : 9 May 2008 19:20 Operator: DGA
Sample : JPL107-002 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509017.D Y8260W.M Mon May 12 13:04:31 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-3

Lab Name: Pace Analytical Services

SDG No.: JPL107

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: R027990

Lab Sample ID: JPL107-003

Lab File ID: Y0509018.D

Date Collected: 05/07/2008

Date Analyzed: 05/09/2008

Dilution Factor: 1.0

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
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				
13				
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29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509018.D Vial: 14
Acq On : 9 May 2008 19:45 Operator: DGA
Sample : JPL107-003 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509018.D Y8260W.M Mon May 12 13:07:21 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-2

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-004
 Lab File ID: Y0509019.D
 Date Collected: 05/07/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509019.D Vial: 15
Acq On : 9 May 2008 20:10 Operator: DGA
Sample : JPL107-004 Inst : yoda
Misc : #4 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509019.D Y8260W.M Mon May 12 13:09:05 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-12-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL107

Run Sequence: R027990

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL107-005

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

Lab File ID: Y0509020.D

Level: (LOW/MED) _____

Date Collected: 05/07/2008

% Moisture: not dec. _____

Date Analyzed: 05/09/2008

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509020.D Vial: 16
Acq On : 9 May 2008 20:35 Operator: DGA
Sample : JPL107-005 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509020.D Y8260W.M Mon May 12 13:37:37 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-006
 Lab File ID: Y0509014.D
 Date Collected: 05/07/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\050908\Y0509014.D Vial: 10
Acq On : 9 May 2008 18:06 Operator: DGA
Sample : JPL107-006 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509014.D Y8260W.M Mon May 12 13:00:50 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-10-05/07/08

Lab Name: Pace Analytical Services
 SDG No.: JPL107
 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: R027990
 Lab Sample ID: JPL107-007
 Lab File ID: Y0509012.D
 Date Collected: 05/07/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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29				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509012.D Vial: 8
Acq On : 9 May 2008 17:17 Operator: DGA
Sample : JPL107-007 TB Inst : yoda
Misc : #2 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509012.D Y8260W.M Mon May 12 10:33:19 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B050908MVOWY2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL107

Run Sequence: R027990

Matrix: (SOIL/WATER) Water

Lab Sample ID: B050908MVOWY2

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

Lab File ID: Y0509011.D

Level: (LOW/MED) _____

Date Collected: _____

% Moisture: not dec. _____

Date Analyzed: 05/09/2008

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

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				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509011.D Vial: 7
Acq On : 9 May 2008 16:52 Operator: DGA
Sample : B050908MVOWY2 Inst : yoda
Misc : 5mL PFW+IS/SS (MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509011.D Y8260W.M Mon May 12 10:33:31 2008

Metals Data

JPL107

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL107

SOW No.: _____

Sample No.	Lab Sample ID
MW-12-5	JPL107-001
MW-12-5MS	JPL107-001MS
MW-12-5MSD	JPL107-001MSD
MW-12-4	JPL107-002
MW-12-3	JPL107-003
MW-12-2	JPL107-004
MW-12-1	JPL107-005
EB-10-05/07/08	JPL107-006
EB-10-05/07/08MS	JPL107-006MS
EB-10-05/07/08MSD	JPL107-006MSD

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: Bill Ambacher

Date: 6/14/08

Title: Inorganics Technical Director

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-5

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL107

Matrix (soil/water): Water

Lab Sample ID: JPL107-001

Level (low/med): LOW

Date Received: 05/08/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.29			M	R028287
7440-70-2	Calcium	44000			P	R028697
7440-47-3	Chromium	10.6			M	R028287
7439-89-6	Iron	296			P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	12600			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	35100			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 10:37

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL107

Matrix (soil/water): Water

Lab Sample ID: JPL107-002

Level (low/med): LOW

Date Received: 05/08/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.80			M	R028287
7440-70-2	Calcium	57200			P	R028697
7440-47-3	Chromium	4.69			M	R028287
7439-89-6	Iron	100	U		P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	14300			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	22500			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 10:37

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL107

Matrix (soil/water): Water

Lab Sample ID: JPL107-003

Level (low/med): LOW

Date Received: 05/08/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	40300			P	R028697
7440-47-3	Chromium	4.39			M	R028287
7439-89-6	Iron	100	U		P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	15000			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	23600			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 10:37

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL107

Matrix (soil/water): Water

Lab Sample ID: JPL107-004

Level (low/med): LOW

Date Received: 05/08/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	67300			P	R028697
7440-47-3	Chromium	5.75			M	R028287
7439-89-6	Iron	319			P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	22800			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	28200			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 10:37

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-12-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL107

Matrix (soil/water): Water

Lab Sample ID: JPL107-005

Level (low/med): LOW

Date Received: 05/08/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	52500			P	R028697
7440-47-3	Chromium	8.11			M	R028287
7439-89-6	Iron	147			P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	20400			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	22400			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/14/2008 10:37

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-10-05/07/08

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL107Matrix (soil/water): WaterLab Sample ID: JPL107-006Level (low/med): LOWDate Received: 05/08/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	5000	U		P	R028697
7440-47-3	Chromium	1.53			M	R028287
7439-89-6	Iron	100	U		P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	5000	U		P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/14/2008 10:37

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-5 **Date/Time Collected:** 05/07/2008 07:51
Lab Sample ID: JPL107-001 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E150.1/29160 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	05/08/2008	05/08/2008	R027942

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	280		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.4		0.20	0.055	05/08/2008	05/08/2008	R027961
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/08/2008	05/08/2008	R027961
Sulfate as SO4	14808-79-8	10	22		10	1.7	05/08/2008	05/08/2008	R027961
Chloride	16887-00-6	10	15		10	0.76	05/08/2008	05/08/2008	R027961
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	180		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-5 **Date/Time Collected:** 05/07/2008 07:51
Lab Sample ID: JPL107-001 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E314.0/29618 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	3.6		2.0	0.28	05/27/2008	05/28/2008	R028359

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-4 **Date/Time Collected:** 05/07/2008 08:32
Lab Sample ID: JPL107-002 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E150.1/29160 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	05/08/2008	05/08/2008	R027942

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	240		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.1		0.20	0.055	05/08/2008	05/08/2008	R027961
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/08/2008	05/08/2008	R027961
Sulfate as SO4	14808-79-8	10	32		10	1.7	05/08/2008	05/08/2008	R027961
Chloride	16887-00-6	10	14		10	0.76	05/08/2008	05/08/2008	R027961
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-4 **Date/Time Collected:** 05/07/2008 08:32
Lab Sample ID: JPL107-002 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E314.0/29618 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	3.5		2.0	0.28	05/27/2008	05/28/2008	R028359

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-3 **Date/Time Collected:** 05/07/2008 09:12
Lab Sample ID: JPL107-003 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E150.1/29160 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	05/08/2008	05/08/2008	R027942

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	230		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/08/2008	05/08/2008	R027961
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/08/2008	05/08/2008	R027961
Sulfate as SO4	14808-79-8	10	29		10	1.7	05/08/2008	05/08/2008	R027961
Chloride	16887-00-6	10	15		10	0.76	05/08/2008	05/08/2008	R027961
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	150		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-3 **Date/Time Collected:** 05/07/2008 09:12
Lab Sample ID: JPL107-003 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E314.0/29618 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/27/2008	05/28/2008	R028359

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-2 **Date/Time Collected:** 05/07/2008 09:57
Lab Sample ID: JPL107-004 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E150.1/29160 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.5		0.10	0.10	05/08/2008	05/08/2008	R027942

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	300		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.5		0.20	0.055	05/08/2008	05/08/2008	R027961
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/08/2008	05/08/2008	R027961
Sulfate as SO4	14808-79-8	10	43		10	1.7	05/08/2008	05/08/2008	R027961
Chloride	16887-00-6	10	19		10	0.76	05/08/2008	05/08/2008	R027961
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-2 **Date/Time Collected:** 05/07/2008 09:57
Lab Sample ID: JPL107-004 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E314.0/29618 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.9		2.0	0.28	05/27/2008	05/28/2008	R028359

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: MW-12-1 **Date/Time Collected:** 05/07/2008 10:38
Lab Sample ID: JPL107-005 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E150.1/29160 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	05/08/2008	05/08/2008	R027942

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	290		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.3		0.20	0.055	05/08/2008	05/08/2008	R027961
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/08/2008	05/08/2008	R027961
Sulfate as SO4	14808-79-8	10	48		10	1.7	05/08/2008	05/08/2008	R027961
Chloride	16887-00-6	10	24		10	0.76	05/08/2008	05/08/2008	R027961
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	190		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client:	Battelle	Project:	JPL Groundwater Monitoring
SDG Number:	JPL107		
Sample Number:	MW-12-1	Date/Time Collected:	05/07/2008 10:38
Lab Sample ID:	JPL107-005	Date/Time Received:	05/08/2008 08:30
Method/Qbatch*:	E314.0/29740	Unit:	ug/L
Instrument:	Ion Chromatograph (2)	File:	N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/29/2008	05/30/2008	R028484

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: EB-10-05/07/08 **Date/Time Collected:** 05/07/2008 10:21
Lab Sample ID: JPL107-006 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E150.1/29160 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.8		0.10	0.10	05/08/2008	05/08/2008	R027942

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	2.0	U	2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29174 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027961\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/08/2008	05/08/2008	R027961
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/08/2008	05/08/2008	R027961
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/08/2008	05/08/2008	R027961
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/08/2008	05/08/2008	R027961
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/08/2008	05/08/2008	R027961

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL107
Sample Number: EB-10-05/07/08 **Date/Time Collected:** 05/07/2008 10:21
Lab Sample ID: JPL107-006 **Date/Time Received:** 05/08/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	05/31/2008	06/02/2008	R028515

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL108

June 18, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL108
Date of Report: June 18, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-11-5	JPL108-001	VOA/MET/INO
MW-11-4	JPL108-002	VOA/MET/INO
MW-11-3	JPL108-003	VOA/MET/INO
MW-11-2	JPL108-004	VOA/MET/INO
MW-11-1	JPL108-005	VOA/MET/INO
EB-11-5/8/08	JPL108-006	VOA/MET/INO
TB-11-5/8/08	JPL108-007	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples. All samples submitted for pH analysis were received after the analytical holding time expired.

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

Volatiles Fraction:

Quality Control Analysis:

MS/MSD analyses were not performed due to insufficient sample volume. Except for cis-1,3-dichloropropene, which recovered high, all spiking analytes in the blank spike analysis recovered within control limits. Because cis-1,3-dichloropropene was not detected in any of the associated samples, no further action was taken.

All other 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."

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ICP and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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	15 minutes	All samples

ICP Metals:

For the run sequence R028697, the ICV exceeded the upper control limit for potassium. All samples contained concentrations of potassium that were less than the CRDL. Quality control data for potassium were reported and were within control limits. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028697, the ninth CCV fell below the lower control limit for potassium, calcium, iron and sodium. Only sample EB-11-5/8/08 was associated with this CCV. Results for sample EB-11-5/8/08 may be biased low. Data have not been flagged for this event.

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ICP-MS Metals:

No comments.

Miscellaneous Inorganics:

In the run sequence R027995 for "300.0 Anions", the matrix spike exceeded the established lower control limit for orthophosphate. Since all of the other quality control samples were in control, no further action was taken.

In the run sequence R028453 for "314.0 Perchlorate", the continuing calibration verification standard 1 exceeded the established upper control limits. The samples being reported within this bracketing continuing calibration verification standard were below the reporting limits, any samples that were detected above the reporting limit were re-analyzed.

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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.
 - ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.
 - Z Denotes data deemed unusable by the analyst.
- 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

Pace Analytical Services, Inc. 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,


for
Kara Godineaux
Project Manager

6/18/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/18/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PAGE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG

Sample MixID (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, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
WD 001	JPL108-05/09/2008 08:45 AM	05/08/2008 08:05 AM	MW-11-5	A-	A-	IN	IN	IN	IN	IN	IN	IN
WD 002	JPL108-05/09/2008 08:45 AM	05/08/2008 09:02 AM	MW-11-4	A-	A-	IN	IN	IN	IN	IN	IN	IN
WD 003	JPL108-05/09/2008 08:45 AM	05/08/2008 09:45 AM	MW-11-3	A-	A-	IN	IN	IN	IN	IN	IN	IN
WD 004	JPL108-05/09/2008 08:45 AM	05/08/2008 10:20 AM	MW-11-2	A-	A-	IN	IN	IN	IN	IN	IN	IN
WD 005	JPL108-05/09/2008 08:45 AM	05/08/2008 10:57 AM	MW-11-1	A-	A-	IN	IN	IN	IN	IN	IN	IN
WD 006	JPL108-05/09/2008 08:45 AM	05/08/2008 10:39 AM	EB-11-5/8/08	A-	A-	IN	IN	IN	IN	IN	IN	IN
WD 007	JPL108-05/09/2008 08:45 AM	05/08/2008 12:00 AM	TB-11-5/8/08								IN	

Approved By: _____ On: _____
 Notes: _____

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

Matrices: Water=WD
 FORM LTL-PM-8.0

COMPANY: BOTTLE
 ADDRESS: 3990 OLD TOWN AVE. C-205
SAV DIELMO, CA 92110
 ATTENTION: DAVID COVER
 PROJECT NAME: SPL CW NW 2008
 PROJECT CONTACT: DAVID COVER
 TELEPHONE: 619-728-7311 FAX:
 JOB/P.O. NO.: 6486090/ 214319

CHAIN OF CUSTODY RECORD SDG # _____
 46083 PAGE 1 OF 1

WORK ORDER ID# SPL108
 L# 7811
 SUBMITTED AT: _____

TESTS TO PERFORM

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS	TESTS TO PERFORM
W	5	VOL (514.2)
S	X	TOTAL Cr (200.8)
X	X	LEAD (200.8)
X	X	ARSENIC (200.8)
X	X	CADMIUM (200.8)
X	X	COPPER (200.8)
X	X	CHLORIDE (314.0)
X	X	NITRATE (300.0)

LAB#	SAMPLE ID / LOCATION	DATE	TIME	W	S	X	X	X	X	X	X	REMARKS
1	MW-11-5	5/8/08	805									LEVEL III ac
2	MW-11-4		902									
3	MW-11-3		945									
4	MW-11-2		1020									
5	MW-11-1		1057									
6	EB-11-5/8/08		1039									EQUIPMENT BLANK
7	TR-11-5/8/08											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

BILLING INFORMATION (DIFFERENT THAN ABOVE)
 NAME: BOTTLE
 ADDRESS: 585 KINLO AVE.
 CITY/STATE/ZIP: COLUMBUS, OH 43201

RECEIVED BY (SIGN AND PRINT): RACHEL FRANK
 DATE/TIME: 5/8/08 1300

RECEIVED BY (SIGN AND PRINT): [Signature]
 DATE/TIME: 5/9/08 8:45

LABORATORY APPROVAL: _____

* 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

Laucks
 Testing Laboratories, Inc.
 940 South Henry St., Seattle, WA 98106 (206) 767-3063 FAX 767-3063
 1116 Lakeside Ave., National, VA 9902 (939) 236-4695 FAX 432-1265

Cooler Receipt Form
Pace Analytical Services, Inc.

SDG: JPL108 Taken By: Client
Cooler: AAD611 Transferred: FedEx
COC #: 46083
Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 5/9/2008
Date cooler was opened: 5/9/2008 8:45AM

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? YES
if YES, record carrier name and airbill number: 865543091375
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? 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: RF

B. LOG-IN PHASE:

Date samples were logged-in: 5/9/2008 9:00AM
Logged-in by Rachel Frank (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? NO
18. Temperatures: 2.1

DISCREPANCIES:

Samples 1 was received out of hold for PH, sample 2 went out of hold while I was logging the samples in, all other samples are close to hold times.

Date Printed: 5/9/2008 9:35

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL108

Cooler: AAD611

Temperatures: 2.1

COC #: 46083

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL108-001	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
JPL108-002	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
JPL108-003	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
JPL108-004	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
JPL108-005	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
JPL108-006	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
JPL108-007	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
Pace Analytical Services, Inc.**

SDG: JPL108

Cooler: AAD611

Temperatures: 2.1

COC #: 46083

Sample	Bottle #	Bottle Description	pH	Bubbles
	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

Battelle

SDG No.: JPL108

- I. Narrative: 2-8
- II. Chain-of-Custody: 9-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-237
 - A. QC Summary Data: 1-9
 - B. Sample Data: 10-92
 - C. Standards Data: 93-209
 - D. Raw QC Data: 210-230
 - E. Bench Sheets: 231-237
- V. Metals Data: MET- 1-294
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-9
 - C. Quality Control Data: 10-50
 - D. Quarterly Verification of Instrument Parameters: 51-61
 - E. Raw Data: 62-286
 - F. Digestion & Distillation Logs: 287-294
- VI. Miscellaneous Inorganics Data: INO 1-169
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-15
 - C. Quality Control Data: 16-34
 - D. Raw Data: 35-169
- VII. Forms Summary: SUM- 1-144

Completed and checked by: Judy Ecklund Date: 6/19/08

QC SUMMARY

SDG #JPL108

Volatiles Analysis

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL108

Run Sequence: R027990

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL108-005) MW-11-1	111	108	95		0
(JPL108-004) MW-11-2	110	104	99		0
(JPL108-003) MW-11-3	108	107	98		0
(JPL108-002) MW-11-4	108	108	99		0
(JPL108-001) MW-11-5	108	110	98		0
(JPL108-006) EB-11-5/8/08	106	108	98		0
(JPL108-007) TB-11-5/8/08	105	111	98		0
(B050908MVOWY2) B050908MVOWY2	107	108	97		0
(S050908MVOWY1) S050908MVOWY1	99	113	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: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R027990 SDG No.: JPL108

BS Lab Sample ID: S050908MVOWY1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	45.54	91		60-140
Chloromethane	50.0	41.29	83		60-140
Vinyl chloride	50.0	44.93	90		60-140
Bromomethane	50.0	46.46	93		60-140
Chloroethane	50.0	45.85	92		60-140
Trichlorofluoromethane	50.0	51.1	102		60-140
1,1-Dichloroethene	50.0	49.71	99		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.61	101		60-140
Methylene chloride	50.0	44.71	89		60-140
Methyl tert-butyl ether	50.0	48.82	98		60-140
trans-1,2-Dichloroethene	50.0	45.59	91		60-140
1,1-Dichloroethane	50.0	44.23	88		60-140
2,2-Dichloropropane	50.0	52.35	105		60-140
cis-1,2-Dichloroethene	50.0	46.21	92		60-140
2-Butanone	50.0	59.72	119		60-140
Bromochloromethane	50.0	46.13	92		60-140
Chloroform	50.0	43.82	88		60-140
1,1,1-Trichloroethane	50.0	48.89	98		60-140
Carbon tetrachloride	50.0	50.67	101		60-140
1,1-Dichloropropene	50.0	53.89	108		60-140
Benzene	50.0	48.21	96		60-140
1,2-Dichloroethane	50.0	48.95	98		60-140
Trichloroethene	50.0	49.06	98		60-140
1,2-Dichloropropane	50.0	49.63	99		60-140
Dibromomethane	50.0	48.73	97		60-140
Bromodichloromethane	50.0	52.15	104		60-140
cis-1,3-Dichloropropene	50.0	75.1	150	*	60-140
4-Methyl-2-pentanone	50.0	57.47	115		60-140
Toluene	50.0	49.77	100		60-140
trans-1,3-Dichloropropene	50.0	55.78	112		60-140
1,1,2-Trichloroethane	50.0	47.25	95		60-140
Tetrachloroethene	50.0	47.89	96		60-140
1,3-Dichloropropane	50.0	51.6	103		60-140
Dibromochloromethane	50.0	52.3	105		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 63 outside limits

COMMENTS:

Date Printed: 5/20/2008 14:49

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R027990 SDG No.: JPL108
 BS Lab Sample ID: S050908MVOWY1
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	51.85	104		60-140
Chlorobenzene	50.0	46.95	94		60-140
Ethylbenzene	50.0	47.54	95		60-140
1,1,1,2-Tetrachloroethane	50.0	42.06	84		60-140
m,p-Xylene	100	96.09	96		60-140
o-Xylene	50.0	45.98	92		60-140
Styrene	50.0	48.89	98		60-140
Bromoform	50.0	44.63	89		60-140
Isopropylbenzene	50.0	48.58	97		60-140
1,1,2,2-Tetrachloroethane	50.0	48.15	96		60-140
n-Propylbenzene	50.0	53.86	108		60-140
Bromobenzene	50.0	51.64	103		60-140
1,2,3-Trichloropropane	50.0	47.74	95		60-140
2-Chlorotoluene	50.0	51.03	102		60-140
1,3,5-Trimethylbenzene	50.0	50.35	101		60-140
4-Chlorotoluene	50.0	52.54	105		60-140
tert-Butylbenzene	50.0	51.5	103		60-140
1,2,4-Trimethylbenzene	50.0	49.66	99		60-140
sec-Butylbenzene	50.0	51.3	103		60-140
4-Isopropyltoluene	50.0	55.59	111		60-140
1,3-Dichlorobenzene	50.0	45.67	91		60-140
1,4-Dichlorobenzene	50.0	44.45	89		60-140
n-Butylbenzene	50.0	50.32	101		60-140
1,2-Dichlorobenzene	50.0	43.92	88		60-140
1,2-Dibromo-3-chloropropane	50.0	44.72	89		60-140
1,2,4-Trichlorobenzene	50.0	47.23	94		60-140
Hexachlorobutadiene	50.0	48.54	97		60-140
Naphthalene	50.0	49.62	99		60-140
1,2,3-Trichlorobenzene	50.0	46.25	93		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 63 outside limits

COMMENTS:

Date Printed: 5/20/2008 14:49

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B050908MVOWY2

Lab Name Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL108

Lab File ID: Y0509011.D

Lab Sample ID: B050908MVOWY2

Date Analyzed: 05/09/2008

Time Analyzed: 16:52

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

Heated Purge: (Y/N) N

Instrument ID: 5973Y

Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S050908MVOWY1	S050908MVOWY1	Y0509006.D	05/09/2008	14:48	R027990
02	TB-11-5/8/08	JPL108-007	Y0509013.D	05/09/2008	17:42	R027990
03	EB-11-5/8/08	JPL108-006	Y0509015.D	05/09/2008	18:31	R027990
04	MW-11-5	JPL108-001	Y0509021.D	05/09/2008	20:59	R027990
05	MW-11-4	JPL108-002	Y0509022.D	05/09/2008	21:24	R027990
06	MW-11-3	JPL108-003	Y0509023.D	05/09/2008	21:49	R027990
07	MW-11-2	JPL108-004	Y0509024.D	05/09/2008	22:14	R027990
08	MW-11-1	JPL108-005	Y0509025.D	05/09/2008	22:38	R027990
09						
10						
11						
12						
13						
14						
15						
16						
17						
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30						

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBY5

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1310 SDG No.: JPL108
 Lab File ID: Y0414036.D BFB Injection Date: 04/14/2008
 Instrument ID: 5973Y BFB Injection Time: 21:43
 GC Column DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	17.8
75	30% to 60% of mass 95	48.1
95	base peak. 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	99.4
175	5% to 9% of mass 17	7.2()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.4()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	VSTD0.3	VSTD0.3	Y0414037.D	04/14/2008	22:08
02	VSTD0.5	VSTD0.5	Y0414038.D	04/14/2008	22:33
03	VSTD001	VSTD001	Y0414039.D	04/14/2008	22:58
04	VSTD005	VSTD005	Y0414040.D	04/14/2008	23:22
05	VSTD010	VSTD010	Y0414041.D	04/14/2008	23:47
06	VSTD050	VSTD050	Y0414042.D	04/15/2008	00:12
07	VSTD100	VSTD100	Y0414043.D	04/15/2008	00:36
08	VSTD200	VSTD200	Y0414044.D	04/15/2008	01:01
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFBY1

Lab Name: Pace Analytical Services Contract: _____Run Sequence: R027335 SDG No.: NBS013 JPL108 @ent 5/20/08Lab File ID: Y0415011.D BFB Injection Date: 04/15/2008Instrument ID: 5973Y BFB Injection Time: 09:55GC Column: DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18
75	30% to 60% of mass 95	48.6
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.6
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	94.8
175	5% to 9% of mass 17	8.3()1
176	greater than 95%, but less than 101% of mass 174	99.1()1
177	5% to 9% of mass 176	6.1()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	S041508MVOWY2	S041508MVOWY2	Y0415015.D	04/15/2008	11:39
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

IB050908MVOWY1/BFB

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R027990 SDG No.: JPL108
 Lab File ID: Y0509004.d BFB Injection Date: 05/09/2008
 Instrument ID: 5973Y BFB Injection Time: 13:58
 GC Column DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18.9
75	30% to 60% of mass 95	50
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	7
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	101.1
175	5% to 9% of mass 17	7()1
176	greater than 95%, but less than 101% of mass 174	97.6()1
177	5% to 9% of mass 176	6.5()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	VSTD050Y1	VSTD050Y1	Y0509005.D	05/09/2008	14:23
02	S050908MVOWY1	S050908MVOWY1	Y0509006.D	05/09/2008	14:48
03	B050908MVOWY2	B050908MVOWY2	Y0509011.D	05/09/2008	16:52
04	TB-11-5/8/08	JPL108-007	Y0509013.D	05/09/2008	17:42
05	EB-11-5/8/08	JPL108-006	Y0509015.D	05/09/2008	18:31
06	MW-11-5	JPL108-001	Y0509021.D	05/09/2008	20:59
07	MW-11-4	JPL108-002	Y0509022.D	05/09/2008	21:24
08	MW-11-3	JPL108-003	Y0509023.D	05/09/2008	21:49
09	MW-11-2	JPL108-004	Y0509024.D	05/09/2008	22:14
10	MW-11-1	JPL108-005	Y0509025.D	05/09/2008	22:38
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R027990 SDG No.: JPL108
 Client Sample No.(VSTD050##): VSTD050Y1 Date Analyzed: 05/09/2008
 Lab File ID (Standard): Y0509005.D Time Analyzed: 14:23
 Instrument ID: 5973Y Heated Purge: (Y/N) N
 GC Column: DB-624 20m ID: 0.18 (mm)

	IS1 (FBZ) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	476404	8.23	249051	11.68	300326	13.61
UPPER LIMIT	952808	8.28	498102	11.73	600652	13.66
LOWER LIMIT	238202	8.18	124525.5	11.63	150163	13.56
CLIENT SAMPLE NO.						
01 S050908MVOWY1	449053	8.23	239864	11.68	287876	13.61
02 B050908MVOWY2	407838	8.23	203732	11.68	260784	13.61
03 TB-11-5/8/08	412244	8.23	210005	11.68	264652	13.61
04 EB-11-5/8/08	410928	8.23	204501	11.68	259750	13.61
05 MW-11-5	429880	8.23	220526	11.68	278657	13.61
06 MW-11-4	402819	8.23	200197	11.68	261501	13.61
07 MW-11-3	392500	8.23	196409	11.68	252636	13.61
08 MW-11-2	399501	8.23	193936	11.68	264375	13.61
09 MW-11-1	399171	8.23	207349	11.68	261960	13.61
10						
11						
12						
13						
14						
15						
16						
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 # JPL108

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-5

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-001
 Lab File ID: Y0509021.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 20:59
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.42	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-5

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-001
 Lab File ID: Y0509021.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 20:59
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-5

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-001
 Lab File ID: Y0509021.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 20:59
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

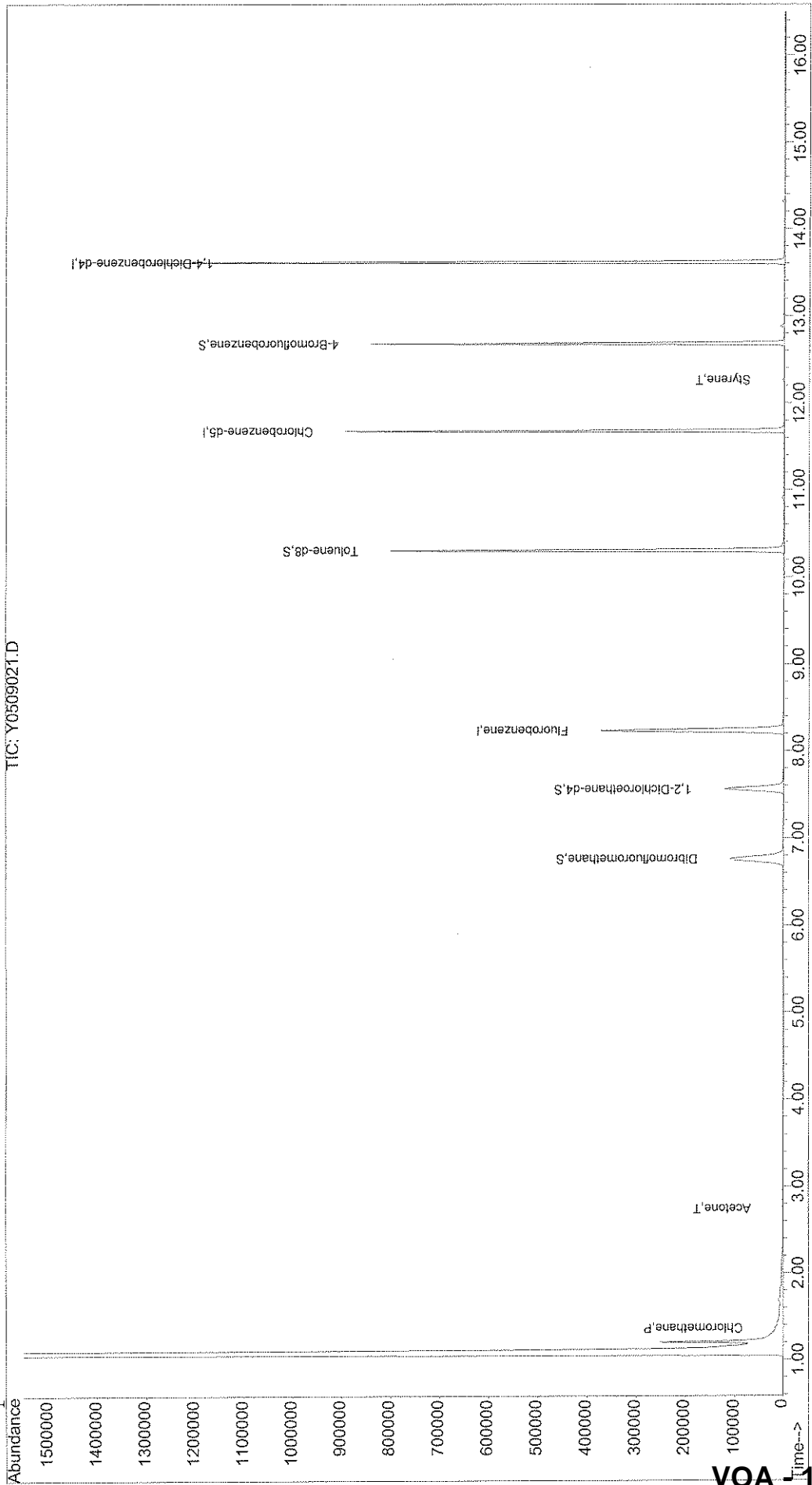
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509021.D Vial: 17
Acq On : 9 May 2008 20:59 Operator: DGA
Sample : JPL108-001 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:38 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



VOA 14

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509021.D
 Acq On : 9 May 2008 20:59
 Sample : JPL108-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:38 2008

Vial: 17
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	8.23	96	429880	50.00	ug/l	0.00 84.19%
54) Chlorobenzene-d5	11.68	82	220526	50.00	ug/l	0.00 90.16%
74) 1,4-Dichlorobenzene-d4	13.61	152	278657	50.00	ug/l	0.00 79.51%

System Monitoring Compounds

36) Dibromofluoromethane	6.76	111	145155	51.62	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	103.24%
40) 1,2-Dichloroethane-d4	7.56	65	145185	54.05	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	108.10%
55) Toluene-d8	10.30	98	466119	48.81	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	97.62%
76) 4-Bromofluorobenzene	12.68	95	199352	55.03	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	110.06%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.36	50	2173	0.42	ug/l	97
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	1.88	64	70	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.		
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.71	96	65	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.75	43	717mS	0.70	ug/l #	79
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.89	76	799	N.D.		
15) Allyl chloride	3.12	76	55	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.28	84	55	Below Cal	#	68
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	3.65	53	124	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	0.00	73	0	N.D.		

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

Y0509021.D Y8260W.M Mon May 12 13:38:58 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509021.D
 Acq On : 9 May 2008 20:59
 Sample : JPL108-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:38 2008

Vial: 17
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.46	96	59		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	7.52	78	60		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	0.00	130	0		N.D.	
46) Methylcyclohexane	9.06	83	60		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	10.26	43	128		N.D.	
56) Toluene	10.37	92	152		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	10.99	43	124		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.69	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.	

Plm 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509021.D Y8260W.M Mon May 12 13:38:59 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509021.D
 Acq On : 9 May 2008 20:59
 Sample : JPL108-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:38 2008

Vial: 17
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	108		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	1509	0.18 ug/L	1 1/2 PAL	96
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.57	105	77		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.69	156	98		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	12.91	120	54		N.D.	
81) 2-Chlorotoluene	12.91	91	260		N.D.	
82) 4-Chlorotoluene	13.05	91	60		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	61		N.D.	
88) 4-Isopropyltoluene	13.59	119	55		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	147		N.D.	
90) 1,2-Dichlorobenzene	13.63	146	147		N.D.	
91) n-Butylbenzene	13.92	91	278		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	139		N.D.	
94) Hexachlorobutadiene	15.31	225	61		N.D.	
95) Naphthalene	0.00	128	0		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	118		N.D.	

Quant 5/20/08

Quant 5/13/08

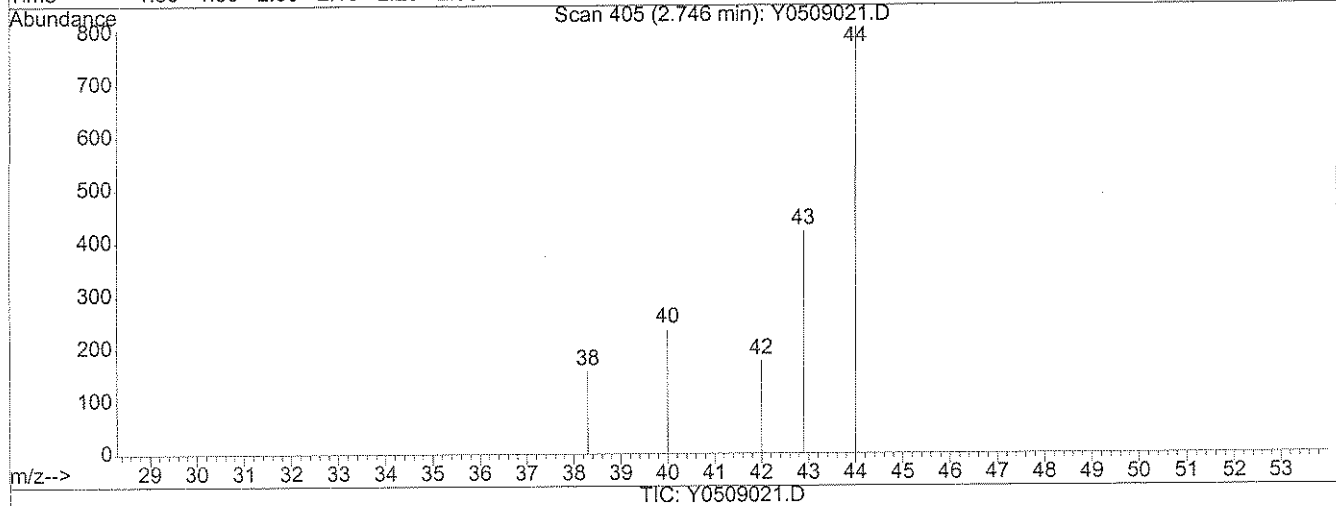
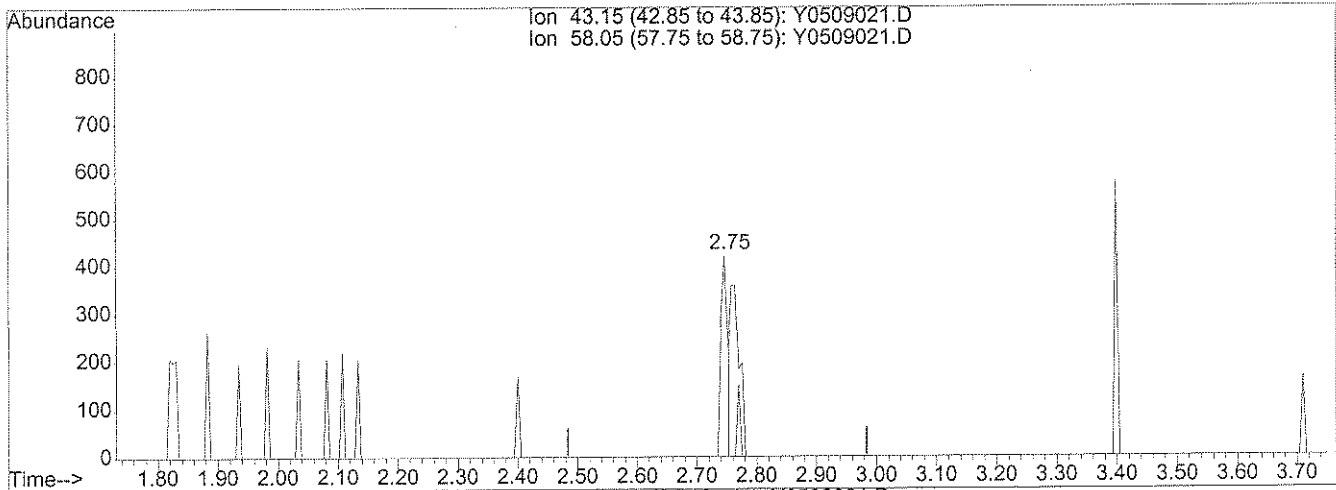
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509021.D
 Acq On : 9 May 2008 20:59
 Sample : JPL108-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:15 2008

Vial: 17
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration



(11) Acetone (T)

2.75min 0.32ug/l

response 331

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	16.01#
0.00	0.00	0.00
0.00	0.00	0.00

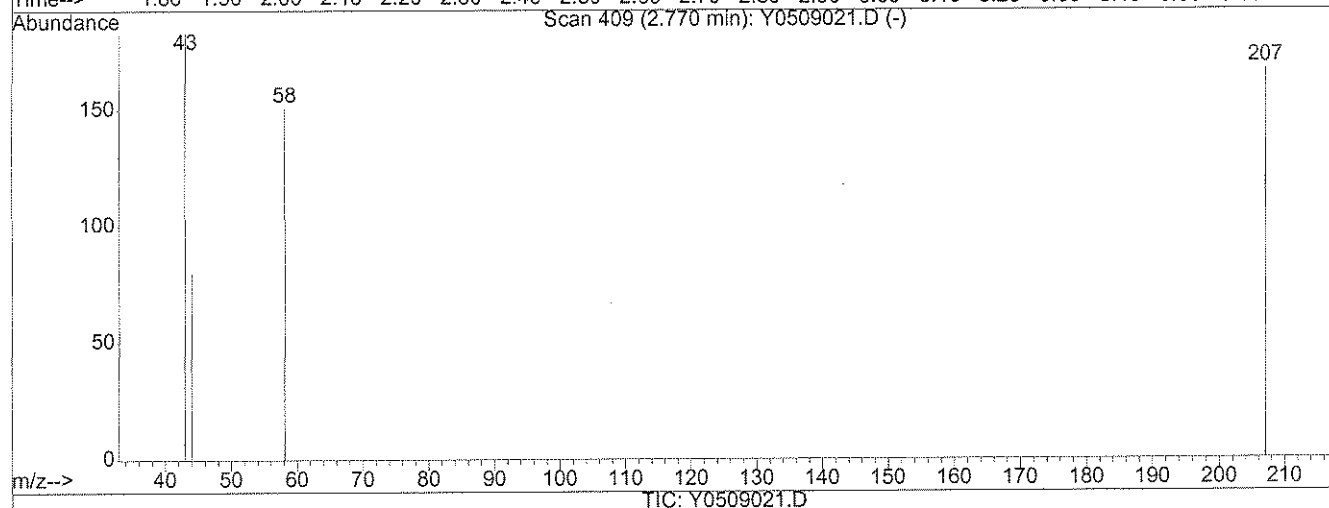
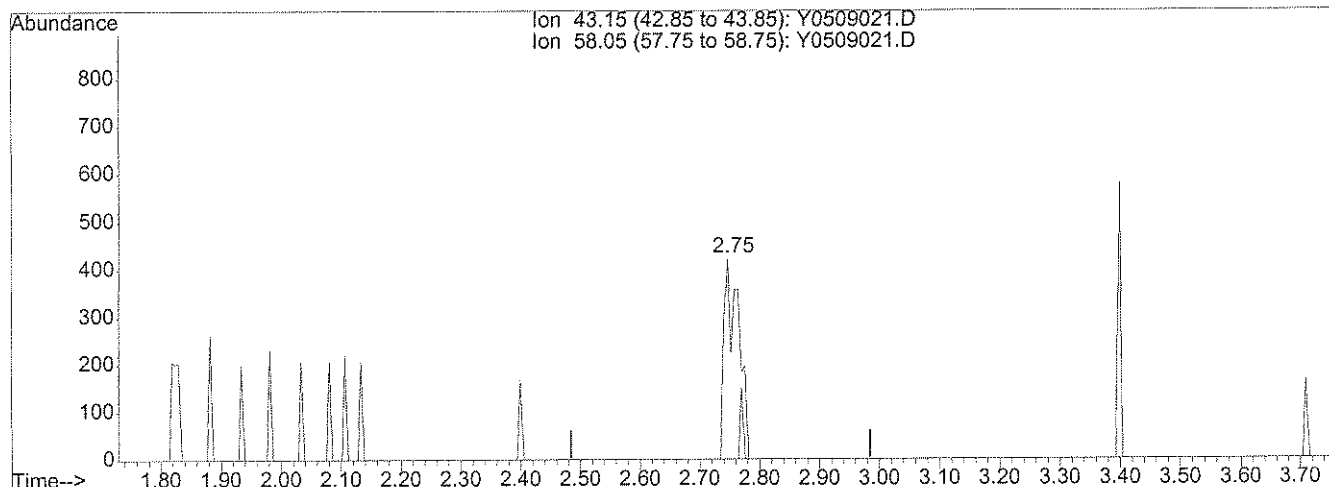
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509021.D
 Acq On : 9 May 2008 20:59
 Sample : JPL108-001
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:38 2008

Vial: 17
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

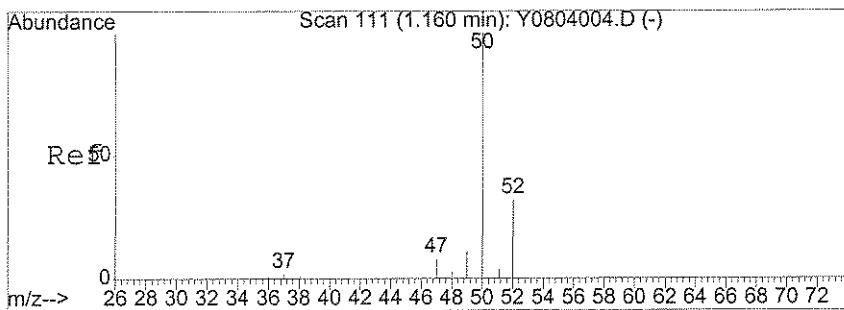


(11) Acetone (T)

2.75min 0.70ug/l m

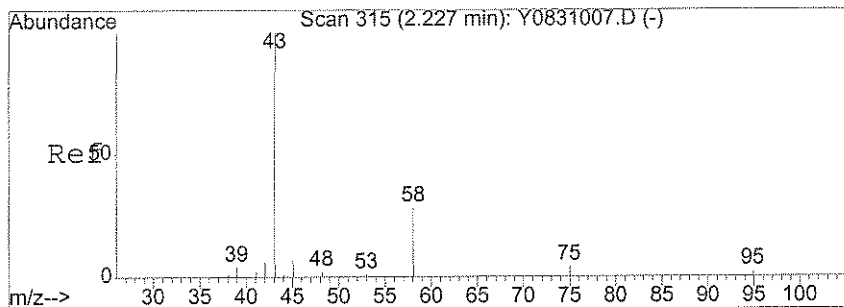
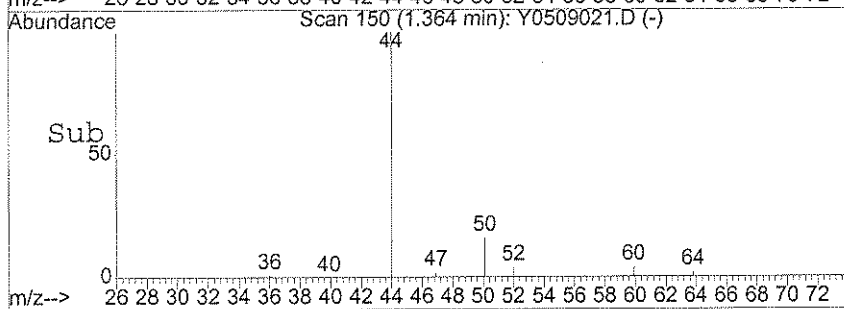
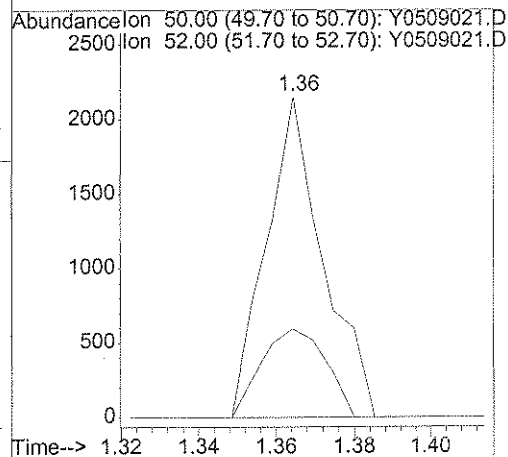
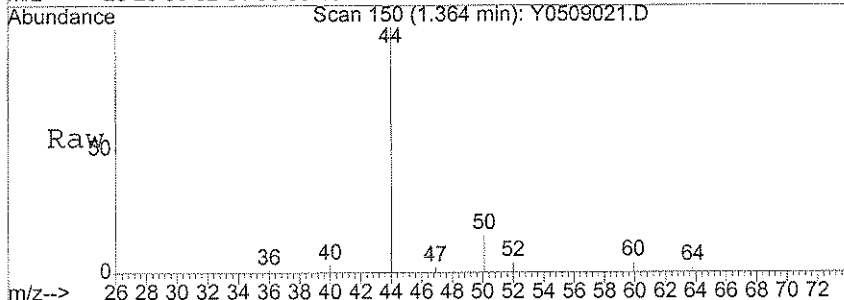
response 717

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	7.39#
0.00	0.00	0.00
0.00	0.00	0.00



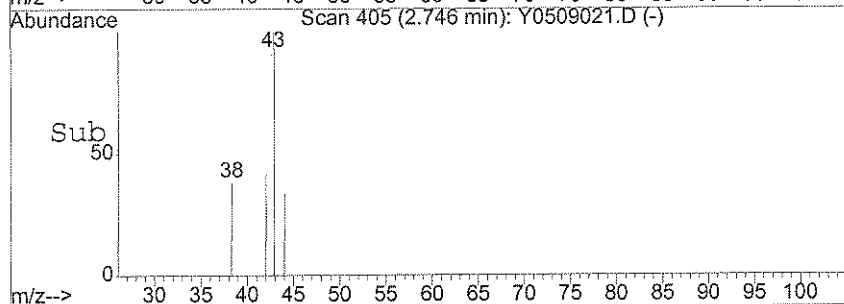
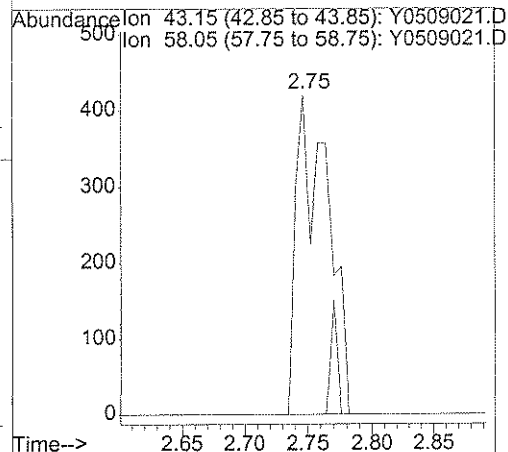
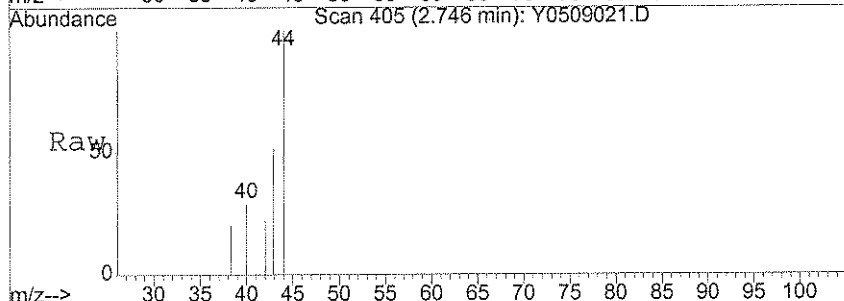
#3
 Chloromethane
 Concen: 0.42 ug/l
 RT: 1.36 min Scan# 150
 Delta R.T. -0.01 min
 Lab File: Y0509021.D
 Acq: 9 May 2008 20:59

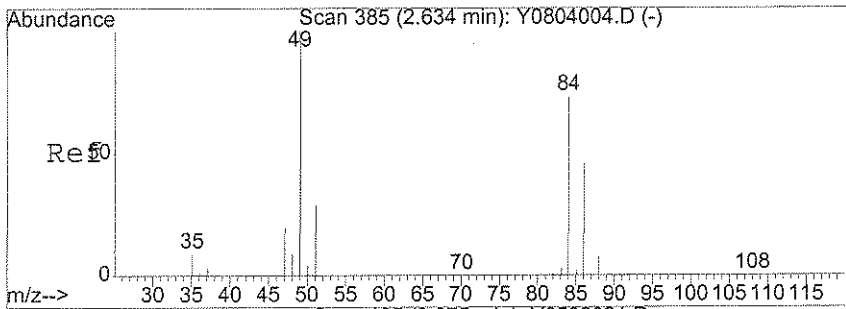
Tgt Ion: 50 Resp: 2173
 Ion Ratio Lower Upper
 50 100
 52 31.2 13.0 53.0



#11
 Acetone
 Concen: 0.70 ug/l m
 RT: 2.75 min Scan# 405
 Delta R.T. 0.01 min
 Lab File: Y0509021.D
 Acq: 9 May 2008 20:59

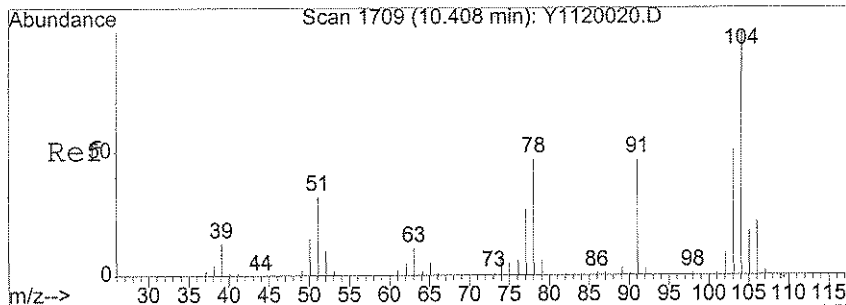
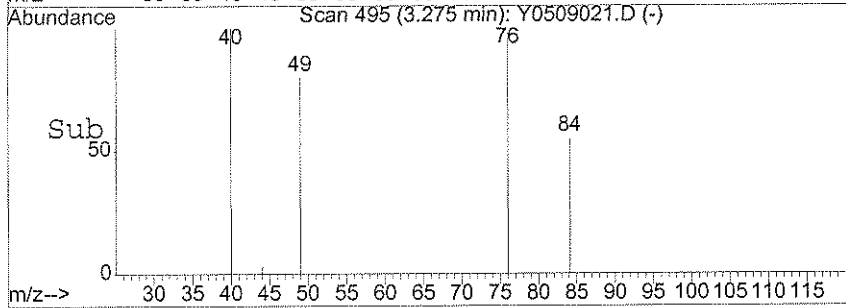
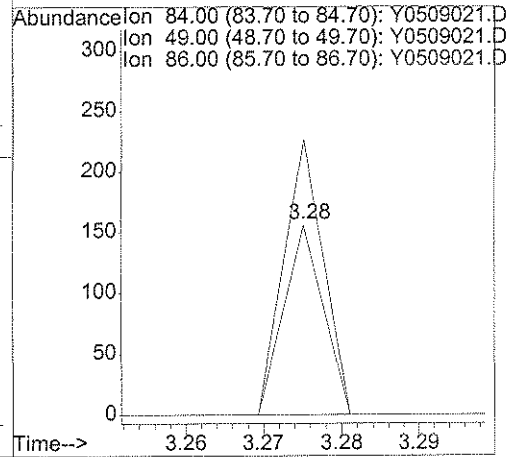
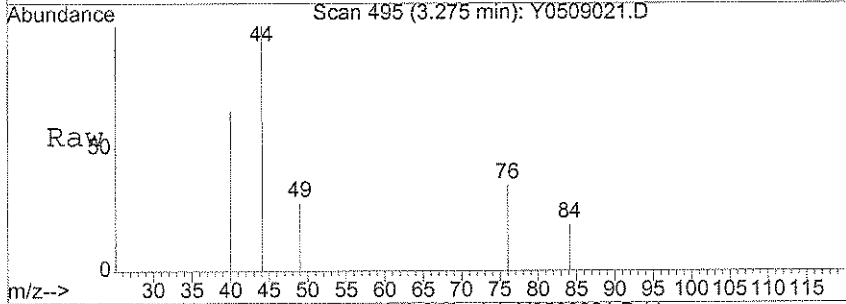
Tgt Ion: 43 Resp: 717
 Ion Ratio Lower Upper
 43 100
 58 7.4 21.3 31.9#





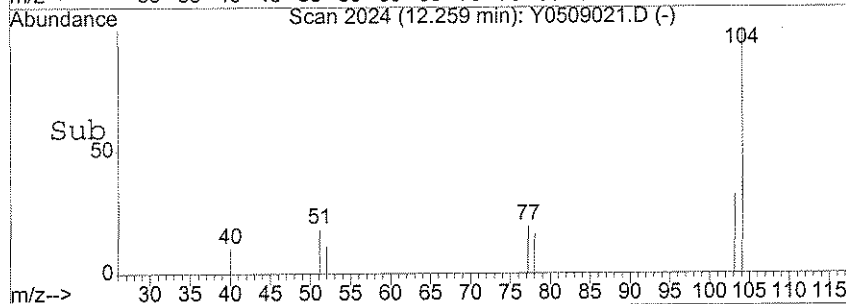
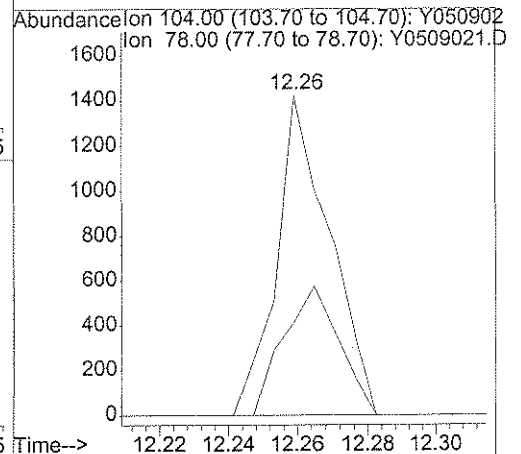
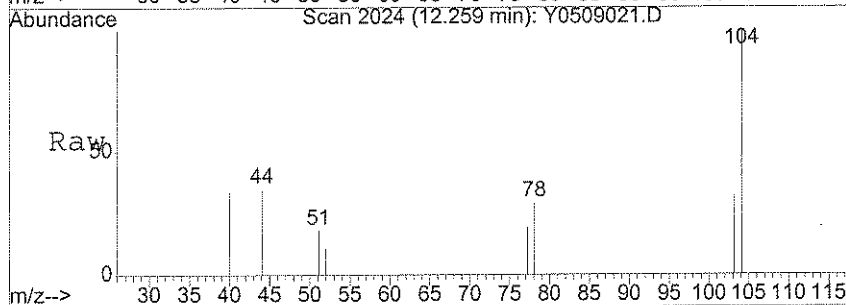
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.28 min Scan# 495
 Delta R.T. 0.01 min
 Lab File: Y0509021.D
 Acq: 9 May 2008 20:59

Tgt Ion	Resp	Lower	Upper
84	100		
49	145.5	112.5	152.5
86	0.0	39.5	79.5#



#71
 Styrene
 Concen: 0.18 ug/l
 RT: 12.26 min Scan# 2024
 Delta R.T. 0.00 min
 Lab File: Y0509021.D
 Acq: 9 May 2008 20:59

Tgt Ion	Resp	Lower	Upper
104	100		
78	42.1	19.7	59.7



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-4

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-002
 Lab File ID: Y0509022.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 21:24
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.65	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-4

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-002
 Lab File ID: Y0509022.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 21:24
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-4

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-002
 Lab File ID: Y0509022.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 21:24
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

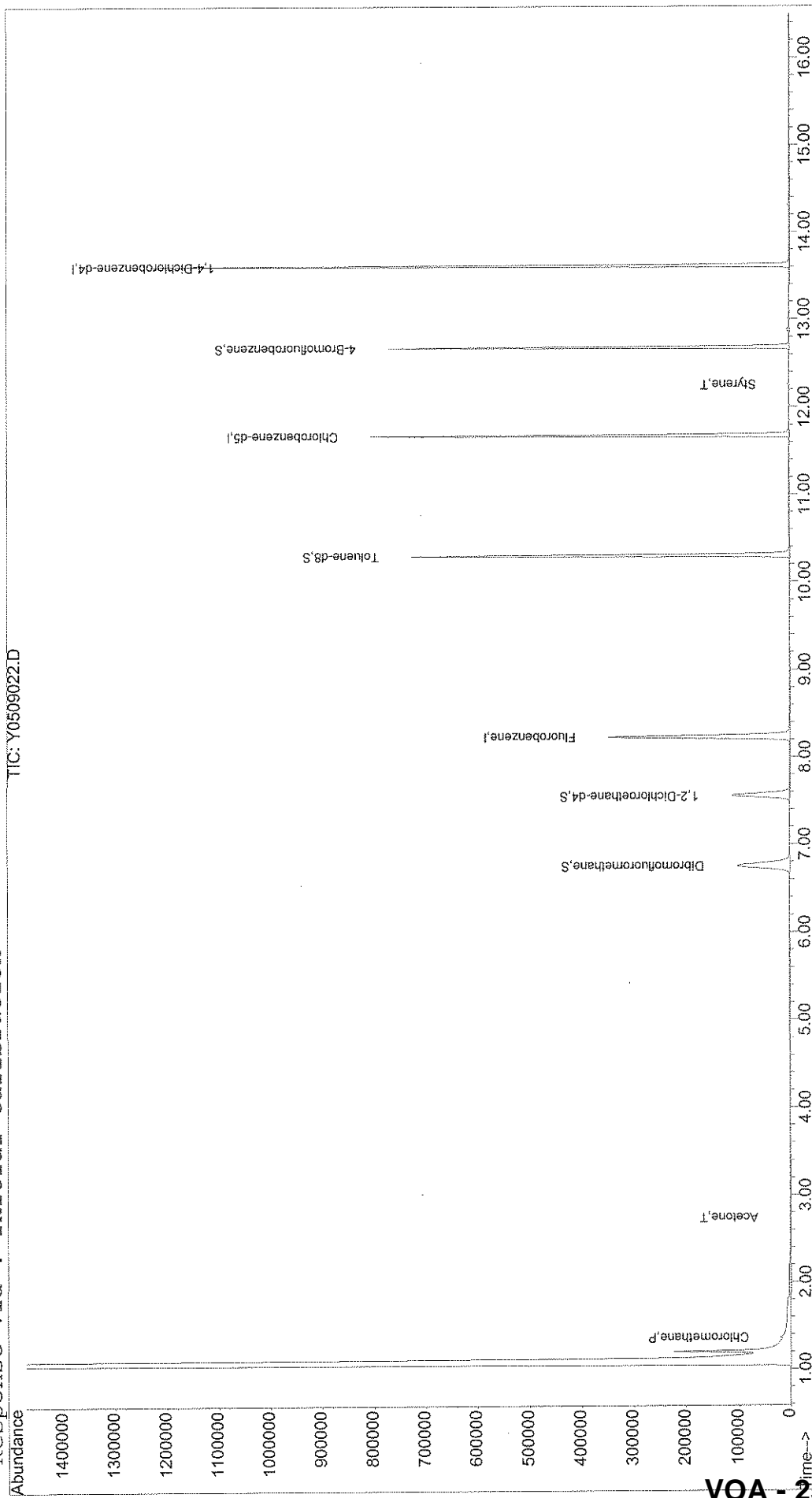
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509022.D Vial: 18
Acq On : 9 May 2008 21:24 Operator: DGA
Sample : JPL108-002 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:40 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509022.D
 Acq On : 9 May 2008 21:24
 Sample : JPL108-002
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:40 2008

Vial: 18
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	8.23	96	402819	50.00	ug/l	0.00	78.89%
54) Chlorobenzene-d5	11.68	82	200197	50.00	ug/l	0.00	81.85%
74) 1,4-Dichlorobenzene-d4	13.61	152	261501	50.00	ug/l	0.00	74.62%

System Monitoring Compounds

36) Dibromofluoromethane	6.76	111	135635	51.47	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 115	Recovery	=	102.94%	
40) 1,2-Dichloroethane-d4	7.56	65	135413	53.80	ug/l	0.00	
Spiked Amount	50.000	Range	70 - 120	Recovery	=	107.60%	
55) Toluene-d8	10.30	98	429024	49.49	ug/l	0.00	
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.98%	
76) 4-Bromofluorobenzene	12.68	95	184238	54.20	ug/l	0.00	
Spiked Amount	50.000	Range	75 - 120	Recovery	=	108.40%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.36	50	3178	0.65 ug/l		99
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	0.00	96	0	N.D.		
6) Chloroethane	1.86	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	2.74	43	825	0.86 ug/l	#	77
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.91	76	1168	N.D.		
15) Allyl chloride	3.12	76	71	N.D.		
16) Acetonitrile	0.00	40	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	3.27	84	59	Below Cal	#	1
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.		
20) Acrylonitrile	3.66	53	60	N.D.		
21) t-butyl alcohol	0.00	59	0	N.D.		
22) Methyl tert-butyl ether	3.68	73	93	N.D.		

QML 5/13/08

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509022.D
 Acq On : 9 May 2008 21:24
 Sample : JPL108-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:40 2008

Vial: 18
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	6.80	56	60		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	7.65	78	186		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.	
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	10.37	92	378		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	11.04	43	109		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.70	112	62		N.D.	
66) 1-Chlorohexane	0.00	91	0		N.D.	d
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Last 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509022.D Y8260W.M Mon May 12 13:40:20 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509022.D
 Acq On : 9 May 2008 21:24
 Sample : JPL108-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:40 2008

Vial: 18
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	390		N.D.	
69) m,p-Xylene	11.92	106	266		N.D.	
70) o-xylene	12.25	106	66		N.D.	
71) Styrene	12.26	104	1232	0.17	ug/l	90
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.56	105	216		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	75	0		N.D.	d
80) n-Propylbenzene	12.89	120	54		N.D.	
81) 2-Chlorotoluene	12.96	91	57		N.D.	
82) 4-Chlorotoluene	12.96	91	57		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	13.60	119	223		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	13.92	91	273		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	290		N.D.	
94) Hexachlorobutadiene	15.30	225	63		N.D.	
95) Naphthalene	15.36	128	131		N.D.	
96) 1,2,3-Trichlorobenzene	15.19	180	77		N.D.	

Handwritten: 1/2 P&L
 90
 5/13/08

Handwritten: 5/13/08

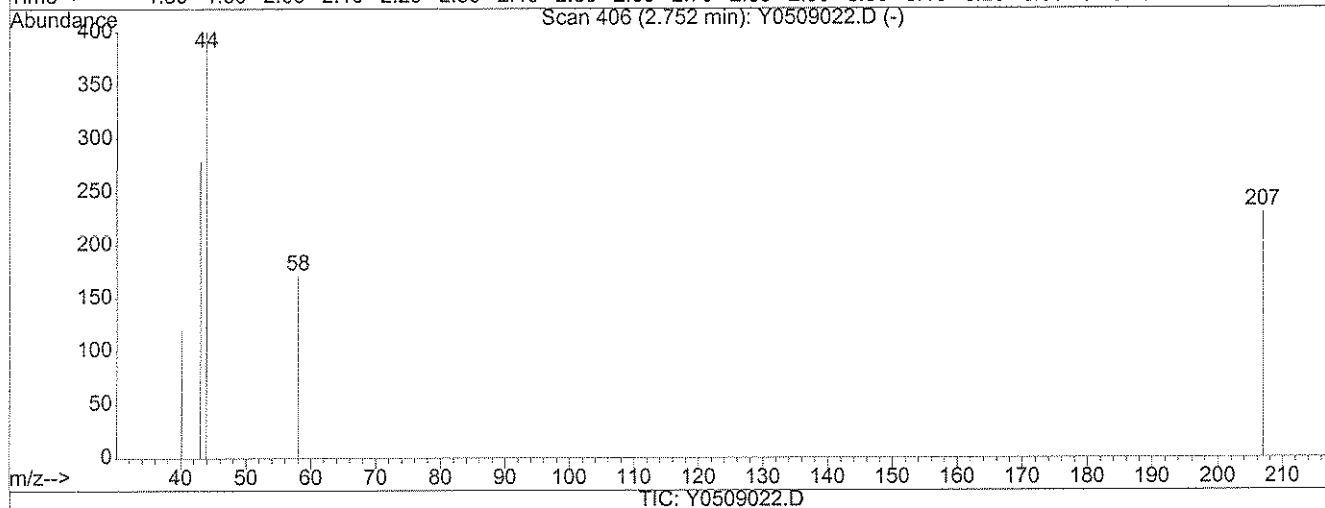
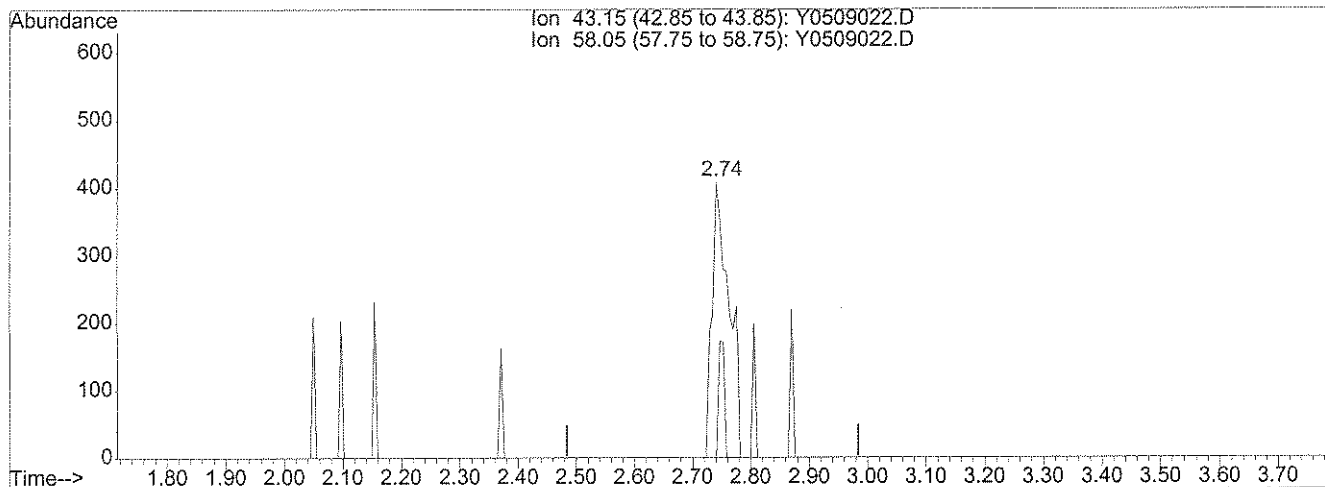
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509022.D
 Acq On : 9 May 2008 21:24
 Sample : JPL108-002
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:40 2008

Vial: 18
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

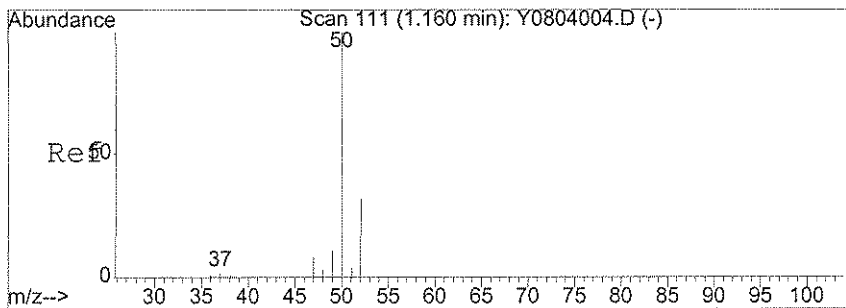


(11) Acetone (T)

2.74min 0.86ug/l

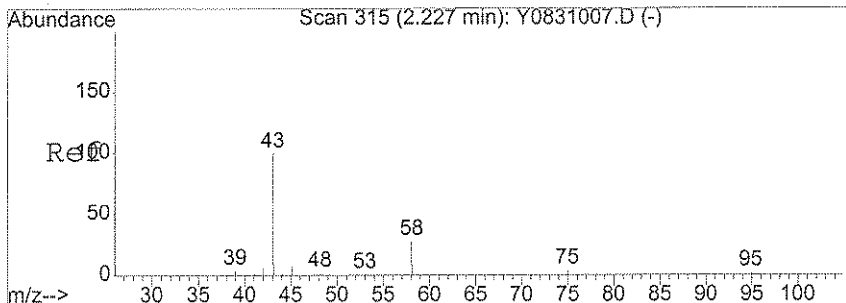
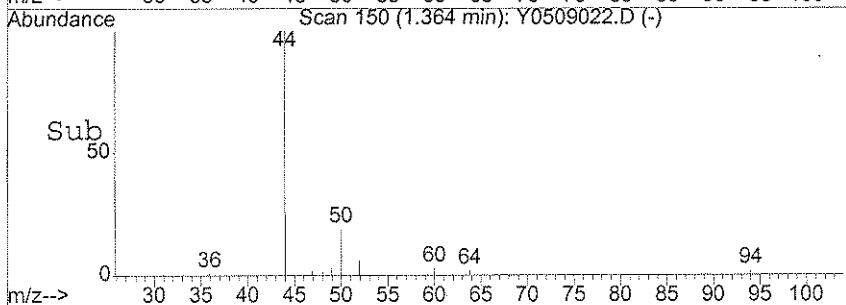
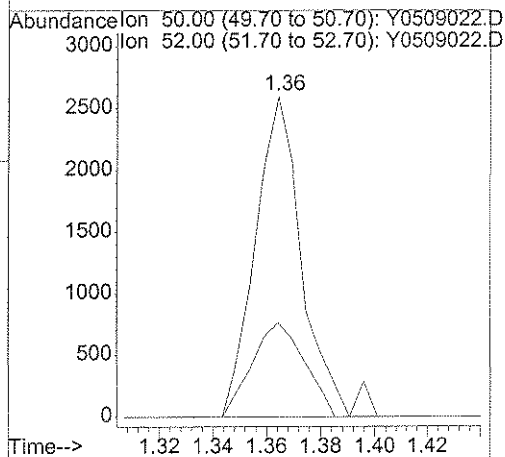
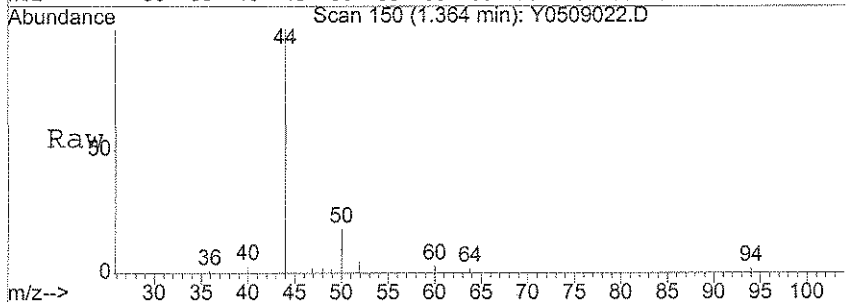
response 825

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	14.67#
0.00	0.00	0.00
0.00	0.00	0.00



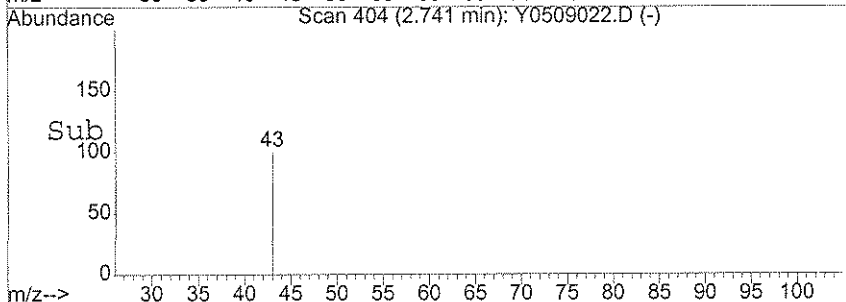
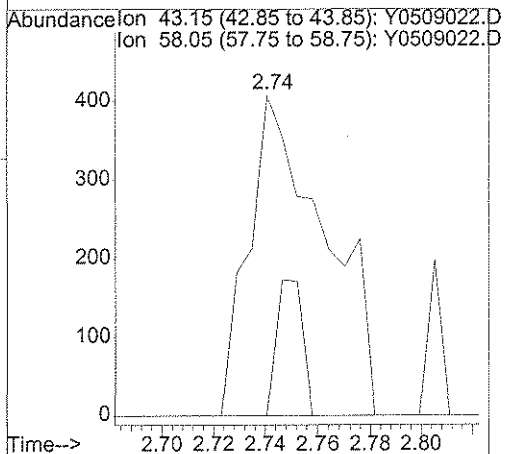
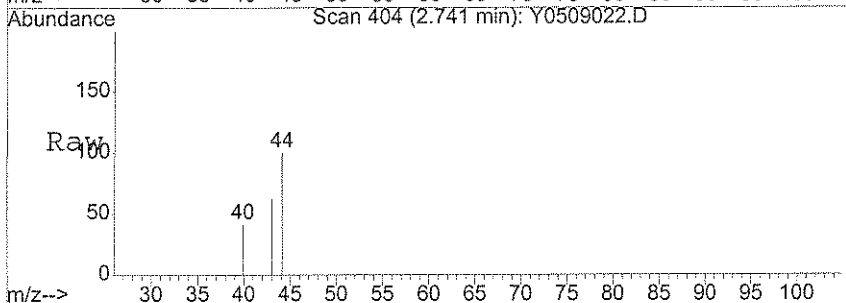
#3
 Chloromethane
 Concen: 0.65 ug/l
 RT: 1.36 min Scan# 150
 Delta R.T. -0.01 min
 Lab File: Y0509022.D
 Acq: 9 May 2008 21:24

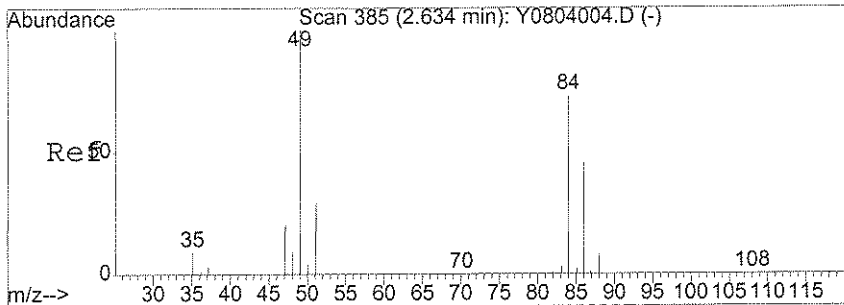
Tgt Ion: 50 Resp: 3178
 Ion Ratio Lower Upper
 50 100
 52 32.5 13.0 53.0



#11
 Acetone
 Concen: 0.86 ug/l
 RT: 2.74 min Scan# 404
 Delta R.T. 0.01 min
 Lab File: Y0509022.D
 Acq: 9 May 2008 21:24

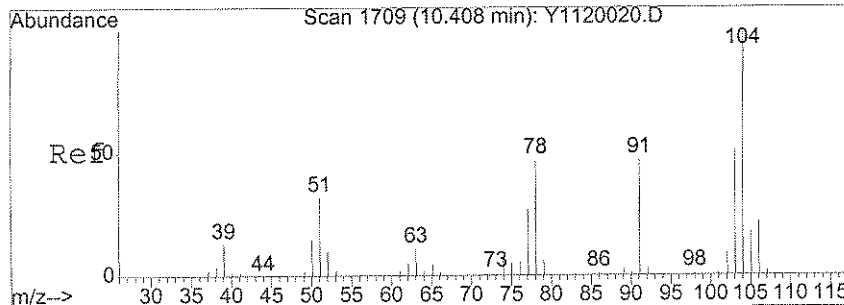
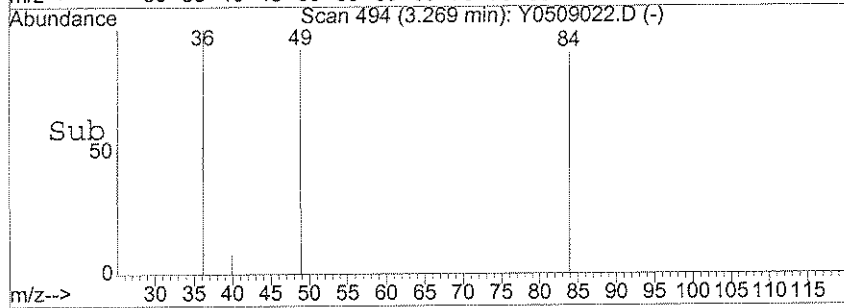
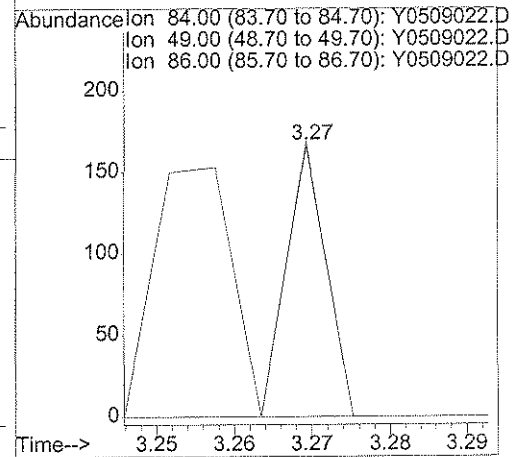
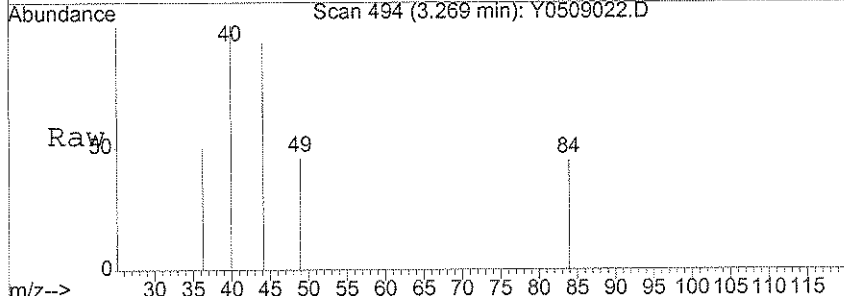
Tgt Ion: 43 Resp: 825
 Ion Ratio Lower Upper
 43 100
 58 14.7 21.3 31.9#





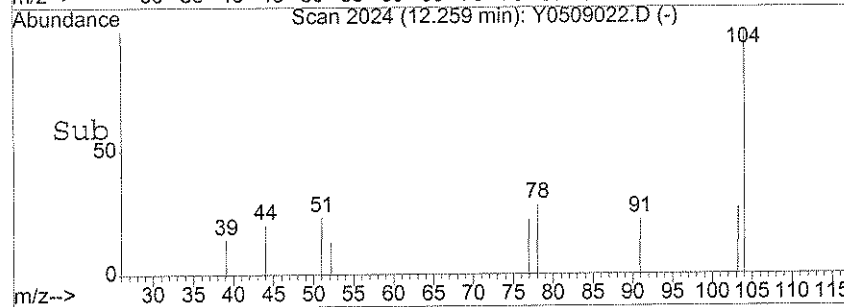
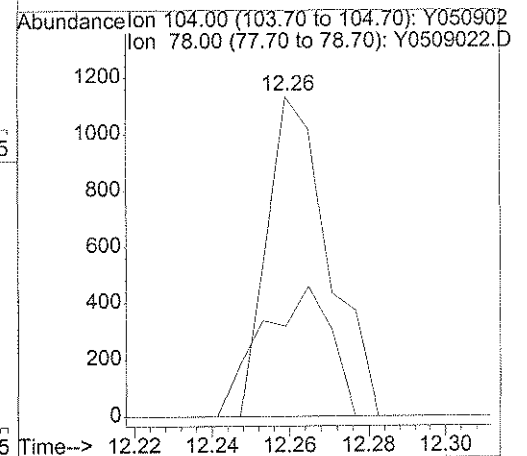
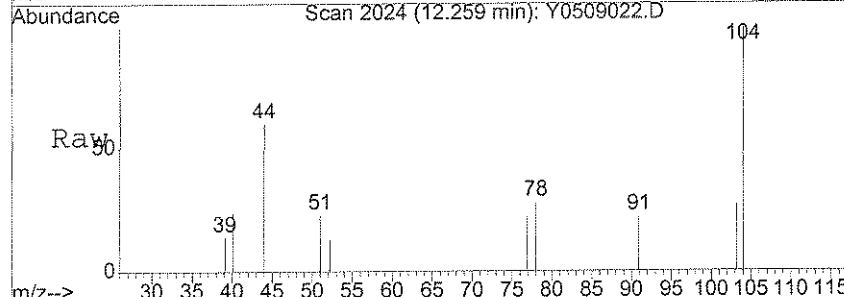
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.27 min Scan# 494
 Delta R.T. 0.00 min
 Lab File: Y0509022.D
 Acq: 9 May 2008 21:24

Tgt Ion	Resp	Lower	Upper
84	100		
49	281.4	112.5	152.5#
86	0.0	39.5	79.5#



#71
 Styrene
 Concen: 0.17 ug/l
 RT: 12.26 min Scan# 2024
 Delta R.T. 0.00 min
 Lab File: Y0509022.D
 Acq: 9 May 2008 21:24

Tgt Ion	Resp	Lower	Upper
104	100		
78	45.9	19.7	59.7



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-3

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-003
 Lab File ID: Y0509023.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 21:49
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.41	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-3

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-003
 Lab File ID: Y0509023.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 21:49
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-3

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-003
 Lab File ID: Y0509023.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 21:49
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

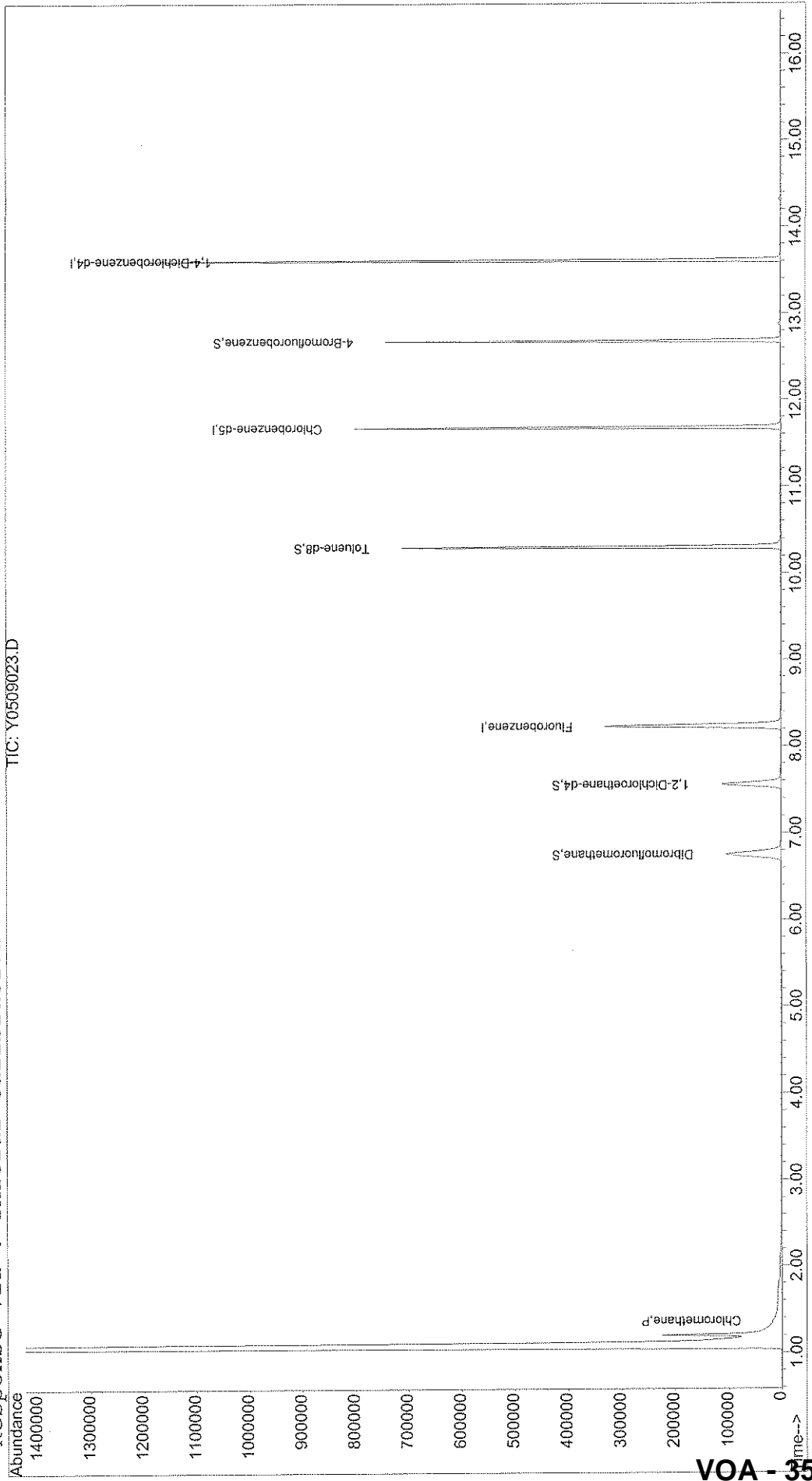
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509023.D
Acq On : 9 May 2008 21:49
Sample : JPL108-003
Misc : #2 5mL+IS/SS(MV8-45-10)
MS Integration Params: rteint.p
Quant Time: May 12 13:41 2008
Vial: 19
Operator: DGA
Inst : yoda
Multiplr: 1.00
Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509023.D
 Acq On : 9 May 2008 21:49
 Sample : JPL108-003
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:41 2008

Vial: 19
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min) Rcv (Ar)
1) Fluorobenzene	8.23	96	392500	50.00	ug/l	0.00 76.87%
54) Chlorobenzene-d5	11.68	82	196409	50.00	ug/l	0.00 80.30%
74) 1,4-Dichlorobenzene-d4	13.61	152	252636	50.00	ug/l	0.00 72.09%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	133911	52.16	ug/l	0.00
Spiked Amount	50.000	Range 85 - 115	Recovery	=	104.32%	
40) 1,2-Dichloroethane-d4	7.56	65	132174	53.90	ug/l	0.00
Spiked Amount	50.000	Range 70 - 120	Recovery	=	107.80%	
55) Toluene-d8	10.30	98	418311	49.19	ug/l	0.00
Spiked Amount	50.000	Range 85 - 120	Recovery	=	98.38%	
76) 4-Bromofluorobenzene	12.68	95	176168	53.64	ug/l	0.00
Spiked Amount	50.000	Range 75 - 120	Recovery	=	107.28%	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.36	50	1951	0.41 ug/l	93
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	1.86	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	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	2.89	76	736	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	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	3.67	96	67	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.	

QNT 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509023.D Y8260W.M Mon May 12 13:41:39 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509023.D
 Acq On : 9 May 2008 21:49
 Sample : JPL108-003
 Misc : #2 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:41 2008

Vial: 19
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	6.33	83	59		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	7.64	78	184		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.	
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	10.64	97	71		N.D.	
60) Tetrachloroethene	10.91	166	67		N.D.	
61) 1,3-Dichloropropane	10.77	76	65		N.D.	
62) 2-Hexanone	11.03	43	87		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.70	112	62		N.D.	
66) 1-Chlorohexane	11.71	91	53		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

QEM 5/13/08

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509023.D
 Acq On : 9 May 2008 21:49
 Sample : JPL108-003
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:41 2008

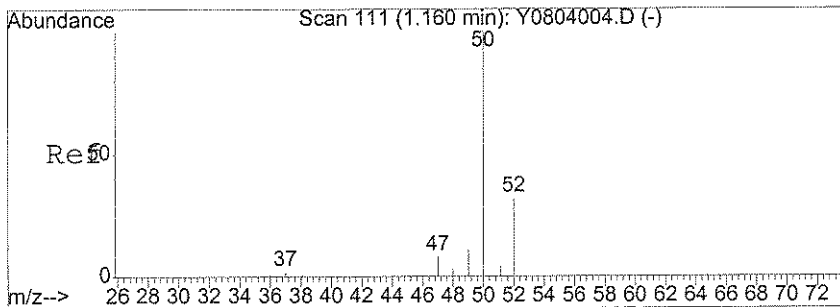
Vial: 19
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

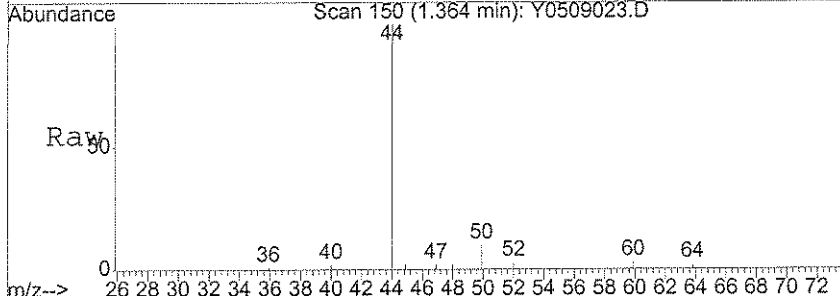
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	160		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	237		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.68	105	482		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
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	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.68	91	440		N.D.	
82) 4-Chlorotoluene	0.00	91	0		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.63	146	110		N.D.	
88) 4-Isopropyltoluene	13.59	119	309		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	110		N.D.	
90) 1,2-Dichlorobenzene	13.63	146	110		N.D.	
91) n-Butylbenzene	13.91	91	289		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.32	75	66		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	53		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	15.36	128	69		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	73		N.D.	

Quant 5/13/08

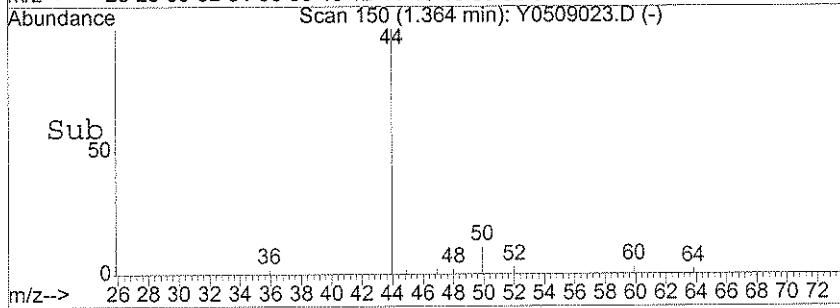
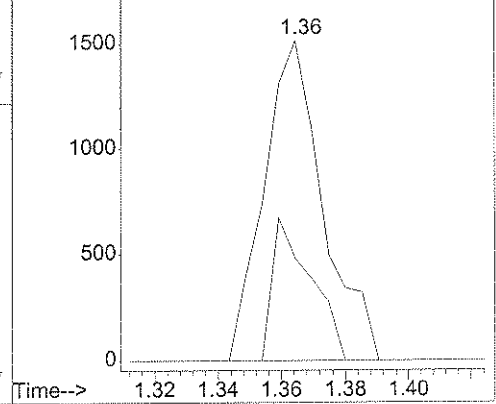


#3
 Chloromethane
 Concen: 0.41 ug/l
 RT: 1.36 min Scan# 150
 Delta R.T. -0.01 min
 Lab File: Y0509023.D
 Acq: 9 May 2008 21:49

Tgt Ion	Resp	Lower	Upper
50	1951		
50	100		
52	29.3	13.0	53.0



Abundance Ion 50.00 (49.70 to 50.70): Y0509023.D
 Ion 52.00 (51.70 to 52.70): Y0509023.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-2

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-004
 Lab File ID: Y0509024.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 22:14
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.70	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-2

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-004
 Lab File ID: Y0509024.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 22:14
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-2

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-004
 Lab File ID: Y0509024.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 22:14
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

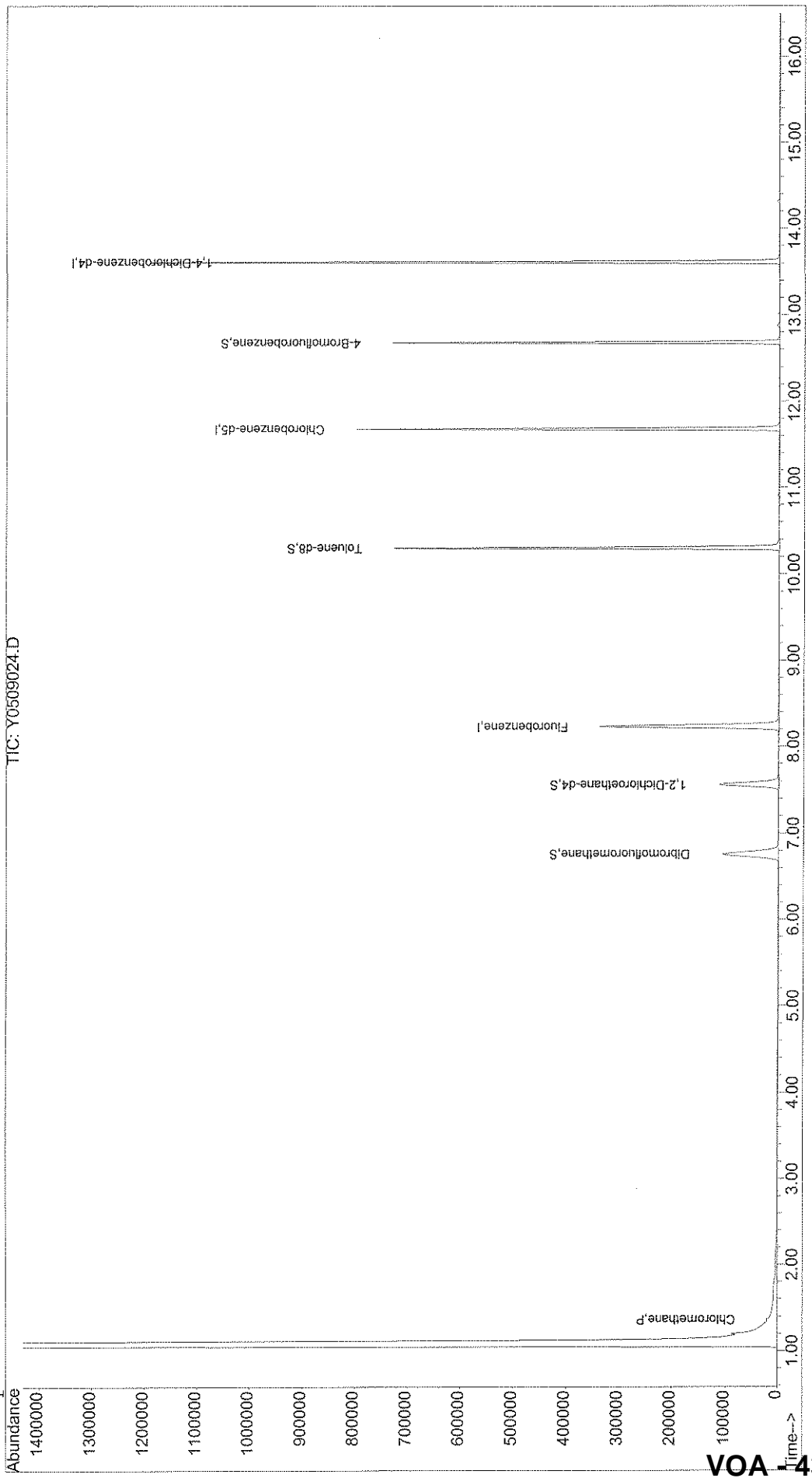
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509024.D Vial: 20
Acq On : 9 May 2008 22:14 Operator: DGA
Sample : JPL108-004 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:42 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



VOA 43

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509024.D
 Acq On : 9 May 2008 22:14
 Sample : JPL108-004
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:42 2008

Vial: 20
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	8.23	96	399501	50.00	ug/l	0.00 78.24%
54) Chlorobenzene-d5	11.68	82	193936	50.00	ug/l	0.00 79.29%
74) 1,4-Dichlorobenzene-d4	13.61	152	264375	50.00	ug/l	0.00 75.44%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	140865	53.90	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	107.80%
40) 1,2-Dichloroethane-d4	7.56	65	136827	54.82	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	109.64%
55) Toluene-d8	10.30	98	416946	49.65	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	99.30%
76) 4-Bromofluorobenzene	12.68	95	178837	52.03	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	104.06%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.36	50	3387	0.70 ug/l	99
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	1.91	64	66	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	2.89	76	685	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	3.28	84	74	Below Cal	# 1
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	3.72	73	63	N.D.	

QANT 5/13/08

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509024.D
 Acq On : 9 May 2008 22:14
 Sample : JPL108-004
 Misc : #3 5mL+IS/SS (MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:42 2008

Vial: 20
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Vinyl acetate	4.61	43	63		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	5.62	43	105		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	6.35	83	169		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	7.66	78	252		N.D.	
42) 1,2-Dichloroethane	7.65	62	53		N.D.	
43) Isobutanol	0.00	43	0		N.D.	d
44) t-amyl methyl ether	0.00	73	0		N.D.	
45) Trichloroethene	8.81	130	143		N.D.	
46) Methylcyclohexane	9.06	83	57		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	9.21	93	63		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	9.56	83	75		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	10.20	43	60		N.D.	
56) Toluene	10.37	92	79		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	10.91	166	58		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	11.15	43	60		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.	

QNA 5/13/08

Quantitation Report

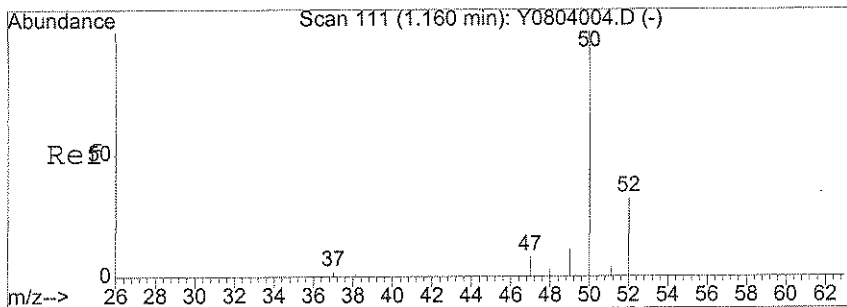
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 Acq On : 9 May 2008 22:14
 Sample : JPL108-004
 Misc : #3 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:42 2008

Vial: 20
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

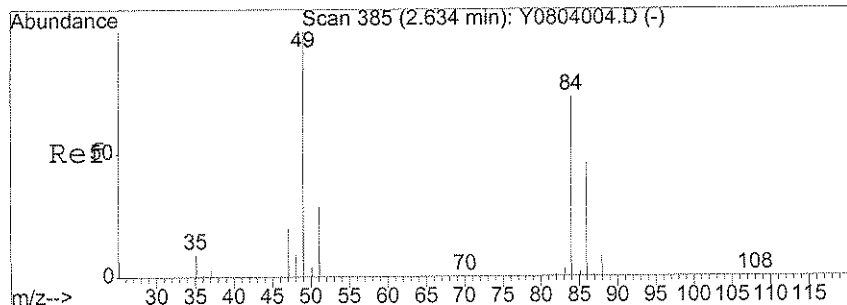
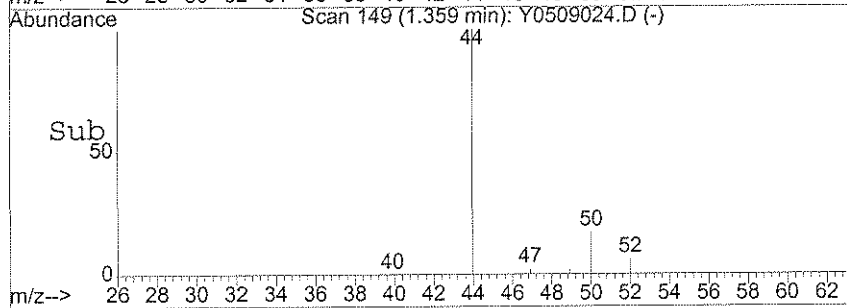
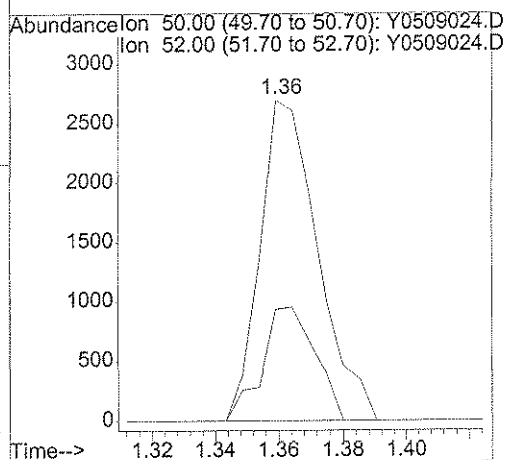
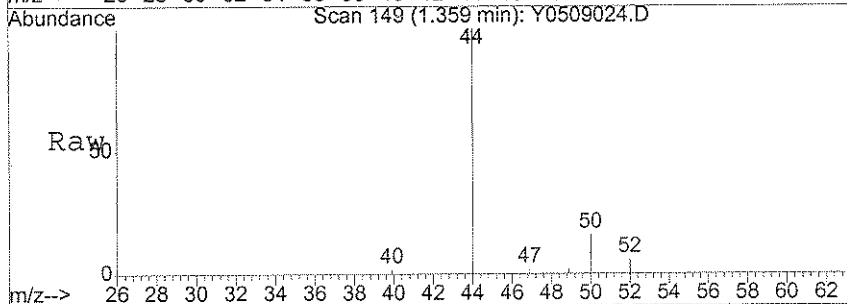
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	237		N.D.	
69) m,p-Xylene	11.91	106	55		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.25	104	88		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.57	105	59		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.68	156	122		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.90	91	166		N.D.	
82) 4-Chlorotoluene	13.05	91	89		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.64	146	62		N.D.	
88) 4-Isopropyltoluene	13.59	119	599		N.D.	
89) 1,4-Dichlorobenzene	13.64	146	62		N.D.	
90) 1,2-Dichlorobenzene	13.64	146	62		N.D.	
91) n-Butylbenzene	13.92	91	148		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	d
93) 1,2,4-Trichlorobenzene	15.17	180	105		N.D.	
94) Hexachlorobutadiene	15.30	225	154		N.D.	
95) Naphthalene	15.37	128	60		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	137		N.D.	



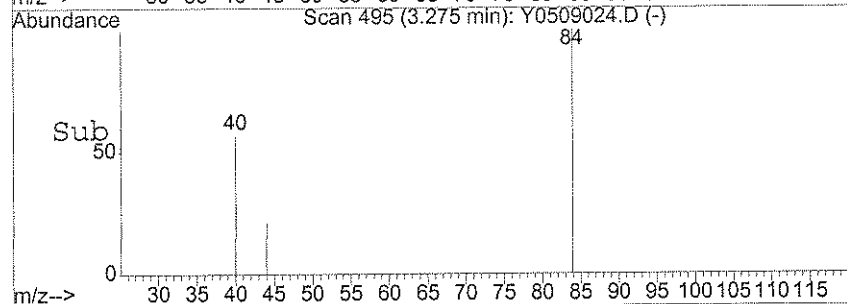
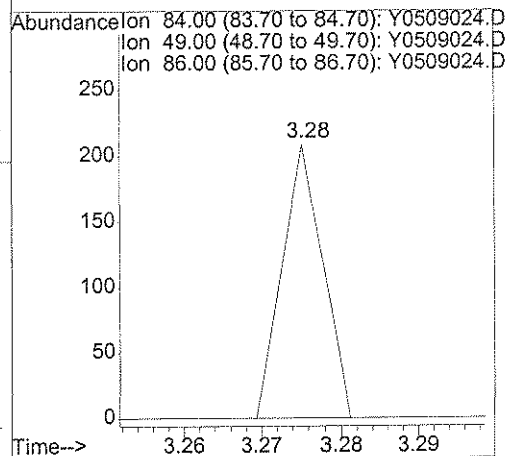
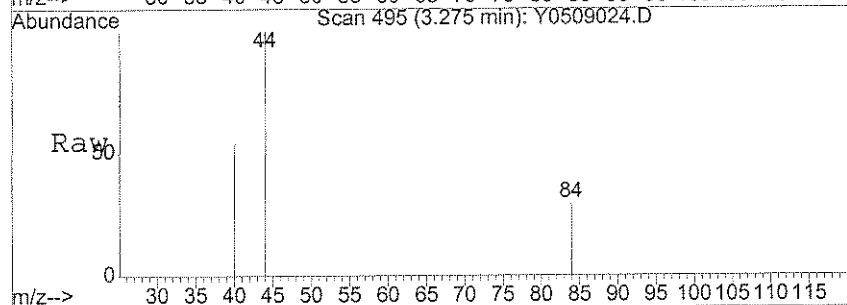
#3
 Chloromethane
 Concen: 0.70 ug/l
 RT: 1.36 min Scan# 149
 Delta R.T. -0.01 min
 Lab File: Y0509024.D
 Acq: 9 May 2008 22:14

Tgt Ion: 50 Resp: 3387
 Ion Ratio Lower Upper
 50 100
 52 32.4 13.0 53.0



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.28 min Scan# 495
 Delta R.T. 0.01 min
 Lab File: Y0509024.D
 Acq: 9 May 2008 22:14

Tgt Ion: 84 Resp: 74
 Ion Ratio Lower Upper
 84 100
 49 0.0 112.5 152.5#
 86 0.0 39.5 79.5#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-1

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-005
 Lab File ID: Y0509025.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 22:38
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.28	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-1

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-005
 Lab File ID: Y0509025.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 22:38
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-11-1

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-005
 Lab File ID: Y0509025.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 22:38
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

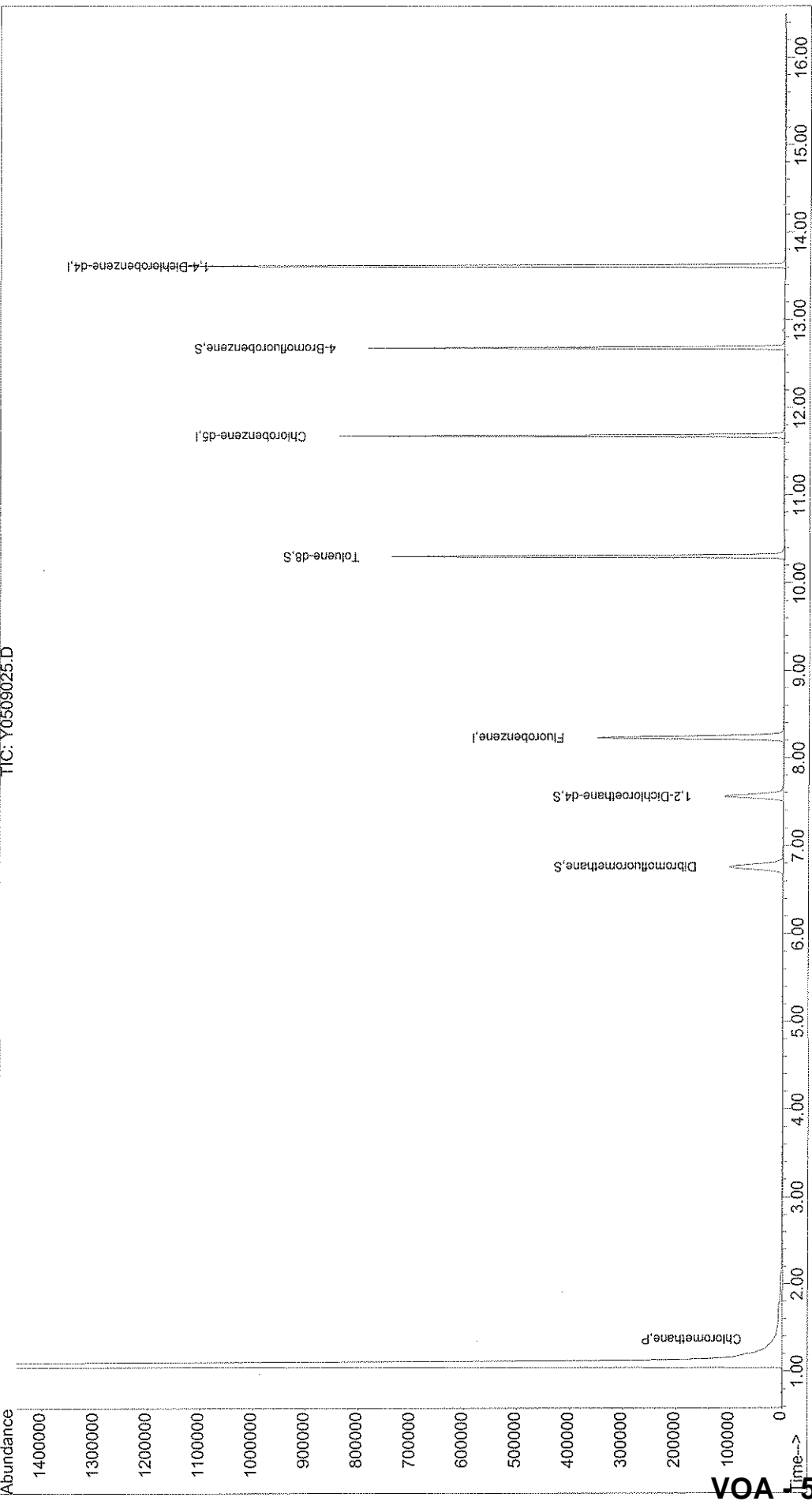
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509025.D Vial: 21
Acq On : 9 May 2008 22:38 Operator: DGA
Sample : JPL108-005 Inst : Yoda
Misc : #2 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:45 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260 - 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509025.D
 Acq On : 9 May 2008 22:38
 Sample : JPL108-005
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:45 2008

Vial: 21
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	8.23	96	399171	50.00	ug/l	0.00 78.17%
54) Chlorobenzene-d5	11.68	82	207349	50.00	ug/l	0.00 84.77%
74) 1,4-Dichlorobenzene-d4	13.61	152	261960	50.00	ug/l	0.00 74.75%

System Monitoring Compounds

36) Dibromofluoromethane	6.77	111	135099	51.74	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	103.48%
40) 1,2-Dichloroethane-d4	7.56	65	138977	55.72	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	111.44%
55) Toluene-d8	10.30	98	428286	47.70	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	95.40%
76) 4-Bromofluorobenzene	12.68	95	183727	53.95	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	107.90%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.37	50	1342	0.28 ug/l	83
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	2.75	43	97	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	2.82	108	60	N.D.	
14) Carbon Disulfide	2.90	76	335	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	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.	
22) Methyl tert-butyl ether	0.00	73	0	N.D.	

Quant 5/13/08

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509025.D
 Acq On : 9 May 2008 22:38
 Sample : JPL108-005
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:45 2008

Vial: 21
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.57	96	71		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	7.68	78	125		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.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	9.05	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	9.23	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	10.20	43	128		N.D.	
56) Toluene	10.37	92	62		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	10.90	97	57		N.D.	
60) Tetrachloroethene	10.91	166	88		N.D.	
61) 1,3-Dichloropropane	10.83	76	62		N.D.	
62) 2-Hexanone	11.23	43	93		N.D.	
63) Dibromochloromethane	11.17	129	53		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.	

(#) = qualifier out of range (m) = manual integration
 Y0509025.D Y8260W.M Mon May 12 13:45:57 2008

QNH 5/13/08

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509025.D
 Acq On : 9 May 2008 22:38
 Sample : JPL108-005
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:45 2008

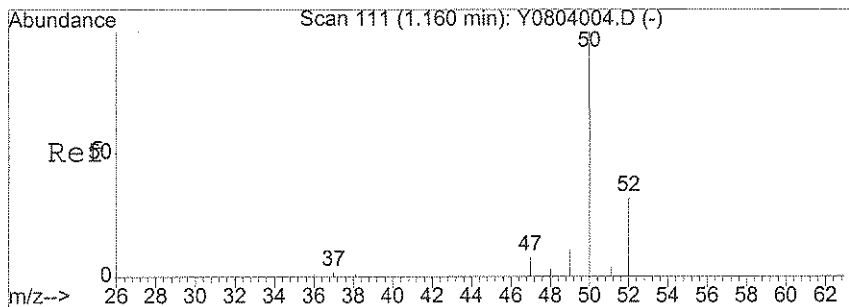
Vial: 21
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

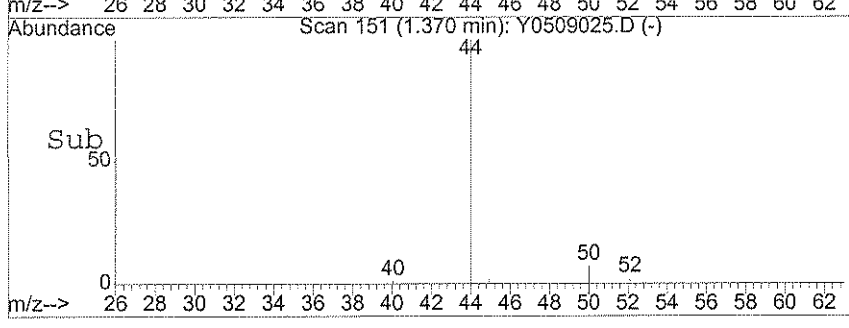
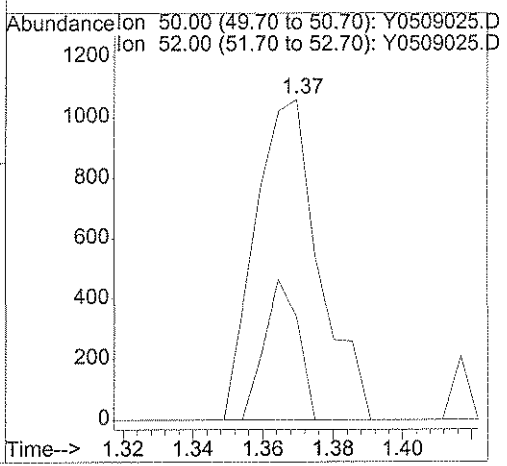
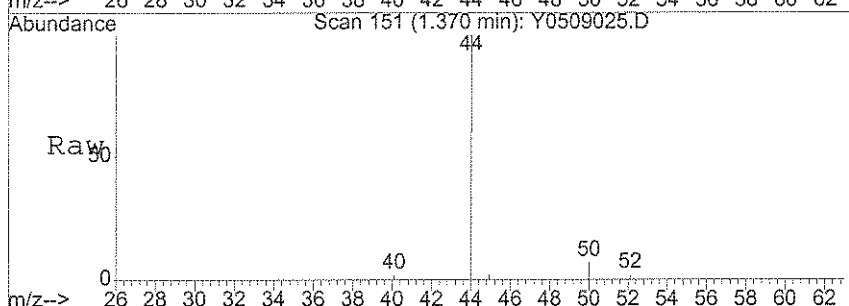
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.90	91	247		N.D.	
69) m,p-Xylene	11.91	106	54		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.26	104	65		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.68	105	611		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.69	156	56		N.D.	
78) 1,1,2,2-Tetrachloroethane	13.08	83	58		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.91	91	149		N.D.	
82) 4-Chlorotoluene	13.05	91	202		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	57		N.D.	
88) 4-Isopropyltoluene	13.59	119	134		N.D.	
89) 1,4-Dichlorobenzene	13.56	146	57		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	13.92	91	133		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.18	180	72		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	15.37	128	310		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	169		N.D.	

Print 5/13/08



#3
 Chloromethane
 Concen: 0.28 ug/l
 RT: 1.37 min Scan# 151
 Delta R.T. 0.00 min
 Lab File: Y0509025.D
 Acq: 9 May 2008 22:38

Tgt Ion: 50 Resp: 1342
 Ion Ratio Lower Upper
 50 100
 52 23.6 13.0 53.0



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-006
 Lab File ID: Y0509015.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 18:31
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.62	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-006
 Lab File ID: Y0509015.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 18:31
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-006
 Lab File ID: Y0509015.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 18:31
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

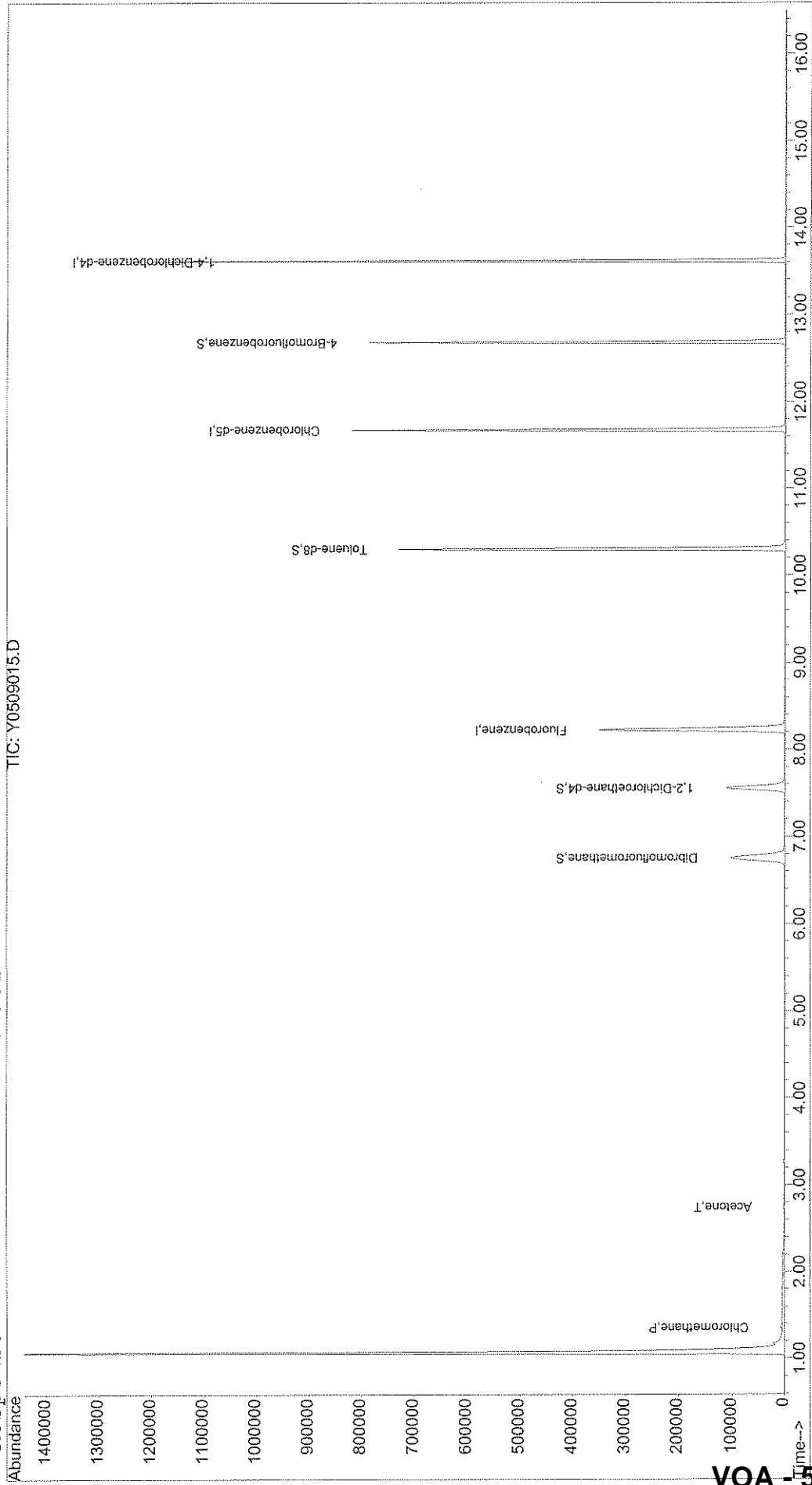
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509015.D Vial: 11
Acq On : 9 May 2008 18:31 Operator: DGA
Sample : JPL108-006 Inst : yoda
Misc : #2 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 13:01 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509015.D
 Acq On : 9 May 2008 18:31
 Sample : JPL108-006
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:01 2008

Vial: 11
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	8.23	96	410928	50.00	ug/l	0.00 80.48%
54) Chlorobenzene-d5	11.68	82	204501	50.00	ug/l	0.00 83.61%
74) 1,4-Dichlorobenzene-d4	13.61	152	259750	50.00	ug/l	0.00 74.12%

System Monitoring Compounds

36) Dibromofluoromethane	6.76	111	137071	50.99	ug/l	0.00
Spiked Amount	50.000	Range	85 - 115	Recovery	=	101.98%
40) 1,2-Dichloroethane-d4	7.56	65	136155	53.03	ug/l	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	106.06%
55) Toluene-d8	10.30	98	434029	49.01	ug/l	0.00
Spiked Amount	50.000	Range	85 - 120	Recovery	=	98.02%
76) 4-Bromofluorobenzene	12.68	95	183168	54.24	ug/l	0.00
Spiked Amount	50.000	Range	75 - 120	Recovery	=	108.48%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.35	50	3062	0.62	ug/l	98
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	2.67	96	67	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.75	43	1470	1.50	ug/l #	83
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.88	76	277	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	3.27	84	634	Below Cal		84
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.		

QNH 5/13/08

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509015.D
 Acq On : 9 May 2008 18:31
 Sample : JPL108-006
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:01 2008

Vial: 11
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
24) Vinyl acetate	0.00	43	0		N.D.	
25) Chloroprene	0.00	53	0		N.D.	
26) Isopropyl ether	4.58	45	57		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	6.35	83	151		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	7.65	78	75		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.	
45) Trichloroethene	8.82	130	54		N.D.	
46) Methylcyclohexane	9.05	83	122		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	10.37	92	233		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	10.73	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	10.94	43	163		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.	

QMA 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509015.D Y8260W.M Mon May 12 13:01:59 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509015.D
 Acq On : 9 May 2008 18:31
 Sample : JPL108-006
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:01 2008

Vial: 11
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	69		N.D.	
69) m,p-Xylene	11.90	106	54		N.D.	
70) o-xylene	12.25	106	152		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.56	105	75		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.80	156	59		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.68	83	56		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	13.04	120	53		N.D.	
81) 2-Chlorotoluene	12.89	91	233		N.D.	
82) 4-Chlorotoluene	13.05	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	183		N.D.	
88) 4-Isopropyltoluene	13.59	119	589		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	196		N.D.	
90) 1,2-Dichlorobenzene	13.92	146	58		N.D.	
91) n-Butylbenzene	13.91	91	510		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	373		N.D.	
94) Hexachlorobutadiene	15.31	225	184		N.D.	
95) Naphthalene	15.37	128	320		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	95		N.D.	

JM 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509015.D Y8260W.M Mon May 12 13:01:59 2008

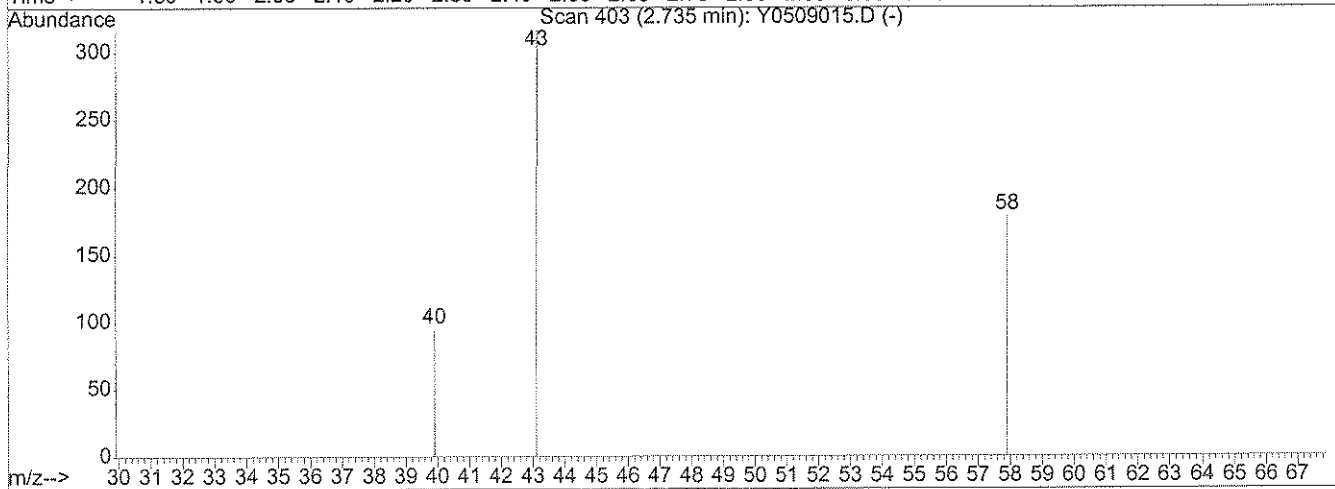
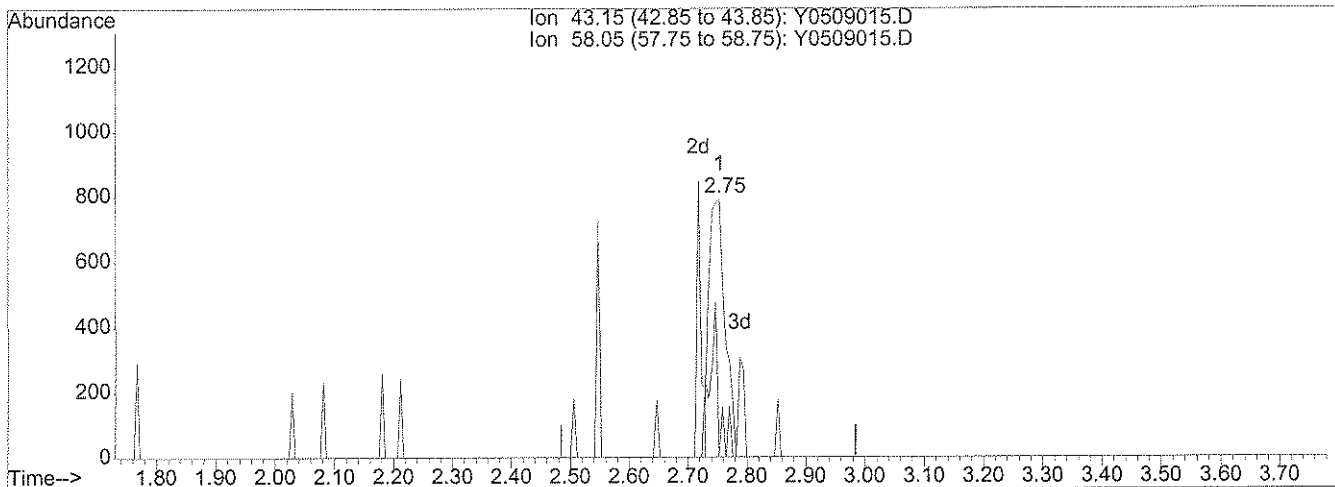
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509015.D
 Acq On : 9 May 2008 18:31
 Sample : JPL108-006
 Misc : #2 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 13:01 2008

Vial: 11
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration



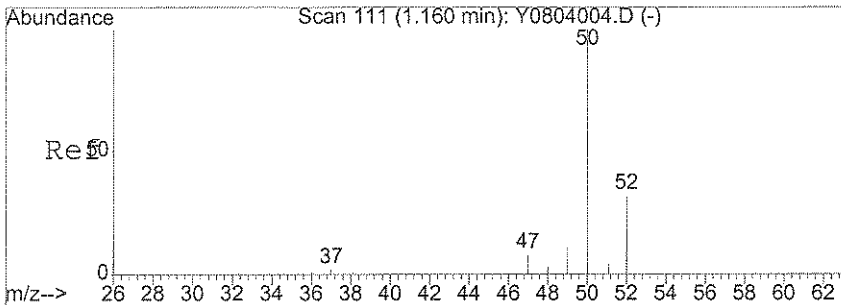
TIC: Y0509015.D

(11) Acetone (T)

2.75min 1.50ug/l

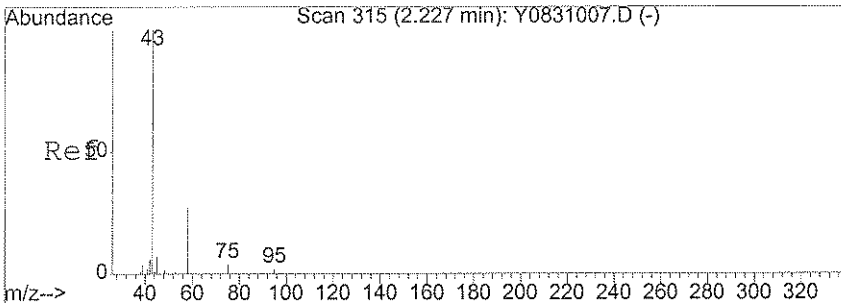
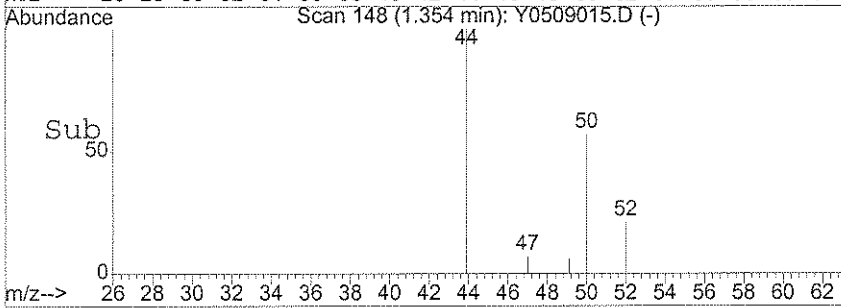
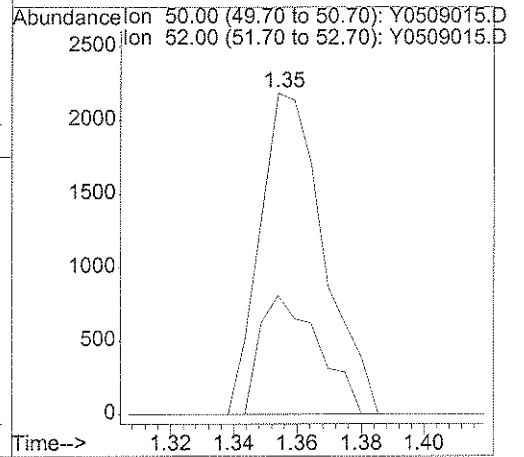
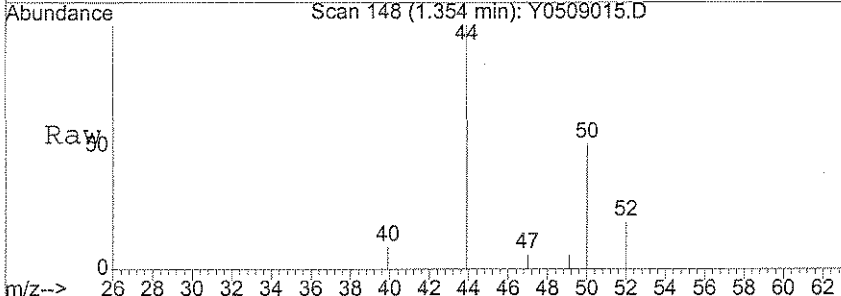
response 1470

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	35.51#
0.00	0.00	0.00
0.00	0.00	0.00



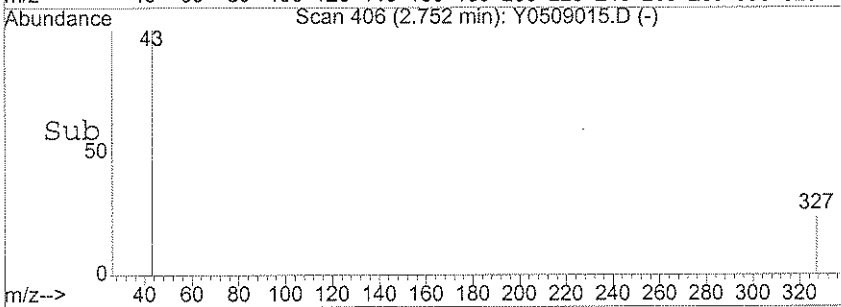
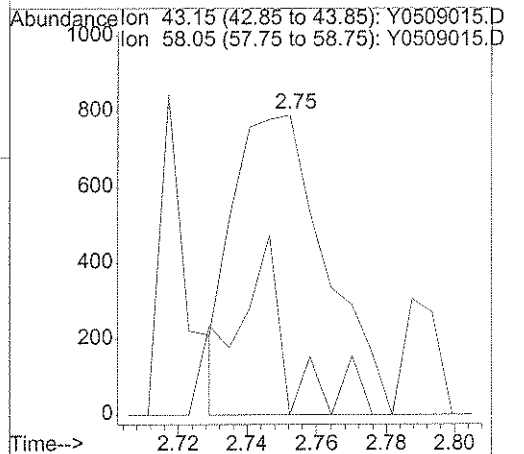
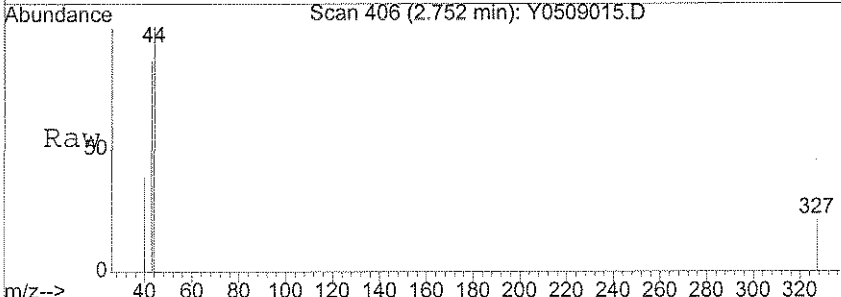
#3
 Chloromethane
 Concen: 0.62 ug/l
 RT: 1.35 min Scan# 148
 Delta R.T. -0.02 min
 Lab File: Y0509015.D
 Acq: 9 May 2008 18:31

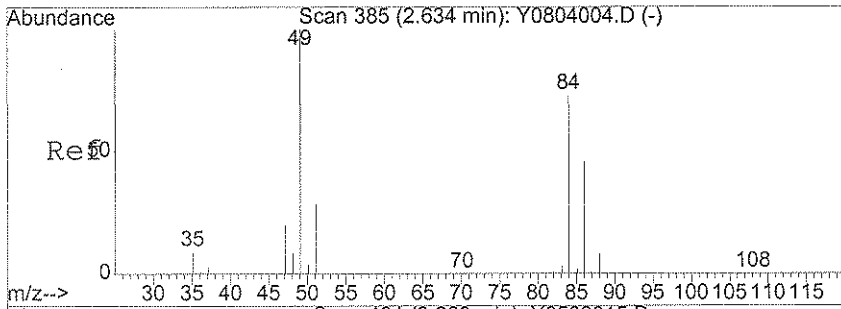
Tgt Ion: 50 Resp: 3062
 Ion Ratio Lower Upper
 50 100
 52 33.9 13.0 53.0



#11
 Acetone
 Concen: 1.50 ug/l
 RT: 2.75 min Scan# 406
 Delta R.T. 0.02 min
 Lab File: Y0509015.D
 Acq: 9 May 2008 18:31

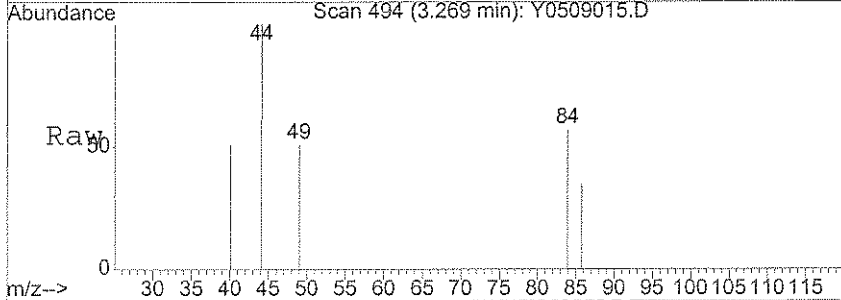
Tgt Ion: 43 Resp: 1470
 Ion Ratio Lower Upper
 43 100
 58 35.5 21.3 31.9#



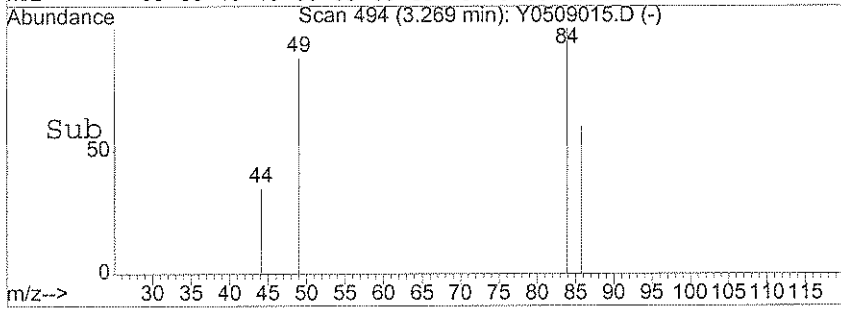
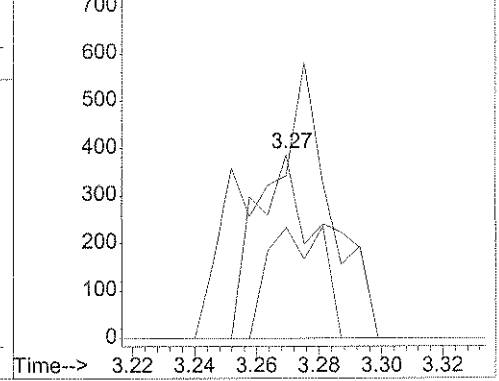


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.27 min Scan# 494
 Delta R.T. 0.00 min
 Lab File: Y0509015.D
 Acq: 9 May 2008 18:31

Tgt Ion	Resp	Lower	Upper
84	100		
49	150.3	112.5	152.5
86	45.7	39.5	79.5



Abundance
 Ion 84.00 (83.70 to 84.70): Y0509015.D
 Ion 49.00 (48.70 to 49.70): Y0509015.D
 Ion 86.00 (85.70 to 86.70): Y0509015.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-007
 Lab File ID: Y0509013.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 17:42
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-007
 Lab File ID: Y0509013.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 17:42
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-007
 Lab File ID: Y0509013.D
 Date Collected: 05/08/2008
 Date/Time Analyzed: 05/09/2008 17:42
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

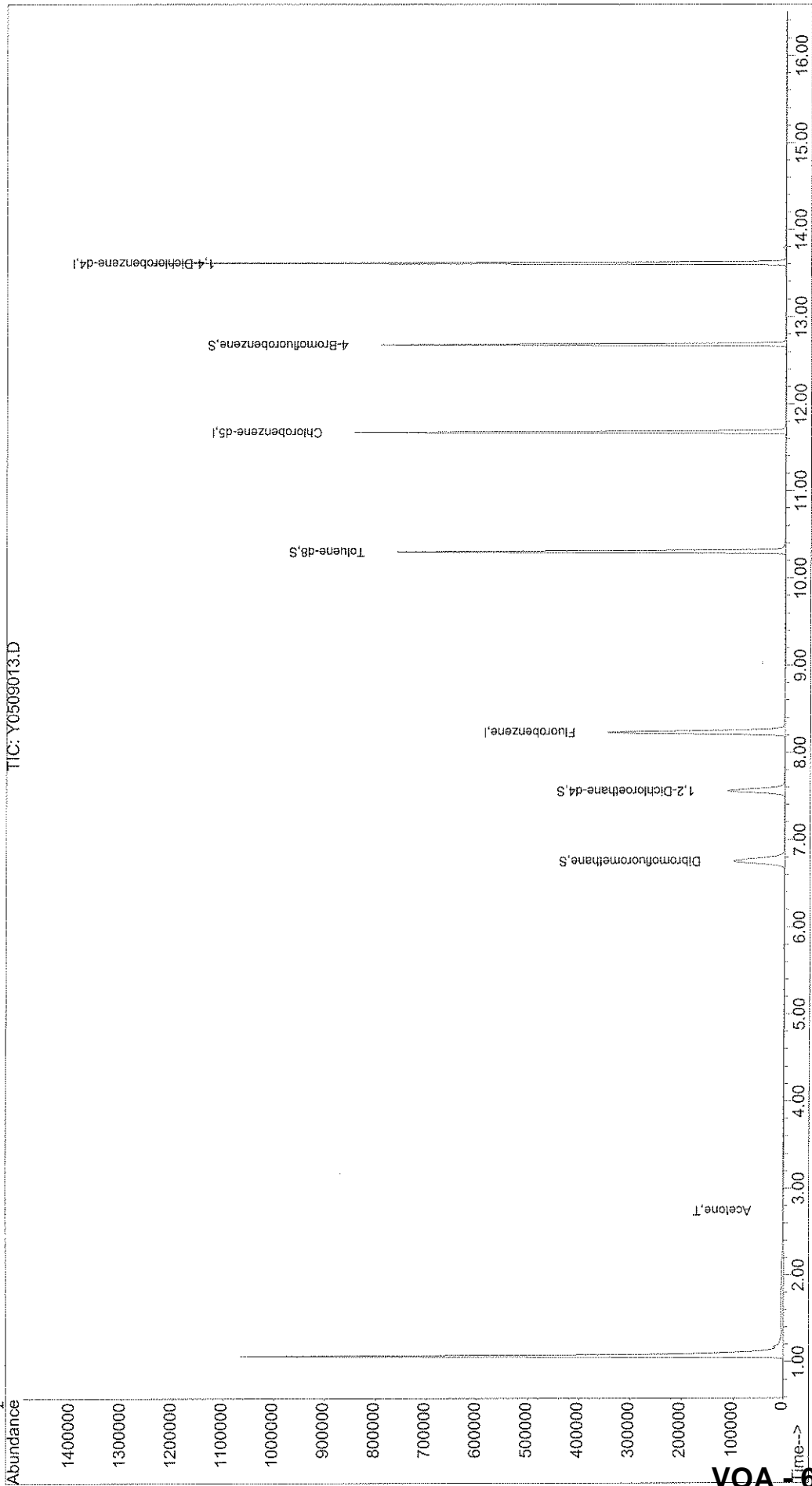
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509013.D Vial: 9
Acq On : 9 May 2008 17:42 Operator: DGA
Sample : JPL108-007 TB Inst : Yoda
Misc : #1 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 12 12:59 2008 Quant Results File: Y8260W.RES

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Thu Apr 17 07:07:54 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509013.D
 Acq On : 9 May 2008 17:42
 Sample : JPL108-007 TB
 Misc : #1 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 12:59 2008

Vial: 9
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260
 IS QA File : X:\MSVOA\YODA\050608\Y0506014.D (6 May 2008 12:59)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	8.23	96	412244	50.00	ug/l	0.00	80.73%
54) Chlorobenzene-d5	11.68	82	210005	50.00	ug/l	0.00	85.86%
74) 1,4-Dichlorobenzene-d4	13.61	152	264652	50.00	ug/l	0.00	75.52%

System Monitoring Compounds

36) Dibromofluoromethane	6.75	111	135563	50.27	ug/l	-0.01	
Spiked Amount	50.000						
Range	85 - 115						Recovery = 100.54%
40) 1,2-Dichloroethane-d4	7.56	65	135418	52.57	ug/l	0.00	
Spiked Amount	50.000						
Range	70 - 120						Recovery = 105.14%
55) Toluene-d8	10.30	98	444157	48.84	ug/l	0.00	
Spiked Amount	50.000						
Range	85 - 120						Recovery = 97.68%
76) 4-Bromofluorobenzene	12.68	95	190826	55.47	ug/l	0.00	
Spiked Amount	50.000						
Range	75 - 120						Recovery = 110.94%

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	2.69	101	82	N.D.		
11) Acetone	2.75	43	1238m3	1.26	ug/l #	62
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.88	76	652	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	3.27	84	213	Below Cal	#	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.		

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

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509013.D
 Acq On : 9 May 2008 17:42
 Sample : JPL108-007 TB
 Misc : #1 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 12:59 2008

Vial: 9
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	0.00	63	0		N.D.	
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	5.64	43	55		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	0.00	78	0		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.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	9.06	83	161		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	10.37	92	56		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	10.68	97	57		N.D.	
60) Tetrachloroethene	10.91	166	55		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	11.10	43	88		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) Chlorobenzene	11.70	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.	

QNH 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509013.D Y8260W.M Mon May 12 12:59:38 2008

Quantitation Report

Data File : X:\MSVOA\YODA\050908\Y0509013.D
 Acq On : 9 May 2008 17:42
 Sample : JPL108-007 TB
 Misc : #1 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 12:59 2008

Vial: 9
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: Y8260W.RES

Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.81	91	157		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.25	104	53		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.56	105	177		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	75	0		N.D.	d
80) n-Propylbenzene	12.90	120	55		N.D.	
81) 2-Chlorotoluene	12.96	91	143		N.D.	
82) 4-Chlorotoluene	13.05	91	240		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	d
84) tert-Butylbenzene	0.00	119	0		N.D.	d
85) 1,2,4-Trimethylbenzene	0.00	105	0		N.D.	d
86) sec-butylbenzene	0.00	105	0		N.D.	d
87) 1,3-Dichlorobenzene	13.56	146	55		N.D.	
88) 4-Isopropyltoluene	13.59	119	583		N.D.	
89) 1,4-Dichlorobenzene	13.63	146	185		N.D.	
90) 1,2-Dichlorobenzene	13.93	146	55		N.D.	
91) n-Butylbenzene	13.91	91	539		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.71	75	63		N.D.	
93) 1,2,4-Trichlorobenzene	15.17	180	140		N.D.	
94) Hexachlorobutadiene	15.30	225	216		N.D.	
95) Naphthalene	15.36	128	218		N.D.	
96) 1,2,3-Trichlorobenzene	15.56	180	263		N.D.	

Quant 5/13/08

(#) = qualifier out of range (m) = manual integration
 Y0509013.D Y8260W.M Mon May 12 12:59:38 2008

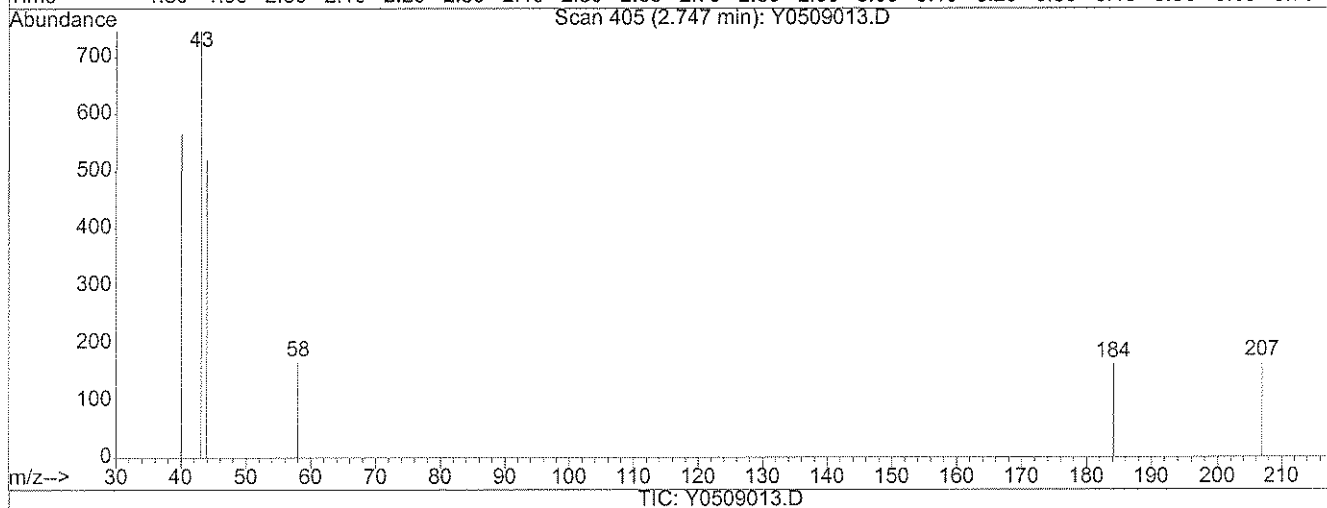
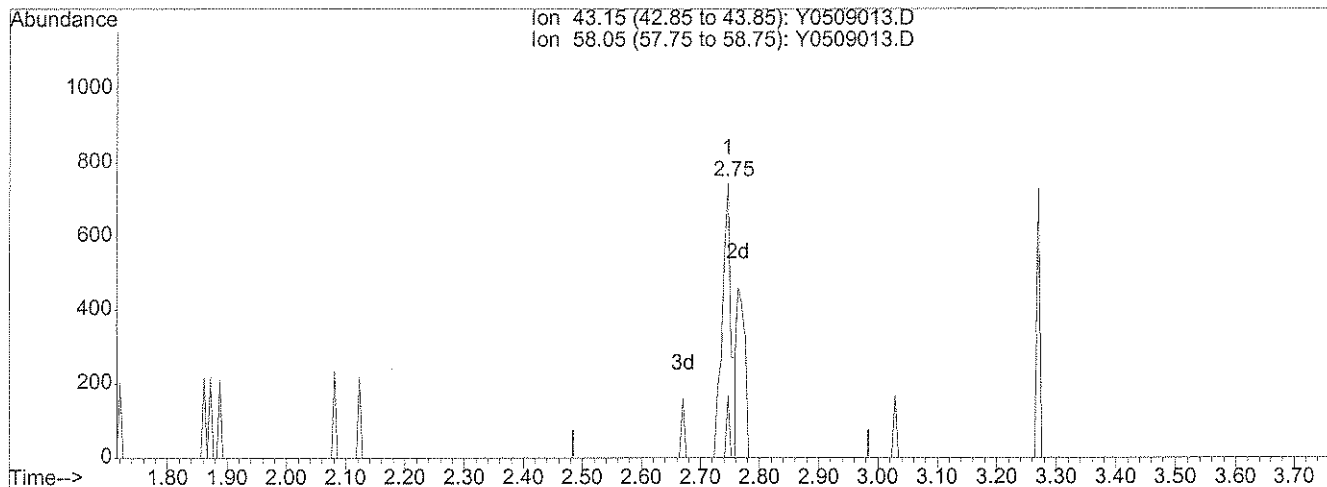
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509013.D
 Acq On : 9 May 2008 17:42
 Sample : JPL108-007 TB
 Misc : #1 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 10:11 2008

Vial: 9
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration



(11) Acetone (T)

2.75min 0.83ug/l

response 811

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	7.27#
0.00	0.00	0.00
0.00	0.00	0.00

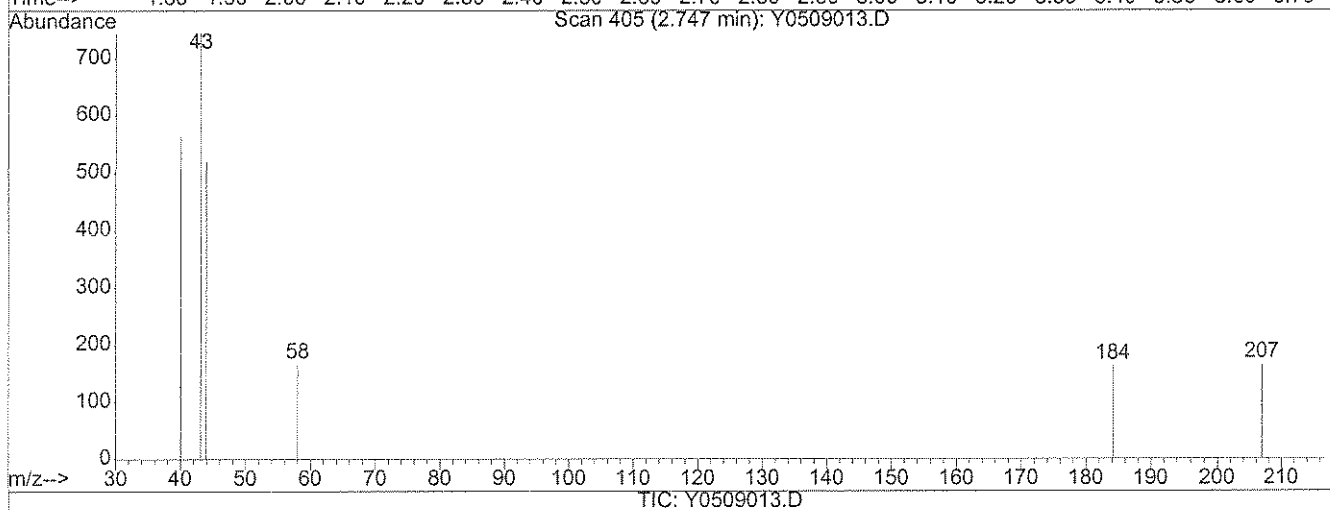
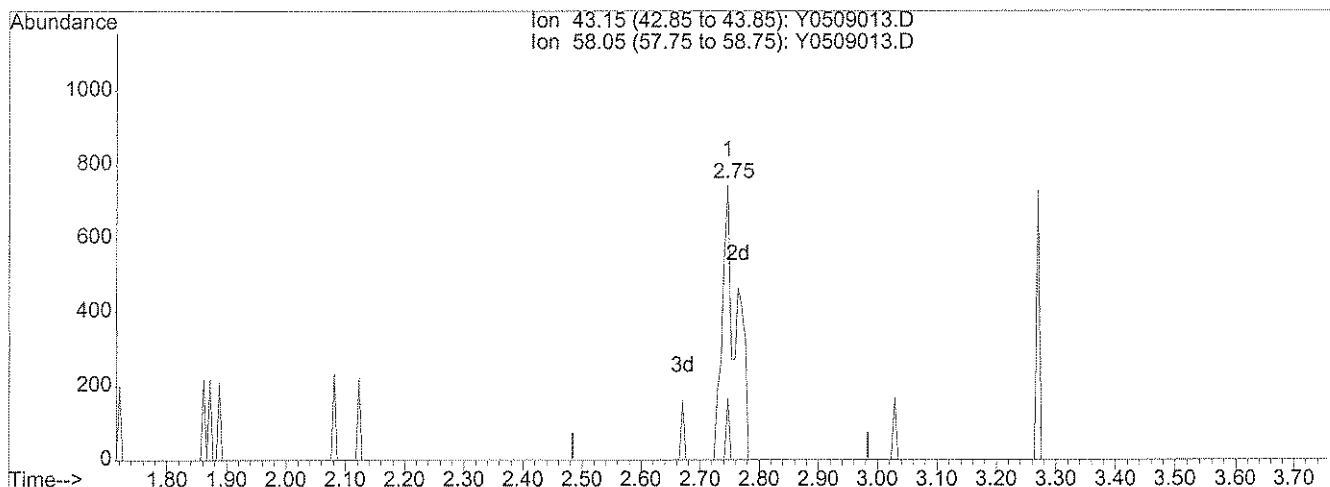
Quantitation Report (Qedit)

Data File : X:\MSVOA\YODA\050908\Y0509013.D
 Acq On : 9 May 2008 17:42
 Sample : JPL108-007 TB
 Misc : #1 5mL+IS/SS(MV8-45-10)
 MS Integration Params: rteint.p
 Quant Time: May 12 12:59 2008

Vial: 9
 Operator: DGA
 Inst : yoda
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
 Title : VOA 8260- 5ML Calibration 5973Y
 Last Update : Thu Apr 17 07:07:54 2008
 Response via : Single Level Calibration

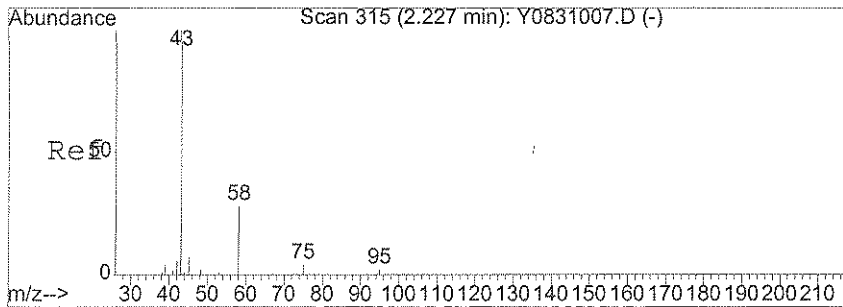


(11) Acetone (T)

2.75min 1.26ug/l m

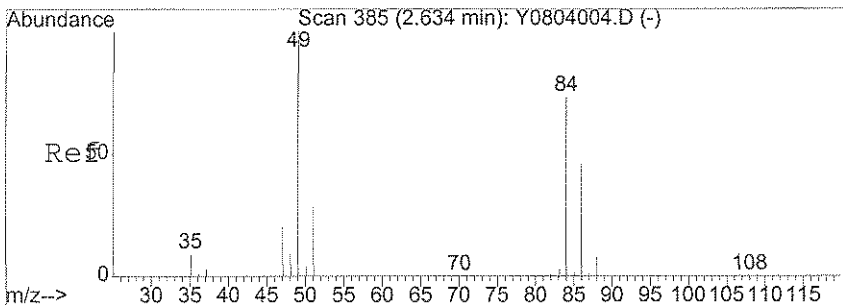
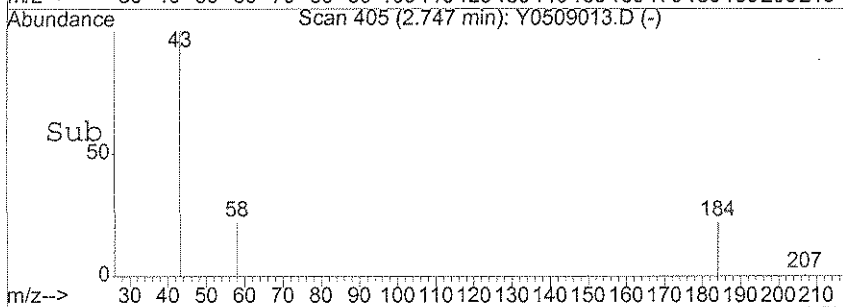
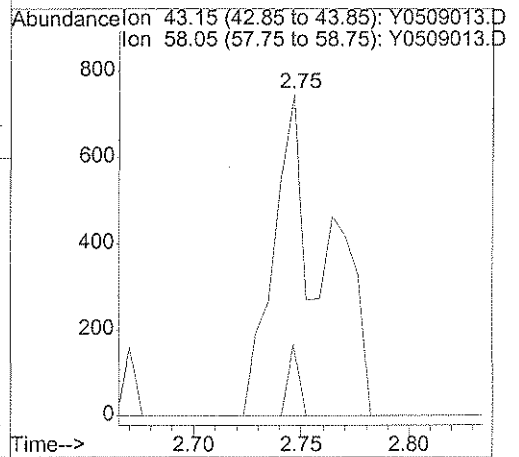
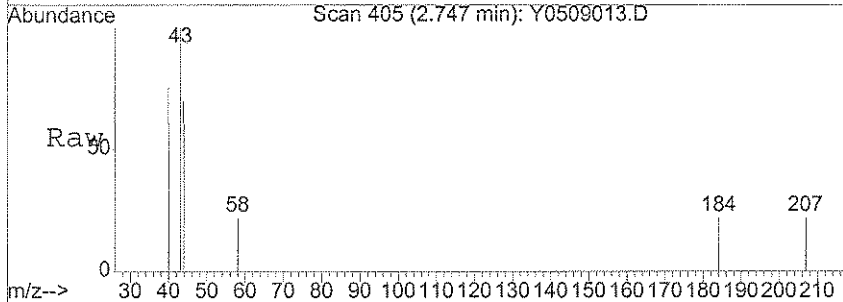
response 1238

Ion	Exp%	Act%
43.15	100	100
58.05	26.60	4.77#
0.00	0.00	0.00
0.00	0.00	0.00



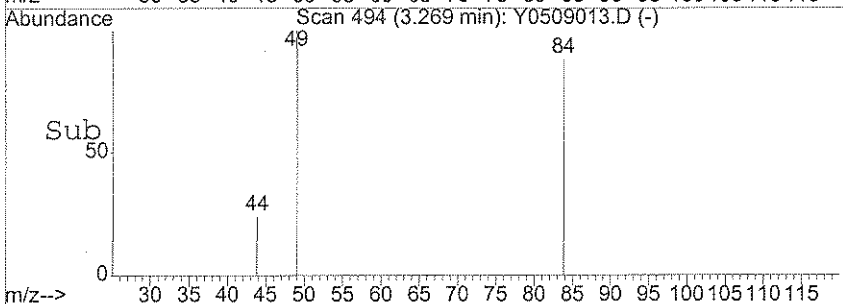
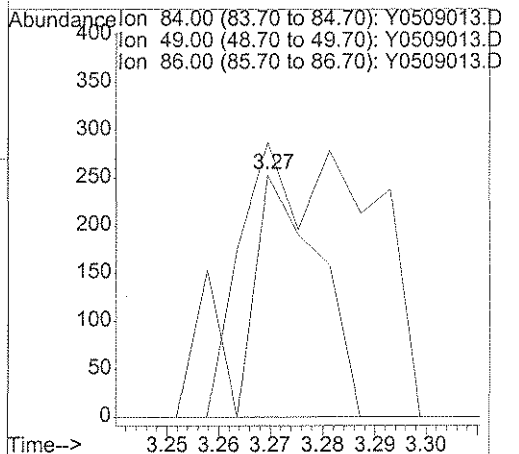
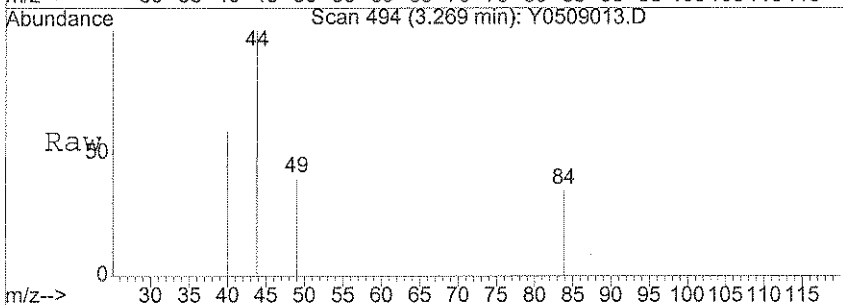
#11
 Acetone
 Concen: 1.26 ug/l m
 RT: 2.75 min Scan# 405
 Delta R.T. 0.01 min
 Lab File: Y0509013.D
 Acq: 9 May 2008 17:42

Tgt Ion	Resp	Lower	Upper
43	1238		
43	100		
58	4.8	21.3	31.9#



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 3.27 min Scan# 494
 Delta R.T. 0.00 min
 Lab File: Y0509013.D
 Acq: 9 May 2008 17:42

Tgt Ion	Resp	Lower	Upper
84	213		
84	100		
49	109.4	112.5	152.5#
86	25.4	39.5	79.5#



TIC DATA

SDG #JPL108

Volatiles Analysis

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-5

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-001
 Lab File ID: Y0509021.D
 Date Collected: 05/08/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509021.D Vial: 17
Acq On : 9 May 2008 20:59 Operator: DGA
Sample : JPL108-001 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509021.D Y8260W.M Mon May 12 13:39:05 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL108

Run Sequence: R027990

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL108-002

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

Lab File ID: Y0509022.D

Level: (LOW/MED) _____

Date Collected: 05/08/2008

% Moisture: not dec. _____

Date Analyzed: 05/09/2008

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

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

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509022.D Vial: 18
Acq On : 9 May 2008 21:24 Operator: DGA
Sample : JPL108-002 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509022.D Y8260W.M Mon May 12 13:40:32 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL108

Run Sequence: R027990

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL108-003

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

Lab File ID: Y0509023.D

Level: (LOW/MED) _____

Date Collected: 05/08/2008

% Moisture: not dec. _____

Date Analyzed: 05/09/2008

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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13				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509023.D Vial: 19
Acq On : 9 May 2008 21:49 Operator: DGA
Sample : JPL108-003 Inst : yoda
Misc : #2 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509023.D Y8260W.M Mon May 12 13:41:48 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-2

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-004
 Lab File ID: Y0509024.D
 Date Collected: 05/08/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509024.D Vial: 20
Acq On : 9 May 2008 22:14 Operator: DGA
Sample : JPL108-004 Inst : yoda
Misc : #3 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509024.D Y8260W.M Mon May 12 13:43:01 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-11-1

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-005
 Lab File ID: Y0509025.D
 Date Collected: 05/08/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509025.D Vial: 21
Acq On : 9 May 2008 22:38 Operator: DGA
Sample : JPL108-005 Inst : yoda
Misc : #2 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509025.D Y8260W.M Mon May 12 13:46:03 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-11-5/8/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL108

Run Sequence: R027990

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL108-006

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

Lab File ID: Y0509015.D

Level: (LOW/MED) _____

Date Collected: 05/08/2008

% Moisture: not dec. _____

Date Analyzed: 05/09/2008

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

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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26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\050908\Y0509015.D Vial: 11
Acq On : 9 May 2008 18:31 Operator: DGA
Sample : JPL108-006 Inst : yoda
Misc : #2 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509015.D Y8260W.M Mon May 12 13:02:03 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-11-5/8/08

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: JPL108-007
 Lab File ID: Y0509013.D
 Date Collected: 05/08/2008
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\050908\Y0509013.D Vial: 9
Acq On : 9 May 2008 17:42 Operator: DGA
Sample : JPL108-007 TB Inst : yoda
Misc : #1 5mL+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509013.D Y8260W.M Mon May 12 12:59:43 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B050908MVOWY2

Lab Name: Pace Analytical Services
 SDG No.: JPL108
 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: R027990
 Lab Sample ID: B050908MVOWY2
 Lab File ID: Y0509011.D
 Date Collected: _____
 Date Analyzed: 05/09/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\050908\Y0509011.D Vial: 7
Acq On : 9 May 2008 16:52 Operator: DGA
Sample : B050908MVOWY2 Inst : yoda
Misc : 5mL PFW+IS/SS(MV8-45-10) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\Y8260W.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

Y0509011.D Y8260W.M Mon May 12 10:33:31 2008

Metals Data

JPL108

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PAGE

SDG No.: JPL108

SOW No.: _____

Sample No.	Lab Sample ID
MW-11-5	JPL108-001
MW-11-5MS	JPL108-001MS
MW-11-5MSD	JPL108-001MSD
MW-11-4	JPL108-002
MW-11-3	JPL108-003
MW-11-2	JPL108-004
MW-11-1	JPL108-005
EB-11-5/8/08	JPL108-006
EB-11-5/8/08MS	JPL108-006MS
EB-11-5/8/08MSD	JPL108-006MSD

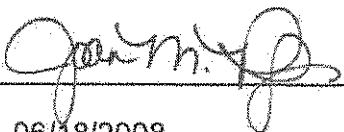
Were ICP interelement corrections applied? Yes/No YES

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: 06/18/2008

Title: Chemist

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-5

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL108Matrix (soil/water): WaterLab Sample ID: JPL108-001Level (low/med): LOWDate Received: 05/09/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	6.20			M	R028287
7440-70-2	Calcium	20800			P	R028697
7440-47-3	Chromium	2.44			M	R028287
7439-89-6	Iron	279			P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	51500			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/17/2008 11:01

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL108

Matrix (soil/water): Water

Lab Sample ID: JPL108-002

Level (low/med): LOW

Date Received: 05/09/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028287
7440-70-2	Calcium	8470			P	R028697
7440-47-3	Chromium	1.71			M	R028287
7439-89-6	Iron	100	U		P	R028697
7439-92-1	Lead	1.00	U		M	R028287
7439-95-4	Magnesium	7380			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	23500			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/17/2008 11:01

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-3

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL108Matrix (soil/water): WaterLab Sample ID: JPL108-003Level (low/med): LOWDate Received: 05/09/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028356
7440-70-2	Calcium	41100			P	R028697
7440-47-3	Chromium	1.00	U		M	R028356
7439-89-6	Iron	290			P	R028697
7439-92-1	Lead	1.00	U		M	R028356
7439-95-4	Magnesium	14400			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	27100			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/17/2008 11:01

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL108

Matrix (soil/water): Water

Lab Sample ID: JPL108-004

Level (low/med): LOW

Date Received: 05/09/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028356
7440-70-2	Calcium	51900			P	R028697
7440-47-3	Chromium	1.00	U		M	R028356
7439-89-6	Iron	445			P	R028697
7439-92-1	Lead	1.00	U		M	R028356
7439-95-4	Magnesium	19500			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	23300			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/17/2008 11:01

SW-846

-1-

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-11-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL108

Matrix (soil/water): Water

Lab Sample ID: JPL108-005

Level (low/med): LOW

Date Received: 05/09/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028356
7440-70-2	Calcium	70800			P	R028697
7440-47-3	Chromium	1.00	U		M	R028356
7439-89-6	Iron	100	U		P	R028697
7439-92-1	Lead	1.00	U		M	R028356
7439-95-4	Magnesium	23900			P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	29500			P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/17/2008 11:01

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-11-5/8/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL108

Matrix (soil/water): Water

Lab Sample ID: JPL108-006

Level (low/med): LOW

Date Received: 05/09/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028356
7440-70-2	Calcium	5000	U		P	R028697
7440-47-3	Chromium	1.73			M	R028356
7439-89-6	Iron	100	U		P	R028697
7439-92-1	Lead	1.00	U		M	R028356
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	5000	U		P	R028697

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/17/2008 11:01

Miscellaneous Inorganic Data

JPL108

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL108

SOW No.: _____

<u>Sample No.</u>
<u>MW-11-5</u>
<u>MW-11-4</u>
<u>MW-11-3</u>
<u>MW-11-2</u>
<u>MW-11-1</u>
<u>EB-11-5/8/08</u>

<u>Lab Sample ID</u>
<u>JPL108-001</u>
<u>JPL108-002</u>
<u>JPL108-003</u>
<u>JPL108-004</u>
<u>JPL108-005</u>
<u>JPL108-006</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: Rave J. Nix

Date: June 9, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-5 **Date/Time Collected:** 05/08/2008 08:05
Lab Sample ID: JPL108-001 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E150.1/29185 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.1		0.10	0.10	05/09/2008	05/09/2008	R027969

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	180		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29216 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027995\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/09/2008	05/09/2008	R027995
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/09/2008	05/09/2008	R027995
Sulfate as SO4	14808-79-8	10	18		10	1.7	05/09/2008	05/09/2008	R027995
Chloride	16887-00-6	10	12		10	0.76	05/09/2008	05/09/2008	R027995
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/09/2008	05/09/2008	R027995

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	8.0		2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	110		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-5 **Date/Time Collected:** 05/08/2008 08:05
Lab Sample ID: JPL108-001 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-4 **Date/Time Collected:** 05/08/2008 09:02
Lab Sample ID: JPL108-002 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E150.1/29185 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.9		0.10	0.10	05/09/2008	05/09/2008	R027969

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	97		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29216 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027995\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/09/2008	05/09/2008	R027995
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/09/2008	05/09/2008	R027995
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/09/2008	05/09/2008	R027995
Chloride	16887-00-6	10	11		10	0.76	05/09/2008	05/09/2008	R027995
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/09/2008	05/09/2008	R027995

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	24		2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	56		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-4 **Date/Time Collected:** 05/08/2008 09:02
Lab Sample ID: JPL108-002 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E314.0/29705 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/28/2008	05/29/2008	R028453

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-3 **Date/Time Collected:** 05/08/2008 09:45
Lab Sample ID: JPL108-003 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E150.1/29185 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	05/09/2008	05/09/2008	R027969

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	230		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29216 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027995\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/09/2008	05/09/2008	R027995
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/09/2008	05/09/2008	R027995
Sulfate as SO4	14808-79-8	10	24		10	1.7	05/09/2008	05/09/2008	R027995
Chloride	16887-00-6	10	11		10	0.76	05/09/2008	05/09/2008	R027995
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/09/2008	05/09/2008	R027995

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	160		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-3 **Date/Time Collected:** 05/08/2008 09:45
Lab Sample ID: JPL108-003 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E314.0/29705 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/28/2008	05/29/2008	R028453

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-2 **Date/Time Collected:** 05/08/2008 10:20
Lab Sample ID: JPL108-004 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E150.1/29185 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.9		0.10	0.10	05/09/2008	05/09/2008	R027969

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	250		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29216 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027995\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/09/2008	05/09/2008	R027995
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/09/2008	05/09/2008	R027995
Sulfate as SO4	14808-79-8	10	37		10	1.7	05/09/2008	05/09/2008	R027995
Chloride	16887-00-6	10	16		10	0.76	05/09/2008	05/09/2008	R027995
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/09/2008	05/09/2008	R027995

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	180		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-2 **Date/Time Collected:** 05/08/2008 10:20
Lab Sample ID: JPL108-004 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E314.0/29705 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/28/2008	05/29/2008	R028453

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-1 **Date/Time Collected:** 05/08/2008 10:57
Lab Sample ID: JPL108-005 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E150.1/29185 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.5		0.10	0.10	05/09/2008	05/09/2008	R027969

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	320		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29216 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027995\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	2.0	U	2.0	0.55	05/09/2008	05/09/2008	R027995
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/09/2008	05/09/2008	R027995
Sulfate as SO4	14808-79-8	10	53		10	1.7	05/09/2008	05/09/2008	R027995
Chloride	16887-00-6	10	24		10	0.76	05/09/2008	05/09/2008	R027995
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/09/2008	05/09/2008	R027995

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch
 FORM LTL-RSR-27.0

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: MW-11-1 **Date/Time Collected:** 05/08/2008 10:57
Lab Sample ID: JPL108-005 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E314.0/29705 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/28/2008	05/29/2008	R028453

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: EB-11-5/8/08 **Date/Time Collected:** 05/08/2008 10:39
Lab Sample ID: JPL108-006 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E150.1/29185 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.8		0.10	0.10	05/09/2008	05/09/2008	R027969

Method/Qbatch*: E160.1/29198 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	3.0		2.0	2.0	05/09/2008	05/13/2008	R027978

Method/Qbatch*: E300.0/29216 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R027995\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/09/2008	05/09/2008	R027995
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/09/2008	05/09/2008	R027995
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/09/2008	05/09/2008	R027995
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/09/2008	05/09/2008	R027995
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/09/2008	05/09/2008	R027995

Method/Qbatch*: E310.1/29456 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0	U	2.0	2.0	05/20/2008	05/20/2008	R028228

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL108
Sample Number: EB-11-5/8/08 **Date/Time Collected:** 05/08/2008 10:39
Lab Sample ID: JPL108-006 **Date/Time Received:** 05/09/2008 08:45
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL109

June 23, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL109
Date of Report: June 23, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-23-5	JPL109-001	VOA/MET/INO
MW-23-4	JPL109-002	VOA/MET/INO
MW-23-3	JPL109-003	VOA/MET/INO
MW-23-2	JPL109-004	VOA/MET/INO
MW-23-1	JPL109-005	VOA/MET/INO
EB-12-5/12/08	JPL109-006	VOA/MET/INO
DUPE-3-2Q08	JPL109-007	VOA/MET/INO
TB-12-5/12/08	JPL109-008	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

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940 S. Harney
Seattle, WA 98108

We assert that the results reported here relate only to the samples listed in this report.

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples. Two of two volatiles bottles submitted for TB-12-5/12/08 contained bubbles of greater than 1/4 inch in size. All samples submitted for pH analysis were received after the analytical holding time had expired.

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 Verification:

In the ICV performed on 5/12/2008 cis-1,3-dichloropropene exceeded 25% due to increased response. Because analysis of the daily second source S05/2207MVOWB2 yielded a recovery that was within the 25%, no further action was taken.

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, all samples except for the trip blank were received in the bottles from the contaminated lot and some have low level detections of chloromethane.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

Tentatively Identified Compounds (TICs):

A library search was performed for non-target analytes that are not identified on the quantitation report. The results for these have been submitted on a separate form.

Quality Control Analyses:

MS/MSD analyses were not performed due to insufficient sample volume. All spiked analytes in the blank spike analysis recovered within the control limits.

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 and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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	15 minutes	All samples

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ICP Metals:

For the run sequence R028697, the ICV exceeded the upper control limit for potassium. No sample results for potassium were reported from this run sequence. Quality control data for potassium were reported and were within control limits. Samples were reanalyzed and reported for potassium from run sequence R028884. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R028697, the ninth CCV fell below the lower control limit for potassium, calcium, iron and sodium. No sample results for potassium, calcium, iron, and sodium that were associated with this CCV were reported. Samples that were associated with this CCV were reanalyzed and reported for potassium, calcium, iron, and sodium from run sequence R028884. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

The serial dilution for the element sodium did not agree within 10% of the original determination after correction for dilution for sample MW-23-5. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and 9.

ICP-MS Metals:

The matrix spike sample and matrix spike duplicate sample percent recoveries of arsenic were outside of the established control limits of 70-130% for sample DUPE-3-2Q08. Laboratory control samples were performed and were within control limits. No further corrective action was required. All relevant data have been flagged with an "N" on Forms I and 5C.

Miscellaneous Inorganics:

In the run sequence R028086 for "300.0 Anions", the matrix spike and matrix spike duplicate exceeded the established lower control limits for orthophosphate. Since all of the other quality control samples were in control, no further action was taken.

In the run sequence R028258 for "310.1 Alkalinity", the relative percent difference for bicarbonate alkalinity exceeded the established control limit. Since all of the other quality control samples were in control, no further action was taken.

In the run sequence R028515 for "314.0 Perchlorate", the matrix spike duplicate exceeded the established upper control limit. Since all of the other quality control samples were in control, 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.
- ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.

Z Denotes data deemed unusable by the analyst.

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


Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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,


for

Kara Godineaux
Project Manager

6/23/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/23/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG

Sample #	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, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
WD JPL109-001	05/13/2008 08:30 AM	05/12/2008 07:47 AM	MW-23-5	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-002	05/13/2008 08:30 AM	05/12/2008 08:25 AM	MW-23-4	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-003	05/13/2008 08:30 AM	05/12/2008 08:59 AM	MW-23-3	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-004	05/13/2008 08:30 AM	05/12/2008 09:43 AM	MW-23-2	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-005	05/13/2008 08:30 AM	05/12/2008 11:03 AM	MW-23-1	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-006	05/13/2008 08:30 AM	05/12/2008 10:48 AM	EB-12-5/12/08	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-007	05/13/2008 08:30 AM	05/12/2008 12:00 AM	DUPE-3-2008	A-	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL109-008	05/13/2008 08:30 AM	05/12/2008 12:00 AM	TB-12-5/12/08								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
 Matrices: Water=WD
FORM LTL-PM-8.0

46072

PAGE 1 OF 1



COMPANY: BOTTLE

ADDRESS: 3990 OLD TOWN AVE, C-205
SAN DIEGO, CA 92110

WORK ORDER ID# SP1189

SUBMITTED AT: 940 South Hamer St, Seattle, WA 98108
1106 Ledwith Ave, Yakima, WA 98902

(206) 767-5060 FAX 767-5063
(509) 248-4095 FAX 452-1265

ATTENTION: DAVID CAUER

PROJECT NAME: Del CW MWL 2008

PROJECT CONTACT: DAVID CAUER

TELEPHONE: 619-726-7311 FAX: _____

JOB/PO. NO.: 6481090/21439

MATRIX: WATER, SOIL OR SPECIFY

NO. OF CONTAINERS	
VOC (524.2)	
TOTAL Cr (200.8)	
LEAD (200.8)	
ARSENIC (200.8)	
NEW CHEM (Perk. Cont. - 100.0)	
CI 04 - (314.0)	
NEW CHEM (Perk. Cont. - 100.0)	

TESTS TO PERFORM

OBSERVATIONS:
COMMENTS: SPECIAL INSTRUCTIONS

LAB SAM	SAMPLE ID / LOCATION	DATE	TIME														
1	MW-23-5	5/12/08	747	W	X	X	X	X	X	X	X	X	X	X	X	X	X
2	MW-23-4		825		X	X	X	X	X	X	X	X	X	X	X	X	X
3	MW-23-3		859		X	X	X	X	X	X	X	X	X	X	X	X	X
4	MW-23-2		943		X	X	X	X	X	X	X	X	X	X	X	X	X
5	MW-23-1		1103		X	X	X	X	X	X	X	X	X	X	X	X	X
6	ES-12-5/12/08		1048		X	X	X	X	X	X	X	X	X	X	X	X	X
8	78-12-5/12/08				X	X	X	X	X	X	X	X	X	X	X	X	X
7	DPE-3-2008				X	X	X	X	X	X	X	X	X	X	X	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

BILLING INFORMATION (IF DIFFERENT THAN ABOVE)

NAME: BOTTLE

ADDRESS: 505 WINDS AVE.

CITY, STATE, ZIP: COLUMBIAS, OR 97301

ATTN: DAVID CAUER

REINQUISHED BY (SIGN AND PRINT): MANO MEUDSZA

DATE: 5/13/08

TIME: 1400

RECEIVED BY (SIGN AND PRINT): RACHEL FRANK

DATE: 5/13/08

TIME: 8:30

TURNDOWN 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 NA

**Cooler Receipt Form
Pace Analytical Services, Inc.**

SDG: JPL109 Taken By: Client

Cooler: AAD840 Transferred: FedEx

COC #: 46072

Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 5/13/2008

Date cooler was opened: 5/13/2008 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: 865543091386
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? 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: *RF*

B. LOG-IN PHASE:

Date samples were logged-in: 5/13/2008 9:13AM

Logged-in by Rachel Frank (sign) *Rachel Frank*

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? NO
18. Temperatures: 4.9

DISCREPANCIES:

2 of 2 Trip Blanks have bubbles >1/4"

Samples 1 & 2 were received to the lab out of hold for PH, sample 3 went out of hold while I was logging the samples in, all other samples are close to hold time for PH.

Date Printed: 5/13/2008 9:16

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL109

Cooler: AAD840

Temperatures: 4.9

COC #: 46072

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL109-001	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
JPL109-002	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
JPL109-003	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
JPL109-004	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
JPL109-005	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
JPL109-006	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
JPL109-007	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
Pace Analytical Services, Inc.

SDG: JPL109

Cooler: AAD840

Temperatures: 4.9

COC #: 46072

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
JPL109-008	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

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Seattle, WA 98108

Battelle

SDG No.: JPL109

- I. Narrative: 2-8
- II. Chain-of-Custody: 9-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-341
 - A. QC Summary Data: 1-14
 - B. Sample Data: 15-119
 - C. Standards Data: 120-287
 - D. Raw QC Data: 288-332
 - E. Bench Sheets: 333-341
- V. Metals Data: MET- 1-367
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-10
 - C. Quality Control Data: 11-57
 - D. Quarterly Verification of Instrument Parameters: 58-68
 - E. Raw Data: 69-359
 - F. Digestion & Distillation Logs: 360-367
- VI. Miscellaneous Inorganics Data: INO 1-185
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-17
 - C. Quality Control Data: 18-42
 - D. Raw Data: 43-185
- VII. Forms Summary: SUM- 1-175

Completed and checked by: Judy Eichlund Date: 6/24/08

QC SUMMARY

SDG JPL109

VOLATILES ANALYSIS

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL109-004) MW-23-2	95	93	96		0
(JPL109-003) MW-23-3	98	94	94		0
(JPL109-002) MW-23-4	95	94	95		0
(JPL109-001) MW-23-5	98	94	95		0
(JPL109-008) TB-12-5/12/08	96	94	93		0
(B051308MVOWB1) B051308MVOWB1	98	97	93		0
(S051308MVOWB1) S051308MVOWB1	95	98	95		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

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL109-007) DUPE-3-2Q08	108	96	93		0
(JPL109-006) EB-12-5/12/08	105	100	95		0
(JPL109-005) MW-23-1	110	100	94		0
(B051608MVOWB1) B051608MVOWB1	110	95	92		0
(S051608MVOWB1) S051608MVOWB1	103	97	94		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: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028171 SDG No.: JPL109

BS Lab Sample ID: S051308MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	46.47	93		60-140
Chloromethane	50.0	45.12	90		60-140
Vinyl chloride	50.0	50	100		60-140
Bromomethane	50.0	45.87	92		60-140
Chloroethane	50.0	44.94	90		60-140
Trichlorofluoromethane	50.0	54.07	108		60-140
1,1-Dichloroethene	50.0	59.17	118		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.21	118		60-140
Methylene chloride	50.0	55.11	110		60-140
Methyl tert-butyl ether	50.0	49.1	98		60-140
trans-1,2-Dichloroethene	50.0	52.97	106		60-140
1,1-Dichloroethane	50.0	51.95	104		60-140
2,2-Dichloropropane	50.0	50.21	100		60-140
cis-1,2-Dichloroethene	50.0	52.25	105		60-140
2-Butanone	50.0	49.11	98		60-140
Bromochloromethane	50.0	53.15	106		60-140
Chloroform	50.0	49.74	99		60-140
1,1,1-Trichloroethane	50.0	52.83	106		60-140
Carbon tetrachloride	50.0	53.59	107		60-140
1,1-Dichloropropene	50.0	55.55	111		60-140
Benzene	50.0	51.4	103		60-140
1,2-Dichloroethane	50.0	51.73	103		60-140
Trichloroethene	50.0	50.65	101		60-140
1,2-Dichloropropane	50.0	51.8	104		60-140
Dibromomethane	50.0	52.18	104		60-140
Bromodichloromethane	50.0	51.5	103		60-140
cis-1,3-Dichloropropene	50.0	66.38	133		60-140
4-Methyl-2-pentanone	50.0	54.49	109		60-140
Toluene	50.0	51.36	103		60-140
trans-1,3-Dichloropropene	50.0	50.03	100		60-140
1,1,2-Trichloroethane	50.0	50.17	100		60-140
Tetrachloroethene	50.0	51.2	102		60-140
1,3-Dichloropropane	50.0	51.45	103		60-140
Dibromochloromethane	50.0	53.39	107		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 10:47

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028171 SDG No.: JPL109

BS Lab Sample ID: S051308MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	53.46	107		60-140
Chlorobenzene	50.0	50.97	102		60-140
Ethylbenzene	50.0	50.81	102		60-140
1,1,1,2-Tetrachloroethane	50.0	48.99	98		60-140
m,p-Xylene	100	101.85	102		60-140
o-Xylene	50.0	49.56	99		60-140
Styrene	50.0	50.8	102		60-140
Bromoform	50.0	51.35	103		60-140
Isopropylbenzene	50.0	50.38	101		60-140
1,1,2,2-Tetrachloroethane	50.0	51.17	102		60-140
n-Propylbenzene	50.0	52	104		60-140
Bromobenzene	50.0	51.92	104		60-140
1,2,3-Trichloropropane	50.0	51.44	103		60-140
2-Chlorotoluene	50.0	50.27	101		60-140
1,3,5-Trimethylbenzene	50.0	51.94	104		60-140
4-Chlorotoluene	50.0	51.14	102		60-140
tert-Butylbenzene	50.0	52.39	105		60-140
1,2,4-Trimethylbenzene	50.0	51.75	104		60-140
sec-Butylbenzene	50.0	53.53	107		60-140
4-Isopropyltoluene	50.0	54.59	109		60-140
1,3-Dichlorobenzene	50.0	50.4	101		60-140
1,4-Dichlorobenzene	50.0	50.25	101		60-140
n-Butylbenzene	50.0	52.19	104		60-140
1,2-Dichlorobenzene	50.0	49.95	100		60-140
1,2-Dibromo-3-chloropropane	50.0	50.79	102		60-140
1,2,4-Trichlorobenzene	50.0	51.75	104		60-140
Hexachlorobutadiene	50.0	50.62	101		60-140
Naphthalene	50.0	53.52	107		60-140
1,2,3-Trichlorobenzene	50.0	50.04	100		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 10:47

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028170 SDG No.: JPL109

BS Lab Sample ID: S051608MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	52.98	106		60-140
Chloromethane	50.0	46.54	93		60-140
Vinyl chloride	50.0	52.19	104		60-140
Bromomethane	50.0	50.63	101		60-140
Chloroethane	50.0	46.2	92		60-140
Trichlorofluoromethane	50.0	63.59	127		60-140
1,1-Dichloroethene	50.0	59.79	120		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	62.46	125		60-140
Methylene chloride	50.0	55.68	111		60-140
Methyl tert-butyl ether	50.0	49.96	100		60-140
trans-1,2-Dichloroethene	50.0	54.86	110		60-140
1,1-Dichloroethane	50.0	53.36	107		60-140
2,2-Dichloropropane	50.0	53.58	107		60-140
cis-1,2-Dichloroethene	50.0	51.95	104		60-140
2-Butanone	50.0	47.9	96		60-140
Bromochloromethane	50.0	53.75	108		60-140
Chloroform	50.0	52.23	104		60-140
1,1,1-Trichloroethane	50.0	56.94	114		60-140
Carbon tetrachloride	50.0	57.91	116		60-140
1,1-Dichloropropene	50.0	58.14	116		60-140
Benzene	50.0	50.84	102		60-140
1,2-Dichloroethane	50.0	55.9	112		60-140
Trichloroethene	50.0	51.38	103		60-140
1,2-Dichloropropane	50.0	50.5	101		60-140
Dibromomethane	50.0	52.42	105		60-140
Bromodichloromethane	50.0	52.91	106		60-140
cis-1,3-Dichloropropene	50.0	64.9	130		60-140
4-Methyl-2-pentanone	50.0	53.38	107		60-140
Toluene	50.0	49.78	100		60-140
trans-1,3-Dichloropropene	50.0	49.36	99		60-140
1,1,2-Trichloroethane	50.0	48.79	98		60-140
Tetrachloroethene	50.0	51.62	103		60-140
1,3-Dichloropropane	50.0	50.18	100		60-140
Dibromochloromethane	50.0	52.92	106		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 10:47

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028170 SDG No.: JPL109

BS Lab Sample ID: S051608MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	51.91	104		60-140
Chlorobenzene	50.0	50.11	100		60-140
Ethylbenzene	50.0	50.25	101		60-140
1,1,1,2-Tetrachloroethane	50.0	49.01	98		60-140
m,p-Xylene	100	100.46	100		60-140
o-Xylene	50.0	48.4	97		60-140
Styrene	50.0	49.76	100		60-140
Bromoform	50.0	50.3	101		60-140
Isopropylbenzene	50.0	50.18	100		60-140
1,1,2,2-Tetrachloroethane	50.0	49.05	98		60-140
n-Propylbenzene	50.0	50.79	102		60-140
Bromobenzene	50.0	50.36	101		60-140
1,2,3-Trichloropropane	50.0	48.96	98		60-140
2-Chlorotoluene	50.0	49.42	99		60-140
1,3,5-Trimethylbenzene	50.0	51.32	103		60-140
4-Chlorotoluene	50.0	50.41	101		60-140
tert-Butylbenzene	50.0	51.55	103		60-140
1,2,4-Trimethylbenzene	50.0	50.94	102		60-140
sec-Butylbenzene	50.0	52.71	105		60-140
4-Isopropyltoluene	50.0	53.85	108		60-140
1,3-Dichlorobenzene	50.0	50.26	101		60-140
1,4-Dichlorobenzene	50.0	49.31	99		60-140
n-Butylbenzene	50.0	51.39	103		60-140
1,2-Dichlorobenzene	50.0	49.29	99		60-140
1,2-Dibromo-3-chloropropane	50.0	48.34	97		60-140
1,2,4-Trichlorobenzene	50.0	51.11	102		60-140
Hexachlorobutadiene	50.0	52.11	104		60-140
Naphthalene	50.0	50.33	101		60-140
1,2,3-Trichlorobenzene	50.0	48.41	97		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 10:47

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B051308MVOWB1

Lab Name Pace Analytical Services Contract: JPL Groundwater Monitorin
 SDG No.: JPL109
 Lab File ID: B0513010.D Lab Sample ID: B051308MVOWB1
 Date Analyzed: 05/13/2008 Time Analyzed: 14:41
 GC Column: ZB-624 20m ID: 0.18 (mm) Heated Purge: (Y/N) N
 Instrument ID: 5973B Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S051308MVOWB1	S051308MVOWB1	B0513007.D	05/13/2008	13:20	R028171
02	TB-12-5/12/08	JPL109-008	B0513018.D	05/13/2008	18:21	R028171
03	MW-23-5	JPL109-001	B0513025.D	05/13/2008	21:29	R028171
04	MW-23-4	JPL109-002	B0513026.D	05/13/2008	21:55	R028171
05	MW-23-3	JPL109-003	B0513027.D	05/13/2008	22:22	R028171
06	MW-23-2	JPL109-004	B0513028.D	05/13/2008	22:49	R028171
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COMMENTS: _____

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B051608MVOWB1

Lab Name Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Lab File ID: B0516008.D

Lab Sample ID: B051608MVOWB1

Date Analyzed: 05/16/2008

Time Analyzed: 10:07

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

Heated Purge: (Y/N) N

Instrument ID: 5973B

Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S051608MVOWB1	S051608MVOWB1	B0516005.D	05/16/2008	08:26	R028170
02	MW-23-1	JPL109-005	B0516018.D	05/16/2008	14:38	R028170
03	EB-12-5/12/08	JPL109-006	B0516019.D	05/16/2008	15:05	R028170
04	DUPE-3-2Q08	JPL109-007	B0516020.D	05/16/2008	15:32	R028170
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COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

CLIENT SAMPLE NO.

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1323 SDG No.: JPL109
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB2

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028171 SDG No.: JPL109
 Lab File ID: B0513005.D BFB Injection Date: 05/13/2008
 Instrument ID: 5973B BFB Injection Time: 12:28
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	15.3
75	30% to 60% of mass 95	44.4
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	108.8
175	5% to 9% of mass 17	7.5()1
176	greater than 95%, but less than 101% of mass 174	96()1
177	5% to 9% of mass 176	6.4()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	VSTD050B1	VSTD050B1	B0513006.D	05/13/2008	12:52
02	S051308MVOWB1	S051308MVOWB1	B0513007.D	05/13/2008	13:20
03	B051308MVOWB1	B051308MVOWB1	B0513010.D	05/13/2008	14:41
04	TB-12-5/12/08	JPL109-008	B0513018.D	05/13/2008	18:21
05	MW-23-5	JPL109-001	B0513025.D	05/13/2008	21:29
06	MW-23-4	JPL109-002	B0513026.D	05/13/2008	21:55
07	MW-23-3	JPL109-003	B0513027.D	05/13/2008	22:22
08	MW-23-2	JPL109-004	B0513028.D	05/13/2008	22:49
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB2/VSTD050B1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028170 SDG No.: JPL109
 Lab File ID: B0516004a.d BFB Injection Date: 05/16/2008
 Instrument ID: 5973B BFB Injection Time: 07:58
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	15.1
75	30% to 60% of mass 95	45.2
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	112.7
175	5% to 9% of mass 17	7.4()1
176	greater than 95%, but less than 101% of mass 174	95.6()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	VSTD050B1	VSTD050B1	B0516004.D	05/16/2008	07:58
02	S051608MVOWB1	S051608MVOWB1	B0516005.D	05/16/2008	08:26
03	B051608MVOWB1	B051608MVOWB1	B0516008.D	05/16/2008	10:07
04	MW-23-1	JPL109-005	B0516018.D	05/16/2008	14:38
05	EB-12-5/12/08	JPL109-006	B0516019.D	05/16/2008	15:05
06	DUPE-3-2Q08	JPL109-007	B0516020.D	05/16/2008	15:32
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22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028171 SDG No.: JPL109
 Client Sample No. (VSTD050##): VSTD050B1 Date Analyzed: 05/13/2008
 Lab File ID (Standard): B0513006.D Time Analyzed: 12:52
 Instrument ID: 5973B 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	565848	7.52	474784	11.30	281661	13.24
UPPER LIMIT	1131696	7.57	949568	11.35	563322	13.29
LOWER LIMIT	282924	7.47	237392	11.25	140830.5	13.19
CLIENT SAMPLE NO.						
01 S051308MVOWB1	566385	7.53	478579	11.30	279965	13.25
02 B051308MVOWB1	515316	7.53	398875	11.30	246271	13.25
03 TB-12-5/12/08	513060	7.53	393507	11.30	244427	13.25
04 MW-23-5	522985	7.53	385032	11.30	247775	13.24
05 MW-23-4	516131	7.53	389452	11.30	242077	13.25
06 MW-23-3	506698	7.53	381817	11.30	242283	13.25
07 MW-23-2	513158	7.52	379113	11.30	242812	13.25
08						
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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

Date Printed: 5/30/2008 10:54

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028170 SDG No.: JPL109
 Client Sample No.(VSTD050##): VSTD050B1 Date Analyzed: 05/16/2008
 Lab File ID (Standard): B0516004.D Time Analyzed: 07:58
 Instrument ID: 5973B 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	492397	7.52	397817	11.30	241111	13.24
UPPER LIMIT	984794	7.57	795634	11.35	482222	13.29
LOWER LIMIT	246198.5	7.47	198908.5	11.25	120555.5	13.19
CLIENT SAMPLE NO.						
01 S051608MVOWB1	505601	7.53	435427	11.30	260283	13.25
02 B051608MVOWB1	453777	7.52	344748	11.30	221431	13.24
03 MW-23-1	446131	7.53	358062	11.30	208056	13.25
04 EB-12-5/12/08	433964	7.53	342388	11.30	195774	13.25
05 DUPE-3-2Q08	442851	7.52	343704	11.30	212469	13.25
06						
07						
08						
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15						
16						
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

Date Printed: 5/30/2008 13:42

SAMPLE DATA

SDG JPL109

VOLATILES ANALYSIS

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-5

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-001
 Lab File ID: B0513025.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 21:29
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.67	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-5

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-001
 Lab File ID: B0513025.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 21:29
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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	0.45	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-5

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-001
 Lab File ID: B0513025.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 21:29
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

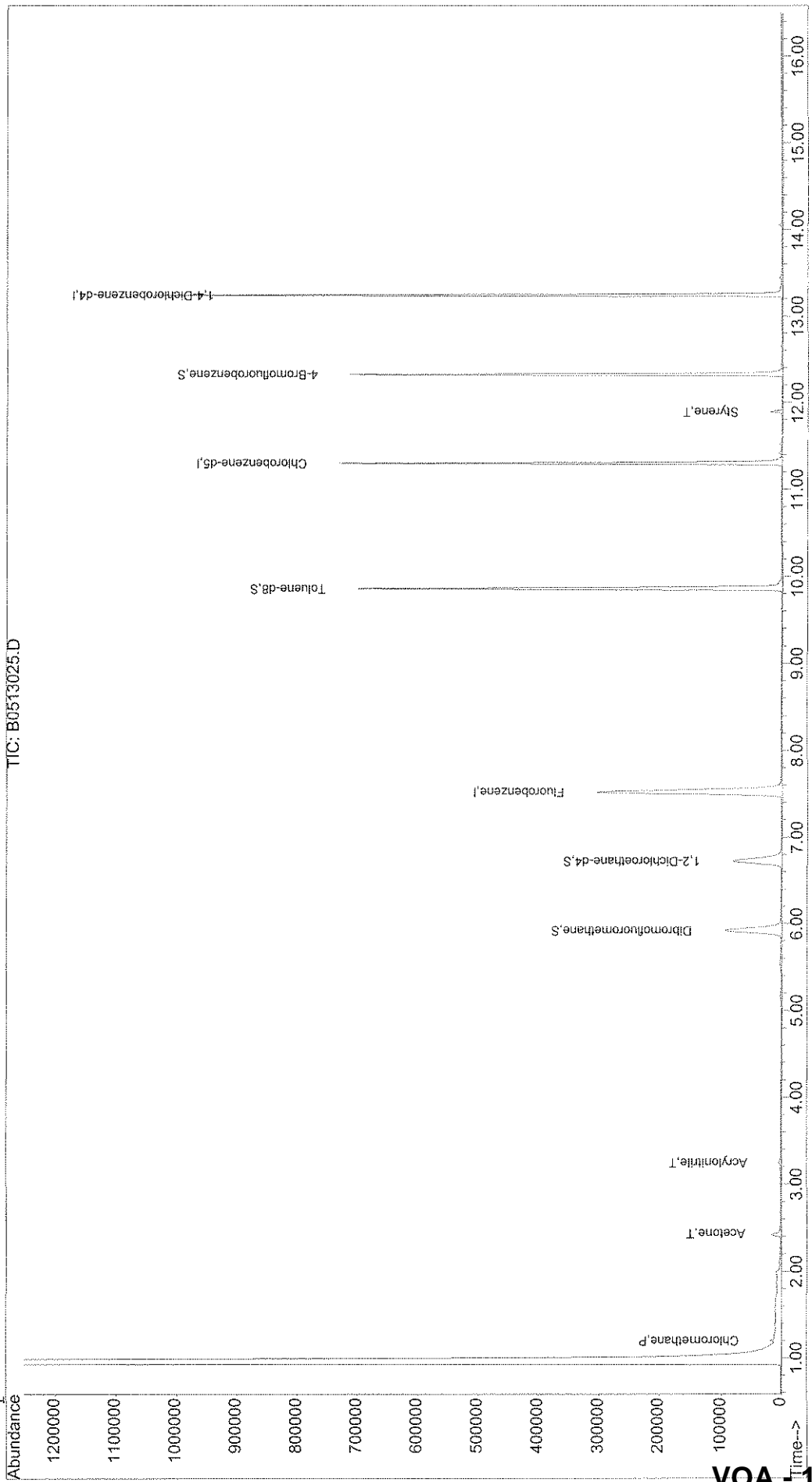
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513025.D Vial: 17
Acq On : 13 May 2008 21:29 Operator: DGA
Sample : JPL109-001 Inst : Buddha
Misc : #2 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:06 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



VOA 19

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513025.D
 Acq On : 13 May 2008 21:29
 Sample : JPL109-001
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:06 2008

Vial: 17
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	522985	25.00	ug/l	0.00	98.56%
54) Chlorobenzene-d5	11.30	117	385032	25.00	ug/l	0.00	87.52%
74) 1,4-Dichlorobenzene-d4	13.24	152	247775	25.00	ug/l	0.00	95.29%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	117521	19.98	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	99.90%	
40) 1,2-Dichloroethane-d4	6.73	65	127676	24.39	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	97.56%	
55) Toluene-d8	9.86	98	468137	23.71	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	94.84%	
76) 4-Bromofluorobenzene	12.32	95	179511	23.38	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	93.52%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	5082	0.67 ug/l		97
4) Vinyl Chloride	1.29	62	266	N.D.		
5) Bromomethane	1.55	96	151	Below Cal	#	39
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	2.44	43	4035	2.27 ug/l		94
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.49	76	2662	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	2.79	41	64	N.D.		
17) Methyl Acetate	2.81	43	157	N.D.		
18) Methylene Chloride	2.87	84	83	Below Cal	#	1
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	3.18	73	461	N.D.		
22) Acrylonitrile	3.25	53	3958	1.94 ug/l		91

(#) = qualifier out of range (m) = manual integration
 B0513025.D B8260W.M Fri May 30 09:07:04 2008

[Handwritten Signature]
 Page 1
VOA-20

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513025.D
 Acq On : 13 May 2008 21:29
 Sample : JPL109-001
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:06 2008

Vial: 17
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	3.91	43	66		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	4.82	96	36		N.D.	
30) 2-Butanone	4.94	43	64		N.D.	
31) Propionitrile	5.19	54	29		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.38	41	104		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.75	56	43		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.71	78	343		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	7.24	43	36		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	8.41	83	30		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.91	41	34		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	9.95	92	906		N.D.	
57) trans-1,3-Dichloropropene	10.31	75	34		N.D.	
58) Ethyl methacrylate	10.38	69	33		N.D.	
59) 1,1,2-Trichloroethane	10.49	97	30		N.D.	
60) Tetrachloroethene	10.49	166	34		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.72	43	74		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.31	91	779		N.D.	
66) Chlorobenzene	11.32	112	43		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0513025.D B8260W.M Fri May 30 09:07:04 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513025.D
 Acq On : 13 May 2008 21:29
 Sample : JPL109-001
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:06 2008

Vial: 17
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
68) Ethylbenzene	11.42	91	3505	N.D.	
69) m,p-Xylene	11.52	106	753	N.D.	
70) o-xylene	11.87	106	274	N.D.	
71) Styrene	11.89	104	8607	0.45 ug/l	84
72) Bromoform	0.00	173	0	N.D.	
73) Isopropylbenzene	12.19	105	140	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	12.53	75	31	N.D.	
80) n-Propylbenzene	12.51	120	52	N.D.	
81) 2-Chlorotoluene	12.52	91	313	N.D.	
82) 4-Chlorotoluene	12.67	91	29	N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	189	N.D.	
84) tert-Butylbenzene	12.90	119	43	N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	645	N.D.	
86) sec-butylbenzene	13.08	105	218	N.D.	
87) 1,3-Dichlorobenzene	13.19	146	37	N.D.	
88) 4-Isopropyltoluene	13.20	119	355	N.D.	
89) 1,4-Dichlorobenzene	13.26	146	169	N.D.	
90) 1,2-Dichlorobenzene	13.56	146	108	N.D.	
91) n-Butylbenzene	13.52	91	480	N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0	N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	176	N.D.	
94) Hexachlorobutadiene	14.88	225	194	N.D.	
95) Naphthalene	14.98	128	896	N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	321	N.D.	

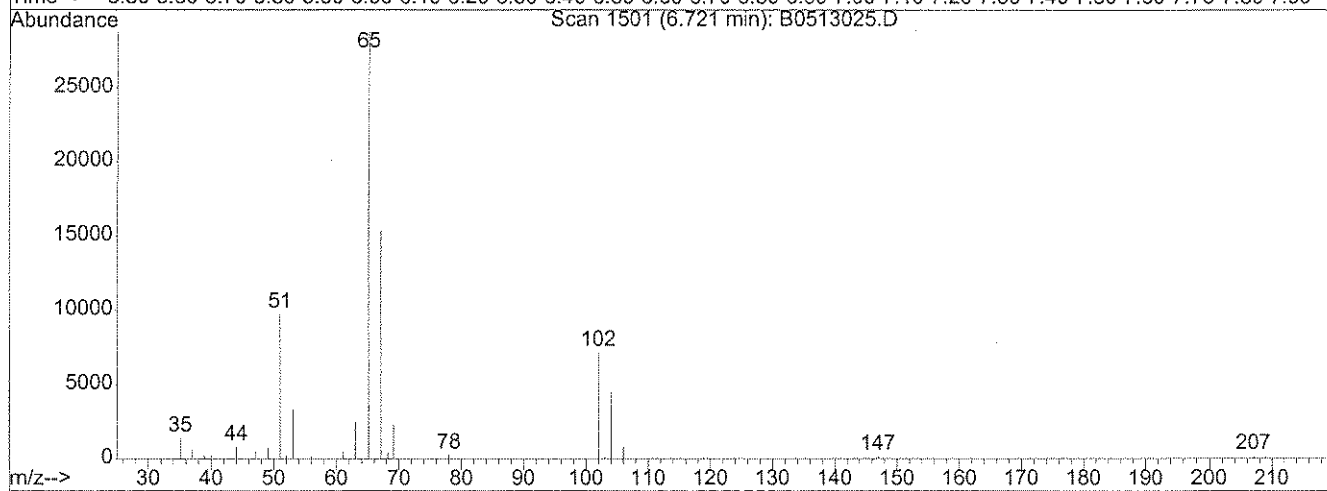
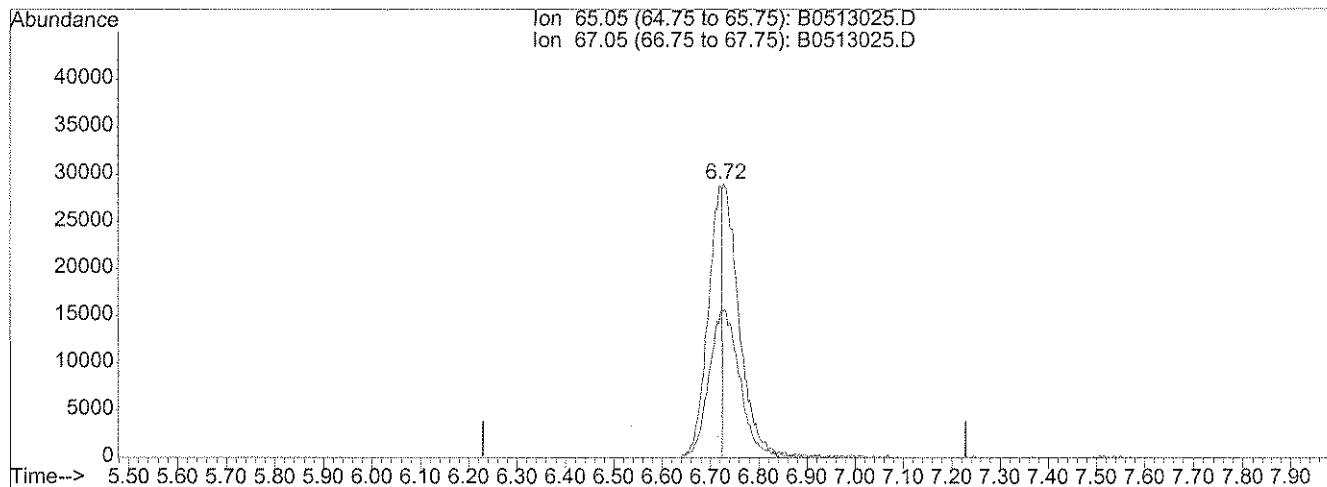
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051308A\B0513025.D
 Acq On : 13 May 2008 21:29
 Sample : JPL109-001
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:06 2008

Vial: 17
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 11.23ug/l

response 58770

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	117.76#
0.00	0.00	0.00
0.00	0.00	0.00

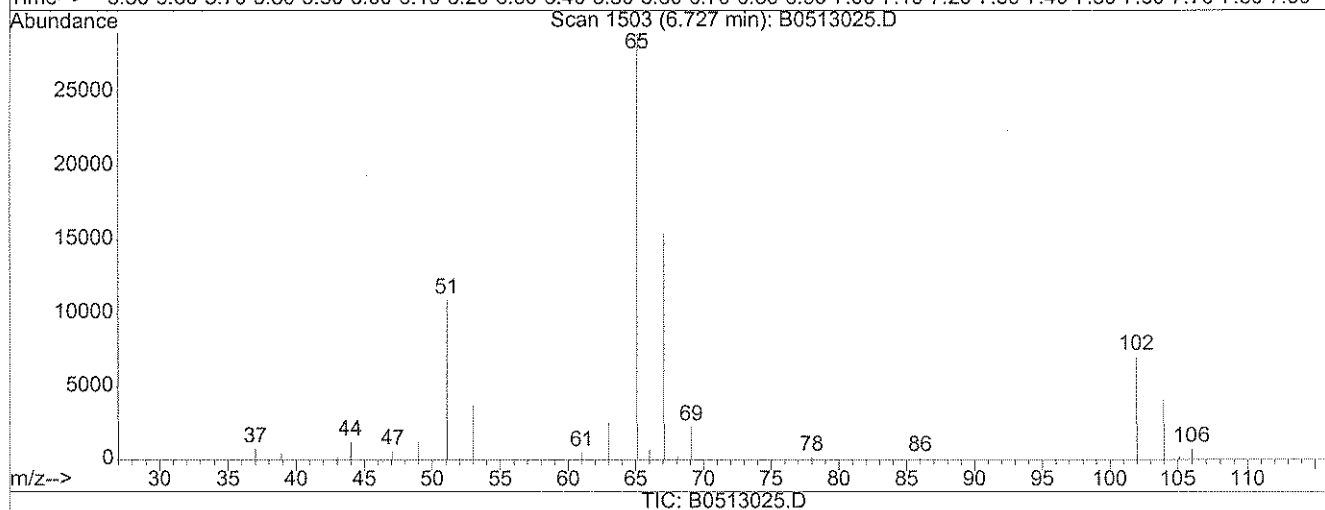
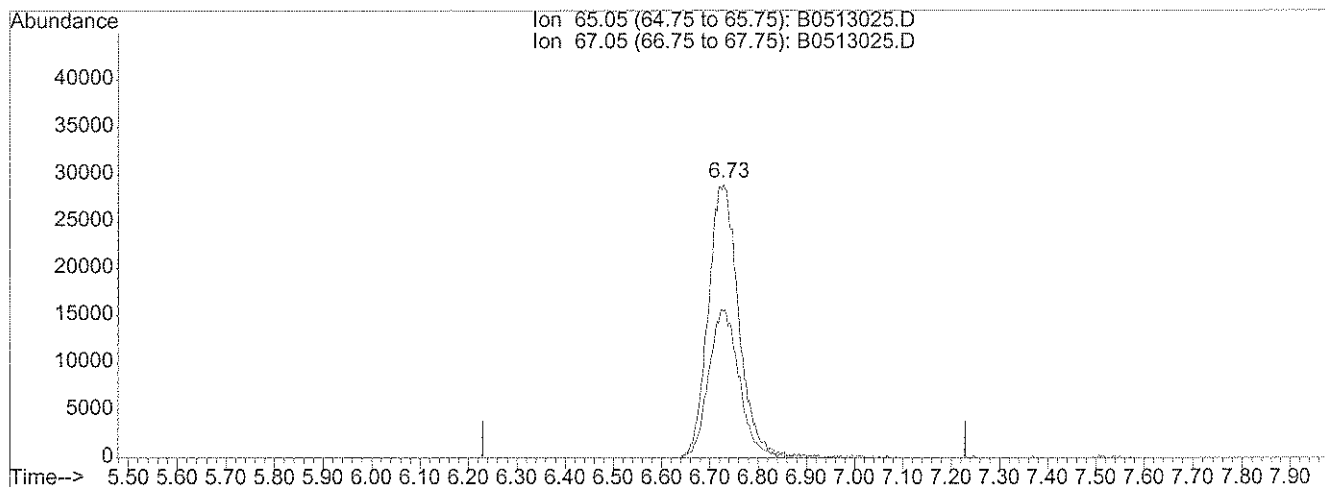
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051308A\B0513025.D
 Acq On : 13 May 2008 21:29
 Sample : JPL109-001
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:06 2008

Vial: 17
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration

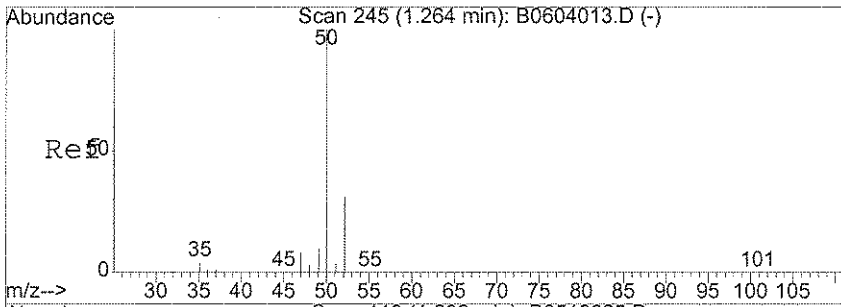


(40) 1,2-Dichloroethane-d4 (S)

6.73min 24.39ug/l m

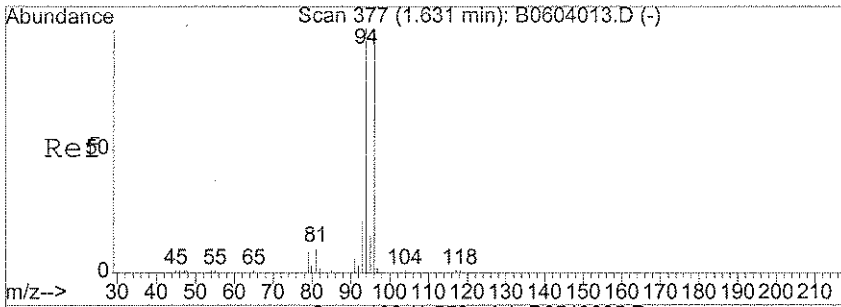
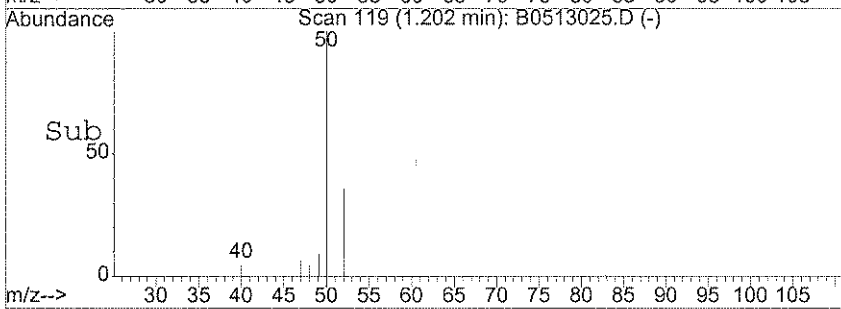
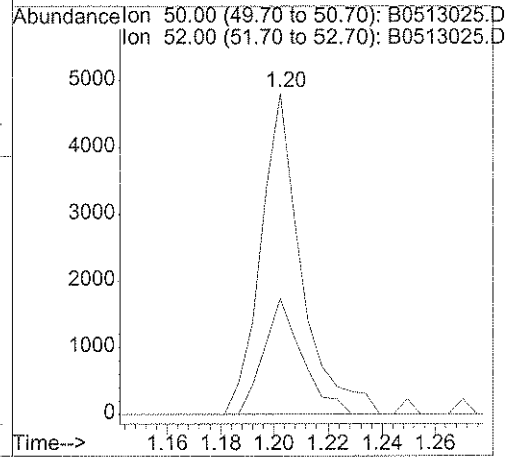
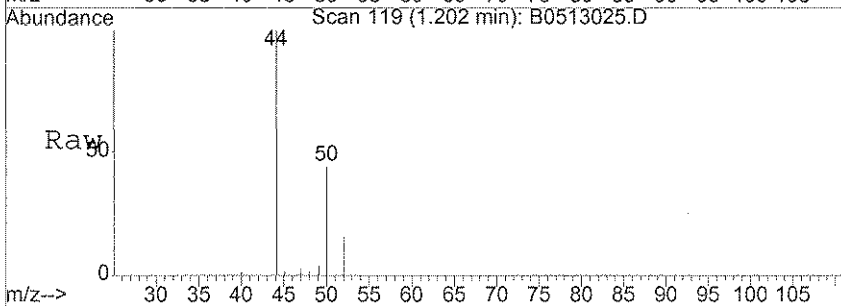
response 127676

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	54.21
0.00	0.00	0.00
0.00	0.00	0.00



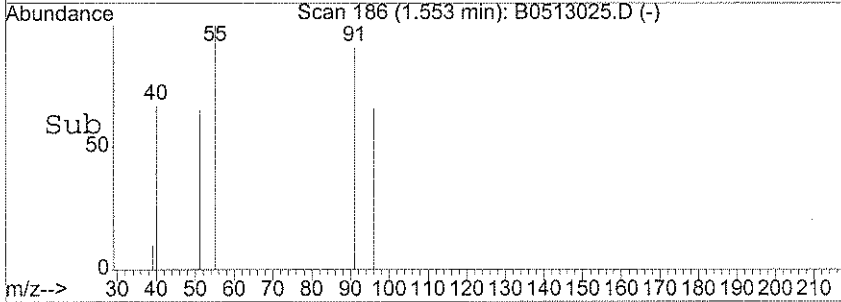
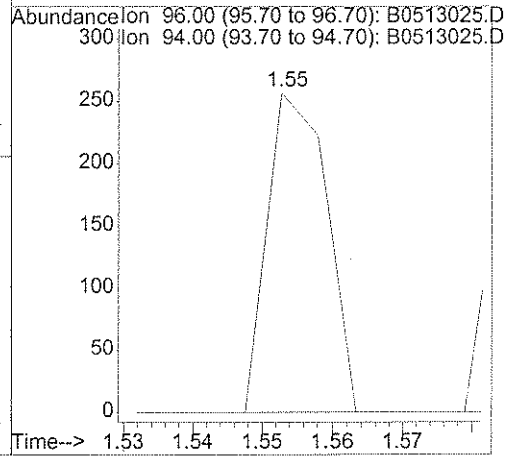
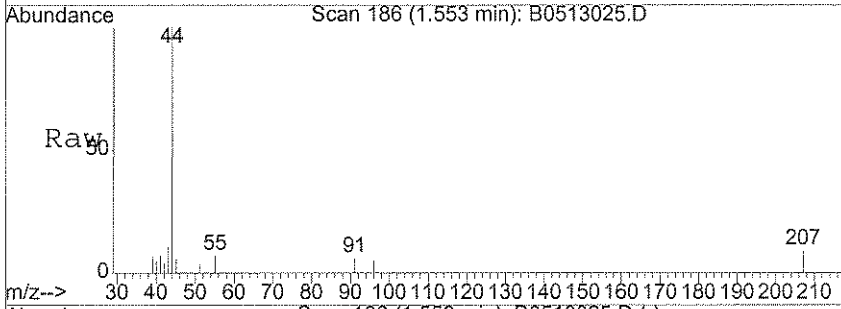
#3
 Chloromethane
 Concen: 0.67 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. 0.00 min
 Lab File: B0513025.D
 Acq: 13 May 2008 21:29

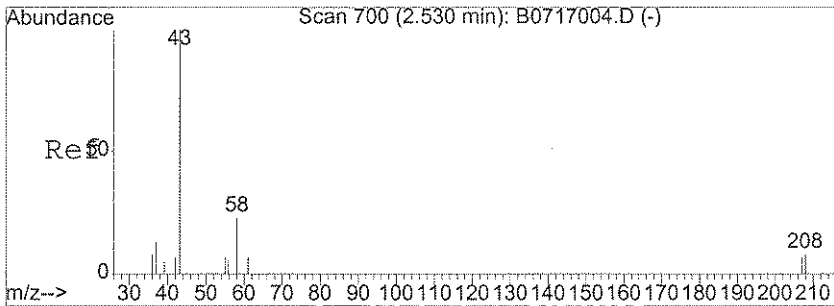
Tgt Ion: 50 Resp: 5082
 Ion Ratio Lower Upper
 50 100
 52 34.4 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.55 min Scan# 186
 Delta R.T. 0.00 min
 Lab File: B0513025.D
 Acq: 13 May 2008 21:29

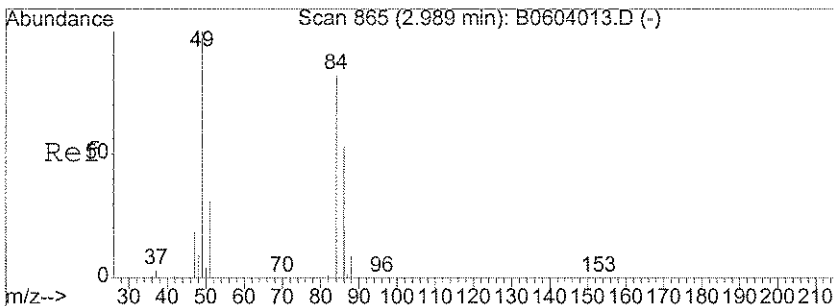
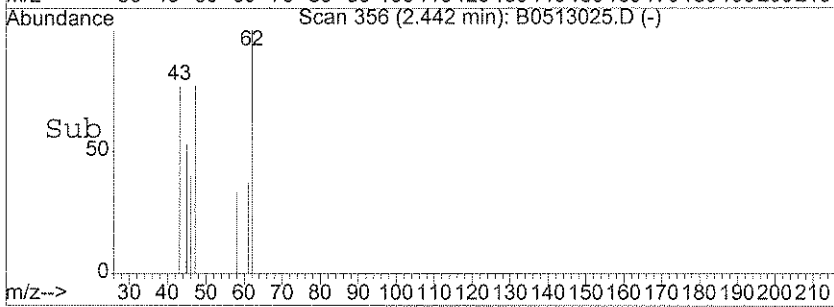
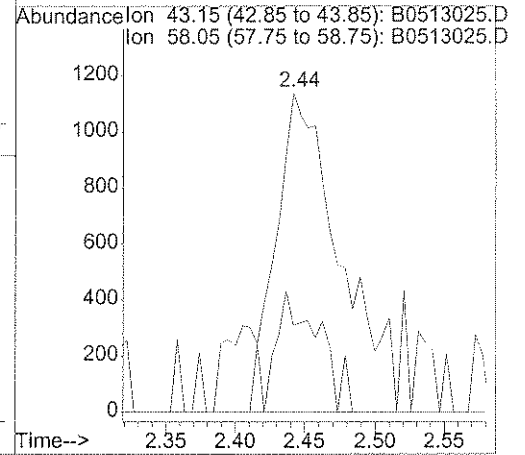
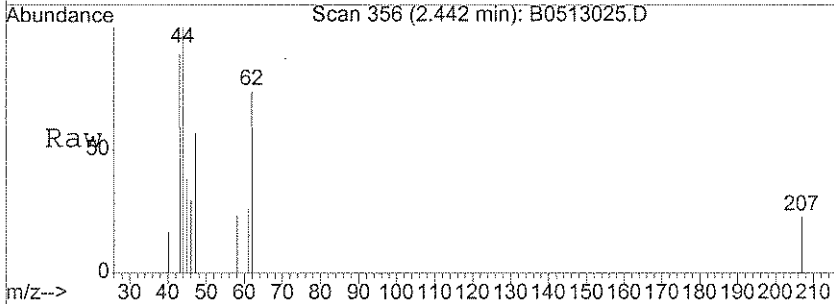
Tgt Ion: 96 Resp: 151
 Ion Ratio Lower Upper
 96 100
 94 41.7 84.9 124.9#





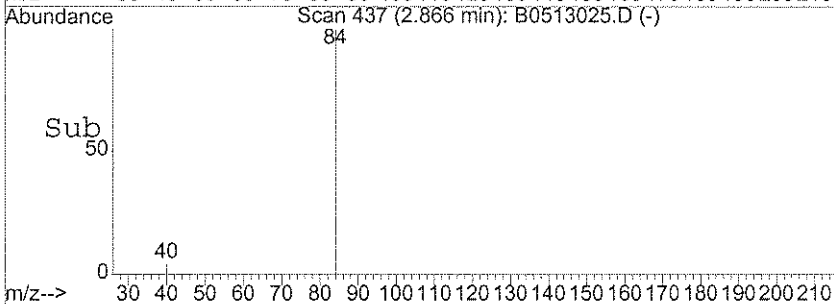
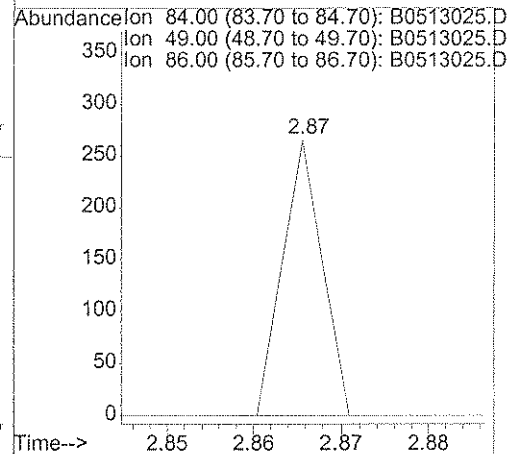
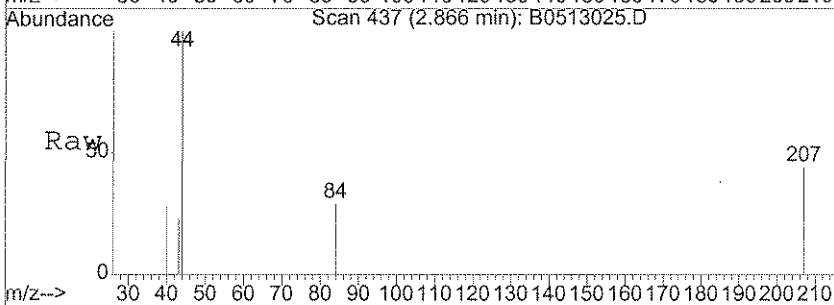
#11
 Acetone
 Concen: 2.27 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0513025.D
 Acq: 13 May 2008 21:29

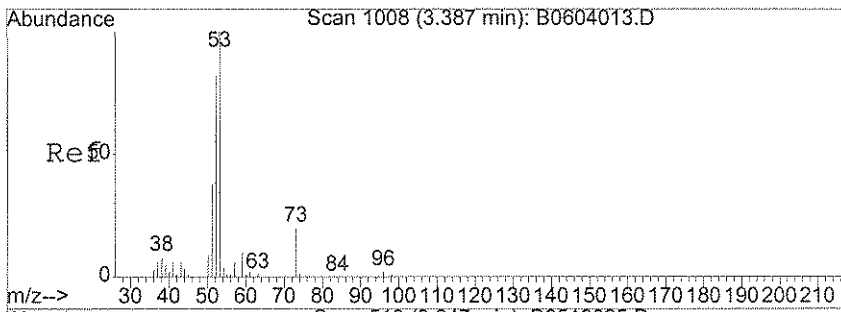
Tgt Ion: 43 Resp: 4035
 Ion Ratio Lower Upper
 43 100
 58 24.4 22.0 33.0



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0513025.D
 Acq: 13 May 2008 21:29

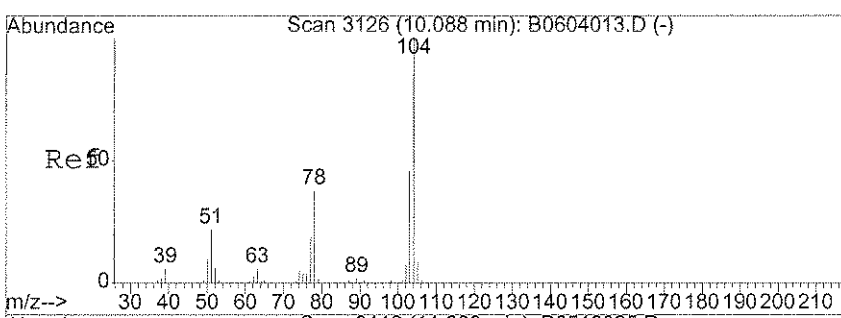
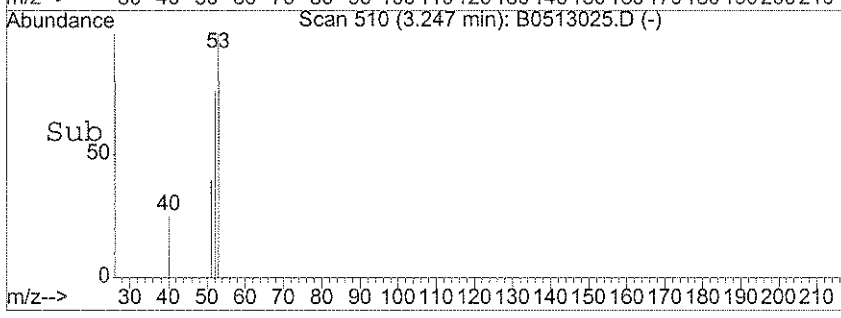
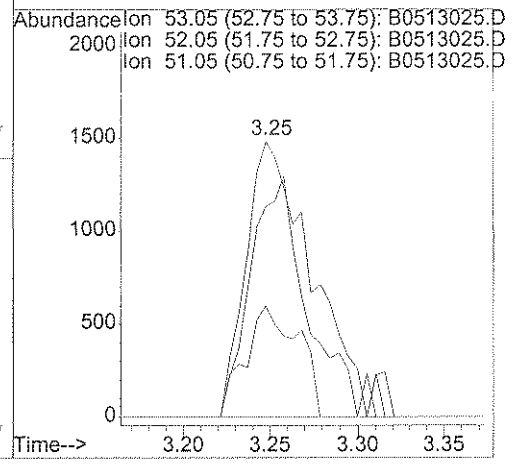
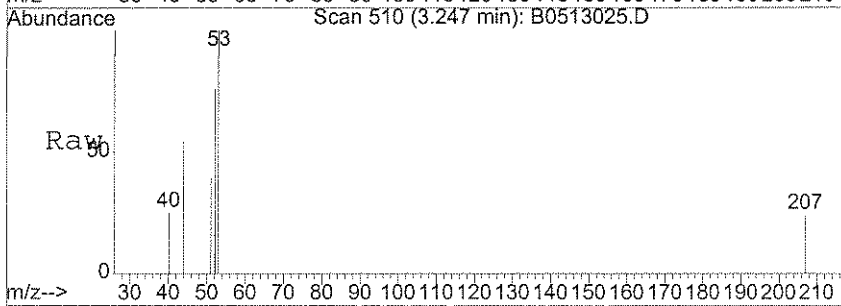
Tgt Ion: 84 Resp: 83
 Ion Ratio Lower Upper
 84 100
 49 0.0 113.6 153.6#
 86 0.0 45.8 85.8#





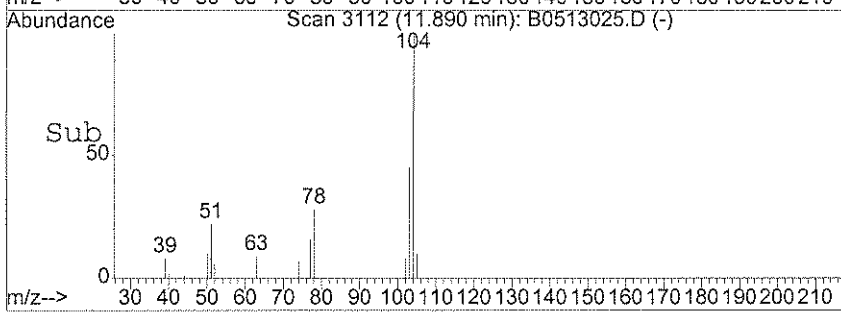
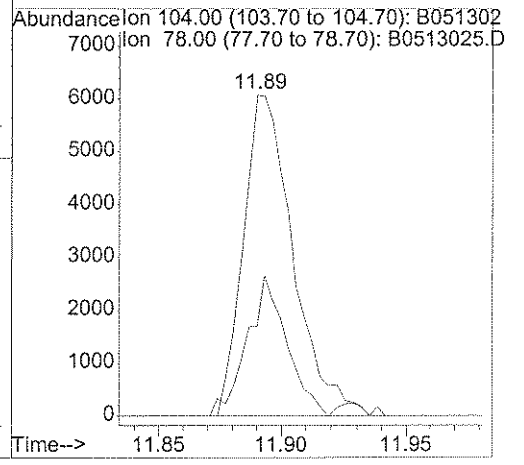
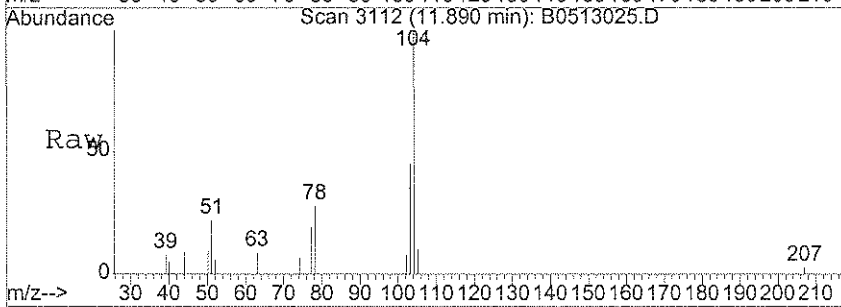
#22
 Acrylonitrile
 Concen: 1.94 ug/l
 RT: 3.25 min Scan# 510
 Delta R.T. 0.01 min
 Lab File: B0513025.D
 Acq: 13 May 2008 21:29

Tgt Ion	Resp	Lower	Upper
53	3958		
52	73.0	65.4	98.0
51	32.4	30.2	45.2



#71
 Styrene
 Concen: 0.45 ug/l
 RT: 11.89 min Scan# 3112
 Delta R.T. -0.00 min
 Lab File: B0513025.D
 Acq: 13 May 2008 21:29

Tgt Ion	Resp	Lower	Upper
104	8607		
78	34.9	25.4	65.4



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-4

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-002
 Lab File ID: B0513026.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 21:55
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.73	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-4

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-002
 Lab File ID: B0513026.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 21:55
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-4

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-002
 Lab File ID: B0513026.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 21:55
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

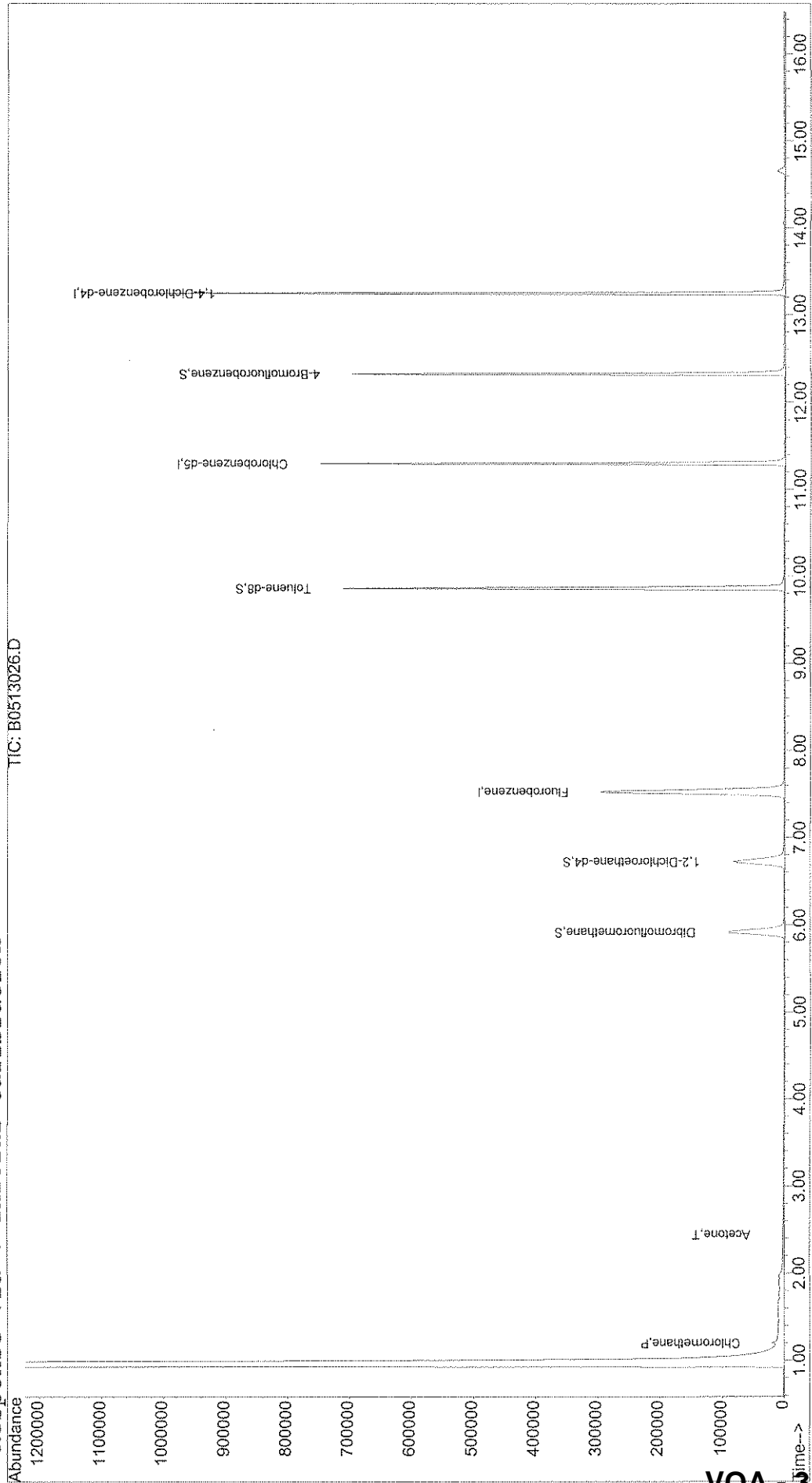
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513026.D Vial: 18
Acq On : 13 May 2008 21:55 Operator: DGA
Sample : JPL109-002 Inst : Buddha
Misc : #2 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:07 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



VOA - 31

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513026.D
 Acq On : 13 May 2008 21:55
 Sample : JPL109-002
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:07 2008

Vial: 18
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	516131	25.00	ug/l	0.00	97.27%
54) Chlorobenzene-d5	11.30	117	389452	25.00	ug/l	0.00	88.52%
74) 1,4-Dichlorobenzene-d4	13.25	152	242077	25.00	ug/l	0.00	93.10%

System Monitoring Compounds

37) Dibromofluoromethane	5.91	111	115369	19.88	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	99.40%	
40) 1,2-Dichloroethane-d4	6.72	65	122396	23.70	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	94.80%	
55) Toluene-d8	9.86	98	476550	23.86	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	95.44%	
76) 4-Bromofluorobenzene	12.32	95	175797	23.43	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	93.72%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	5490	0.73	ug/l	98
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.56	96	66	Below Cal		92
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	2.44	43	2672	1.53	ug/l	52
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.49	76	68	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.	d	
17) Methyl Acetate	2.78	43	159	N.D.		
18) Methylene Chloride	0.00	84	0	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
 B0513026.D B8260W.M Fri May 30 09:08:08 2008

J. Sparks
 Page 1
 VOA-32

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513026.D
 Acq On : 13 May 2008 21:55
 Sample : JPL109-002
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:07 2008

Vial: 18
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	3.90	43	72		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	4.70	77	37		N.D.	
29) cis-1,2-Dichloroethene	4.82	96	53		N.D.	
30) 2-Butanone	4.96	43	30		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.38	41	64		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.81	56	43		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.70	78	71		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	8.07	130	30		N.D.	
46) Methylcyclohexane	8.41	83	33		N.D.	
47) 1,2-Dichloropropene	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.88	41	96		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	9.42	63	36		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	9.94	92	133		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	10.56	69	29		N.D.	
59) 1,1,2-Trichloroethane	0.00	97	0		N.D.	
60) Tetrachloroethene	10.49	166	31		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	10.72	43	49		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.33	91	31		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
 B0513026.D B8260W.M Fri May 30 09:08:08 2008

J. Spink
 Page 2
VOA - 33

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513026.D
 Acq On : 13 May 2008 21:55
 Sample : JPL109-002
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:07 2008

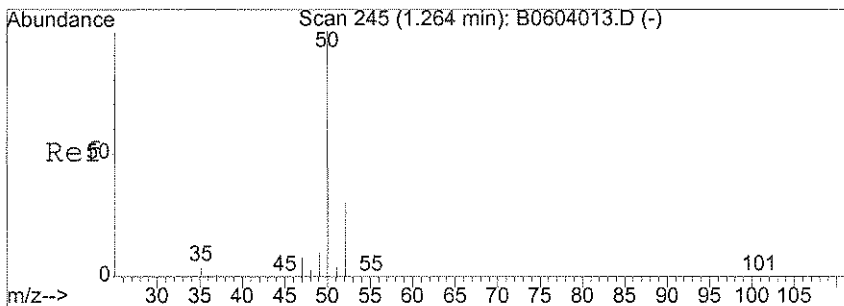
Vial: 18
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

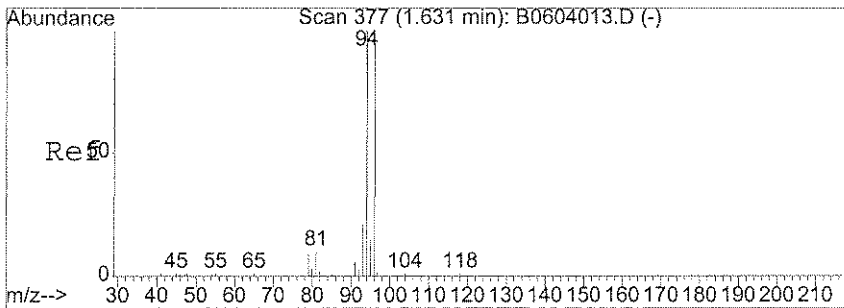
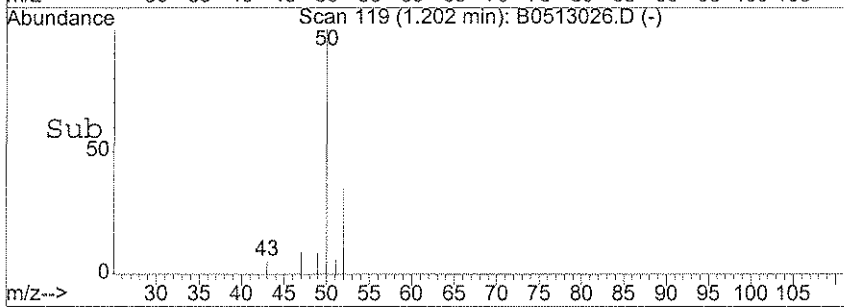
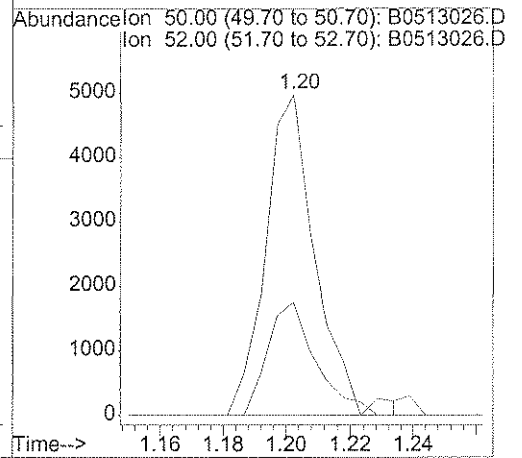
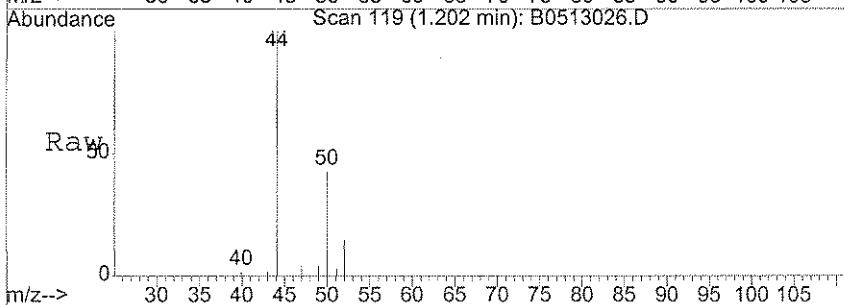
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	95		N.D.	
69) m,p-Xylene	11.52	106	391		N.D.	
70) o-xylene	11.62	106	30		N.D.	
71) Styrene	11.89	104	185		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.17	105	66		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.33	156	32		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	12.52	75	38		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.58	91	39		N.D.	
82) 4-Chlorotoluene	12.66	91	29		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	34		N.D.	
84) tert-Butylbenzene	12.91	119	35		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	189		N.D.	
86) sec-butylbenzene	13.08	105	254		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	83		N.D.	
88) 4-Isopropyltoluene	13.20	119	508		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	166		N.D.	
90) 1,2-Dichlorobenzene	13.57	146	52		N.D.	
91) n-Butylbenzene	13.52	91	481		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	211		N.D.	
94) Hexachlorobutadiene	14.89	225	103		N.D.	
95) Naphthalene	14.98	128	362		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	132		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0513026.D B8260W.M Fri May 30 09:08:09 2008



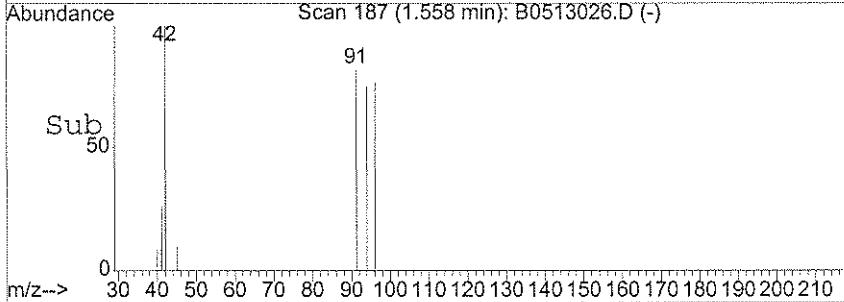
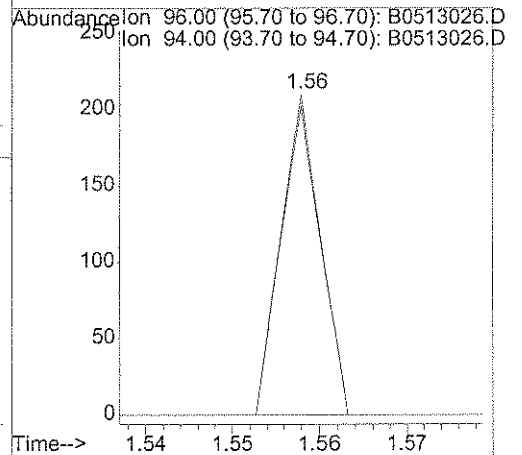
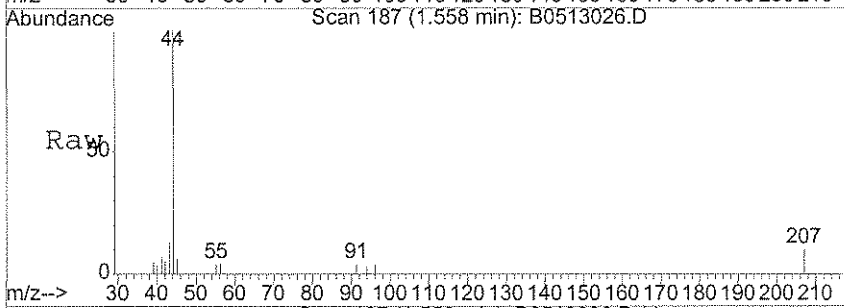
#3
 Chloromethane
 Concen: 0.73 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0513026.D
 Acq: 13 May 2008 21:55

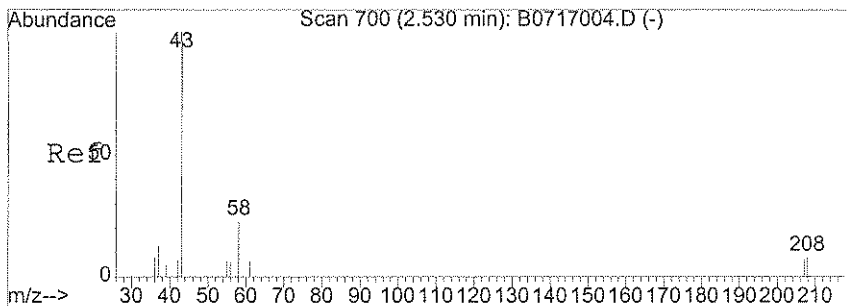
Tgt Ion	Resp	Lower	Upper
50	5490		
52	33.8	12.5	52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.56 min Scan# 187
 Delta R.T. 0.01 min
 Lab File: B0513026.D
 Acq: 13 May 2008 21:55

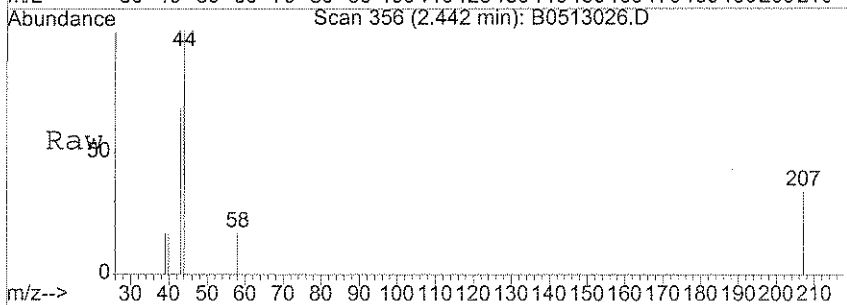
Tgt Ion	Resp	Lower	Upper
96	66		
94	97.0	84.9	124.9



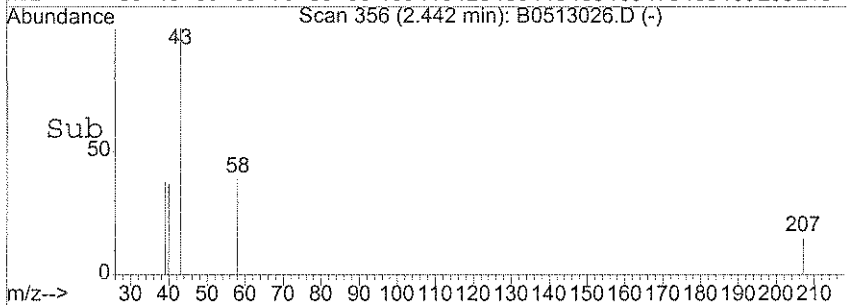
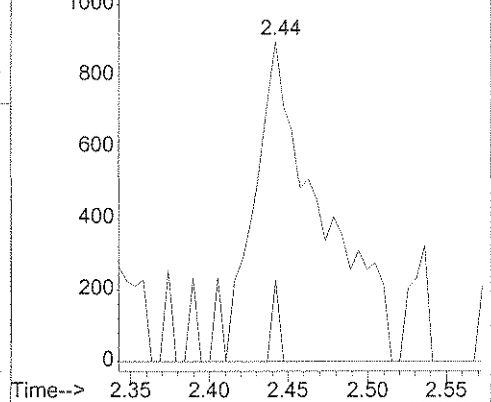


#11
 Acetone
 Concen: 1.53 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0513026.D
 Acq: 13 May 2008 21:55

Tgt Ion: 43 Resp: 2672
 Ion Ratio Lower Upper
 43 100
 58 2.7 22.0 33.0#



Abundance Ion 43.15 (42.85 to 43.85): B0513026.D
 Ion 58.05 (57.75 to 58.75): B0513026.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-3

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-003
 Lab File ID: B0513027.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 22:22
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.48	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-3

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-003
 Lab File ID: B0513027.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 22:22
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL109-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0513027.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/13/2008 22:22

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

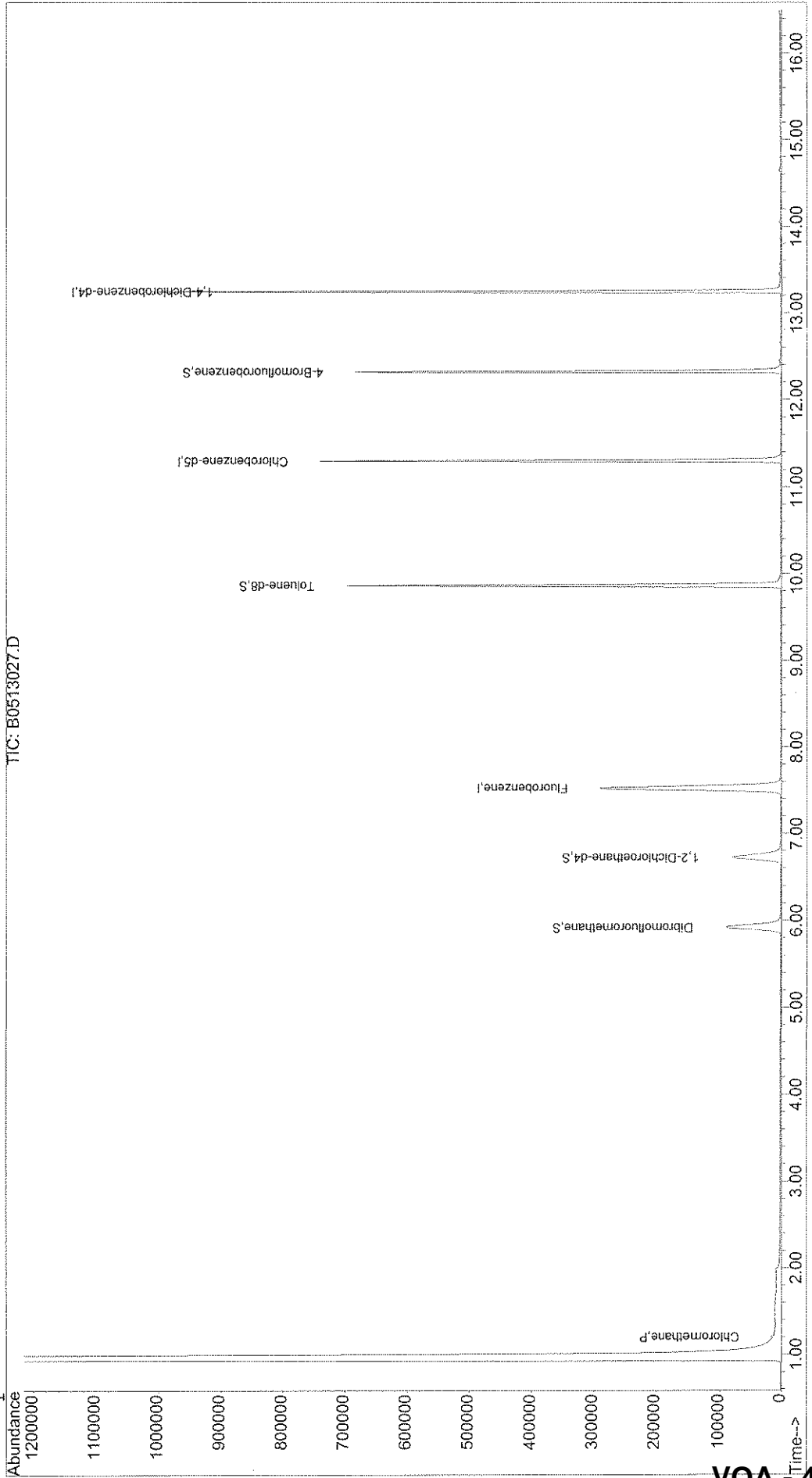
CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513027.D Vial: 19
Acq On : 13 May 2008 22:22 Operator: DGA
Sample : JPL109-003 Inst : Buddha
Misc : #2 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:08 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513027.D
 Acq On : 13 May 2008 22:22
 Sample : JPL109-003
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:08 2008

Vial: 19
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	506698	25.00	ug/l	0.00	95.49%
54) Chlorobenzene-d5	11.30	117	381817	25.00	ug/l	0.00	86.79%
74) 1,4-Dichlorobenzene-d4	13.25	152	242283	25.00	ug/l	0.00	93.18%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	112207	19.69	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	98.45%	
40) 1,2-Dichloroethane-d4	6.72	65	123650	24.38	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	97.52%	
55) Toluene-d8	9.86	98	460346	23.51	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	94.04%	
76) 4-Bromofluorobenzene	12.32	95	175766	23.41	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	93.64%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	3549	0.48	ug/l	91
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	2.23	56	67	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	2.41	43	240	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	2.73	41	69	N.D.		
17) Methyl Acetate	2.78	43	82	N.D.		
18) Methylene Chloride	0.00	84	0	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
 B0513027.D B8260W.M Fri May 30 09:08:53 2008

J. S. 5/30/08
 Page 1
 VOA-41

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513027.D
 Acq On : 13 May 2008 22:22
 Sample : JPL109-003
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:08 2008

Vial: 19
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	3.95	43	71		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	4.72	77	29		N.D.	
29) cis-1,2-Dichloroethene	4.91	96	31		N.D.	
30) 2-Butanone	4.95	43	105		N.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	5.56	83	32		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.71	56	32		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.69	78	74		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	8.91	41	43		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	9.86	75	76		N.D.	
53) 4-Methyl-2-pentanone	9.83	43	153		N.D.	
56) Toluene	9.94	92	30		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	10.71	43	248		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	873		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
 B0513027.D B8260W.M Fri May 30 09:08:53 2008

J. Starks
 Page 2
VOA-42

Quantitation Report

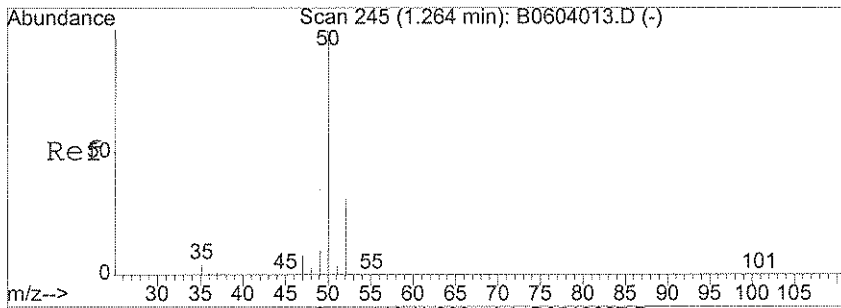
Data File : X:\MSVOA\BUDDHA\051308A\B0513027.D
 Acq On : 13 May 2008 22:22
 Sample : JPL109-003
 Misc : #2 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:08 2008

Vial: 19
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

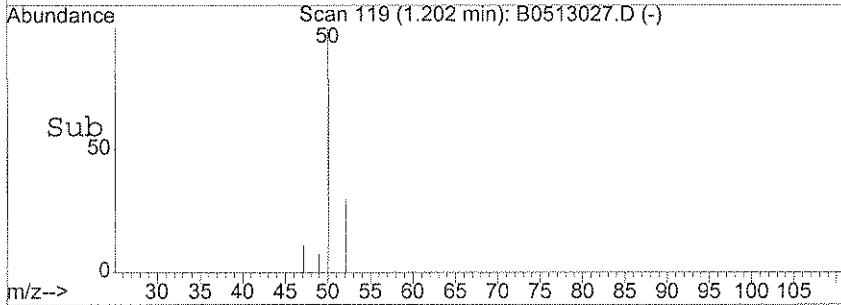
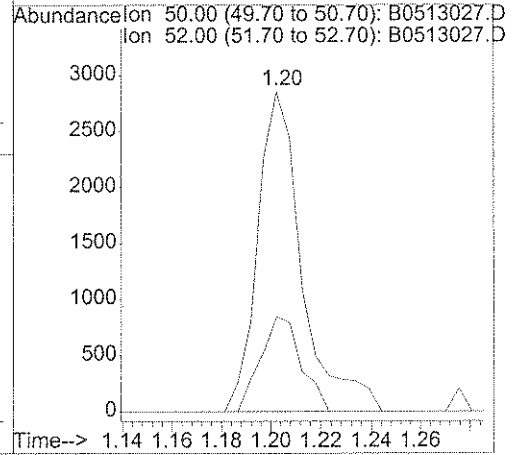
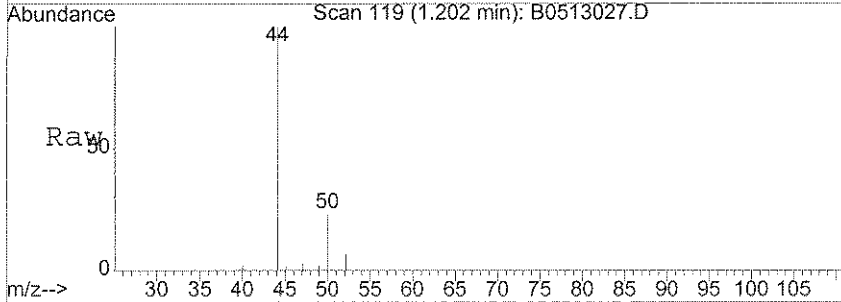
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	137		N.D.	
69) m,p-Xylene	11.53	106	95		N.D.	
70) o-xylene	11.86	106	30		N.D.	
71) Styrene	11.89	104	114		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.18	105	109		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	12.54	75	30		N.D.	
80) n-Propylbenzene	12.52	120	44		N.D.	
81) 2-Chlorotoluene	12.59	91	70		N.D.	
82) 4-Chlorotoluene	12.69	91	49		N.D.	
83) 1,3,5-Trimethylbenzene	12.95	105	105		N.D.	
84) tert-Butylbenzene	12.91	119	33		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	105		N.D.	
86) sec-butylbenzene	13.08	105	150		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	39		N.D.	
88) 4-Isopropyltoluene	13.20	119	465		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	160		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	120		N.D.	
91) n-Butylbenzene	13.52	91	471		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	93		N.D.	
94) Hexachlorobutadiene	14.89	225	67		N.D.	
95) Naphthalene	14.98	128	151		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	163		N.D.	



#3
 Chloromethane
 Concen: 0.48 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0513027.D
 Acq: 13 May 2008 22:22

Tgt Ion: 50 Resp: 3549
 Ion Ratio Lower Upper
 50 100
 52 27.2 12.5 52.5



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL109-004

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0513028.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/13/2008 22:49

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:	
		<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	0.30	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-2

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-004
 Lab File ID: B0513028.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 22:49
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-2

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-004
 Lab File ID: B0513028.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 22:49
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

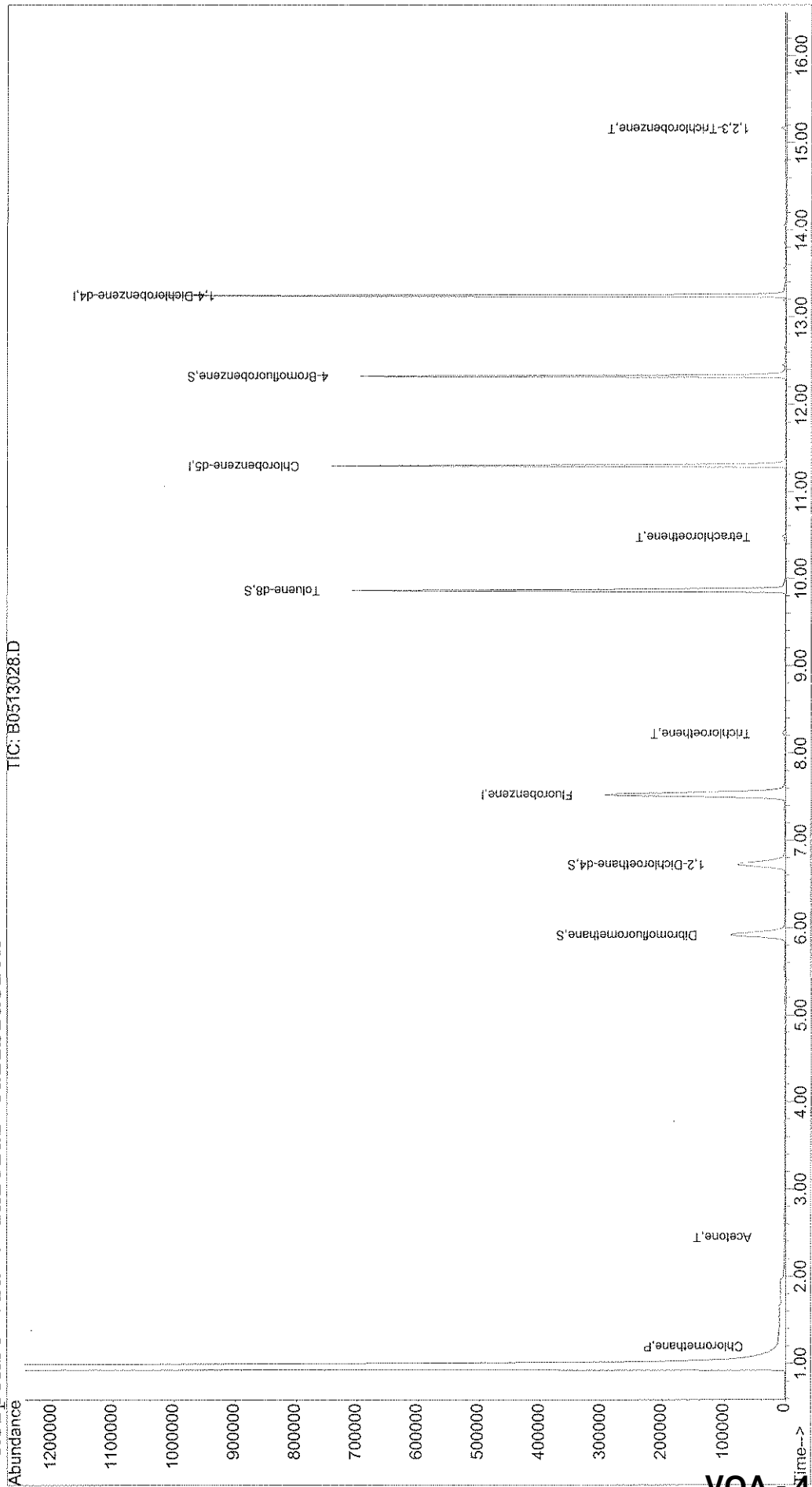
CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D Vial: 20
Acq On : 13 May 2008 22:49 Operator: DGA
Sample : JPL109-004 Inst : Buddha
Misc : #3 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:16 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
 Acq On : 13 May 2008 22:49
 Sample : JPL109-004
 Misc : #3 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:16 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.52	96	513158	25.00	ug/l	0.00	96.71%
54) Chlorobenzene-d5	11.30	117	379113	25.00	ug/l	0.00	86.17%
74) 1,4-Dichlorobenzene-d4	13.25	152	242812	25.00	ug/l	0.00	93.38%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	113711	19.71	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	98.55%	
40) 1,2-Dichloroethane-d4	6.72	65	122354m	23.83	ug/l	-0.01	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	95.32%	
55) Toluene-d8	9.86	98	464695	23.90	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	95.60%	
76) 4-Bromofluorobenzene	12.32	95	175291	23.29	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	93.16%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			Qvalue
3) Chloromethane	1.20	50	1797	0.24	ug/l	97	1/2 PPT
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	2.44	43	2696	1.55	ug/l	#	73
12) Iodomethane	0.00	142	0	N.D.			
13) Bromoethane	0.00	108	0	N.D.			
14) Carbon Disulfide	2.50	76	63	N.D.			
15) Allyl chloride	0.00	76	0	N.D.			
16) Acetonitrile	2.77	41	63	N.D.			
17) Methyl Acetate	2.77	43	143	N.D.			
18) Methylene Chloride	2.86	84	151	Below Cal	#	51	
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
 B0513028.D B8260W.M Fri May 30 09:16:28 2008

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 Page 1
VOA - 49

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
 Acq On : 13 May 2008 22:49
 Sample : JPL109-004
 Misc : #3 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:16 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.77	63	1704	N.D.		
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	45	0	N.D.		
26) Vinyl acetate	3.91	43	63	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	4.80	77	39	N.D.		
29) cis-1,2-Dichloroethene	4.80	96	76	N.D.		
30) 2-Butanone	4.94	43	36	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.37	41	32	N.D.		
34) Chloroform	5.53	83	1427	N.D.		
35) 1,1,1-Trichloroethane	0.00	97	0	N.D.		
36) Cyclohexane	5.76	56	31	N.D.		
38) Carbon Tetrachloride	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.72	78	65	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	8.23	130	2191m	0.30	ug/l #	75
46) Methylcyclohexane	8.37	83	35	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	0.00	93	0	N.D.		
49) Methyl methacrylate	8.91	41	29	N.D.		
50) Bromodichloromethane	9.09	83	426	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	9.93	92	193	N.D.		
57) trans-1,3-Dichloropropene	0.00	75	0	N.D.		
58) Ethyl methacrylate	10.24	69	31	N.D.		
59) 1,1,2-Trichloroethane	0.00	97	0	N.D.		
60) Tetrachloroethene	10.48	166	1433	0.18	ug/l	92
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	10.71	43	30	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	11.30	91	787	N.D.		
66) Chlorobenzene	11.33	112	44	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration
 B0513028.D B8260W.M Fri May 30 09:16:28 2008

Handwritten notes:
 Don't
 1/29/08 5/30/08
 92

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
 Acq On : 13 May 2008 22:49
 Sample : JPL109-004
 Misc : #3 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:16 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	185		N.D.	
69) m,p-Xylene	11.51	106	109		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.89	104	81		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.17	105	38		N.D.	
75) trans-1,4-Dichloro-2-buten	12.02	53	30		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	32		N.D.	
79) 1,2,3-Trichloropropane	12.52	75	30		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.58	91	35		N.D.	
82) 4-Chlorotoluene	12.68	91	37		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	116		N.D.	
84) tert-Butylbenzene	12.91	119	131		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	140		N.D.	
86) sec-butylbenzene	13.08	105	219		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	1748		N.D.	
88) 4-Isopropyltoluene	13.20	119	437		N.D.	
89) 1,4-Dichlorobenzene	13.19	146	1748		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	1345		N.D.	
91) n-Butylbenzene	13.52	91	400		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	790		N.D.	
94) Hexachlorobutadiene	14.89	225	112		N.D.	
95) Naphthalene	14.99	128	288		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	2063	0.17	ug/l #	91

Handwritten: $1/2$ PQL
 DGA 5/30/08

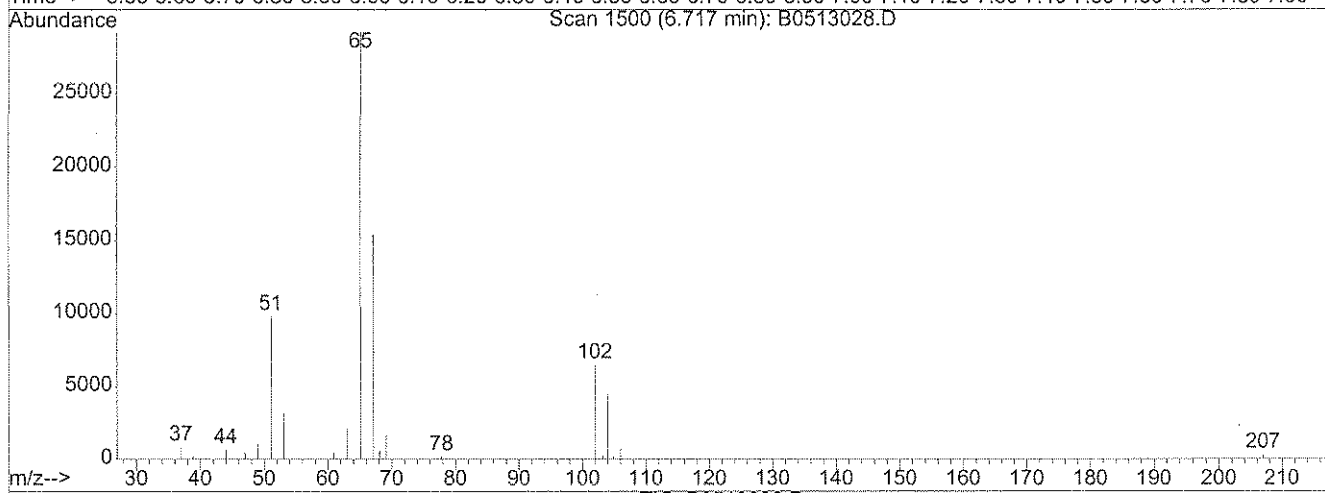
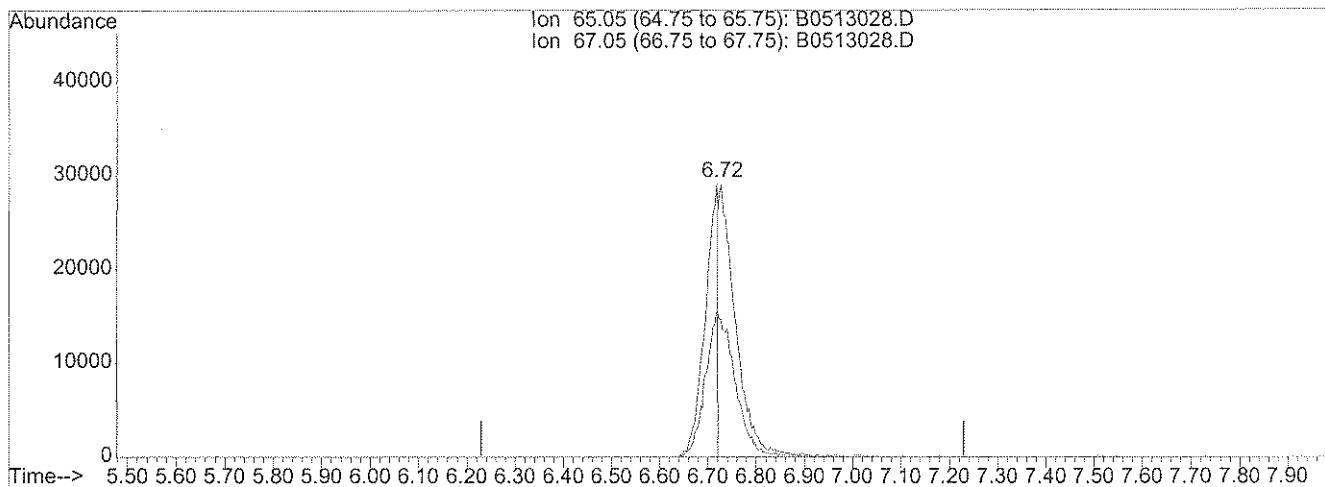
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
Acq On : 13 May 2008 22:49
Sample : JPL109-004
Misc : #3 10ML +IS/SS(524)
MS Integration Params: rteint.p
Quant Time: May 30 9:13 2008

Vial: 20
Operator: DGA
Inst : Buddha
Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 10.38ug/l

response 53305

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	122.56#
0.00	0.00	0.00
0.00	0.00	0.00

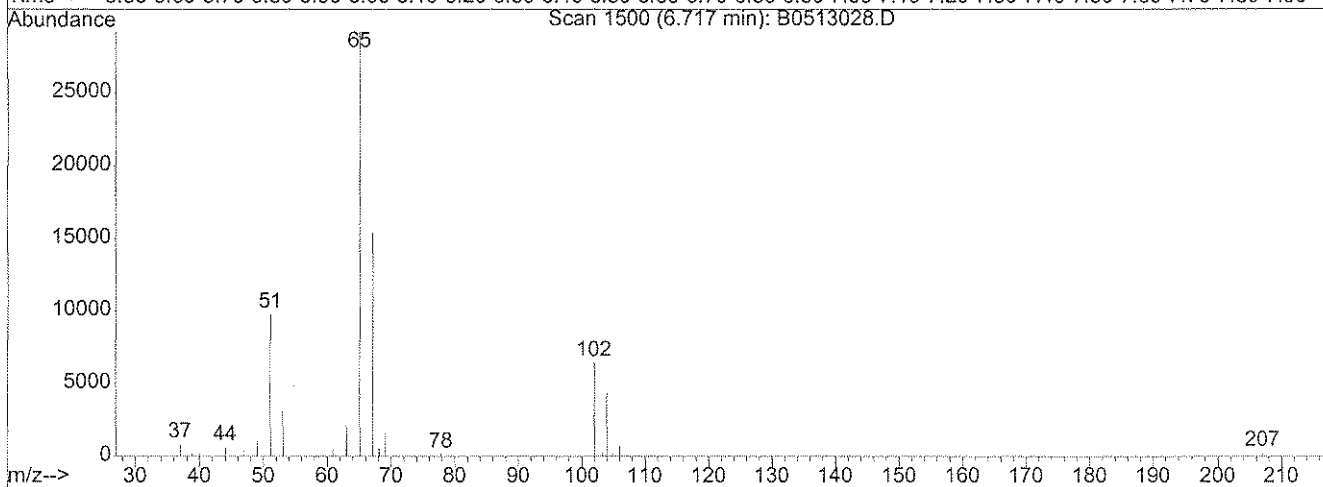
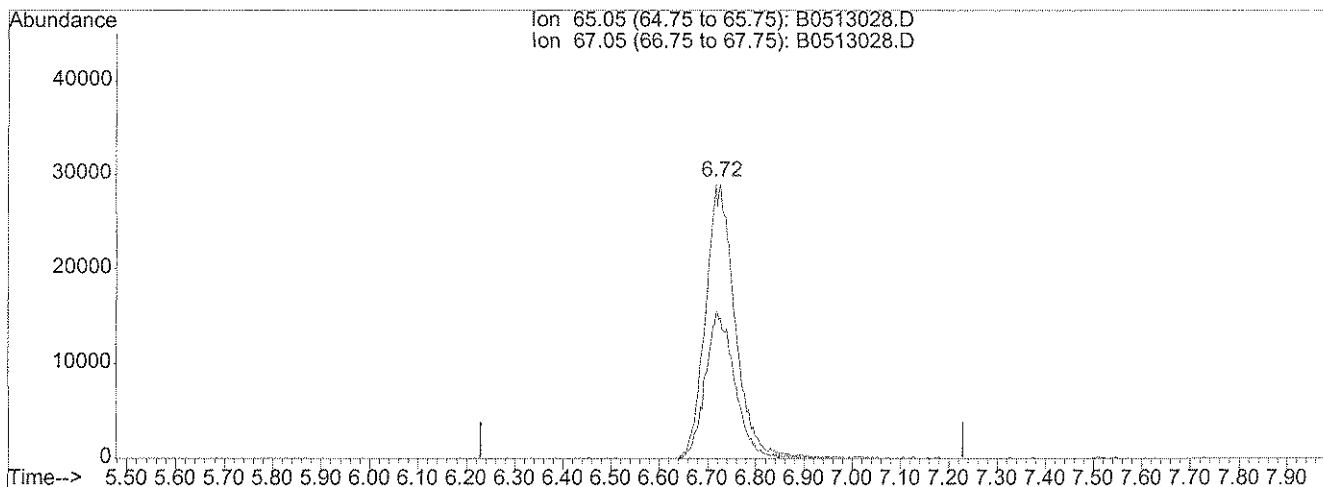
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
 Acq On : 13 May 2008 22:49
 Sample : JPL109-004
 Misc : #3 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:15 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration

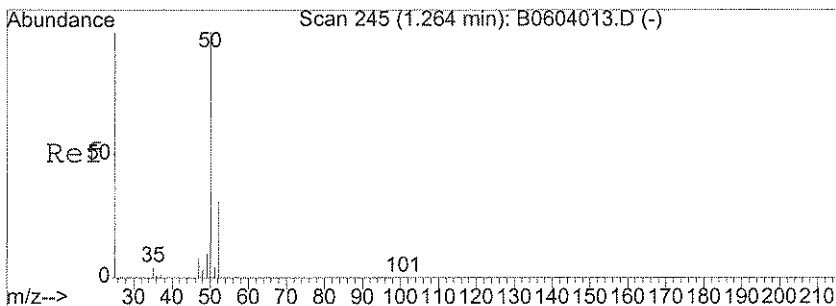


(40) 1,2-Dichloroethane-d4 (S)

6.72min 23.83ug/l m

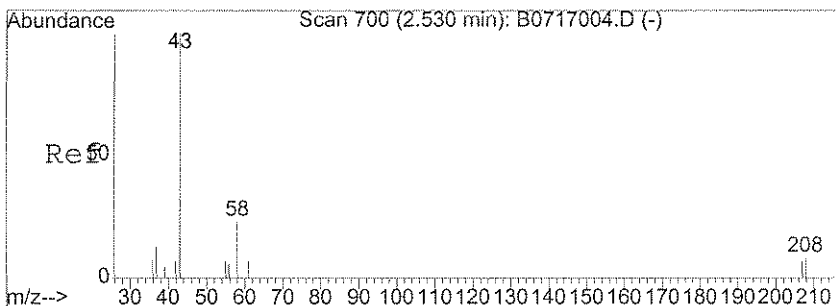
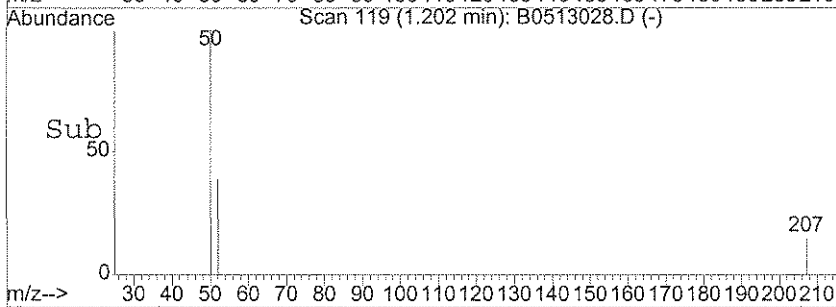
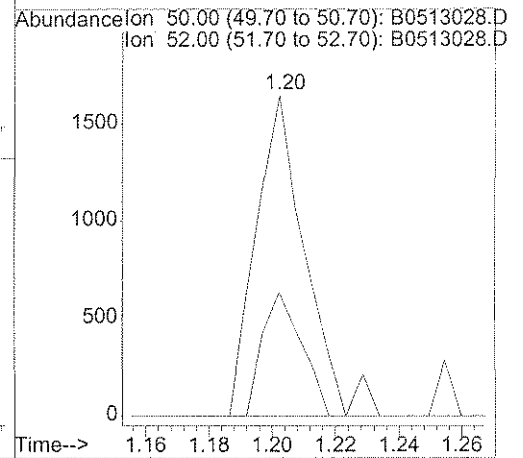
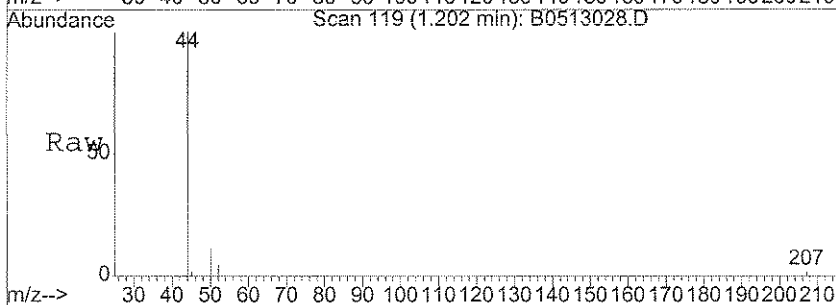
response 122354

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	53.39
0.00	0.00	0.00
0.00	0.00	0.00



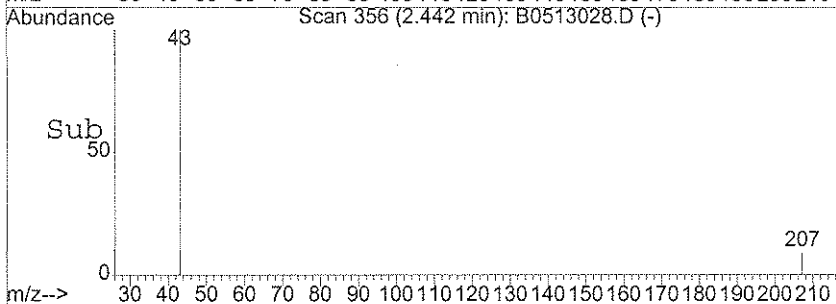
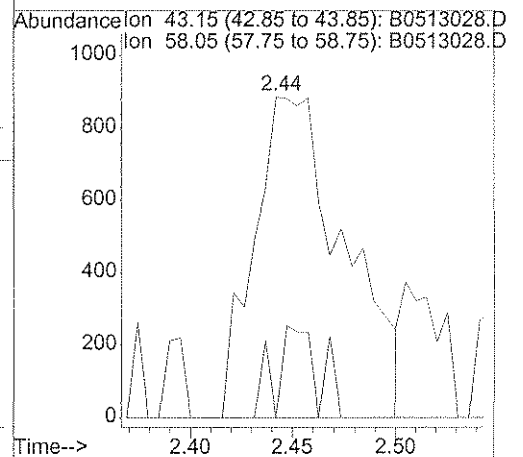
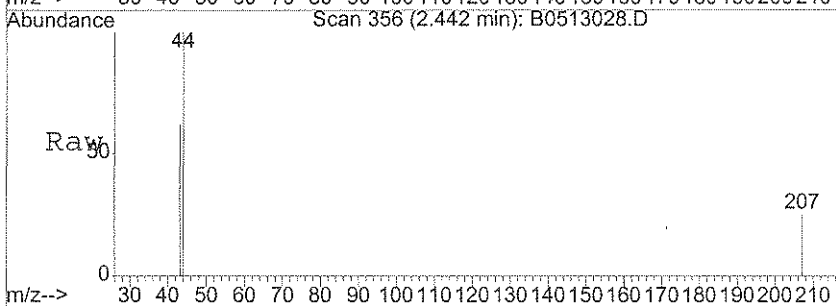
#3
 Chloromethane
 Concen: 0.24 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0513028.D
 Acq: 13 May 2008 22:49

Tgt Ion: 50 Resp: 1797
 Ion Ratio Lower Upper
 50 100
 52 30.8 12.5 52.5



#11
 Acetone
 Concen: 1.55 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0513028.D
 Acq: 13 May 2008 22:49

Tgt Ion: 43 Resp: 2696
 Ion Ratio Lower Upper
 43 100
 58 13.6 22.0 33.0#



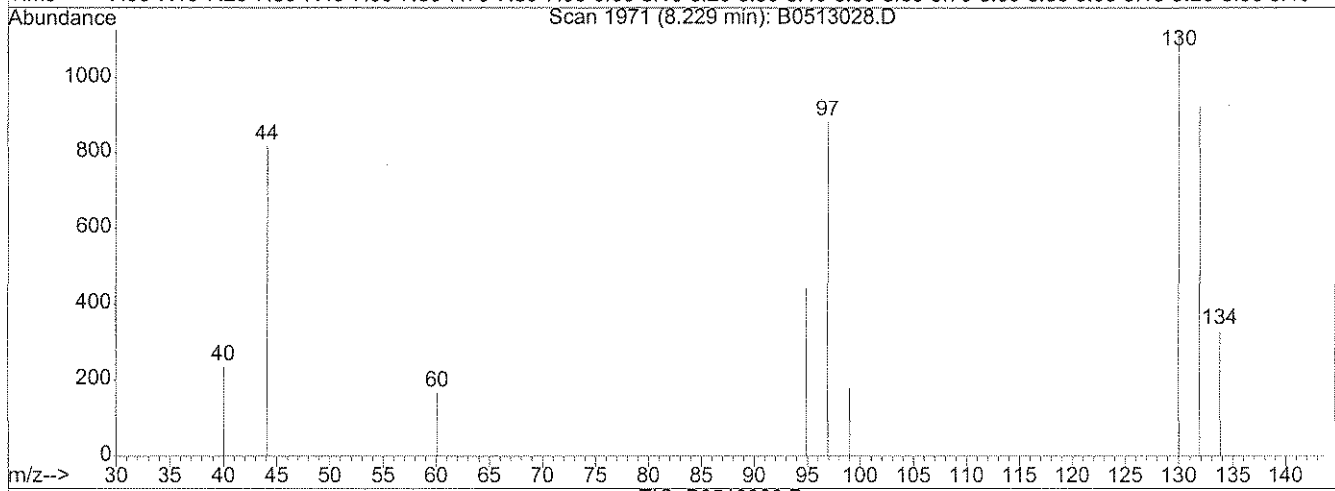
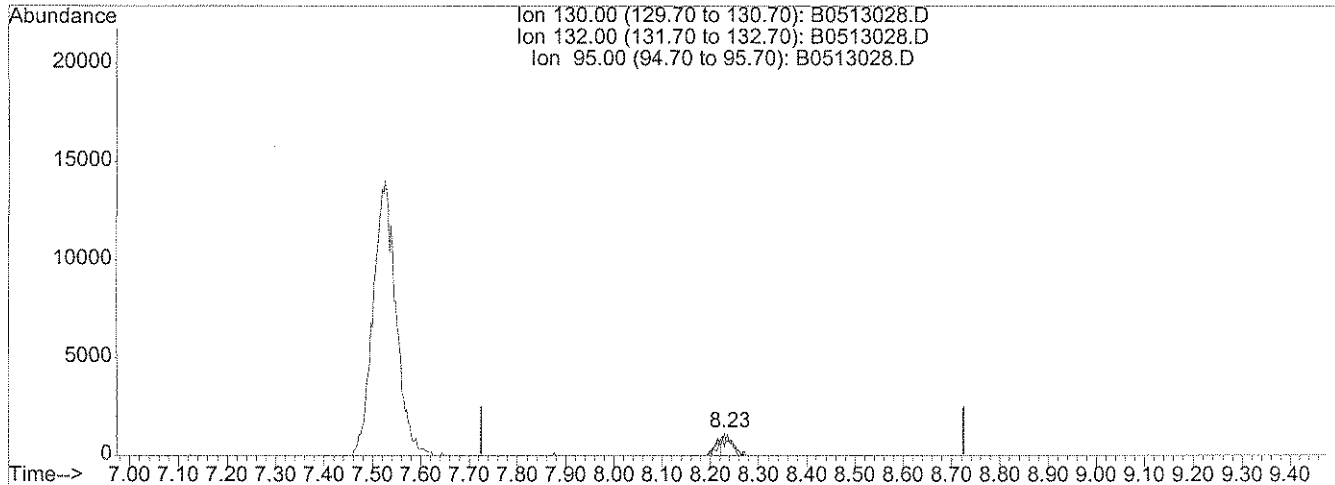
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
 Acq On : 13 May 2008 22:49
 Sample : JPL109-004
 Misc : #3 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:16 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



TIC: B0513028.D

(45) Trichloroethene (T)

8.23min 0.18ug/l

response 1336

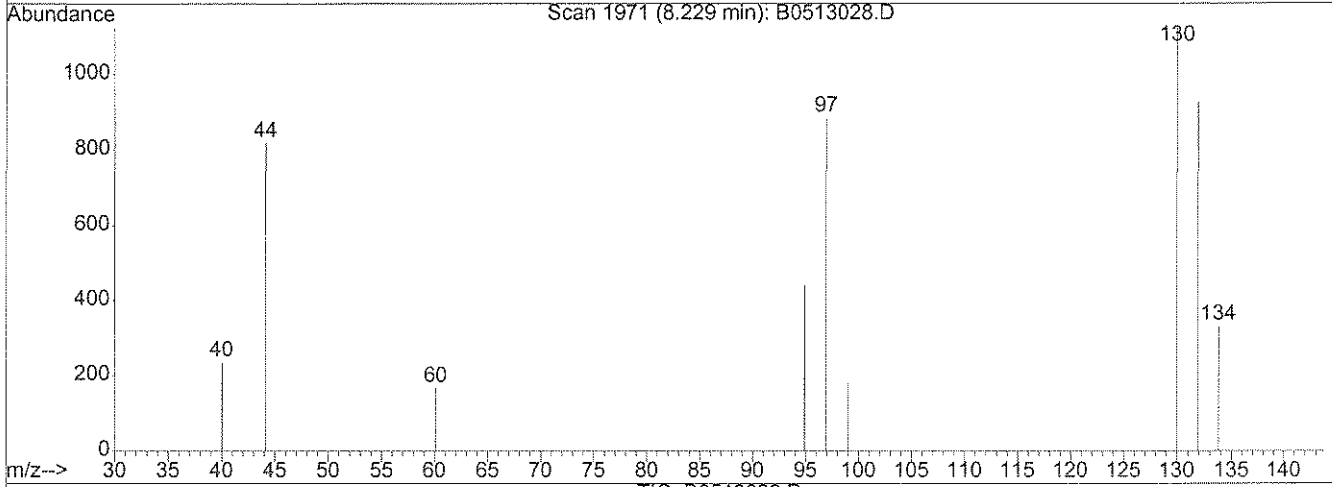
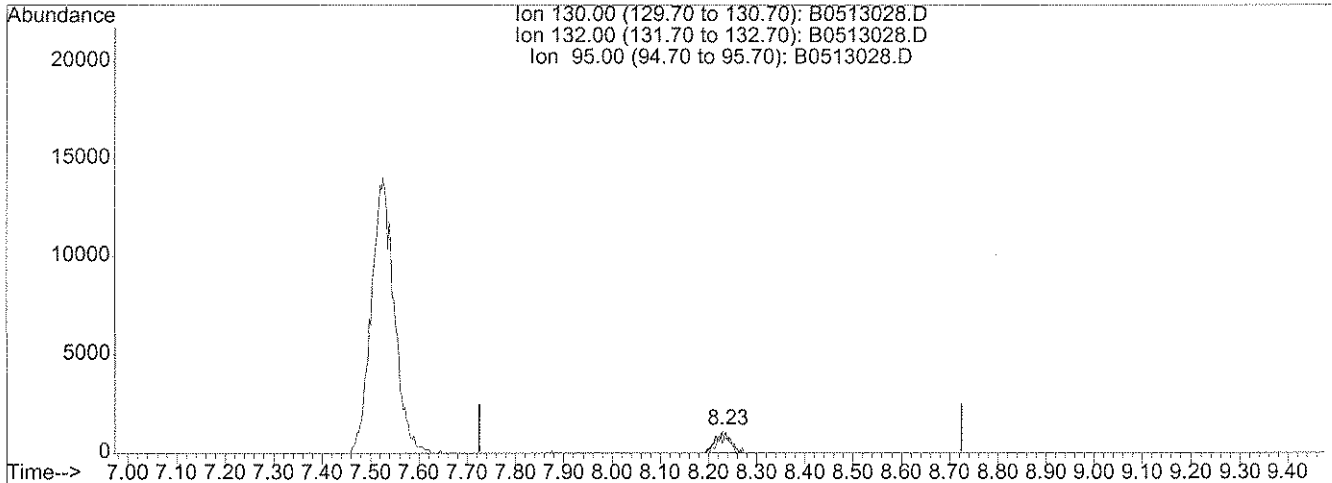
Ion	Exp%	Act%
130.00	100	100
132.00	100.20	122.08#
95.00	95.80	68.56#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051308A\B0513028.D
 Acq On : 13 May 2008 22:49
 Sample : JPL109-004
 Misc : #3 10ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:16 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00
 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration

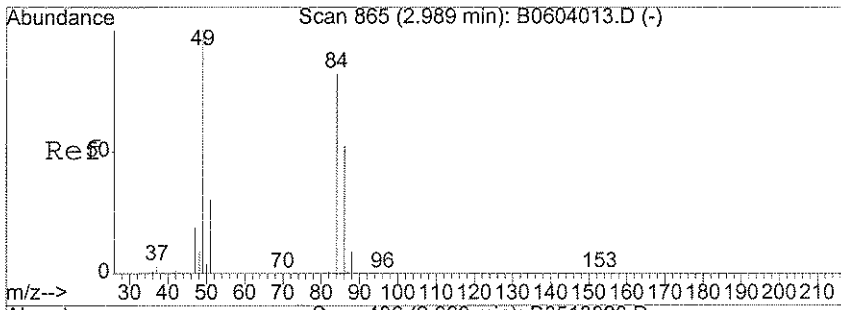


(45) Trichloroethene (T)

8.23min 0.30ug/l m

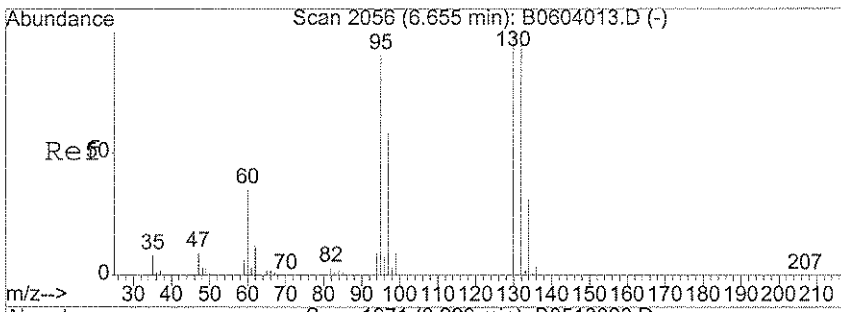
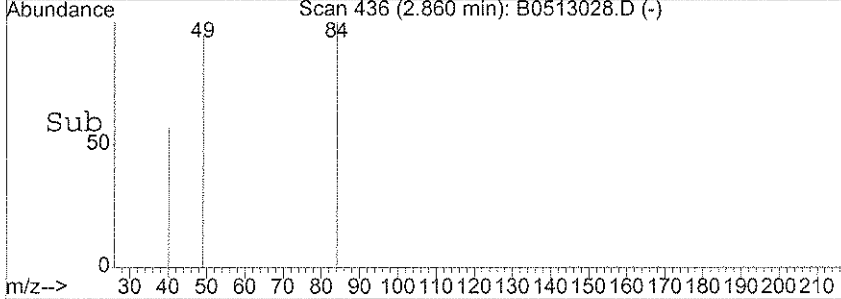
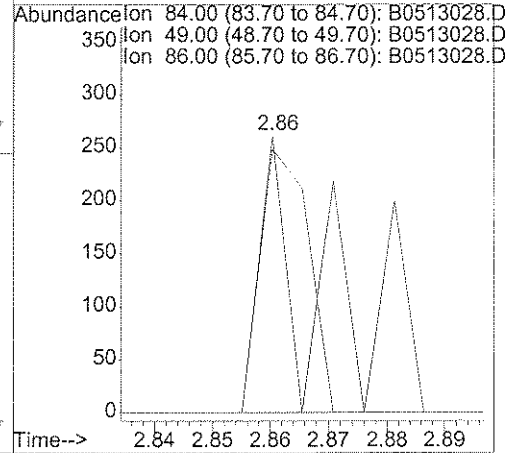
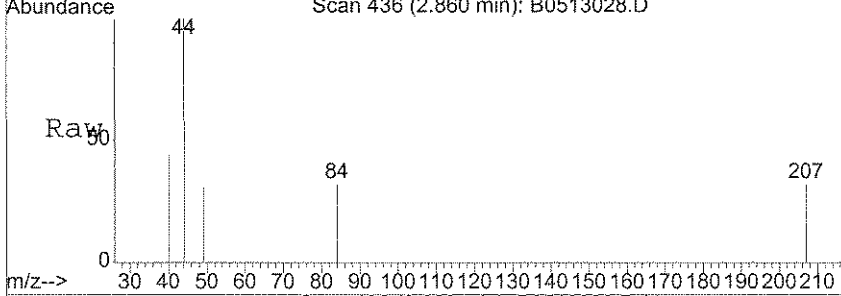
response 2191

Ion	Exp%	Act%
130.00	100	100
132.00	100.20	74.44#
95.00	95.80	41.81#
0.00	0.00	0.00



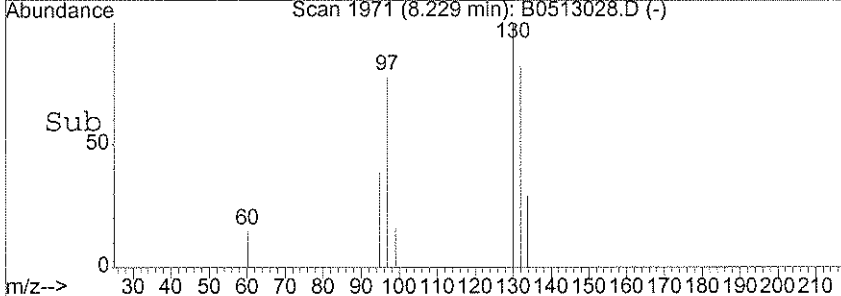
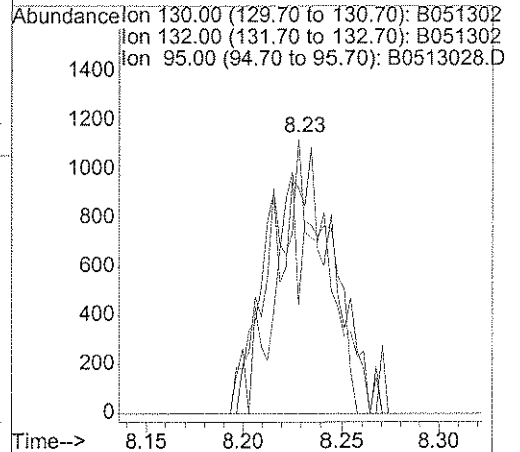
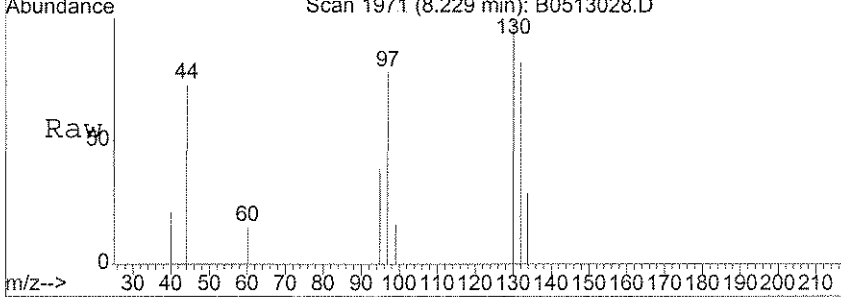
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.86 min Scan# 436
 Delta R.T. 0.00 min
 Lab File: B0513028.D
 Acq: 13 May 2008 22:49

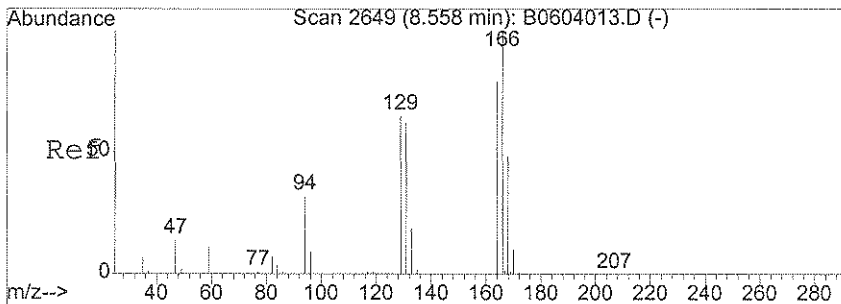
Tgt Ion:	84	Resp:	151
Ion Ratio	Lower	Upper	
84	100		
49	96.0	113.6	153.6#
86	0.0	45.8	85.8#



#45
 Trichloroethene
 Concen: 0.30 ug/l m
 RT: 8.23 min Scan# 1971
 Delta R.T. 0.00 min
 Lab File: B0513028.D
 Acq: 13 May 2008 22:49

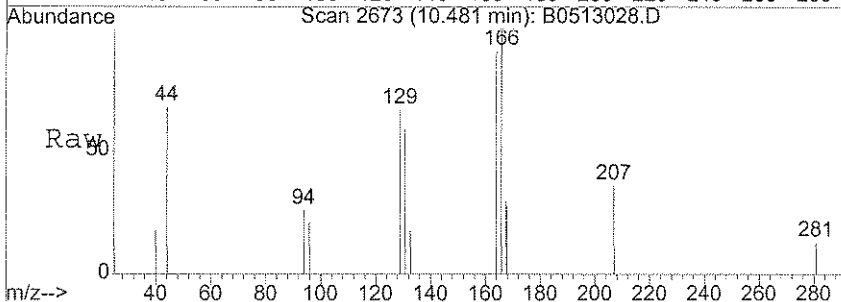
Tgt Ion:	130	Resp:	2191
Ion Ratio	Lower	Upper	
130	100		
132	74.4	80.2	120.2#
95	41.8	75.8	115.8#



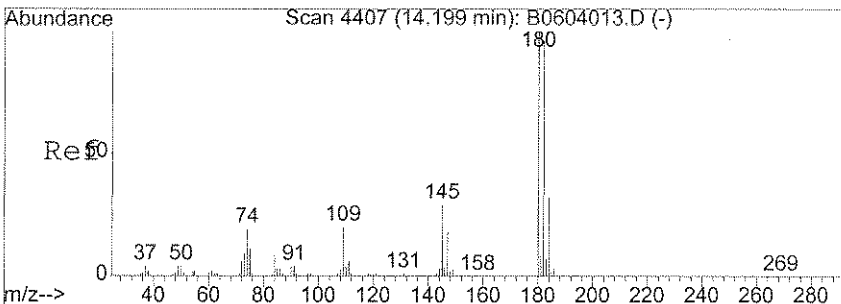
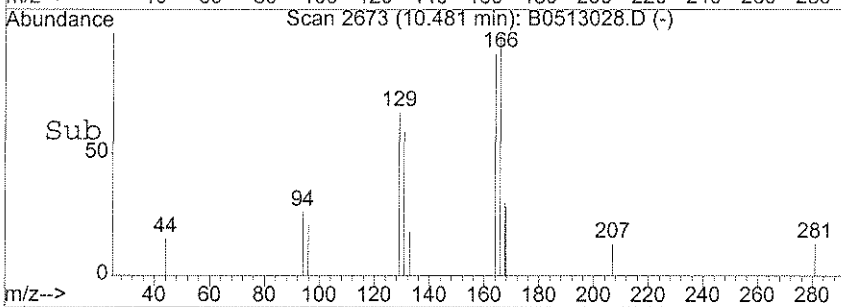
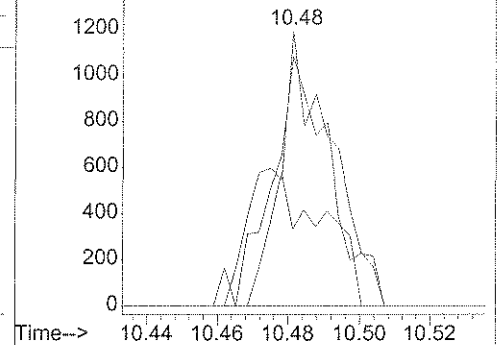


#60
 Tetrachloroethene
 Concen: 0.18 ug/l
 RT: 10.48 min Scan# 2673
 Delta R.T. -0.00 min
 Lab File: B0513028.D
 Acq: 13 May 2008 22:49

Tgt Ion	Ratio	Lower	Upper
166	100		
164	87.2	65.6	98.4
168	44.0	41.1	61.7

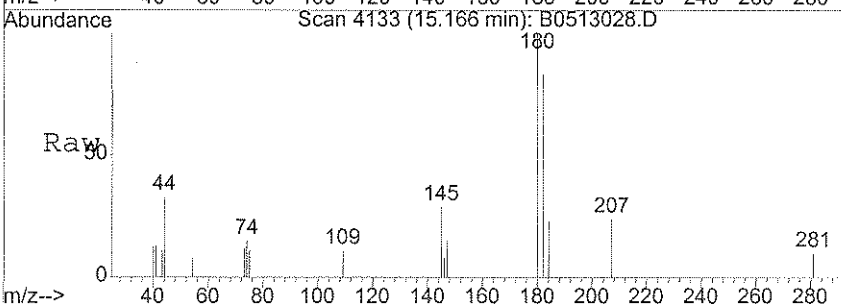


Abundance Ion 165.95 (165.65 to 166.65): B051302
 Ion 163.95 (163.65 to 164.65): B051302
 Ion 167.95 (167.65 to 168.65): B051302

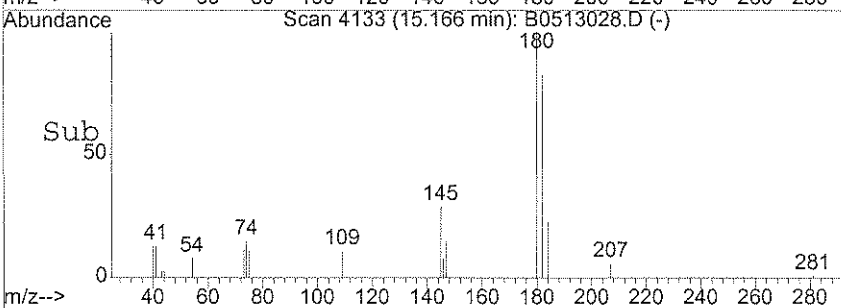
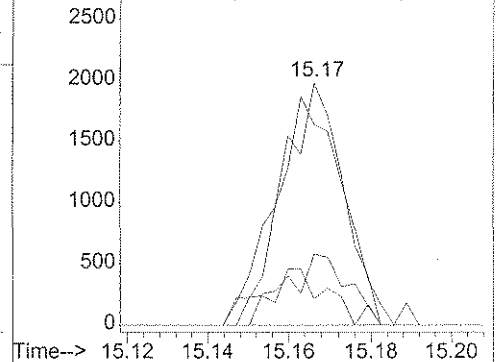


#96
 1,2,3-Trichlorobenzene
 Concen: 0.17 ug/l
 RT: 15.17 min Scan# 4133
 Delta R.T. -0.00 min
 Lab File: B0513028.D
 Acq: 13 May 2008 22:49

Tgt Ion	Ratio	Lower	Upper
180	100		
182	106.5	77.2	115.8
145	29.2	22.0	33.0
109	23.1	15.1	22.7#



Abundance Ion 179.95 (179.65 to 180.65): B051302
 Ion 181.95 (181.65 to 182.65): B051302
 Ion 144.95 (144.65 to 145.65): B051302
 Ion 109.05 (108.75 to 109.75): B051302



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL109-005

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0516018.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/16/2008 14:38

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: <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	0.31	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	0.34	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	0.52	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-1

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-005
 Lab File ID: B0516018.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/16/2008 14:38
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	Q
		<u>ug/L</u>	
108-88-3	Toluene	0.50	U
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.36	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-23-1

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-005
 Lab File ID: B0516018.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/16/2008 14:38
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

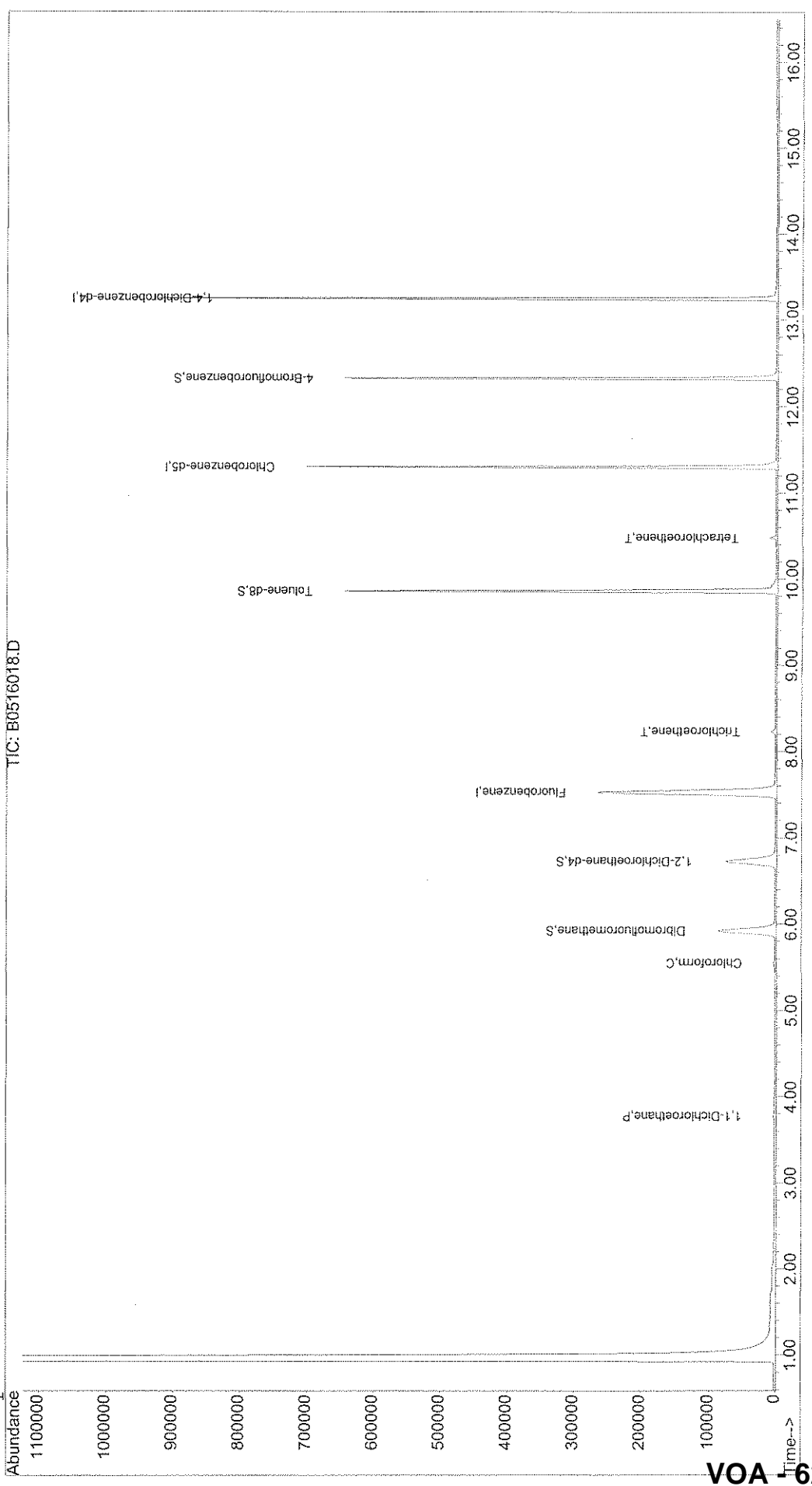
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516018.D Vial: 20
Acq On : 16 May 2008 14:38 Operator: DGA
Sample : JPL109-005 Inst : Buddha
Misc : #2 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:51 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516018.D
 Acq On : 16 May 2008 14:38
 Sample : JPL109-005
 Misc : #2 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:51 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	446131	25.00	ug/l	0.00	84.08%
54) Chlorobenzene-d5	11.30	117	358062	25.00	ug/l	0.00	81.39%
74) 1,4-Dichlorobenzene-d4	13.25	152	208056	25.00	ug/l	0.00	80.02%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	103139	20.56	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	102.80%	
40) 1,2-Dichloroethane-d4	6.72	65	122450	27.43	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	109.72%	
55) Toluene-d8	9.86	98	433175	23.59	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	94.36%	
76) 4-Bromofluorobenzene	12.32	95	160791	24.94	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	99.76%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	706	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	2.30	96	136	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.		
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
 B0516018.D B8260W.M Fri May 30 09:52:06 2008

J. Smith
 VOA - 63 Page 1

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516018.D
 Acq On : 16 May 2008 14:38
 Sample : JPL109-005
 Misc : #2 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:51 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.77	63	3140	0.31	ug/l	92
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	45	0	N.D.		
26) Vinyl acetate	0.00	43	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	4.79	96	72	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	5.39	41	30	N.D.		
34) Chloroform	5.55	83	3264m	0.34	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	0.00	117	0	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.69	78	31	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	7.35	43	31	N.D.		
45) Trichloroethene	8.23	130	3320	0.52	ug/l #	69
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	8.75	41	31	N.D.		
50) Bromodichloromethane	9.08	83	71	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	9.87	75	30	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	9.94	92	246	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	10.48	166	2687	0.36	ug/l	97
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	10.78	43	37	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	11.30	91	545	N.D.		
66) Chlorobenzene	11.33	112	36	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

(#) = qualifier out of range (m) = manual integration
 B0516018.D B8260W.M Fri May 30 09:52:07 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516018.D Vial: 20
 Acq On : 16 May 2008 14:38 Operator: DGA
 Sample : JPL109-005 Inst : Buddha
 Misc : #2 10ML +IS/SS (524) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:51 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	107		N.D.	
69) m,p-Xylene	11.52	106	73		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	12.18	105	35		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.32	156	29		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	32		N.D.	
79) 1,2,3-Trichloropropane	12.50	75	31		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.52	91	96		N.D.	
82) 4-Chlorotoluene	12.68	91	35		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	110		N.D.	
84) tert-Butylbenzene	12.91	119	31		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	95		N.D.	
86) sec-butylbenzene	13.09	105	108		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	31		N.D.	
88) 4-Isopropyltoluene	13.20	119	204		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	29		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	182		N.D.	
91) n-Butylbenzene	13.52	91	84		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.17	75	40		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	99		N.D.	
94) Hexachlorobutadiene	14.88	225	219		N.D.	
95) Naphthalene	14.98	128	175		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	316		N.D.	

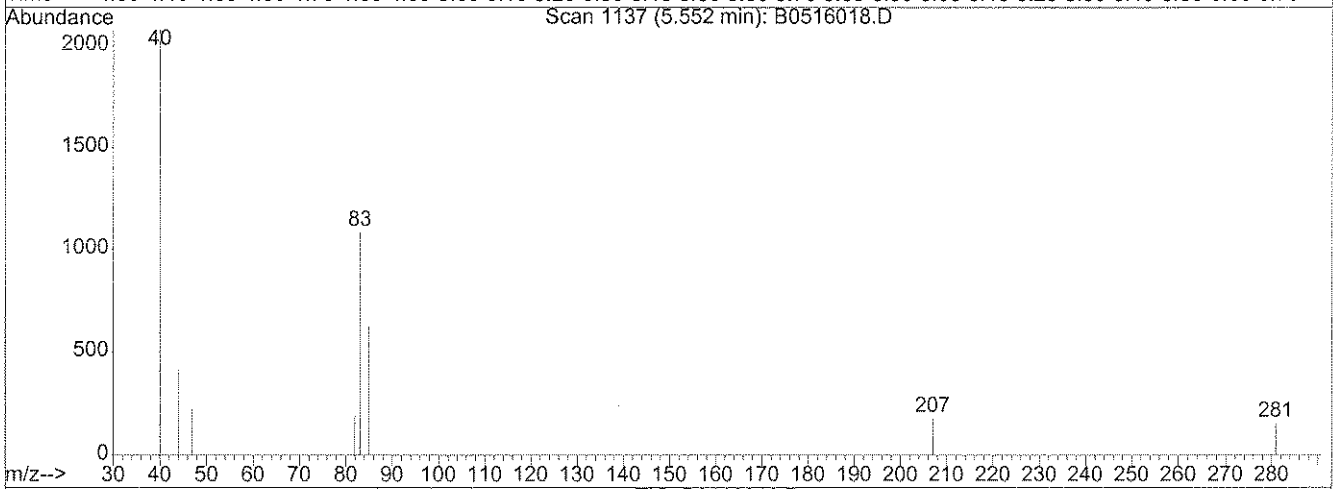
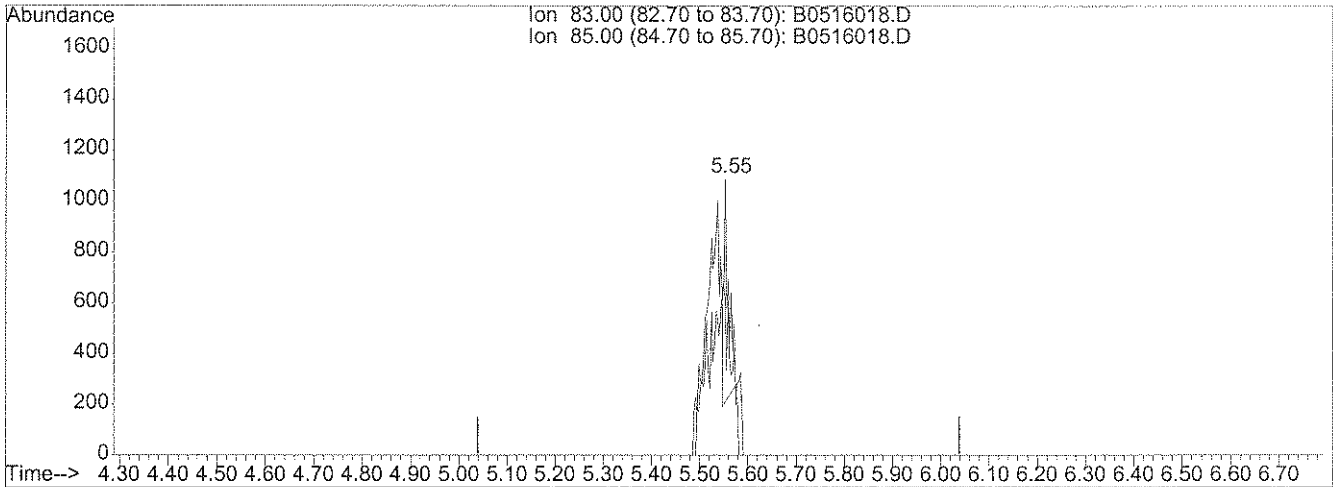
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051608A\B0516018.D
 Acq On : 16 May 2008 14:38
 Sample : JPL109-005
 Misc : #2 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:51 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



TIC: B0516018.D

(34) Chloroform (C)

5.55min 0.06ug/l

response 605

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	65.62
0.00	0.00	0.00
0.00	0.00	0.00

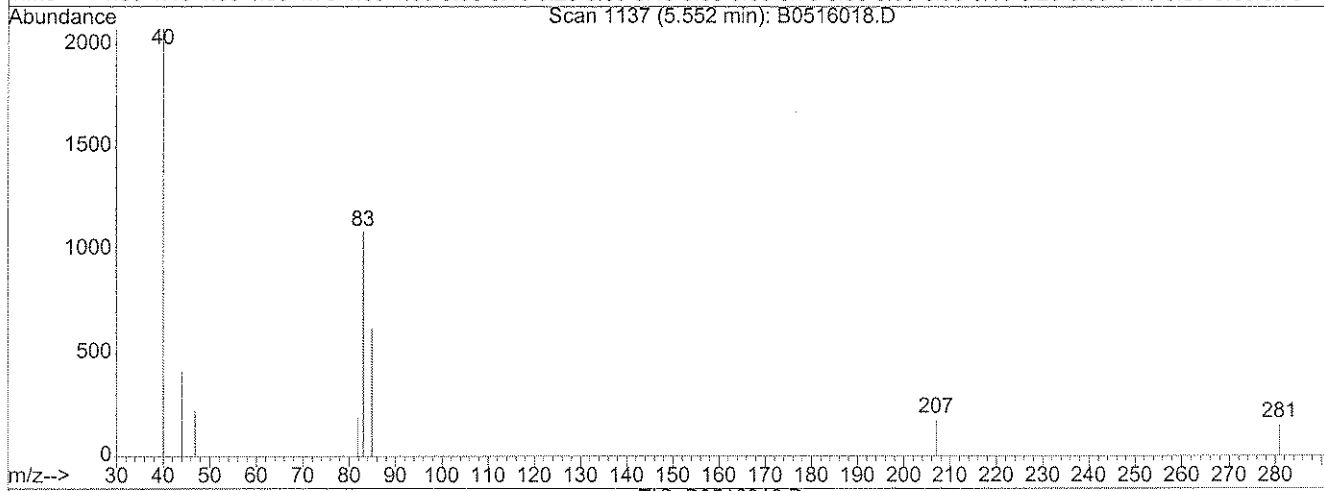
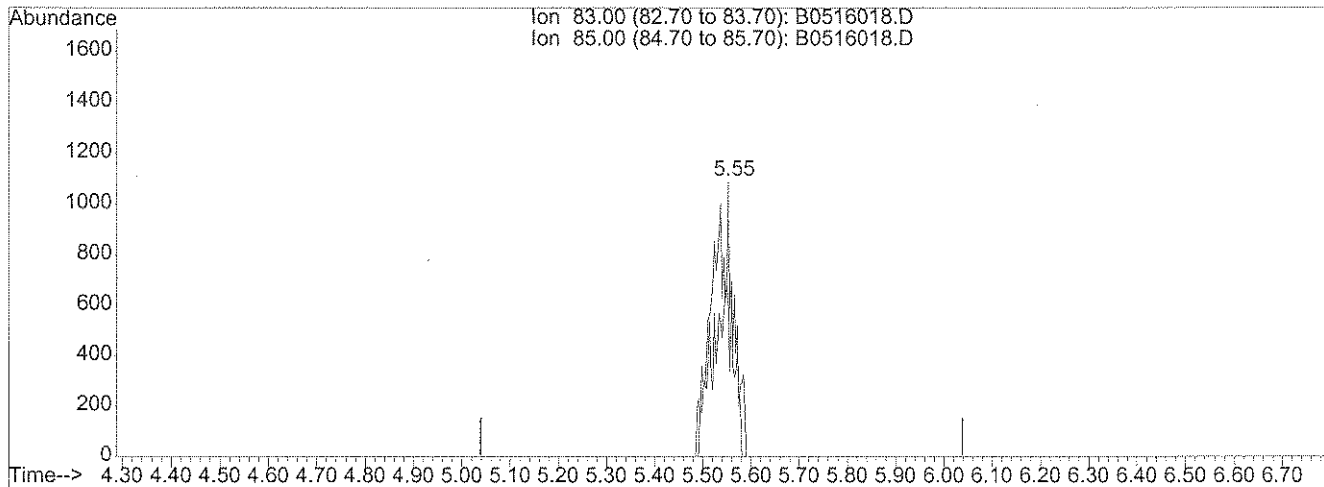
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051608A\B0516018.D
 Acq On : 16 May 2008 14:38
 Sample : JPL109-005
 Misc : #2 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:51 2008

Vial: 20
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



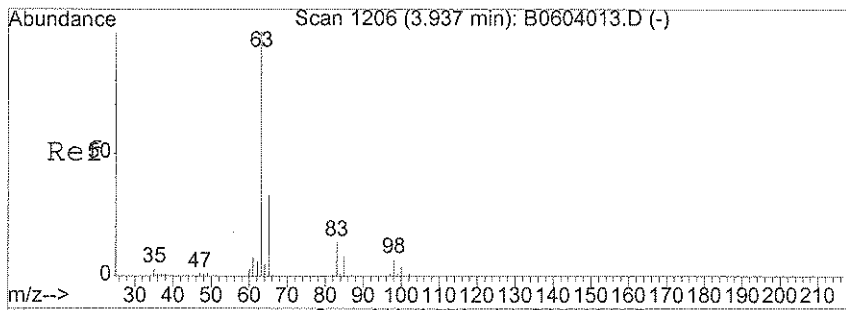
TIC: B0516018.D

(34) Chloroform (C)

5.55min 0.34ug/l m

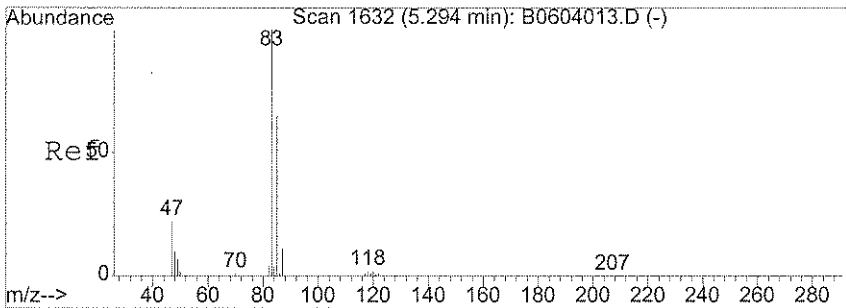
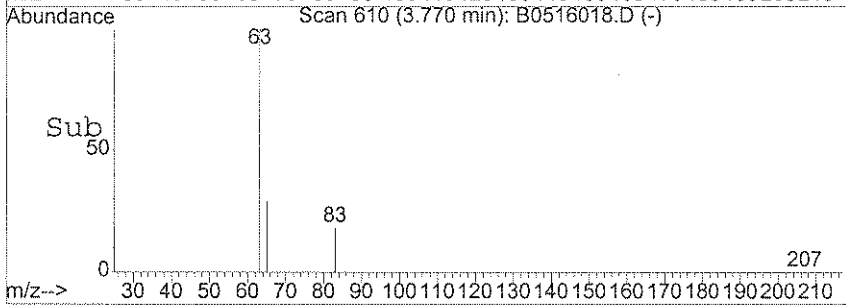
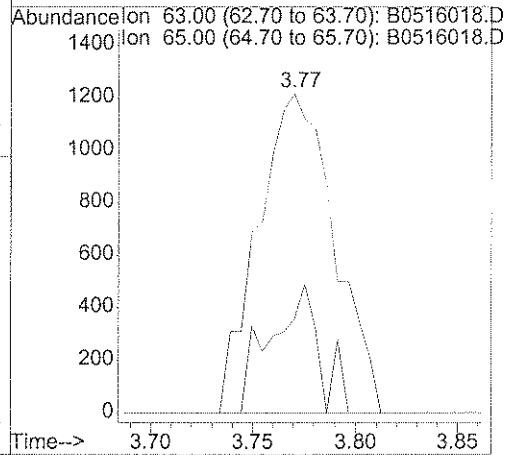
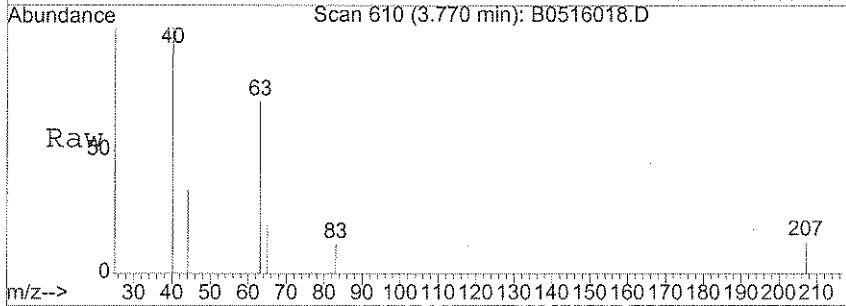
response 3264

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	12.16#
0.00	0.00	0.00
0.00	0.00	0.00



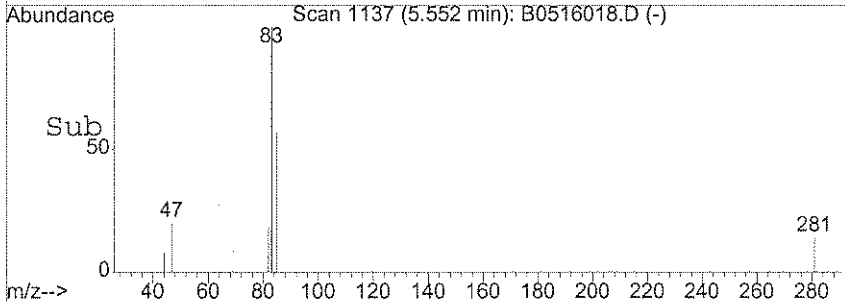
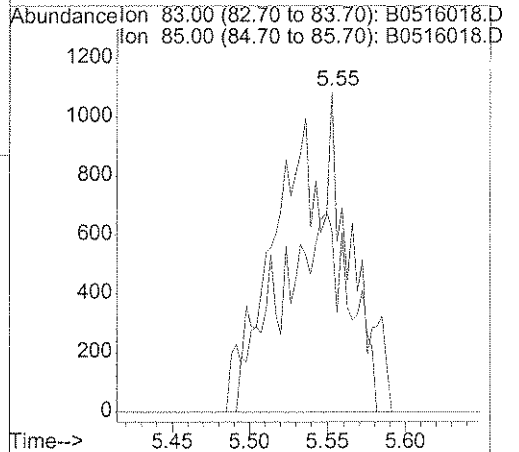
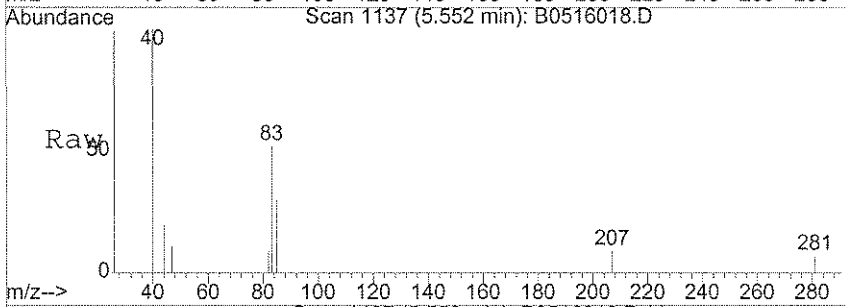
#23
 1,1-Dichloroethane
 Concen: 0.31 ug/l
 RT: 3.77 min Scan# 610
 Delta R.T. -0.00 min
 Lab File: B0516018.D
 Acq: 16 May 2008 14:38

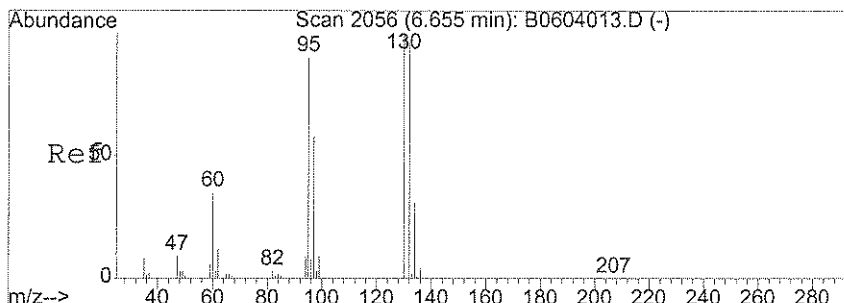
Tgt Ion: 63 Resp: 3140
 Ion Ratio Lower Upper
 63 100
 65 26.1 10.2 50.2



#34
 Chloroform
 Concen: 0.34 ug/l m
 RT: 5.55 min Scan# 1137
 Delta R.T. 0.01 min
 Lab File: B0516018.D
 Acq: 16 May 2008 14:38

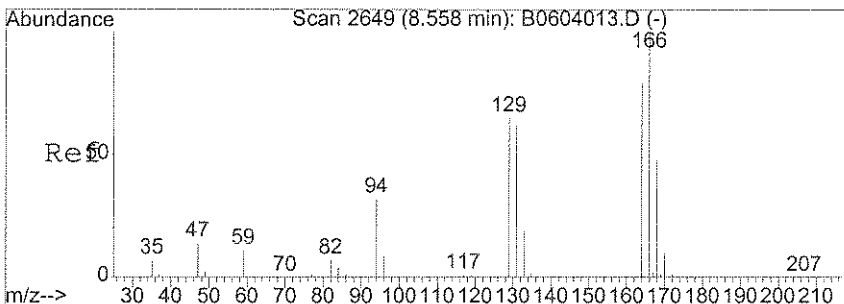
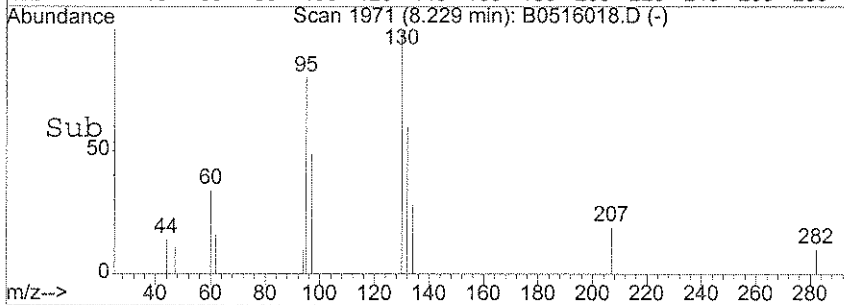
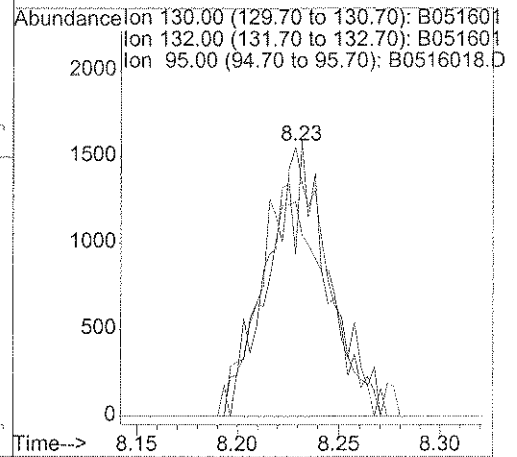
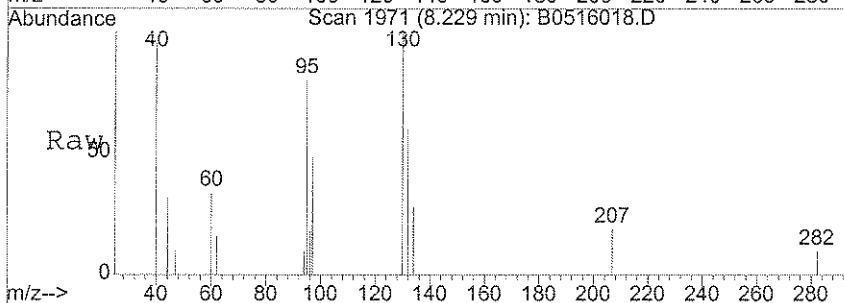
Tgt Ion: 83 Resp: 3264
 Ion Ratio Lower Upper
 83 100
 85 12.2 44.0 84.0#





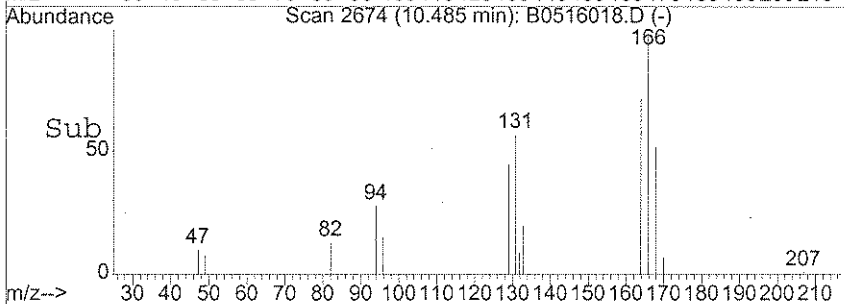
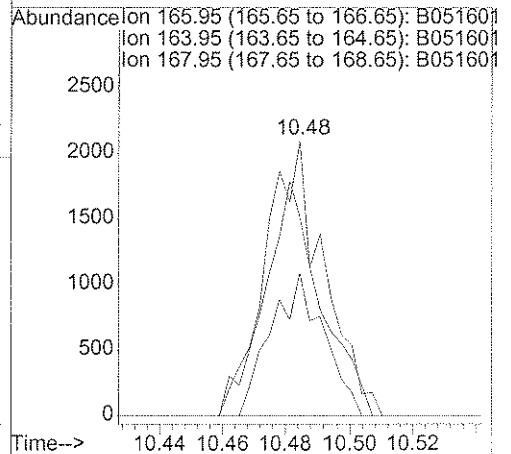
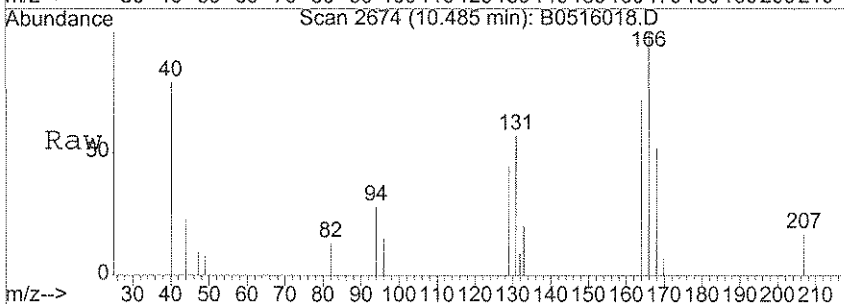
#45
 Trichloroethene
 Concen: 0.52 ug/l
 RT: 8.23 min Scan# 1971
 Delta R.T. 0.00 min
 Lab File: B0516018.D
 Acq: 16 May 2008 14:38

Tgt Ion	Resp	Lower	Upper
130	3320		
130	100		
132	48.0	80.2	120.2#
95	87.3	75.8	115.8



#60
 Tetrachloroethene
 Concen: 0.36 ug/l
 RT: 10.48 min Scan# 2674
 Delta R.T. -0.00 min
 Lab File: B0516018.D
 Acq: 16 May 2008 14:38

Tgt Ion	Resp	Lower	Upper
166	2687		
166	100		
164	81.7	65.6	98.4
168	46.5	41.1	61.7



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-12-5/12/08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-006
 Lab File ID: B0516019.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/16/2008 15:05
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.31	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-12-5/12/08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-006
 Lab File ID: B0516019.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/16/2008 15:05
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-12-5/12/08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-006
 Lab File ID: B0516019.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/16/2008 15:05
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

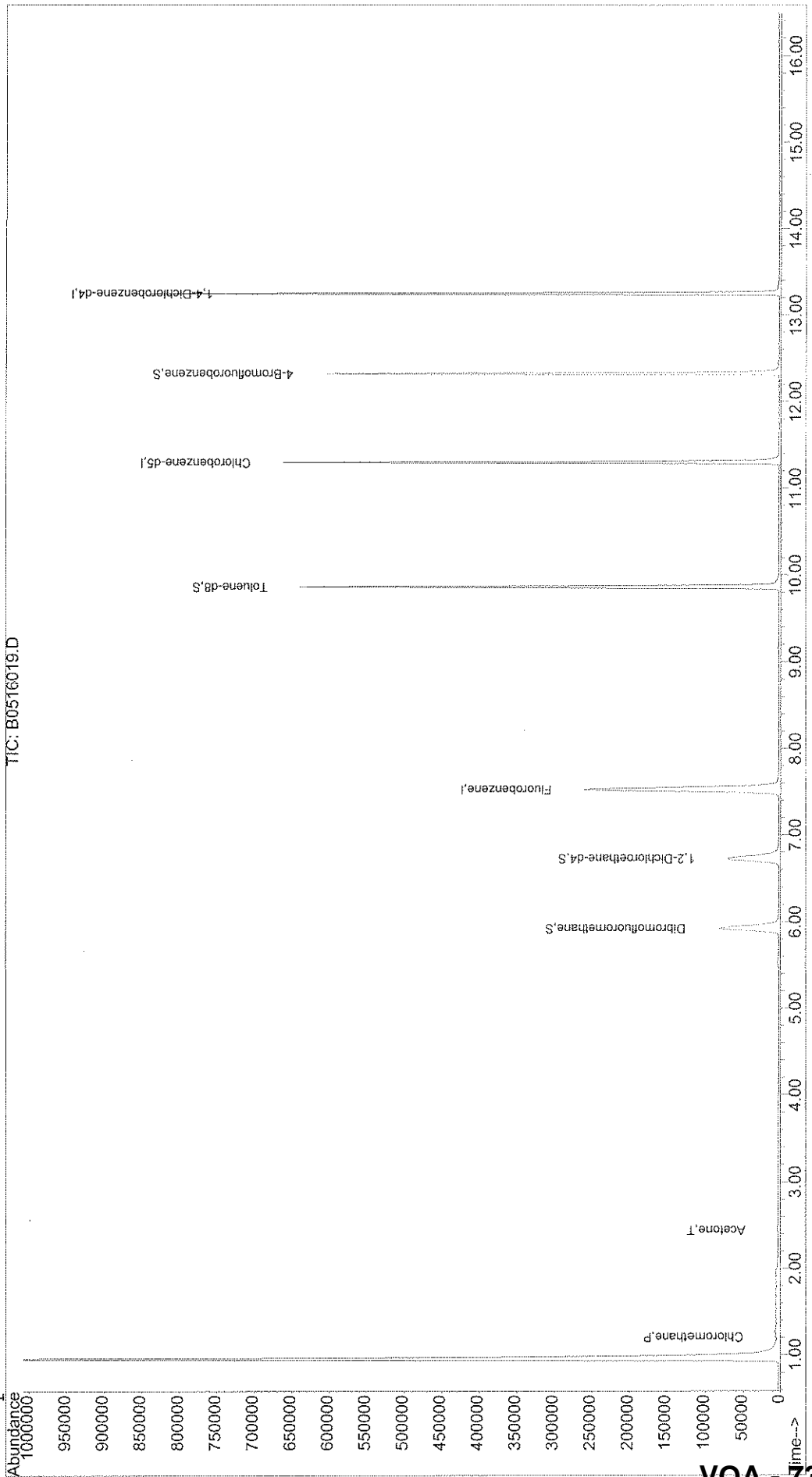
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516019.D Vial: 21
Acq On : 16 May 2008 15:05 Operator: DGA
Sample : JPL109-006 Inst : Buddha
Misc : #4 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:52 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516019.D
 Acq On : 16 May 2008 15:05
 Sample : JPL109-006
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:52 2008

Vial: 21
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	433964	25.00	ug/l	0.00 81.78%
54) Chlorobenzene-d5	11.30	117	342388	25.00	ug/l	0.00 77.82%
74) 1,4-Dichlorobenzene-d4	13.25	152	195774	25.00	ug/l	0.00 75.29%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	101380	20.78	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	103.90%
40) 1,2-Dichloroethane-d4	6.73	65	113990	26.25	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	105.00%
55) Toluene-d8	9.86	98	417199	23.76	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	95.04%
76) 4-Bromofluorobenzene	12.32	95	151707	25.00	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	100.00%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.21	50	1984	0.31	ug/l	99
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	2.44	43	2365	1.61	ug/l #	88
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	2.79	41	69	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	2.86	84	236	Below Cal	#	66
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
 B0516019.D B8260W.M Fri May 30 09:53:00 2008

[Handwritten Signature]
 Page 1
VOA-74

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516019.D
 Acq On : 16 May 2008 15:05
 Sample : JPL109-006
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:52 2008

Vial: 21
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.79	96	39		N.D.	
30) 2-Butanone	4.89	43	35		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.35	41	32		N.D.	
34) Chloroform	5.60	83	71		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	6.70	78	128		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	8.24	130	193		N.D.	
46) Methylcyclohexane	8.39	83	32		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.81	41	30		N.D.	
50) Bromodichloromethane	9.16	83	33		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	9.94	92	405		N.D.	
57) trans-1,3-Dichloropropene	10.27	75	29		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	10.72	43	43		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	712		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
 B0516019.D B8260W.M Fri May 30 09:53:01 2008

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 Page 2
VOA-75

Quantitation Report

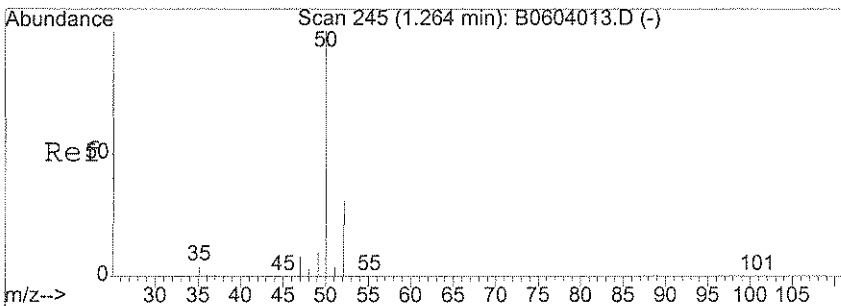
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 Acq On : 16 May 2008 15:05
 Sample : JPL109-006
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:52 2008

Vial: 21
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

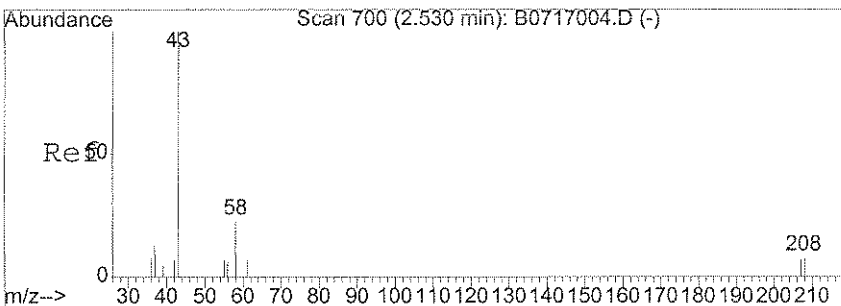
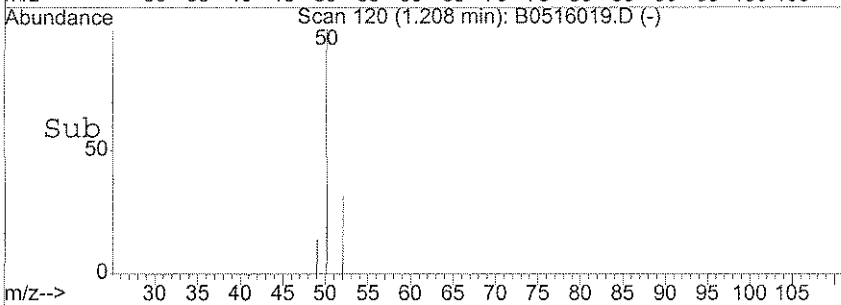
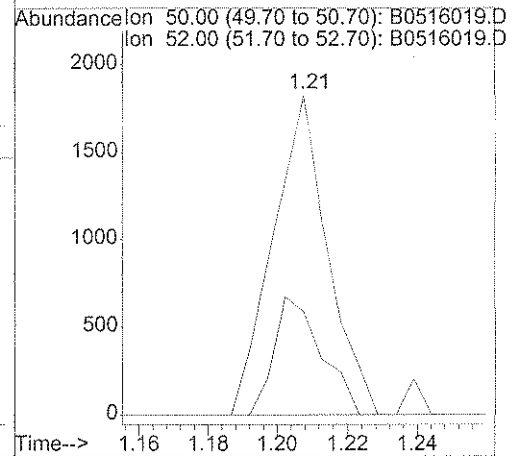
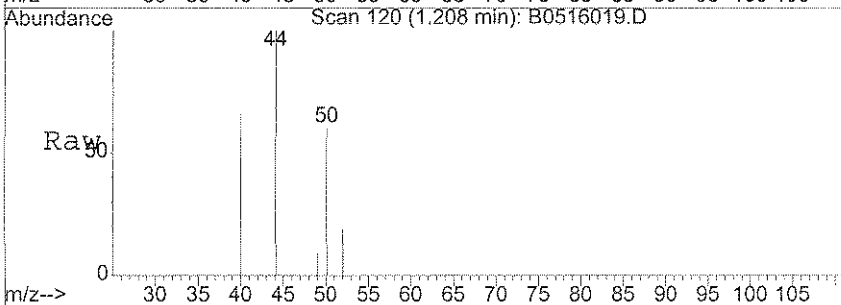
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	169		N.D.	
69) m,p-Xylene	11.52	106	304		N.D.	
70) o-xylene	11.87	106	79		N.D.	
71) Styrene	11.89	104	38		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.18	105	77		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	12.32	83	35		N.D.	
79) 1,2,3-Trichloropropane	12.53	75	32		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.58	91	30		N.D.	
82) 4-Chlorotoluene	12.69	91	37		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	68		N.D.	
84) tert-Butylbenzene	13.19	119	64		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	180		N.D.	
86) sec-butylbenzene	13.09	105	67		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	13.20	119	189		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	13.53	91	143		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	33		N.D.	
94) Hexachlorobutadiene	14.89	225	71		N.D.	
95) Naphthalene	14.99	128	287		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	66		N.D.	



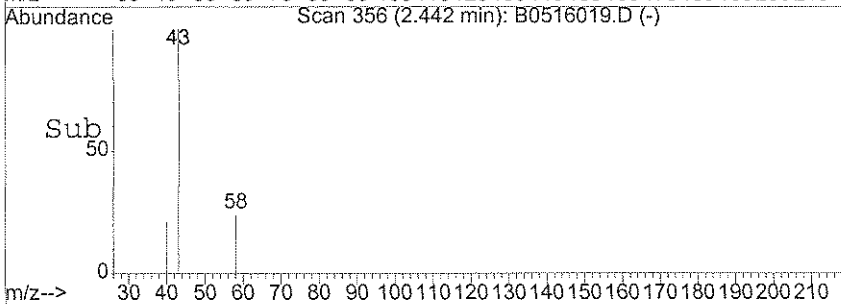
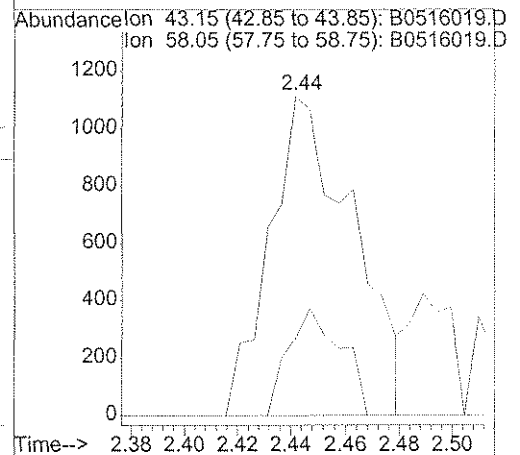
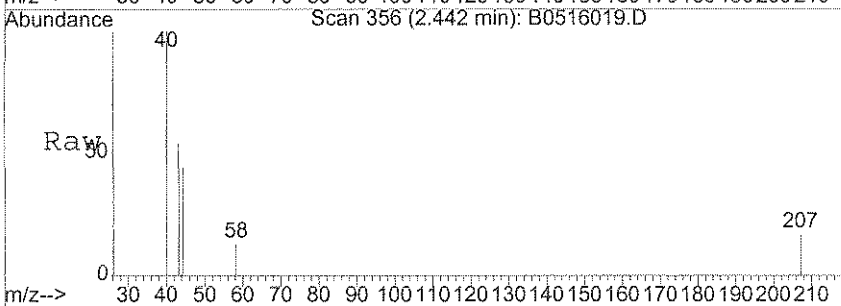
#3
 Chloromethane
 Concen: 0.31 ug/l
 RT: 1.21 min Scan# 120
 Delta R.T. 0.01 min
 Lab File: B0516019.D
 Acq: 16 May 2008 15:05

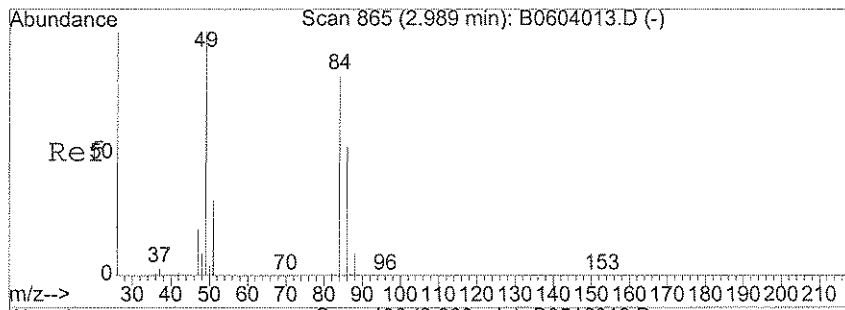
Tgt Ion: 50 Resp: 1984
 Ion Ratio Lower Upper
 50 100
 52 32.0 12.5 52.5



#11
 Acetone
 Concen: 1.61 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0516019.D
 Acq: 16 May 2008 15:05

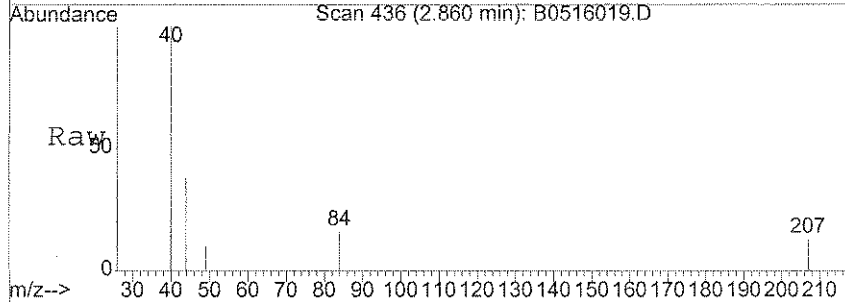
Tgt Ion: 43 Resp: 2365
 Ion Ratio Lower Upper
 43 100
 58 21.1 22.0 33.0#



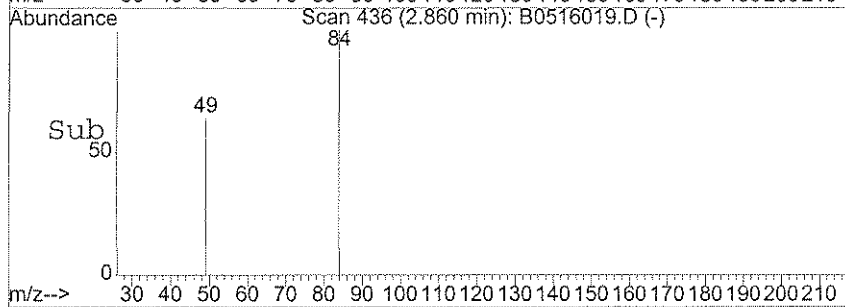
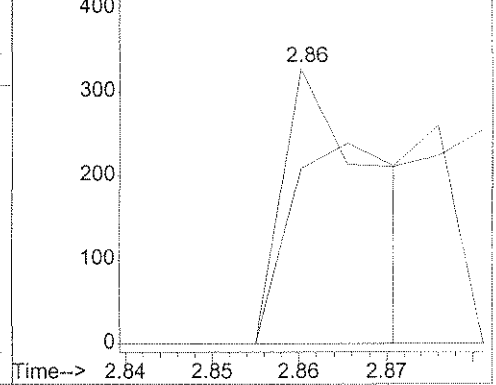


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.86 min Scan# 436
 Delta R.T. 0.00 min
 Lab File: B0516019.D
 Acq: 16 May 2008 15:05

Tgt Ion	Resp	Lower	Upper
84	100		
49	122.5	113.6	153.6
86	0.0	45.8	85.8#



Abundance Ion 84.00 (83.70 to 84.70): B0516019.D
 Ion 49.00 (48.70 to 49.70): B0516019.D
 Ion 86.00 (85.70 to 86.70): B0516019.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-3-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL109-007

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0516020.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/16/2008 15:32

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	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	0.27	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-3-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-007
 Lab File ID: B0516020.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/16/2008 15:32
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-3-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL109-007

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0516020.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/16/2008 15:32

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

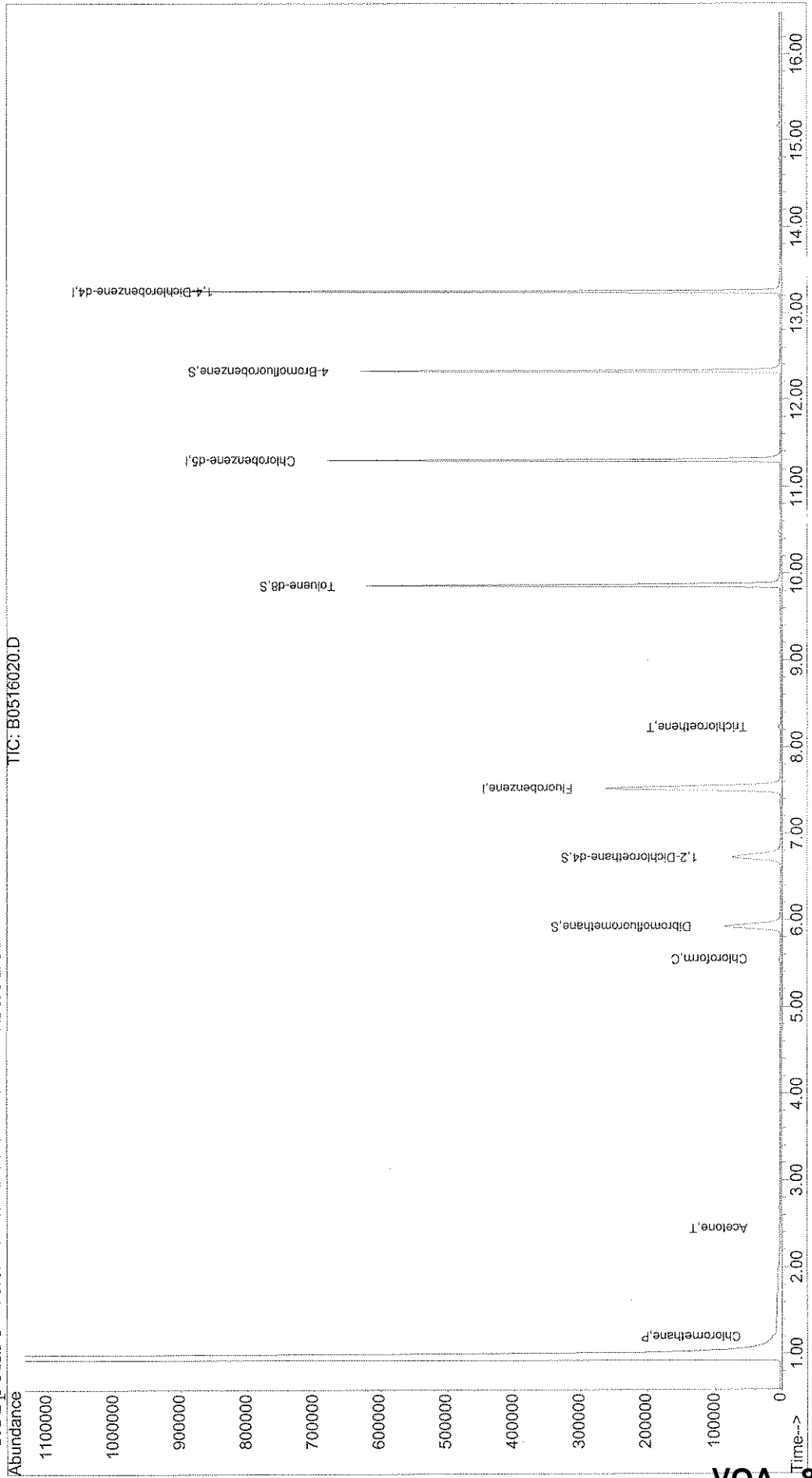
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D Vial: 22
Acq On : 16 May 2008 15:32 Operator: DGA
Sample : JPL109-007 Inst : Buddha
Misc : #4 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:53 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D
 Acq On : 16 May 2008 15:32
 Sample : JPL109-007
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:53 2008

Vial: 22
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.52	96	442851	25.00	ug/l	0.00 83.46%
54) Chlorobenzene-d5	11.30	117	343704	25.00	ug/l	0.00 78.12%
74) 1,4-Dichlorobenzene-d4	13.25	152	212469	25.00	ug/l	0.00 81.71%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	103270	20.74	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	103.70%
40) 1,2-Dichloroethane-d4	6.72	65	119634	26.99	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	107.96%
55) Toluene-d8	9.86	98	409392	23.23	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	92.92%
76) 4-Bromofluorobenzene	12.32	95	157490	23.92	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	95.68%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.20	50	1295	0.20 ug/l	< 1/2 PAL
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	2.45	43	1812	1.21 ug/l	# 63
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	2.69	41	63	N.D.	
17) Methyl Acetate	2.70	43	68	N.D.	
18) Methylene Chloride	0.00	84	0	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.	

QA 5/30/08

(#) = qualifier out of range (m) = manual integration
 B0516020.D B8260W.M Fri May 30 09:54:05 2008

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Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D
 Acq On : 16 May 2008 15:32
 Sample : JPL109-007
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:53 2008

Vial: 22
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	1294		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.79	96	42		N.D.	
30) 2-Butanone	4.98	43	31		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.44	41	35		N.D.	
34) Chloroform	5.55	83	2843m	0.30	ug/l #	46
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	6.72	78	36		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	8.24	130	1730	0.27	ug/l	91
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	9.02	41	31		N.D.	
50) Bromodichloromethane	9.08	83	174		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.86	75	38		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	9.93	92	329		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	10.49	166	1001		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.77	43	31		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	645		N.D.	
66) Chlorobenzene	11.32	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0516020.D B8260W.M Fri May 30 09:54:06 2008

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 Page 2
 VOA-84

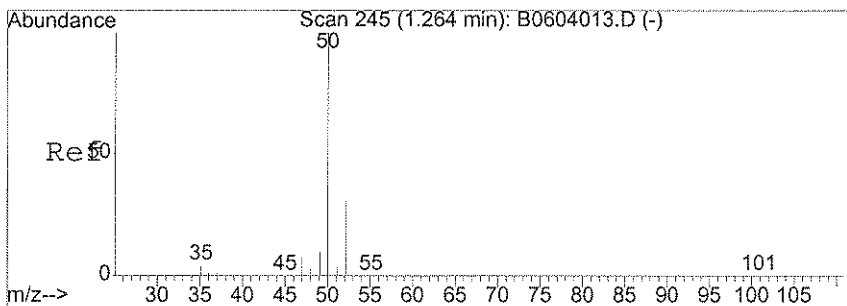
Quantitation Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D Vial: 22
 Acq On : 16 May 2008 15:32 Operator: DGA
 Sample : JPL109-007 Inst : Buddha
 Misc : #4 10ML +IS/SS (524) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:53 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

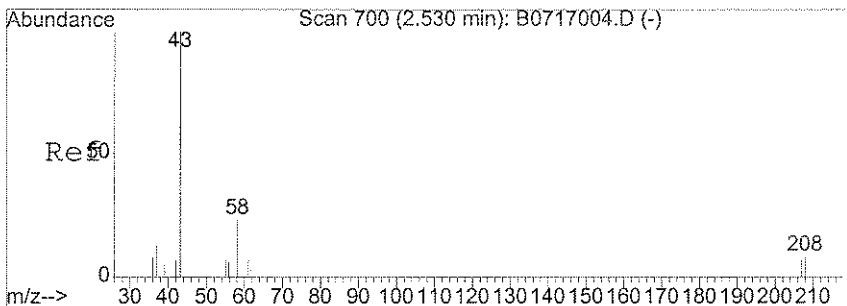
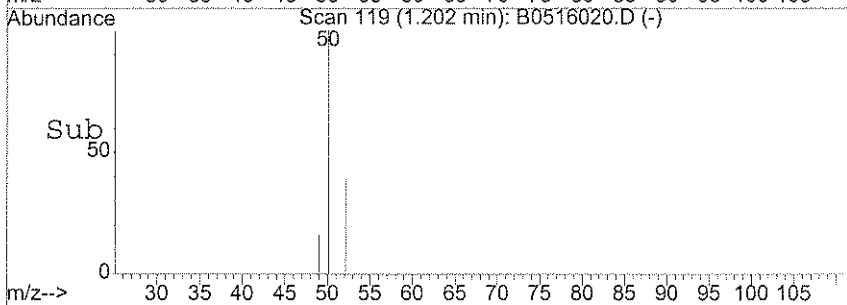
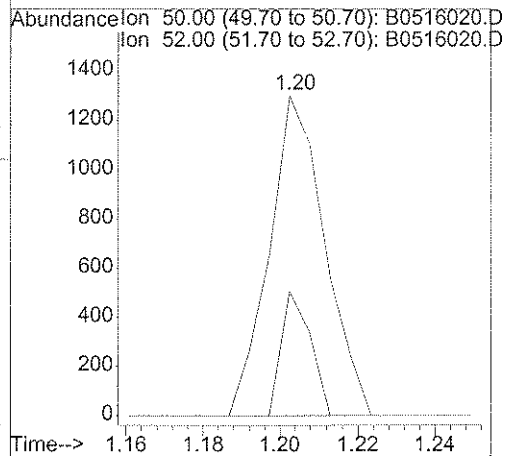
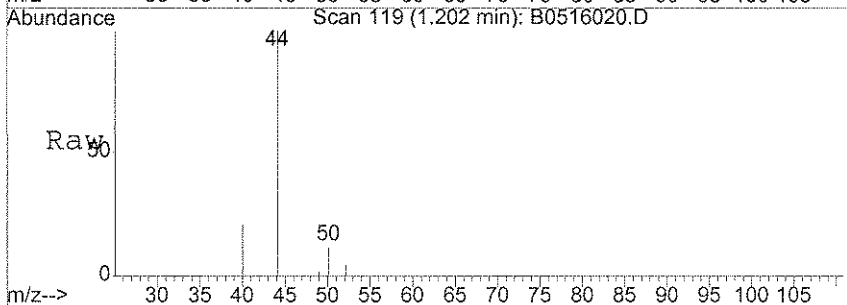
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	29		N.D.	
69) m,p-Xylene	11.52	106	60		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.90	104	31		N.D.	
72) Bromoform	12.31	173	54		N.D.	
73) Isopropylbenzene	12.18	105	31		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.45	83	33		N.D.	
79) 1,2,3-Trichloropropane	12.49	75	47		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.59	91	29		N.D.	
82) 4-Chlorotoluene	12.59	91	29		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105	0		N.D.	
84) tert-Butylbenzene	13.20	119	293		N.D.	
85) 1,2,4-Trimethylbenzene	13.08	105	172		N.D.	
86) sec-butylbenzene	13.08	105	172		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	1297		N.D.	
88) 4-Isopropyltoluene	13.20	119	293		N.D.	
89) 1,4-Dichlorobenzene	13.19	146	1297		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	991		N.D.	
91) n-Butylbenzene	13.52	91	106		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	687		N.D.	
94) Hexachlorobutadiene	14.89	225	36		N.D.	
95) Naphthalene	14.98	128	62		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	1573		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0516020.D B8260W.M Fri May 30 09:54:06 2008



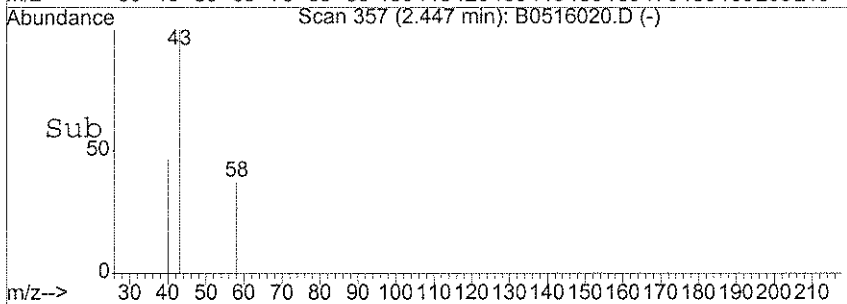
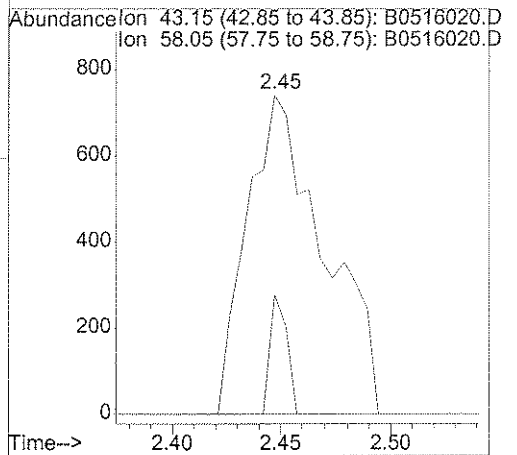
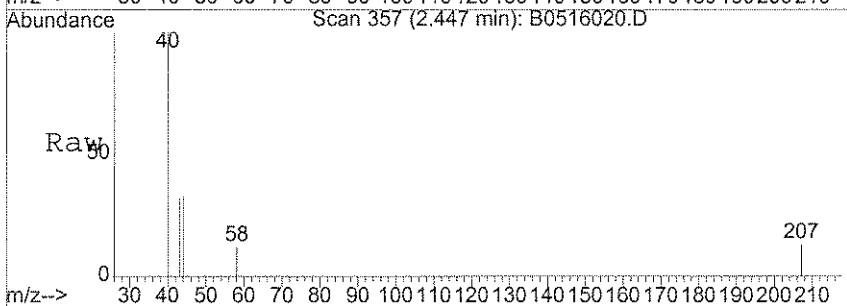
#3
 Chloromethane
 Concen: 0.20 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. 0.00 min
 Lab File: B0516020.D
 Acq: 16 May 2008 15:32

Tgt Ion: 50 Resp: 1295
 Ion Ratio Lower Upper
 50 100
 52 20.5 12.5 52.5



#11
 Acetone
 Concen: 1.21 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0516020.D
 Acq: 16 May 2008 15:32

Tgt Ion: 43 Resp: 1812
 Ion Ratio Lower Upper
 43 100
 58 8.3 22.0 33.0#



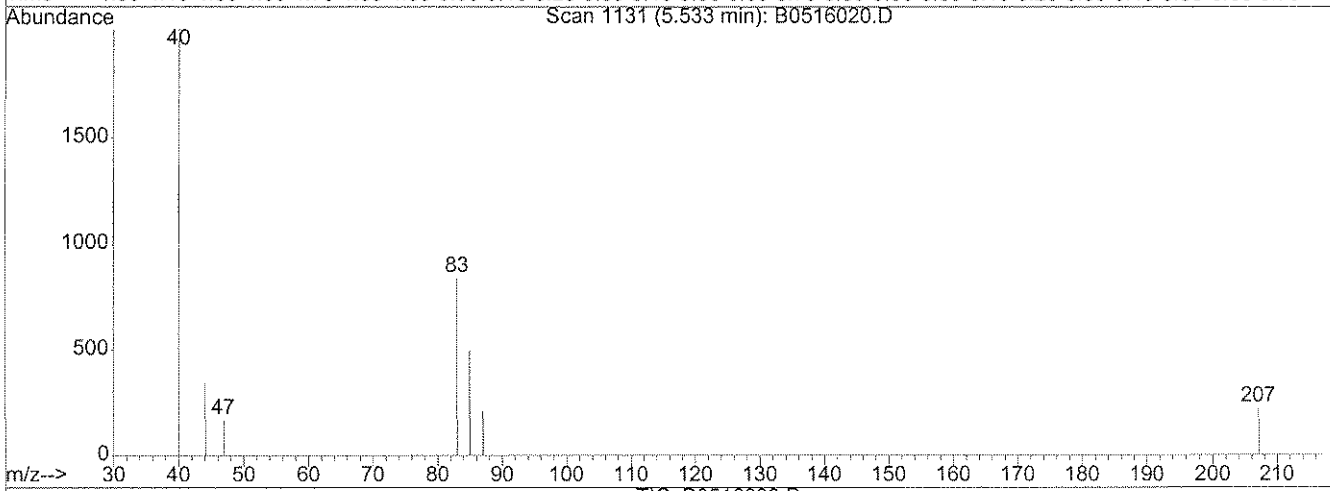
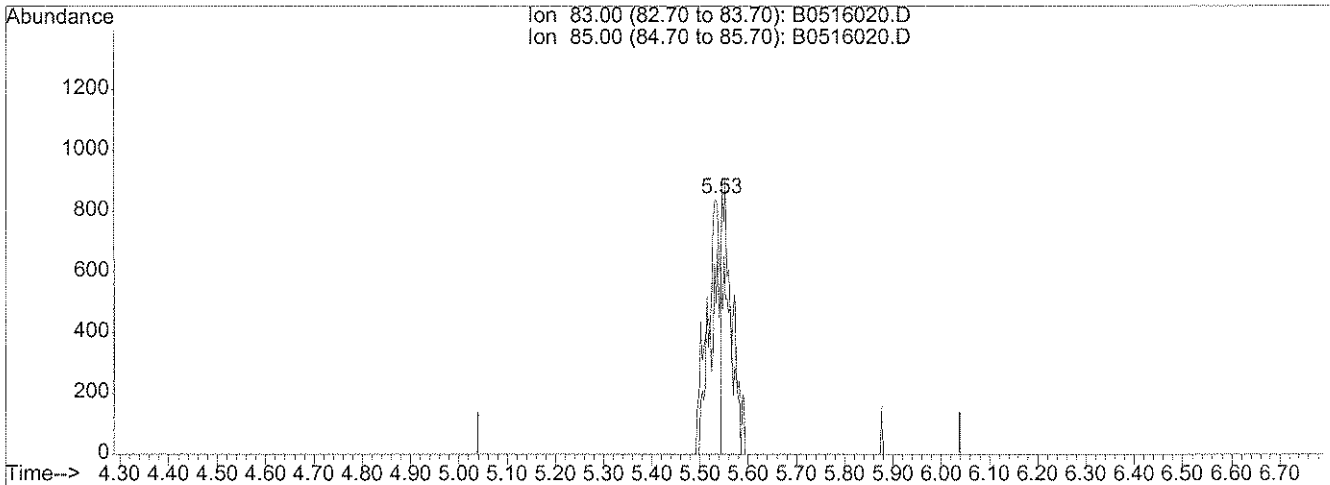
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D
 Acq On : 16 May 2008 15:32
 Sample : JPL109-007
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:58 2008

Vial: 22
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(34) Chloroform (C)

5.53min 0.17ug/l

response 1566

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	21.90#
0.00	0.00	0.00
0.00	0.00	0.00

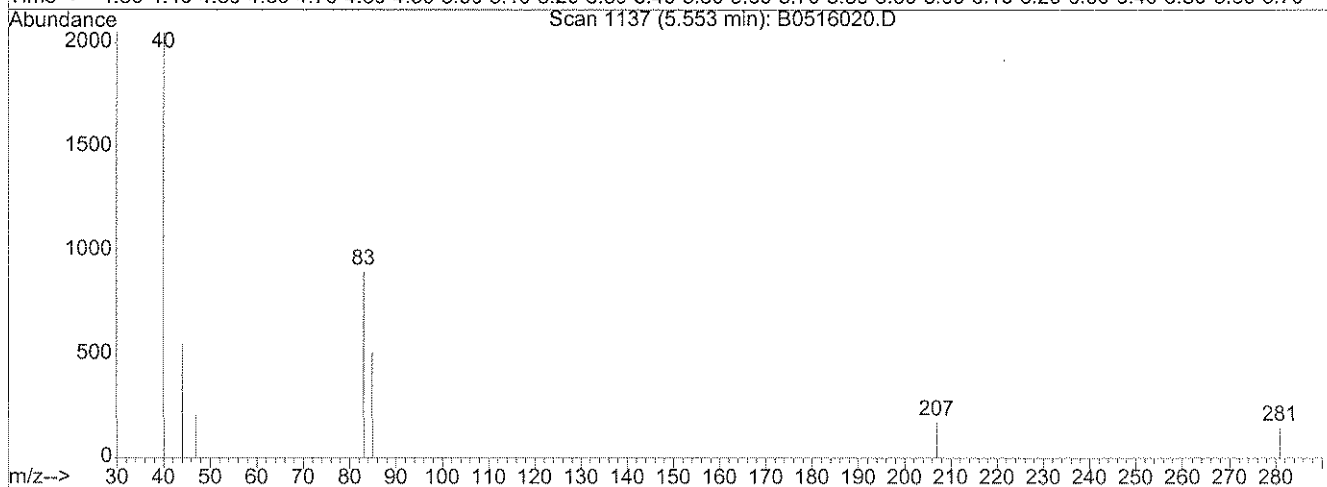
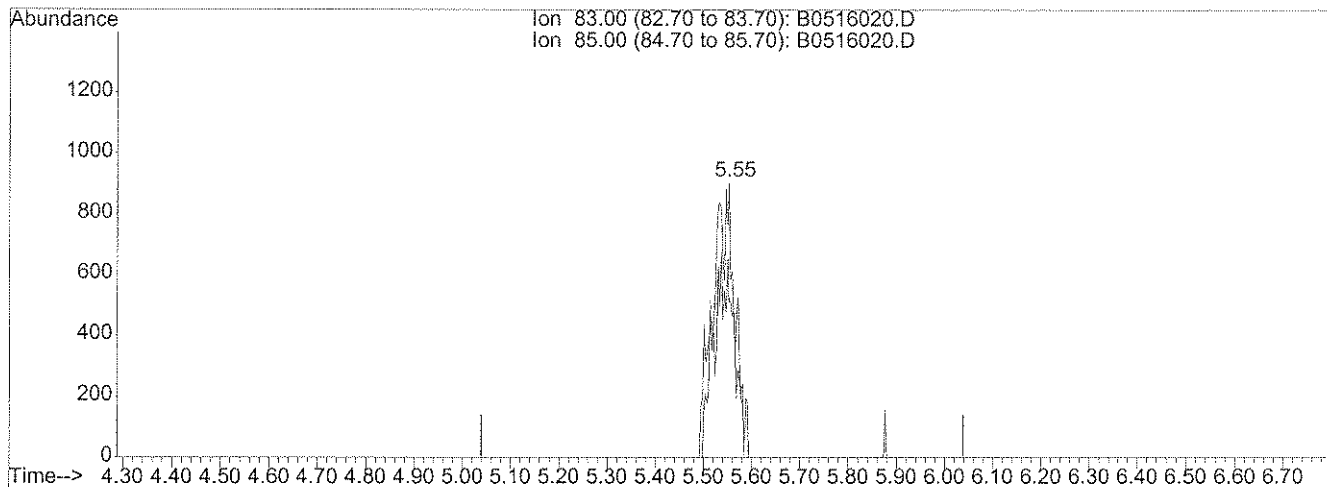
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D
 Acq On : 16 May 2008 15:32
 Sample : JPL109-007
 Misc : #4 10ML +IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:53 2008

Vial: 22
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



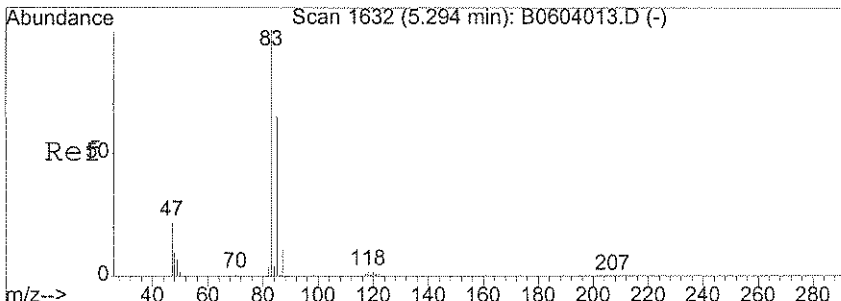
TIC: B0516020.D

(34) Chloroform (C)

5.55min 0.30ug/l m

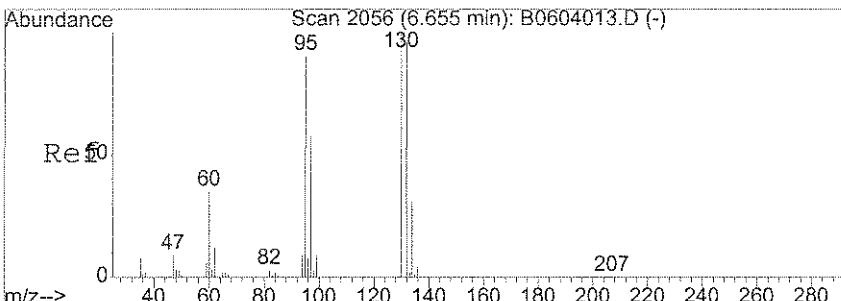
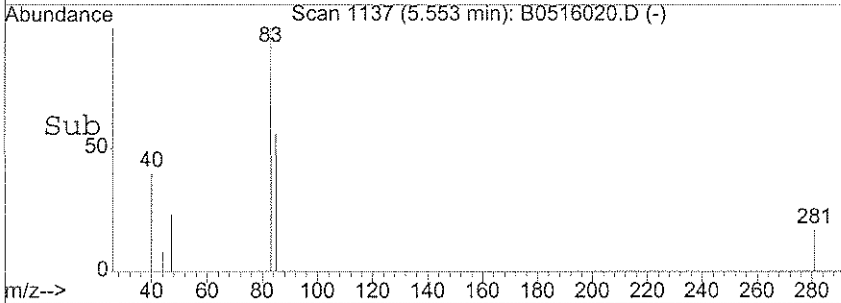
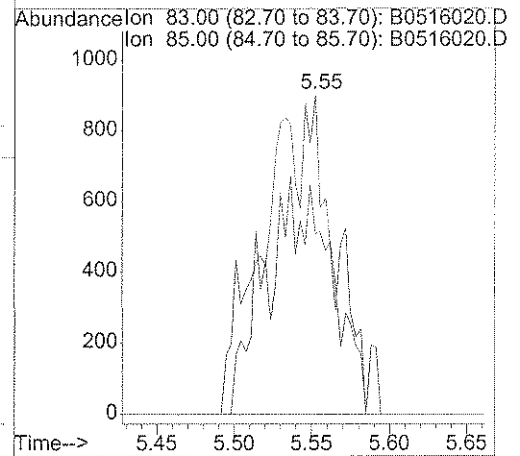
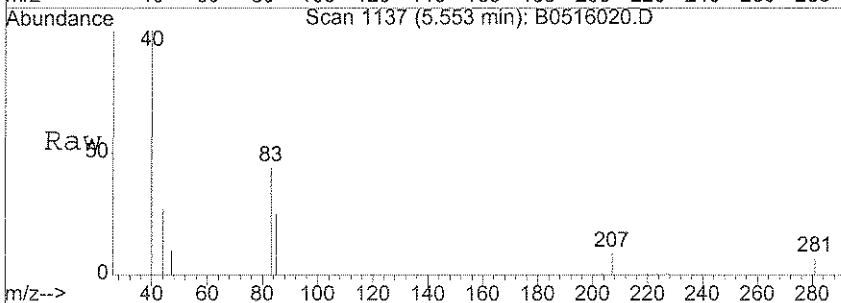
response 2843

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	12.06#
0.00	0.00	0.00
0.00	0.00	0.00



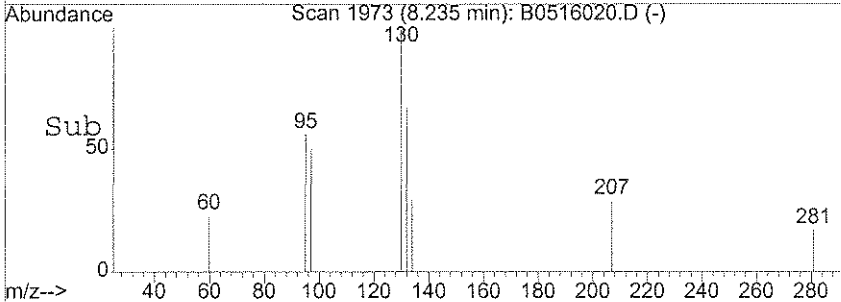
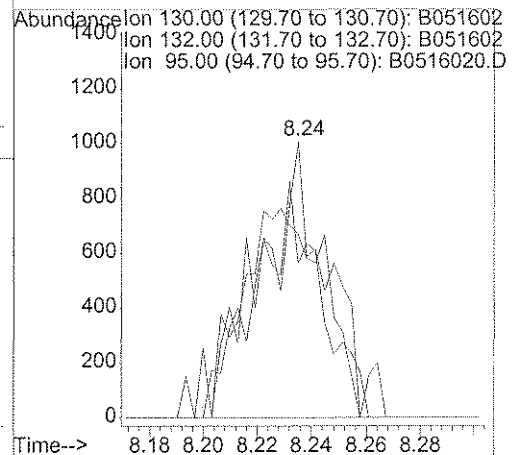
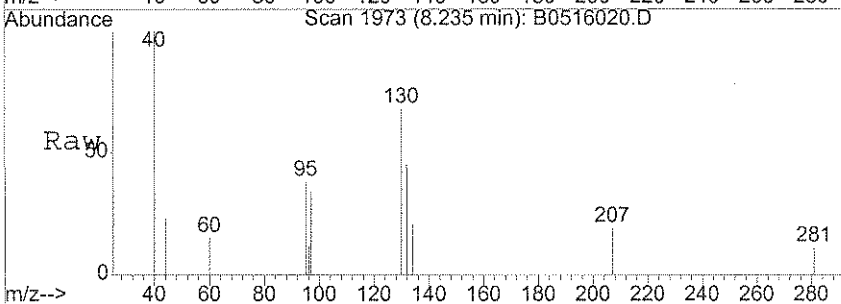
#34
 Chloroform
 Concen: 0.30 ug/l m
 RT: 5.55 min Scan# 1137
 Delta R.T. 0.01 min
 Lab File: B0516020.D
 Acq: 16 May 2008 15:32

Tgt Ion: 83 Resp: 2843
 Ion Ratio Lower Upper
 83 100
 85 12.1 44.0 84.0#



#45
 Trichloroethene
 Concen: 0.27 ug/l
 RT: 8.24 min Scan# 1973
 Delta R.T. 0.01 min
 Lab File: B0516020.D
 Acq: 16 May 2008 15:32

Tgt Ion: 130 Resp: 1730
 Ion Ratio Lower Upper
 130 100
 132 95.5 80.2 120.2
 95 83.1 75.8 115.8



Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\051608A\B0516020.D Vial: 22
Acq On : 16 May 2008 15:32 Operator: DGA
Sample : JPL109-007 Inst : Buddha
Misc : #4 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0516020.D B8260W.M Fri May 30 09:54:10 2008

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12-5/12/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL109-008

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0513018.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/13/2008 18:21

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: <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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12-5/12/08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-008
 Lab File ID: B0513018.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 18:21
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12-5/12/08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-008
 Lab File ID: B0513018.D
 Date Collected: 05/12/2008
 Date/Time Analyzed: 05/13/2008 18:21
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

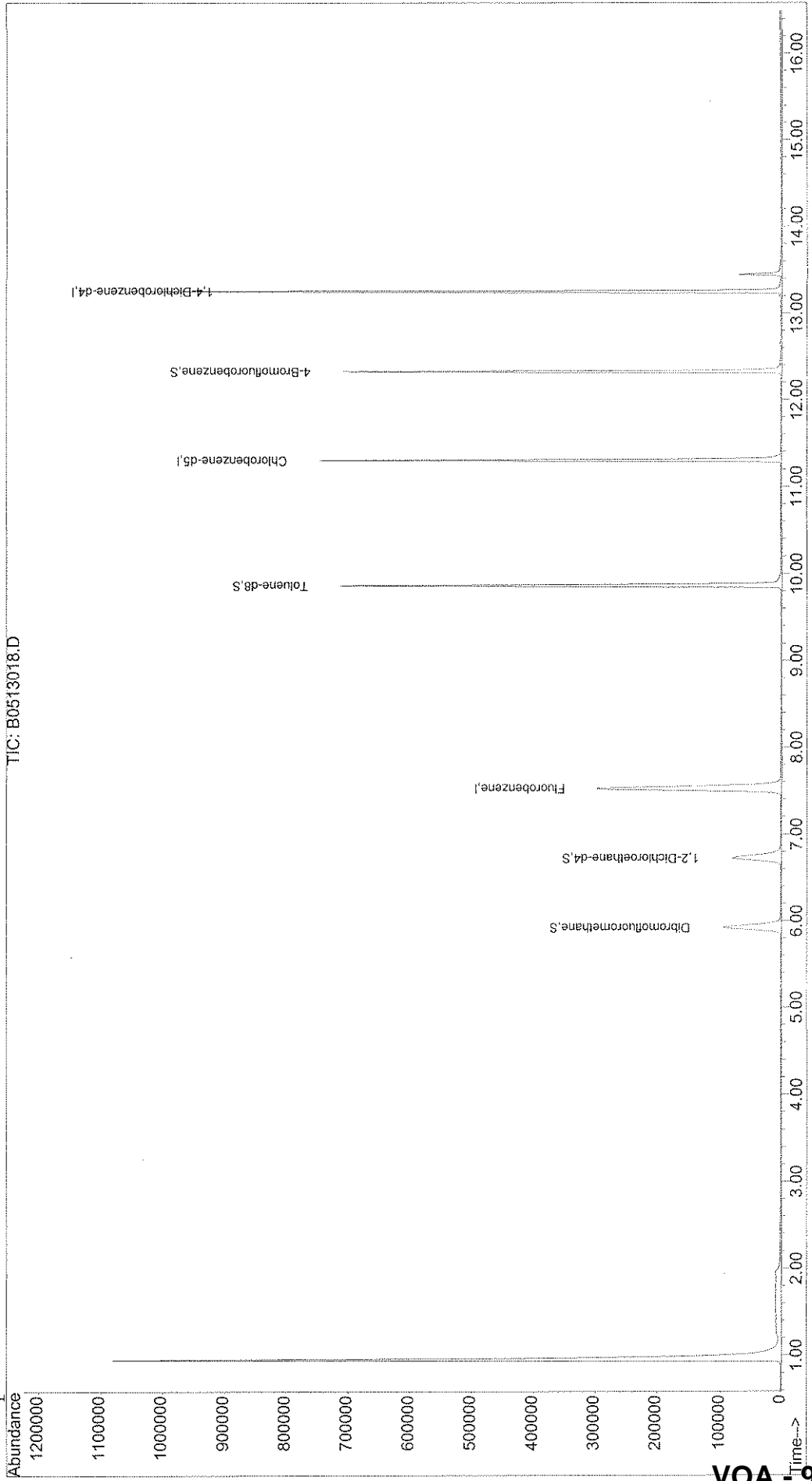
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513018.D Vial: 10
Acq On : 13 May 2008 18:21 Operator: DGA
Sample : JPL109-008 Inst : Buddha
Misc : #1 5ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:05 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513018.D
 Acq On : 13 May 2008 18:21
 Sample : JPL109-008
 Misc : #1 5ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:05 2008

Vial: 10
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	513060	25.00	ug/l	0.00 96.69%
54) Chlorobenzene-d5	11.30	117	393507	25.00	ug/l	0.00 89.44%
74) 1,4-Dichlorobenzene-d4	13.25	152	244427	25.00	ug/l	0.00 94.01%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	116332	20.16	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	100.80%
40) 1,2-Dichloroethane-d4	6.73	65	123248	24.00	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	96.00%
55) Toluene-d8	9.86	98	470125	23.30	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	93.20%
76) 4-Bromofluorobenzene	12.32	95	178887	23.61	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	94.44%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.21	50	435	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.55	96	86	Below Cal		86
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	2.32	96	67	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.	d	
17) Methyl Acetate	2.76	43	215	N.D.		
18) Methylene Chloride	2.87	84	63	Below Cal	#	1
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
 B0513018.D B8260W.M Fri May 30 09:05:45 2008

J. Smith
 Page 1
VOA - 95

Quantitation Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513018.D
 Acq On : 13 May 2008 18:21
 Sample : JPL109-008
 Misc : #1 5ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:05 2008

Vial: 10
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	3.88	43	128		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	4.71	77	37		N.D.	
29) cis-1,2-Dichloroethene	4.91	96	31		N.D.	
30) 2-Butanone	4.94	43	30		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	80		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.72	56	32		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.70	78	67		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	8.41	83	30		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.89	41	42		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	9.82	43	287		N.D.	
56) Toluene	9.94	92	81		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	10.48	69	37		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	10.70	43	31		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	826		N.D.	
66) Chlorobenzene	11.32	112	38		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0513018.D B8260W.M Fri May 30 09:05:45 2008

Quantitation Report

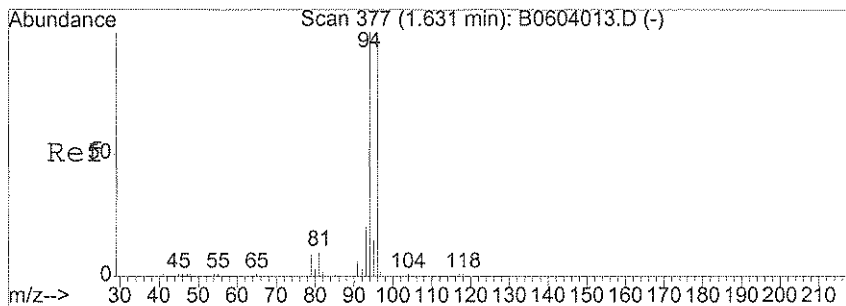
Data File : X:\MSVOA\BUDDHA\051308A\B0513018.D
 Acq On : 13 May 2008 18:21
 Sample : JPL109-008
 Misc : #1 5ML +IS/SS(524)
 MS Integration Params: rteint.p
 Quant Time: May 30 9:05 2008

Vial: 10
 Operator: DGA
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

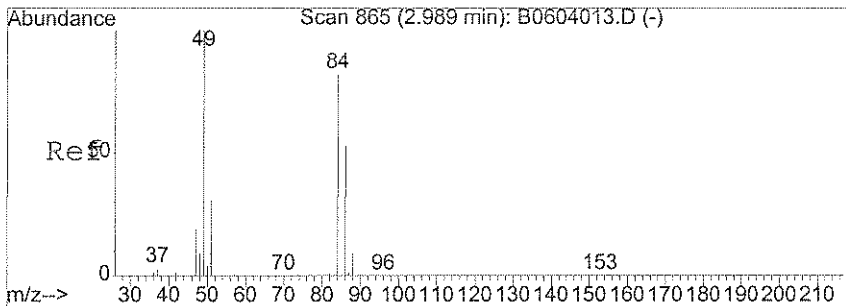
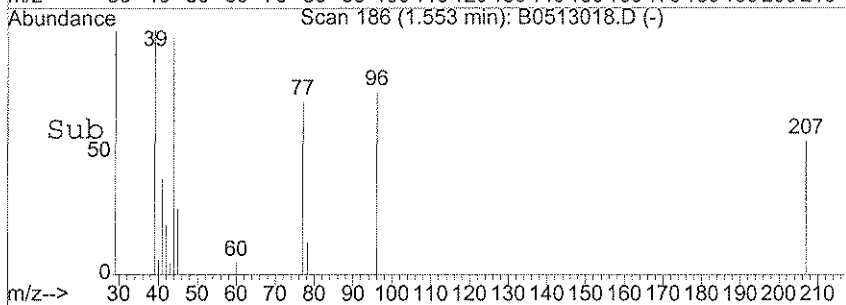
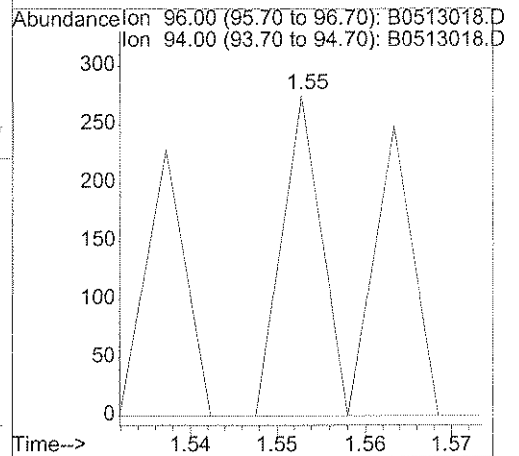
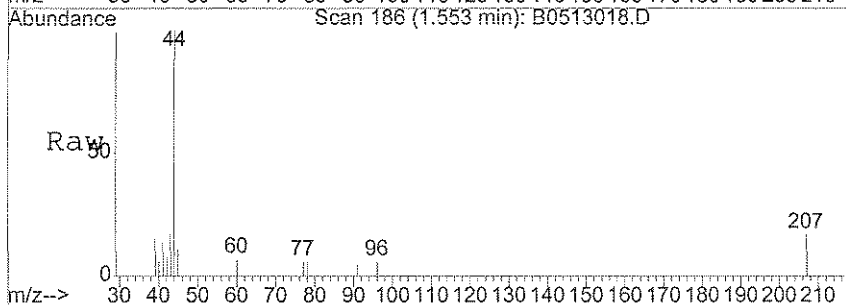
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	117		N.D.	
69) m,p-Xylene	11.52	106	76		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.31	173	62		N.D.	
73) Isopropylbenzene	12.18	105	97		N.D.	
75) trans-1,4-Dichloro-2-buten	12.58	53	36		N.D.	
77) Bromobenzene	12.43	156	30		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	12.49	75	67		N.D.	
80) n-Propylbenzene	12.52	120	31		N.D.	
81) 2-Chlorotoluene	12.59	91	35		N.D.	
82) 4-Chlorotoluene	12.68	91	127		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	274		N.D.	
84) tert-Butylbenzene	12.91	119	206		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	242		N.D.	
86) sec-butylbenzene	12.96	105	242		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	160		N.D.	
88) 4-Isopropyltoluene	13.20	119	2062		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	205		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	48		N.D.	
91) n-Butylbenzene	13.52	91	744		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	384		N.D.	
94) Hexachlorobutadiene	14.89	225	382		N.D.	
95) Naphthalene	14.98	128	533		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	183		N.D.	



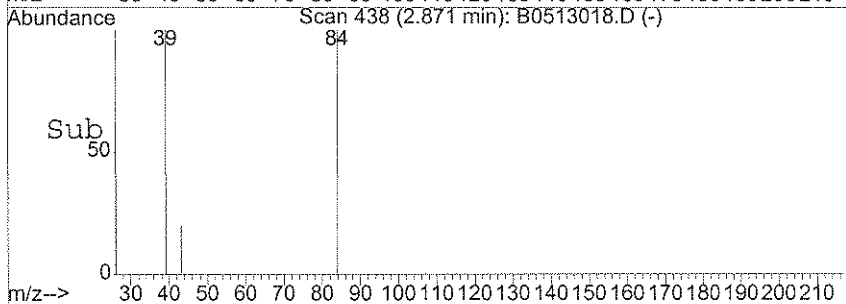
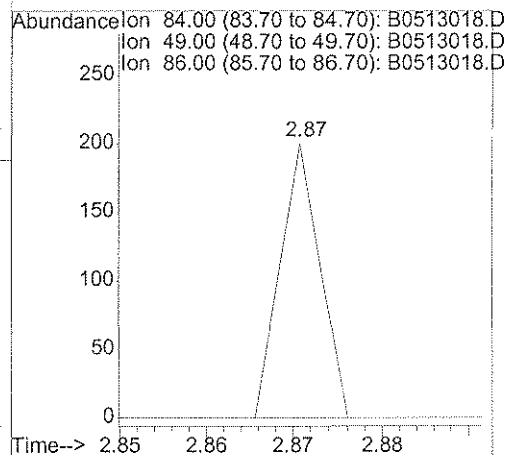
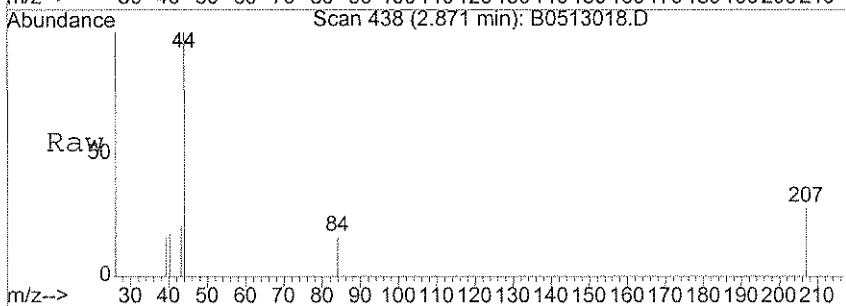
#5
 Bromomethane
 Concen: Below Cal
 RT: 1.55 min Scan# 186
 Delta R.T. 0.00 min
 Lab File: B0513018.D
 Acq: 13 May 2008 18:21

Tgt Ion:	96	Resp:	86
Ion Ratio	Lower	Upper	
96	100		
94	90.7	84.9	124.9



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 438
 Delta R.T. 0.01 min
 Lab File: B0513018.D
 Acq: 13 May 2008 18:21

Tgt Ion:	84	Resp:	63
Ion Ratio	Lower	Upper	
84	100		
49	0.0	113.6	153.6#
86	0.0	45.8	85.8#



TIC DATA

SDG #JPL109

Volatiles Analysis

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-5

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-001
 Lab File ID: B0513025.D
 Date Collected: 05/12/2008
 Date Analyzed: 05/13/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\051308A\B0513025.D Vial: 17
Acq On : 13 May 2008 21:29 Operator: DGA
Sample : JPL109-001 Inst : Buddha
Misc : #2 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0513025.D B8260W.M Fri May 30 09:07:11 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL109-002

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0513026.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date Analyzed: 05/13/2008

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

	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\BUDDHA\051308A\B0513026.D Vial: 18
Acq On : 13 May 2008 21:55 Operator: DGA
Sample : JPL109-002 Inst : Buddha
Misc : #2 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0513026.D B8260W.M Fri May 30 09:08:13 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL109-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0513027.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date Analyzed: 05/13/2008

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513027.D Vial: 19
Acq On : 13 May 2008 22:22 Operator: DGA
Sample : JPL109-003 Inst : Buddha
Misc : #2 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0513027.D B8260W.M Fri May 30 09:08:58 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028171

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL109-004

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0513028.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date Analyzed: 05/13/2008

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

	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\BUDDHA\051308A\B0513028.D Vial: 20
Acq On : 13 May 2008 22:49 Operator: DGA
Sample : JPL109-004 Inst : Buddha
Misc : #3 10ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0513028.D B8260W.M Fri May 30 09:16:33 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-23-1

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028170
 Lab Sample ID: JPL109-005
 Lab File ID: B0516018.D
 Date Collected: 05/12/2008
 Date Analyzed: 05/16/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\051608A\B0516018.D Vial: 20
Acq On : 16 May 2008 14:38 Operator: DGA
Sample : JPL109-005 Inst : Buddha
Misc : #2 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0516018.D B8260W.M Fri May 30 09:52:12 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-12-5/12/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL109-006

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0516019.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date Analyzed: 05/16/2008

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

	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\BUDDHA\051608A\B0516019.D Vial: 21
Acq On : 16 May 2008 15:05 Operator: DGA
Sample : JPL109-006 Inst : Buddha
Misc : #4 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0516019.D B8260W.M Fri May 30 09:53:13 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-3-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL109-007

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0516020.D

Level: (LOW/MED) _____

Date Collected: 05/12/2008

% Moisture: not dec. _____

Date Analyzed: 05/16/2008

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\051608\B0516020.D Vial: 22
Acq On : 16 May 2008 15:32 Operator: DGA
Sample : JPL109-007 Inst : Buddha
Misc : #4 10ML +IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0516020.D B8260W.M Fri May 30 14:24:56 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-12-5/12/08

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: JPL109-008
 Lab File ID: B0513018.D
 Date Collected: 05/12/2008
 Date Analyzed: 05/13/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513018.D Vial: 10
Acq On : 13 May 2008 18:21 Operator: DGA
Sample : JPL109-008 Inst : Buddha
Misc : #1 5ML +IS/SS(524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0513018.D B8260W.M Fri May 30 09:05:49 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B051308MVOWB1

Lab Name: Pace Analytical Services
 SDG No.: JPL109
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028171
 Lab Sample ID: B051308MVOWB1
 Lab File ID: B0513010.D
 Date Collected: _____
 Date Analyzed: 05/13/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\051308A\B0513010.D Vial: 10
Acq On : 13 May 2008 14:41 Operator: DGA
Sample : B051308MVOWB1 Inst : Buddha
Misc : 10ML PFW+IS/SS(MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0513010.D B8260W.M Fri May 30 09:04:46 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B051608MVOWB1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL109

Run Sequence: R028170

Matrix: (SOIL/WATER) Water

Lab Sample ID: B051608MVOWB1

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0516008.D

Level: (LOW/MED) _____

Date Collected: _____

% Moisture: not dec. _____

Date Analyzed: 05/16/2008

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\051608\B0516008.D Vial: 10
Acq On : 16 May 2008 10:07 Operator: DGA
Sample : B051608MVOWB1 Inst : Buddha
Misc : 10ML PFW+IS/SS(MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0516008.D B8260W.M Fri May 30 14:25:09 2008

Metals Data

JPL109

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL109

SOW No.: _____

Sample No.
MW-23-5
MW-23-5MS
MW-23-5MSD
MW-23-4
MW-23-3
MW-23-2
MW-23-1
EB-12-5/12/08
DUPE-3-2Q08
DUPE-3-2Q08MS
DUPE-3-2Q08MSD

Lab Sample ID
JPL109-001
JPL109-001MS
JPL109-001MSD
JPL109-002
JPL109-003
JPL109-004
JPL109-005
JPL109-006
JPL109-007
JPL109-007MS
JPL109-007MSD

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: 6/22/08

Title: Inorganics Technical Director

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-5

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL109Matrix (soil/water): WaterLab Sample ID: JPL109-001Level (low/med): LOWDate Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	3.93		N	M	R028382
7440-70-2	Calcium	5320			P	R028884
7440-47-3	Chromium	3.72			M	R028382
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	90800		E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:11

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL109

Matrix (soil/water): Water

Lab Sample ID: JPL109-002

Level (low/med): LOW

Date Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.88		N	M	R028382
7440-70-2	Calcium	30000			P	R028884
7440-47-3	Chromium	5.23			M	R028382
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	12200			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	29500		E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:11

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-3

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL109Matrix (soil/water): WaterLab Sample ID: JPL109-003Level (low/med): LOWDate Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.29		N	M	R028382
7440-70-2	Calcium	36200			P	R028884
7440-47-3	Chromium	3.29			M	R028382
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	11700			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	27400		E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:11

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL109

Matrix (soil/water): Water

Lab Sample ID: JPL109-004

Level (low/med): LOW

Date Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U	N	M	R028382
7440-70-2	Calcium	101000			P	R028884
7440-47-3	Chromium	6.93			M	R028382
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	36000			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	36600		E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:11

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-23-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL109

Matrix (soil/water): Water

Lab Sample ID: JPL109-005

Level (low/med): LOW

Date Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U	N	M	R028382
7440-70-2	Calcium	147000			P	R028884
7440-47-3	Chromium	5.42			M	R028382
7439-89-6	Iron	645			P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	51100			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	37200		E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:11

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-12-5/12/08

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL109Matrix (soil/water): WaterLab Sample ID: JPL109-006Level (low/med): LOWDate Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U	N	M	R028382
7440-70-2	Calcium	5000	U		P	R028884
7440-47-3	Chromium	1.22			M	R028382
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	5000	U	E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:11

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-3-2Q08

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL109Matrix (soil/water): WaterLab Sample ID: JPL109-007Level (low/med): LOWDate Received: 05/13/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U	N	M	R028382
7440-70-2	Calcium	94600			P	R028884
7440-47-3	Chromium	6.58			M	R028382
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028382
7439-95-4	Magnesium	34900			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	33900		E	P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No
 Comment _____

Date Printed: 6/19/2008 13:11

Miscellaneous Inorganic Data

JPL109

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL109

SOW No.:

<u>Sample No.</u>
<u>MW-23-5</u>
<u>MW-23-4</u>
<u>MW-23-3</u>
<u>MW-23-2</u>
<u>MW-23-1</u>
<u>EB-12-5/12/08</u>
<u>DUPE-3-2Q08</u>

<u>Lab Sample ID</u>
<u>JPL109-001</u>
<u>JPL109-002</u>
<u>JPL109-003</u>
<u>JPL109-004</u>
<u>JPL109-005</u>
<u>JPL109-006</u>
<u>JPL109-007</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: Raul J. Nino

Date: June 9, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-5 **Date/Time Collected:** 05/12/2008 07:47
Lab Sample ID: JPL109-001 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E150.1/29254 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	9.4		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	240		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028086\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	2.0	U	2.0	0.55	05/13/2008	05/13/2008	R028086
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/13/2008	05/13/2008	R028086
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/13/2008	05/13/2008	R028086
Chloride	16887-00-6	10	13		10	0.76	05/13/2008	05/13/2008	R028086
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/13/2008	05/13/2008	R028086

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	110		2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	28		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-5 Date/Time Collected: 05/12/2008 07:47
Lab Sample ID: JPL109-001 Date/Time Received: 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 Unit: ug/L
Instrument: Ion Chromatograph (2) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-4 **Date/Time Collected:** 05/12/2008 08:25
Lab Sample ID: JPL109-002 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E150.1/29254 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.1		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	200		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028086\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	4.9		2.0	0.55	05/13/2008	05/13/2008	R028086
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/13/2008	05/13/2008	R028086
Sulfate as SO4	14808-79-8	1	8.5		1.0	0.17	05/13/2008	05/13/2008	R028086
Chloride	16887-00-6	10	14		10	0.76	05/13/2008	05/13/2008	R028086
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/13/2008	05/13/2008	R028086

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	130		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-4 **Date/Time Collected:** 05/12/2008 08:25
Lab Sample ID: JPL109-002 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-3 **Date/Time Collected:** 05/12/2008 08:59
Lab Sample ID: JPL109-003 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E150.1/29254 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	220		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028086\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	3.8		2.0	0.55	05/13/2008	05/13/2008	R028086
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/13/2008	05/13/2008	R028086
Sulfate as SO4	14808-79-8	1	11		1.0	0.17	05/13/2008	05/13/2008	R028086
Chloride	16887-00-6	10	12		10	0.76	05/13/2008	05/13/2008	R028086
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/13/2008	05/13/2008	R028086

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	140		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-3 **Date/Time Collected:** 05/12/2008 08:59
Lab Sample ID: JPL109-003 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-2 **Date/Time Collected:** 05/12/2008 09:43
Lab Sample ID: JPL109-004 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E150.1/29254 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.5		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	560		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028086\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	12		2.0	0.55	05/13/2008	05/13/2008	R028086
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/13/2008	05/13/2008	R028086
Sulfate as SO4	14808-79-8	10	110		10	1.7	05/13/2008	05/13/2008	R028086
Orthophosphate	7723-14-0	10	10	U	10	3.3	05/13/2008	05/13/2008	R028086

Method/Qbatch*: E300.0/29342 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	20	88		20	1.5	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-2 **Date/Time Collected:** 05/12/2008 09:43
Lab Sample ID: JPL109-004 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.1		4.0	0.56	05/31/2008	06/02/2008	R028515

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
 SDG Number: JPL109
 Sample Number: MW-23-1 Date/Time Collected: 05/12/2008 11:03
 Lab Sample ID: JPL109-005 Date/Time Received: 05/13/2008 08:30
 Method/Qbatch*: E150.1/29254 Unit: pH Units
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.7		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 Unit: mg/L
 Instrument: Balance (01) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	790		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R028086\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	12		2.0	0.55	05/13/2008	05/13/2008	R028086
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/13/2008	05/13/2008	R028086
Sulfate as SO4	14808-79-8	10	200		10	1.7	05/13/2008	05/13/2008	R028086
Orthophosphate	7723-14-0	10	10	U	10	3.3	05/13/2008	05/13/2008	R028086

Method/Qbatch*: E300.0/29342 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Chloride	16887-00-6	20	130		20	1.5	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 Unit: mg/L
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	260		2.0	2.0	05/21/2008	05/21/2008	R028258

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: MW-23-1 **Date/Time Collected:** 05/12/2008 11:03
Lab Sample ID: JPL109-005 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	05/31/2008	06/02/2008	R028515

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: EB-12-5/12/08 **Date/Time Collected:** 05/12/2008 10:48
Lab Sample ID: JPL109-006 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E150.1/29254 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.4		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	2.0	U	2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028086\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/13/2008	05/13/2008	R028086
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/13/2008	05/13/2008	R028086
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/13/2008	05/13/2008	R028086
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/13/2008	05/13/2008	R028086
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/13/2008	05/13/2008	R028086

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: EB-12-5/12/08 **Date/Time Collected:** 05/12/2008 10:48
Lab Sample ID: JPL109-006 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: DUPE-3-2Q08 **Date/Time Collected:** 05/12/2008 00:00
Lab Sample ID: JPL109-007 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E150.1/29254 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.3		0.10	0.10	05/13/2008	05/13/2008	R028035

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	580		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29304 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	12		2.0	0.55	05/13/2008	05/19/2008	R028086
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/13/2008	05/19/2008	R028086
Sulfate as SO4	14808-79-8	10	120		10	1.7	05/13/2008	05/19/2008	R028086
Chloride	16887-00-6	10	98		10	0.76	05/13/2008	05/19/2008	R028086
Orthophosphate	7723-14-0	10	10	U	10	3.3	05/13/2008	05/19/2008	R028086

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL109
Sample Number: DUPE-3-2Q08 **Date/Time Collected:** 05/12/2008 00:00
Lab Sample ID: JPL109-007 **Date/Time Received:** 05/13/2008 08:30
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	05/31/2008	06/02/2008	R028515

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL110

June 23, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL110
Date of Report: June 23, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-24-5	JPL110-001	VOA/MET/INO
MW-24-4	JPL110-002	VOA/MET/INO
MW-24-3	JPL110-003	VOA/MET/INO
MW-24-2	JPL110-004	VOA/MET/INO
MW-24-1	JPL110-005	VOA/SVOA/MET/INO
EB-13-5/13/08	JPL110-006	VOA/MET/INO
DUPE-4-2Q08	JPL110-007	VOA/SVOA/MET/INO
TB-13-5/13/08	JPL110-008	VOA

Analytical Request Key:

VOA = Volatiles (524.2)
SVOA = 1,4-Dioxane (8270)
MET = Metals (200.7/200.8)
INO = Chloride, Nitrate, Nitrite, Sulfate, Ortho phosphorus (300.0)
Alkalinity (310.1)
Perchlorate (314.0)
Total Dissolved Solids (160.1)
pH (150.1)

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, Cl, SO4	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES

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Seattle, WA 98108

8270SIM-level 1,4-Dioxane (1.5 ppb RL; J to 1 ppb)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples.

All samples submitted for pH analysis were received after the analytical holding time had expired.

Both volatiles bottles submitted for TB-13-05/13/08 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."

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

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.

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Seattle, WA 98108

Volatiles Fraction:

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, all samples except for the trip blank were received in the bottles from the contaminated lot and some have low level detections of chloromethane.

Tentatively Identified Compounds (TICs):

A library search was performed for non-target analytes that are not identified on the quantitation report. The results for these have been submitted on a separate form.

Quality Control Analyses:

As a result of batching MS/MSD analyses were performed on a sample not included in this SDG. All analyte recoveries were in control in the blank spike analysis.

Semivolatiles Fraction:

Surrogate Recoveries:

Analysis of the extract for sample DUPE-4-2Q08 yielded low surrogate recoveries for 2-fluorophenol and 2,4,6-tribromophenol. Normally, the sample would be re-extracted and reanalyzed; however, due to insufficient sample available, re-extraction was not performed.

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 and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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.

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Seattle, WA 98108

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	15 minutes	All samples

ICP Metals:

For the run sequence R028697, the ICV exceeded the upper control limit for potassium. No sample results for potassium were reported from this run sequence. Quality control data for potassium were reported and were within control limits. Samples were reanalyzed and reported for potassium from run sequence R028884. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R028697, the ninth CCV fell below the lower control limit for potassium, calcium, iron and sodium. No sample results for potassium, calcium, iron, and sodium that were associated with this CCV were reported. Samples that were associated with this CCV were reanalyzed and reported for potassium, calcium, iron, and sodium from run sequence R028884. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

ICP-MS Metals:

For the run sequence R028870, the second CCV exceeded the upper control limit for lead. All sample results for lead were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

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Miscellaneous Inorganics:

In the run sequence R028119 for "300.0 Anions", the matrix spikes and matrix spike duplicates exceeded the established lower control limits for nitrate and orthophosphate. Since all of the other quality control samples were in control, no further action was taken.

In the run sequence R028515 for "314.0 Perchlorate", the matrix spike and matrix spike duplicate exceeded the established upper control limits. Since all of the other quality control samples were in control, 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.
- ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.
 - Z Denotes data deemed unusable by the analyst.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

Pace Analytical Services, Inc.
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Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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,


for
Kara Godineaux
Project Manager

6/24/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/24/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG

Sample MtxID (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	300.0 NO3, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	827/SIM-level 1.4-Dioxane (1.5 ppb RL; J to 1 ppb)
WD JPL110-001	05/14/2008 08:20 AM	05/13/2008 08:20 AM	MW-24-5	A-	IN	IN	IN	IN		IN	IN	IN	
WD JPL110-002	05/14/2008 08:20 AM	05/13/2008 09:10 AM	MW-24-4	A-	IN	IN	IN	IN		IN	IN	IN	
WD JPL110-003	05/14/2008 08:20 AM	05/13/2008 09:42 AM	MW-24-3	A-	IN	IN	IN	IN		IN	IN	IN	
WD JPL110-004	05/14/2008 08:20 AM	05/13/2008 10:30 AM	MW-24-2	A-	IN	IN	IN	IN		IN	IN	IN	
WD JPL110-005	05/14/2008 08:20 AM	05/13/2008 11:16 AM	MW-24-1	A-	IN	IN	IN		IN	IN	IN	IN	IN
WD JPL110-006	05/14/2008 08:20 AM	05/13/2008 11:00 AM	EB-13-5/13/08	A-	IN	IN	IN	IN		IN	IN	IN	
WD JPL110-007	05/14/2008 08:20 AM	05/13/2008 12:00 AM	DUPE-4-2008	A-	IN	IN	IN		IN	IN	IN	IN	IN
WD JPL110-008	05/14/2008 08:20 AM	05/13/2008 12:00 AM	TB-13-5/13/08									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
 Matrices: Water=WD
FORM LTL-PM-8.0

46054

PAGE 1 OF 1

12

Laucks

Testing Laboratories, Inc.

WORK ORDER ID# SP110 SUBMITTED AT: _____

940 South Hanover St. South, VA 23068 (230) 757-5100 FAX 757-5103
 1106 Ledwith Ave. Virginia, VA 23062 (509) 246-4005 FAX 452-1265

15#1298

TESTS TO PERFORM

MATRIX: WATER, SOIL OR SPECIFY
 NO. OF CONTAINERS
UIC (524.2)
TOTAL-C (200.8)
LEAD (200.8)
ARSENIC (200.8)
CHLORIDE (314.0)
0-PROSTATE (300.0)
NITRATE
DIOXANE (8270)

OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS

COMPANY: BOTTLE
 ADDRESS: 3990 OLD TOWN AVE, C-205
SAN DIEGO, CA 92110
 ATTENTION: DAVID COVER
 PROJECT NAME: SPL GW MON 2008
 PROJECT CONTACT: DAVID COVER
 TELEPHONE: 619-726-7311 FAX: _____
 JOB/P.O. NO.: 6486090 / 214314

LAB S/N	SAMPLE ID / LOCATION	DATE	TIME	W	S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1	MW-24-5	5/13/08	820																		
2	MW-24-4		910																		
3	MW-24-3		942																		
4	MW-24-2		1030																		
5	MW-24-1		1116																		
6	EIS-13-5/13/08		1100																		
5	TR-13-5/13/08																				
5	DUP-4-2008																				

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: Ma McC / MARCO MENDOZA

NAME: BOTTLE
 ATTN: DAVID TURNER
 ADDRESS: 505 GULF AVE
 CITY, STATE, ZIP: COLUMBUS, OH 43201

DATE: 5/13/08 TIME: 1500
 RECEIVED BY (SIGN AND PRINT): Rachel Frank

DATE: 5-14-08 TIME: 8:30

* 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
Pace Analytical Services, Inc.

SDG: JPL110 Taken By: Client
Cooler: AAD838 Transferred: FedEx
COC #: 46054
Project: JPL Groundwater Monitoring (Battelle)

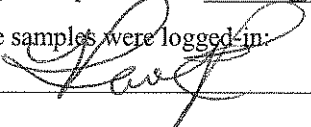
Date samples were received at the laboratory: 5/14/2008
Date cooler was opened: 5/14/2008 8:20AM

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? YES
if YES, record carrier name and airbill number: 865543091397
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? 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: RF

B. LOG-IN PHASE:

Date samples were logged-in: 5/14/2008 8:46AM

Logged-in by Rachel Frank (sign) 

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? NO
18. Temperatures: **5.2**

DISCREPANCIES:

2 of 2 Trip Blanks have bubbles >1/4"
Sample 1 was received to the lab out of hold for PH, all other samples are close to hold times for PH.

Date Printed: 5/14/2008 8:48

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL110
Cooler: AAD838
Temperatures: 5.2
COC #: 46054

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL110-001	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
JPL110-002	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
JPL110-003	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
JPL110-004	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
JPL110-005	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	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
JPL110-006	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
Pace Analytical Services, Inc.

SDG: JPL110
 Cooler: AAD838
 Temperatures: 5.2
 COC #: 46054

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL110-007	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
JPL110-008	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

Battelle

SDG No.: JPL110

- I. Narrative: 2-9
- II. Chain-of-Custody: 10-15
- III. Index: 16-17
- IV. Volatiles Data: VOA 1-299
 - A. QC Summary Data: 1-8
 - B. Sample Data: 9-107
 - C. Standards Data: 108-267
 - D. Raw QC Data: 268-290
 - E. Bench Sheets: 291-299
- V. Semivolatiles Data: SVOA 1-120
 - A. QC Summary Data: 1-9
 - B. Sample Data: 10-22
 - C. Standards Data: 23-78
 - D. Raw QC Data: 79-99
 - E. Bench Sheets: 100-120
- VI. Metals Data: MET- 1-443
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-10
 - C. Quality Control Data: 11-74
 - D. Quarterly Verification of Instrument Parameters: 75-85
 - E. Raw Data: 86-421
 - F. Digestion & Distillation Logs: 422-443
- VII. Miscellaneous Inorganics Data: INO 1-183
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-13
 - C. Quality Control Data: 14-38
 - D. Raw Data: 39-183
- VIII. Forms Summary: SUM- 1-192

Completed and checked by:

Andy Ecklund

Date:

6/24/08

QC SUMMARY

SDG# JPL110

Volatiles Analysis

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL110

Run Sequence: R028235

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL110-007) DUPE-4-2Q08	116	95	93		0
(JPL110-006) EB-13-5/13/08	113	101	96		0
(JPL110-005) MW-24-1	111	102	93		0
(JPL110-004) MW-24-2	114	97	91		0
(JPL110-003) MW-24-3	113	98	94		0
(JPL110-002) MW-24-4	111	97	94		0
(JPL110-001) MW-24-5	113	93	93		0
(JPL110-008) TB-13-5/13/08	109	92	93		0
(B052008MVOWB2) B052008MVOWB2	111	94	93		0
(S052008MVOWB1) S052008MVOWB1	107	92	93		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: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028235 SDG No.: JPL110

BS Lab Sample ID: S052008MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	51.38	103		60-140
Chloromethane	50.0	48.53	97		60-140
Vinyl chloride	50.0	54.23	108		60-140
Bromomethane	50.0	54.29	109		60-140
Chloroethane	50.0	50.89	102		60-140
Trichlorofluoromethane	50.0	67.75	136		60-140
1,1-Dichloroethene	50.0	61.59	123		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	63.1	126		60-140
Methylene chloride	50.0	57.55	115		60-140
Methyl tert-butyl ether	50.0	55.95	112		60-140
trans-1,2-Dichloroethene	50.0	56.75	114		60-140
1,1-Dichloroethane	50.0	56.12	112		60-140
2,2-Dichloropropane	50.0	59.06	118		60-140
cis-1,2-Dichloroethene	50.0	55.94	112		60-140
2-Butanone	50.0	43.01	86		60-140
Bromochloromethane	50.0	56.29	113		60-140
Chloroform	50.0	55.95	112		60-140
1,1,1-Trichloroethane	50.0	60.94	122		60-140
Carbon tetrachloride	50.0	60.15	120		60-140
1,1-Dichloropropene	50.0	59.74	119		60-140
Benzene	50.0	51.74	103		60-140
1,2-Dichloroethane	50.0	56.3	113		60-140
Trichloroethene	50.0	52.35	105		60-140
1,2-Dichloropropane	50.0	47.88	96		60-140
Dibromomethane	50.0	51.04	102		60-140
Bromodichloromethane	50.0	51.62	103		60-140
cis-1,3-Dichloropropene	50.0	57.24	114		60-140
4-Methyl-2-pentanone	50.0	47.19	94		60-140
Toluene	50.0	49.06	98		60-140
trans-1,3-Dichloropropene	50.0	45.81	92		60-140
1,1,2-Trichloroethane	50.0	46.19	92		60-140
Tetrachloroethene	50.0	51.04	102		60-140
1,3-Dichloropropane	50.0	47.26	95		60-140
Dibromochloromethane	50.0	51.61	103		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/31/2008 9:30

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028235 SDG No.: JPL110

BS Lab Sample ID: S052008MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	49.37	99		60-140
Chlorobenzene	50.0	49.4	99		60-140
Ethylbenzene	50.0	50.66	101		60-140
1,1,1,2-Tetrachloroethane	50.0	53.77	108		60-140
m,p-Xylene	100	101.34	101		60-140
o-Xylene	50.0	49.95	100		60-140
Styrene	50.0	49.97	100		60-140
Bromoform	50.0	50.29	101		60-140
Isopropylbenzene	50.0	53.26	107		60-140
1,1,2,2-Tetrachloroethane	50.0	44.83	90		60-140
n-Propylbenzene	50.0	48.32	97		60-140
Bromobenzene	50.0	47.54	95		60-140
1,2,3-Trichloropropane	50.0	45.31	91		60-140
2-Chlorotoluene	50.0	47.3	95		60-140
1,3,5-Trimethylbenzene	50.0	49.86	100		60-140
4-Chlorotoluene	50.0	48.65	97		60-140
tert-Butylbenzene	50.0	50.98	102		60-140
1,2,4-Trimethylbenzene	50.0	50.06	100		60-140
sec-Butylbenzene	50.0	50.93	102		60-140
4-Isopropyltoluene	50.0	52.96	106		60-140
1,3-Dichlorobenzene	50.0	48.99	98		60-140
1,4-Dichlorobenzene	50.0	48.97	98		60-140
n-Butylbenzene	50.0	50.62	101		60-140
1,2-Dichlorobenzene	50.0	48.56	97		60-140
1,2-Dibromo-3-chloropropane	50.0	46.17	92		60-140
1,2,4-Trichlorobenzene	50.0	51.27	103		60-140
Hexachlorobutadiene	50.0	50.73	101		60-140
Naphthalene	50.0	48.23	96		60-140
1,2,3-Trichlorobenzene	50.0	47.52	95		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/31/2008 9:30

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B052008MVOWB2

Lab Name Pace Analytical Services Contract: JPL Groundwater Monitorin
 SDG No.: JPL110
 Lab File ID: B0520013.D Lab Sample ID: B052008MVOWB2
 Date Analyzed: 05/20/2008 Time Analyzed: 11:50
 GC Column: DB-624 20m ID: 0.18 (mm) Heated Purge: (Y/N) N
 Instrument ID: 5973B Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S052008MVOWB1	S052008MVOWB1	B0520006.D	05/20/2008	08:43	R028235
02	TB-13-5/13/08	JPL110-008	B0520016.D	05/20/2008	13:12	R028235
03	MW-24-5	JPL110-001	B0520017.D	05/20/2008	13:41	R028235
04	MW-24-4	JPL110-002	B0520018.D	05/20/2008	14:08	R028235
05	MW-24-3	JPL110-003	B0520019.D	05/20/2008	14:35	R028235
06	MW-24-2	JPL110-004	B0520020.D	05/20/2008	15:02	R028235
07	MW-24-1	JPL110-005	B0520021.D	05/20/2008	15:30	R028235
08	EB-13-5/13/08	JPL110-006	B0520022.D	05/20/2008	15:58	R028235
09	DUPE-4-2Q08	JPL110-007	B0520023.D	05/20/2008	16:26	R028235
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COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1323 SDG No.: JPL110
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%. but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFB/VSTD050B1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028235 SDG No.: JPL110
 Lab File ID: B0520005.D BFB Injection Date: 05/20/2008
 Instrument ID: 5973B BFB Injection Time: 08:15
 GC Column DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	15.9
75	30% to 60% of mass 95	46.3
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.9
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	111.8
175	5% to 9% of mass 17	7.6()1
176	greater than 95%, but less than 101% of mass 174	96.9()1
177	5% to 9% of mass 176	6.5()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	VSTD050B1	VSTD050B1	B0520005a.D	05/20/2008	08:15
02	S052008MVOWB1	S052008MVOWB1	B0520006.D	05/20/2008	08:43
03	B052008MVOWB2	B052008MVOWB2	B0520013.D	05/20/2008	11:50
04	TB-13-5/13/08	JPL110-008	B0520016.D	05/20/2008	13:12
05	MW-24-5	JPL110-001	B0520017.D	05/20/2008	13:41
06	MW-24-4	JPL110-002	B0520018.D	05/20/2008	14:08
07	MW-24-3	JPL110-003	B0520019.D	05/20/2008	14:35
08	MW-24-2	JPL110-004	B0520020.D	05/20/2008	15:02
09	MW-24-1	JPL110-005	B0520021.D	05/20/2008	15:30
10	EB-13-5/13/08	JPL110-006	B0520022.D	05/20/2008	15:58
11	DUPE-4-2Q08	JPL110-007	B0520023.D	05/20/2008	16:26
12					
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22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028235 SDG No.: JPL110
 Client Sample No.(VSTD050##): VSTD050B1 Date Analyzed: 05/20/2008
 Lab File ID (Standard): B0520005a.D Time Analyzed: 08:15
 Instrument ID: 5973B Heated Purge: (Y/N) N
 GC Column: DB-624 20m ID: 0.18 (mm)

	IS1 (FBZ) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	473206	7.53	387604	11.30	246501	13.25
UPPER LIMIT	946412	7.58	775208	11.35	493002	13.3
LOWER LIMIT	236603	7.48	193802	11.25	123250.5	13.2
CLIENT SAMPLE NO.						
01 S052008MVOWB1	447528	7.53	360272	11.30	237598	13.25
02 B052008MVOWB2	425615	7.53	344767	11.30	213727	13.25
03 TB-13-5/13/08	438782	7.53	368405	11.30	221077	13.25
04 MW-24-5	369606	7.53	301917	11.30	190424	13.25
05 MW-24-4	417203	7.52	342124	11.30	208639	13.25
06 MW-24-3	410147	7.52	339167	11.30	205638	13.25
07 MW-24-2	371144	7.53	302321	11.30	192645	13.25
08 MW-24-1	422659	7.53	355482	11.30	199793	13.25
09 EB-13-5/13/08	394603	7.53	324680	11.30	183466	13.25
10 DUPE-4-2Q08	381719	7.53	310022	11.30	193455	13.25
11						
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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# JPL110

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-5

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-001
 Lab File ID: B0520017.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 13:41
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.60	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-5

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-001
 Lab File ID: B0520017.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 13:41
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-5

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-001
 Lab File ID: B0520017.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 13:41
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

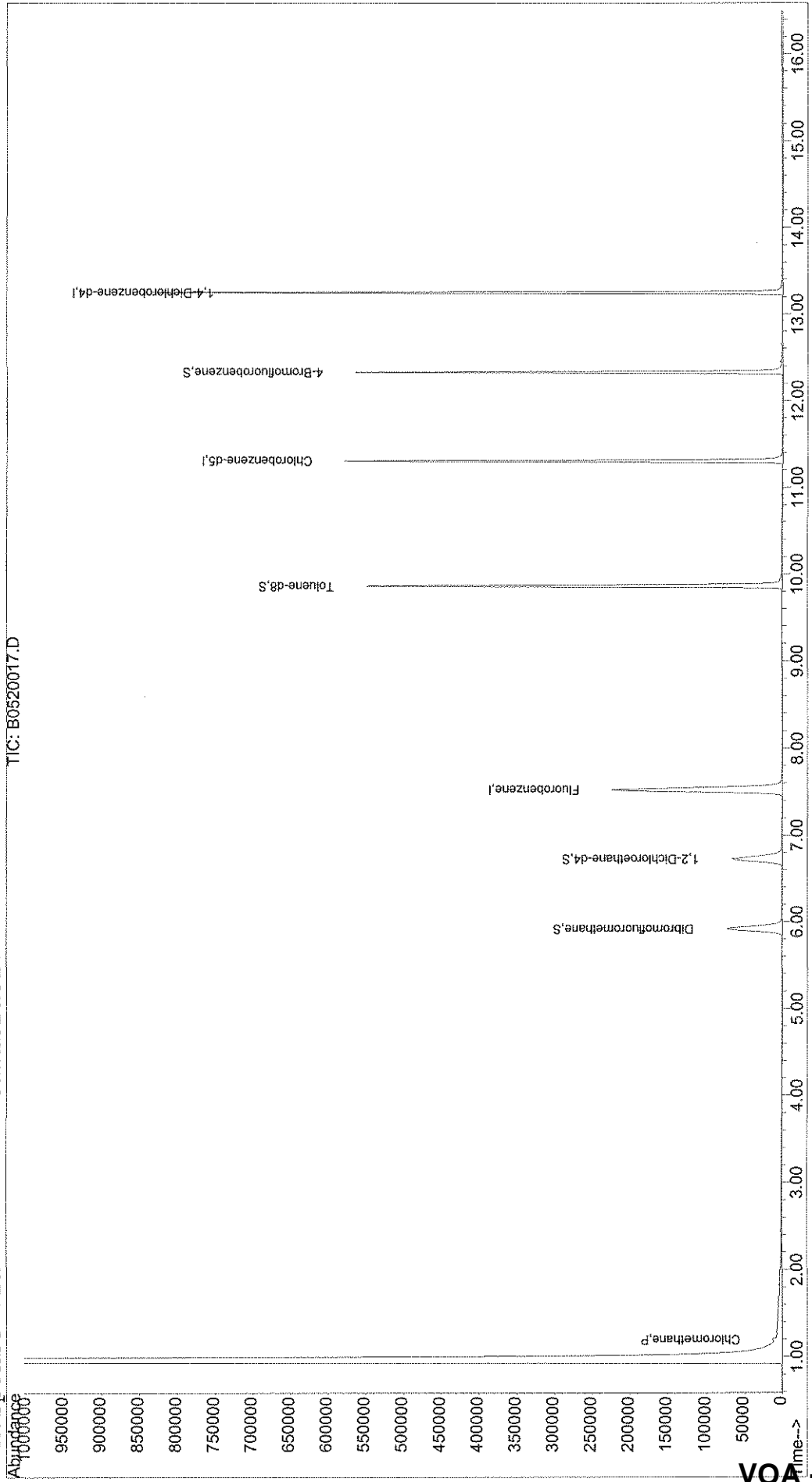
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520017.D Vial: 14
Acq On : 20 May 2008 13:41 Operator: LPM
Sample : JPL110-001 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:17 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520017.D
 Acq On : 20 May 2008 13:41
 Sample : JPL110-001
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:17 2008

Vial: 14
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	369606	25.00	ug/l	0.00	69.65%
54) Chlorobenzene-d5	11.30	117	301917	25.00	ug/l	0.00	68.63%
74) 1,4-Dichlorobenzene-d4	13.25	152	190424	25.00	ug/l	0.00	73.24%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	90294	21.73	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	108.65%	
40) 1,2-Dichloroethane-d4	6.73	65	104149	29.51	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	118.04%	
55) Toluene-d8	9.86	98	358410	24.27	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	97.08%	
76) 4-Bromofluorobenzene	12.32	95	137436	24.37	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	97.48%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	3237	0.60	ug/l	86
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.		
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.		

4/21/08 LPM

(#) = qualifier out of range (m) = manual integration
 B0520017.D B8260W.M Wed May 21 16:17:25 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520017.D
 Acq On : 20 May 2008 13:41
 Sample : JPL110-001
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:17 2008

Vial: 14
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.76	96	31		N.D.	
30) 2-Butanone	5.05	43	30		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	6.69	78	78		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	8.12	130	38		N.D.	
46) Methylcyclohexane	8.40	83	34		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	9.09	41	33		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	9.94	92	157		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	10.48	166	48		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	10.54	43	40		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	745		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

5/23/08

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520017.D
 Acq On : 20 May 2008 13:41
 Sample : JPL110-001
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:17 2008

Vial: 14
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.41	91	170		N.D.	
69) m,p-Xylene	11.53	106	240		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.89	104	208		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.16	105	37		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	12.32	83	30		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	12.51	120	56		N.D.	
81) 2-Chlorotoluene	12.59	91	54		N.D.	
82) 4-Chlorotoluene	12.68	91	30		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	124		N.D.	
84) tert-Butylbenzene	12.90	119	71		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	253		N.D.	
86) sec-butylbenzene	13.08	105	256		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	36		N.D.	
88) 4-Isopropyltoluene	13.19	119	521		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	142		N.D.	
90) 1,2-Dichlorobenzene	13.26	146	101		N.D.	
91) n-Butylbenzene	13.52	91	396		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	185		N.D.	
94) Hexachlorobutadiene	14.90	225	271		N.D.	
95) Naphthalene	14.98	128	184		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	282		N.D.	

5/23/08

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-4

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-002
 Lab File ID: B0520018.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 14:08
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.58	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-4

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-002
 Lab File ID: B0520018.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 14:08
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-4

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-002
 Lab File ID: B0520018.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 14:08
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

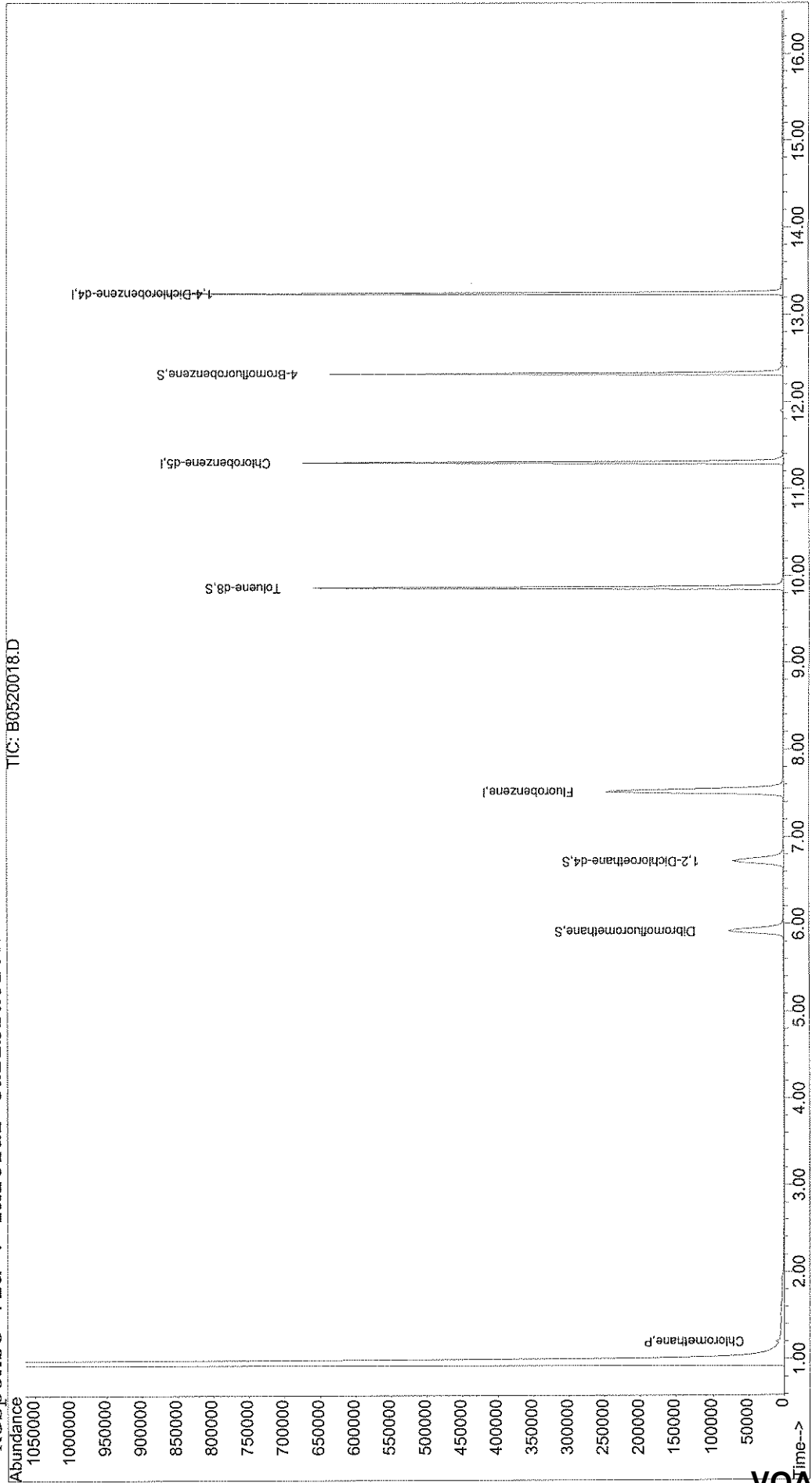
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D Vial: 15
Acq On : 20 May 2008 14:08 Operator: LPM
Sample : JPL110-002 Inst : Buddha
Misc : #4 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:24 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D
 Acq On : 20 May 2008 14:08
 Sample : JPL110-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:24 2008

Vial: 15
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.52	96	417203	25.00	ug/l	0.00 78.62%
54) Chlorobenzene-d5	11.30	117	342124	25.00	ug/l	0.00 77.76%
74) 1,4-Dichlorobenzene-d4	13.25	152	208639	25.00	ug/l	0.00 80.24%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	93662	19.97	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery		99.85%
40) 1,2-Dichloroethane-d4	6.72	65	116375m	29.21	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery		116.84%
55) Toluene-d8	9.86	98	414353	24.76	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery		99.04%
76) 4-Bromofluorobenzene	12.32	95	156782	25.38	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery		101.52%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	3538	0.58	ug/l	95
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	2.49	76	336	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.		
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	3.25	53	73	N.D.		

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D
 Acq On : 20 May 2008 14:08
 Sample : JPL110-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:24 2008

Vial: 15
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.76	96	81		N.D.	
30) 2-Butanone	4.94	43	30		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	6.69	78	46		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	8.40	83	30		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.70	41	46		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	9.38	63	33		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	9.93	92	167		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	10.50	69	29		N.D.	
59) 1,1,2-Trichloroethane	10.41	97	31		N.D.	
60) Tetrachloroethene	10.48	166	30		N.D.	
61) 1,3-Dichloropropane	10.76	76	35		N.D.	
62) 2-Hexanone	10.82	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	11.30	91	597		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

9/23/08 LPM

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D
 Acq On : 20 May 2008 14:08
 Sample : JPL110-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:24 2008

Vial: 15
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.53	91	490		N.D.	
69) m,p-Xylene	11.52	106	109		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.90	104	1689		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.18	105	81		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	12.31	83	31		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.59	91	32		N.D.	
82) 4-Chlorotoluene	12.68	91	38		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	29		N.D.	
84) tert-Butylbenzene	12.91	119	36		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	247		N.D.	
86) sec-butylbenzene	13.08	105	158		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	251		N.D.	
88) 4-Isopropyltoluene	13.19	119	166		N.D.	
89) 1,4-Dichlorobenzene	13.28	146	77		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	133		N.D.	
91) n-Butylbenzene	13.52	91	108		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	149		N.D.	
94) Hexachlorobutadiene	14.88	225	68		N.D.	
95) Naphthalene	14.98	128	271		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	111		N.D.	

5/23/08 LPM

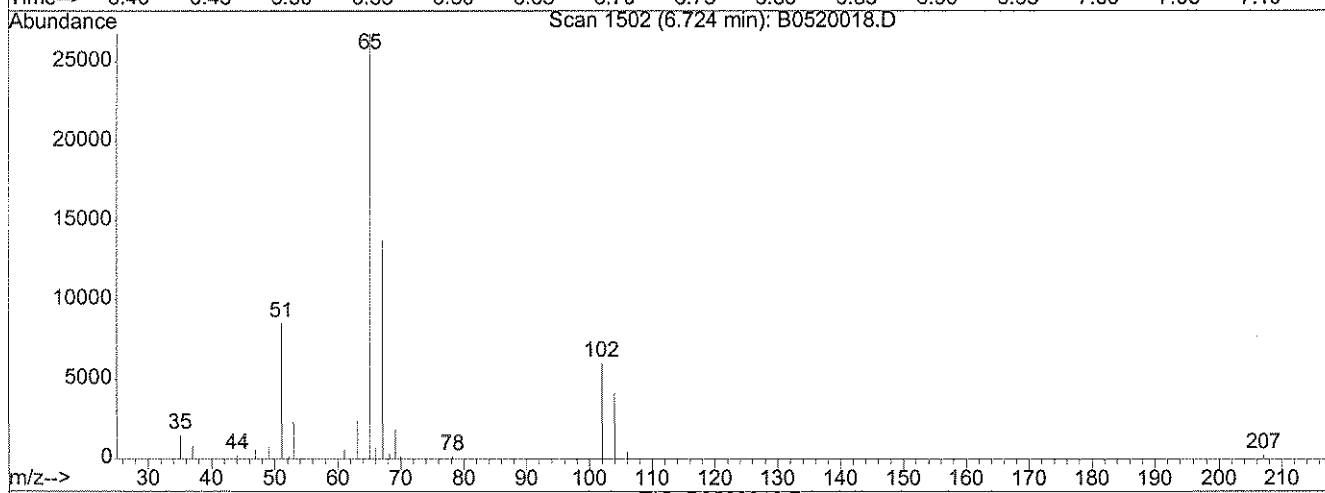
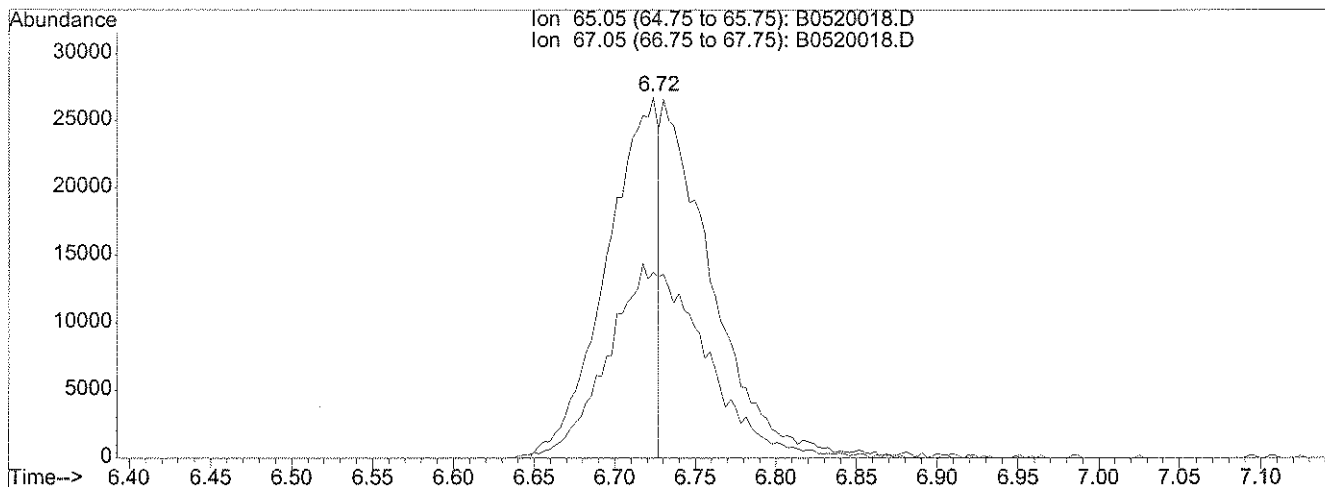
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D
 Acq On : 20 May 2008 14:08
 Sample : JPL110-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:17 2008

Vial: 15
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 14.94ug/l

response 59518

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	100.84#
0.00	0.00	0.00
0.00	0.00	0.00

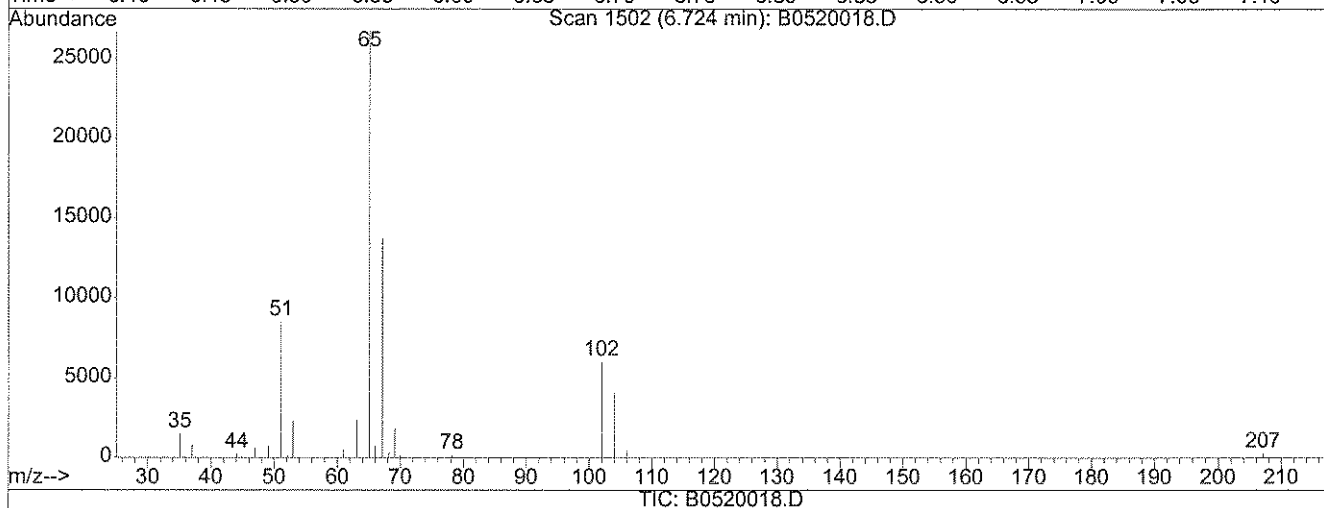
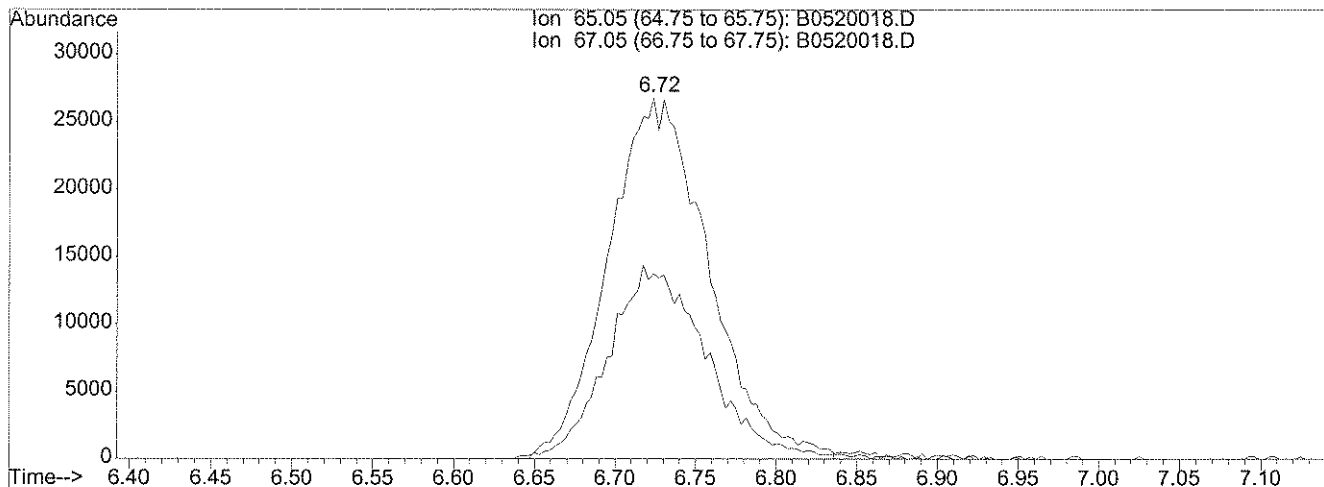
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D
 Acq On : 20 May 2008 14:08
 Sample : JPL110-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:24 2008

Vial: 15
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 29.21ug/l m

response 116375

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	51.57
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-3

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-003
 Lab File ID: B0520019.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 14:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.54	
75-01-4	Vinyl chloride	2.0	
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	2.0	
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	2.7	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-3

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-003
 Lab File ID: B0520019.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 14:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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	1.0	
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	1.1	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL110

Run Sequence: R028235

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL110-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520019.D

Level: (LOW/MED) _____

Date Collected: 05/13/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/20/2008 14:35

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

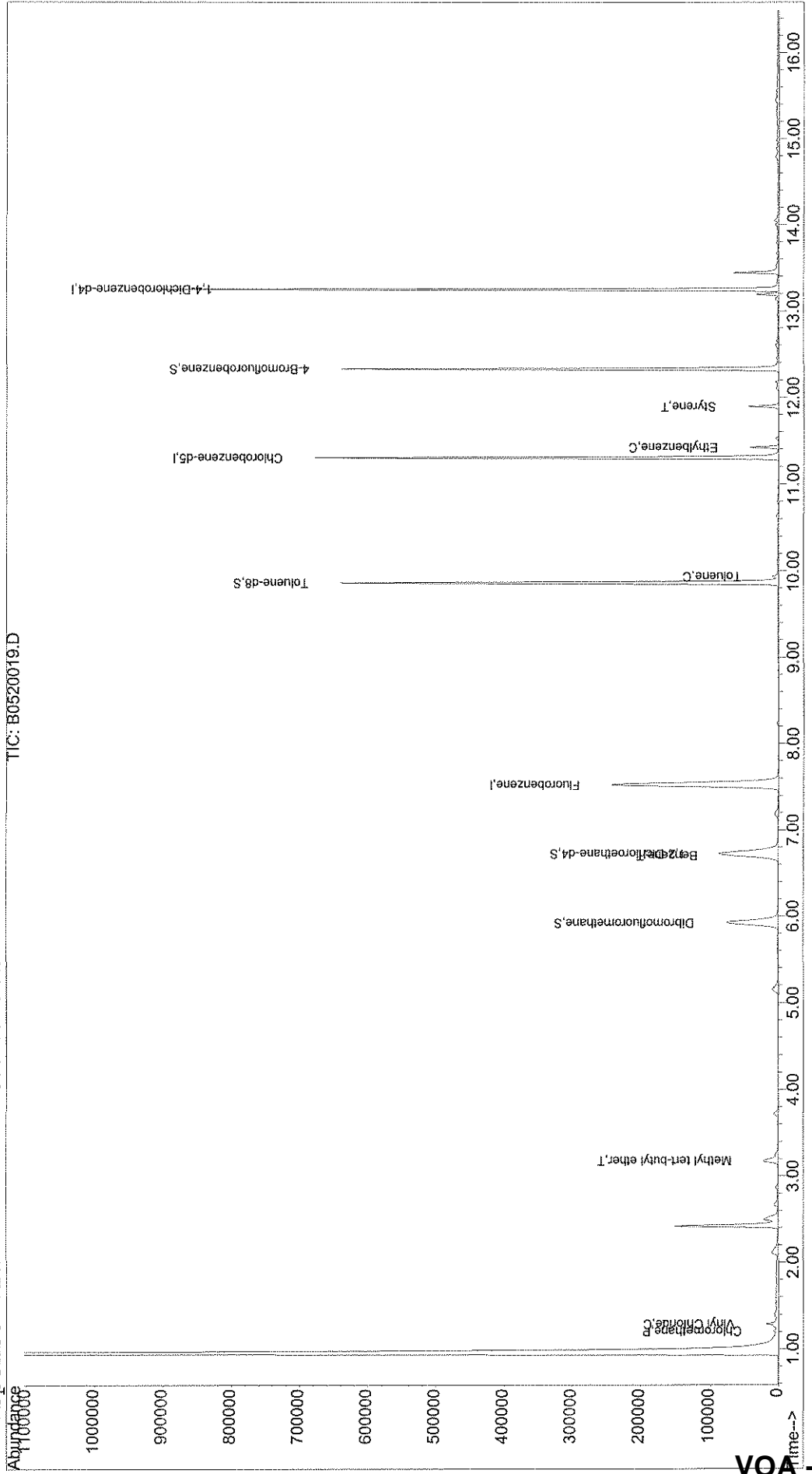
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D Vial: 16
Acq On : 20 May 2008 14:35 Operator: LPM
Sample : JPL110-003 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:22 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:22 2008

Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.52	96	410147	25.00	ug/l	0.00	77.29%
54) Chlorobenzene-d5	11.30	117	339167	25.00	ug/l	0.00	77.09%
74) 1,4-Dichlorobenzene-d4	13.25	152	205638	25.00	ug/l	0.00	79.09%

System Monitoring Compounds

step/su

37) Dibromofluoromethane	5.92	111	94033m ^b	20.39	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	101.95%	
40) 1,2-Dichloroethane-d4	6.73	65	115815	29.57	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	118.28%	
55) Toluene-d8	9.86	98	410729	24.76	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	99.04%	
76) 4-Bromofluorobenzene	12.32	95	156310	25.67	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	102.68%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.21	50	3221	0.54	ug/l	93
4) Vinyl Chloride	1.29	62	10680	1.98	ug/l	97
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.	d	
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.	d	
17) Methyl Acetate	2.73	43	216	N.D.		
18) Methylene Chloride	2.86	84	2118	Below Cal		94
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	3.18	73	34333	1.99	ug/l	# 88
22) Acrylonitrile	0.00	53	0	N.D.	d	

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:22 2008

Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	645		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	0		N.D.	
27) Ethyl-t-butyl ether	4.37	59	36		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	4.80	96	38		N.D.	
30) 2-Butanone	4.85	43	29		N.D.	
31) Propionitrile	0.00	54	0		N.D.	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	5.76	56	30		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.69	78	51979m ^s	2.65	ug/l	100
42) 1,2-Dichloroethane	6.94	62	141		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	d
44) Isobutanol	7.27	43	29		N.D.	
45) Trichloroethene	8.21	130	292		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	8.87	41	32		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	9.79	75	30		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	2347	0.18	ug/l	98
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	10.64	97	37		N.D.	
60) Tetrachloroethene	10.47	166	345		N.D.	
61) 1,3-Dichloropropene	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) 1-Chlorohexane	0.00	91	0		N.D.	d
66) Chlorobenzene	11.33	112	92		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\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:22 2008

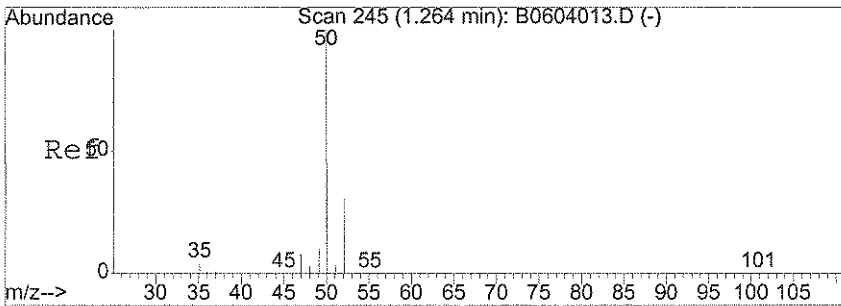
Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

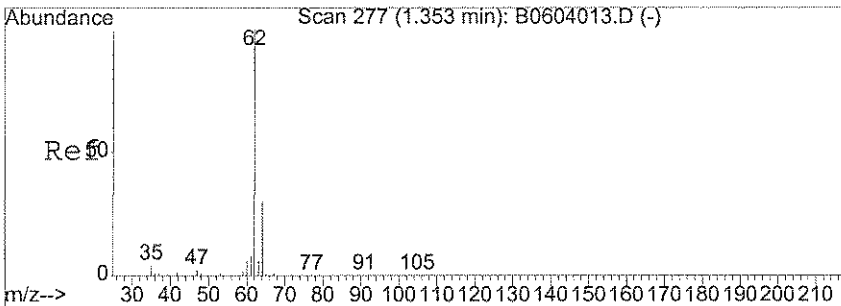
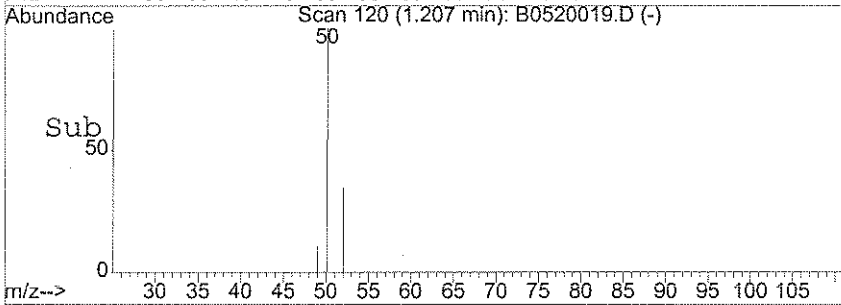
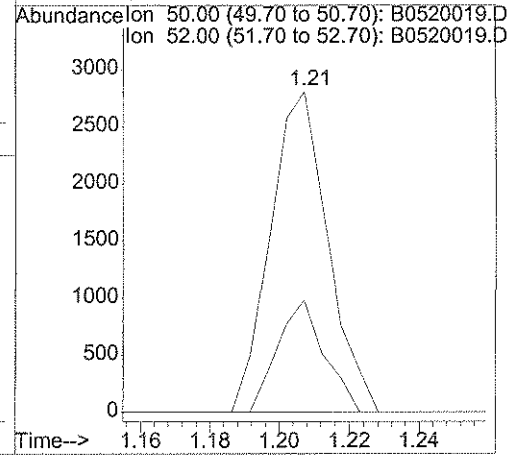
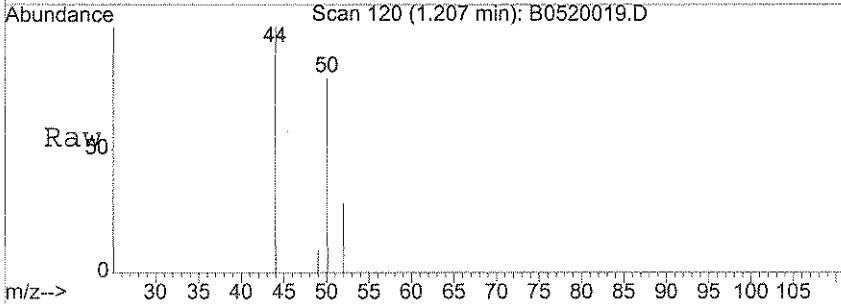
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	24405	1.00	ug/l	94
69) m,p-Xylene	11.52	106	1357	N.D.		
70) o-xylene	11.87	106	802	N.D.		
71) Styrene	11.89	104	18998	1.12	ug/l	91
72) Bromoform	12.34	173	55	N.D.		
73) Isopropylbenzene	12.17	105	2483	N.D.		
75) trans-1,4-Dichloro-2-buten	12.59	53	38	N.D.		
77) Bromobenzene	12.32	156	126	N.D.		
78) 1,1,2,2-Tetrachloroethane	12.58	83	93	N.D.		
79) 1,2,3-Trichloropropane	0.00	75	0	N.D.	d	
80) n-Propylbenzene	12.52	120	31	N.D.		
81) 2-Chlorotoluene	12.58	91	51	N.D.		
82) 4-Chlorotoluene	12.69	91	34	N.D.		
83) 1,3,5-Trimethylbenzene	12.65	105	462	N.D.		
84) tert-Butylbenzene	12.96	119	98	N.D.		
85) 1,2,4-Trimethylbenzene	12.96	105	1371	N.D.		
86) sec-butylbenzene	13.09	105	241	N.D.		
87) 1,3-Dichlorobenzene	13.19	146	121	N.D.		
88) 4-Isopropyltoluene	13.19	119	2046	N.D.		
89) 1,4-Dichlorobenzene	13.26	146	159	N.D.		
90) 1,2-Dichlorobenzene	13.56	146	32	N.D.		
91) n-Butylbenzene	13.52	91	434	N.D.		
92) 1,2-Dibromo-3-chloropropan	13.86	75	49	N.D.		
93) 1,2,4-Trichlorobenzene	14.79	180	265	N.D.		
94) Hexachlorobutadiene	14.88	225	62	N.D.		
95) Naphthalene	14.98	128	1245	N.D.		
96) 1,2,3-Trichlorobenzene	15.16	180	195	N.D.		

5/23/08



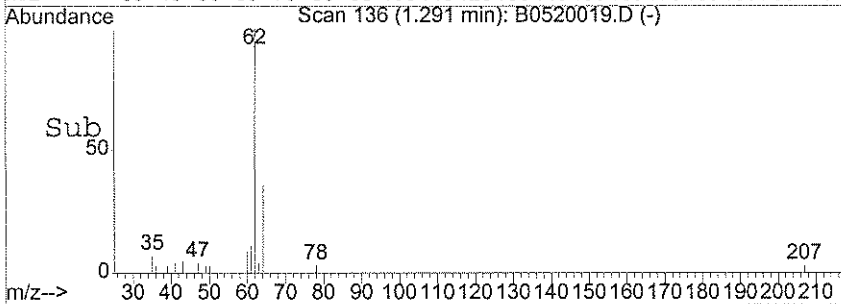
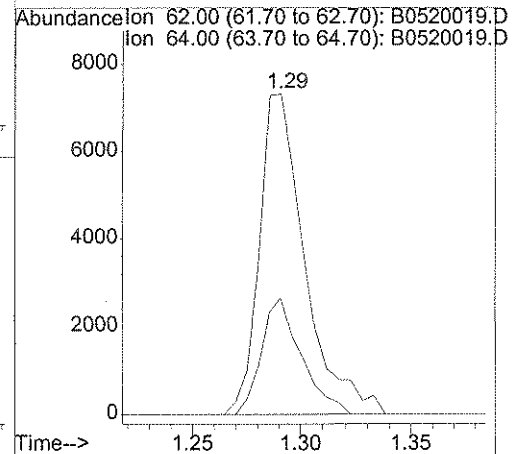
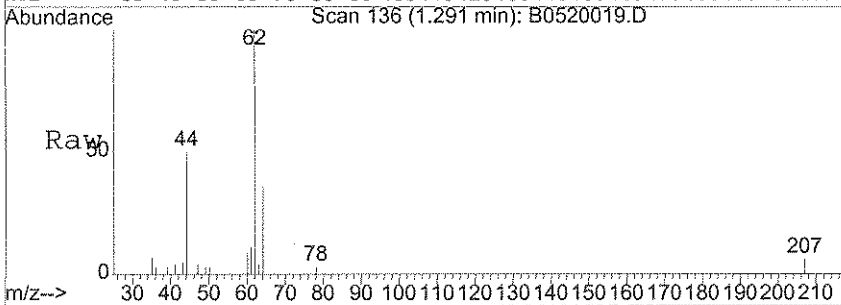
#3
 Chloromethane
 Concen: 0.54 ug/l
 RT: 1.21 min Scan# 120
 Delta R.T. 0.00 min
 Lab File: B0520019.D
 Acq: 20 May 2008 14:35

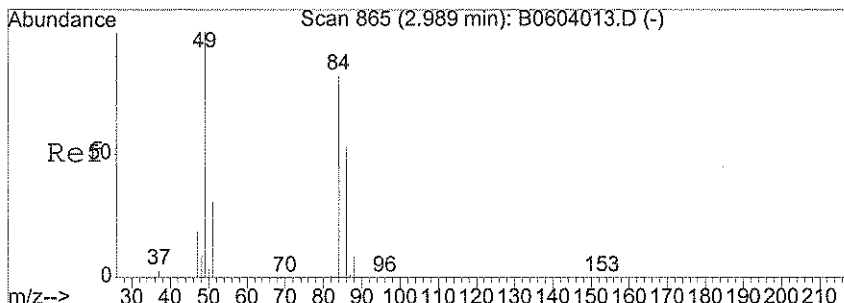
Tgt Ion	Resp	Lower	Upper
50	3221		
52	28.5	12.5	52.5



#4
 Vinyl Chloride
 Concen: 1.98 ug/l
 RT: 1.29 min Scan# 136
 Delta R.T. -0.01 min
 Lab File: B0520019.D
 Acq: 20 May 2008 14:35

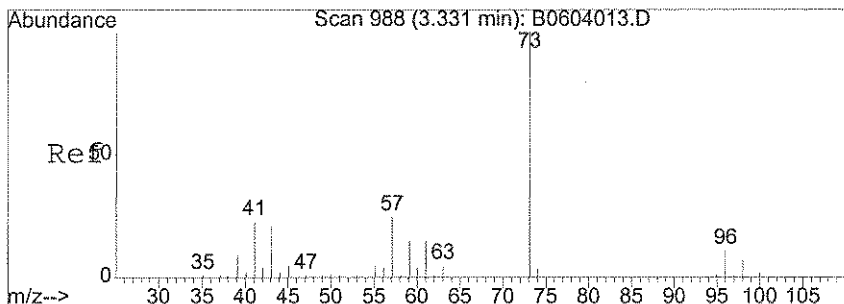
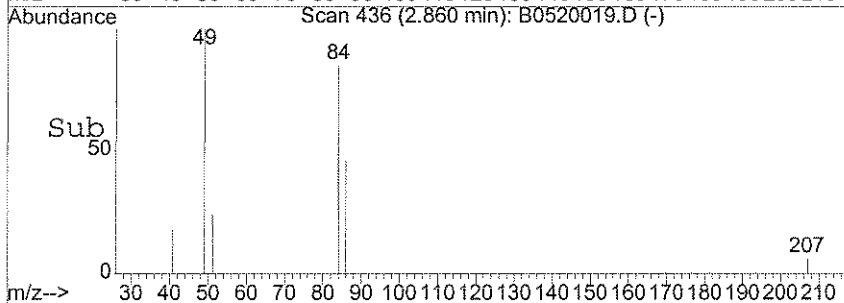
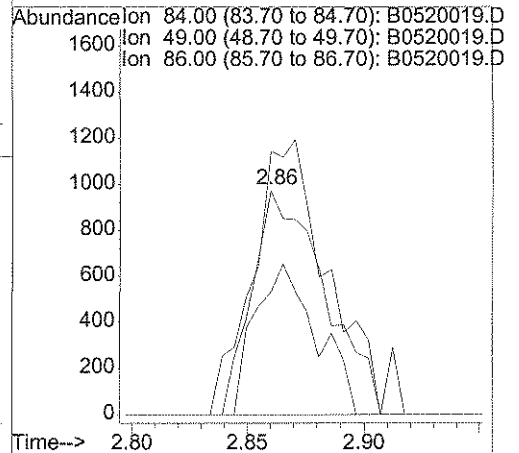
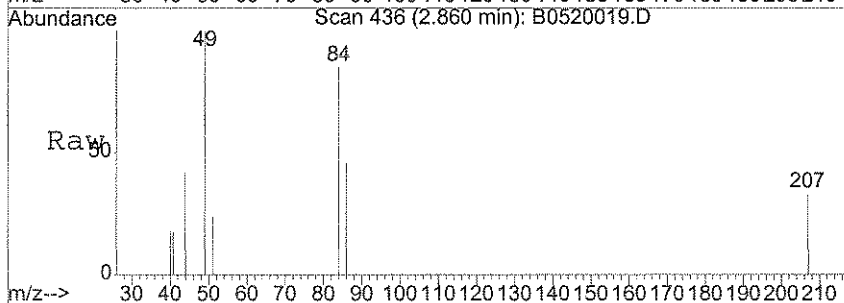
Tgt Ion	Resp	Lower	Upper
62	10680		
64	31.7	10.2	50.2





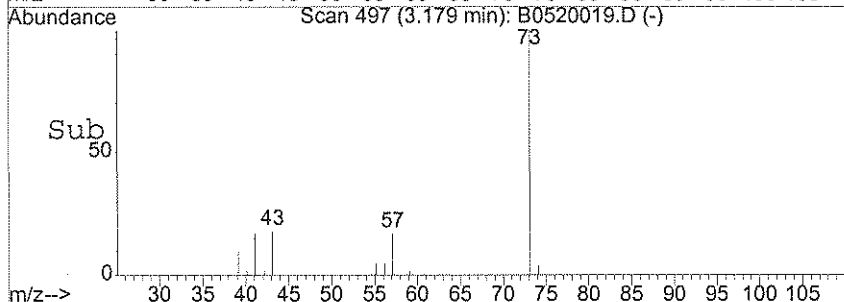
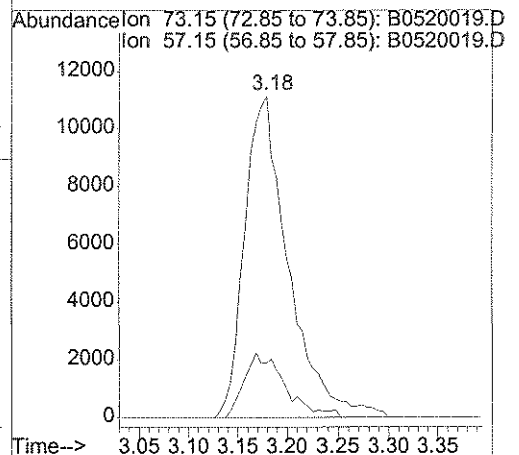
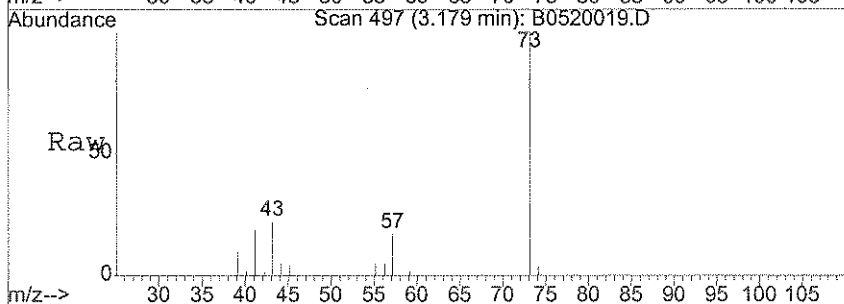
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.86 min Scan# 436
 Delta R.T. -0.00 min
 Lab File: B0520019.D
 Acq: 20 May 2008 14:35

Tgt Ion:	84	Resp:	2118
Ion Ratio	Lower	Upper	
84	100		
49	128.8	113.6	153.6
86	57.1	45.8	85.8



#21
 Methyl tert-butyl ether
 Concen: 1.99 ug/l
 RT: 3.18 min Scan# 497
 Delta R.T. 0.03 min
 Lab File: B0520019.D
 Acq: 20 May 2008 14:35

Tgt Ion:	73	Resp:	34333
Ion Ratio	Lower	Upper	
73	100		
57	18.2	19.3	28.9#



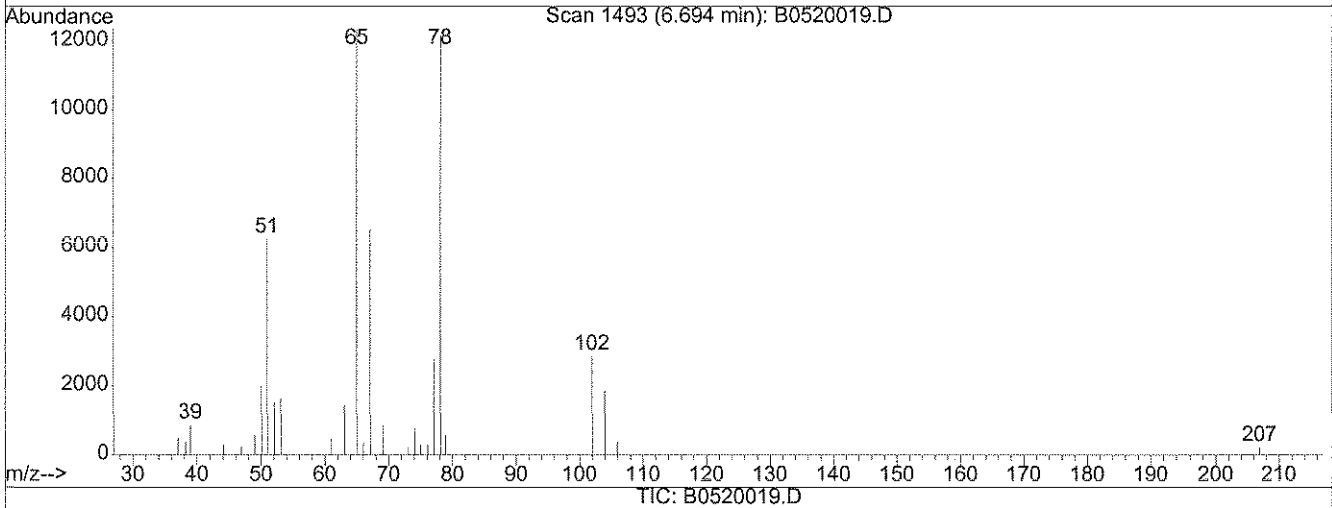
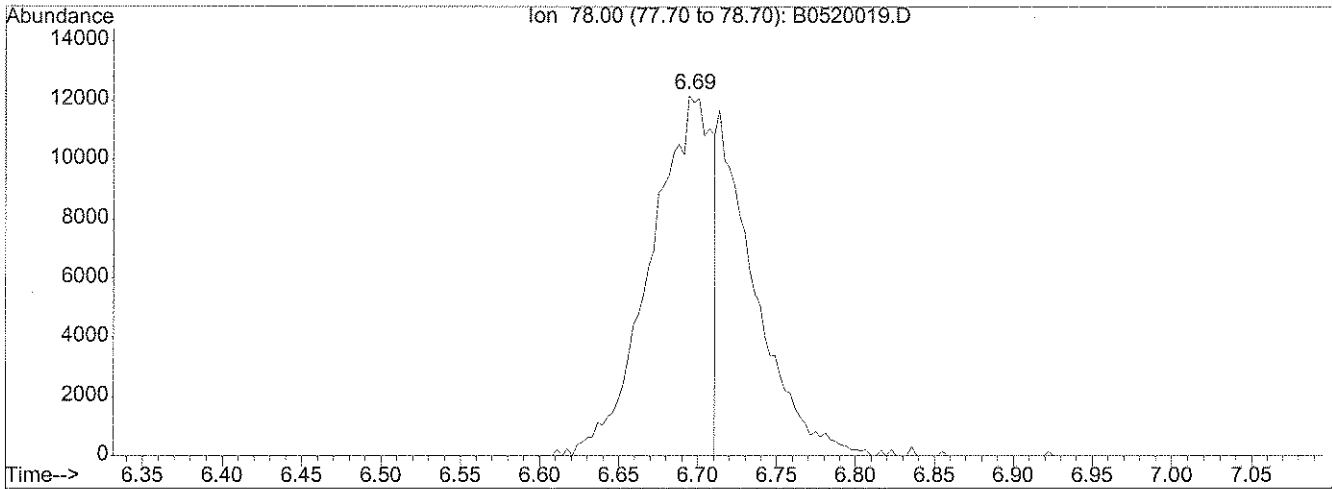
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
Acq On : 20 May 2008 14:35
Sample : JPL110-003
Misc : #3 10ML PFW+IS/SS (524)
MS Integration Params: rteint.p
Quant Time: May 21 16:21 2008

Vial: 16
Operator: LPM
Inst : Buddha
Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Multiple Level Calibration



(41) Benzene (T)

6.69min 1.67ug/l

response 32735

Ion	Exp%	Act%
78.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

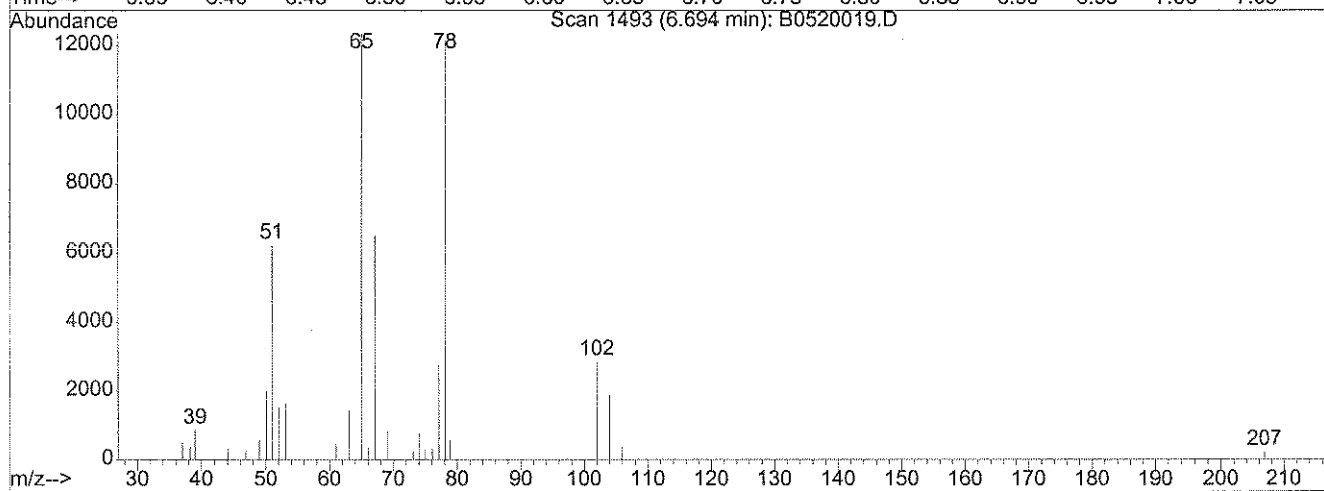
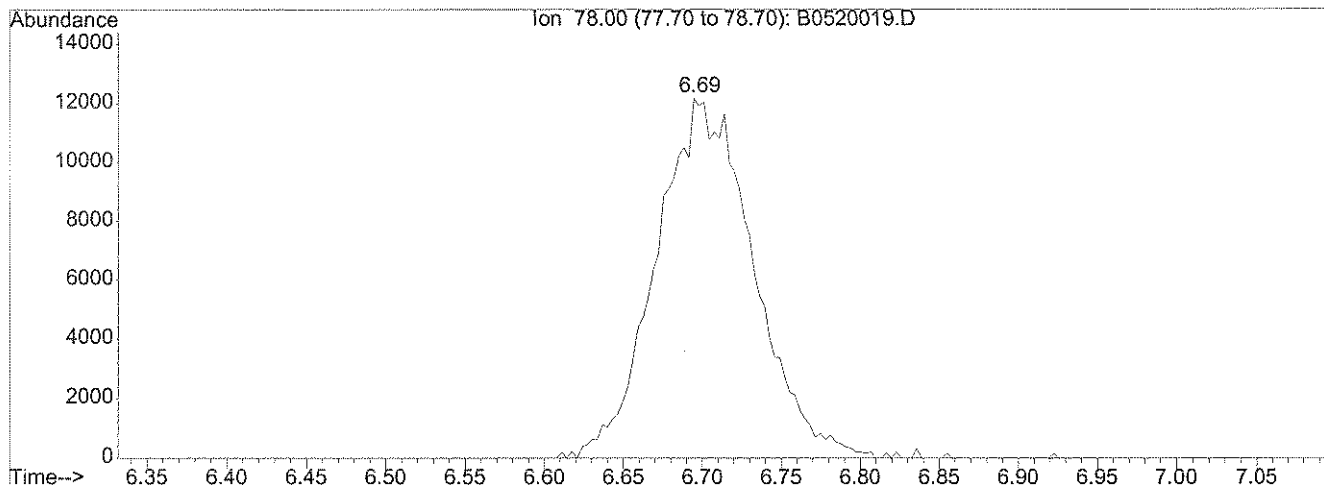
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:21 2008

Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration

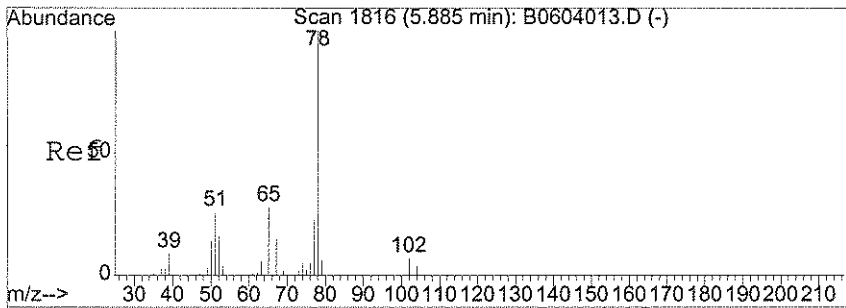


(41) Benzene (T)

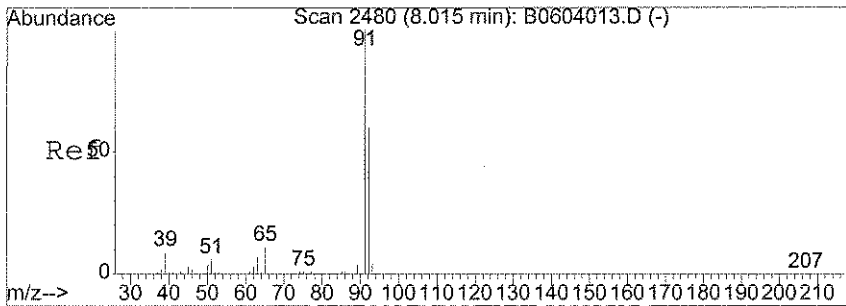
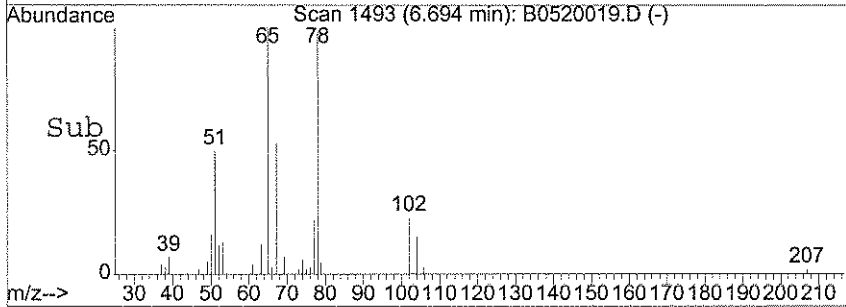
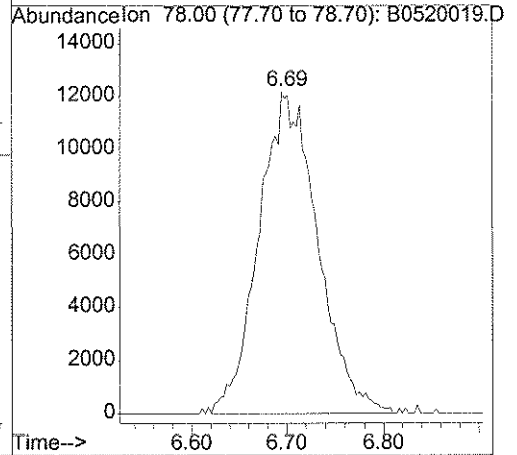
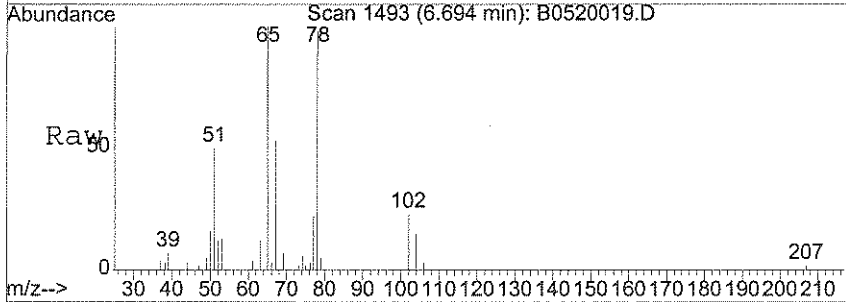
6.69min 2.65ug/l m

response 51979

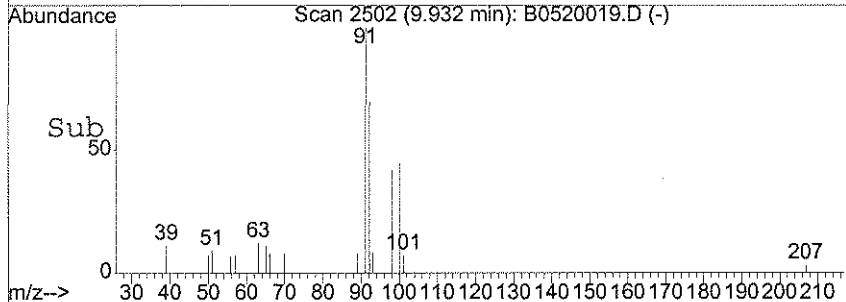
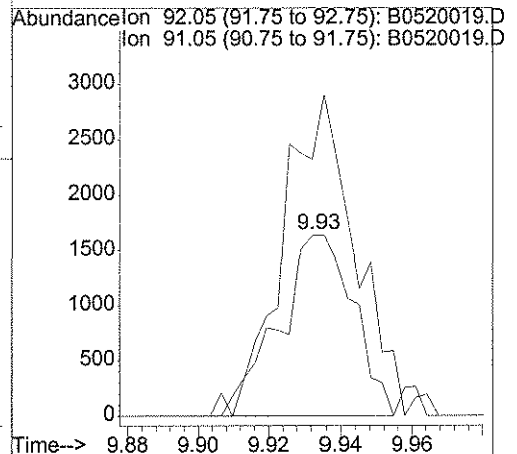
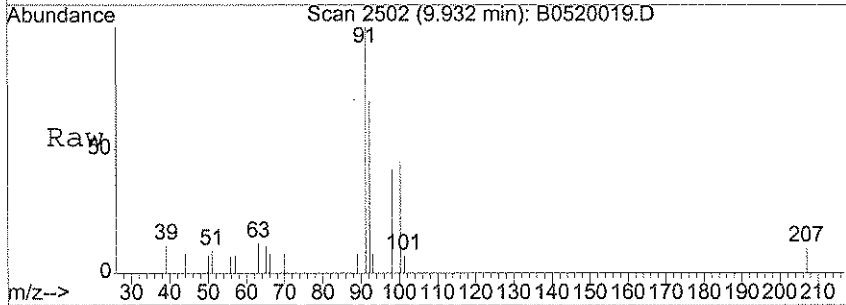
Ion	Exp%	Act%
78.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

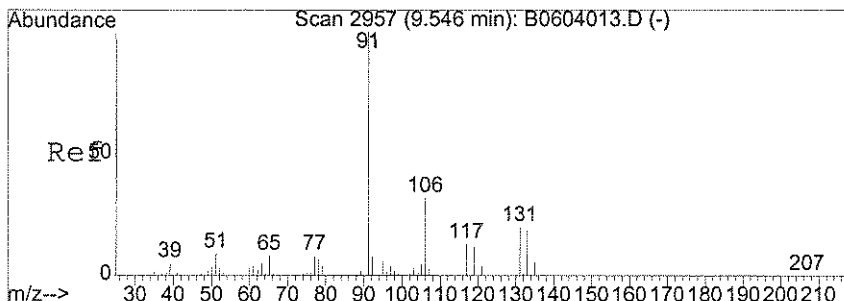


#41
Benzene
Concen: 2.65 ug/l m
RT: 6.69 min Scan# 1493
Delta R.T. -0.00 min
Lab File: B0520019.D
Acq: 20 May 2008 14:35
Tgt Ion: 78 Resp: 51979



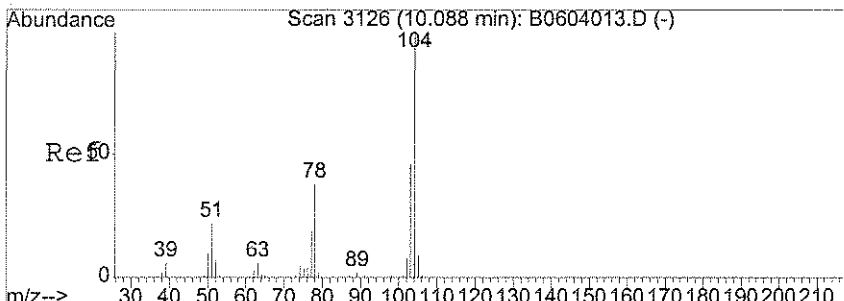
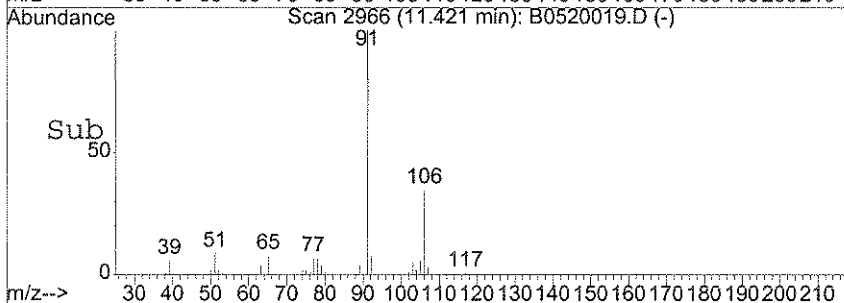
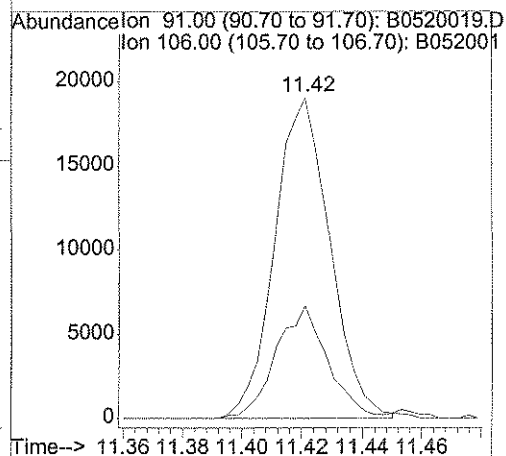
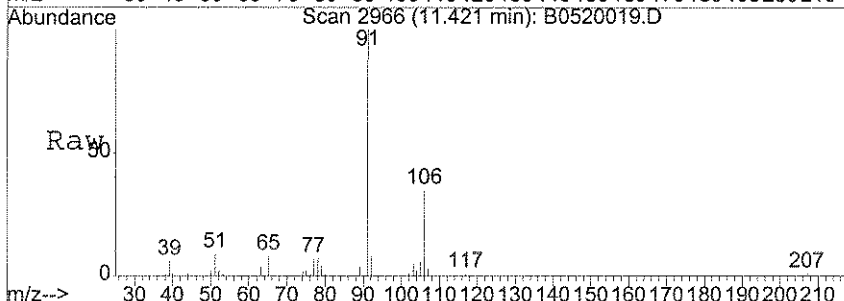
#56
Toluene
Concen: 0.18 ug/l
RT: 9.93 min Scan# 2502
Delta R.T. -0.00 min
Lab File: B0520019.D
Acq: 20 May 2008 14:35
Tgt Ion: 92 Resp: 2347
Ion Ratio Lower Upper
92 100
91 175.1 137.6 206.4





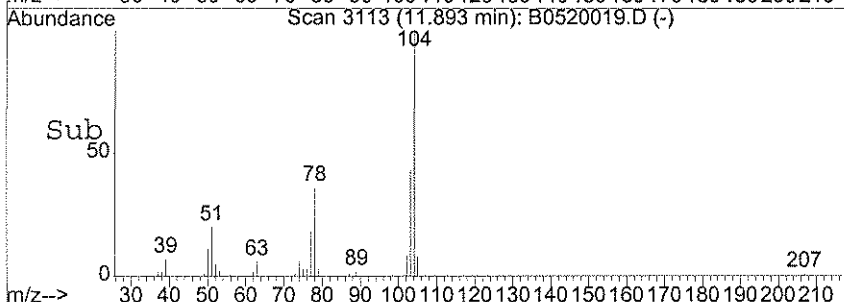
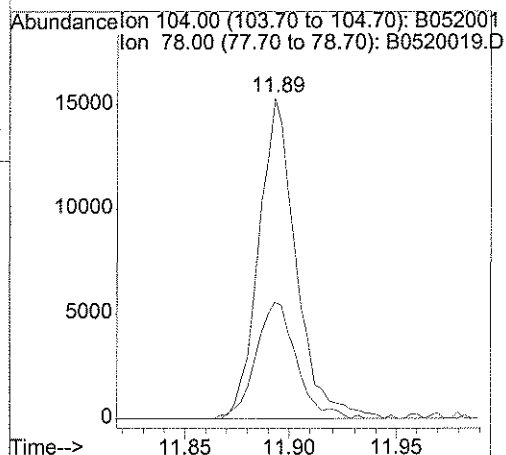
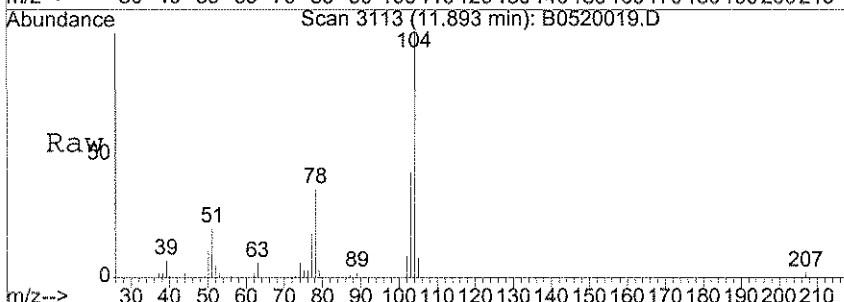
#68
 Ethylbenzene
 Concen: 1.00 ug/l
 RT: 11.42 min Scan# 2966
 Delta R.T. -0.00 min
 Lab File: B0520019.D
 Acq: 20 May 2008 14:35

Tgt Ion: 91 Resp: 24405
 Ion Ratio Lower Upper
 91 100
 106 35.2 25.6 38.4



#71
 Styrene
 Concen: 1.12 ug/l
 RT: 11.89 min Scan# 3113
 Delta R.T. -0.00 min
 Lab File: B0520019.D
 Acq: 20 May 2008 14:35

Tgt Ion: 104 Resp: 18998
 Ion Ratio Lower Upper
 104 100
 78 39.2 25.4 65.4



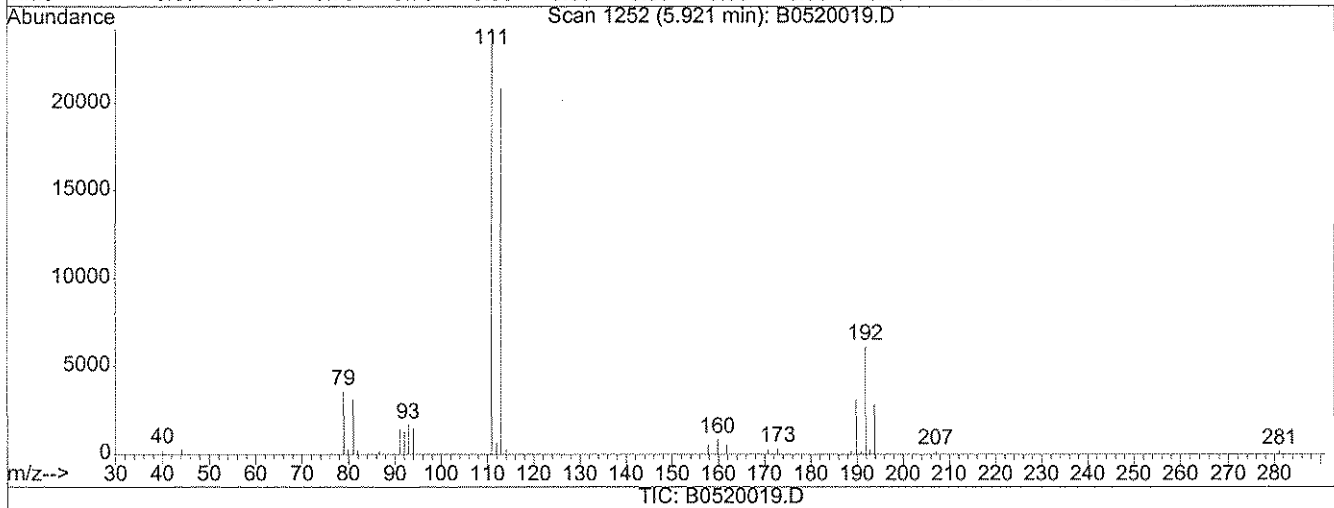
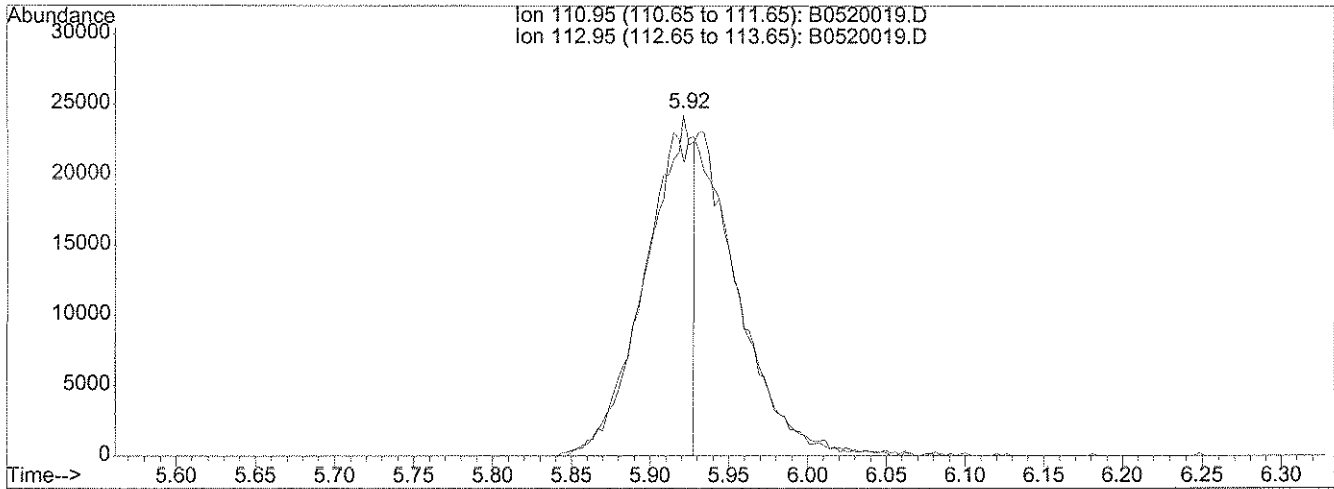
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:20 2008

Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.92min 11.14ug/l

response 51355

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	81.96#
0.00	0.00	0.00
0.00	0.00	0.00

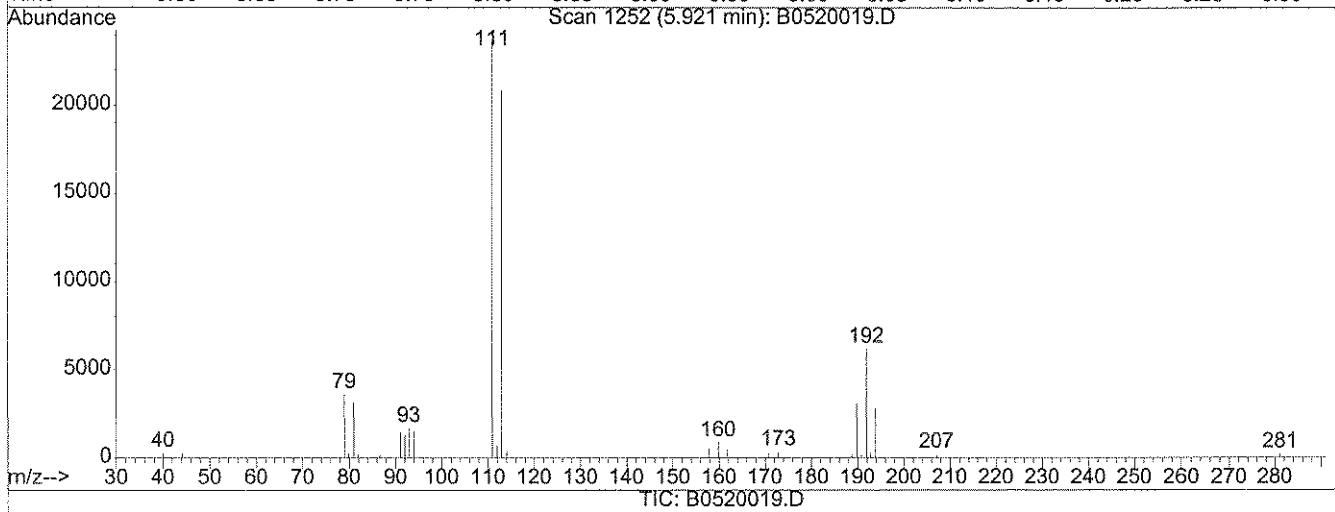
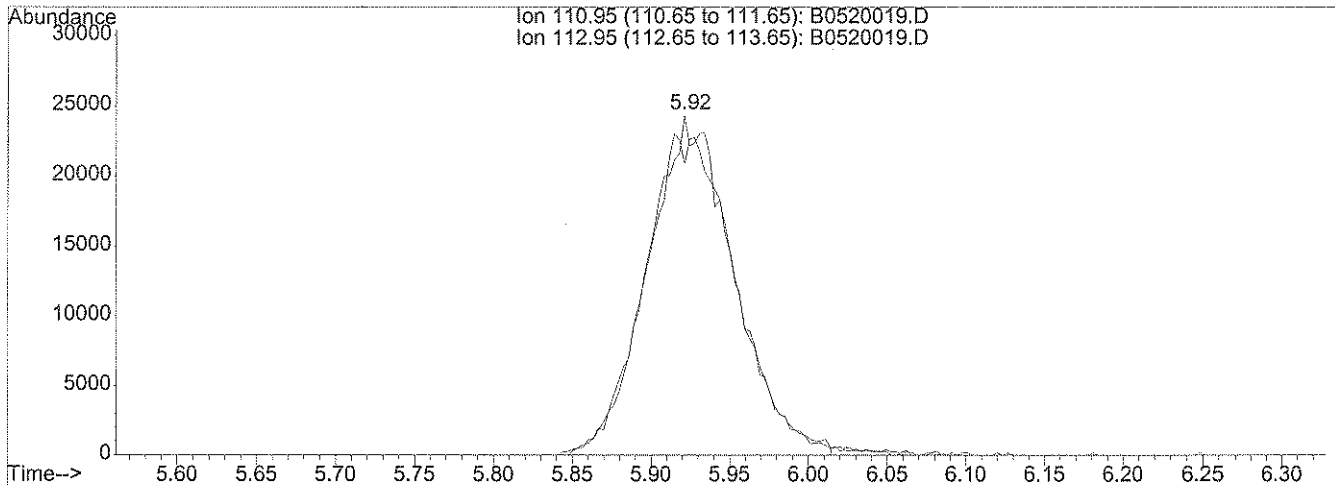
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:21 2008

Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.92min 20.39ug/l m

response 94033

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	44.76#
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-2

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-004
 Lab File ID: B0520020.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:02
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.38	J
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	0.43	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-2

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-004
 Lab File ID: B0520020.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:02
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-2

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-004
 Lab File ID: B0520020.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:02
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

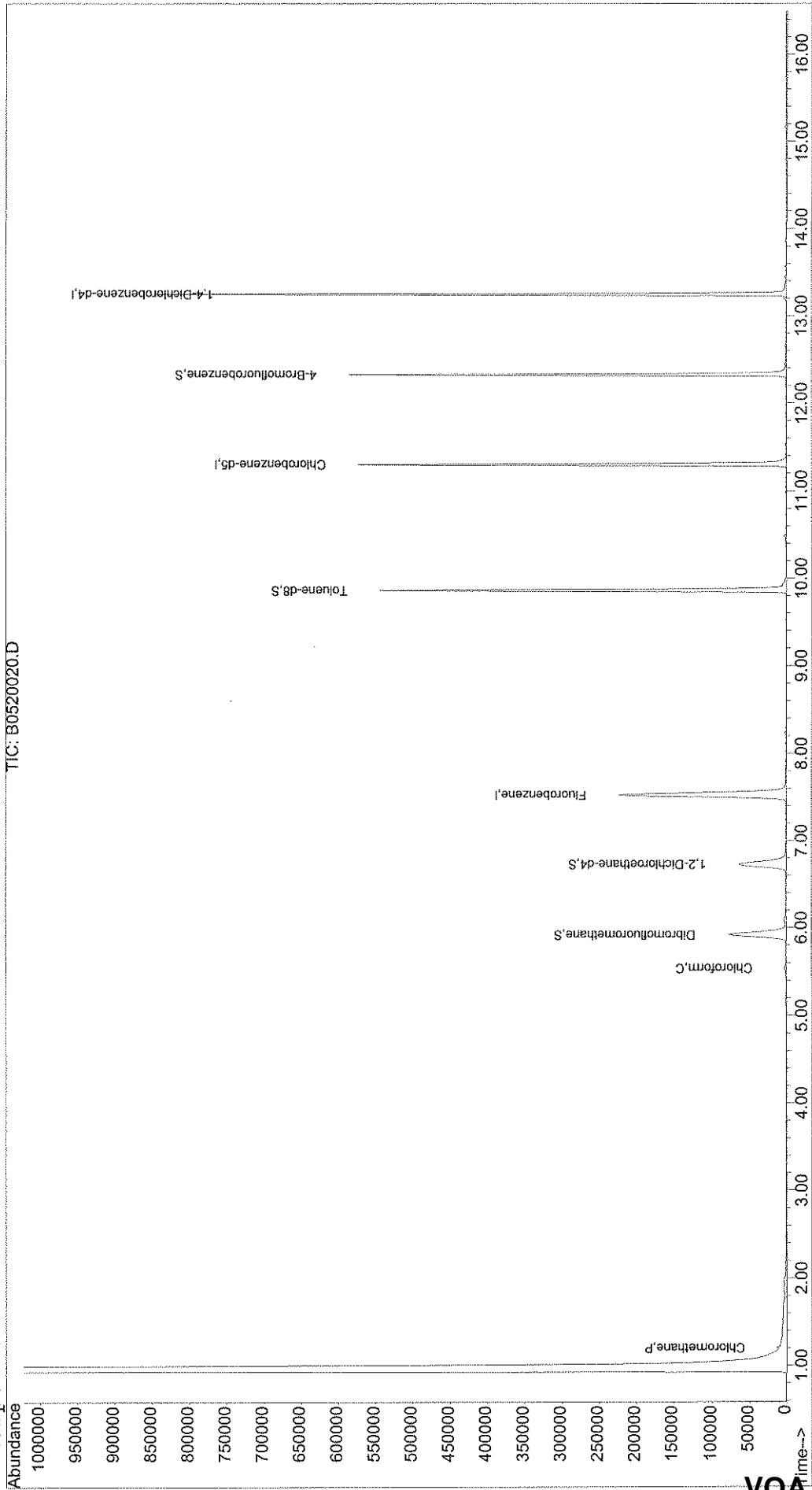
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D Vial: 17
Acq On : 20 May 2008 15:02 Operator: LPM
Sample : JPL110-004 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:25 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D
 Acq On : 20 May 2008 15:02
 Sample : JPL110-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:25 2008

Vial: 17
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	371144	25.00	ug/l	0.00 69.94%
54) Chlorobenzene-d5	11.30	117	302321	25.00	ug/l	0.00 68.72%
74) 1,4-Dichlorobenzene-d4	13.25	152	192645	25.00	ug/l	0.00 74.09%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	91332	21.88	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	109.40%
40) 1,2-Dichloroethane-d4	6.72	65	106087	29.94	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	119.76%
55) Toluene-d8	9.86	98	351997	23.80	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	95.20%
76) 4-Bromofluorobenzene	12.32	95	144305	25.30	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	101.20%

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.20	50	2036	0.38 ug/l	94
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	2.50	76	68	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.	
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.	

5/23/08 LPM

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D
 Acq On : 20 May 2008 15:02
 Sample : JPL110-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:25 2008

Vial: 17
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	744		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.84	96	34		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	5.48	41	29		N.D.	
34) Chloroform	5.54	83	3382ms	0.43	ug/l #	34
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	85		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.70	78	63		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	8.23	130	359		N.D.	
46) Methylcyclohexane	8.43	83	34		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	9.19	83	31		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	9.94	92	144		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	10.48	166	627		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.54	43	40		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	475		N.D.	
66) Chlorobenzene	11.32	112	34		N.D.	
67) 1,1,1,2-Tetrachloroethane	11.67	131	29		N.D.	

*stz/ls
LPM*

(#) = qualifier out of range (m) = manual integration
 B0520020.D B8260W.M Wed May 21 16:25:42 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D
 Acq On : 20 May 2008 15:02
 Sample : JPL110-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:25 2008

Vial: 17
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.52	91	663		N.D.	
69) m,p-Xylene	11.52	106	254		N.D.	
70) o-xylene	11.88	106	29		N.D.	
71) Styrene	11.89	104	53		N.D.	
72) Bromoform	12.34	173	53		N.D.	
73) Isopropylbenzene	12.17	105	138		N.D.	
75) trans-1,4-Dichloro-2-buten	12.24	53	36		N.D.	
77) Bromobenzene	12.33	156	40		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.52	91	108		N.D.	
82) 4-Chlorotoluene	12.79	91	32		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	120		N.D.	
84) tert-Butylbenzene	12.92	119	49		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	206		N.D.	
86) sec-butylbenzene	13.08	105	77		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	1227		N.D.	
88) 4-Isopropyltoluene	13.21	119	131		N.D.	
89) 1,4-Dichlorobenzene	13.19	146	1227		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	679		N.D.	
91) n-Butylbenzene	13.53	91	174		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	533		N.D.	
94) Hexachlorobutadiene	14.89	225	108		N.D.	
95) Naphthalene	14.98	128	160		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	775		N.D.	

Handwritten signature

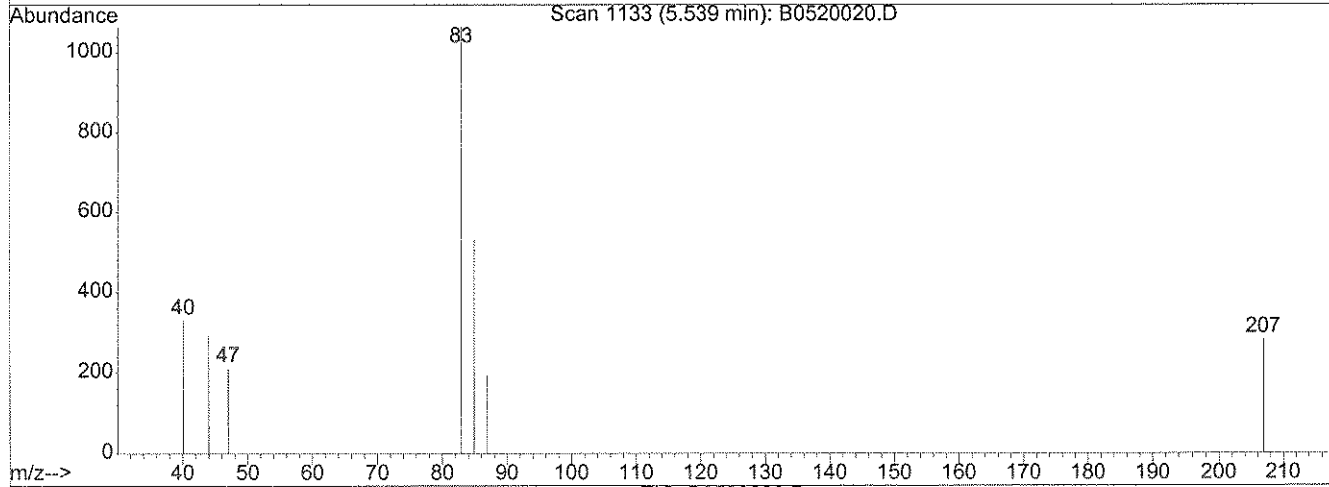
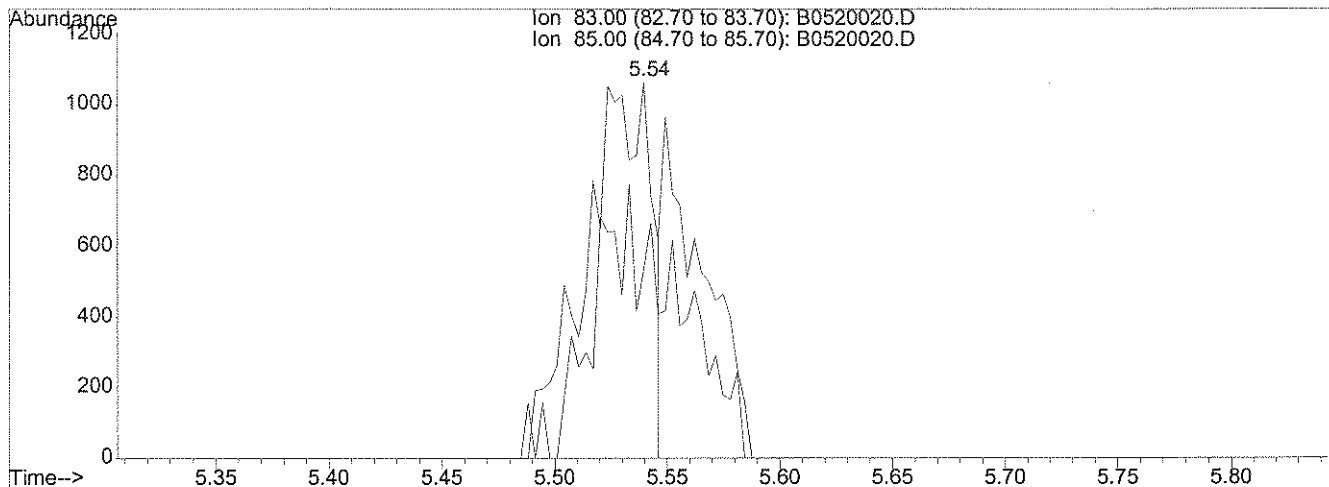
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D
 Acq On : 20 May 2008 15:02
 Sample : JPL110-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:24 2008

Vial: 17
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



TIC: B0520020.D

(34) Chloroform (C)

5.54min 0.27ug/l

response 2164

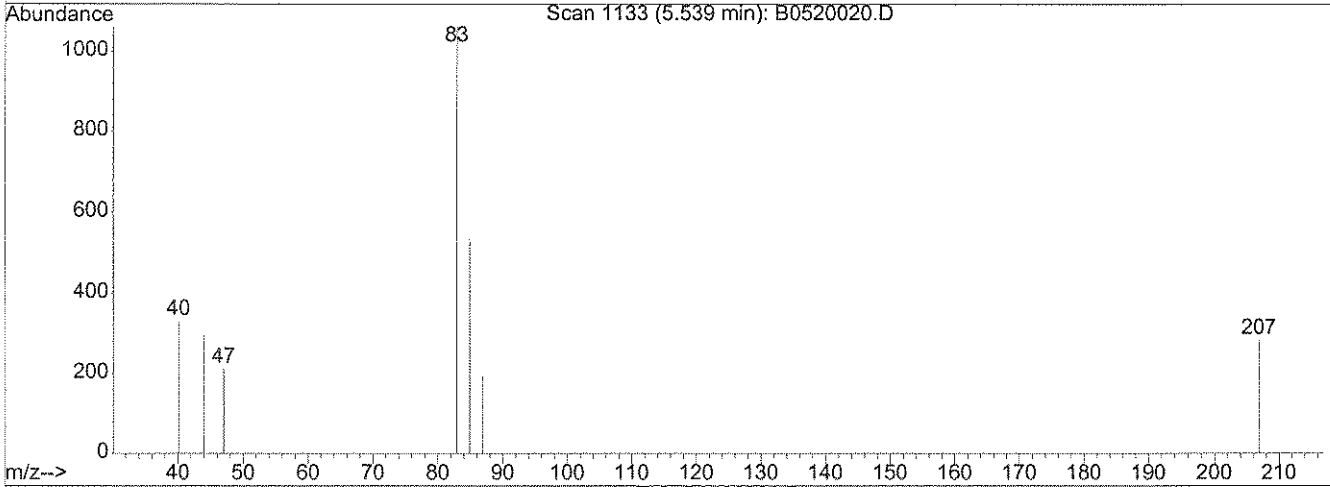
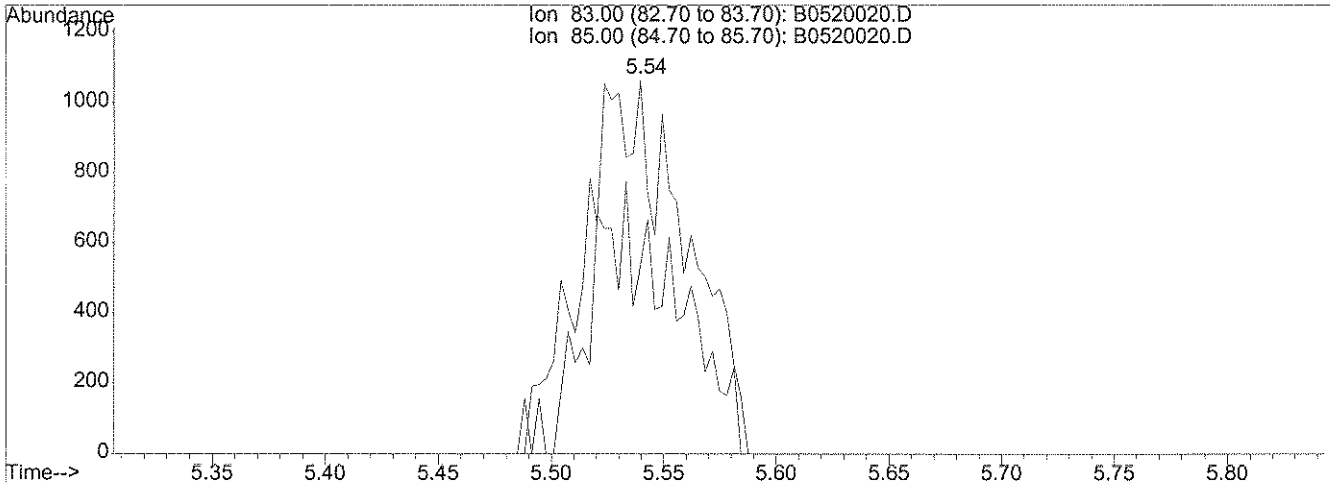
Ion	Exp%	Act%
83.00	100	100
85.00	64.00	12.75#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D
 Acq On : 20 May 2008 15:02
 Sample : JPL110-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:24 2008

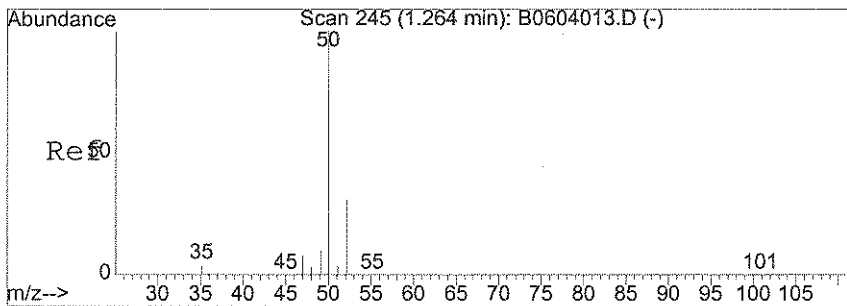
Vial: 17
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00
 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



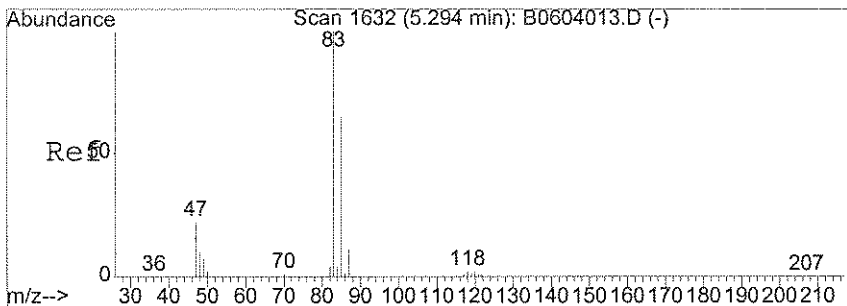
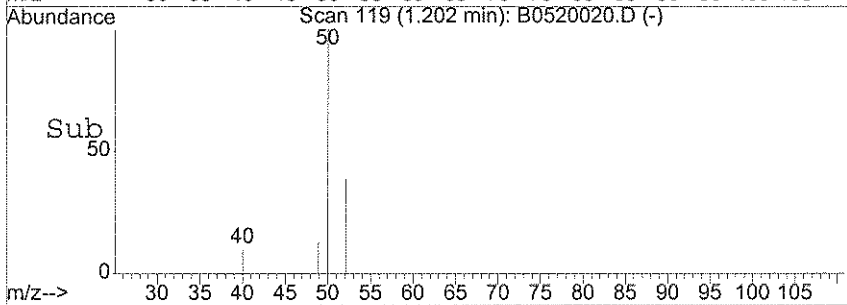
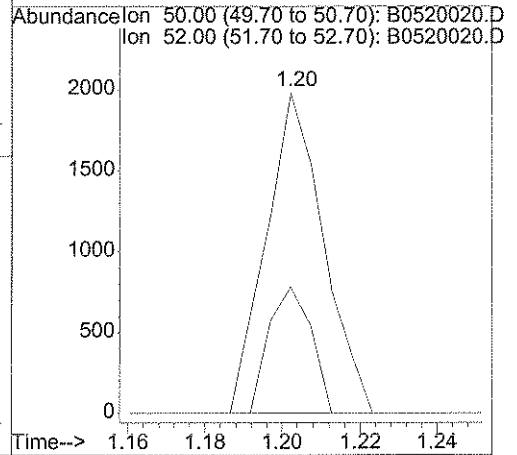
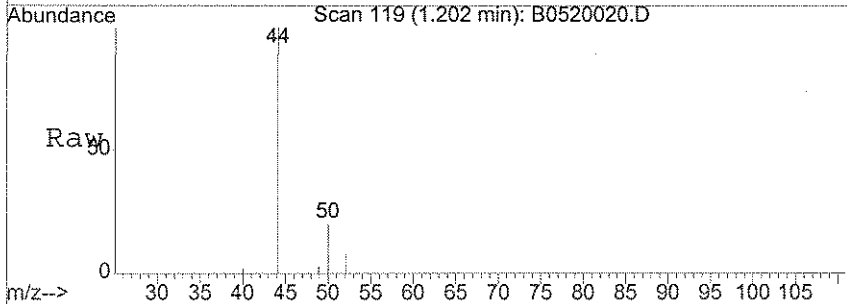
TIC: B0520020.D

(34) Chloroform (C)		
5.54min	0.43ug/l m	
response	3382	
Ion	Exp%	Act%
83.00	100	100
85.00	64.00	8.16#
0.00	0.00	0.00
0.00	0.00	0.00



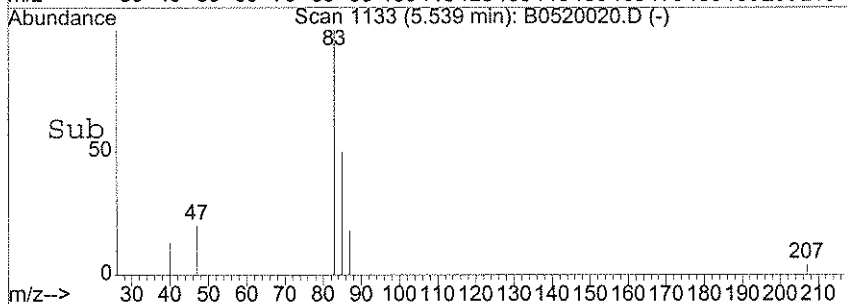
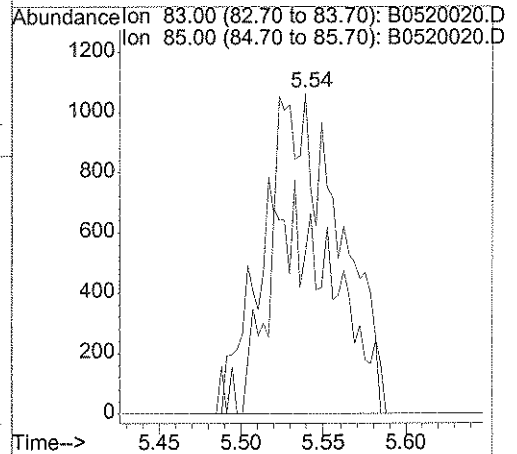
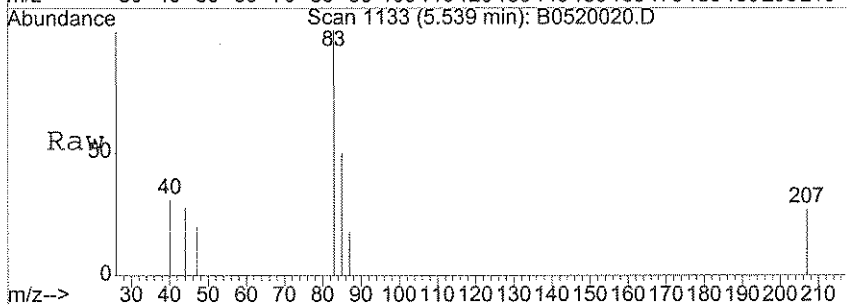
#3
 Chloromethane
 Concen: 0.38 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0520020.D
 Acq: 20 May 2008 15:02

Tgt Ion: 50 Resp: 2036
 Ion Ratio Lower Upper
 50 100
 52 29.3 12.5 52.5



#34
 Chloroform
 Concen: 0.43 ug/l m
 RT: 5.54 min Scan# 1133
 Delta R.T. -0.00 min
 Lab File: B0520020.D
 Acq: 20 May 2008 15:02

Tgt Ion: 83 Resp: 3382
 Ion Ratio Lower Upper
 83 100
 85 8.2 44.0 84.0#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-005
 Lab File ID: B0520021.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:30
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.37	J
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	3.8	
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	3.3	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-005
 Lab File ID: B0520021.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:30
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	Q
		<u>ug/L</u>	
108-88-3	Toluene	0.50	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	0.41	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-005
 Lab File ID: B0520021.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:30
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

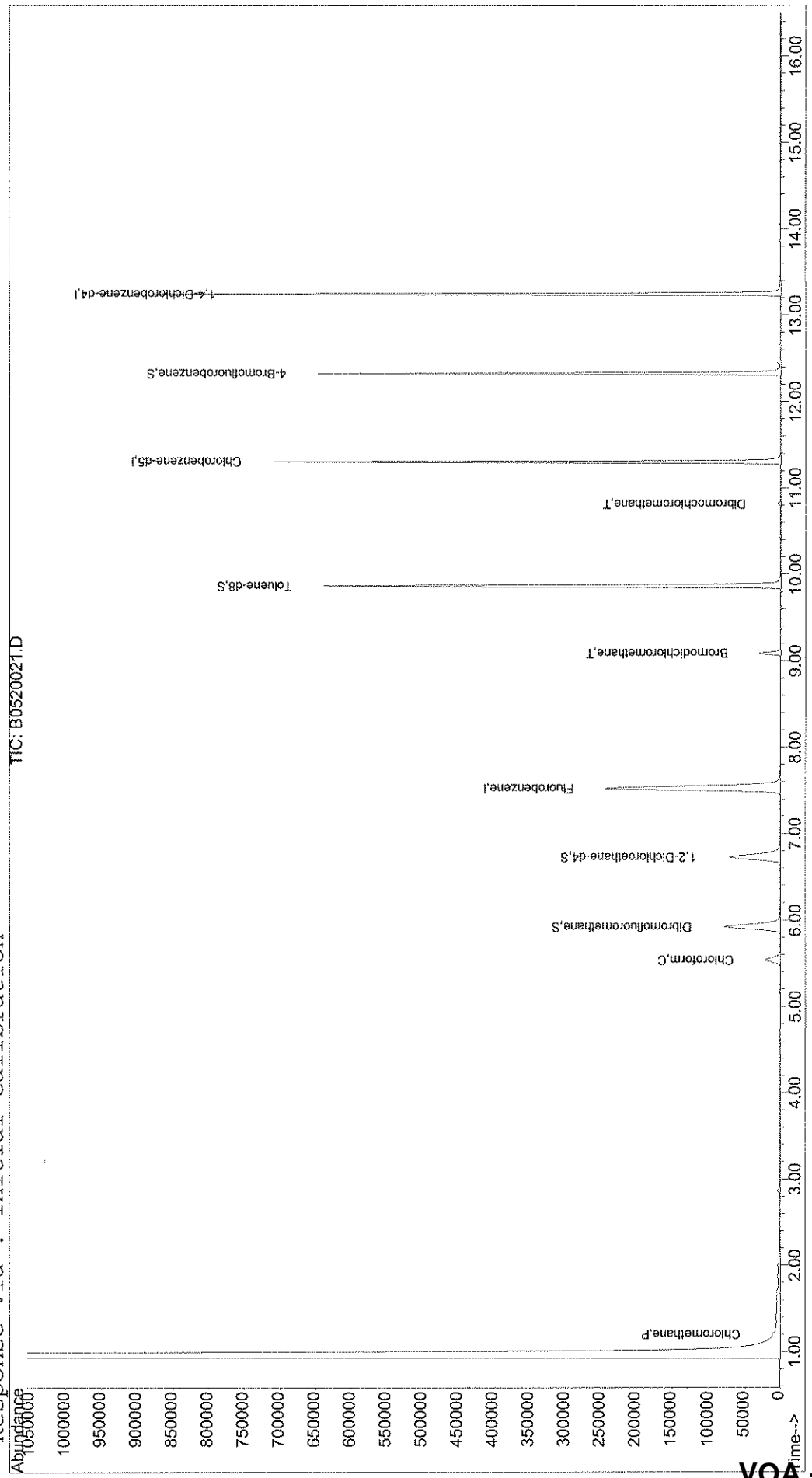
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520021.D
Acq On : 20 May 2008 15:30
Sample : JPL110-005
Misc : #5 10ML PFW+IS/SS (524)
MS Integration Params: rteint.p
Quant Time: May 21 16:27 2008
Vial: 18
Operator: LPM
Inst : Buddha
Multiplr: 1.00
Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520021.D
 Acq On : 20 May 2008 15:30
 Sample : JPL110-005
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:27 2008

Vial: 18
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	422659	25.00	ug/l	0.00 79.65%
54) Chlorobenzene-d5	11.30	117	355482	25.00	ug/l	0.00 80.80%
74) 1,4-Dichlorobenzene-d4	13.25	152	199793	25.00	ug/l	0.00 76.84%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	96057	20.21	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	101.05%
40) 1,2-Dichloroethane-d4	6.73	65	117783	29.19	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	116.76%
55) Toluene-d8	9.86	98	424743	24.43	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	97.72%
76) 4-Bromofluorobenzene	12.32	95	158257	26.75	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	107.00%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	2253	0.37	ug/l	93
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	2.86	84	2275	Below Cal		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.		

5/23/08

(#) = qualifier out of range (m) = manual integration
 B0520021.D B8260W.M Wed May 21 16:27:54 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520021.D
 Acq On : 20 May 2008 15:30
 Sample : JPL110-005
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:27 2008

Vial: 18
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.85	96	34		N.D.	
30) 2-Butanone	4.87	43	58		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.35	41	34		N.D.	
34) Chloroform	5.54	83	34269	3.82	ug/l #	62
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	6.68	78	31		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	8.87	41	30		N.D.	
50) Bromodichloromethane	9.09	83	21021	3.27	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	9.94	92	33		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	10.46	97	31		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.73	43	91		N.D.	
63) Dibromochloromethane	10.82	129	2291	0.41	ug/l	93
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	717		N.D.	
66) Chlorobenzene	11.47	112	29		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

5/23/08

(#) = qualifier out of range (m) = manual integration
 B0520021.D B8260W.M Wed May 21 16:27:55 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520021.D
 Acq On : 20 May 2008 15:30
 Sample : JPL110-005
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:27 2008

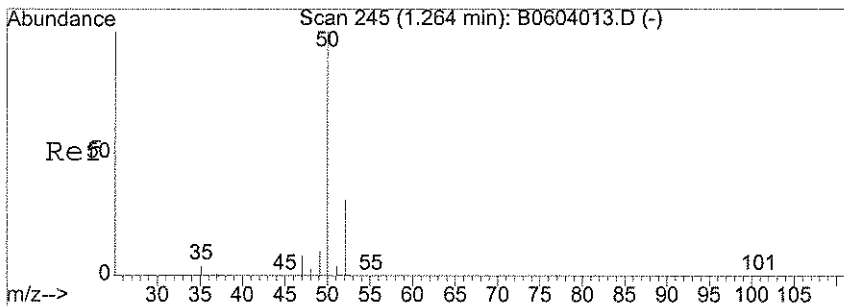
Vial: 18
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

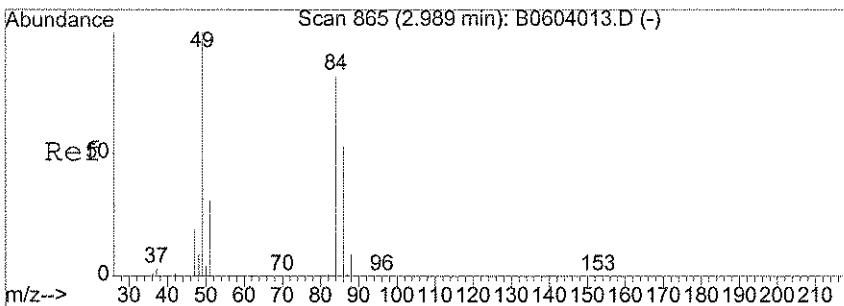
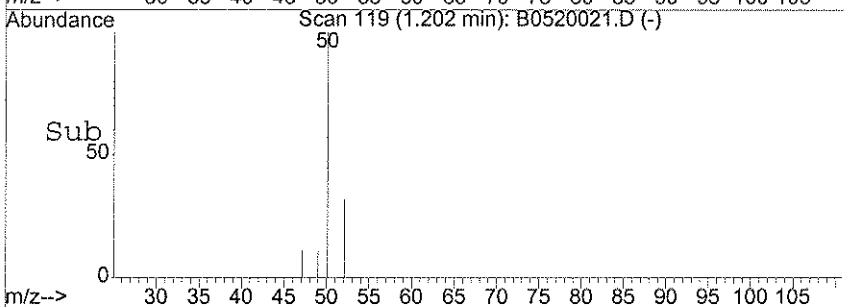
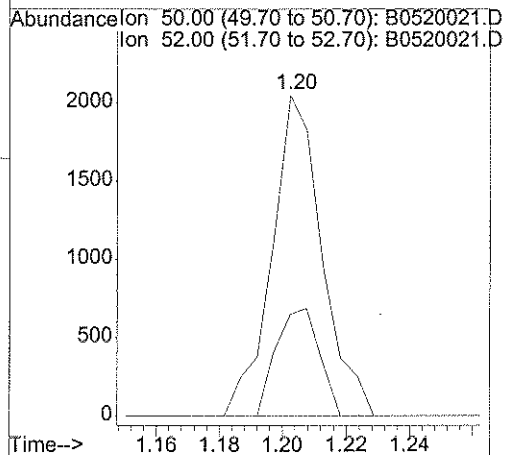
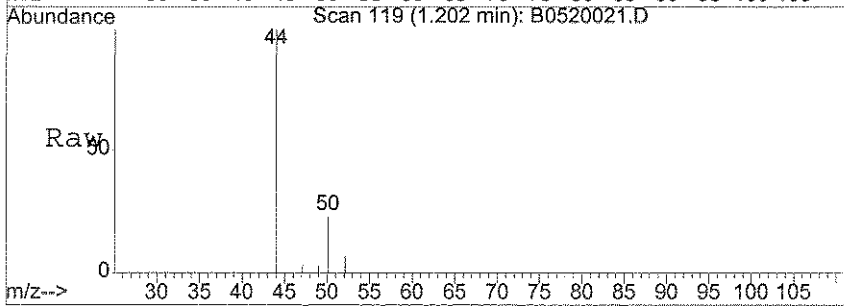
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	96		N.D.	
69) m,p-Xylene	11.52	106	62		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.90	104	29		N.D.	
72) Bromoform	12.08	173	331		N.D.	
73) Isopropylbenzene	12.18	105	74		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.64	156	30		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.52	91	29		N.D.	
82) 4-Chlorotoluene	12.68	91	79		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	63		N.D.	
84) tert-Butylbenzene	12.91	119	38		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	110		N.D.	
86) sec-butylbenzene	13.08	105	254		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	32		N.D.	
88) 4-Isopropyltoluene	13.20	119	434		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	36		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	34		N.D.	
91) n-Butylbenzene	13.52	91	134		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	117		N.D.	
94) Hexachlorobutadiene	14.89	225	116		N.D.	
95) Naphthalene	14.98	128	282		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	67		N.D.	

5/23/08 LPM



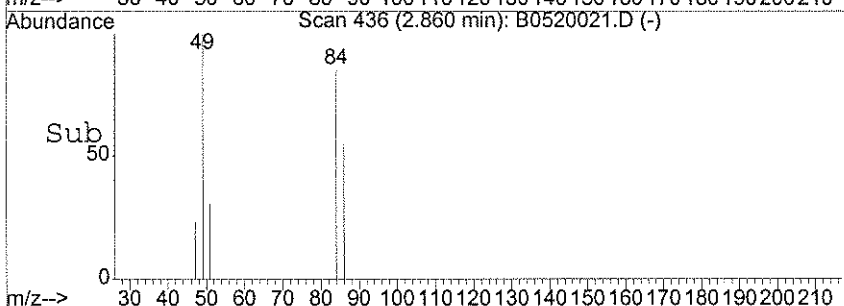
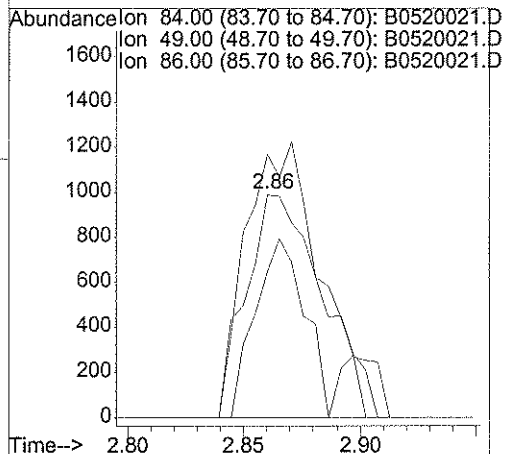
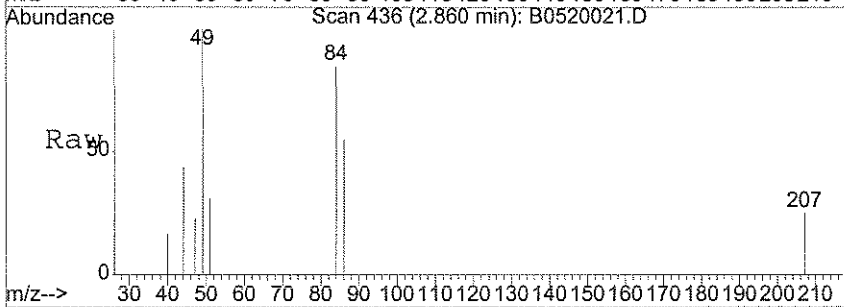
#3
 Chloromethane
 Concen: 0.37 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. 0.00 min
 Lab File: B0520021.D
 Acq: 20 May 2008 15:30

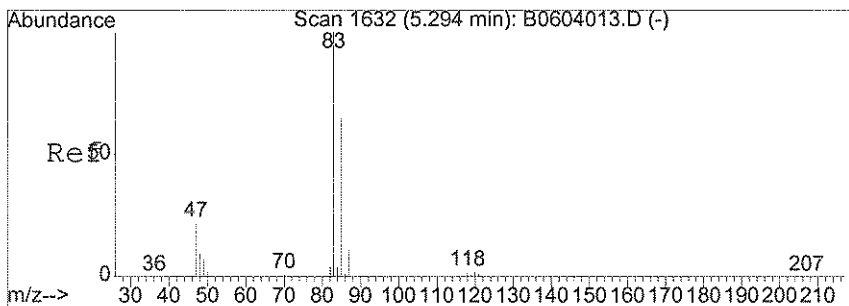
Tgt Ion	Resp	Lower	Upper
50	2253		
52	28.7	12.5	52.5



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.86 min Scan# 436
 Delta R.T. 0.00 min
 Lab File: B0520021.D
 Acq: 20 May 2008 15:30

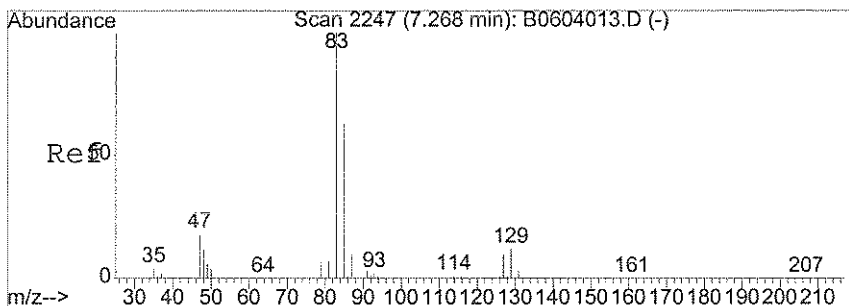
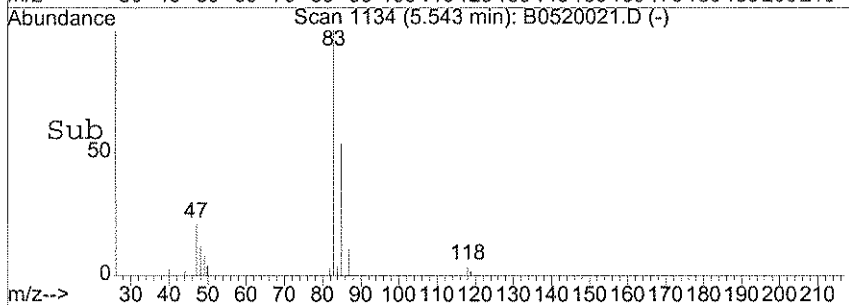
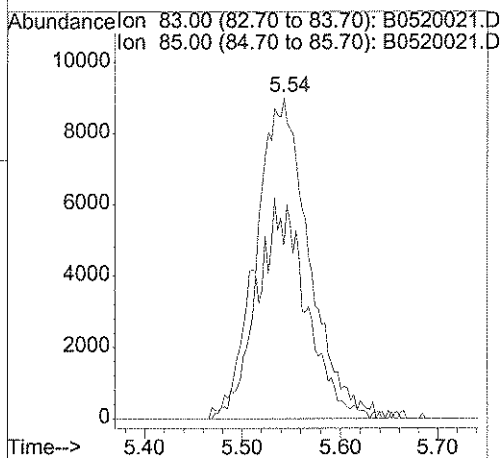
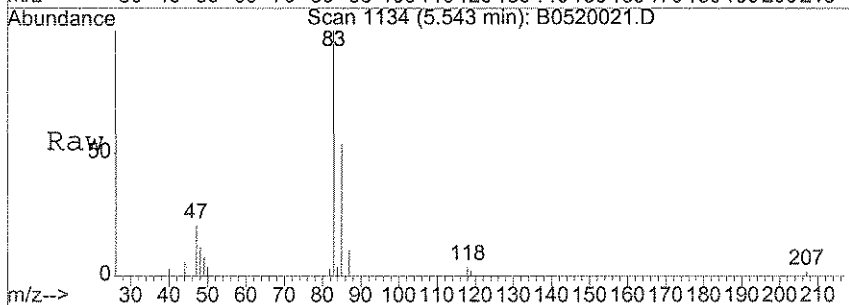
Tgt Ion	Resp	Lower	Upper
84	2275		
49	123.6	113.6	153.6
86	52.0	45.8	85.8





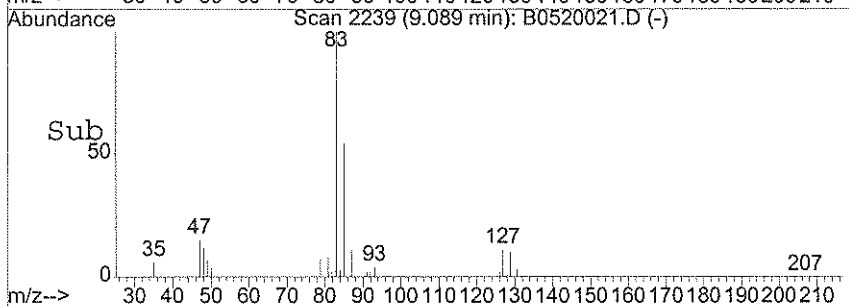
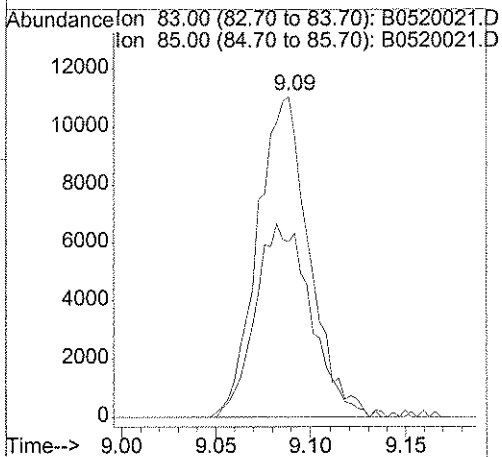
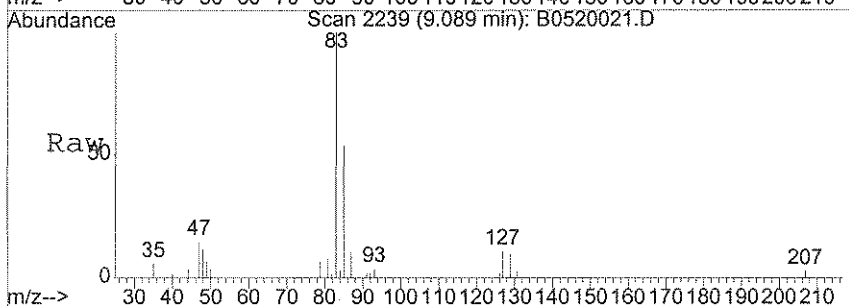
#34
 Chloroform
 Concen: 3.82 ug/l
 RT: 5.54 min Scan# 1134
 Delta R.T. 0.00 min
 Lab File: B0520021.D
 Acq: 20 May 2008 15:30

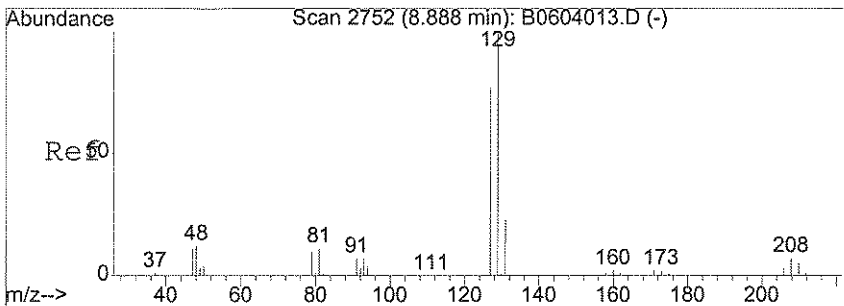
Tgt Ion	Resp	Lower	Upper
83	34269		
85	34.1	44.0	84.0#



#50
 Bromodichloromethane
 Concen: 3.27 ug/l
 RT: 9.09 min Scan# 2239
 Delta R.T. 0.01 min
 Lab File: B0520021.D
 Acq: 20 May 2008 15:30

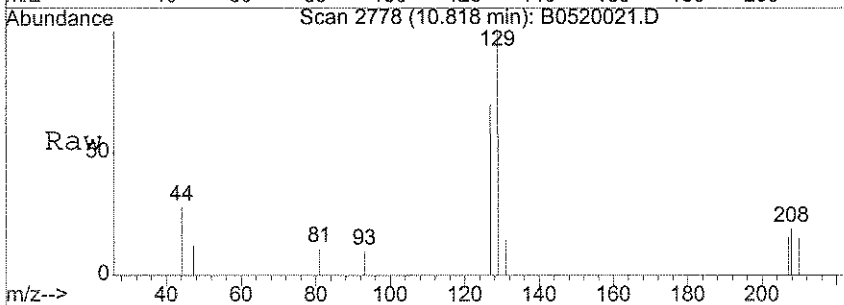
Tgt Ion	Resp	Lower	Upper
83	21021		
85	64.4	43.0	83.0



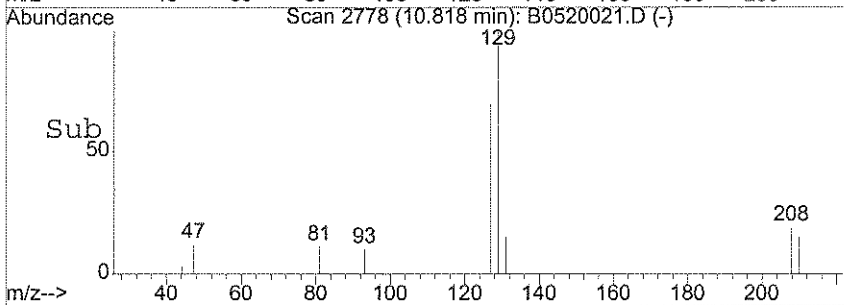
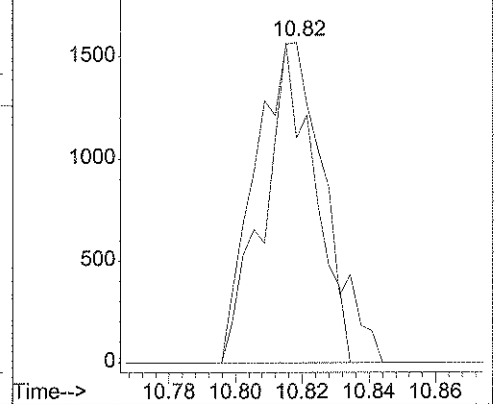


#63
 Dibromochloromethane
 Concen: 0.41 ug/l
 RT: 10.82 min Scan# 2778
 Delta R.T. 0.00 min
 Lab File: B0520021.D
 Acq: 20 May 2008 15:30

Tgt Ion: 129 Resp: 2291
 Ion Ratio Lower Upper
 129 100
 127 72.3 58.5 98.5



Abundance Ion 129.00 (128.70 to 129.70): B052002
 Ion 127.00 (126.70 to 127.70): B052002



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-13-5/13/08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-006
 Lab File ID: B0520022.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.87	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-13-5/13/08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-006
 Lab File ID: B0520022.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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	1,1,1,2-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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-13-5/13/08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-006
 Lab File ID: B0520022.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 15:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

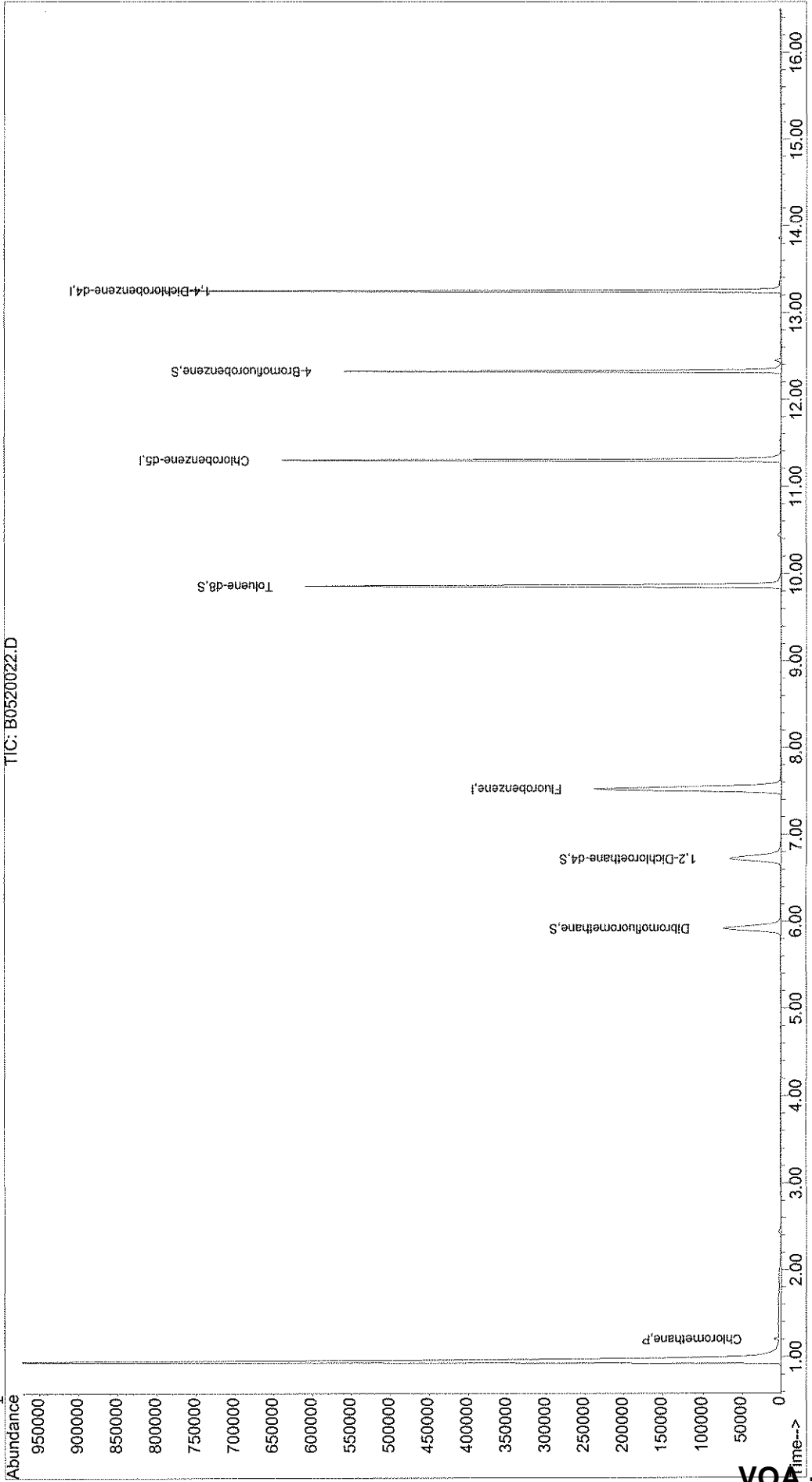
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520022.D Vial: 19
Acq On : 20 May 2008 15:58 Operator: LPM
Sample : JPL110-006 Inst : Buddha
Misc : #4 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:28 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520022.D
 Acq On : 20 May 2008 15:58
 Sample : JPL110-006
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:28 2008

Vial: 19
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	394603	25.00	ug/l	0.00	74.37%
54) Chlorobenzene-d5	11.30	117	324680	25.00	ug/l	0.00	73.80%
74) 1,4-Dichlorobenzene-d4	13.25	152	183466	25.00	ug/l	0.00	70.56%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	91345	20.59	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	102.95%	
40) 1,2-Dichloroethane-d4	6.72	65	111618	29.63	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	118.52%	
55) Toluene-d8	9.86	98	399388	25.15	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	100.60%	
76) 4-Bromofluorobenzene	12.32	95	143386	26.39	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	105.56%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	4984	0.87	ug/l	95
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	2.87	84	675	Below Cal	#	70
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.		

5/23/08

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520022.D
 Acq On : 20 May 2008 15:58
 Sample : JPL110-006
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:28 2008

Vial: 19
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.95	43	41		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.47	41	32		N.D.	
34) Chloroform	5.53	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	6.70	78	44		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	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	9.94	92	119		N.D.	
57) trans-1,3-Dichloropropene	10.28	75	29		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	10.74	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	11.30	91	565		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

5/23/08 LPM

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520022.D
 Acq On : 20 May 2008 15:58
 Sample : JPL110-006
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:28 2008

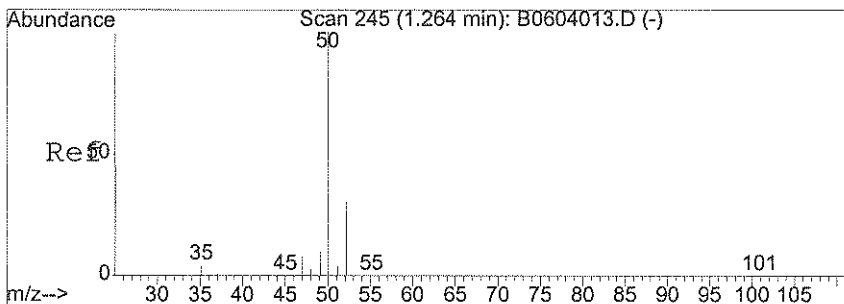
Vial: 19
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

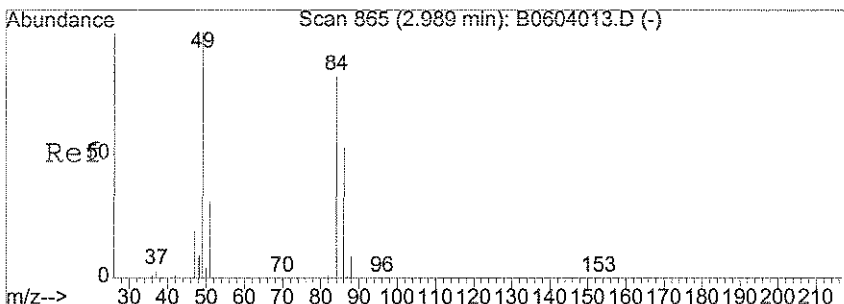
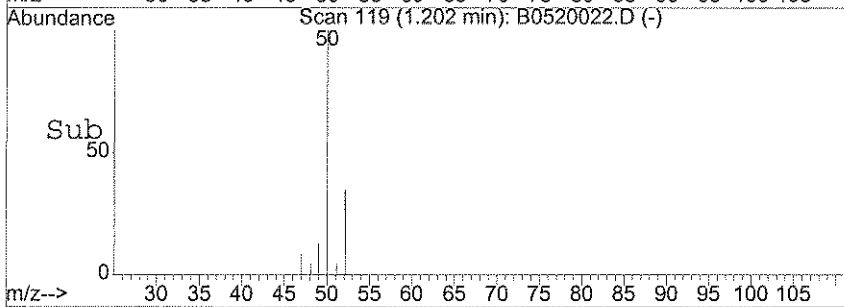
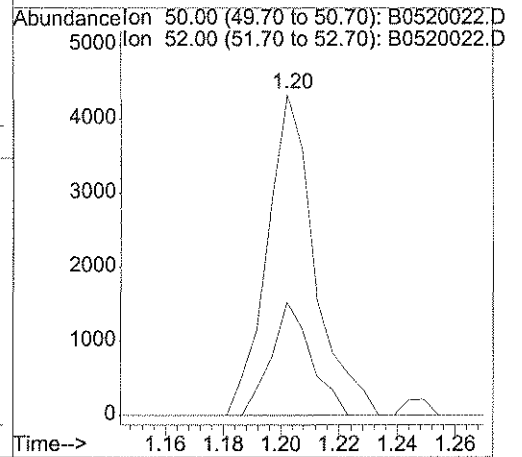
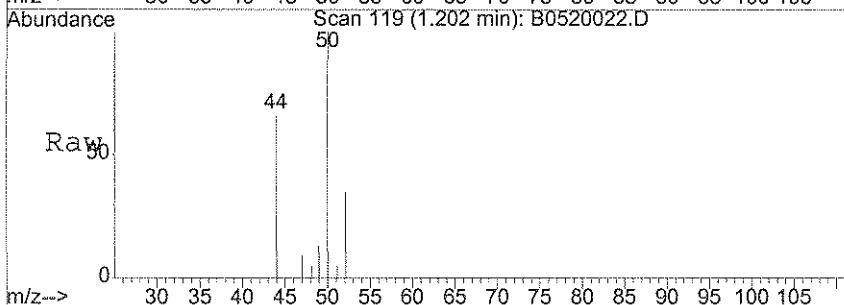
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.52	91	885		N.D.	
69) m,p-Xylene	11.52	106	344		N.D.	
70) o-xylene	11.86	106	29		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.17	105	56		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	12.65	120	32		N.D.	
81) 2-Chlorotoluene	12.64	91	35		N.D.	
82) 4-Chlorotoluene	12.69	91	44		N.D.	
83) 1,3,5-Trimethylbenzene	12.96	105	124		N.D.	
84) tert-Butylbenzene	12.91	119	49		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	124		N.D.	
86) sec-butylbenzene	13.09	105	97		N.D.	
87) 1,3-Dichlorobenzene	13.26	146	74		N.D.	
88) 4-Isopropyltoluene	13.20	119	354		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	74		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	38		N.D.	
91) n-Butylbenzene	13.52	91	342		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	35		N.D.	
94) Hexachlorobutadiene	14.89	225	55		N.D.	
95) Naphthalene	14.97	128	60		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	36		N.D.	

5/23/08 LPM



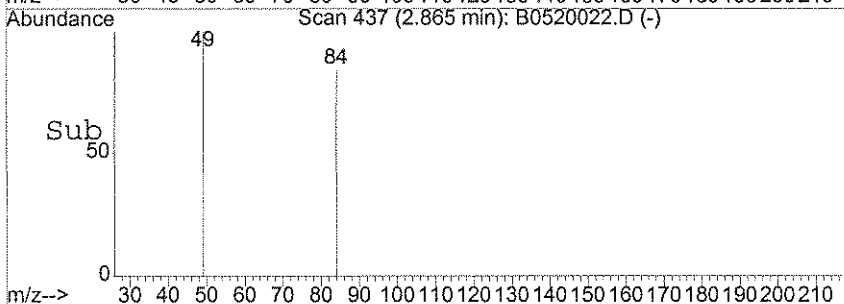
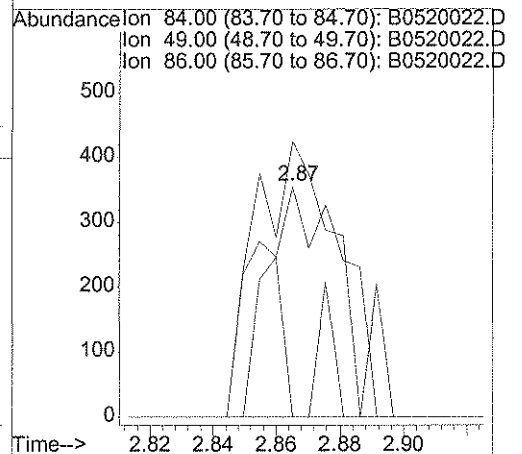
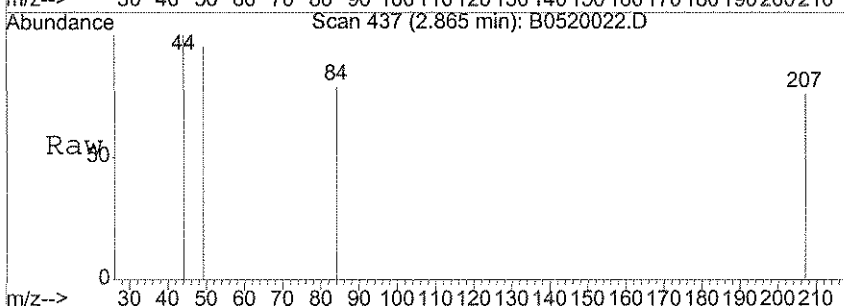
#3
 Chloromethane
 Concen: 0.87 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0520022.D
 Acq: 20 May 2008 15:58

Tgt Ion	Resp	Lower	Upper
50	4984		
52	29.9	12.5	52.5



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0520022.D
 Acq: 20 May 2008 15:58

Tgt Ion	Resp	Lower	Upper
84	675		
49	113.9	113.6	153.6
86	21.3	45.8	85.8#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-007
 Lab File ID: B0520023.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 16:26
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.42	J
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	3.5	
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	3.0	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-007
 Lab File ID: B0520023.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 16:26
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	Q
		<u>ug/L</u>	
108-88-3	Toluene	0.50	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	0.41	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-007
 Lab File ID: B0520023.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 16:26
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

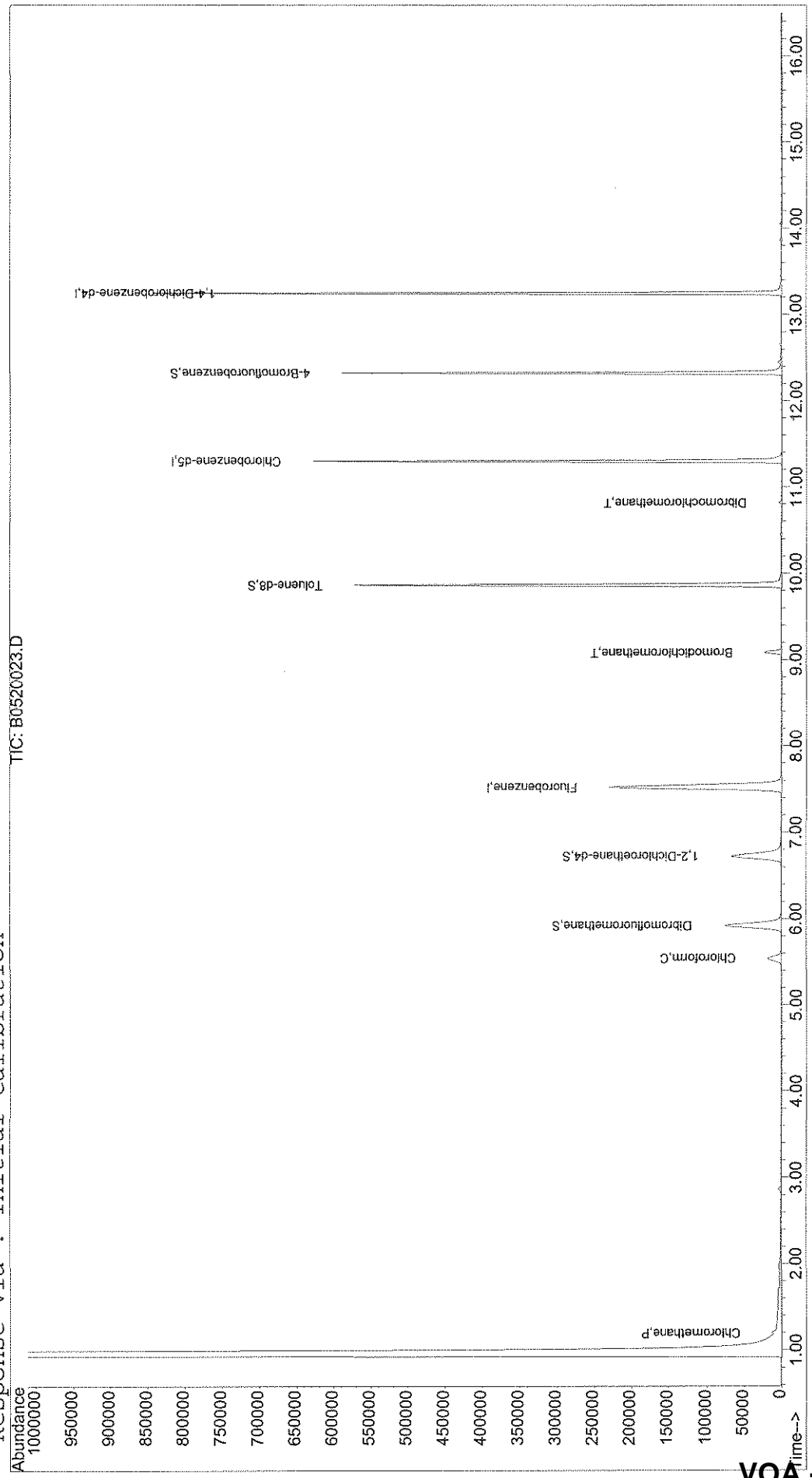
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520023.D Vial: 20
Acq On : 20 May 2008 16:26 Operator: LPM
Sample : JPL110-007 Inst : Buddha
Misc : #5 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:29 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520023.D
 Acq On : 20 May 2008 16:26
 Sample : JPL110-007
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:29 2008

Vial: 20
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	381719	25.00	ug/l	0.00	71.94%
54) Chlorobenzene-d5	11.30	117	310022	25.00	ug/l	0.00	70.47%
74) 1,4-Dichlorobenzene-d4	13.25	152	193455	25.00	ug/l	0.00	74.40%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	92428	21.53	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	107.65%	
40) 1,2-Dichloroethane-d4	6.73	65	110793	30.40	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	121.60%#	
55) Toluene-d8	9.86	98	368423	24.29	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	97.16%	
76) 4-Bromofluorobenzene	12.32	95	142707	24.91	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	99.64%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	2311	0.42	ug/l	95
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	2.50	76	151	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	2.87	84	2027	Below Cal		88
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\BUDDHA\052008\B0520023.D
 Acq On : 20 May 2008 16:26
 Sample : JPL110-007
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:29 2008

Vial: 20
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.79	96	29		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	5.54	83	27999ms	3.45	ug/l	40
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	6.72	78	31		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	8.82	41	38		N.D.	
50) Bromodichloromethane	9.09	83	17343	2.98	ug/l	100
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	9.94	92	32		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	10.11	69	29		N.D.	
59) 1,1,2-Trichloroethane	10.44	97	40		N.D.	
60) Tetrachloroethene	10.47	166	31		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.73	43	38		N.D.	
63) Dibromochloromethane	10.81	129	1965	0.41	ug/l	87
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.31	91	557		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
 B0520023.D B8260W.M Wed May 21 16:30:04 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520023.D
 Acq On : 20 May 2008 16:26
 Sample : JPL110-007
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:29 2008

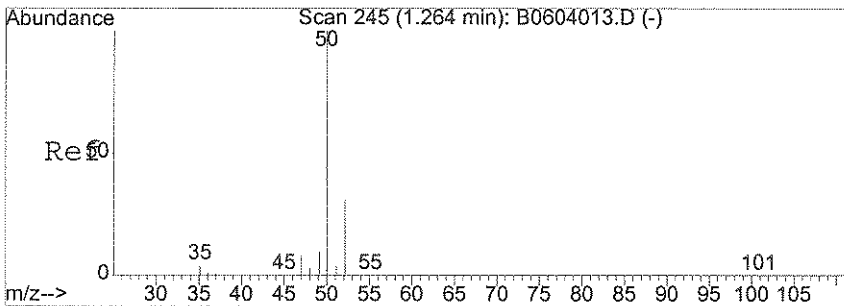
Vial: 20
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

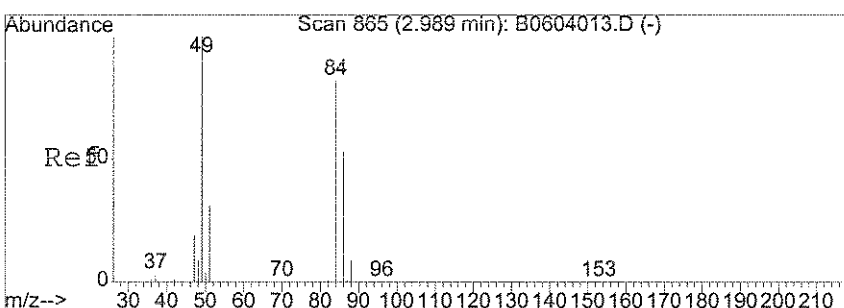
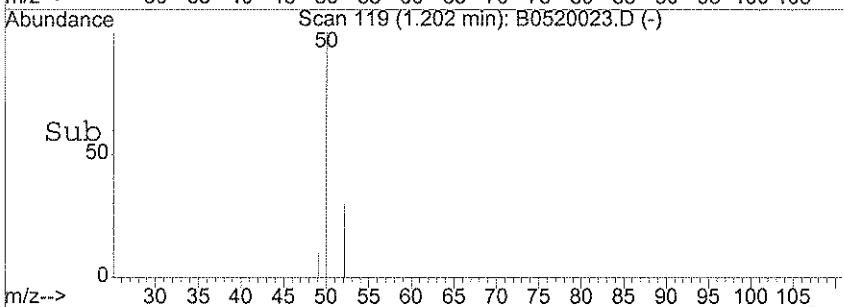
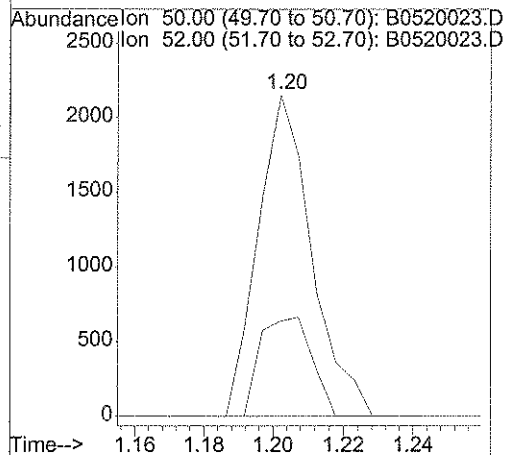
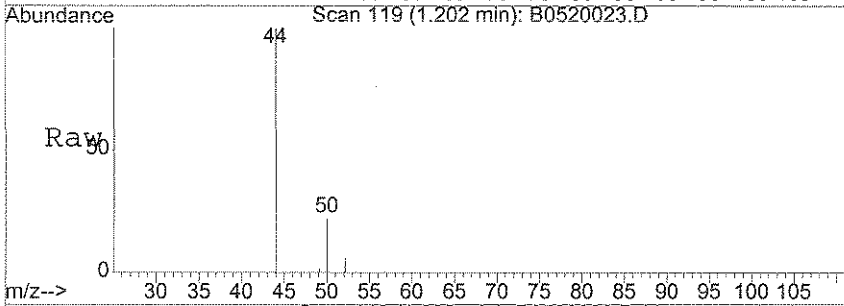
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	103		N.D.	
69) m,p-Xylene	11.52	106	67		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.90	104	39		N.D.	
72) Bromoform	12.08	173	246		N.D.	
73) Isopropylbenzene	12.18	105	30		N.D.	
75) trans-1,4-Dichloro-2-buten	12.34	53	29		N.D.	
77) Bromobenzene	12.32	156	35		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	34		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.59	91	42		N.D.	
82) 4-Chlorotoluene	12.59	91	42		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	65		N.D.	
84) tert-Butylbenzene	12.96	119	30		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	163		N.D.	
86) sec-butylbenzene	13.09	105	50		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	70		N.D.	
88) 4-Isopropyltoluene	13.19	119	286		N.D.	
89) 1,4-Dichlorobenzene	13.20	146	70		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	37		N.D.	
91) n-Butylbenzene	13.52	91	235		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.02	75	31		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	46		N.D.	
94) Hexachlorobutadiene	0.00	225	0		N.D.	
95) Naphthalene	14.98	128	104		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	42		N.D.	

SP 3/08 LPM



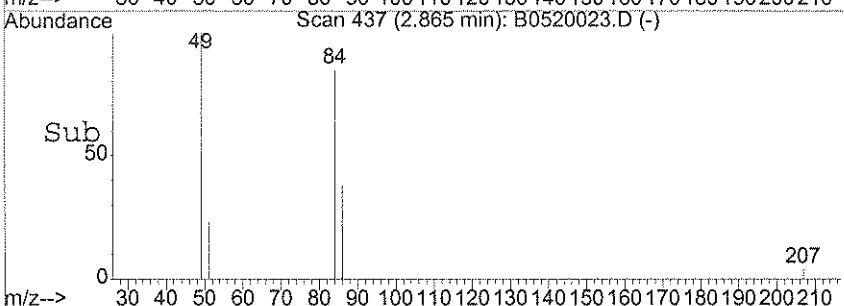
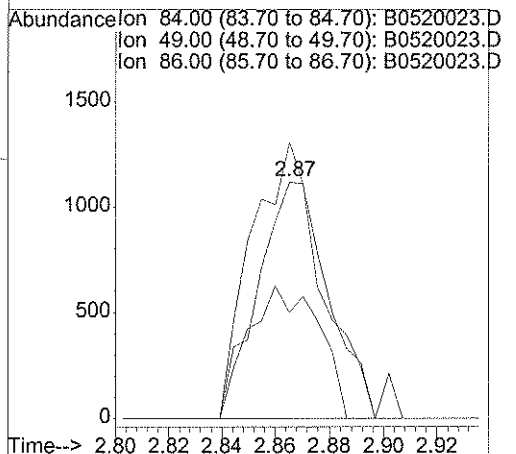
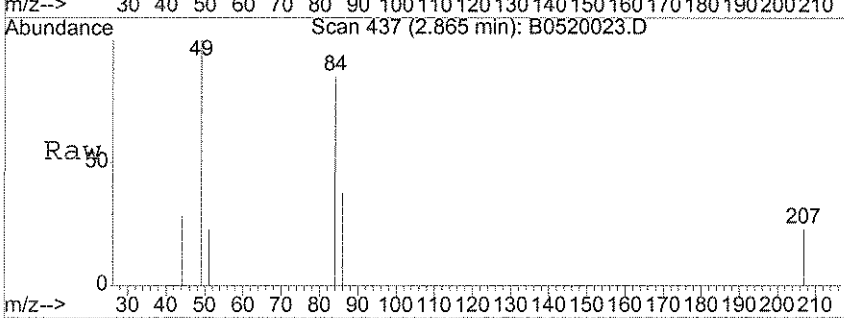
#3
 Chloromethane
 Concen: 0.42 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0520023.D
 Acq: 20 May 2008 16:26

Tgt Ion	Resp	Lower	Upper
50	2311		
52	29.6	12.5	52.5



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0520023.D
 Acq: 20 May 2008 16:26

Tgt Ion	Resp	Lower	Upper
84	2027		
49	119.3	113.6	153.6
86	55.8	45.8	85.8



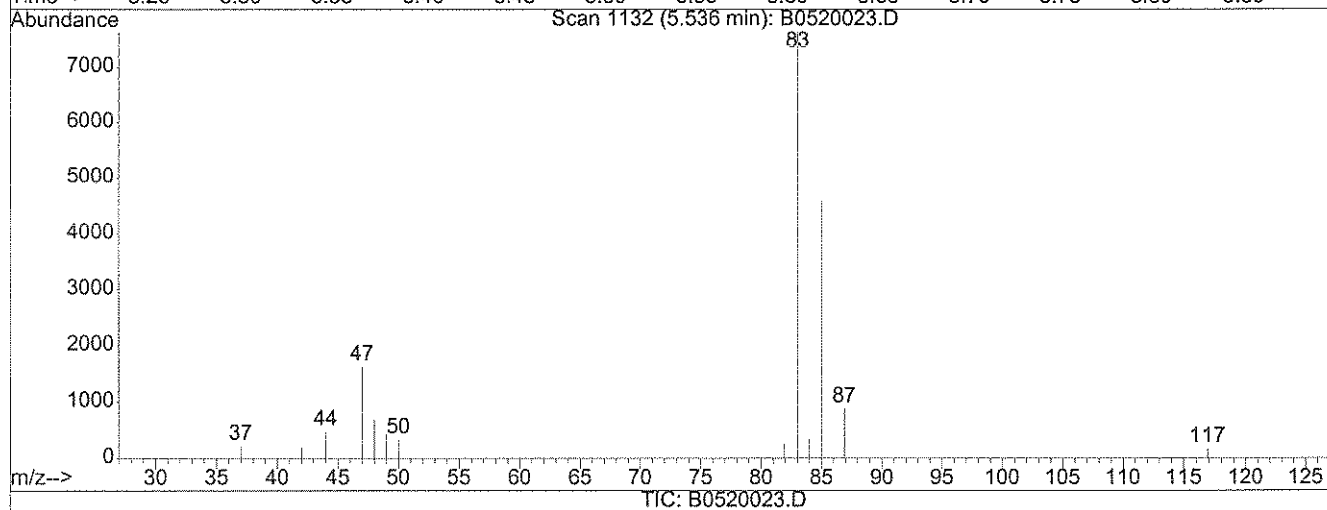
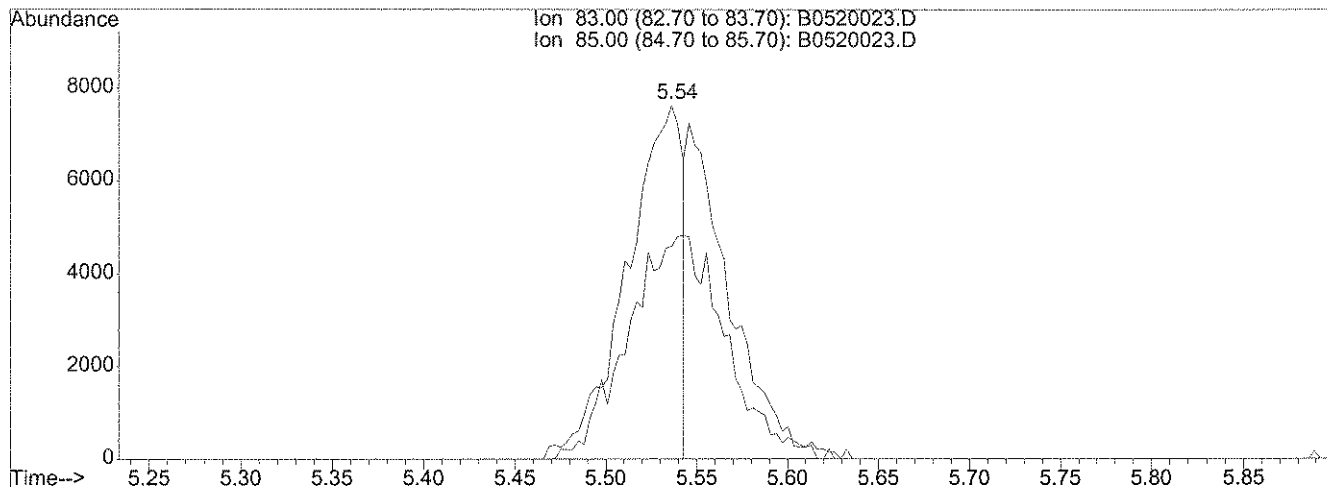
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520023.D
 Acq On : 20 May 2008 16:26
 Sample : JPL110-007
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:29 2008

Vial: 20
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(34) Chloroform (C)

5.54min 1.99ug/l

response 16104

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	111.32#
0.00	0.00	0.00
0.00	0.00	0.00

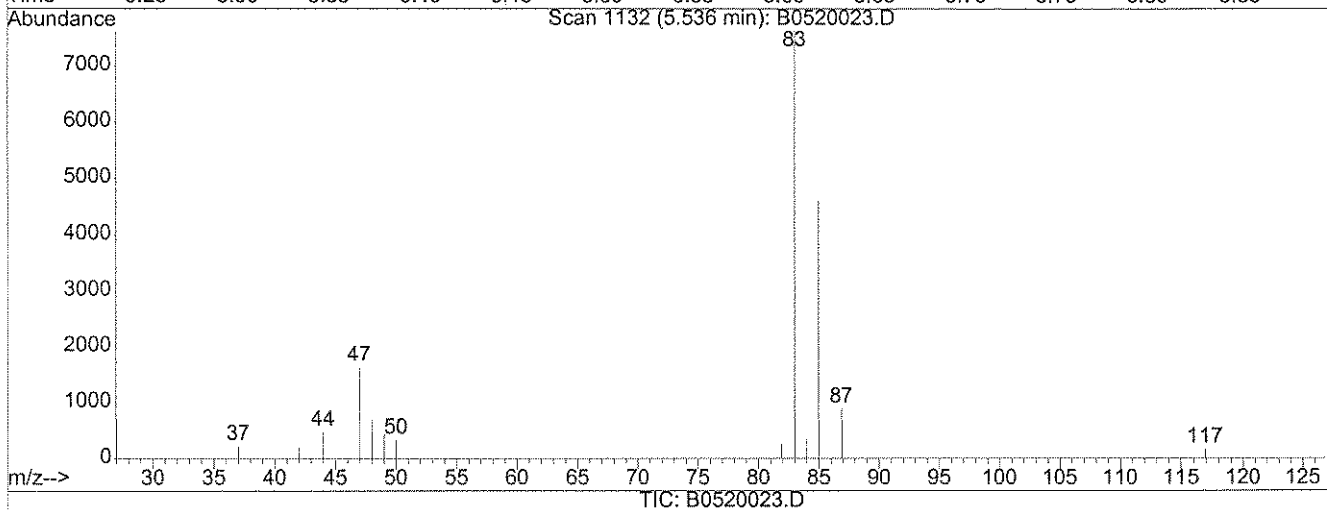
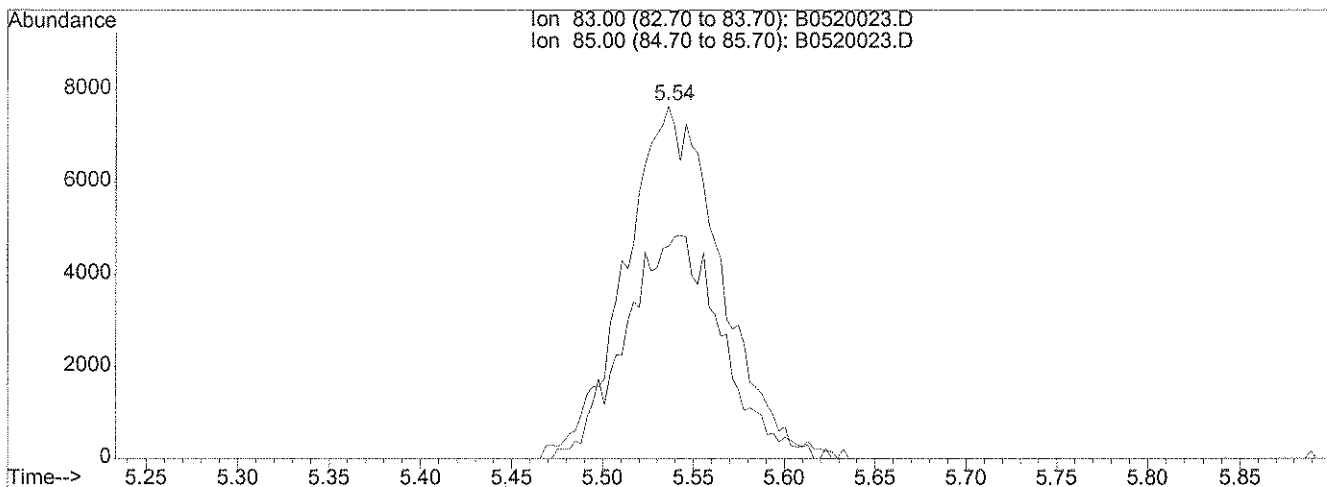
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520023.D
 Acq On : 20 May 2008 16:26
 Sample : JPL110-007
 Misc : #5 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:29 2008

Vial: 20
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration

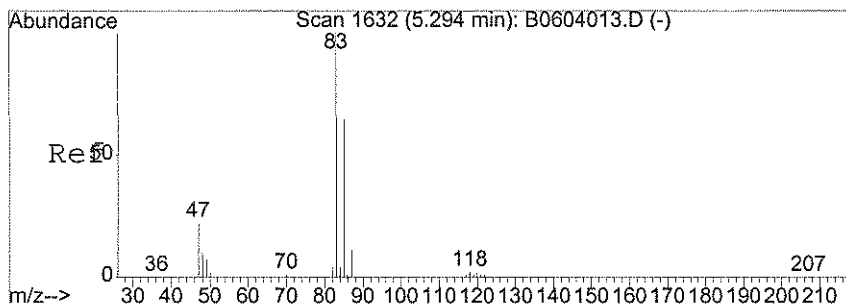


(34) Chloroform (C)

5.54min 3.45ug/l m

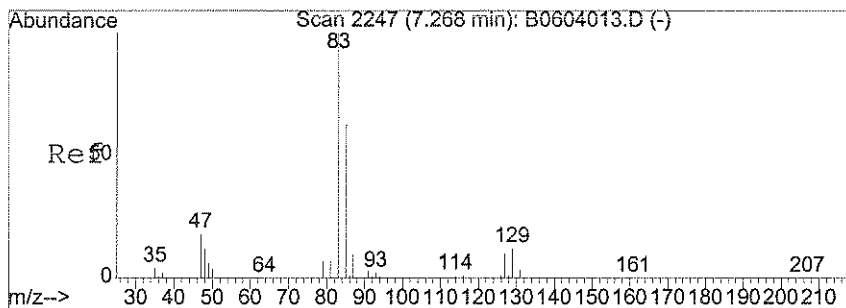
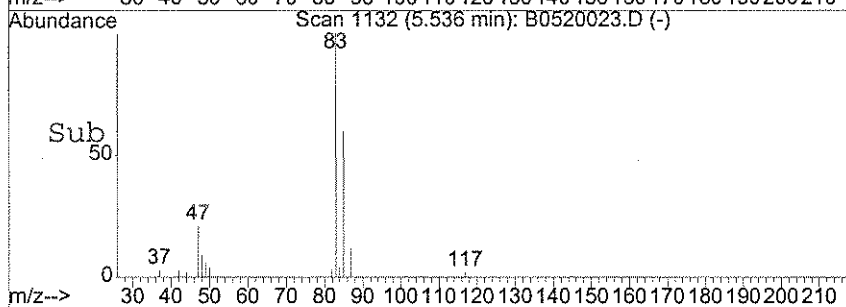
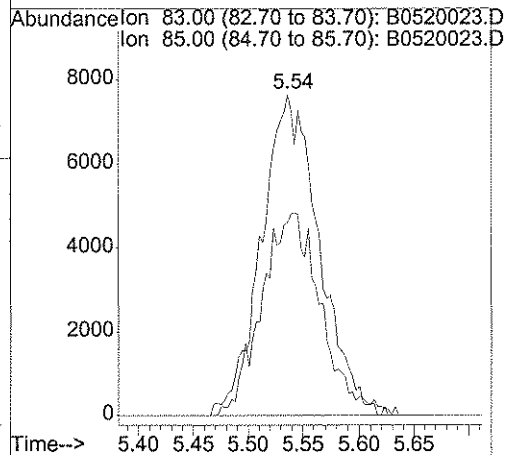
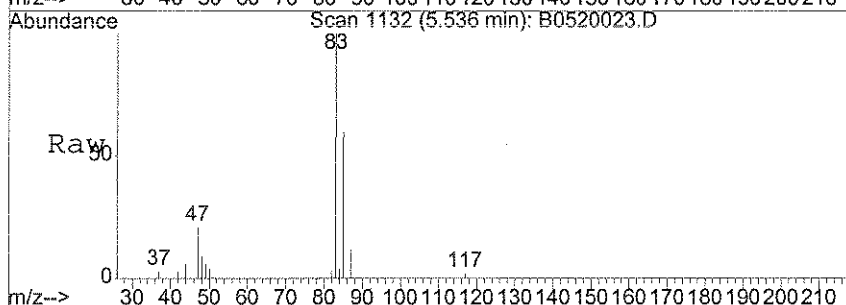
response 27999

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	64.03
0.00	0.00	0.00
0.00	0.00	0.00



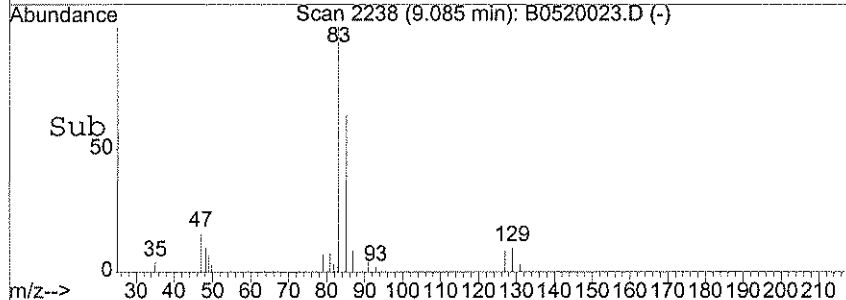
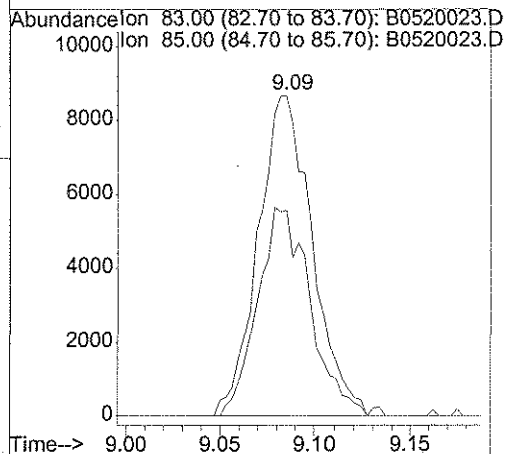
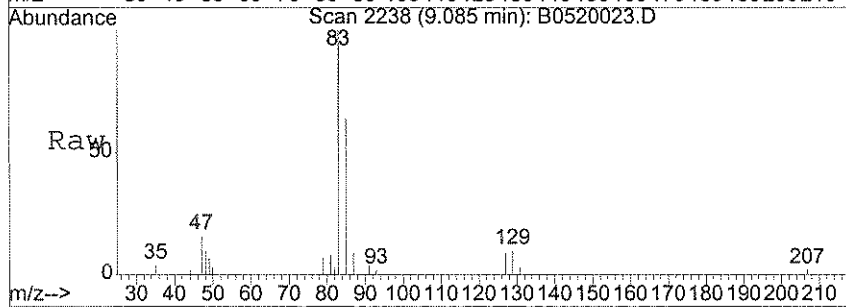
#34
 Chloroform
 Concen: 3.45 ug/l m
 RT: 5.54 min Scan# 1132
 Delta R.T. -0.00 min
 Lab File: B0520023.D
 Acq: 20 May 2008 16:26

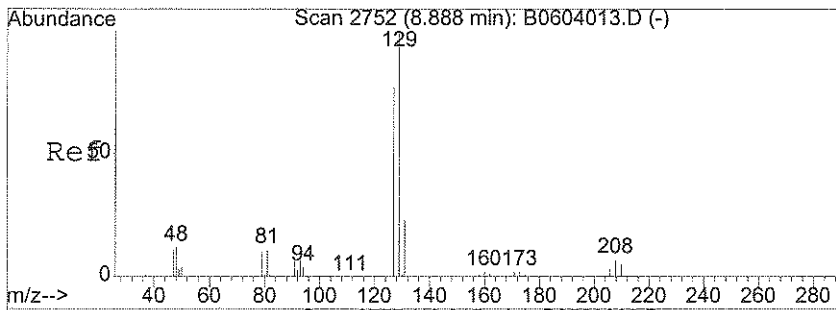
Tgt Ion	Resp	Lower	Upper
83	27999		
85	64.0	44.0	84.0



#50
 Bromodichloromethane
 Concen: 2.98 ug/l
 RT: 9.09 min Scan# 2238
 Delta R.T. 0.00 min
 Lab File: B0520023.D
 Acq: 20 May 2008 16:26

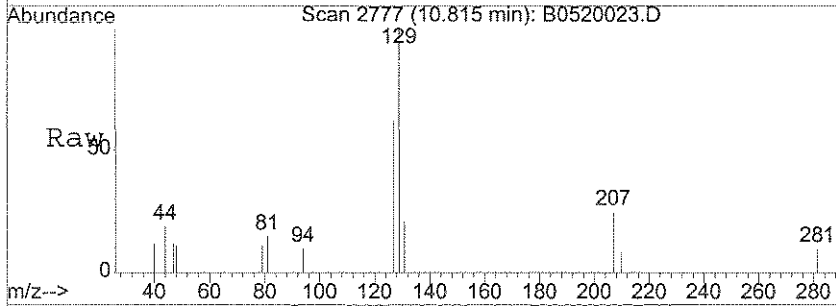
Tgt Ion	Resp	Lower	Upper
83	17343		
85	62.9	43.0	83.0



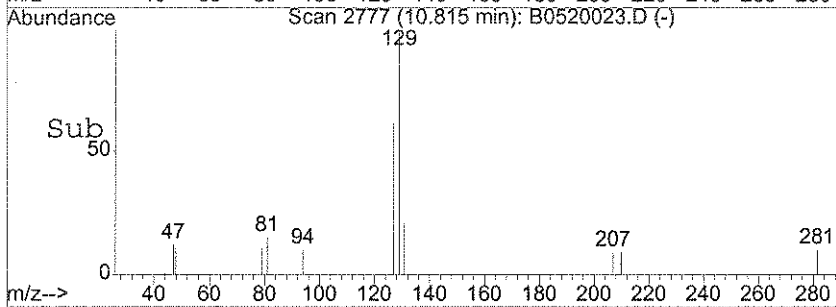
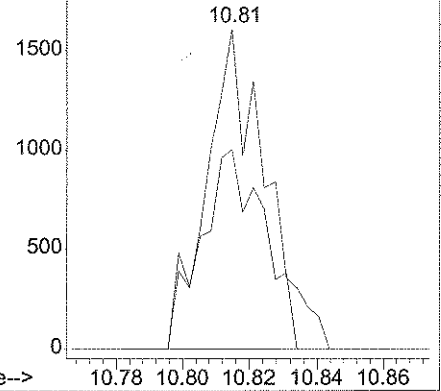


#63
 Dibromochloromethane
 Concen: 0.41 ug/l
 RT: 10.81 min Scan# 2777
 Delta R.T. -0.00 min
 Lab File: B0520023.D
 Acq: 20 May 2008 16:26

Tgt Ion: 129 Resp: 1965
 Ion Ratio Lower Upper
 129 100
 127 67.0 58.5 98.5



Abundance Ion 129.00 (128.70 to 129.70): B052002
 Ion 127.00 (126.70 to 127.70): B052002



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-13-5/13/08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-008
 Lab File ID: B0520016.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 13:12
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-13-5/13/08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-008
 Lab File ID: B0520016.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 13:12
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-13-5/13/08

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-008
 Lab File ID: B0520016.D
 Date Collected: 05/13/2008
 Date/Time Analyzed: 05/20/2008 13:12
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

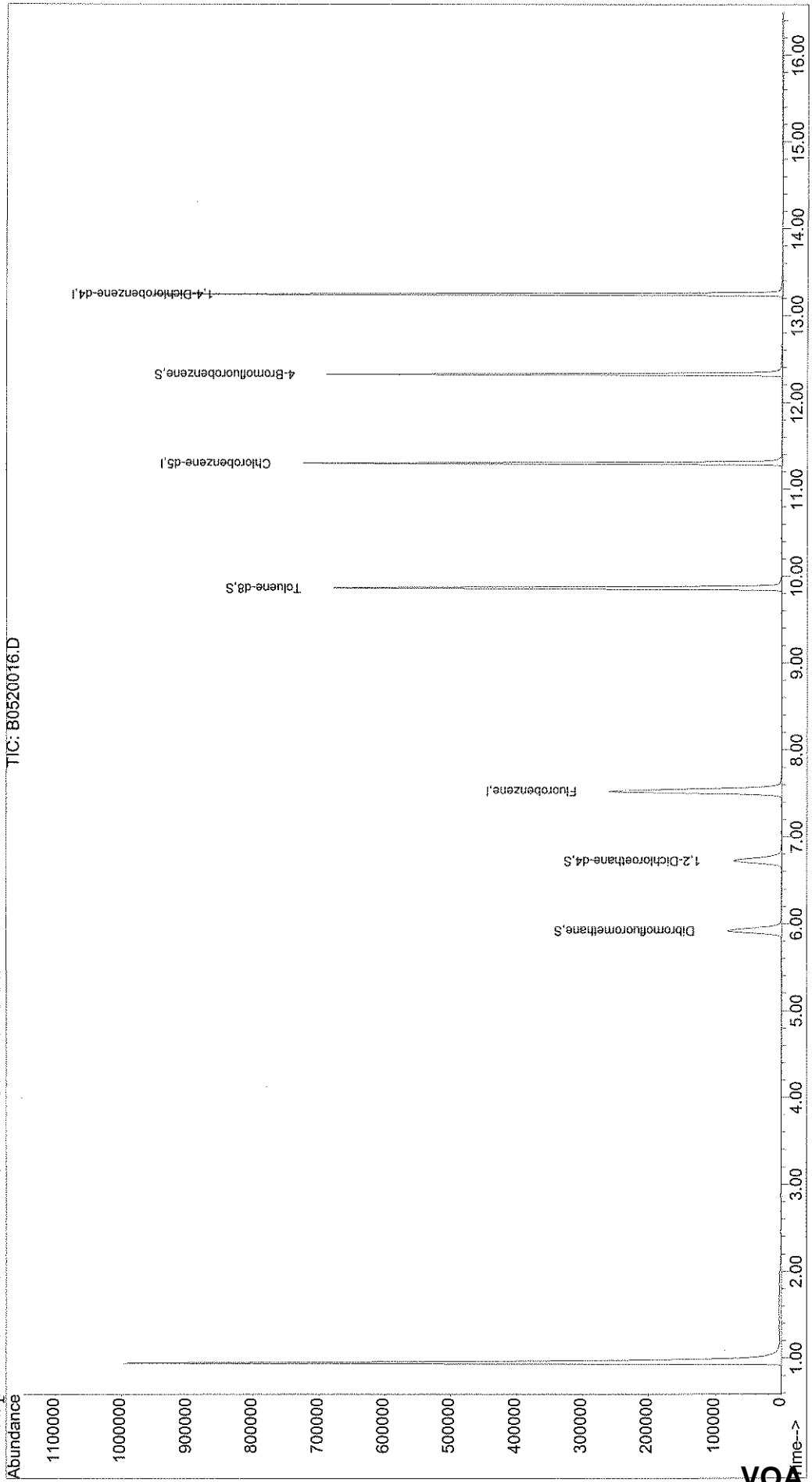
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520016.D
Acq On : 20 May 2008 13:12
Sample : JPL110-008
Misc : #2 10ML PFW+IS/SS (524)
MS Integration Params: rteint.p
Quant Time: May 21 16:16 2008
Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520016.D
 Acq On : 20 May 2008 13:12
 Sample : JPL110-008
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:16 2008

Vial: 11
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	438782	25.00	ug/l	0.00 82.69%
54) Chlorobenzene-d5	11.30	117	368405	25.00	ug/l	0.00 83.74%
74) 1,4-Dichlorobenzene-d4	13.25	152	221077	25.00	ug/l	0.00 85.03%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	101088	20.49	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	102.45%
40) 1,2-Dichloroethane-d4	6.72	65	119586	28.54	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	114.16%
55) Toluene-d8	9.86	98	439540	24.39	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	97.56%
76) 4-Bromofluorobenzene	12.32	95	166837	25.49	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	101.96%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	84	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	2.86	84	380	Below Cal	#	1
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.		

5/23/08 LP

(#) = qualifier out of range (m) = manual integration
 B0520016.D B8260W.M Wed May 21 16:16:40 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520016.D
 Acq On : 20 May 2008 13:12
 Sample : JPL110-008
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:16 2008

Vial: 11
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.95	43	29		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	6.69	78	32		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	8.41	83	31		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	9.93	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	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.83	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	11.31	91	884		N.D.	
66) Chlorobenzene	11.33	112	40		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

4/23/08

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520016.D
 Acq On : 20 May 2008 13:12
 Sample : JPL110-008
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:16 2008

Vial: 11
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	131		N.D.	
69) m,p-Xylene	11.53	106	79		N.D.	
70) o-xylene	11.87	106	35		N.D.	
71) Styrene	11.87	104	41		N.D.	
72) Bromoform	12.31	173	38		N.D.	
73) Isopropylbenzene	12.17	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	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.59	91	78		N.D.	
82) 4-Chlorotoluene	12.69	91	78		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	192		N.D.	
84) tert-Butylbenzene	12.91	119	88		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	223		N.D.	
86) sec-butylbenzene	13.08	105	286		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	74		N.D.	
88) 4-Isopropyltoluene	13.19	119	792		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	119		N.D.	
90) 1,2-Dichlorobenzene	13.55	146	35		N.D.	
91) n-Butylbenzene	13.53	91	448		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	37		N.D.	
94) Hexachlorobutadiene	14.88	225	269		N.D.	
95) Naphthalene	14.99	128	326		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	111		N.D.	

5/23/08

TIC FORMS

SDG# JPL110

Volatiles Analysis

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-5

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-001
 Lab File ID: B0520017.D
 Date Collected: 05/13/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052008\B0520017.D Vial: 14
Acq On : 20 May 2008 13:41 Operator: LPM
Sample : JPL110-001 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520017.D B8260W.M Wed May 21 16:57:14 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-4

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-002
 Lab File ID: B0520018.D
 Date Collected: 05/13/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520018.D Vial: 15
Acq On : 20 May 2008 14:08 Operator: LPM
Sample : JPL110-002 Inst : Buddha
Misc : #4 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520018.D B8260W.M Wed May 21 16:57:29 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-3

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: 1

Contract: JPL Groundwater Monitorin
 Run Sequence: R028235
 Lab Sample ID: JPL110-003
 Lab File ID: B0520019.D
 Date Collected: 05/13/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000075-18-3 Dimethyl sulfide	2.421	8.7	JN
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520019.D
 Acq On : 20 May 2008 14:35
 Sample : JPL110-003
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: LSCINT.P

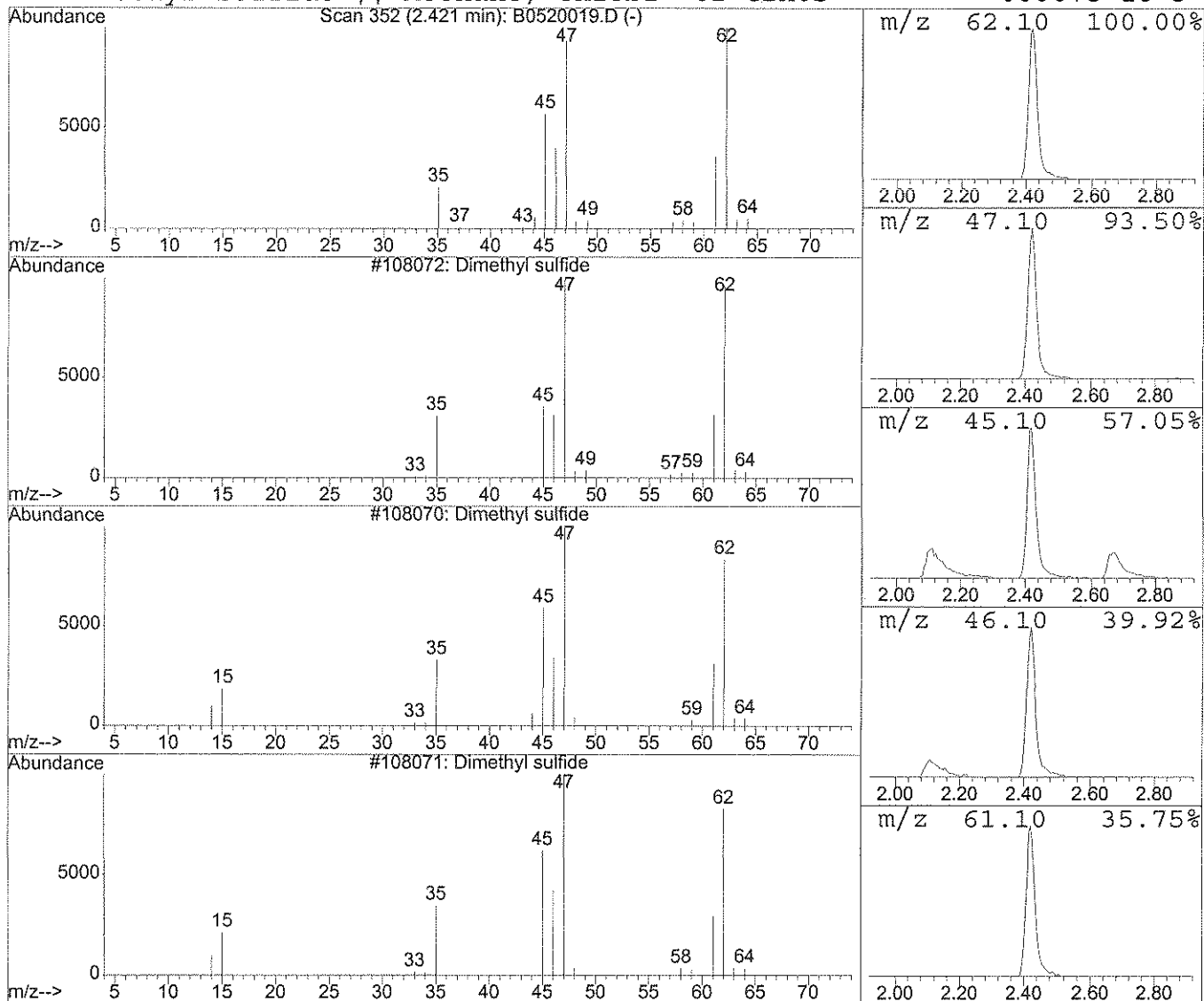
Vial: 16
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Library : D:\DATABASE\NIST129K.L

 Peak Number 1 Dimethyl sulfide Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
2.42	8.68 ug/l	287246	Fluorobenzene	827719	7.52

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dimethyl sulfide	62	C2H6S	000075-18-3	95
2		Dimethyl sulfide	62	C2H6S	000075-18-3	95
3		Dimethyl sulfide	62	C2H6S	000075-18-3	95
4		Dimethyl sulfide \$\$ Methane, thiobi	62	C2H6S	000075-18-3	91



Tentatively Identified Compound (LSC) summary

Operator ID: LPM Date Acquired: 20 May 2008 14:35
Data File: X:\MSVOA\BUDDHA\052008\B0520019.D
Name: JPL110-003
Misc: #3 10ML PFW+IS/SS (524)
Method: X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title: VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Dimethyl sulfide	2.42	8.7	ug/l	287246	ISTD01	7.52	827719	25.0
B0520019.D B8260W.M								
		Wed May 21 16:58:00		2008				

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-2

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL110-004
 Lab File ID: B0520020.D
 Date Collected: 05/13/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520020.D Vial: 17
Acq On : 20 May 2008 15:02 Operator: LPM
Sample : JPL110-004 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520020.D B8260W.M Wed May 21 16:58:07 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-24-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL110

Run Sequence: R028235

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL110-005

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520021.D

Level: (LOW/MED) _____

Date Collected: 05/13/2008

% Moisture: not dec. _____

Date Analyzed: 05/20/2008

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

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\BUDDHA\052008\B0520021.D Vial: 18
Acq On : 20 May 2008 15:30 Operator: LPM
Sample : JPL110-005 Inst : Buddha
Misc : #5 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520021.D B8260W.M Wed May 21 16:58:21 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-13-5/13/08

Lab Name: Pace Analytical Services

SDG No.: JPL110

Matrix: (SOIL/WATER) Water

Sample wt/vol: 10.0 (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: R028235

Lab Sample ID: JPL110-006

Lab File ID: B0520022.D

Date Collected: 05/13/2008

Date Analyzed: 05/20/2008

Dilution Factor: 1.0

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520022.D Vial: 19
Acq On : 20 May 2008 15:58 Operator: LPM
Sample : JPL110-006 Inst : Buddha
Misc : #4 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520022.D B8260W.M Wed May 21 16:58:34 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-4-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL110

Run Sequence: R028235

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL110-007

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520023.D

Level: (LOW/MED) _____

Date Collected: 05/13/2008

% Moisture: not dec. _____

Date Analyzed: 05/20/2008

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

01	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
02					
03					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520023.D Vial: 20
Acq On : 20 May 2008 16:26 Operator: LPM
Sample : JPL110-007 Inst : Buddha
Misc : #5 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520023.D B8260W.M Wed May 21 16:58:51 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-13-5/13/08

Lab Name: Pace Analytical Services

SDG No.: JPL110

Matrix: (SOIL/WATER) Water

Sample wt/vol: 10.0 (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: R028235

Lab Sample ID: JPL110-008

Lab File ID: B0520016.D

Date Collected: 05/13/2008

Date Analyzed: 05/20/2008

Dilution Factor: 1.0

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520016.D Vial: 11
Acq On : 20 May 2008 13:12 Operator: LPM
Sample : JPL110-008 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520016.D B8260W.M Wed May 21 16:57:03 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B052008MVOWB2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL110

Run Sequence: R028235

Matrix: (SOIL/WATER) Water

Lab Sample ID: B052008MVOWB2

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520013.D

Level: (LOW/MED) _____

Date Collected: _____

% Moisture: not dec. _____

Date Analyzed: 05/20/2008

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

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\BUDDHA\052008\B0520013.D Vial: 10
Acq On : 20 May 2008 11:50 Operator: LPM
Sample : B052008MVOWB2 Inst : Buddha
Misc : 10ML PFW+IS/SS(MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520013.D B8260W.M Wed May 21 16:56:46 2008

SAMPLE DATA

SDG# JPL110

Semivolatiles

1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-24-1

Lab Name: Pace Analytical Services
 SDG No.: JPL110
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 920.0 (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 & >11

Contract: JPL Groundwater Monitorin
 Run Sequence: R028332
 Lab Sample ID: JPL110-005
 Lab File ID: T0523008.D
 Date Collected: 05/13/2008
 Date Extracted: 05/20/2008
 Date Analyzed: 05/23/2008
 Dilution Factor: 1.0
 Extraction: (Type) CONT

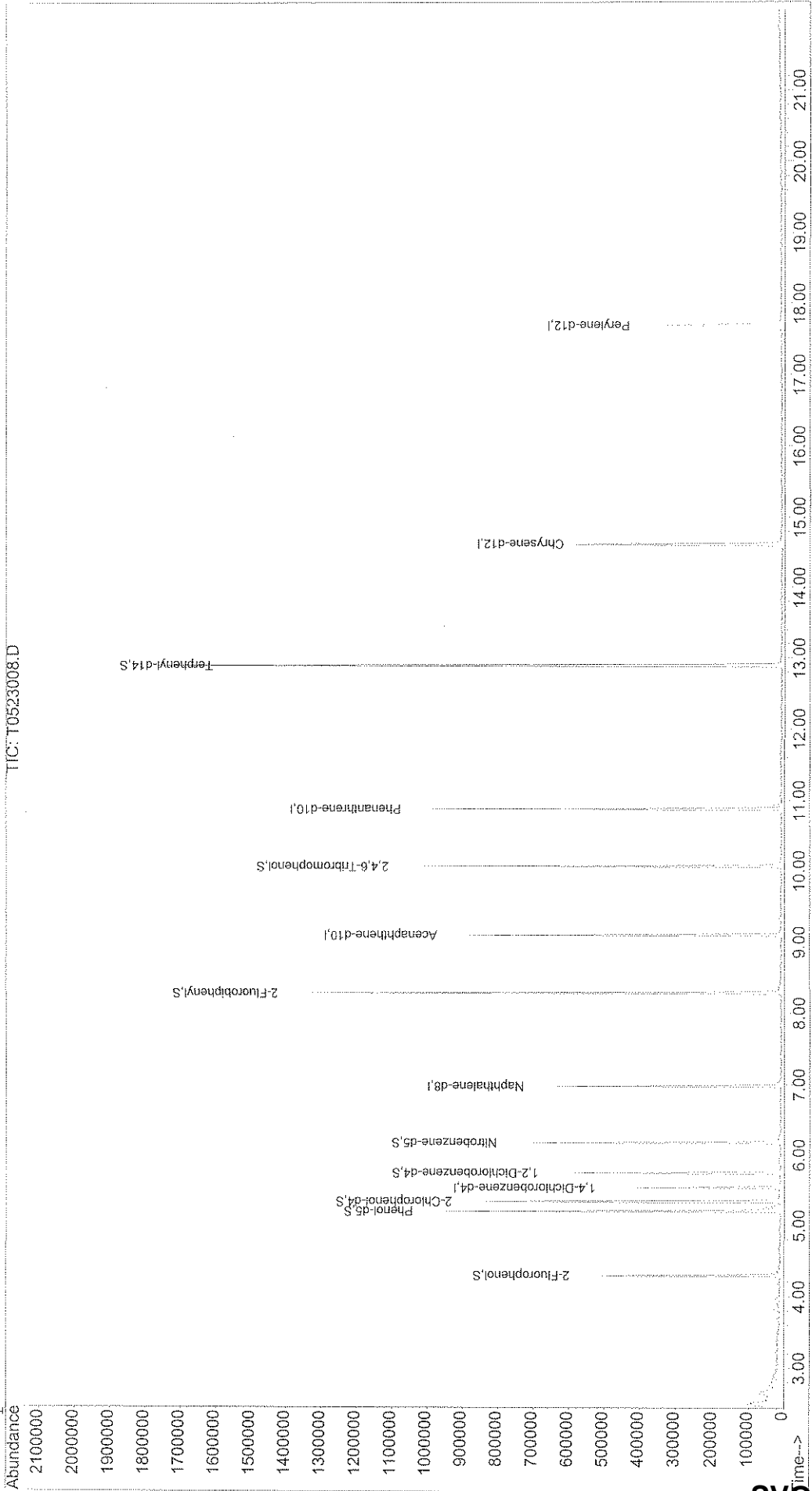
CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane	1.1	J

Comments:

Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523008.D Vial: 3
Acq On : 23 May 2008 11:45 Operator: VM
Sample : JPL110-005 Inst : GC/MS Ins
Misc : T5972 920ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 23 13:43 2008 Quant Results File: T8270M.RES

Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
Title : 8270 (625) SW846 BNA Calibration 5972T
Last Update : Fri May 23 13:36:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523008.D Vial: 3
 Acq On : 23 May 2008 11:45 Operator: VM
 Sample : JPL110-005 Inst : GC/MS Ins
 Misc : T5972 920ML->1ML+IS Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 23 13:43 2008 Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Fri May 23 13:36:50 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND
 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	5.54	152	71364	20.00	ng/ul	0.00 NA%
24) Naphthalene-d8	6.98	136	312952	20.00	ng/ul	-0.01 NA%
40) Acenaphthene-d10	9.10	164	189870	20.00	ng/ul	-0.01 NA%
68) Phenanthrene-d10	10.88	188	339675	20.00	ng/ul	-0.01 NA%
82) Chrysene-d12	14.62	240	302501	20.00	ng/ul	0.00 NA%
92) Perylene-d12	17.70	264	203021	20.00	ng/ul	0.00 NA%

System Monitoring Compounds

5) 2-Fluorophenol	4.30	112	228813	32.81	ng/ul	0.00
Spiked Amount	75.000	Range	23 - 117	Recovery	=	43.75%
7) Phenol-d5	5.21	99	435159	45.65	ng/ul	0.00
Spiked Amount	75.000	Range	36 - 121	Recovery	=	60.87%
11) 2-Chlorophenol-d4	5.34	132	304620	46.09	ng/ul	0.00
Spiked Amount	75.000	Range	48 - 117	Recovery	=	61.45%
15) 1,2-Dichlorobenzene-d4	5.75	152	109147	28.23	ng/ul	0.00
Spiked Amount	50.000	Range	38 - 82	Recovery	=	56.46%
25) Nitrobenzene-d5	6.18	82	285159	34.47	ng/ul	0.00
Spiked Amount	50.000	Range	57 - 102	Recovery	=	68.94%
46) 2-Fluorobiphenyl	8.29	172	412704	28.84	ng/ul	0.00
Spiked Amount	50.000	Range	46 - 106	Recovery	=	57.68%
72) 2,4,6-Tribromophenol	10.07	330	153669	42.33	ng/ul	-0.01
Spiked Amount	75.000	Range	41 - 149	Recovery	=	56.44%
85) Terphenyl-d14	12.90	244	702169	35.43	ng/ul	0.00
Spiked Amount	50.000	Range	79 - 136	Recovery	=	70.86%#

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.82	88	2985	0.97	ng/ul#	86
3) N-nitrosodimethylamine	2.93	74	108	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	5.21	77	404	N.D.		
8) Phenol	5.22	94	116	N.D.		
9) Aniline	5.34	93	448	N.D.		
10) Bis(2-Chloroethyl)ether	5.34	93	448	N.D.		

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

Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523008.D
 Acq On : 23 May 2008 11:45
 Sample : JPL110-005
 Misc : T5972 920ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: May 23 13:43 2008

Vial: 3
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Fri May 23 13:36:50 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
12) 2-Chlorophenol	5.26	128	210		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	5.75	108	891		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	5.75	108	891		N.D.	
19) Bis(2-chloroisopropyl) ethe	5.86	45	108		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	0.00	70	0		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	6.18	77	664		N.D.	
27) Isophorone	6.46	82	460		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	7.44	113	102		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	8.39	154	457		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	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.	

(#) = qualifier out of range (m) = manual integration
 T0523008.D T8270M.M Fri May 23 13:43:58 2008

Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523008.D
 Acq On : 23 May 2008 11:45
 Sample : JPL110-005
 Misc : T5972 920ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: May 23 13:43 2008

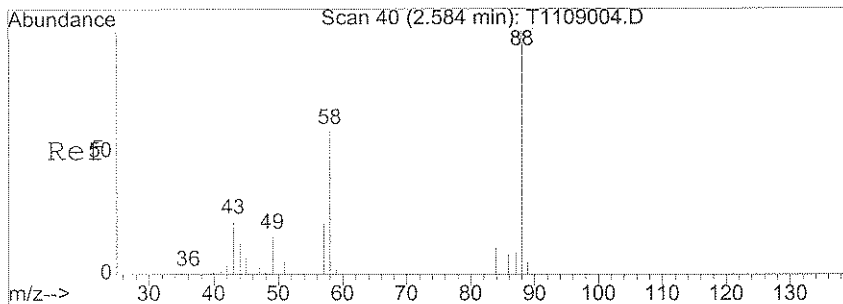
Vial: 3
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Fri May 23 13:36:50 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

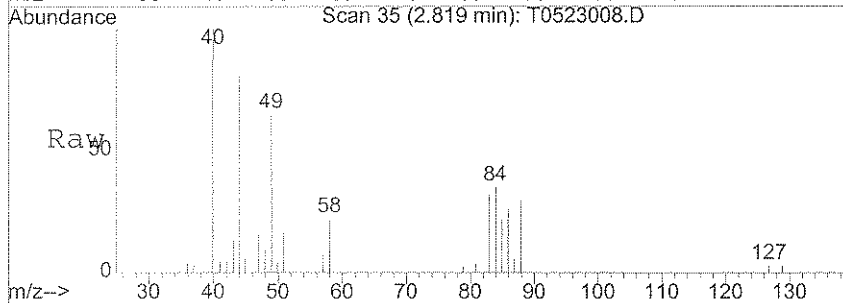
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	9.10	109	264		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	9.67	149	1349		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	10.07	169	3569		N.D.	
71) 1,2-Diphenylhydrazine	10.07	77	714		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	11.17	167	135		N.D.	
80) Di-n-butylphthalate	11.64	149	1876		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.	d
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	14.62	228	751		N.D.	
90) bis(2-Ethylhexyl)phthalate	0.00	149	0		N.D.	d
91) Chrysene	14.62	228	751		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	17.70	252	528		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.	

(#) = qualifier out of range (m) = manual integration
 T0523008.D T8270M.M Fri May 23 13:43:59 2008

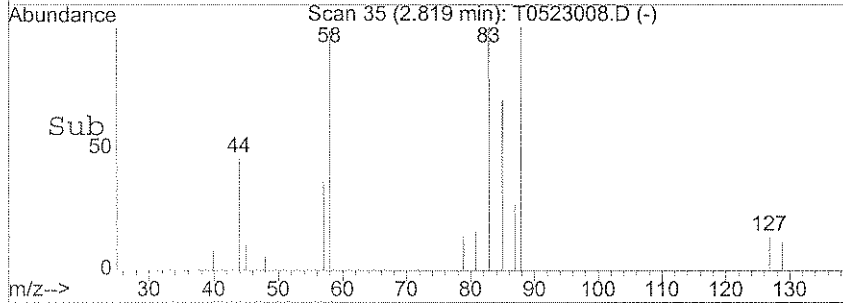
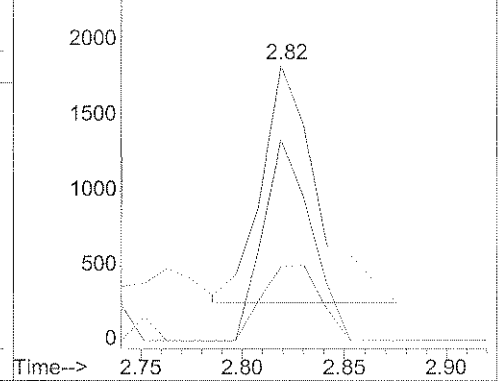


#2
 1,4-Dioxane
 Concen: 0.97 ng/ul
 RT: 2.82 min Scan# 35
 Delta R.T. 0.00 min
 Lab File: T0523008.D
 Acq: 23 May 2008 11:45

Tgt Ion	Resp	Lower	Upper
88	2985		
58	74.2	51.5	77.3
57	33.4	19.3	28.9



Abundance Ion 88.05 (87.75 to 88.75): T0523008.D
 2500 Ion 58.00 (57.70 to 58.70): T0523008.D
 Ion 57.00 (56.70 to 57.70): T0523008.D



1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-4-2Q08

Lab Name: Face Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL110

Run Sequence: R028332

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL110-007

Sample wt/vol: 910.0 (g/mL) mL

Lab File ID: T0523016.D

Level: (LOW/MED) _____

Date Collected: 05/13/2008

% Moisture: _____ Decanted: (Y/N) N

Date Extracted: 05/20/2008

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 05/23/2008

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: <2 & >11

Extraction: (Type) CONT

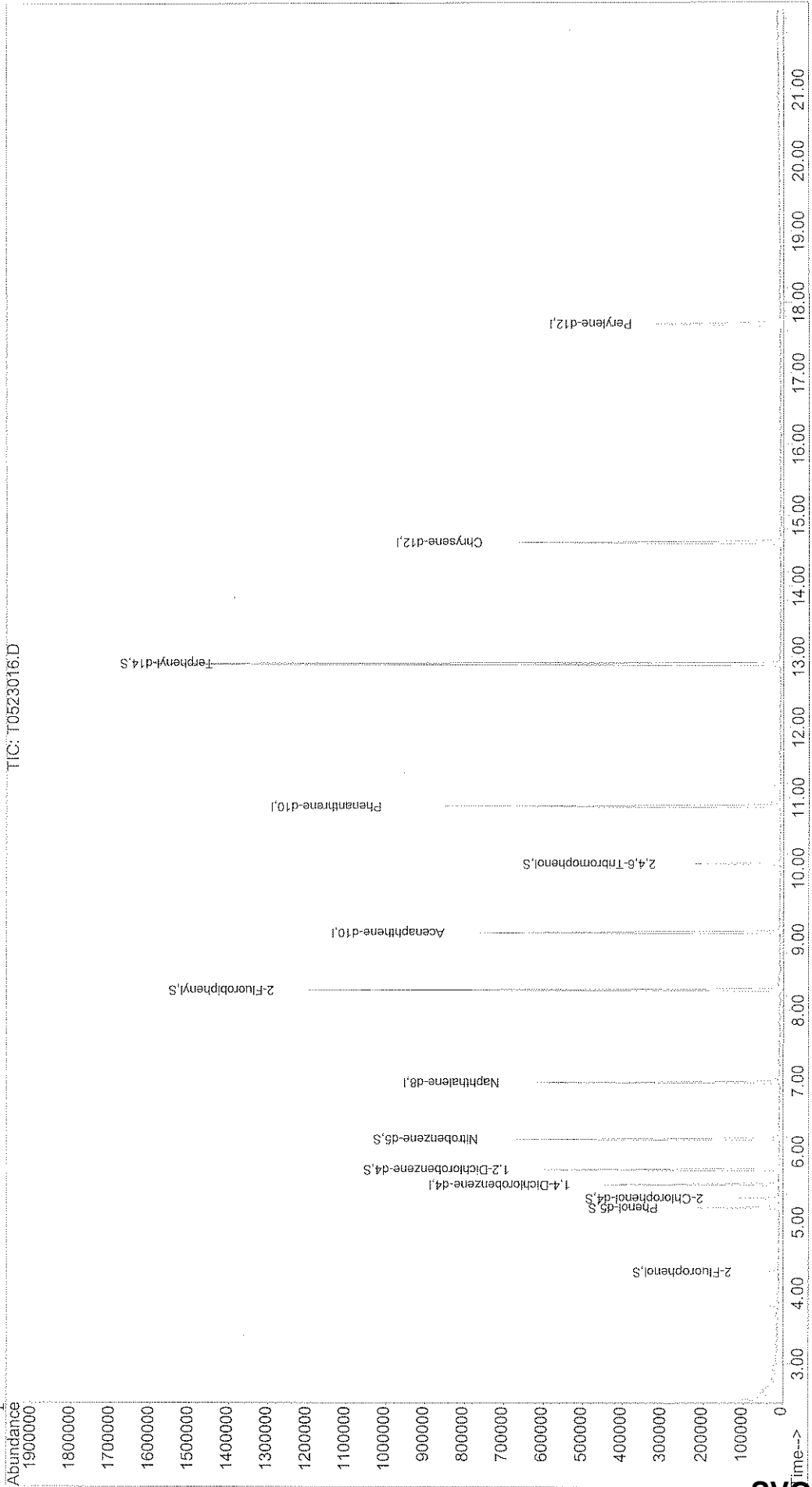
CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	0.96	J

Comments:

Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523016.D Vial: 4
Acq On : 23 May 2008 15:58 Operator: VM
Sample : JPL110-007 Inst : GC/MS Ins
Misc : T5972 910ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 27 6:52 2008 Quant Results File: T8270M.RES

Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
Title : 8270 (625) SW846 BNA Calibration 5972T
Last Update : Tue May 27 06:51:01 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523016.D Vial: 4
 Acq On : 23 May 2008 15:58 Operator: VM
 Sample : JPL110-007 Inst : GC/MS Ins
 Misc : T5972 910ML->1ML+IS Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: May 27 6:52 2008 Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Tue May 27 06:51:01 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND
 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	5.53	152	75732	20.00	ng/ul	0.00 NA%
24) Naphthalene-d8	6.98	136	337127	20.00	ng/ul	-0.01 NA%
40) Acenaphthene-d10	9.10	164	189466	20.00	ng/ul	-0.01 NA%
68) Phenanthrene-d10	10.88	188	341639	20.00	ng/ul	-0.01 NA%
82) Chrysene-d12	14.62	240	316739	20.00	ng/ul	0.00 NA%
92) Perylene-d12	17.71	264	202082	20.00	ng/ul	0.01 NA%

System Monitoring Compounds

5) 2-Fluorophenol	4.29	112	17589	2.38	ng/ul	0.00
Spiked Amount	75.000	Range	23 - 117	Recovery	=	3.17%#
7) Phenol-d5	5.21	99	100812	9.96	ng/ul	0.00
Spiked Amount	75.000	Range	36 - 121	Recovery	=	13.28%#
11) 2-Chlorophenol-d4	5.34	132	36456	5.20	ng/ul	0.00
Spiked Amount	75.000	Range	48 - 117	Recovery	=	6.93%#
15) 1,2-Dichlorobenzene-d4	5.75	152	104523	25.47	ng/ul	0.00
Spiked Amount	50.000	Range	38 - 82	Recovery	=	50.94%
25) Nitrobenzene-d5	6.18	82	266173	29.87	ng/ul	0.00
Spiked Amount	50.000	Range	57 - 102	Recovery	=	59.74%
46) 2-Fluorobiphenyl	8.28	172	388651	27.22	ng/ul	0.00
Spiked Amount	50.000	Range	46 - 106	Recovery	=	54.44%
72) 2,4,6-Tribromophenol	10.07	330	36315	9.94	ng/ul	-0.01
Spiked Amount	75.000	Range	41 - 149	Recovery	=	13.25%#
85) Terphenyl-d14	12.91	244	778804	37.38	ng/ul	0.01
Spiked Amount	50.000	Range	79 - 136	Recovery	=	74.76%#

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.82	88	2845	0.87	ng/ul#	92
3) N-nitrosodimethylamine	0.00	74	0	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	0.00	77	0	N.D.		
8) Phenol	0.00	94	0	N.D.		
9) Aniline	0.00	93	0	N.D.		
10) Bis(2-Chloroethyl)ether	0.00	93	0	N.D.		

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

Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523016.D
 Acq On : 23 May 2008 15:58
 Sample : JPL110-007
 Misc : T5972 910ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: May 27 6:52 2008

Vial: 4
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Tue May 27 06:51:01 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

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	5.75	108	845		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	5.75	108	845		N.D.	
19) Bis(2-chloroisopropyl) ethe	5.73	45	226		N.D.	
20) 3 & 4-Methylphenol	0.00	108	0		N.D.	
21) Acetophenone	6.00	105	120		N.D.	
22) n-Nitroso-di-n-propylamine	0.00	70	0		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	6.18	77	751		N.D.	
27) Isophorone	6.57	82	160		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.	
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	8.39	154	390		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	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.	

(#) = qualifier out of range (m) = manual integration
 T0523016.D T8270M.M Tue May 27 06:52:25 2008

Quantitation Report

Data File : X:\MSABN\DONALD\052308\T0523016.D
 Acq On : 23 May 2008 15:58
 Sample : JPL110-007
 Misc : T5972 910ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: May 27 6:52 2008

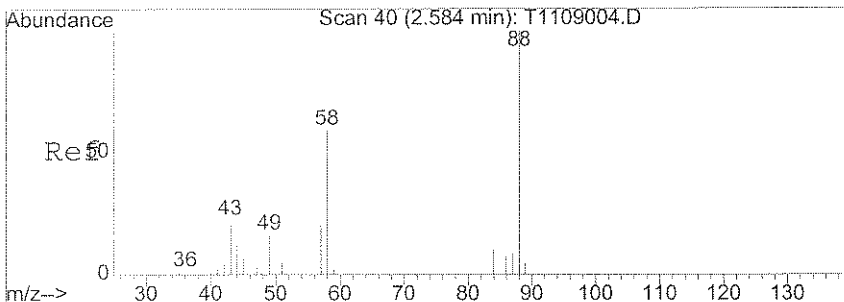
Vial: 4
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Tue May 27 06:51:01 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

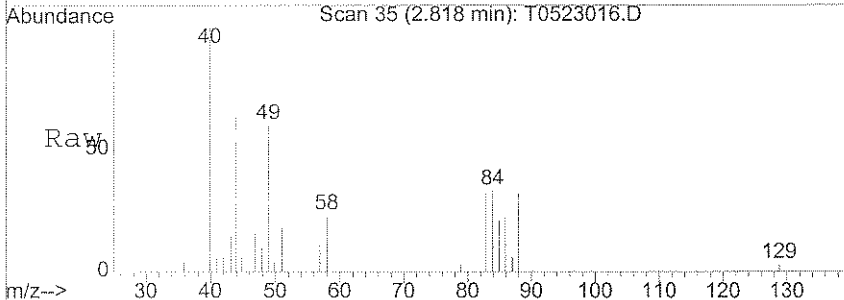
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	9.10	109	330		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	9.67	149	396		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	10.07	169	833		N.D.	
71) 1,2-Diphenylhydrazine	10.05	77	229		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	11.17	167	122		N.D.	
80) Di-n-butylphthalate	11.64	149	2141		N.D.	
81) Fluoranthene	12.36	202	128		N.D.	
83) Benzidine	0.00	184	0		N.D.	
84) Pyrene	12.66	202	121		N.D.	
86) Butylbenzylphthalate	0.00	149	0		N.D.	
87) Bis(2-ethylhexyl) adipate	0.00	129	0		N.D.	d
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	14.62	228	1037		N.D.	
90) bis(2-Ethylhexyl) phthalate	0.00	149	0		N.D.	d
91) Chrysene	14.62	228	1037		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	17.71	252	551		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.	

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

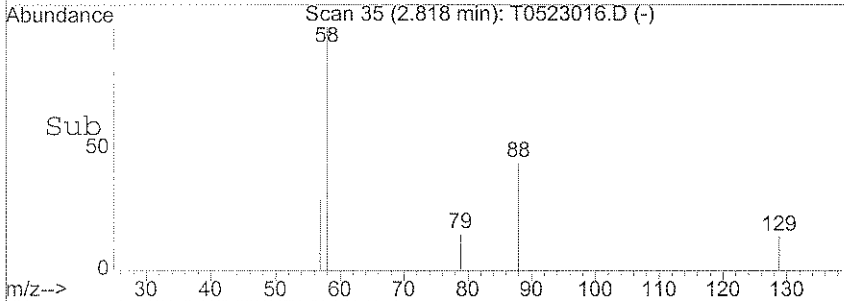
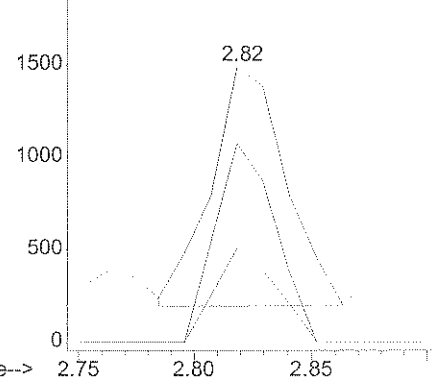


#2
 1,4-Dioxane
 Concen: 0.87 ng/ul
 RT: 2.82 min Scan# 35
 Delta R.T. -0.00 min
 Lab File: T0523016.D
 Acq: 23 May 2008 15:58

Tgt Ion	Resp	Lower	Upper
88	100		
58	68.2	51.5	77.3
57	32.3	19.3	28.9#



Abundance Ion 88.05 (87.75 to 88.75): T0523016.D
 2000 Ion 58.00 (57.70 to 58.70): T0523016.D
 Ion 57.00 (56.70 to 57.70): T0523016.D



Metals Data

JPL110

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110

SOW No.: _____

Sample No.	Lab Sample ID
MW-24-5	JPL110-001
MW-24-5MS	JPL110-001MS
MW-24-5MSD	JPL110-001MSD
MW-24-4	JPL110-002
MW-24-3	JPL110-003
MW-24-3MS	JPL110-003MS
MW-24-3MSD	JPL110-003MSD
MW-24-2	JPL110-004
MW-24-1	JPL110-005
EB-13-5/13/08	JPL110-006
DUPE-4-2Q08	JPL110-007
DUPE-4-2Q08MS	JPL110-007MS
DUPE-4-2Q08MSD	JPL110-007MSD

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: 6/22/08

Title: Inorganics Technical Director

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-5

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL110Matrix (soil/water): WaterLab Sample ID: JPL110-001Level (low/med): LOWDate Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.39			M	R028870
7440-70-2	Calcium	35700			P	R028884
7440-47-3	Chromium	3.41			M	R028870
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028870
7439-95-4	Magnesium	9360			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	43100			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/19/2008 13:52

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110

Matrix (soil/water): Water

Lab Sample ID: JPL110-002

Level (low/med): LOW

Date Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.42			M	R028870
7440-70-2	Calcium	7420			P	R028884
7440-47-3	Chromium	1.59			M	R028870
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028870
7439-95-4	Magnesium	8840			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	41300			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:52

SW-846

-1-

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110

Matrix (soil/water): Water

Lab Sample ID: JPL110-003

Level (low/med): LOW

Date Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.83			M	R028637
7440-70-2	Calcium	6070			P	R028697
7440-47-3	Chromium	14.5			M	R028637
7439-89-6	Iron	1760			P	R028697
7439-92-1	Lead	3.62			M	R028637
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028697
7440-23-5	Sodium	33800			P	R028697

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:52

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-2

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL110Matrix (soil/water): WaterLab Sample ID: JPL110-004Level (low/med): LOWDate Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.07			M	R028870
7440-70-2	Calcium	40900			P	R028884
7440-47-3	Chromium	2.34			M	R028870
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028870
7439-95-4	Magnesium	13400			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	43100			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:52

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-24-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110

Matrix (soil/water): Water

Lab Sample ID: JPL110-005

Level (low/med): LOW

Date Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028870
7440-70-2	Calcium	69100			P	R028884
7440-47-3	Chromium	3.77			M	R028870
7439-89-6	Iron	2380			P	R028884
7439-92-1	Lead	1.00	U		M	R028870
7439-95-4	Magnesium	21000			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	28500			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:52

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-13-5/13/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110

Matrix (soil/water): Water

Lab Sample ID: JPL110-006

Level (low/med): LOW

Date Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028870
7440-70-2	Calcium	5000	U		P	R028884
7440-47-3	Chromium	1.00	U		M	R028870
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028870
7439-95-4	Magnesium	5000	U		P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	5000	U		P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:52

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-4-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110

Matrix (soil/water): Water

Lab Sample ID: JPL110-007

Level (low/med): LOW

Date Received: 05/14/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028870
7440-70-2	Calcium	65100			P	R028884
7440-47-3	Chromium	4.68			M	R028870
7439-89-6	Iron	1360			P	R028884
7439-92-1	Lead	1.00	U		M	R028870
7439-95-4	Magnesium	20700			P	R028697
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	26700			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/19/2008 13:52

Miscellaneous Inorganic Data

JPL110

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL110


SOW No.: _____

<u>Sample No.</u>
<u>MW-24-5</u>
<u>MW-24-4</u>
<u>MW-24-3</u>
<u>MW-24-2</u>
<u>MW-24-1</u>
<u>EB-13-5/13/08</u>
<u>DUPE-4-2Q08</u>

<u>Lab Sample ID</u>
<u>JPL110-001</u>
<u>JPL110-002</u>
<u>JPL110-003</u>
<u>JPL110-004</u>
<u>JPL110-005</u>
<u>JPL110-006</u>
<u>JPL110-007</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: Paul J. Noto

Date: June 9, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
 SDG Number: JPL110
 Sample Number: MW-24-5 Date/Time Collected: 05/13/2008 08:20
 Lab Sample ID: JPL110-001 Date/Time Received: 05/14/2008 08:20

Method/Qbatch*: E150.1/29284 Unit: pH Units
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.7		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300 Unit: mg/L
 Instrument: Balance (01) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	210		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Sulfate as SO4	14808-79-8	10	20		10	1.7	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E300.0/29371 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	5	1.1		1.0	0.28	05/15/2008	05/16/2008	R028150
Chloride	16887-00-6	5	9.0		5.0	0.38	05/15/2008	05/16/2008	R028150

Method/Qbatch*: E310.1/29506 Unit: mg/L
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	170		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: MW-24-5 **Date/Time Collected:** 05/13/2008 08:20
Lab Sample ID: JPL110-001 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: MW-24-4 **Date/Time Collected:** 05/13/2008 09:10
Lab Sample ID: JPL110-002 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E150.1/29284 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.9		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	140		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/14/2008	05/14/2008	R028119
Sulfate as SO4	14808-79-8	1	5.7		1.0	0.17	05/14/2008	05/14/2008	R028119
Chloride	16887-00-6	10	17		10	0.76	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	28		2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	72		2.0	2.0	05/21/2008	05/21/2008	R028258

Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: MW-24-3 **Date/Time Collected:** 05/13/2008 09:42
Lab Sample ID: JPL110-003 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E150.1/29284 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	9.0		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	150		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.31		0.20	0.055	05/14/2008	05/14/2008	R028119
Sulfate as SO4	14808-79-8	1	7.4		1.0	0.17	05/14/2008	05/14/2008	R028119
Chloride	16887-00-6	10	22		10	0.76	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	40		2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	44		2.0	2.0	05/21/2008	05/21/2008	R028258

Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: MW-24-2 **Date/Time Collected:** 05/13/2008 10:30
Lab Sample ID: JPL110-004 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E150.1/29284 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	280		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.9		0.20	0.055	05/14/2008	05/14/2008	R028119
Sulfate as SO4	14808-79-8	10	24		10	1.7	05/14/2008	05/14/2008	R028119
Chloride	16887-00-6	10	41		10	0.76	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	160		2.0	2.0	05/21/2008	05/21/2008	R028258

Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	27		2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: MW-24-1 **Date/Time Collected:** 05/13/2008 11:16
Lab Sample ID: JPL110-005 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E150.1/29284 **Unit:** pH Units
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.2		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	350		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.58		0.20	0.055	05/14/2008	05/14/2008	R028119
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/14/2008	05/14/2008	R028119
Sulfate as SO4	14808-79-8	10	47		10	1.7	05/14/2008	05/14/2008	R028119
Chloride	16887-00-6	10	64		10	0.76	05/14/2008	05/14/2008	R028119
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	170		2.0	2.0	05/21/2008	05/21/2008	R028258

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: MW-24-1 **Date/Time Collected:** 05/13/2008 11:16
Lab Sample ID: JPL110-005 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	8.2		2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring

SDG Number: JPL110

Sample Number: EB-13-5/13/08

Date/Time Collected: 05/13/2008 11:00

Lab Sample ID: JPL110-006

Date/Time Received: 05/14/2008 08:20

Method/Qbatch*: E150.1/29284

Unit: pH Units

Instrument: None

File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.5		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300

Unit: mg/L

Instrument: Balance (01)

File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	6.0		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342

Unit: mg/L

Instrument: Ion Chromatograph (2)

File: R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/14/2008	05/14/2008	R028119
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/14/2008	05/14/2008	R028119
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506

Unit: mg/L

Instrument: None

File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0		2.0	2.0	05/21/2008	05/21/2008	R028258

Method/Qbatch*: E314.0/29780

Unit: ug/L

Instrument: Ion Chromatograph (2)

File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle Project: JPL Groundwater Monitoring
 SDG Number: JPL110
 Sample Number: DUPE-4-2Q08 Date/Time Collected: 05/13/2008 00:00
 Lab Sample ID: JPL110-007 Date/Time Received: 05/14/2008 08:20
 Method/Qbatch*: E150.1/29284 Unit: pH Units
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	05/14/2008	05/14/2008	R028066

Method/Qbatch*: E160.1/29300 Unit: mg/L
 Instrument: Balance (01) File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	360		2.0	2.0	05/14/2008	05/16/2008	R028082

Method/Qbatch*: E300.0/29342 Unit: mg/L
 Instrument: Ion Chromatograph (2) File: R028119\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.58		0.20	0.055	05/14/2008	05/14/2008	R028119
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/14/2008	05/14/2008	R028119
Sulfate as SO4	14808-79-8	10	46		10	1.7	05/14/2008	05/14/2008	R028119
Chloride	16887-00-6	10	63		10	0.76	05/14/2008	05/14/2008	R028119
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/14/2008	05/14/2008	R028119

Method/Qbatch*: E310.1/29506 Unit: mg/L
 Instrument: None File: N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/21/2008	05/21/2008	R028258
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	170		2.0	2.0	05/21/2008	05/21/2008	R028258

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL110
Sample Number: DUPE-4-2Q08 **Date/Time Collected:** 05/13/2008 00:00
Lab Sample ID: JPL110-007 **Date/Time Received:** 05/14/2008 08:20
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	9.4		2.0	0.28	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL111

June 24, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL111
Date of Report: June 24, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-25-5	JPL111-001	VOA/MET/INO
MW-25-4	JPL111-002	VOA/MET/INO
MW-25-3	JPL111-003	VOA/MET/INO
MW-25-2	JPL111-004	VOA/MET/INO
MW-25-1	JPL111-005	VOA/MET/INO
EB-14-05/14/08	JPL111-006	VOA/MET/INO
TB-14-05/14/08	JPL111-007	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

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940 S. Harney
Seattle, WA 98108

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples. Notification of these discrepancies was included in the sample receipt confirmation sent to Betsy Cutie, David Connor, and Ryan Wensink on 05/15/2008 via email.

One of three volatiles bottles submitted for MW-25-2 contained bubbles of less than 1/4 inch in size. Both volatiles bottles submitted for TB-14-05/14/08 contained bubbles of less 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."

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

Volatiles Fraction:

Continuing Calibration Verification (CCV):

In the CCV performed on 5/22/2008 the %D values for dichlorodifluoromethane and trichlorofluoromethane exceeded 20% due to increased response. These analytes were not detected in any associated samples so no further action was taken.

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, all samples except for the trip blank were received in the bottles from the contaminated lot (#033108-3) and have low level detections of chloromethane.

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Tic Analysis:

Tic analyses were performed for analytes that are not identified on the quantitation report.

Quality Control Analyses:

Analysis of the blank spike S052208MVOWB2 yielded a high recovery for trichlorofluoromethane. Because the recovery was high and the analyte was not detected in the associated samples, no further action was taken.

MS/MSD analyses performed on sample MW-25-1 yielded high recoveries for dichlorodifluoromethane and trichlorofluoromethane. Because all other analytes recovered within the control limits and neither of these analytes that recovered high were detected in the samples, no further action was taken. All RPD values were within the control limits.

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 and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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

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Seattle, WA 98108

Nitrate	48 hours	None
Nitrite	48 hours	None
Ortho phosphorus	48 hours	None
Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	15 minutes	All samples

ICP Metals:

For the run sequences R028884 and R029004, the ICVs exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for these events.

For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

For the run sequence R029004, the third CCB contained a level of potassium that was greater than ½ the CRDL. No sample results for potassium were associated with this CCB. Therefore, no corrective action was required. Data have not been flagged for this event.

Due to software limitations, which limit that amount of data that can be processed, all injections are not present on Form 14 for run sequence R029004. All calibration checks are listed and all injections surrounding the samples are listed.

ICP-MS Metals:

For the run sequence R028436, there were greater than 10 injections between CCV3 and CCV4. No sample results were bracketed by these two CCVs. The preparation blank and laboratory control samples were associated with these two CCVs. Therefore, the preparation blank and laboratory control samples were reanalyzed and reported from run sequence R028770. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R028770, the second CCV exceeded the upper control limit for lead. No sample results for lead were reported from this run sequence. Quality control data for lead were reported and were within control limits. No further corrective action was required. Data have not been flagged for this event.

Miscellaneous Inorganics:

In the run sequence R028150 for "300.0 Anions", the matrix spike and matrix spike duplicate exceeded the established lower control limits for orthophosphate. Since all of the other quality control samples were in control, no further action was taken.

In the run sequence R028515 for "314.0 Perchlorate", the matrix spike duplicate exceeded the established upper control limits. Since all of the other quality control samples were in control, 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.
 - ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.

Z Denotes data deemed unusable by the analyst.

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

Pace Analytical Services, Inc.


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RELEASE OF DATA

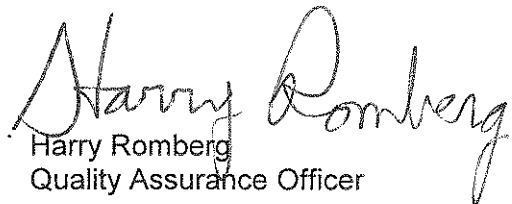
Pace Analytical Services, Inc. certifies that these results meet all requirements of the NELAC standards, except where otherwise noted.

"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,


for
Kara Godineaux
Project Manager

6/24/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/24/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG

Sample Mx 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, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL111-001	05/15/2008 08:25 AM	05/14/2008 08:37 AM	MW-25-5	A-	IN	IN	IN	IN	IN	IN	IN	IN
JPL111-002	05/15/2008 08:25 AM	05/14/2008 09:20 AM	MW-25-4	A-	IN	IN	IN	IN	IN	IN	IN	IN
JPL111-003	05/15/2008 08:25 AM	05/14/2008 10:02 AM	MW-25-3	A-	IN	IN	IN	IN	IN	IN	IN	IN
JPL111-004	05/15/2008 08:25 AM	05/14/2008 10:41 AM	MW-25-2	A-	IN	IN	IN	IN	IN	IN	IN	IN
*JPL111-005	05/15/2008 08:25 AM	05/14/2008 11:26 AM	MW-25-1	A-	IN	IN	IN	IN	IN	IN	IN	IN
JPL111-006	05/15/2008 08:25 AM	05/14/2008 11:09 AM	EB-14-05/14/08	A-	IN	IN	IN	IN	IN	IN	IN	IN
JPL111-007	05/15/2008 08:25 AM	05/14/2008 12:00 AM	TB-14-05/14/08								IN	

Approved By:

On:

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

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

Matrices: Water=WD

FORM 1 TL-PM-8.0

THIS INFORMATION WILL BE USED FOR REPORTING/BILLING (SEE BELOW)

COMPANY: BOTTLE
 ADDRESS: 3990 25th TOWN AVE, C-205
SUNDESKO, CA 92110
 ATTENTION: DAVID COLLIER
 PROJECT NAME: SEE SAN MAN 2808
 PROJECT CONTACT: DAVID COLLIER
 TELEPHONE: 619-726-7311 FAX: _____
 JOB/PO. NO.: 648688/214379

CHAIN OF CUSTODY RECORD SDG # _____
 46056
 WORK ORDER ID# SP111
 15# 7046

Laucks
 Testing Laboratories, Inc.
 940 South Harbor St, Seattle, WA 98105 (206) 757-3000 FAX 767-5063
 1101 Leach Ave, Yakima, WA 98902 (509) 248-4005 FAX 492-1265

TESTS TO PERFORM

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS	VOC (524.0)	TOTAL Cr (200.5)	LEAD (200.8)	ARSENIC (200.8)	GREEN CHECK (See Matrix)	CLO2 (314.0)	GREEN CHECK (See Matrix)

LAB SA#	SAMPLE ID / LOCATION	DATE	TIME	W	S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1	MW-25-5	07/14/08	0837																		
2	MW-25-4		0920																		
3	MW-25-3		1002																		
4	MW-25-2		1041																		
5	MW-25-1		1126																		
6	EB-14-05/14/08	07/14/08	1109																		
7	EB-14-05/14/08	07/14/08																			

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.

BILLING INFORMATION: DIFFERENT THAN ABOVE

NAME: BOTTLE
 ATTN: DAVID COLLIER
 ADDRESS: 3990 25th TOWN AVE
 CITY, STATE, ZIP: SUNDESKO, CA 92110

RECEIVED BY (SIGN AND PRINT): RACHEL FRANK
 DATE/TIME: 5/15/08 8:25

LABORATORY APPROVAL: _____

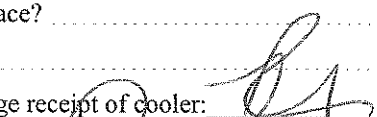
TURNAROUND REQUEST:
 STD. 10-14 WORKING DAYS
 * 24-HRS. (100% SURP)
 * 72-HRS. (75% SURP)
 * 5 DAYS (50% SURP)
 OTHER: _____
 TEMP: _____
 CUSTODY SEAL: Y N N/A

Cooler Receipt Form
Pace Analytical Services, Inc.


SDG: JPL111 Taken By: Client
Cooler: AAD845 Transferred: FedEx
COC #: 46056
Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 5/15/2008
Date cooler was opened: 5/15/2008 8:25AM

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? YES
if YES, record carrier name and airbill number: 865543091401
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? 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:  _____

B. LOG-IN PHASE:

Date samples were logged-in: 5/15/2008 9:13AM
Logged-in by Rachel Frank (sign) 

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? NO
18. Temperatures: 3.7

DISCREPANCIES:

Sample 1 went out of hold for PH while I was logging the samples in. All other samples are close to hold times for PH.

Date Printed: 5/15/2008 9:15

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL111

Cooler: AAD845

Temperatures: 3.7

COC #: 46056

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL111-001	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
JPL111-002	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
JPL111-003	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
JPL111-004	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
JPL111-005	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
JPL111-006	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
JPL111-007	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
Pace Analytical Services, Inc.

SDG: JPL111
Cooler: AAD845
Temperatures: 3.7
COC #: 46056

Sample	Bottle #	Bottle Description	pH	Bubbles
	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

Battelle

SDG No.: JPL111

- I. Narrative: 2-8
- II. Chain-of-Custody: 9-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-320
 - A. QC Summary Data: 1-12
 - B. Sample Data: 13-102
 - C. Standards Data: 103-264
 - D. Raw QC Data: 265-312
 - E. Bench Sheets: 313-320
- V. Metals Data: MET- 1-348
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-9
 - C. Quality Control Data: 10-53
 - D. Quarterly Verification of Instrument Parameters: 54-64
 - E. Raw Data: 65-339
 - F. Digestion & Distillation Logs: 340-348
- VI. Miscellaneous Inorganics Data: INO 1-181
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-15
 - C. Quality Control Data: 16-38
 - D. Raw Data: 39-181
- VII. Forms Summary: SUM- 1-157

Completed and checked by: Judy Ecklund Date: 6/24/08

QC SUMMARY

SDG #JPL111

Volatiles Analysis

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinSDG No.: JPL111Run Sequence: R028288Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL111-005MSD) MW-25-1MSD	125	90	100		0
(JPL111-005MS) MW-25-1MS	126	93	97		0
(JPL111-006) EB-14-05/14/08	132	96	91		0
(JPL111-005) MW-25-1	128	95	95		0
(JPL111-004) MW-25-2	124	99	97		0
(JPL111-003) MW-25-3	128	94	93		0
(JPL111-002) MW-25-4	125	95	93		0
(JPL111-001) MW-25-5	126	96	94		0
(JPL111-007) TB-14-05/14/08	120	95	95		0
(B052208MVOWB1) B052208MVOWB1	122	96	94		0
(S052208MVOWB2) S052208MVOWB2	115	97	100		0

SMC1 (DCA) = 1,2-Dichloroethane-d4
 SMC2 (BFB) = 4-Bromofluorobenzene
 SMC3 (TOL) = Toluene-d8
 SMC4 () =

QC LIMITS

60-140

60-140

60-140

Column to be used to flag recovery values
 * Values outside of contract required QC limits

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028288 SDG No.: JPL111

BS Lab Sample ID: S052208MVOWB2

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	67.1	134		60-140
Chloromethane	50.0	53	106		60-140
Vinyl chloride	50.0	58.08	116		60-140
Bromomethane	50.0	62.74	125		60-140
Chloroethane	50.0	55.72	111		60-140
Trichlorofluoromethane	50.0	72.65	145	*	60-140
1,1-Dichloroethene	50.0	52.32	105		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.15	106		60-140
Methylene chloride	50.0	49.95	100		60-140
Methyl tert-butyl ether	50.0	54.38	109		60-140
trans-1,2-Dichloroethene	50.0	48.67	97		60-140
1,1-Dichloroethane	50.0	48.5	97		60-140
2,2-Dichloropropane	50.0	50.14	100		60-140
cis-1,2-Dichloroethene	50.0	46.74	93		60-140
2-Butanone	50.0	48.81	98		60-140
Bromochloromethane	50.0	47.97	96		60-140
Chloroform	50.0	49.53	99		60-140
1,1,1-Trichloroethane	50.0	54.25	109		60-140
Carbon tetrachloride	50.0	54.14	108		60-140
1,1-Dichloropropene	50.0	51.23	102		60-140
Benzene	50.0	44.94	90		60-140
1,2-Dichloroethane	50.0	56.44	113		60-140
Trichloroethene	50.0	45.74	91		60-140
1,2-Dichloropropane	50.0	45.1	90		60-140
Dibromomethane	50.0	49.58	99		60-140
Bromodichloromethane	50.0	51.13	102		60-140
cis-1,3-Dichloropropene	50.0	59.79	120		60-140
4-Methyl-2-pentanone	50.0	54.15	108		60-140
Toluene	50.0	47.45	95		60-140
trans-1,3-Dichloropropene	50.0	48.67	97		60-140
1,1,2-Trichloroethane	50.0	47.01	94		60-140
Tetrachloroethene	50.0	48.57	97		60-140
1,3-Dichloropropane	50.0	48.25	97		60-140
Dibromochloromethane	50.0	52.46	105		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 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 9:31

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028288 SDG No.: JPL111
 BS Lab Sample ID: S052208MVOWB2
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	49.58	99		60-140
Chlorobenzene	50.0	47.07	94		60-140
Ethylbenzene	50.0	47.99	96		60-140
1,1,1,2-Tetrachloroethane	50.0	48.73	97		60-140
m,p-Xylene	100	94.41	94		60-140
o-Xylene	50.0	45.03	90		60-140
Styrene	50.0	46.06	92		60-140
Bromoform	50.0	48.58	97		60-140
Isopropylbenzene	50.0	48.12	96		60-140
1,1,2,2-Tetrachloroethane	50.0	44.66	89		60-140
n-Propylbenzene	50.0	45.87	92		60-140
Bromobenzene	50.0	46.45	93		60-140
1,2,3-Trichloropropane	50.0	45.66	91		60-140
2-Chlorotoluene	50.0	45.58	91		60-140
1,3,5-Trimethylbenzene	50.0	47.72	95		60-140
4-Chlorotoluene	50.0	47.35	95		60-140
tert-Butylbenzene	50.0	47.96	96		60-140
1,2,4-Trimethylbenzene	50.0	48.08	96		60-140
sec-Butylbenzene	50.0	48.3	97		60-140
4-Isopropyltoluene	50.0	50.19	100		60-140
1,3-Dichlorobenzene	50.0	45.83	92		60-140
1,4-Dichlorobenzene	50.0	45.62	91		60-140
n-Butylbenzene	50.0	47.42	95		60-140
1,2-Dichlorobenzene	50.0	45.34	91		60-140
1,2-Dibromo-3-chloropropane	50.0	47.84	96		60-140
1,2,4-Trichlorobenzene	50.0	46.53	93		60-140
Hexachlorobutadiene	50.0	47.22	94		60-140
Naphthalene	50.0	45.8	92		60-140
1,2,3-Trichlorobenzene	50.0	42.96	86		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 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 9:31

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorMS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL111MS Client Sample No.: MW-25-1MS MSD Client Sample No.: MW-25-1MSDMS Lab Sample ID: JPL111-005MS MSD Lab Sample ID: JPL111-005MSDLevel: N/AUnits: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Dichlorodifluoromethane	0	50.0	76.94	154 *	50.0	78.2	156 *	2	30	60-140
Chloromethane	0.53	50.0	53.88	107	50.0	56.67	112	5	30	60-140
Vinyl chloride	0	50.0	59.86	120	50.0	64.65	129	8	30	60-140
Bromomethane	0	50.0	64.97	130	50.0	67.33	135	4	30	60-140
Chloroethane	0	50.0	54.93	110	50.0	57.99	116	5	30	60-140
Trichlorofluoromethane	0	50.0	82.33	165 *	50.0	82.63	165 *	0	30	60-140
1,1-Dichloroethane	0	50.0	57.95	116	50.0	57.97	116	0	30	60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	0	50.0	62.45	125	50.0	62.57	125	0	30	60-140
Methylene chloride	0	50.0	52.07	104	50.0	53.16	106	2	30	60-140
Methyl tert-butyl ether	0	50.0	55.83	112	50.0	58.34	117	4	30	60-140
trans-1,2-Dichloroethene	0	50.0	52.64	105	50.0	52.03	104	1	30	60-140
1,1-Dichloroethane	0	50.0	53.97	108	50.0	51.67	103	4	30	60-140
2,2-Dichloropropane	0	50.0	51.36	103	50.0	51.08	102	1	30	60-140
cis-1,2-Dichloroethene	0	50.0	48.29	97	50.0	48.62	97	1	30	60-140
2-Butanone	0	50.0	45.11	90	50.0	48.1	96	6	30	60-140
Bromochloromethane	0	50.0	50.84	102	50.0	50	100	2	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 4 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater MonitorMS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL111MS Client Sample No.: MW-25-1MS MSD Client Sample No.: MW-25-1MSDMS Lab Sample ID: JPL111-005MS MSD Lab Sample ID: JPL111-005MSDLevel: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Chloroform	0.22	50.0	54.7	109	50.0	53.05	106	3	30	60-140
1,1,1-Trichloroethane	0	50.0	61.39	123	50.0	60.25	121	2	30	60-140
Carbon tetrachloride	0	50.0	61.45	123	50.0	60.17	120	2	30	60-140
1,1-Dichloropropane	0	50.0	57.14	114	50.0	55.5	111	3	30	60-140
Benzene	0	50.0	46.15	92	50.0	45.94	92	1	30	60-140
1,2-Dichloroethane	0	50.0	58.77	118	50.0	58.79	118	0	30	60-140
Trichloroethene	0	50.0	46.35	93	50.0	46.62	93	1	30	60-140
1,2-Dichloropropane	0	50.0	41.82	84	50.0	41.77	84	0	30	60-140
Dibromomethane	0	50.0	47.08	94	50.0	48.09	96	2	30	60-140
Bromodichloromethane	0	50.0	50.16	100	50.0	50.22	100	0	30	60-140
cis-1,3-Dichloropropene	0	50.0	50.89	102	50.0	49.25	99	3	30	60-140
4-Methyl-2-pentane	0	50.0	47.29	95	50.0	49.46	99	5	30	60-140
Toluene	0	50.0	45	90	50.0	46.62	93	4	30	60-140
trans-1,3-Dichloropropene	0	50.0	42.94	86	50.0	42.62	85	1	30	60-140
1,1,2-Trichloroethane	0	50.0	43.13	86	50.0	43.87	88	2	30	60-140
Tetrachloroethene	0	50.0	47.19	94	50.0	48.06	96	2	30	60-140
1,3-Dichloropropane	0	50.0	44.76	90	50.0	43.85	88	2	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedance because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 4 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorMS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL111MS Client Sample No.: MW-25-1MS MSD Client Sample No.: MW-25-1MSDMS Lab Sample ID: JPL111-005MS MSD Lab Sample ID: JPL111-005MSDLevel: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Dibromochloromethane	0	50.0	49.42	99	50.0	50.04	100	1	30	60-140
1,2-Dibromoethane	0	50.0	46.24	92	50.0	46.25	93	0	30	60-140
Chlorobenzene	0	50.0	46.07	92	50.0	45.77	92	1	30	60-140
Ethylbenzene	0	50.0	48.34	97	50.0	47.7	95	1	30	60-140
1,1,1,2-Tetrachloroethane	0	50.0	51.04	102	50.0	54.16	108	6	30	60-140
m,p-Xylene	0	100	93.97	94	100	93.78	94	0	30	60-140
o-Xylene	0	50.0	46.3	93	50.0	47.42	95	2	30	60-140
Styrene	0	50.0	45.55	91	50.0	44.32	89	3	30	60-140
Bromoform	0	50.0	46.42	93	50.0	47.05	94	1	30	60-140
Isopropylbenzene	0	50.0	51.17	102	50.0	52.55	105	3	30	60-140
1,1,2,2-Tetrachloroethane	0	50.0	40.64	81	50.0	41.32	83	2	30	60-140
n-Propylbenzene	0	50.0	44.21	88	50.0	43.22	86	2	30	60-140
Bromobenzene	0	50.0	43.31	87	50.0	42.29	85	2	30	60-140
1,2,3-Trichloropropane	0	50.0	41.22	82	50.0	41.8	84	1	30	60-140
2-Chlorotoluene	0	50.0	44.38	89	50.0	43.52	87	2	30	60-140
1,3,5-Trimethylbenzene	0	50.0	46.16	92	50.0	46.58	93	1	30	60-140
4-Chlorotoluene	0	50.0	45.97	92	50.0	44.83	90	3	30	60-140
tert-Butylbenzene	0	50.0	47.87	96	50.0	49.41	99	3	30	60-140
1,2,4-Trimethylbenzene	0	50.0	46.61	93	50.0	46.74	93	0	30	60-140
sec-Butylbenzene	0	50.0	47.22	94	50.0	47.62	95	1	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 4 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater MonitorMS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL111MS Client Sample No.: MW-25-1MS MSD Client Sample No.: MW-25-1MSDMS Lab Sample ID: JPL111-005MS MSD Lab Sample ID: JPL111-005MSDLevel: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
4-Isopropyltoluene	0	50.0	49.28	99	50.0	49.85	100	1	30	60-140
1,3-Dichlorobenzene	0	50.0	44.53	89	50.0	45.01	90	1	30	60-140
1,4-Dichlorobenzene	0	50.0	44.68	89	50.0	44.75	90	0	30	60-140
n-Butylbenzene	0	50.0	46.3	93	50.0	47.32	95	2	30	60-140
1,2-Dichlorobenzene	0	50.0	44.44	89	50.0	45.89	92	3	30	60-140
1,2-Dibromo-3-chloropropane	0	50.0	43.56	87	50.0	50.49	101	15	30	60-140
1,2,4-Trichlorobenzene	0	50.0	43.78	88	50.0	48.61	97	11	30	60-140
Hexachlorobutadiene	0	50.0	44.17	88	50.0	48.34	97	9	30	60-140
Naphthalene	0	50.0	41.02	82	50.0	47.34	95	14	30	60-140
1,2,3-Trichlorobenzene	0	50.0	40.14	80	50.0	45.7	91	13	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 4 out of 126 outside limits

COMMENTS:

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B052208MVOWB1

Lab Name Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL111

Lab File ID: B0522011.d

Lab Sample ID: B052208MVOWB1

Date Analyzed: 05/22/2008

Time Analyzed: 12:00

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

Heated Purge: (Y/N) N

Instrument ID: 5973B

Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S052208MVOWB2	S052208MVOWB2	B0522008.d	05/22/2008	10:34	R028288
02	TE-14-05/14/08	JPL111-007	B0522013.d	05/22/2008	12:53	R028288
03	MW-25-5	JPL111-001	B0522017.d	05/22/2008	14:41	R028288
04	MW-25-4	JPL111-002	B0522018.d	05/22/2008	15:07	R028288
05	MW-25-3	JPL111-003	B0522019.d	05/22/2008	15:34	R028288
06	MW-25-2	JPL111-004	B0522020.d	05/22/2008	16:03	R028288
07	MW-25-1	JPL111-005	B0522021.d	05/22/2008	16:32	R028288
08	EB-14-05/14/08	JPL111-006	B0522022.d	05/22/2008	16:58	R028288
09	MW-25-1MS	JPL111-005MS	B0522027.d	05/22/2008	19:12	R028288
10	MW-25-1MSD	JPL111-005MSD	B0522028.d	05/22/2008	19:39	R028288
11						
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28						
29						
30						

COMMENTS: _____

VOA - 9

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1323 SDG No.: JPL111
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028288 SDG No.: JPL111
 Lab File ID: B0522004.D BFB Injection Date: 05/22/2008
 Instrument ID: 5973B BFB Injection Time: 08:40
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18.8
75	30% to 60% of mass 95	48.9
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	110.6
175	5% to 9% of mass 17	7.4()1
176	greater than 95%, but less than 101% of mass 174	100.4()1
177	5% to 9% of mass 176	6.7()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	VSTD050B1	VSTD050B1	B0522006.d	05/22/2008	09:37
02	S052208MVOWB2	S052208MVOWB2	B0522008.d	05/22/2008	10:34
03	B052208MVOWB1	B052208MVOWB1	B0522011.d	05/22/2008	12:00
04	TB-14-05/14/08	JPL111-007	B0522013.d	05/22/2008	12:53
05	MW-25-5	JPL111-001	B0522017.d	05/22/2008	14:41
06	MW-25-4	JPL111-002	B0522018.d	05/22/2008	15:07
07	MW-25-3	JPL111-003	B0522019.d	05/22/2008	15:34
08	MW-25-2	JPL111-004	B0522020.d	05/22/2008	16:03
09	MW-25-1	JPL111-005	B0522021.d	05/22/2008	16:32
10	EB-14-05/14/08	JPL111-006	B0522022.d	05/22/2008	16:58
11	MW-25-1MS	JPL111-005MS	B0522027.d	05/22/2008	19:12
12	MW-25-1MSD	JPL111-005MSD	B0522028.d	05/22/2008	19:39
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028288 SDG No.: JPL111
 Client Sample No. (VSTD050##): VSTD050B1 Date Analyzed: 05/22/2008
 Lab File ID (Standard): B0522006.d Time Analyzed: 09:37
 Instrument ID: 5973B 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	562537	7.53	436770	11.30	279429	13.25
UPPER LIMIT	1125074	7.58	873540	11.35	558858	13.3
LOWER LIMIT	281268.5	7.48	218385	11.25	139714.5	13.2
CLIENT SAMPLE NO.						
01 S052208MVOWB2	578274	7.52	468454	11.30	290141	13.25
02 B052208MVOWB1	519143	7.53	407353	11.30	254023	13.25
03 TB-14-05/14/08	530712	7.53	401715	11.30	250769	13.25
04 MW-25-5	488643	7.52	379575	11.30	238067	13.25
05 MW-25-4	465242	7.52	359777	11.30	231424	13.25
06 MW-25-3	467219	7.53	364040	11.30	234163	13.25
07 MW-25-2	531709	7.53	417328	11.30	238186	13.25
08 MW-25-1	449402	7.52	352747	11.30	226625	13.25
09 EB-14-05/14/08	441068	7.53	354622	11.30	225595	13.25
10 MW-25-1MS	514002	7.53	406342	11.30	277915	13.25
11 MW-25-1MSD	493568	7.52	362654	11.30	252210	13.25
12						
13						
14						
15						
16						
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 # JPL111

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-5

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-001
 Lab File ID: B0522017.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 14:41
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.86	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-5

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL111

Run Sequence: R028288

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL111-001

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522017.d

Level: (LOW/MED) _____

Date Collected: 05/14/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/22/2008 14:41

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:	
		<u>ug/L</u>	<u>Q</u>
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-5

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-001
 Lab File ID: B0522017.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 14:41
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

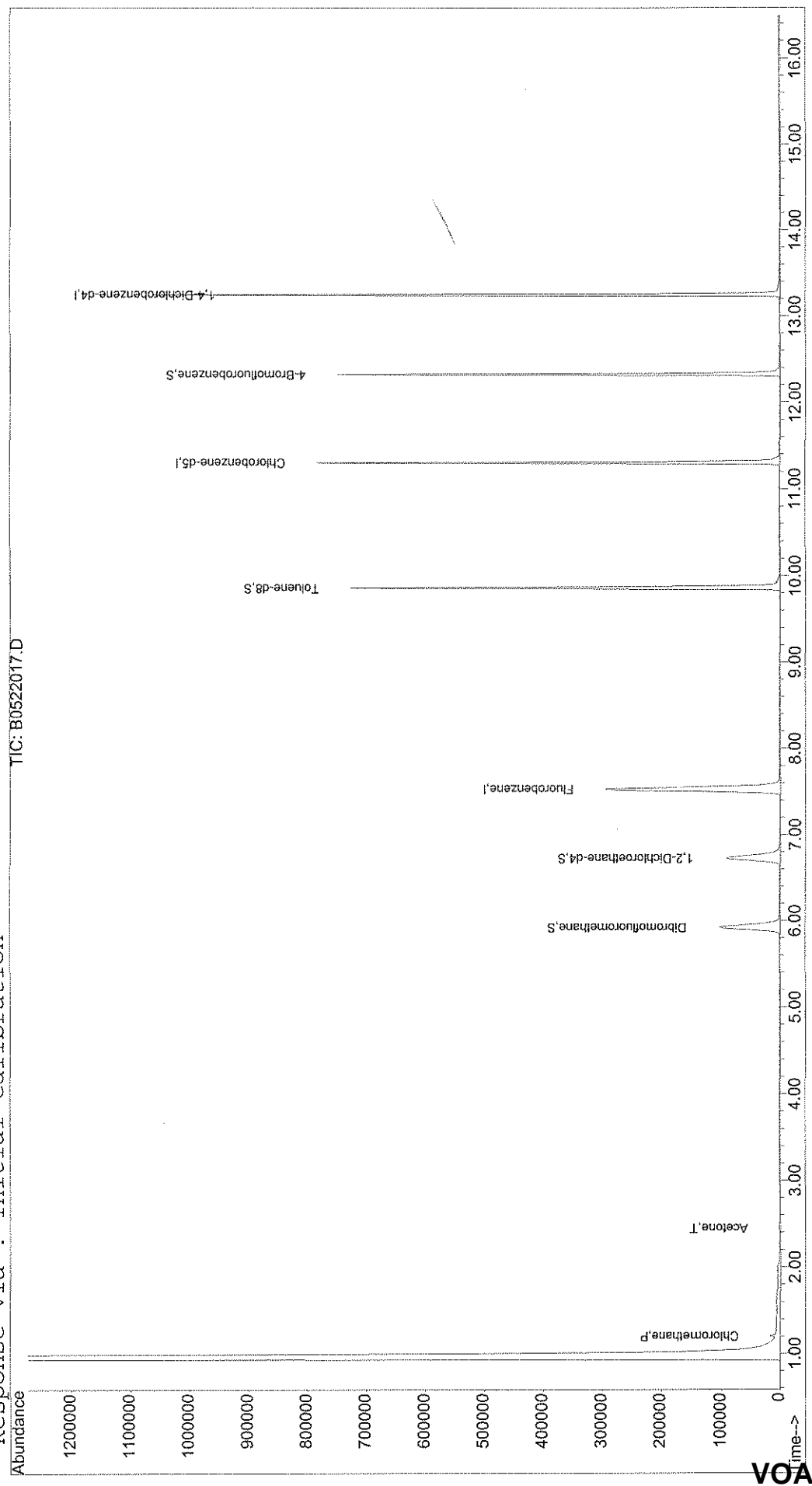
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522017.D Vial: 15
Acq On : 22 May 2008 14:41 Operator: LNH
Sample : JPL111-001 (524.2) Inst : Buddha
Misc : #4 10ML+IS/SS Multiplr: 1.00
MS Integation Params: rteint.p
Quant Time: May 23 16:09 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522017.D
 Acq On : 22 May 2008 14:41
 Sample : JPL111-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:09 2008

Vial: 15
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	7.52	96	488643	25.00	ug/l	0.00	92.09%
54) Chlorobenzene-d5	11.30	117	379575	25.00	ug/l	0.00	86.28%
74) 1,4-Dichlorobenzene-d4	13.25	152	238067	25.00	ug/l	0.00	91.56%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	126987	23.11	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	115.55%#	
40) 1,2-Dichloroethane-d4	6.73	65	154133	33.04	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	31.52	132.16%#	
55) Toluene-d8	9.86	98	457385	24.63	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.50	98.52%	
76) 4-Bromofluorobenzene	12.32	95	177398	25.16	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	100.64%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			
3) Chloromethane	1.20	50	6149	0.86	ug/l	94	
4) Vinyl Chloride	0.00	62	0	N.D.			
5) Bromomethane	1.56	96	73	Below Cal	#	1	
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	2.45	43	2541	1.53	ug/l	#	64
12) Iodomethane	0.00	142	0	N.D.			
13) Bromoethane	0.00	108	0	N.D.			
14) Carbon Disulfide	2.49	76	2022	N.D.			
15) Allyl chloride	0.00	76	0	N.D.			
16) Acetonitrile	2.73	41	63	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	3.09	96	72	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.			

24.04
QNH 5/30/08
QNH 5/27/08

(#) = qualifier out of range (m) = manual integration
 B0522017.D B8260W.M Fri May 23 16:09:45 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522017.D
 Acq On : 22 May 2008 14:41
 Sample : JPL111-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:09 2008

Vial: 15
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.76	96	30		N.D.	
30) 2-Butanone	4.91	43	60		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.37	41	29		N.D.	
34) Chloroform	5.52	83	92		N.D.	
35) 1,1,1-Trichloroethane	5.82	97	29		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.17	117	29		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.70	78	113		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	8.05	130	39		N.D.	
46) Methylcyclohexane	8.41	83	87		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.92	41	32		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	9.60	63	39		N.D.	
52) cis-1,3-Dichloropropene	9.86	75	39		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	225		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	10.30	97	38		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.75	43	36		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	667		N.D.	
66) Chlorobenzene	11.33	112	78		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

YAH 5/27/8

(#) = qualifier out of range (m) = manual integration
 B0522017.D B8260W.M Fri May 23 16:09:46 2008

Quantitation Report

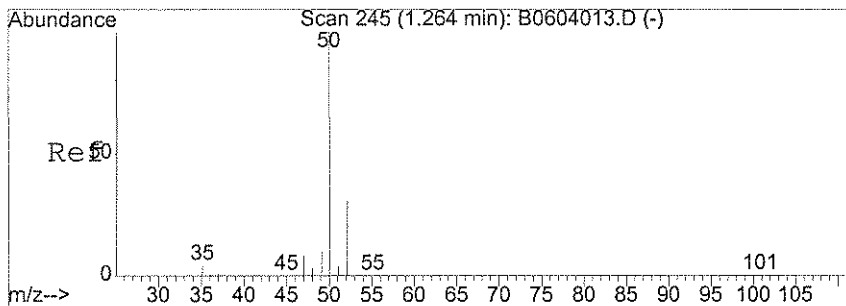
Data File : X:\MSVOA\BUDDHA\052208\B0522017.D
 Acq On : 22 May 2008 14:41
 Sample : JPL111-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:09 2008

Vial: 15
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

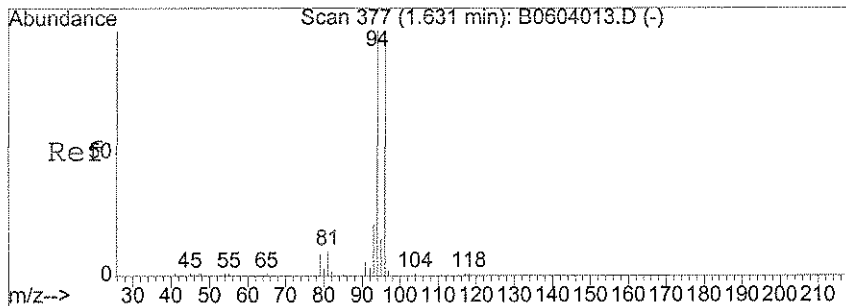
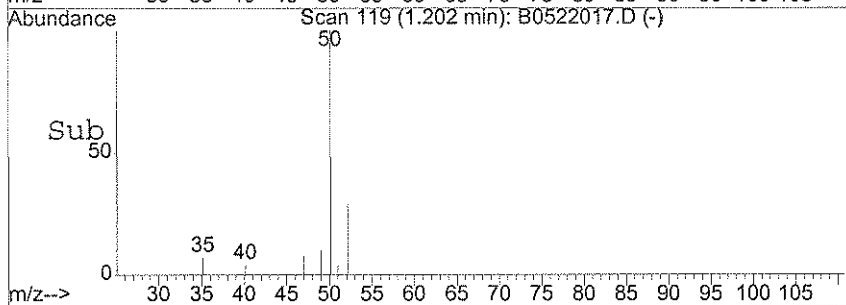
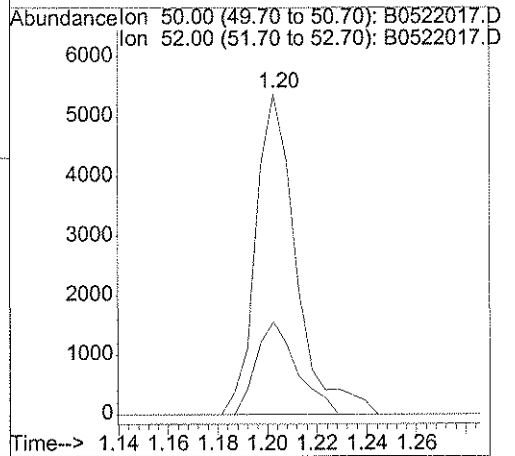
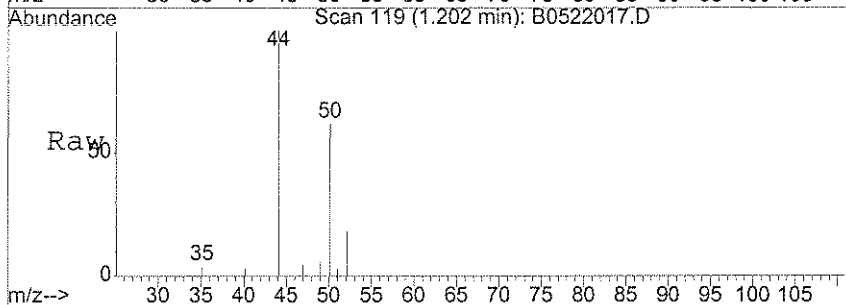
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.52	91	703		N.D.	
69) m,p-Xylene	11.53	106	257		N.D.	
70) o-xylene	11.87	106	87		N.D.	
71) Styrene	11.90	104	112		N.D.	
72) Bromoform	12.32	173	353		N.D.	
73) Isopropylbenzene	12.19	105	72		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.44	156	33		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.65	83	30		N.D.	
79) 1,2,3-Trichloropropane	12.43	75	31		N.D.	
80) n-Propylbenzene	12.51	120	74		N.D.	
81) 2-Chlorotoluene	12.59	91	29		N.D.	
82) 4-Chlorotoluene	12.68	91	31		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	192		N.D.	
84) tert-Butylbenzene	12.90	119	252		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	240		N.D.	
86) sec-butylbenzene	13.09	105	433		N.D.	
87) 1,3-Dichlorobenzene	13.27	146	183		N.D.	
88) 4-Isopropyltoluene	13.20	119	801		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	183		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	45		N.D.	
91) n-Butylbenzene	13.52	91	680		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.33	75	44		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	272		N.D.	
94) Hexachlorobutadiene	14.89	225	405		N.D.	
95) Naphthalene	14.97	128	208		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	336		N.D.	



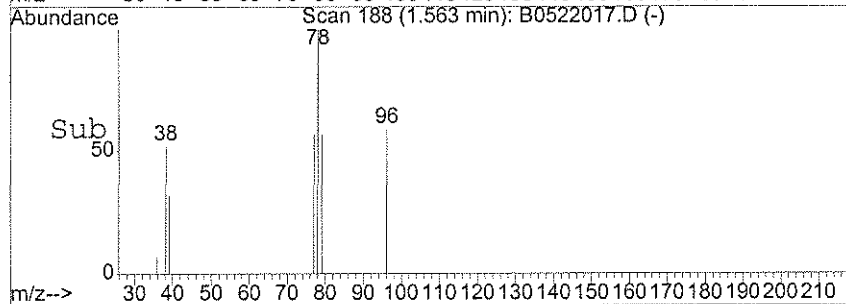
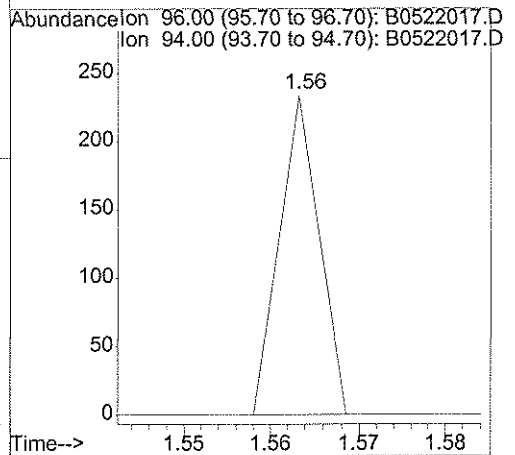
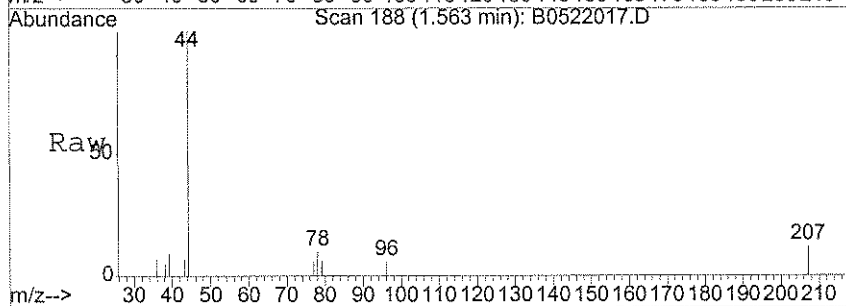
#3
 Chloromethane
 Concen: 0.86 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. 0.00 min
 Lab File: B0522017.D
 Acq: 22 May 2008 14:41

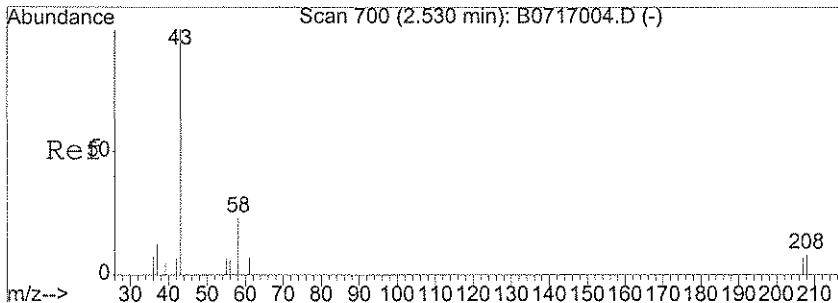
Tgt Ion: 50 Resp: 6149
 Ion Ratio Lower Upper
 50 100
 52 29.4 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.56 min Scan# 188
 Delta R.T. 0.01 min
 Lab File: B0522017.D
 Acq: 22 May 2008 14:41

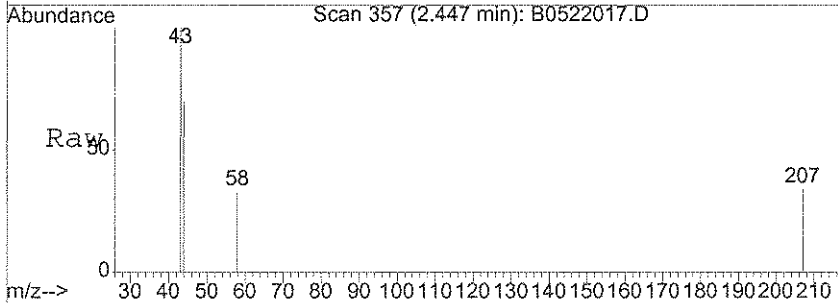
Tgt Ion: 96 Resp: 73
 Ion Ratio Lower Upper
 96 100
 94 0.0 84.9 124.9#



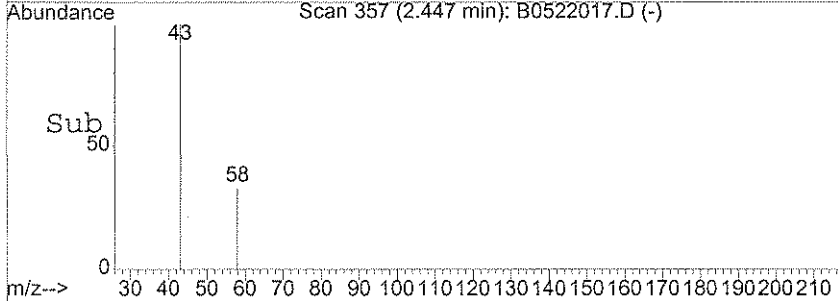
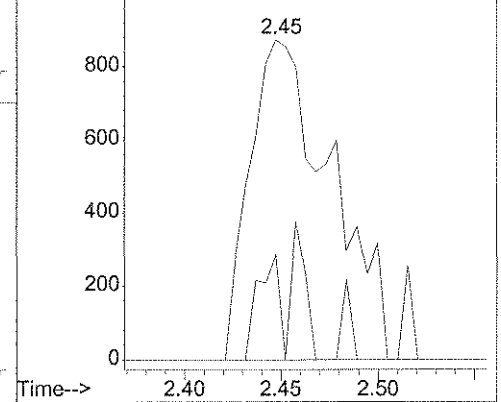


#11
 Acetone
 Concen: 1.53 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0522017.D
 Acq: 22 May 2008 14:41

Tgt Ion: 43 Resp: 2541
 Ion Ratio Lower Upper
 43 100
 58 8.7 22.0 33.0#



Abundance Ion 43.15 (42.85 to 43.85): B0522017.D
 Ion 58.05 (57.75 to 58.75): B0522017.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-4

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-002
 Lab File ID: B0522018.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 15:07
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.92	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-4

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-002
 Lab File ID: B0522018.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 15:07
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-4

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-002
 Lab File ID: B0522018.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 15:07
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

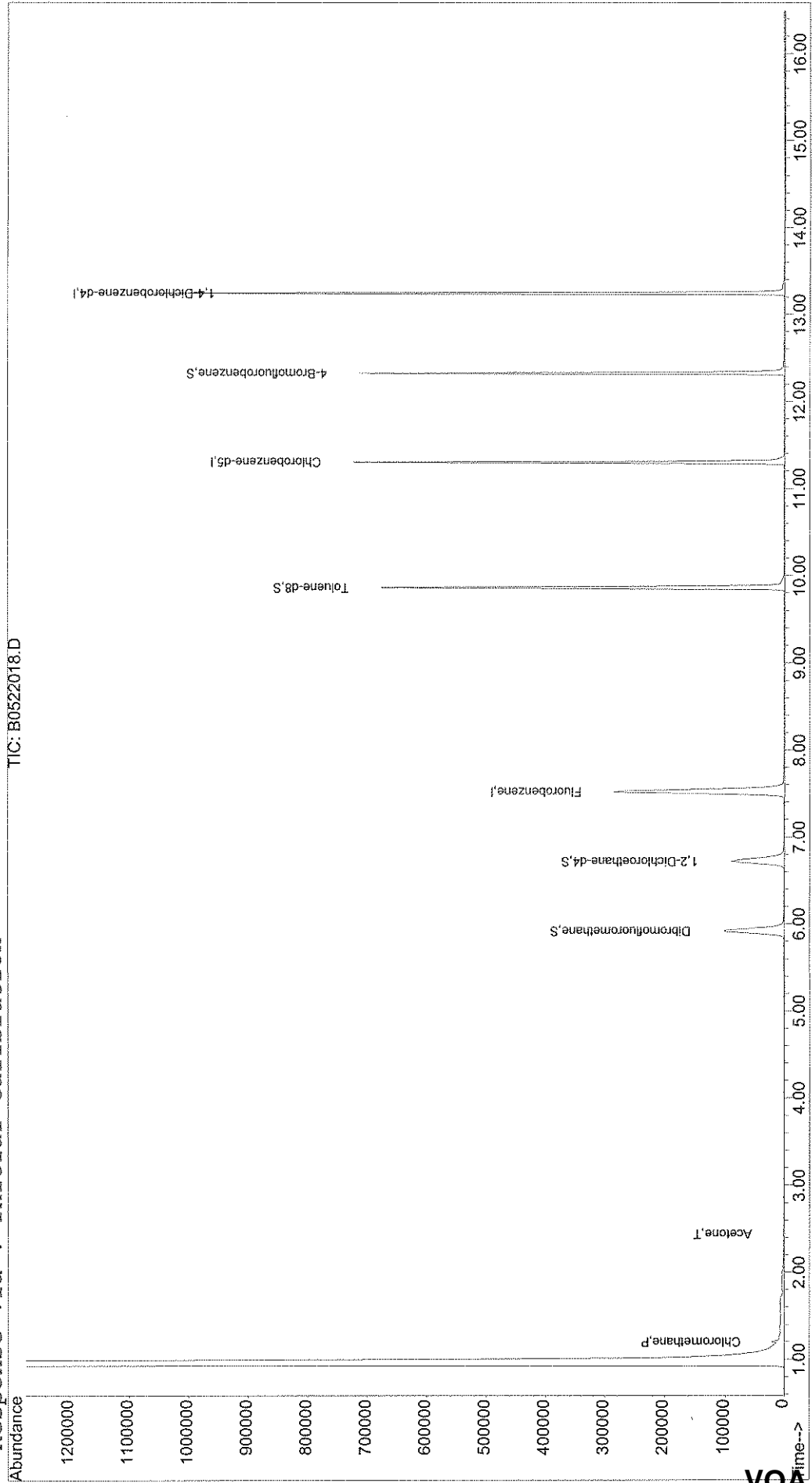
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522018.D Vial: 16
Acq On : 22 May 2008 15:07 Operator: LNH
Sample : JPL111-002 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:10 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522018.D
 Acq On : 22 May 2008 15:07
 Sample : JPL111-002 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:10 2008

Vial: 16
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	7.52	96	465242	25.00	ug/l	0.00	87.68%
54) Chlorobenzene-d5	11.30	117	359777	25.00	ug/l	0.00	81.78%
74) 1,4-Dichlorobenzene-d4	13.25	152	231424	25.00	ug/l	0.00	89.00%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	123387	23.59	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	117.95%#	
40) 1,2-Dichloroethane-d4	6.72	65	145730	32.81	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	31.30	131.24%#	
55) Toluene-d8	9.86	98	429143	24.39	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.26	97.56%	
76) 4-Bromofluorobenzene	12.32	95	170394	24.87	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	23.76	99.48%	

OKH 5/30/08

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	6230	0.92	ug/l	95
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.56	96	68	Below Cal	#	1
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	2.31	96	69	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.45	43	2194	1.39	ug/l #	66
12) Iodomethane	0.00	142	0	N.D.		
13) Bromoethane	0.00	108	0	N.D.		
14) Carbon Disulfide	2.49	76	64	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	2.73	43	75	N.D.		
18) Methylene Chloride	0.00	84	0	N.D.	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.		

OKH 5/27/08

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522018.D
 Acq On : 22 May 2008 15:07
 Sample : JPL111-002 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:10 2008

Vial: 16
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.78	96	40		N.D.	
30) 2-Butanone	4.87	43	42		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	5.54	83	133		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.82	56	29		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.07	75	35		N.D.	
41) Benzene	6.71	78	81		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	7.18	43	34		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	8.40	83	29		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.90	41	34		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	9.72	75	30		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.95	92	43		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	10.61	97	45		N.D.	
60) Tetrachloroethene	10.48	166	56		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.69	43	93		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	11.07	107	30		N.D.	
65) 1-Chlorohexane	11.30	91	901		N.D.	
66) Chlorobenzene	11.32	112	67		N.D.	
67) 1,1,1,2-Tetrachloroethane	11.18	131	38		N.D.	

LNH 5/27/08

(#) = qualifier out of range (m) = manual integration
 B0522018.D B8260W.M Fri May 23 16:10:45 2008

Quantitation Report

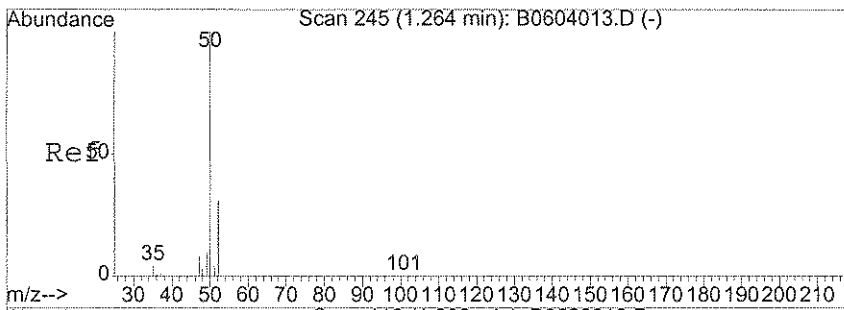
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 Acq On : 22 May 2008 15:07
 Sample : JPL111-002 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:10 2008

Vial: 16
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

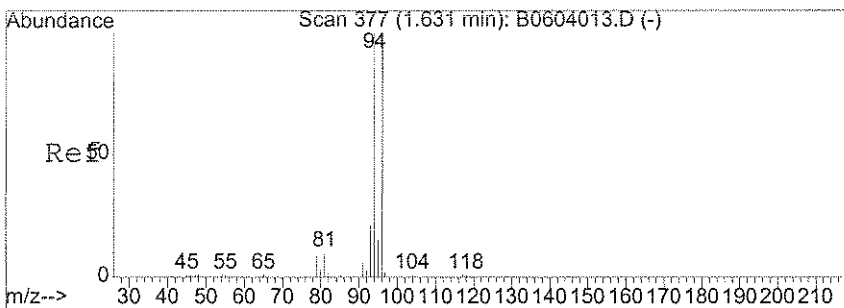
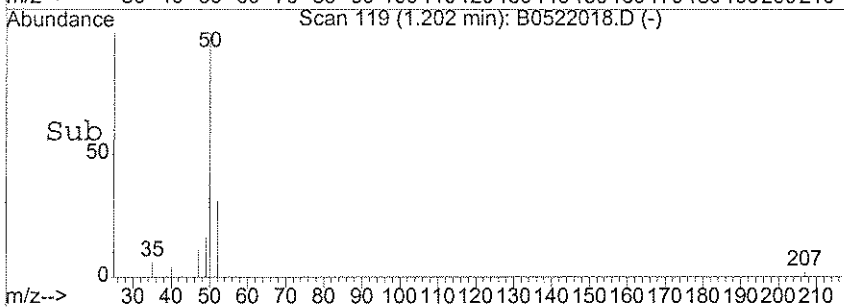
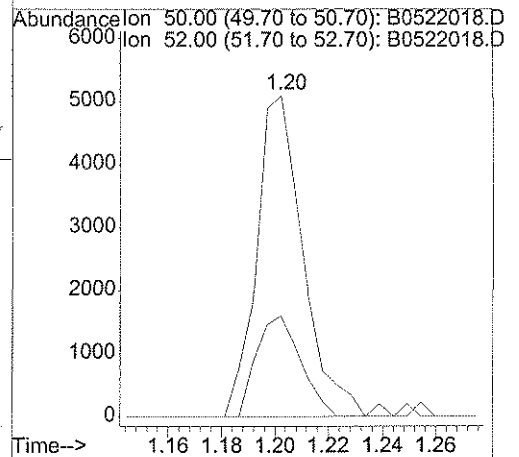
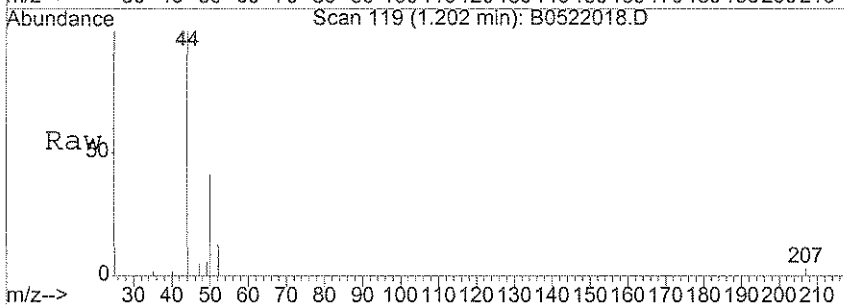
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	240		N.D.	
69) m,p-Xylene	11.52	106	35		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	12.19	105	30		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.33	156	52		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	49		N.D.	
79) 1,2,3-Trichloropropane	12.53	75	35		N.D.	
80) n-Propylbenzene	12.64	120	35		N.D.	
81) 2-Chlorotoluene	12.68	91	81		N.D.	
82) 4-Chlorotoluene	12.68	91	81		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	184		N.D.	
84) tert-Butylbenzene	12.92	119	33		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	213		N.D.	
86) sec-butylbenzene	13.08	105	388		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	31		N.D.	
88) 4-Isopropyltoluene	13.20	119	649		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	88		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	52		N.D.	
91) n-Butylbenzene	13.52	91	650		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	305		N.D.	
94) Hexachlorobutadiene	14.88	225	52		N.D.	
95) Naphthalene	14.98	128	270		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	396		N.D.	



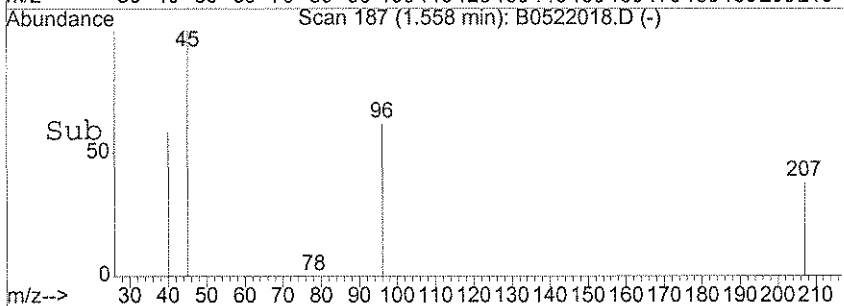
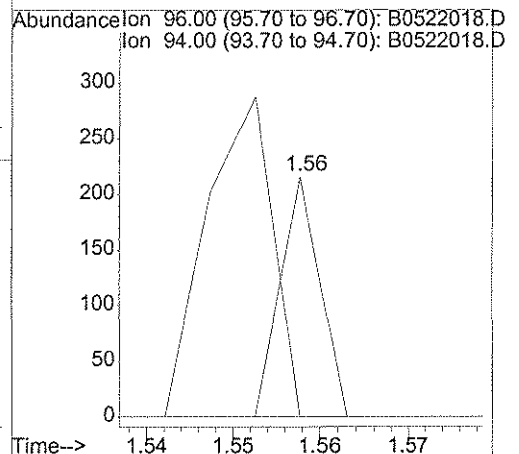
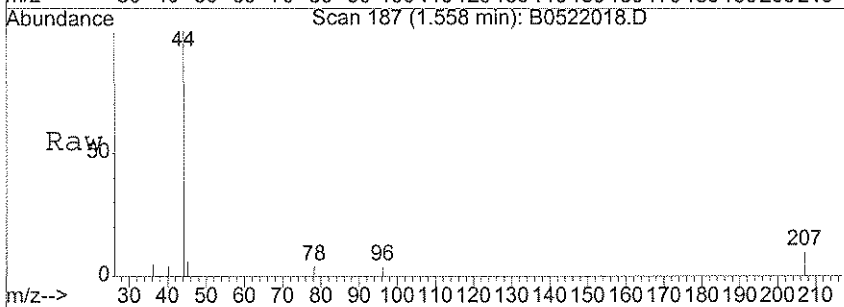
#3
 Chloromethane
 Concen: 0.92 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0522018.D
 Acq: 22 May 2008 15:07

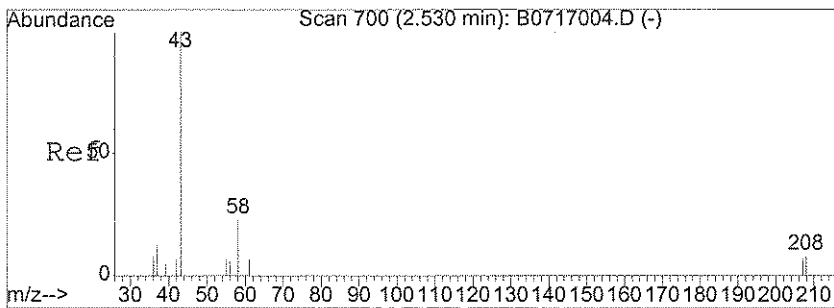
Tgt Ion: 50 Resp: 6230
 Ion Ratio Lower Upper
 50 100
 52 29.7 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.56 min Scan# 187
 Delta R.T. 0.01 min
 Lab File: B0522018.D
 Acq: 22 May 2008 15:07

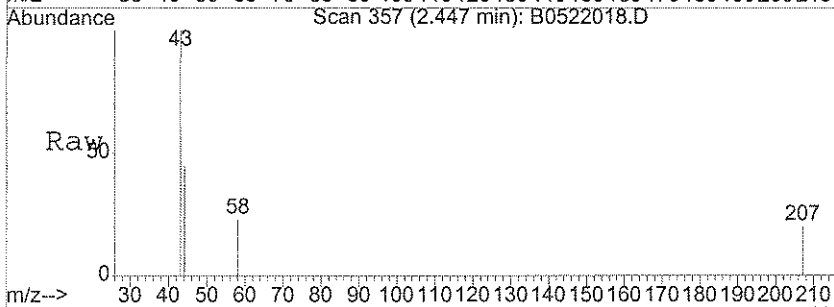
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 Ion Ratio Lower Upper
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 94 226.5 84.9 124.9#



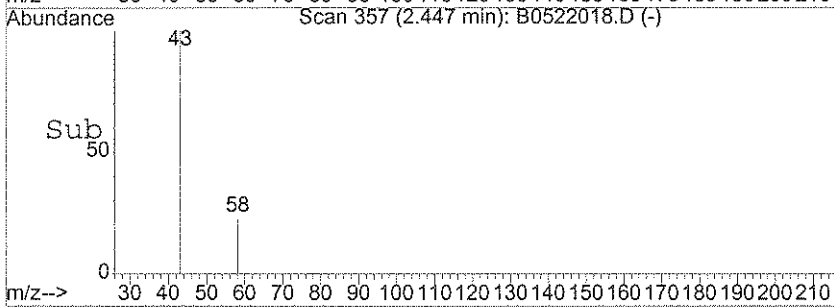
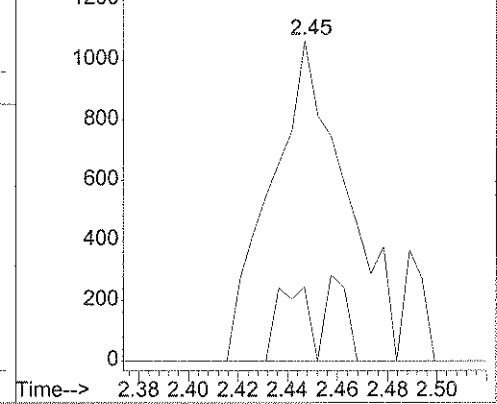


#11
 Acetone
 Concen: 1.39 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0522018.D
 Acq: 22 May 2008 15:07

Tgt Ion	Ratio	Lower	Upper
43	100		
58	9.9	22.0	33.0#



Abundance Ion 43.15 (42.85 to 43.85): B0522018.D
 Ion 58.05 (57.75 to 58.75): B0522018.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-3

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-003
 Lab File ID: B0522019.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 15:34
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.58	
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	0.99	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-3

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-003
 Lab File ID: B0522019.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 15:34
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-3

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-003
 Lab File ID: B0522019.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 15:34
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

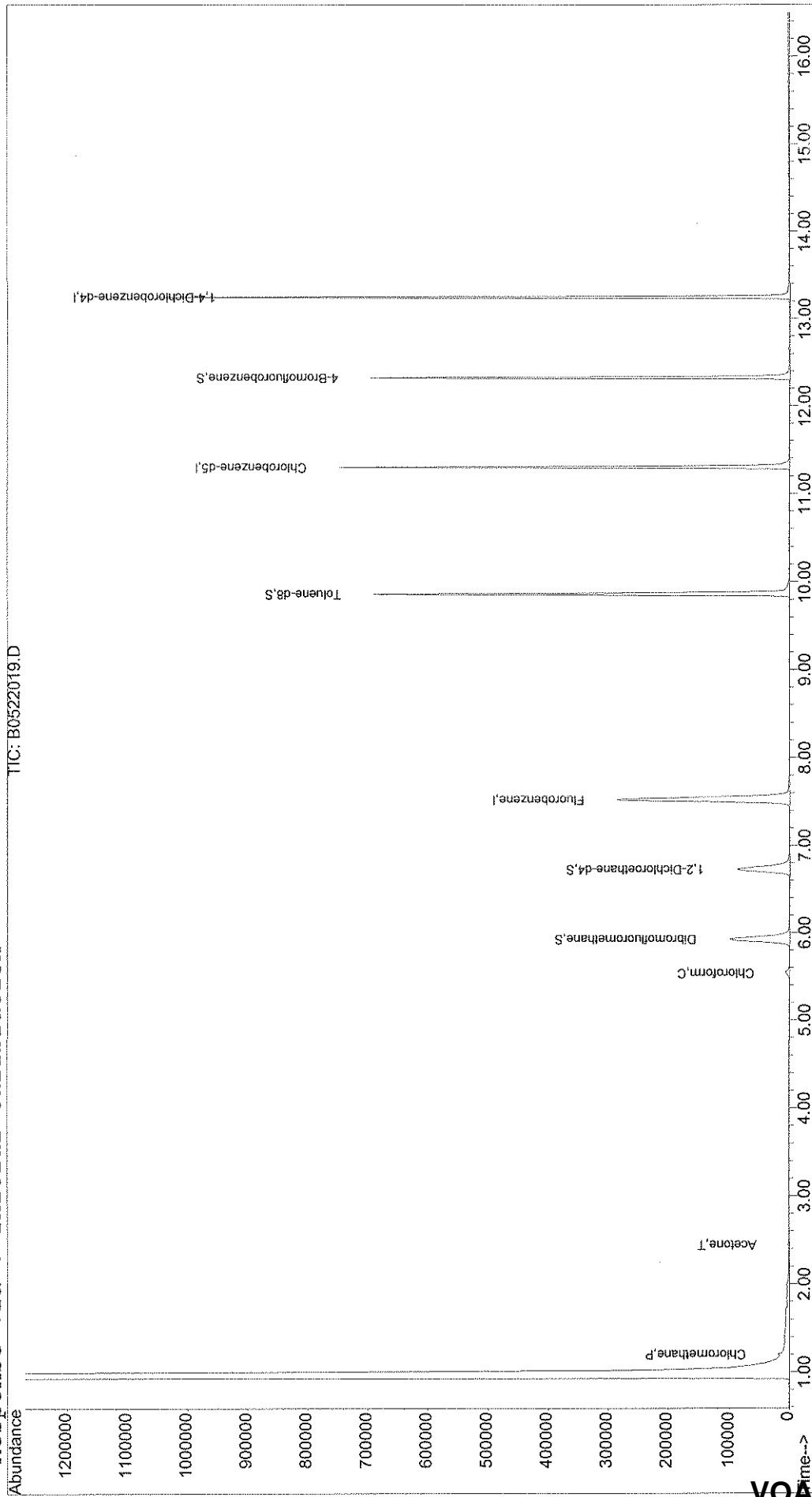
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522019.D Vial: 17
Acq On : 22 May 2008 15:34 Operator: LNH
Sample : JPL111-003 (524.2 Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:11 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522019.D
 Acq On : 22 May 2008 15:34
 Sample : JPL111-003 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:11 2008

Vial: 17
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	467219	25.00	ug/l	0.00	88.05%
54) Chlorobenzene-d5	11.30	117	364040	25.00	ug/l	0.00	82.75%
74) 1,4-Dichlorobenzene-d4	13.25	152	234163	25.00	ug/l	0.00	90.06%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	123349	23.48	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	117.40%#	
40) 1,2-Dichloroethane-d4	6.72	65	149979	33.62	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	32.08	134.48%#	
55) Toluene-d8	9.86	98	434876	24.42	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.30	97.68%	
76) 4-Bromofluorobenzene	12.32	95	171141	24.68	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	23.58	98.72%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			
3) Chloromethane	1.20	50	3928	0.58	ug/l	99	
4) Vinyl Chloride	0.00	62	0	N.D.			
5) Bromomethane	1.56	96	64	Below Cal	#	1	
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	2.44	43	803	0.51	ug/l	98	
12) Iodomethane	0.00	142	0	N.D.			
13) Bromoethane	0.00	108	0	N.D.			
14) Carbon Disulfide	2.49	76	76	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) 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.			

QNT 5/20/08
 Qvalue

QNT 5/27/08

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522019.D
 Acq On : 22 May 2008 15:34
 Sample : JPL111-003 (524.2
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:11 2008

Vial: 17
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	39		N.D.	
30) 2-Butanone	5.01	43	60		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	5.53	83	9847mS	0.99	ug/l #	80
35) 1,1,1-Trichloroethane	5.60	97	42		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.14	75	30		N.D.	
41) Benzene	6.69	78	46		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	8.39	130	35		N.D.	
46) Methylcyclohexane	8.42	83	30		N.D.	
47) 1,2-Dichloropropane	8.66	63	31		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	0.00	41	0		N.D.	
50) Bromodichloromethane	9.09	83	515		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.86	75	29		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.94	92	185		N.D.	
57) trans-1,3-Dichloropropene	10.10	75	39		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	10.33	97	33		N.D.	
60) Tetrachloroethene	10.48	166	71		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.75	43	33		N.D.	
63) Dibromochloromethane	10.82	129	65		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.31	91	749		N.D.	
66) Chlorobenzene	11.33	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0522019.D B8260W.M Fri May 23 16:11:49 2008

Quantitation Report

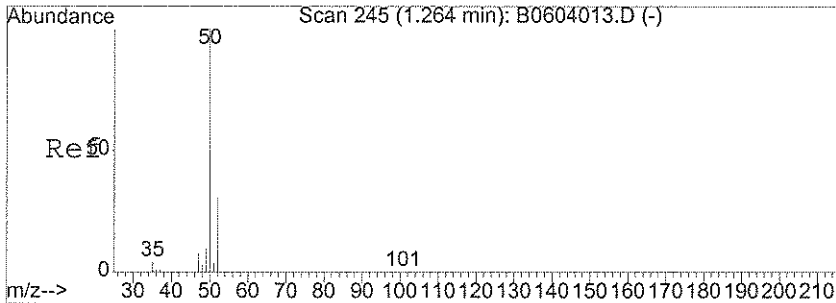
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 Acq On : 22 May 2008 15:34
 Sample : JPL111-003 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:11 2008

Vial: 17
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

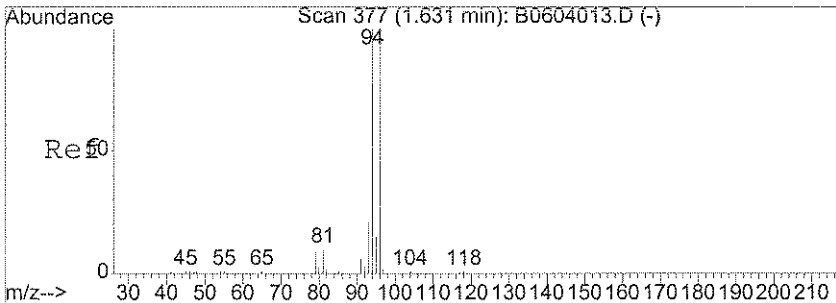
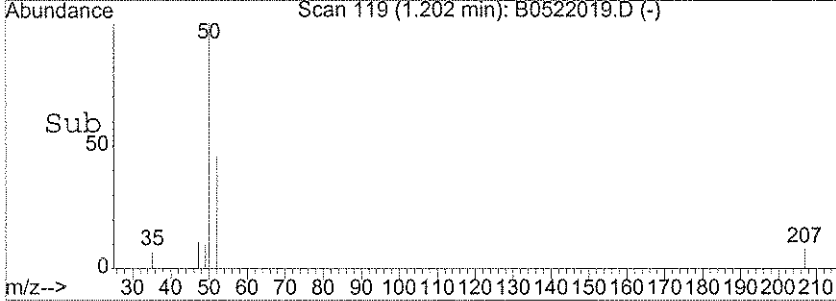
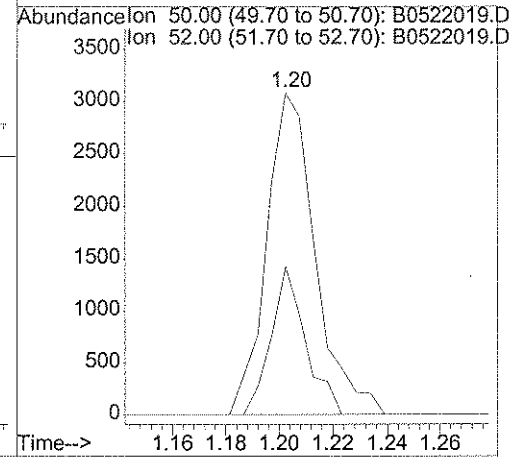
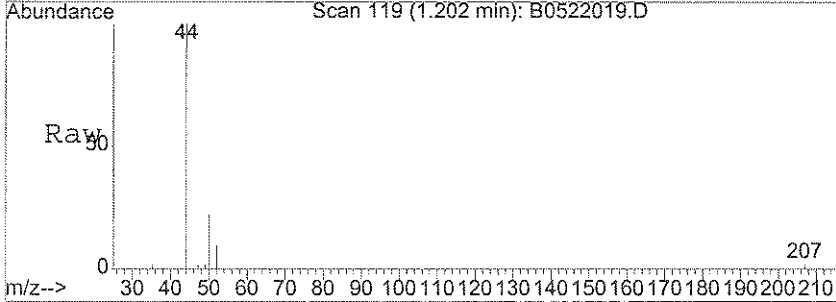
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	186		N.D.	
69) m,p-Xylene	11.53	106	231		N.D.	
70) o-xylene	11.66	106	37		N.D.	
71) Styrene	11.89	104	36		N.D.	
72) Bromoform	12.34	173	69		N.D.	
73) Isopropylbenzene	12.18	105	36		N.D.	
75) trans-1,4-Dichloro-2-buten	12.32	53	50		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	100		N.D.	
79) 1,2,3-Trichloropropane	12.51	75	56		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.91	91	77		N.D.	
82) 4-Chlorotoluene	12.68	91	33		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	163		N.D.	
84) tert-Butylbenzene	12.92	119	72		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	165		N.D.	
86) sec-butylbenzene	13.08	105	86		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	136		N.D.	
88) 4-Isopropyltoluene	13.20	119	555		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	110		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	224		N.D.	
91) n-Butylbenzene	13.52	91	216		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.19	75	30		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	210		N.D.	
94) Hexachlorobutadiene	14.89	225	177		N.D.	
95) Naphthalene	14.97	128	292		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	218		N.D.	



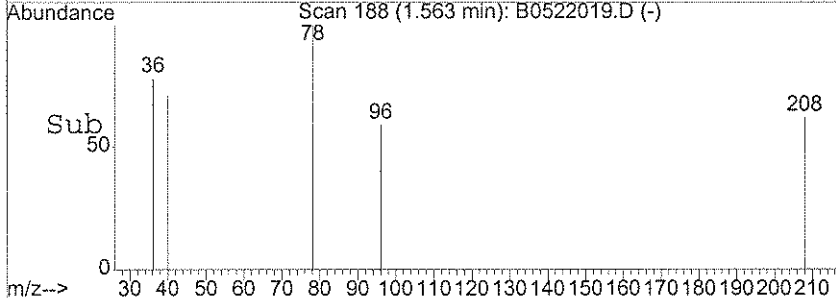
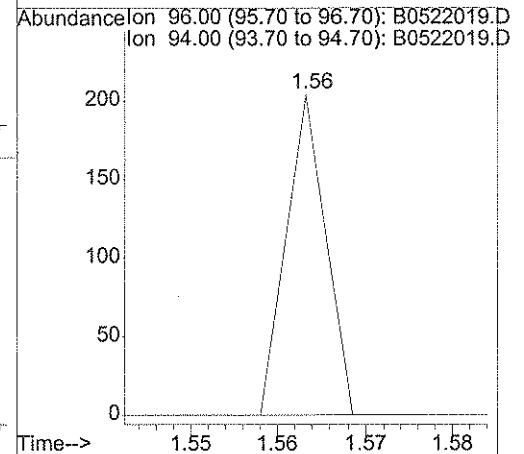
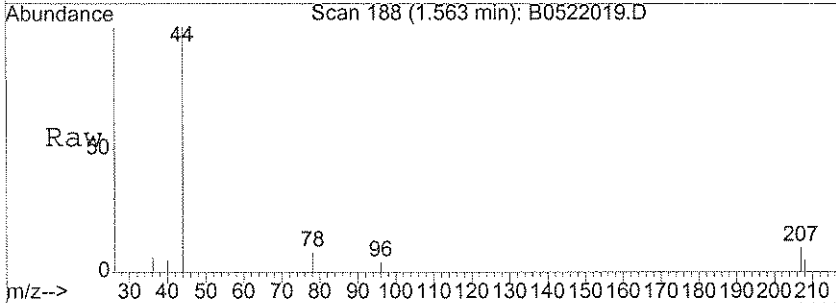
#3
 Chloromethane
 Concen: 0.58 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. 0.00 min
 Lab File: B0522019.D
 Acq: 22 May 2008 15:34

Tgt Ion: 50 Resp: 3928
 Ion Ratio Lower Upper
 50 100
 52 32.9 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.56 min Scan# 188
 Delta R.T. 0.01 min
 Lab File: B0522019.D
 Acq: 22 May 2008 15:34

Tgt Ion: 96 Resp: 64
 Ion Ratio Lower Upper
 96 100
 94 0.0 84.9 124.9#



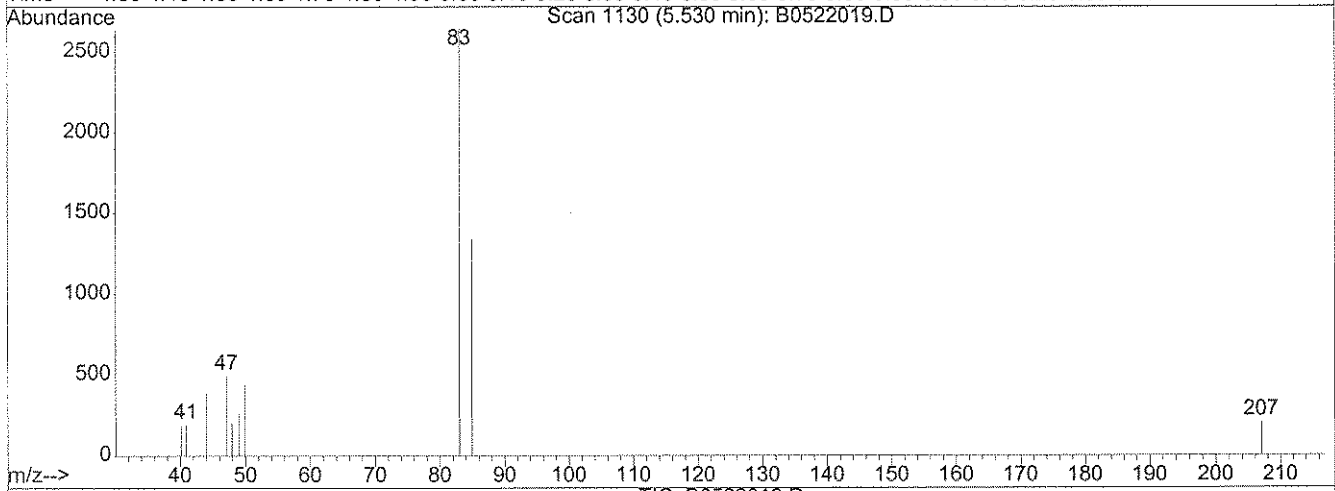
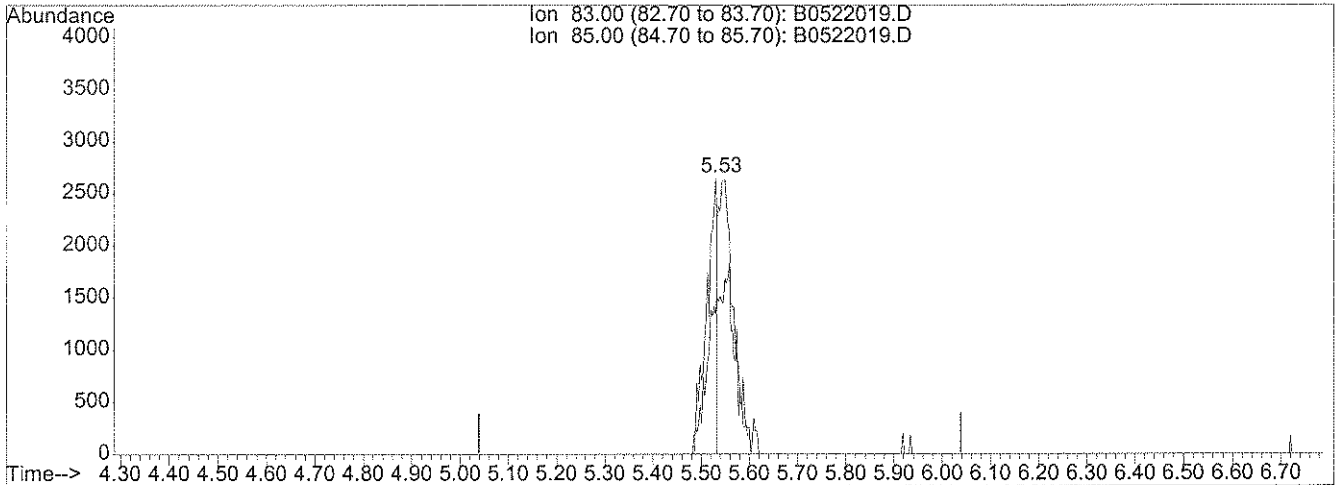
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522019.D
 Acq On : 22 May 2008 15:34
 Sample : JPL111-003 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:11 2008

Vial: 17
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



TIC: B0522019.D

(34) Chloroform (C)

5.53min 0.41ug/l

response 4038

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	80.01
0.00	0.00	0.00
0.00	0.00	0.00

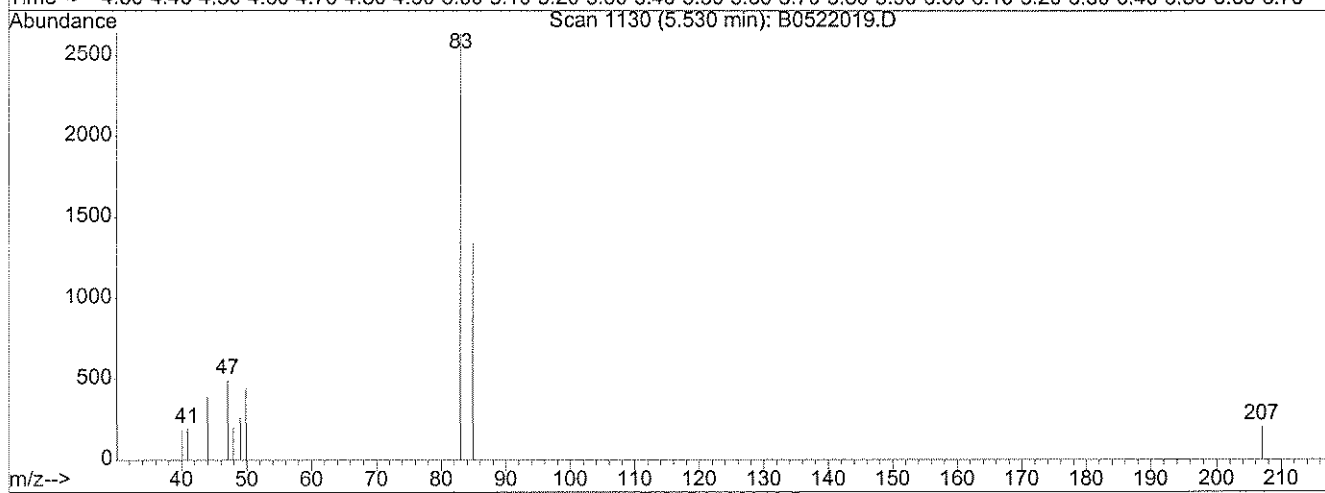
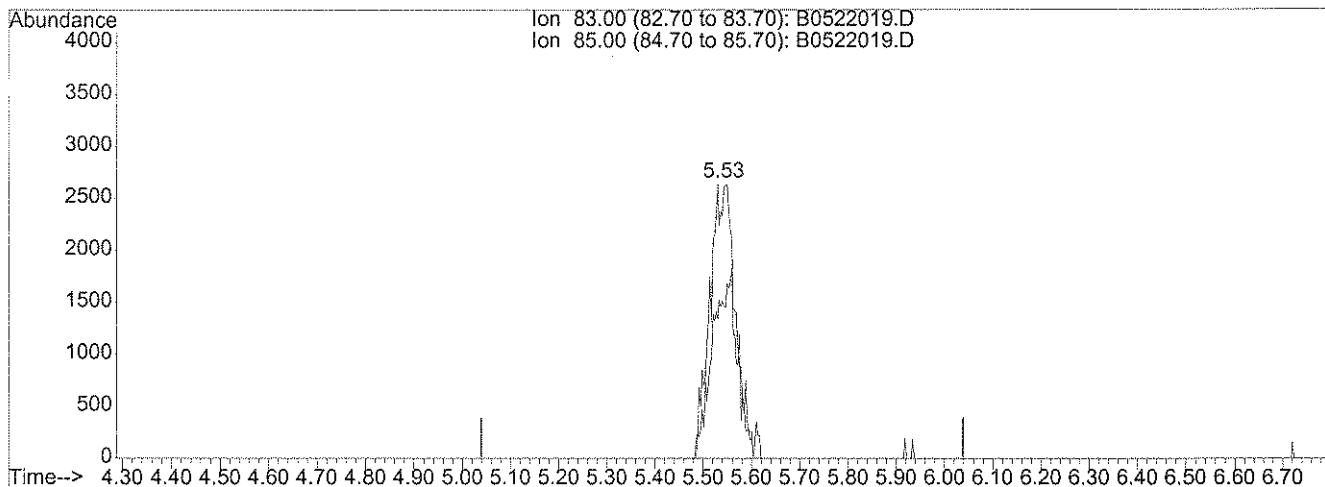
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522019.D
Acq On : 22 May 2008 15:34
Sample : JPL111-003 (524.2
Misc : #3 10ML+IS/SS
MS Integration Params: rteint.p
Quant Time: May 23 16:11 2008

Vial: 17
Operator: LNH
Inst : Buddha
Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Multiple Level Calibration

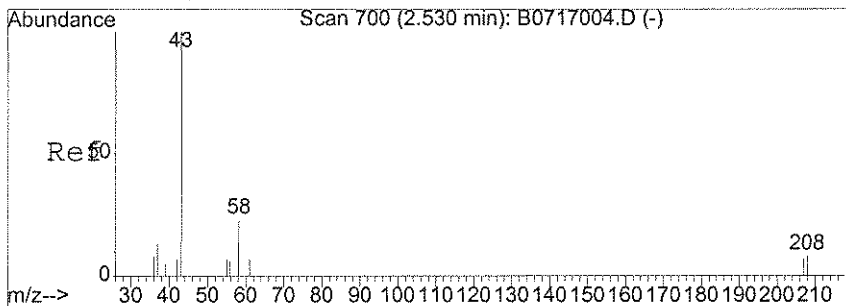


(34) Chloroform (C)

5.53min 0.99ug/l m

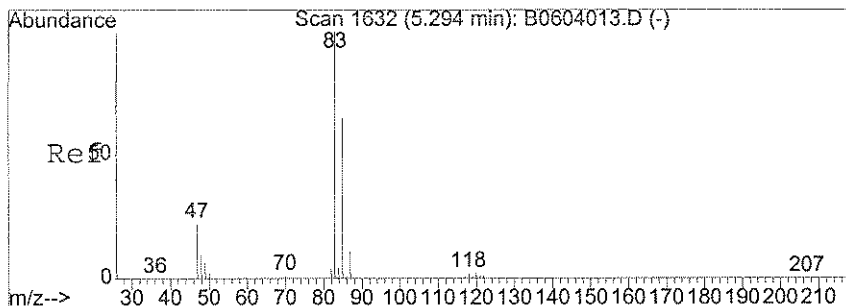
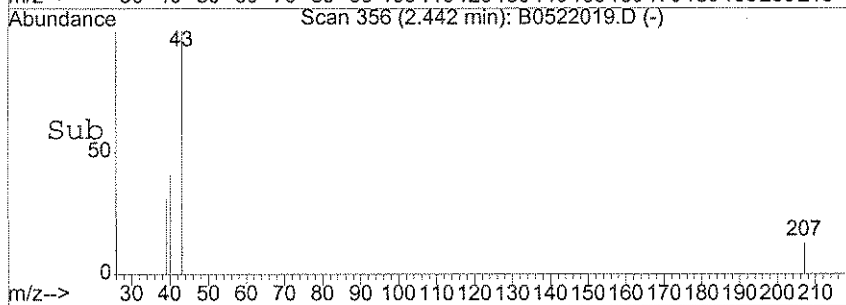
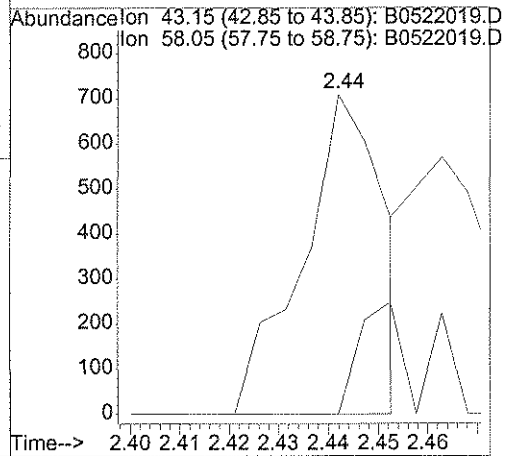
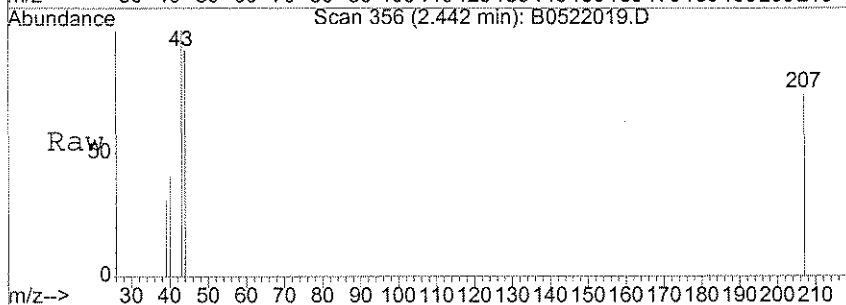
response 9847

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	32.81#
0.00	0.00	0.00
0.00	0.00	0.00



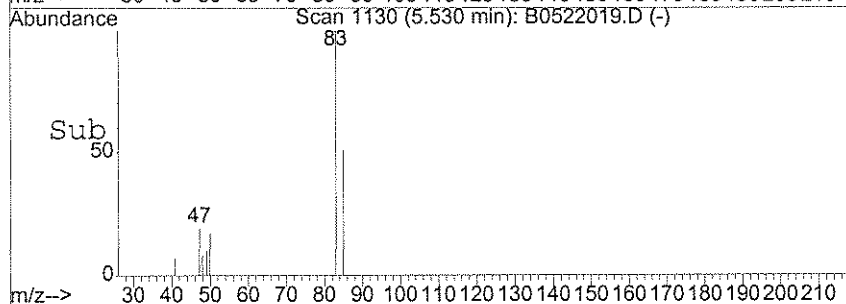
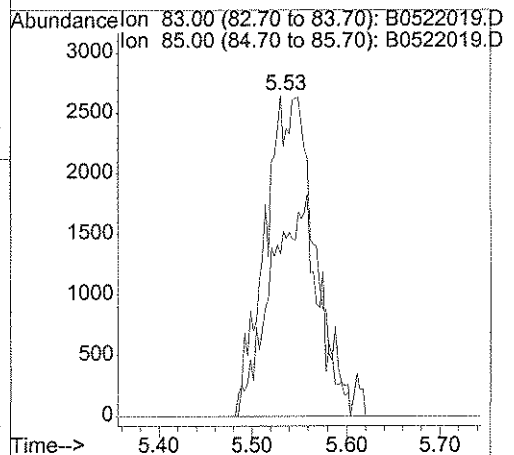
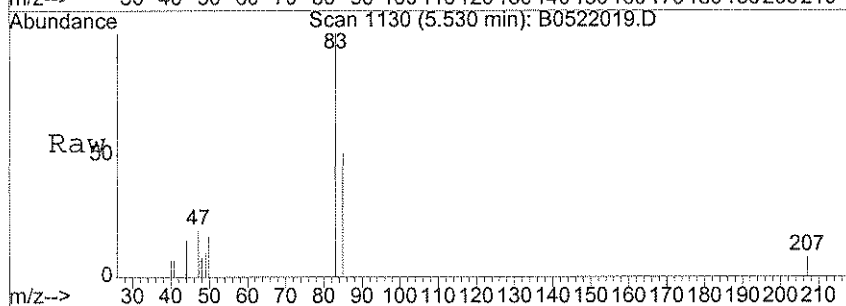
#11
 Acetone
 Concen: 0.51 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0522019.D
 Acq: 22 May 2008 15:34

Tgt Ion: 43 Resp: 803
 Ion Ratio Lower Upper
 43 100
 58 26.5 22.0 33.0



#34
 Chloroform
 Concen: 0.99 ug/l m
 RT: 5.53 min Scan# 1130
 Delta R.T. -0.01 min
 Lab File: B0522019.D
 Acq: 22 May 2008 15:34

Tgt Ion: 83 Resp: 9847
 Ion Ratio Lower Upper
 83 100
 85 32.8 44.0 84.0#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-2

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-004
 Lab File ID: B0522020.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:03
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.69	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-2

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-004
 Lab File ID: B0522020.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:03
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-2

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-004
 Lab File ID: B0522020.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:03
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

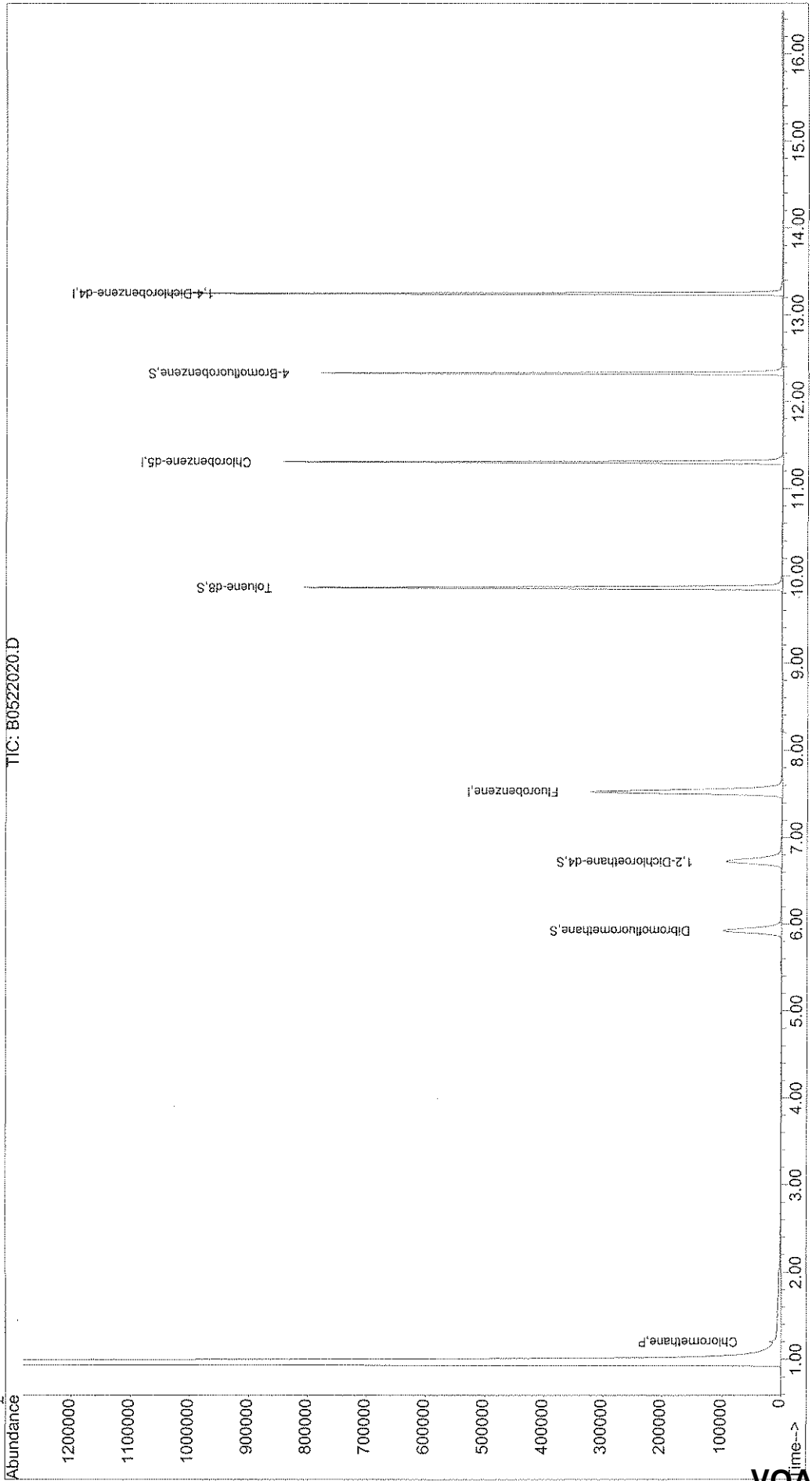
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQANT\B0522020.D Vial: 18
Acq On : 22 May 2008 16:03 Operator: LNH
Sample : JPL111-004 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:09 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522020.D Vial: 18
 Acq On : 22 May 2008 16:03 Operator: LNH
 Sample : JPL111-004 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:09 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
						Rcv(Ar)
1) Fluorobenzene	7.53	96	531709	25.00	ug/l	0.00 100.20%
54) Chlorobenzene-d5	11.30	117	417328	25.00	ug/l	0.00 94.86%
74) 1,4-Dichlorobenzene-d4	13.25	152	238186	25.00	ug/l	0.00 91.61%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	126439	21.15	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	105.75%
40) 1,2-Dichloroethane-d4	6.72	65	165195mS	31.04	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	124.16%#
55) Toluene-d8	9.86	98	518979	24.25	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	97.00%
76) 4-Bromofluorobenzene	12.32	95	181992	24.65	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	98.60%

Qent 5/30/08

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	5327	0.69	ug/l	96
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.55	96	86	Below Cal	#	1
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.		
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.		

Qent 5/30/08

(#) = qualifier out of range (m) = manual integration
 B0522020.D B8260W.M Fri May 30 09:09:42 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522020.D Vial: 18
 Acq On : 22 May 2008 16:03 Operator: LNH
 Sample : JPL111-004 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:09 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.87	96	30		N.D.	
30) 2-Butanone	4.97	43	39		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	5.54	83	578		N.D.	
35) 1,1,1-Trichloroethane	5.85	97	33		N.D.	
36) Cyclohexane	5.62	56	34		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.15	75	30		N.D.	
41) Benzene	6.69	78	35		N.D.	
42) 1,2-Dichloroethane	6.77	62	30		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	8.23	130	661		N.D.	
46) Methylcyclohexane	8.41	83	30		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	9.09	83	140		N.D.	
51) 2-Chloroethyl vinyl ether	9.45	63	38		N.D.	
52) cis-1,3-Dichloropropene	9.68	75	31		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	278		N.D.	
57) trans-1,3-Dichloropropene	10.15	75	29		N.D.	
58) Ethyl methacrylate	10.35	69	31		N.D.	
59) 1,1,2-Trichloroethane	10.28	97	39		N.D.	
60) Tetrachloroethene	10.49	166	51		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.73	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	11.33	91	38		N.D.	
66) Chlorobenzene	11.32	112	46		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

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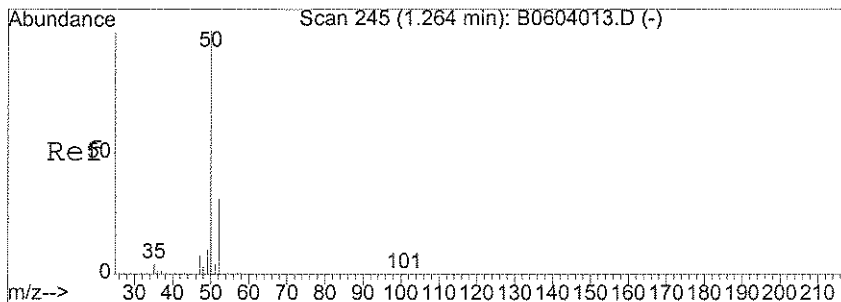
(#) = qualifier out of range (m) = manual integration
 B0522020.D B8260W.M Fri May 30 09:09:42 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522020.D Vial: 18
 Acq On : 22 May 2008 16:03 Operator: LNH
 Sample : JPL111-004 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:09 2008 Quant Results File: B8260W.RES

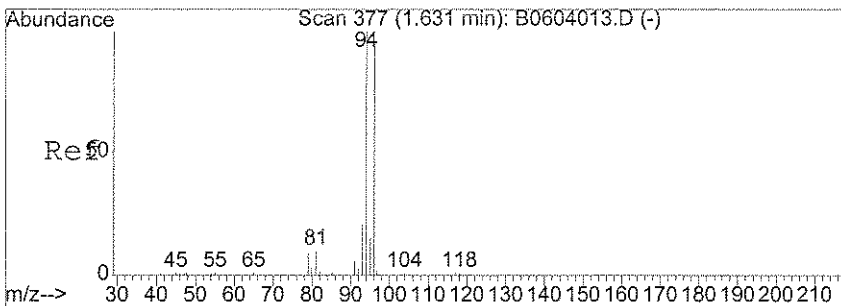
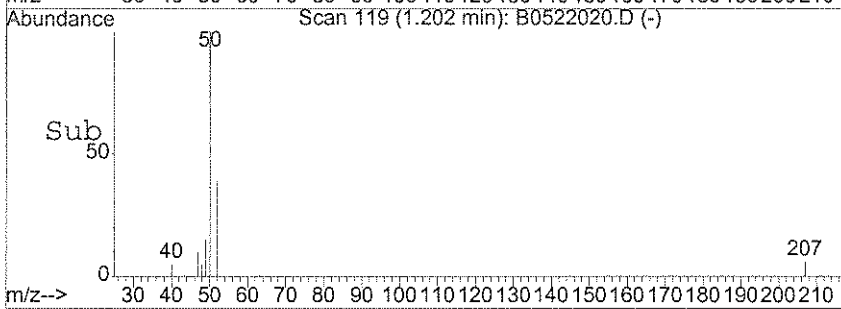
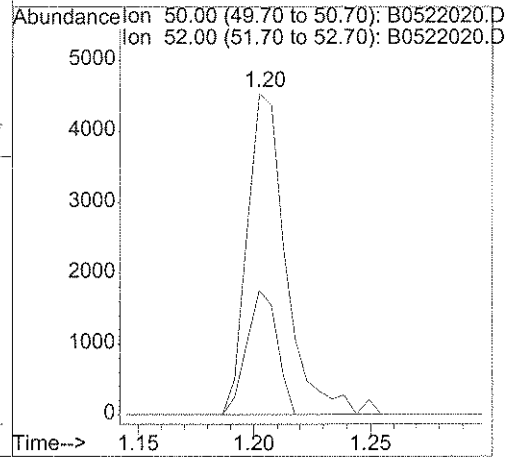
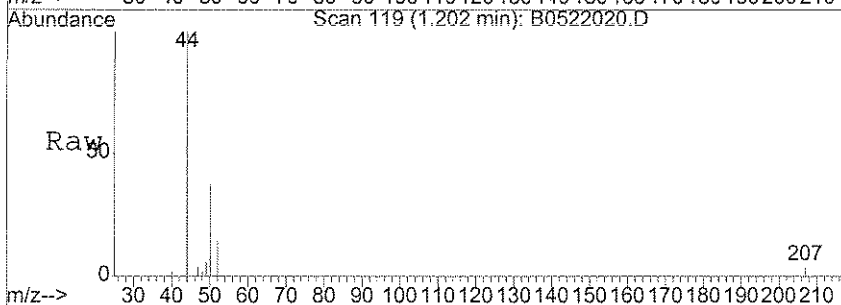
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	146		N.D.	
69) m,p-Xylene	11.53	106	118		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.17	104	30		N.D.	
72) Bromoform	12.35	173	30		N.D.	
73) Isopropylbenzene	12.18	105	119		N.D.	
75) trans-1,4-Dichloro-2-buten	12.23	53	34		N.D.	
77) Bromobenzene	12.37	156	31		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.59	83	31		N.D.	
79) 1,2,3-Trichloropropane	12.50	75	64		N.D.	
80) n-Propylbenzene	12.48	120	31		N.D.	
81) 2-Chlorotoluene	12.59	91	116		N.D.	
82) 4-Chlorotoluene	12.69	91	50		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	73		N.D.	
84) tert-Butylbenzene	12.90	119	131		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	282		N.D.	
86) sec-butylbenzene	13.08	105	290		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	94		N.D.	
88) 4-Isopropyltoluene	13.20	119	608		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	225		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	191		N.D.	
91) n-Butylbenzene	13.52	91	445		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.19	75	30		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	269		N.D.	
94) Hexachlorobutadiene	14.89	225	146		N.D.	
95) Naphthalene	14.97	128	256		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	129		N.D.	



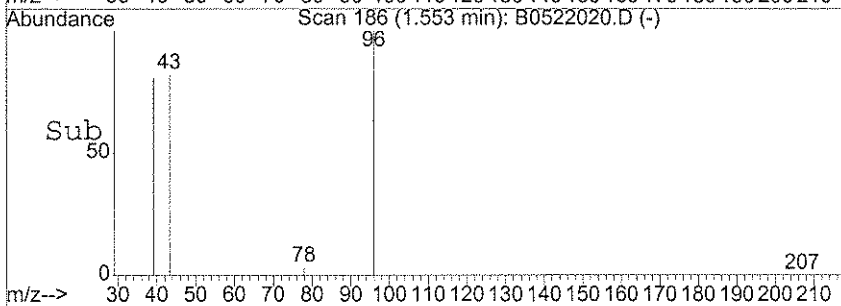
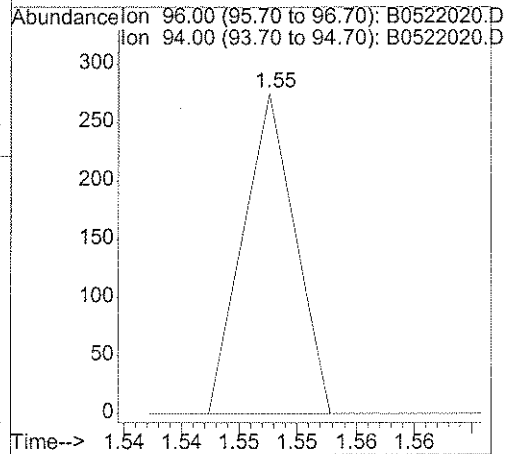
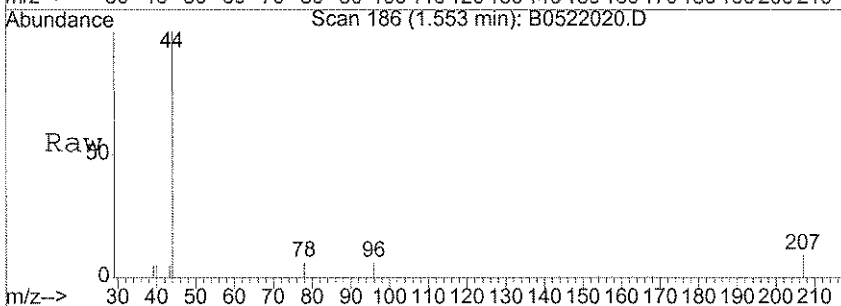
#3
 Chloromethane
 Concen: 0.69 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0522020.D
 Acq: 22 May 2008 16:03

Tgt Ion: 50 Resp: 5327
 Ion Ratio Lower Upper
 50 100
 52 30.3 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.55 min Scan# 186
 Delta R.T. 0.00 min
 Lab File: B0522020.D
 Acq: 22 May 2008 16:03

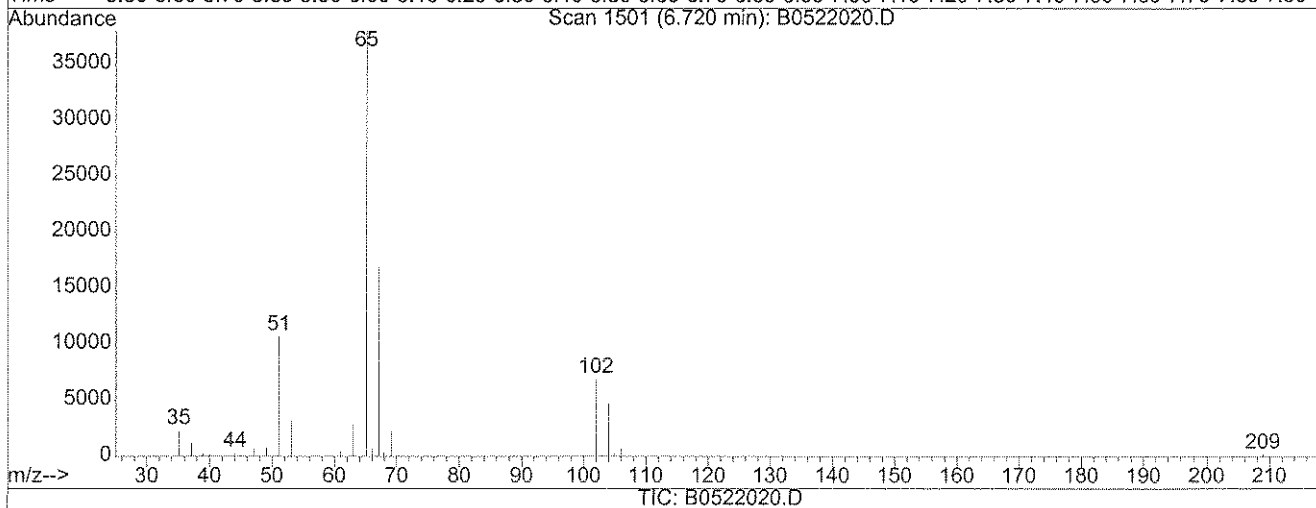
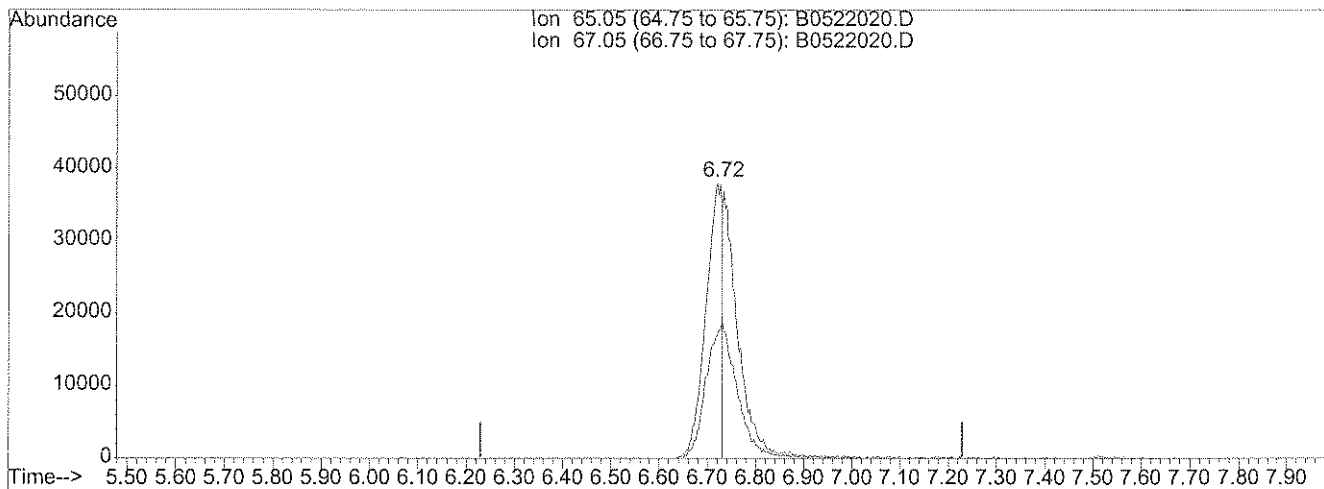
Tgt Ion: 96 Resp: 86
 Ion Ratio Lower Upper
 96 100
 94 0.0 84.9 124.9#



Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522020.D Vial: 18
 Acq On : 22 May 2008 16:03 Operator: LNH
 Sample : JPL111-004 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:09 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 16.49ug/l

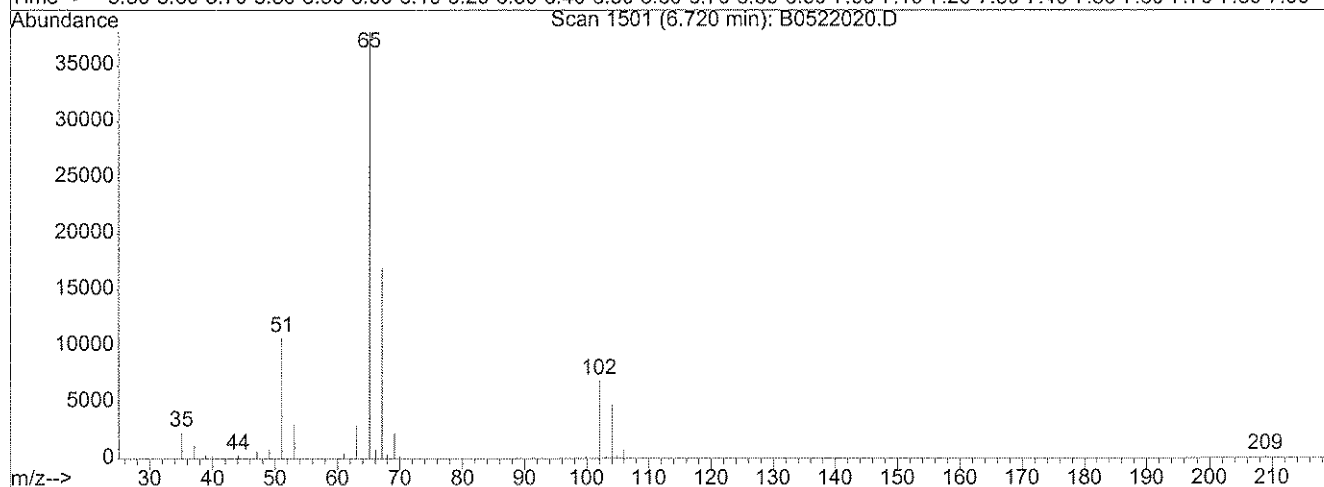
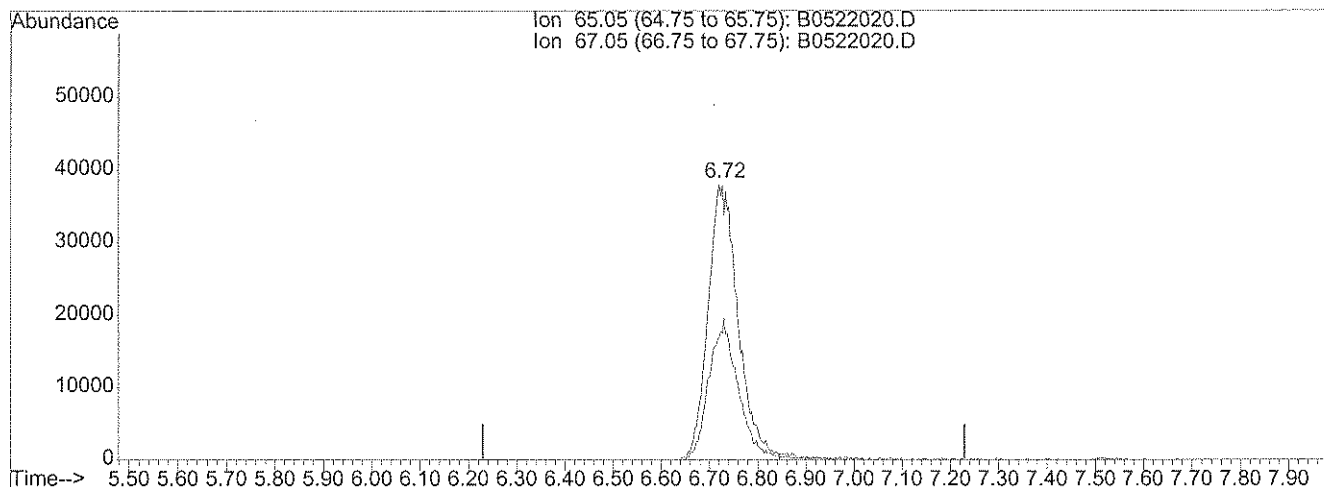
response 87755

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	93.05#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522020.D Vial: 18
 Acq On : 22 May 2008 16:03 Operator: LNH
 Sample : JPL111-004 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:09 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 31.04ug/l m

response 165195

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	49.43
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-1

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-005
 Lab File ID: B0522021.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:32
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.53	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-1

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-005
 Lab File ID: B0522021.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:32
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-25-1

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-005
 Lab File ID: B0522021.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:32
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

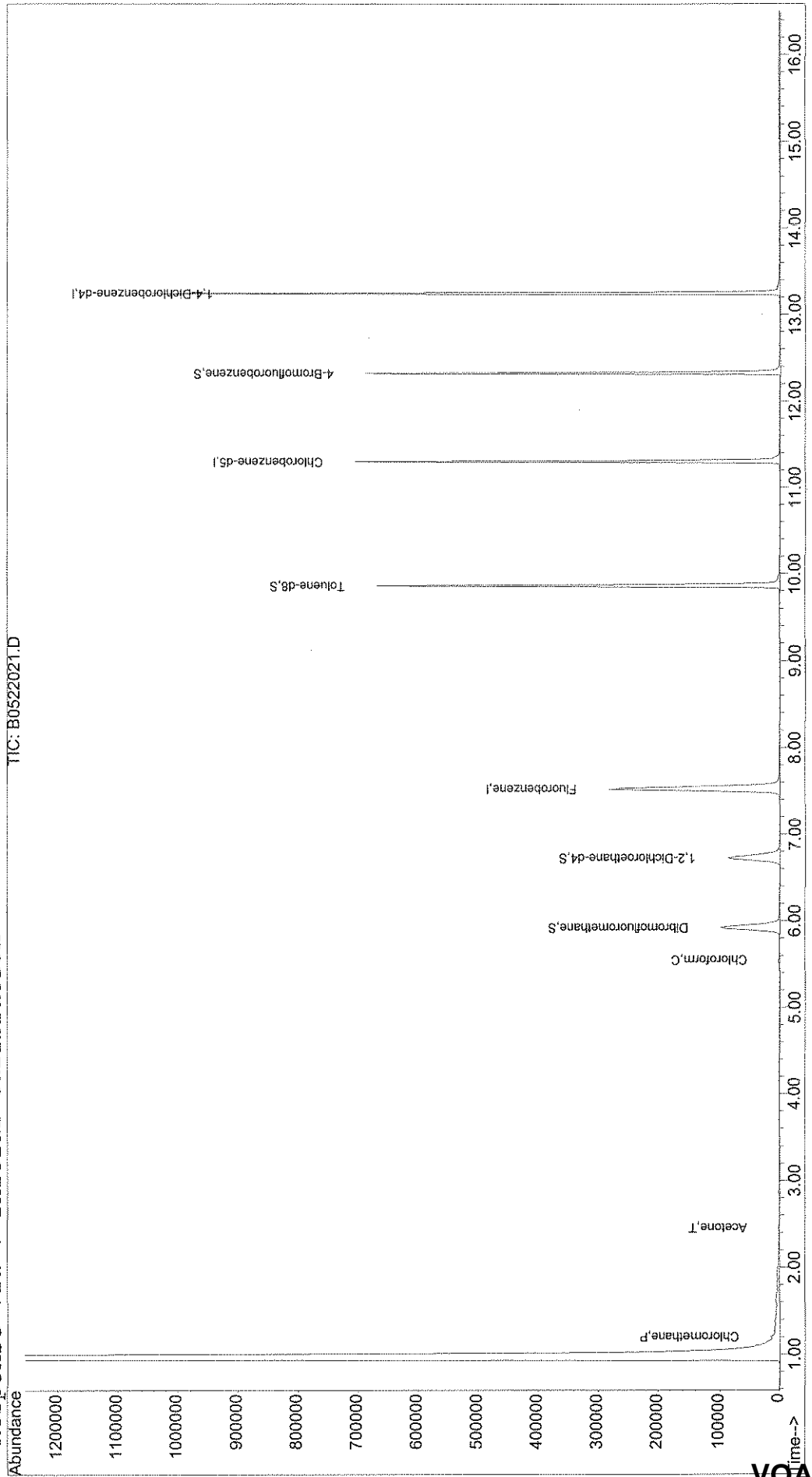
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522021.D Vial: 19
Acq On : 22 May 2008 16:32 Operator: LNH
Sample : JPL111-005 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:13 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522021.D
 Acq On : 22 May 2008 16:32
 Sample : JPL111-005 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:13 2008

Vial: 19
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	7.52	96	449402	25.00	ug/l	0.00	84.69%
54) Chlorobenzene-d5	11.30	117	352747	25.00	ug/l	0.00	80.18%
74) 1,4-Dichlorobenzene-d4	13.25	152	226625	25.00	ug/l	0.00	87.16%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	119411	23.63	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	118.15%#	
40) 1,2-Dichloroethane-d4	6.72	65	143431	33.43	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	31.82	133.72%#	
55) Toluene-d8	9.86	98	428518	24.83	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.109	99.32%	
76) 4-Bromofluorobenzene	12.32	95	166379	24.79	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	23.69	99.16%	

John S. Bolos

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			
3) Chloromethane	1.20	50	3478	0.53	ug/l	88	
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	2.46	43	1776	1.16	ug/l	#	62
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	2.87	84	1208	Below Cal	#		78
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	3.19	73	729	N.D.			
22) Acrylonitrile	0.00	53	0	N.D.			

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522021.D
 Acq On : 22 May 2008 16:32
 Sample : JPL111-005 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:13 2008

Vial: 19
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	4.75	77	29		N.D.	
29) cis-1,2-Dichloroethene	4.75	96	34		N.D.	
30) 2-Butanone	5.02	43	29		N.D.	
31) Propionitrile	5.13	54	29		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.43	41	31		N.D.	
34) Chloroform	5.56	83	2137mS	0.22	ug/l # $1/2$ PRL	1
35) 1,1,1-Trichloroethane	5.85	97	32		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.16	75	39		N.D.	
41) Benzene	6.70	78	29		N.D.	
42) 1,2-Dichloroethane	6.83	62	30		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D.	d
45) Trichloroethene	8.22	130	33		N.D.	
46) Methylcyclohexane	8.37	83	31		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	8.74	93	44		N.D.	
49) Methyl methacrylate	9.01	41	34		N.D.	
50) Bromodichloromethane	9.09	83	56		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.86	75	31		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.94	92	67		N.D.	
57) trans-1,3-Dichloropropene	10.44	75	29		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	10.34	97	30		N.D.	
60) Tetrachloroethene	10.49	166	70		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.70	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	11.33	91	39		N.D.	
66) Chlorobenzene	11.30	112	29		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

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

Quantitation Report

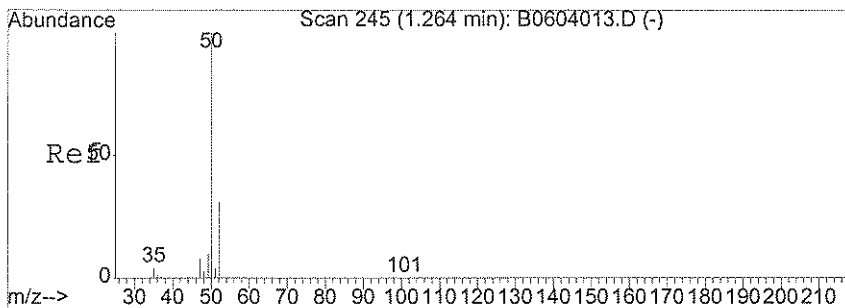
Data File : X:\MSVOA\BUDDHA\052208\B0522021.D
 Acq On : 22 May 2008 16:32
 Sample : JPL111-005 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:13 2008

Vial: 19
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

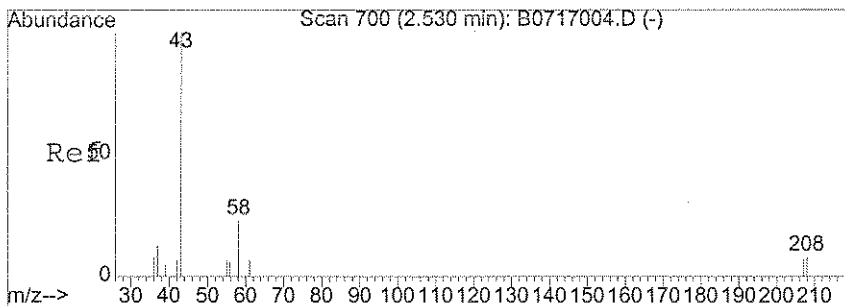
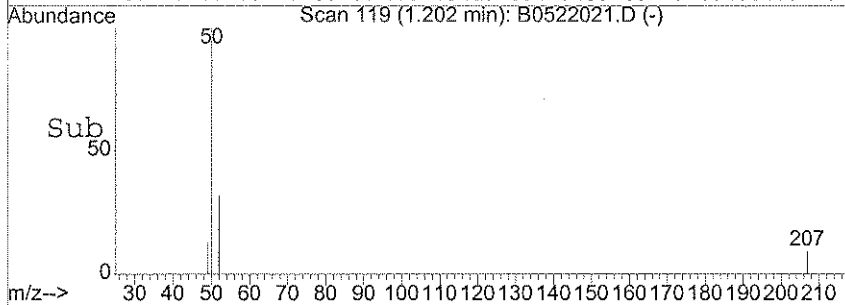
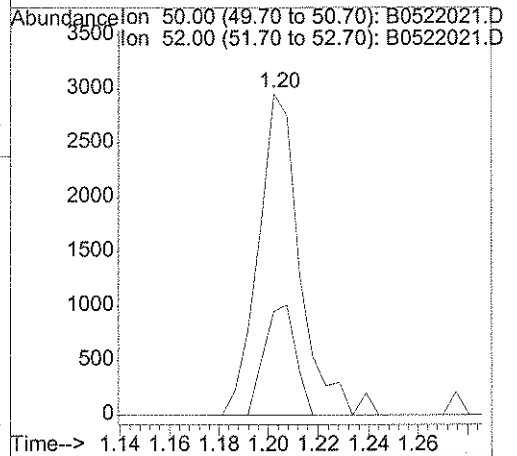
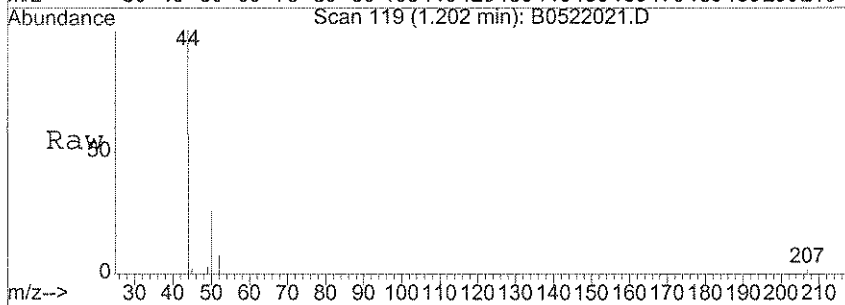
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	32		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	11.89	106	32		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.34	173	99		N.D.	
73) Isopropylbenzene	12.17	105	83		N.D.	
75) trans-1,4-Dichloro-2-buten	12.03	53	32		N.D.	
77) Bromobenzene	12.32	156	94		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	12.53	75	37		N.D.	
80) n-Propylbenzene	12.53	120	39		N.D.	
81) 2-Chlorotoluene	12.52	91	134		N.D.	
82) 4-Chlorotoluene	12.52	91	134		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	74		N.D.	
84) tert-Butylbenzene	12.96	119	67		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	155		N.D.	
86) sec-butylbenzene	13.09	105	53		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	81		N.D.	
88) 4-Isopropyltoluene	13.20	119	157		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	109		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	92		N.D.	
91) n-Butylbenzene	13.52	91	206		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.07	75	31		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	163		N.D.	
94) Hexachlorobutadiene	14.89	225	204		N.D.	
95) Naphthalene	14.99	128	147		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	46		N.D.	



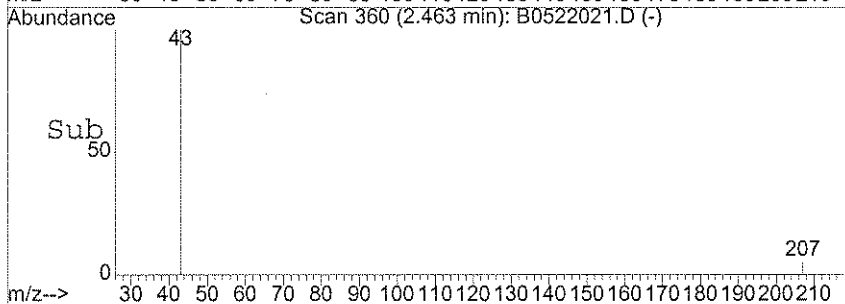
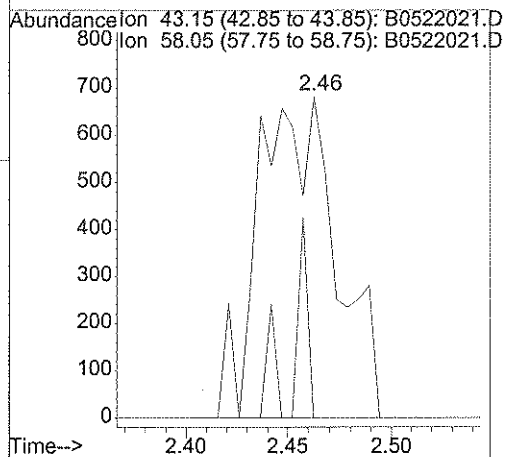
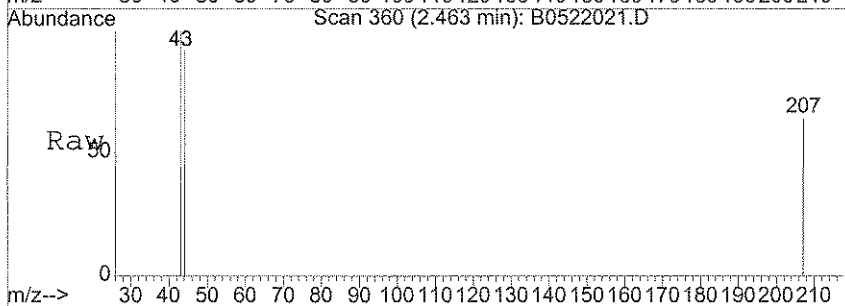
#3
 Chloromethane
 Concen: 0.53 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0522021.D
 Acq: 22 May 2008 16:32

Tgt Ion: 50	Resp: 3478
Ion Ratio	Lower Upper
50	100
52	25.8 12.5 52.5



#11
 Acetone
 Concen: 1.16 ug/l
 RT: 2.46 min Scan# 360
 Delta R.T. 0.04 min
 Lab File: B0522021.D
 Acq: 22 May 2008 16:32

Tgt Ion: 43	Resp: 1776
Ion Ratio	Lower Upper
43	100
58	7.5 22.0 33.0#

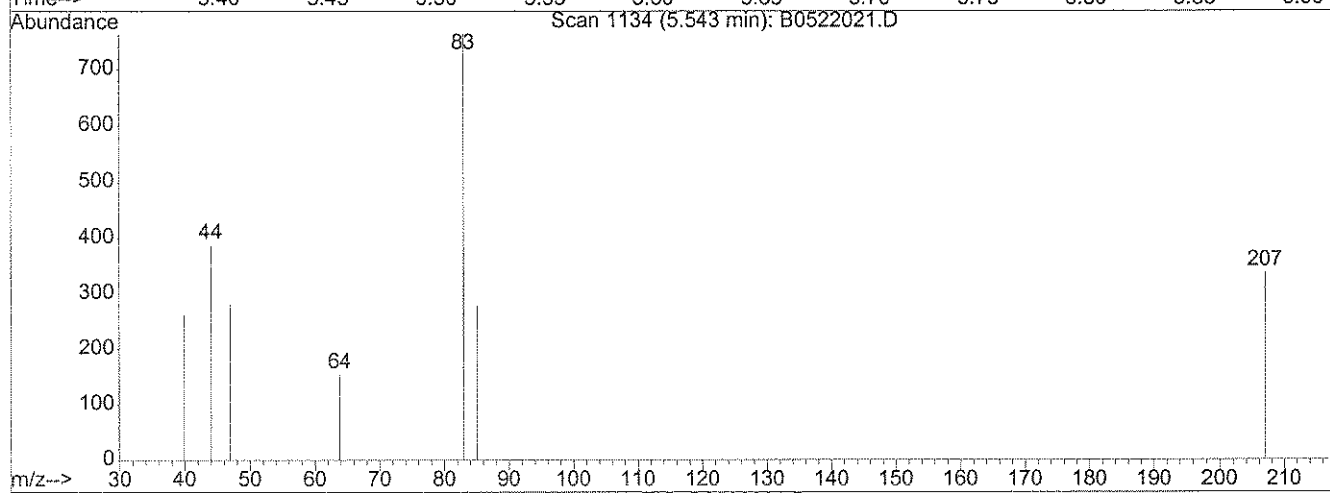
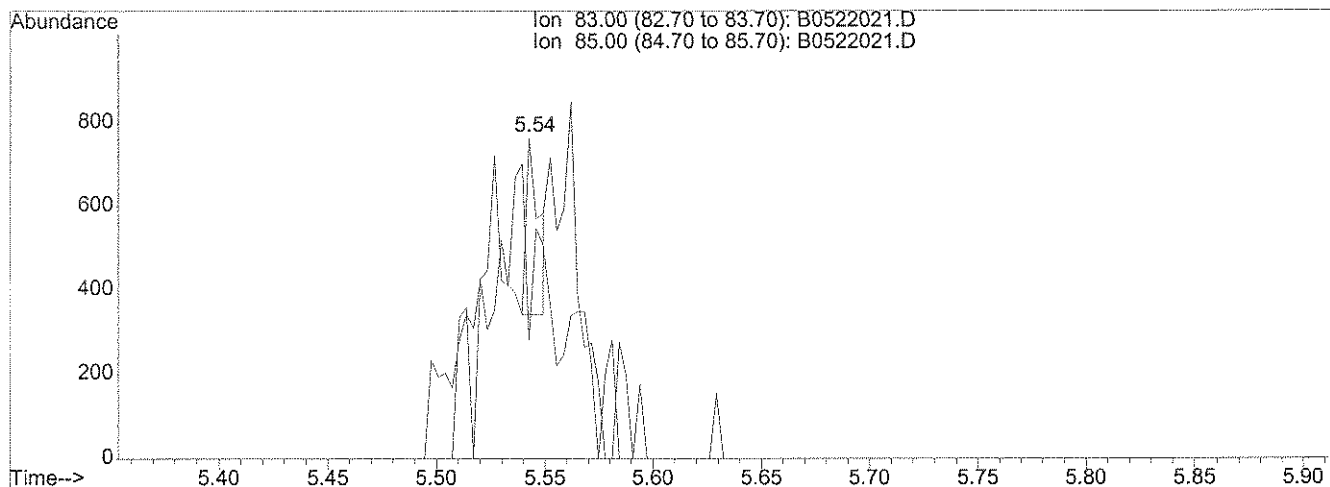


Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522021.D
 Acq On : 22 May 2008 16:32
 Sample : JPL111-005 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 15:50 2008

Vial: 19
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00
 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(34) Chloroform (C)

5.54min 0.02ug/l

response 171

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	412.87#
0.00	0.00	0.00
0.00	0.00	0.00

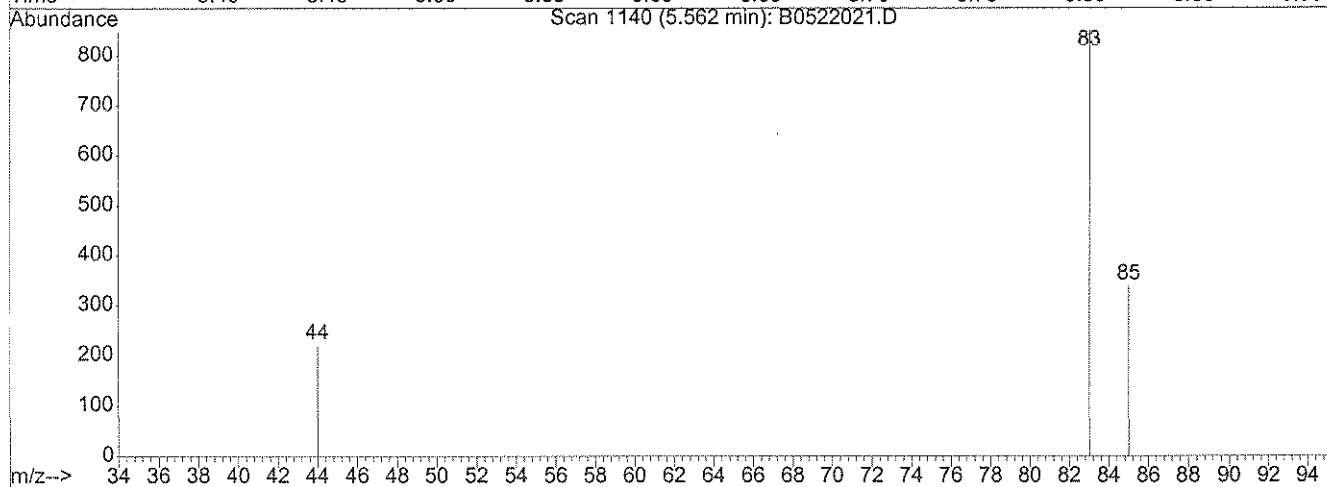
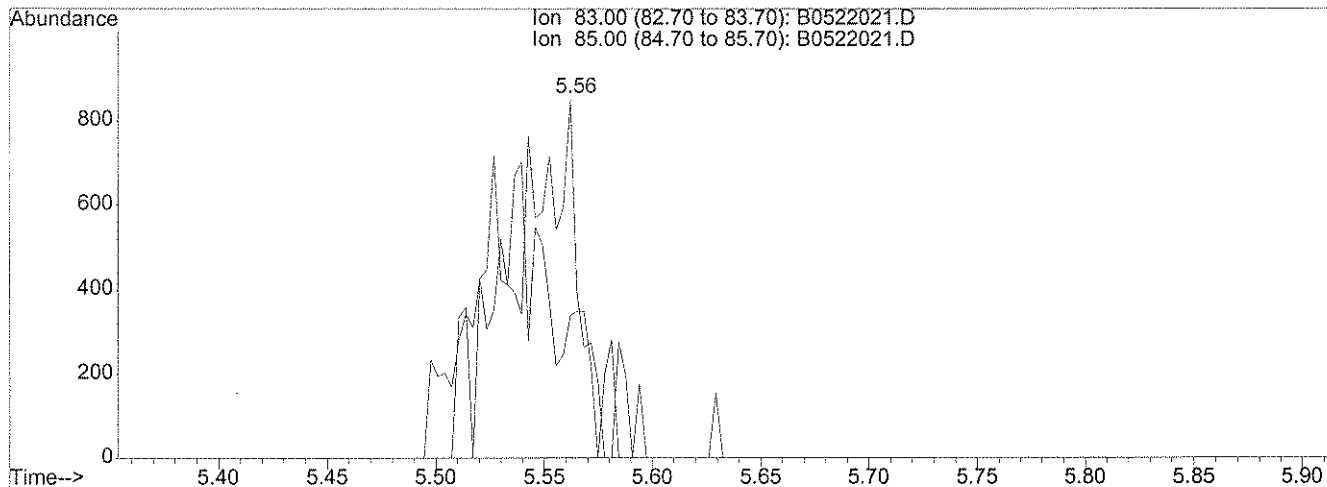
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522021.D
 Acq On : 22 May 2008 16:32
 Sample : JPL111-005 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:13 2008

Vial: 19
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



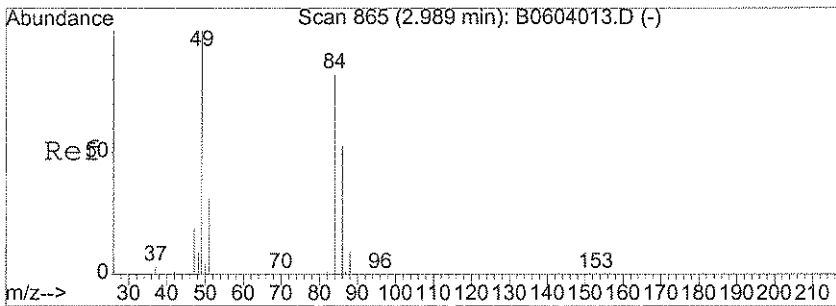
TIC: B0522021.D

(34) Chloroform (C)

5.56min 0.22ug/l m

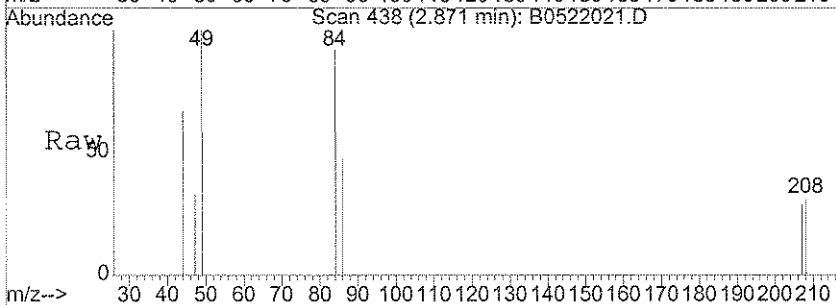
response 2137

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	33.04#
0.00	0.00	0.00
0.00	0.00	0.00

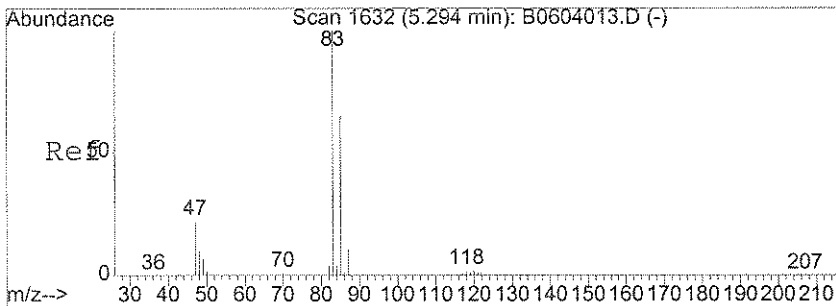
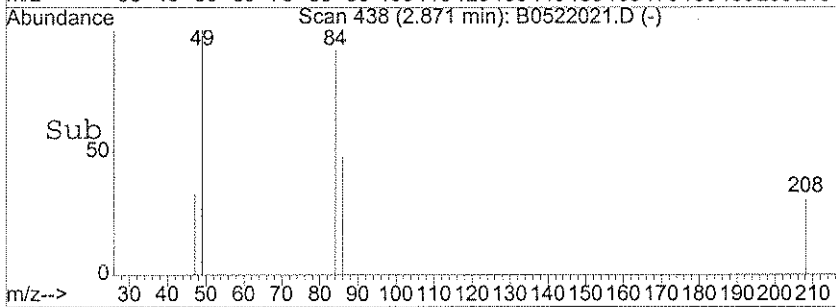
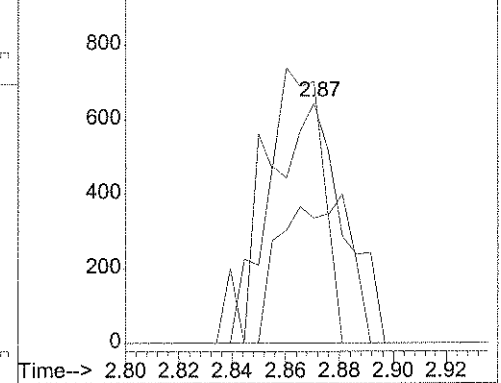


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 438
 Delta R.T. 0.01 min
 Lab File: B0522021.D
 Acq: 22 May 2008 16:32

Tgt Ion	Resp	Lower	Upper
84	1208		
49	112.3	113.6	153.6#
86	42.2	45.8	85.8#

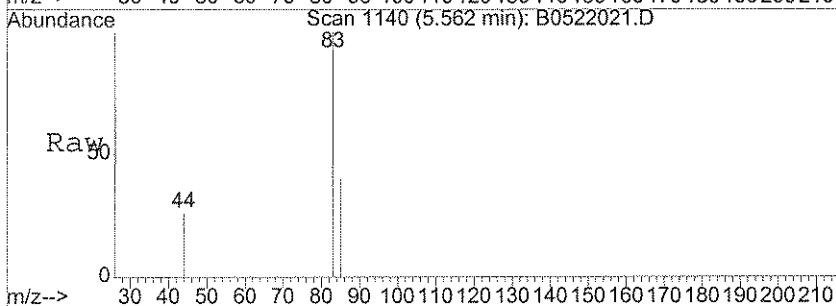


Abundance Ion 84.00 (83.70 to 84.70): B0522021.D
 1000 Ion 49.00 (48.70 to 49.70): B0522021.D
 Ion 86.00 (85.70 to 86.70): B0522021.D

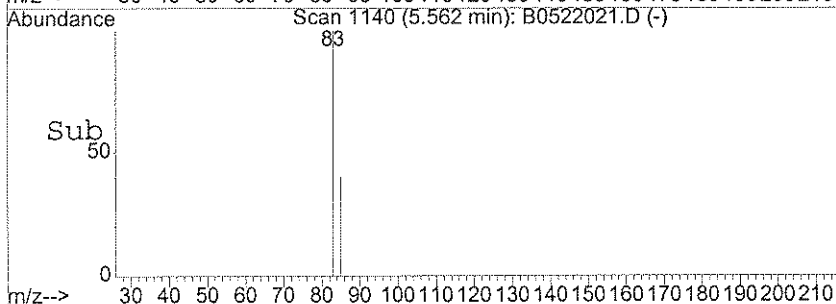
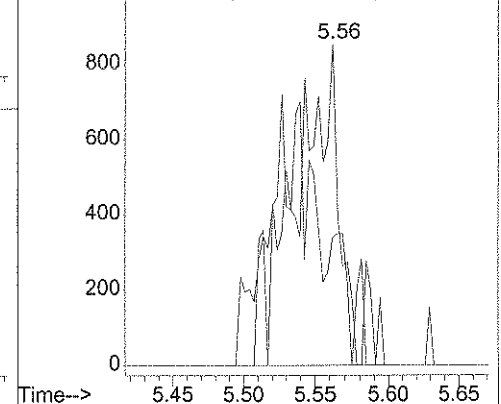


#34
 Chloroform
 Concen: 0.22 ug/l m
 RT: 5.56 min Scan# 1140
 Delta R.T. 0.02 min
 Lab File: B0522021.D
 Acq: 22 May 2008 16:32

Tgt Ion	Resp	Lower	Upper
83	2137		
85	33.0	44.0	84.0#



Abundance Ion 83.00 (82.70 to 83.70): B0522021.D
 1000 Ion 85.00 (84.70 to 85.70): B0522021.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-006
 Lab File ID: B0522022.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.58	
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	0.37	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-006
 Lab File ID: B0522022.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-006
 Lab File ID: B0522022.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 16:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

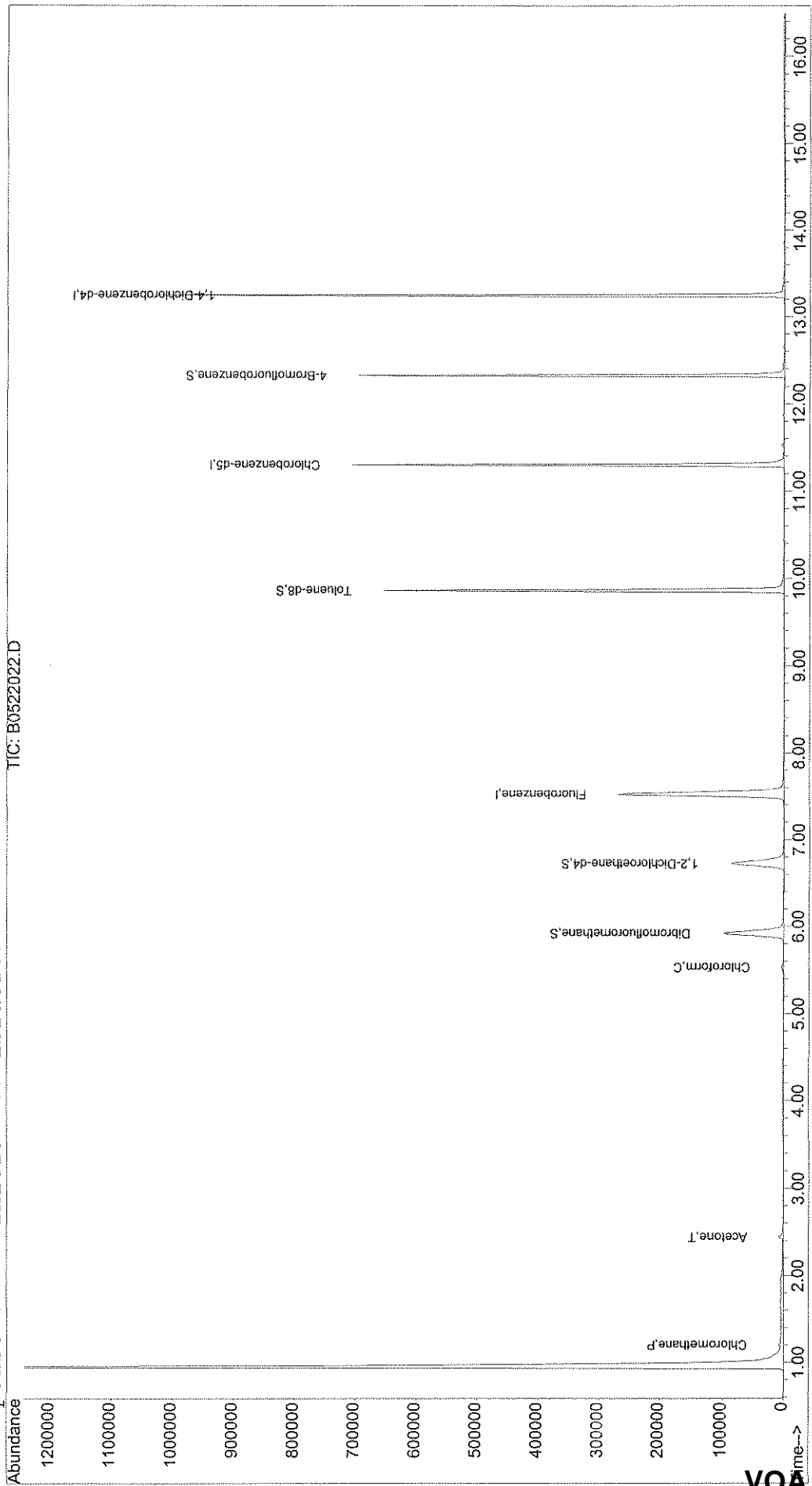
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522022.D Vial: 20
Acq On : 22 May 2008 16:58 Operator: LNH
Sample : JPL111-006 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:14 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522022.D
 Acq On : 22 May 2008 16:58
 Sample : JPL111-006 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:14 2008

Vial: 20
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	441068	25.00	ug/l	0.00	83.12%
54) Chlorobenzene-d5	11.30	117	354622	25.00	ug/l	0.00	80.61%
74) 1,4-Dichlorobenzene-d4	13.25	152	225595	25.00	ug/l	0.00	86.76%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	116327	23.45	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	117.25%#	
40) 1,2-Dichloroethane-d4	6.73	65	145648	34.59	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	^{33.00}	138.36%#	
55) Toluene-d8	9.86	98	415455	23.95	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	^{22.85}	95.80%	
76) 4-Bromofluorobenzene	12.32	95	167159	25.02	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	100.08%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			
3) Chloromethane	1.20	50	3709	0.58	ug/l	97	
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	2.44	43	11071	7.40	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	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) 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.			

23.91
QNT 5/30/08
 Qvalue

QNT 5/30/08

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522022.D
 Acq On : 22 May 2008 16:58
 Sample : JPL111-006 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:14 2008

Vial: 20
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.93	43	39		N.D.	
31) Propionitrile	5.10	54	29		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.40	41	38		N.D.	
34) Chloroform	5.53	83	3498mS	0.37	ug/l #	80
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.11	117	30		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.69	78	42		N.D.	
42) 1,2-Dichloroethane	7.05	62	30		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	8.40	83	30		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.88	41	34		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	9.64	75	43		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.87	92	30		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	10.23	97	32		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.60	43	50		N.D.	
63) Dibromochloromethane	10.77	129	44		N.D.	
64) 1,2-Dibromoethane	10.81	107	30		N.D.	
65) 1-Chlorohexane	11.30	91	490		N.D.	
66) Chlorobenzene	11.25	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

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

Quantitation Report

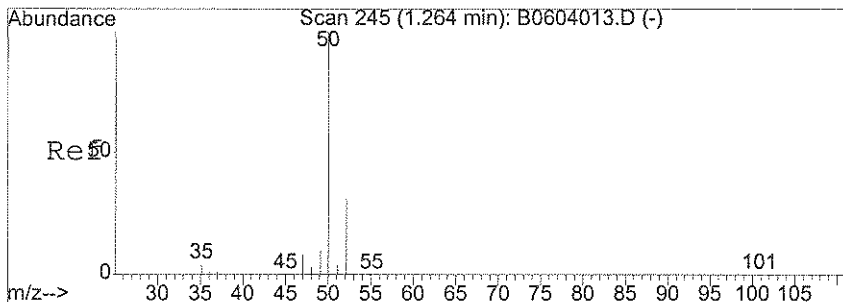
Data File : X:\MSVOA\BUDDHA\052208\B0522022.D
 Acq On : 22 May 2008 16:58
 Sample : JPL111-006 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:14 2008

Vial: 20
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

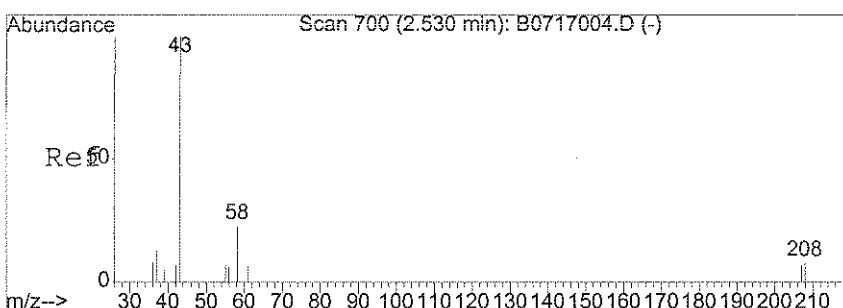
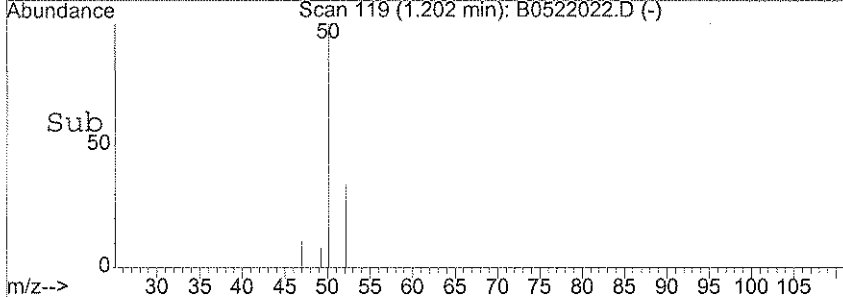
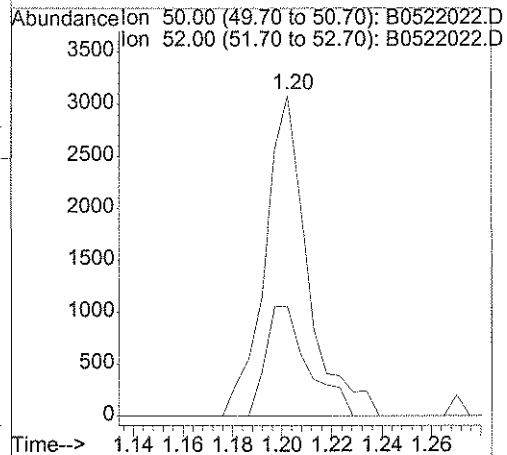
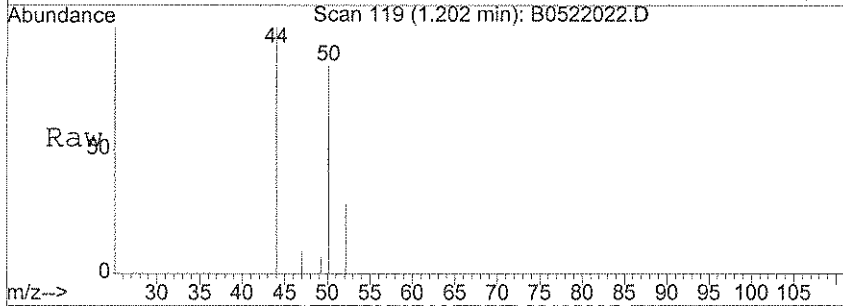
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	835		N.D.	
69) m,p-Xylene	11.52	106	1039		N.D.	
70) o-xylene	11.87	106	420		N.D.	
71) Styrene	11.90	104	34		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.18	105	124		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.34	156	31		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.31	83	32		N.D.	
79) 1,2,3-Trichloropropane	12.52	75	65		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.51	91	58		N.D.	
82) 4-Chlorotoluene	12.51	91	58		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	99		N.D.	
84) tert-Butylbenzene	12.91	119	36		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	78		N.D.	
86) sec-butylbenzene	13.09	105	198		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	76		N.D.	
88) 4-Isopropyltoluene	13.20	119	287		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	80		N.D.	
90) 1,2-Dichlorobenzene	13.57	146	37		N.D.	
91) n-Butylbenzene	13.52	91	269		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	132		N.D.	
94) Hexachlorobutadiene	14.89	225	69		N.D.	
95) Naphthalene	14.99	128	424		N.D.	
96) 1,2,3-Trichlorobenzene	14.97	180	33		N.D.	



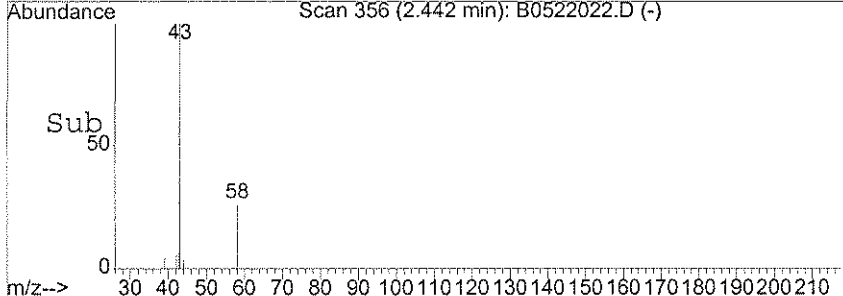
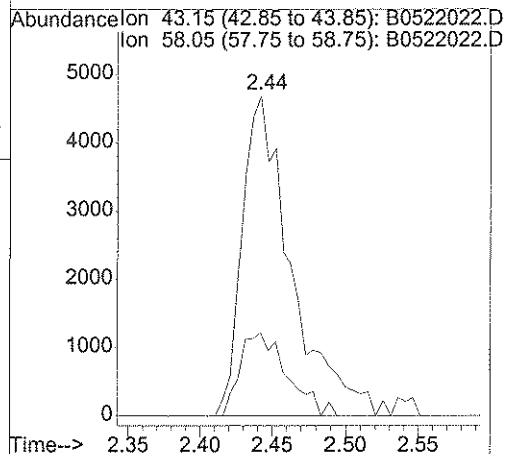
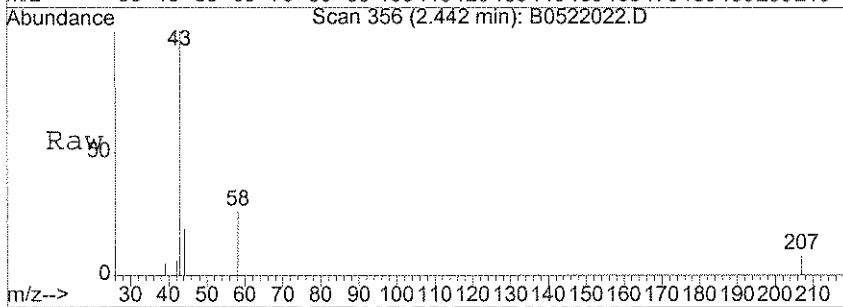
#3
 Chloromethane
 Concen: 0.58 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0522022.D
 Acq: 22 May 2008 16:58

Tgt Ion	Resp	Lower	Upper
50	3709		
52	34.3	12.5	52.5



#11
 Acetone
 Concen: 7.40 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0522022.D
 Acq: 22 May 2008 16:58

Tgt Ion	Resp	Lower	Upper
43	11071		
58	25.0	22.0	33.0



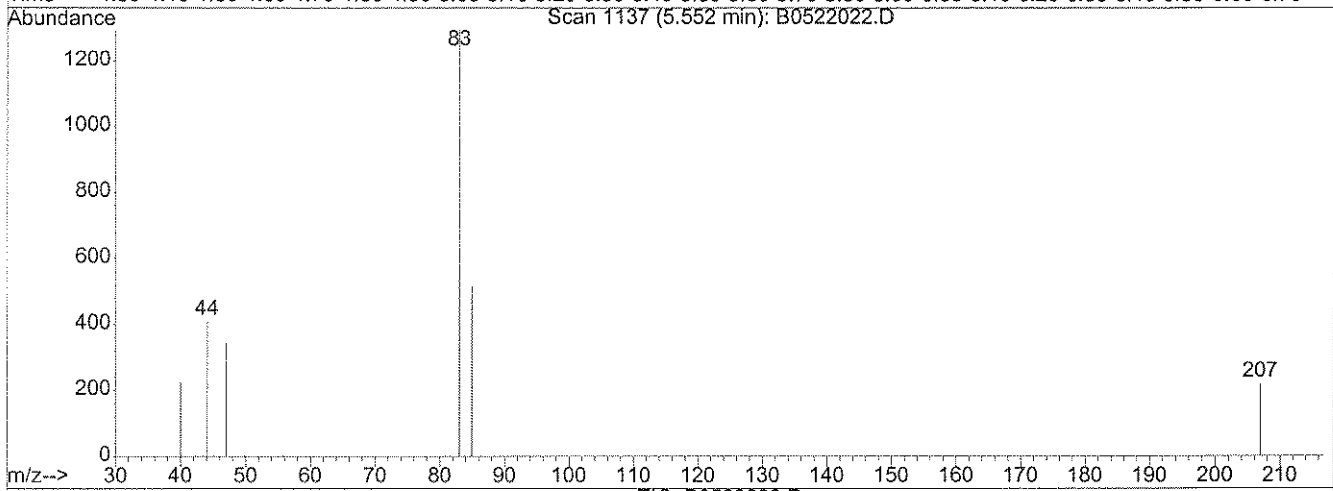
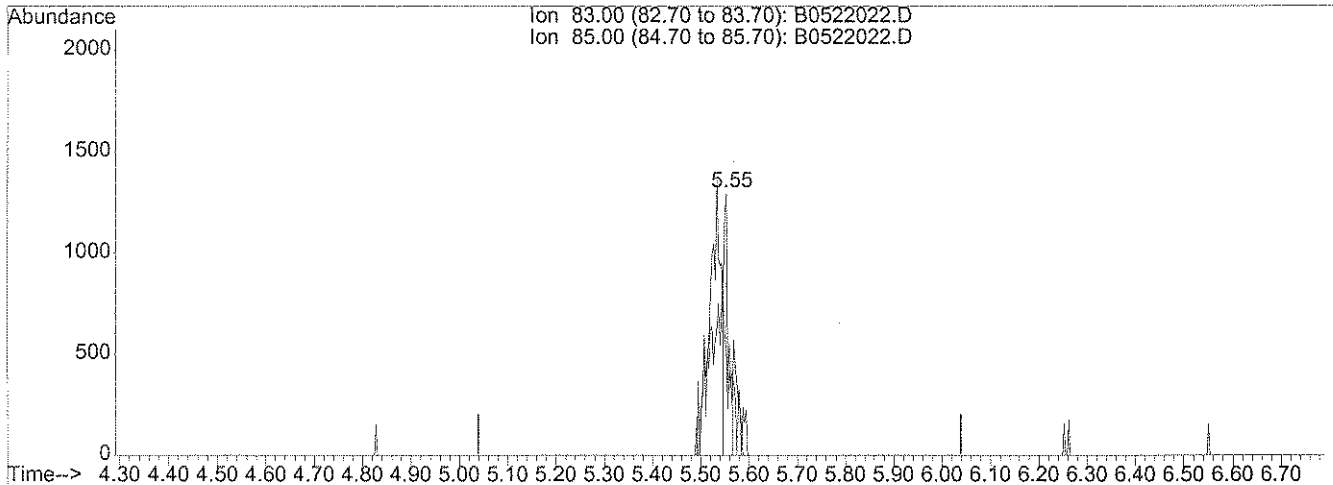
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522022.D
 Acq On : 22 May 2008 16:58
 Sample : JPL111-006 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:14 2008

Vial: 20
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(34) Chloroform (C)

5.55min 0.08ug/l

response 775

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	48.65
0.00	0.00	0.00
0.00	0.00	0.00

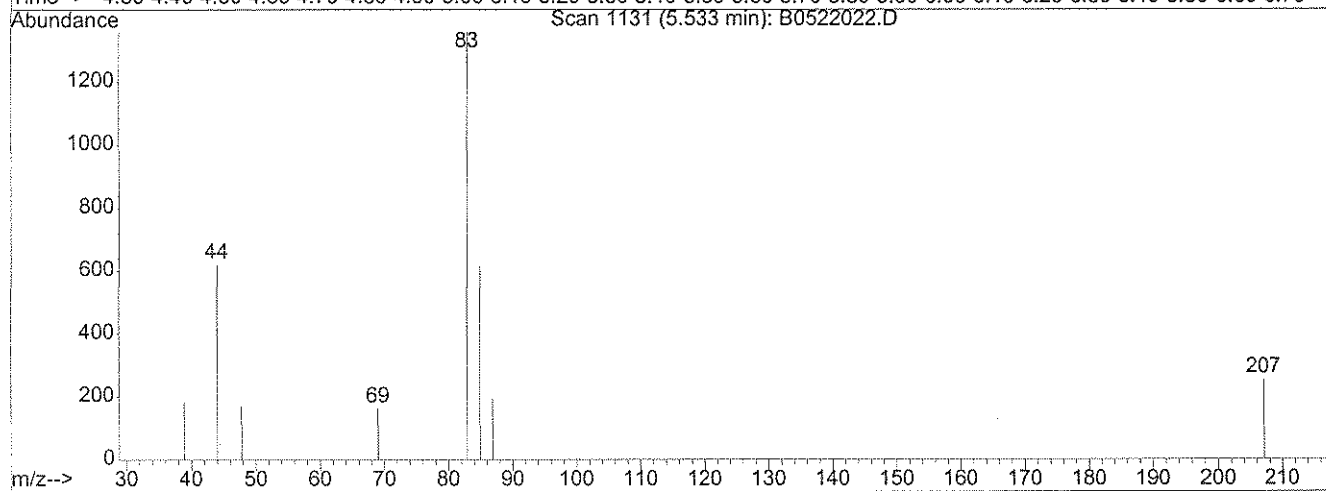
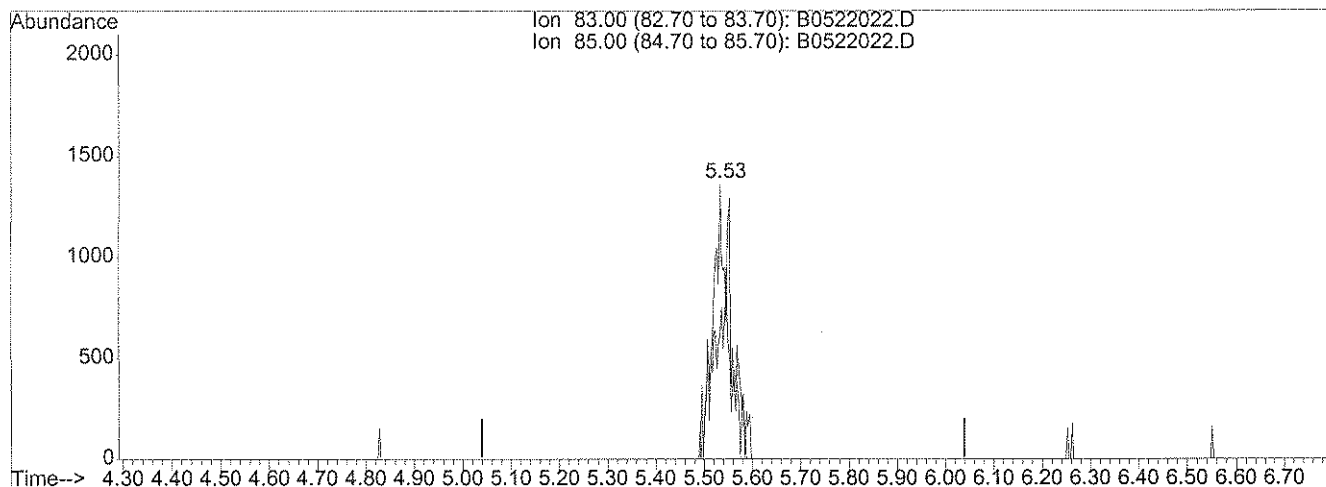
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522022.D
 Acq On : 22 May 2008 16:58
 Sample : JPL111-006 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:14 2008

Vial: 20
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



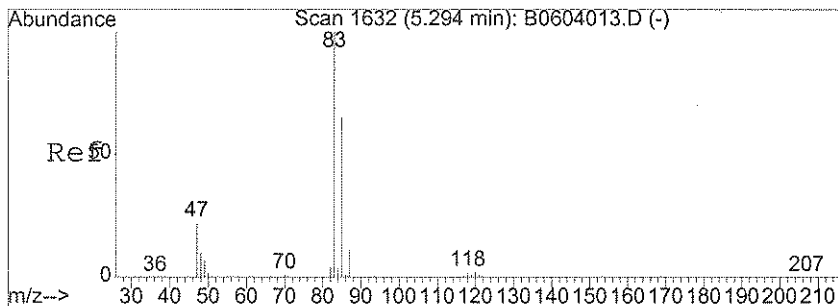
TIC: B0522022.D

(34) Chloroform (C)

5.53min 0.37ug/l m

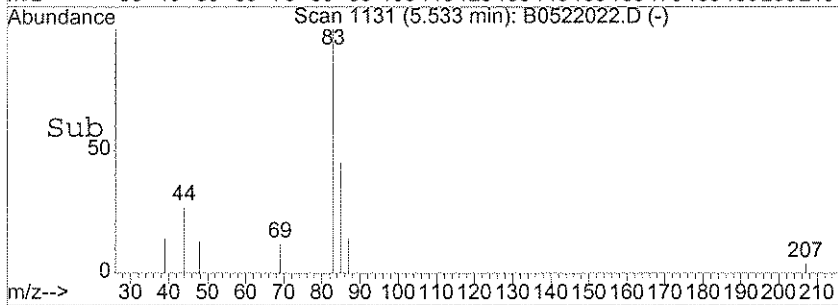
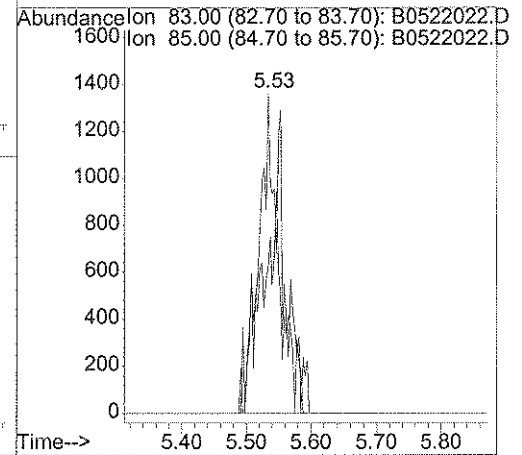
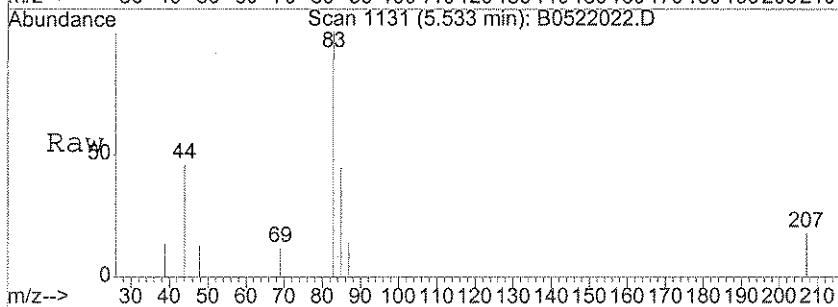
response 3498

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	10.78#
0.00	0.00	0.00
0.00	0.00	0.00



#34
 Chloroform
 Concen: 0.37 ug/l m
 RT: 5.53 min Scan# 1131
 Delta R.T. -0.01 min
 Lab File: B0522022.D
 Acq: 22 May 2008 16:58

Tgt Ion	Resp	Lower	Upper
83	3498		
85	10.8	44.0	84.0#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-007
 Lab File ID: B0522013.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 12:53
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-007
 Lab File ID: B0522013.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 12:53
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-007
 Lab File ID: B0522013.d
 Date Collected: 05/14/2008
 Date/Time Analyzed: 05/22/2008 12:53
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

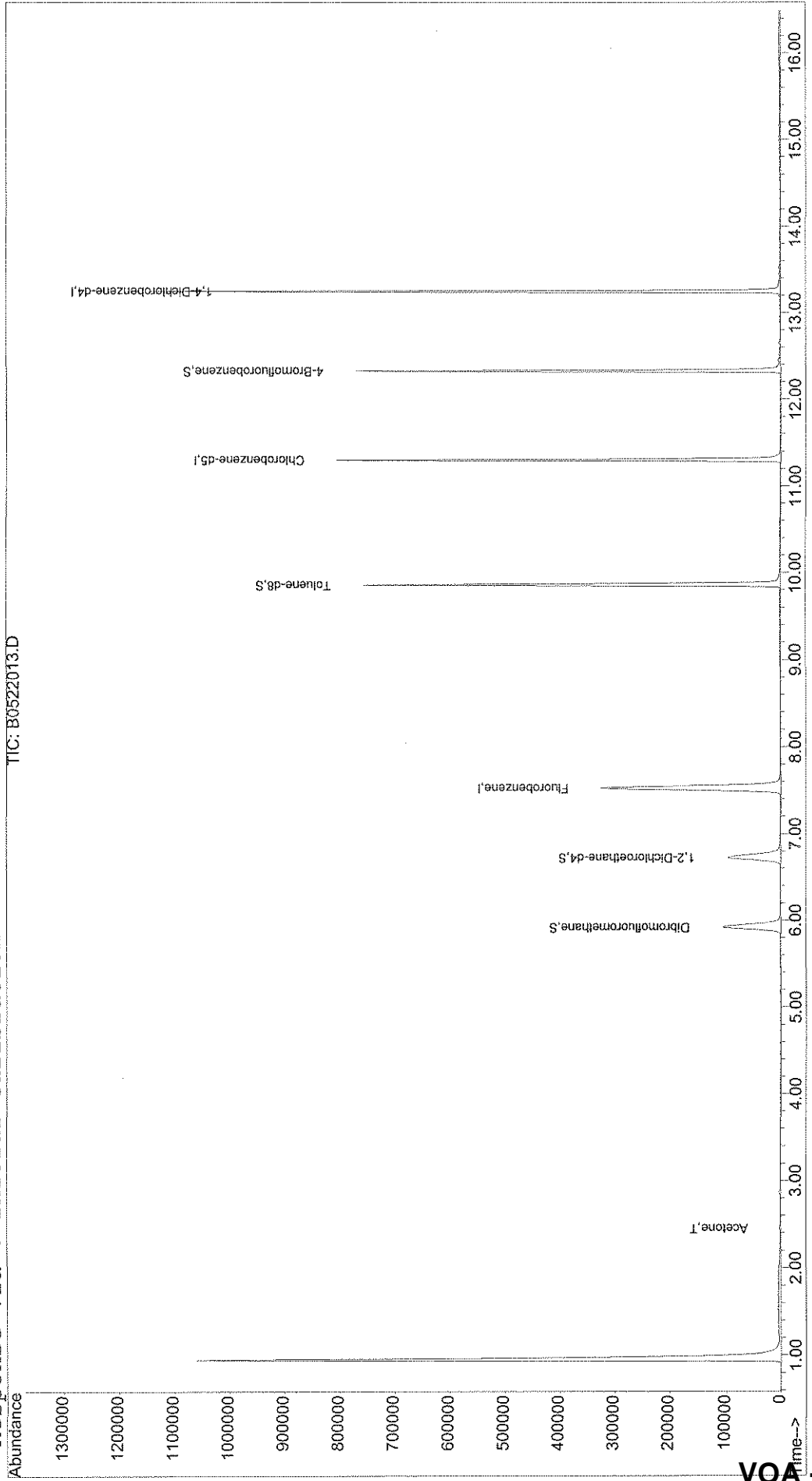
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522013.D Vial: 12
Acq On : 22 May 2008 12:53 Operator: LNH
Sample : JPL111-007 TB Inst : Buddha
Misc : #2 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:04 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522013.D
 Acq On : 22 May 2008 12:53
 Sample : JPL111-007 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:04 2008

Vial: 12
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	530712	25.00	ug/l	0.00	100.02%
54) Chlorobenzene-d5	11.30	117	401715	25.00	ug/l	0.00	91.31%
74) 1,4-Dichlorobenzene-d4	13.25	152	250769	25.00	ug/l	0.00	96.44%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	129588m	21.72	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	108.60%	
40) 1,2-Dichloroethane-d4	6.72	65	159950	31.57	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	20.12 =	126.28%#	
55) Toluene-d8	9.86	98	487227	24.80	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.45	99.20%	
76) 4-Bromofluorobenzene	12.32	95	185264	24.95	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	23.84	99.80%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			
3) Chloromethane	1.20	50	67	N.D.			
4) Vinyl Chloride	0.00	62	0	N.D.			
5) Bromomethane	1.55	96	64	Below Cal	#	1	
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	2.45	43	1750	0.97	ug/l #	81	
12) Iodomethane	0.00	142	0	N.D.			
13) Bromoethane	0.00	108	0	N.D.			
14) Carbon Disulfide	2.49	76	169	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	2.87	84	1415	Below Cal		92	
19) trans-1,2-Dichloroethene	3.10	96	65	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\BUDDHA\052208\B0522013.D
 Acq On : 22 May 2008 12:53
 Sample : JPL111-007 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:04 2008

Vial: 12
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	32		N.D.	
30) 2-Butanone	4.93	43	92		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.34	41	29		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	5.74	97	29		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	0.00	117	0		N.D.	
39) 1,1-Dichloropropene	6.16	75	31		N.D.	
41) Benzene	6.70	78	66		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	8.23	130	45		N.D.	
46) Methylcyclohexane	8.41	83	38		N.D.	
47) 1,2-Dichloropropane	8.41	63	35		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.90	41	34		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	9.51	75	34		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	47		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	10.59	97	38		N.D.	
60) Tetrachloroethene	10.49	166	138		N.D.	
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	10.73	43	37		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	1046		N.D.	
66) Chlorobenzene	11.33	112	96		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

LNH 5/23/08

(#) = qualifier out of range (m) = manual integration
 B0522013.D B8260W.M Fri May 23 16:04:25 2008

Quantitation Report

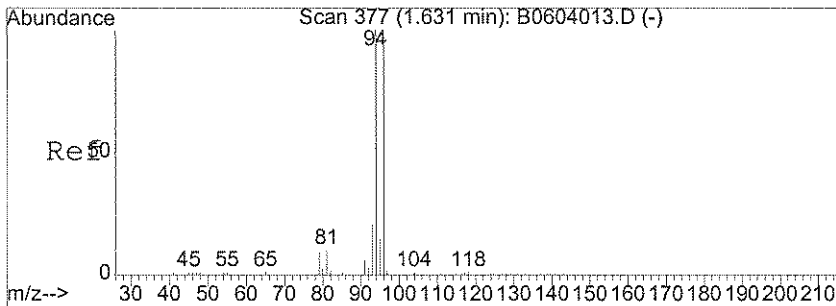
Data File : X:\MSVOA\BUDDHA\052208\B0522013.D
 Acq On : 22 May 2008 12:53
 Sample : JPL111-007 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:04 2008

Vial: 12
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

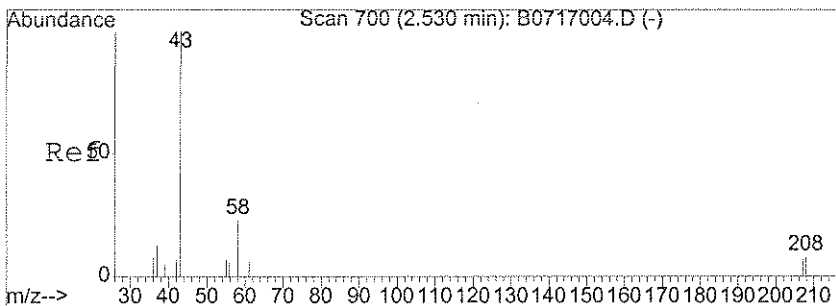
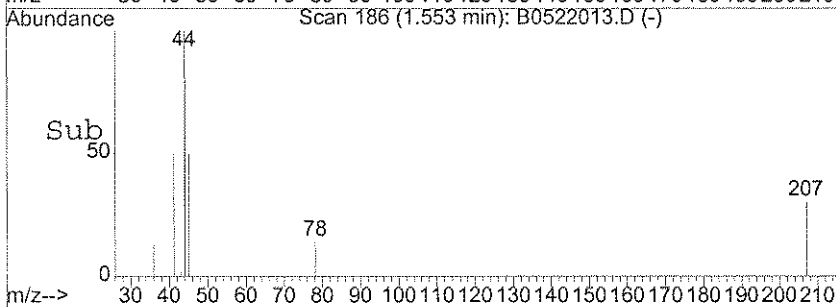
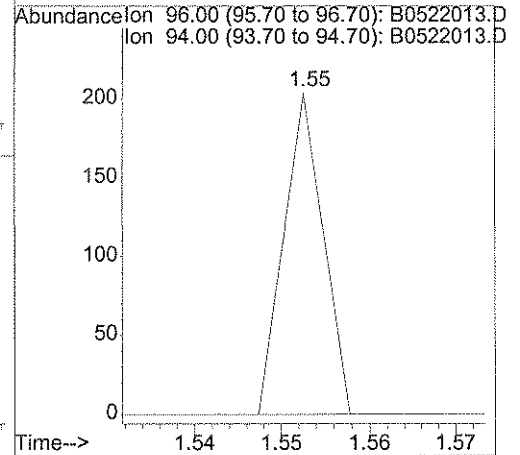
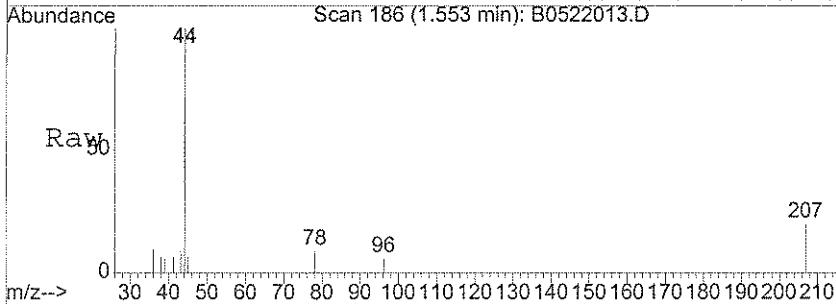
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	279		N.D.	
69) m,p-Xylene	11.53	106	234		N.D.	
70) o-xylene	11.86	106	31		N.D.	
71) Styrene	11.90	104	71		N.D.	
72) Bromoform	12.34	173	164		N.D.	
73) Isopropylbenzene	12.18	105	514		N.D.	
75) trans-1,4-Dichloro-2-buten	12.30	53	33		N.D.	
77) Bromobenzene	12.33	156	43		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.45	83	30		N.D.	
79) 1,2,3-Trichloropropane	12.51	75	37		N.D.	
80) n-Propylbenzene	12.51	120	231		N.D.	
81) 2-Chlorotoluene	12.59	91	145		N.D.	
82) 4-Chlorotoluene	12.68	91	313		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	386		N.D.	
84) tert-Butylbenzene	12.91	119	341		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	516		N.D.	
86) sec-butylbenzene	13.09	105	777		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	419		N.D.	
88) 4-Isopropyltoluene	13.21	119	1319		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	477		N.D.	
90) 1,2-Dichlorobenzene	13.57	146	300		N.D.	
91) n-Butylbenzene	13.52	91	1015		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.07	75	29		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	628		N.D.	
94) Hexachlorobutadiene	14.89	225	441		N.D.	
95) Naphthalene	14.98	128	932		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	712		N.D.	



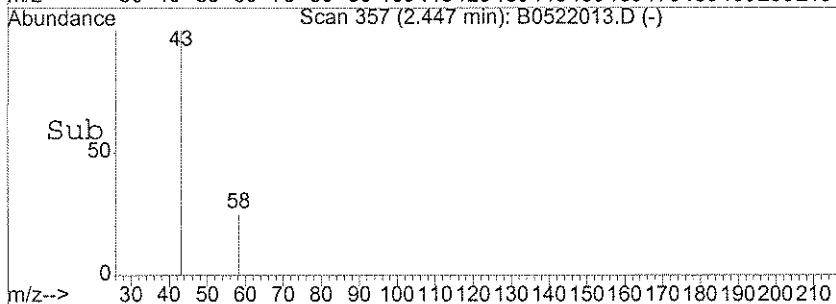
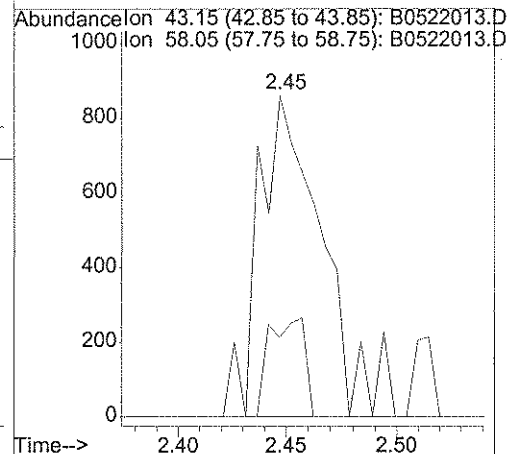
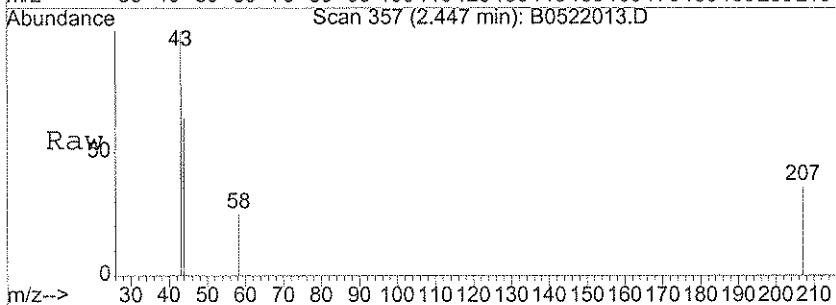
#5
 Bromomethane
 Concen: Below Cal
 RT: 1.55 min Scan# 186
 Delta R.T. 0.00 min
 Lab File: B0522013.D
 Acq: 22 May 2008 12:53

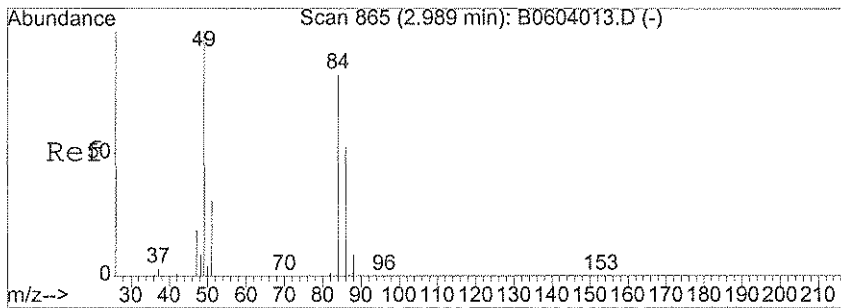
Tgt Ion: 96 Resp: 64
 Ion Ratio Lower Upper
 96 100
 94 0.0 84.9 124.9#



#11
 Acetone
 Concen: 0.97 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0522013.D
 Acq: 22 May 2008 12:53

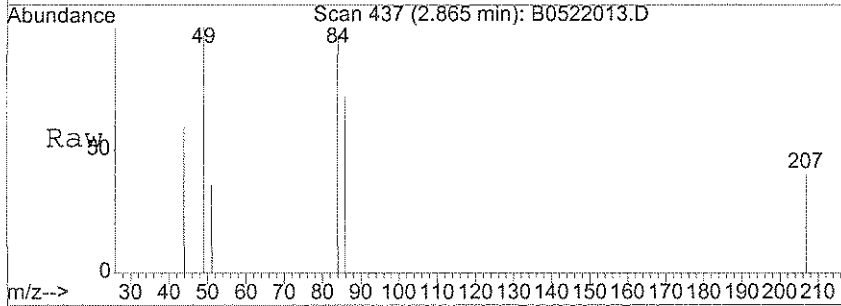
Tgt Ion: 43 Resp: 1750
 Ion Ratio Lower Upper
 43 100
 58 17.5 22.0 33.0#



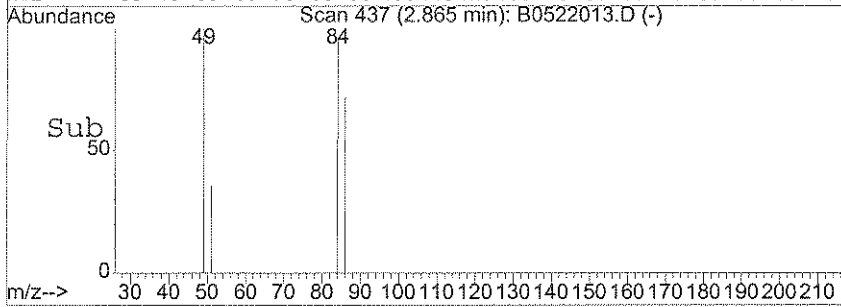
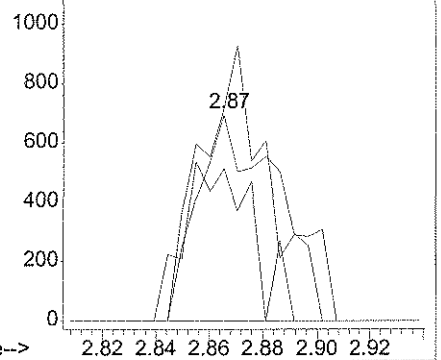


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0522013.D
 Acq: 22 May 2008 12:53

Tgt Ion	Resp	Lower	Upper
84	1415		
84	100		
49	119.6	113.6	153.6
86	67.2	45.8	85.8



Abundance
 Ion 84.00 (83.70 to 84.70): B0522013.D
 Ion 49.00 (48.70 to 49.70): B0522013.D
 Ion 86.00 (85.70 to 86.70): B0522013.D



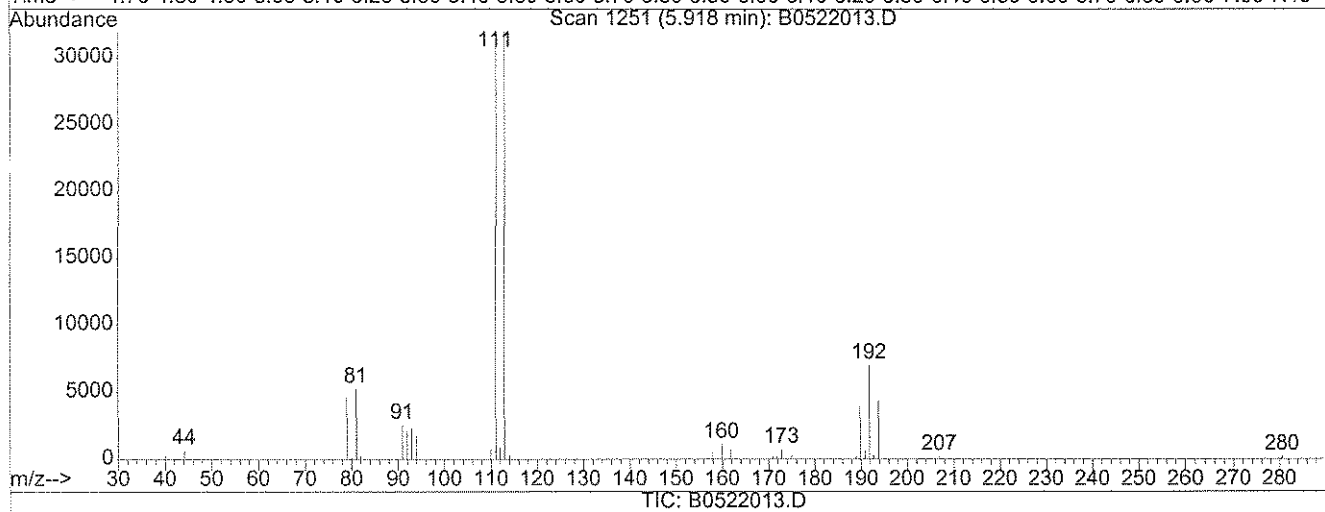
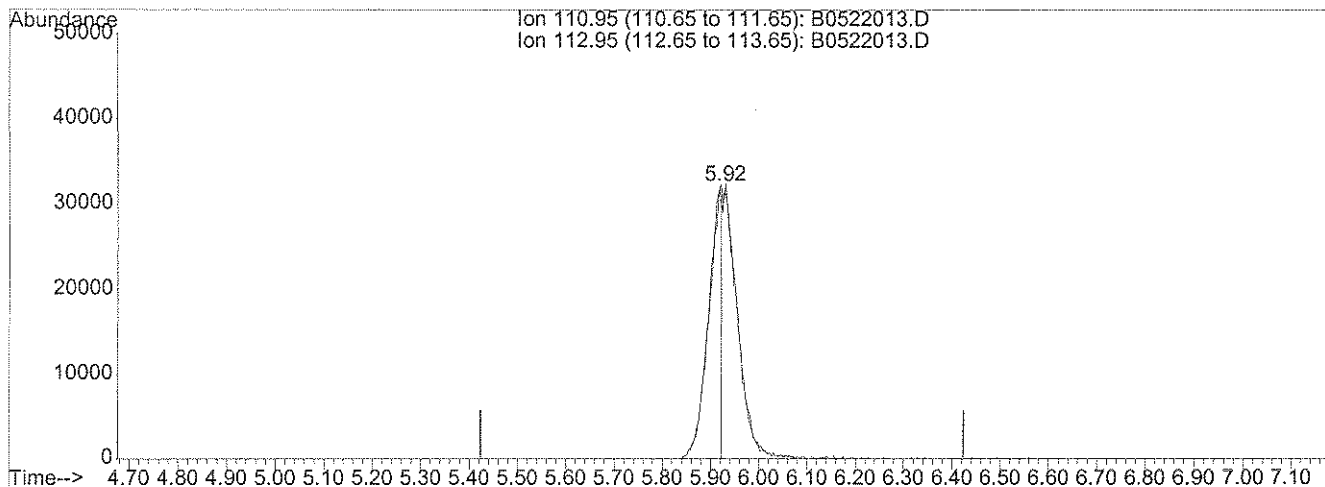
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522013.D
 Acq On : 22 May 2008 12:53
 Sample : JPL111-007 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 15:40 2008

Vial: 12
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.92min 9.84ug/l

response 58712

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	109.02
0.00	0.00	0.00
0.00	0.00	0.00

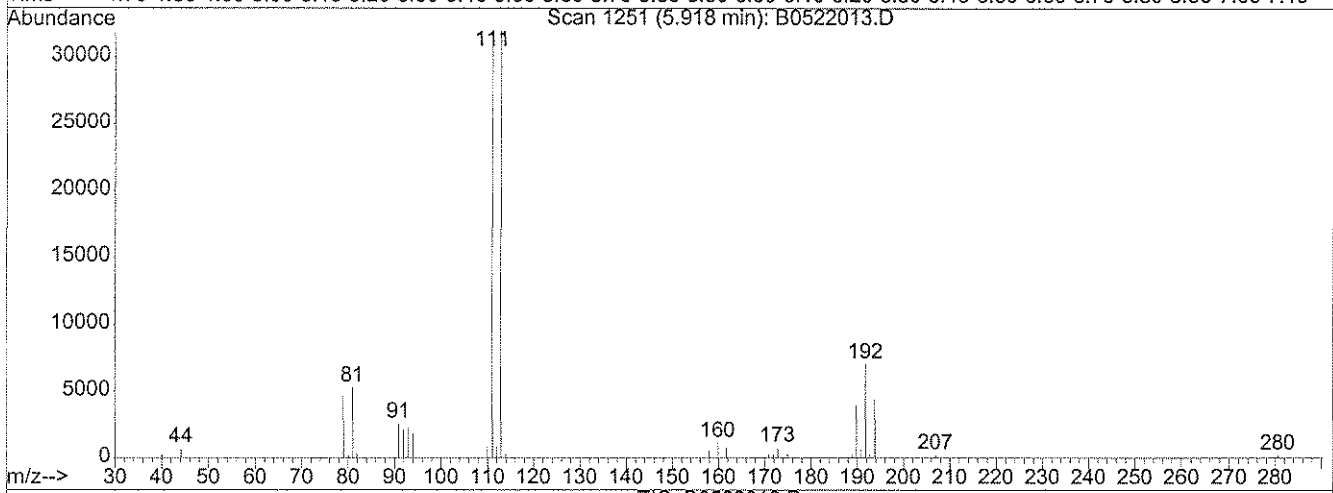
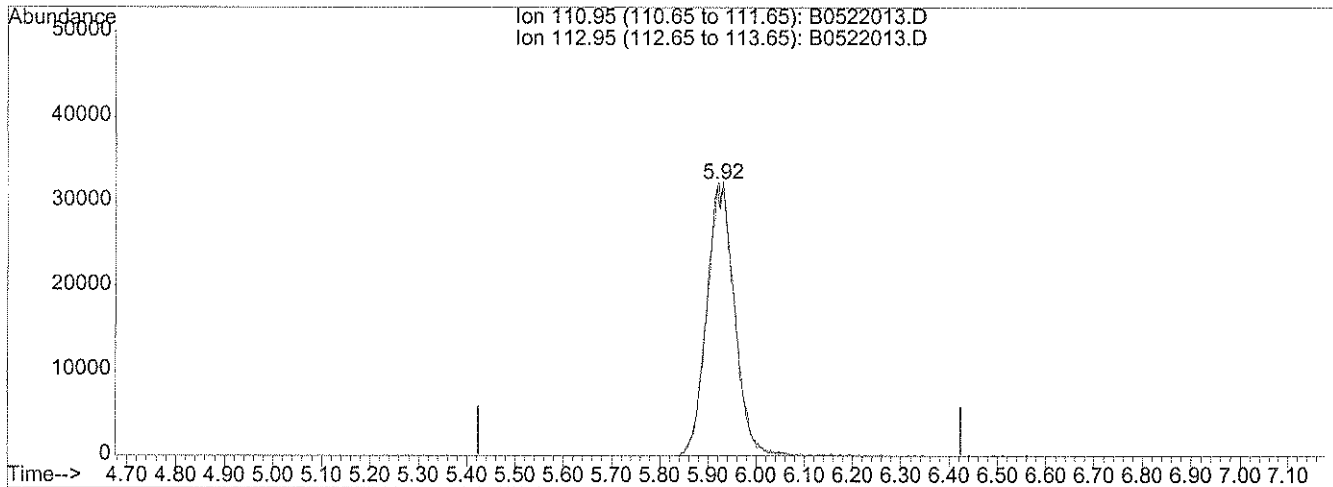
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522013.D
 Acq On : 22 May 2008 12:53
 Sample : JPL111-007 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:04 2008

Vial: 12
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



TIC: B0522013.D

(37) Dibromofluoromethane (S)

5.92min 21.72ug/l m

response 129588

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	49.39#
0.00	0.00	0.00
0.00	0.00	0.00

TIC DATA

SDG #JPL111

Volatiles Analysis

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-5

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-001
 Lab File ID: B0522017.d
 Date Collected: 05/14/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052208\B0522017.D Vial: 15
Acq On : 22 May 2008 14:41 Operator: LNH
Sample : JPL111-001 (524.2) Inst : Buddha
Misc : #4 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522017.D B8260W.M Fri May 23 16:09:53 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-4

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-002
 Lab File ID: B0522018.d
 Date Collected: 05/14/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052208\B0522018.D Vial: 16
Acq On : 22 May 2008 15:07 Operator: LNH
Sample : JPL111-002 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522018.D B8260W.M Fri May 23 16:10:52 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-3

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL111

Run Sequence: R028288

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL111-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522019.d

Level: (LOW/MED) _____

Date Collected: 05/14/2008

% Moisture: not dec. _____

Date Analyzed: 05/22/2008

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522019.D Vial: 17
Acq On : 22 May 2008 15:34 Operator: LNH
Sample : JPL111-003 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522019.D B8260W.M Fri May 23 16:11:54 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL111

Run Sequence: R028288

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL111-004

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522020.d

Level: (LOW/MED) _____

Date Collected: 05/14/2008

% Moisture: not dec. _____

Date Analyzed: 05/22/2008

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522020.D Vial: 18
Acq On : 22 May 2008 16:03 Operator: LNH
Sample : JPL111-004 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522020.D B8260W.M Fri May 23 16:14:09 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-25-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL111

Run Sequence: R028288

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL111-005

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522021.d

Level: (LOW/MED) _____

Date Collected: 05/14/2008

% Moisture: not dec. _____

Date Analyzed: 05/22/2008

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522021.D Vial: 19
Acq On : 22 May 2008 16:32 Operator: LNH
Sample : JPL111-005 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522021.D B8260W.M Fri May 23 16:14:00 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-14-05/14/08

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL111-006
 Lab File ID: B0522022.d
 Date Collected: 05/14/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522022.D Vial: 20
Acq On : 22 May 2008 16:58 Operator: LNH
Sample : JPL111-006 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522022.D B8260W.M Fri May 23 16:15:11 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-14-05/14/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL111

Run Sequence: R028288

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL111-007

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522013.d

Level: (LOW/MED) _____

Date Collected: 05/14/2008

% Moisture: not dec. _____

Date Analyzed: 05/22/2008

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

	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\BUDDHA\052208\B0522013.D Vial: 12
Acq On : 22 May 2008 12:53 Operator: LNH
Sample : JPL111-007 TB Inst : Buddha
Misc : #2 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522013.D B8260W.M Fri May 23 16:04:32 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B052208MVOWB1

Lab Name: Pace Analytical Services
 SDG No.: JPL111
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: B052208MVOWB1
 Lab File ID: B0522011.d
 Date Collected: _____
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052208\B0522011.D Vial: 10
Acq On : 22 May 2008 12:00 Operator: LNH
Sample : B052208MVOWB1 Inst : Buddha
Misc : 10ML PFW+IS/SS(MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522011.D B8260W.M Fri May 23 16:04:46 2008

Metals Data

JPL111

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

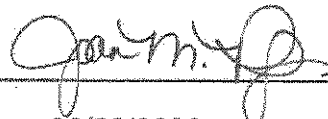
Lab Name: Pace Analytical Services, Inc. Contract: JPL Groundwater Monitorin
 Lab Code: PACE SDG No.: JPL111
 SOW No.: _____

Sample No.	Lab Sample ID
MW-25-5	JPL111-001
MW-25-4	JPL111-002
MW-25-3	JPL111-003
MW-25-2	JPL111-004
MW-25-1	JPL111-005
MW-25-1MS	JPL111-005MS
MW-25-1MSD	JPL111-005MSD
EB-14-05/14/08	JPL111-006

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: 06/23/2008 Title: Chemist

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-5

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL111

Matrix (soil/water): Water

Lab Sample ID: JPL111-001

Level (low/med): LOW

Date Received: 05/15/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	3.06			M	R028436
7440-70-2	Calcium	9740			P	R028884
7440-47-3	Chromium	2.35			M	R028436
7439-89-6	Iron	115			P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	6410			P	R028884
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	80700			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 7:03

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-4

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL111

Matrix (soil/water): Water

Lab Sample ID: JPL111-002

Level (low/med): LOW

Date Received: 05/15/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.43			M	R028436
7440-70-2	Calcium	66300			P	R028884
7440-47-3	Chromium	6.36			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	19800			P	R028884
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	53400			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 7:03

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-3

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL111Matrix (soil/water): WaterLab Sample ID: JPL111-003Level (low/med): LOWDate Received: 05/15/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.40			M	R028436
7440-70-2	Calcium	72500			P	R028884
7440-47-3	Chromium	7.41			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	23100			P	R028884
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	37100			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 7:03

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL111

Matrix (soil/water): Water

Lab Sample ID: JPL111-004

Level (low/med): LOW

Date Received: 05/15/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.21			M	R028436
7440-70-2	Calcium	68900			P	R028884
7440-47-3	Chromium	6.52			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	24000			P	R028884
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	31500			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 7:03

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-25-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL111

Matrix (soil/water): Water

Lab Sample ID: JPL111-005

Level (low/med): LOW

Date Received: 05/15/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	104000			P	R028884
7440-47-3	Chromium	4.79			M	R028436
7439-89-6	Iron	821			P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	35100			P	R028884
7440-09-7	Potassium	5000	U		P	R028884
7440-23-5	Sodium	32900			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 7:03

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-14-05/14/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL111

Matrix (soil/water): Water

Lab Sample ID: JPL111-006

Level (low/med): LOW

Date Received: 05/15/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	5000	U		P	R028884
7440-47-3	Chromium	1.17			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	5000	U		P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	5000	U		P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 7:03

Miscellaneous Inorganic Data

JPL111

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL111

SOW No.: _____

<u>Sample No.</u>
<u>MW-25-5</u>
<u>MW-25-4</u>
<u>MW-25-3</u>
<u>MW-25-2</u>
<u>MW-25-1</u>
<u>EB-14-05/14/08</u>

<u>Lab Sample ID</u>
<u>JPL111-001</u>
<u>JPL111-002</u>
<u>JPL111-003</u>
<u>JPL111-004</u>
<u>JPL111-005</u>
<u>JPL111-006</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: Paul J. NWO

Date: June 10, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-5 **Date/Time Collected:** 05/14/2008 08:37
Lab Sample ID: JPL111-001 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E150.1/29331 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	8.8		0.10	0.10	05/15/2008	05/15/2008	R028111

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	270		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29371 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/15/2008	05/15/2008	R028150
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/15/2008	05/15/2008	R028150
Sulfate as SO4	14808-79-8	10	75		10	1.7	05/15/2008	05/15/2008	R028150
Chloride	16887-00-6	10	17		10	0.76	05/15/2008	05/15/2008	R028150
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/15/2008	05/15/2008	R028150

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	32		2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	68		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-5 **Date/Time Collected:** 05/14/2008 08:37
Lab Sample ID: JPL111-001 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/02/2008	06/03/2008	R028530

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-4 **Date/Time Collected:** 05/14/2008 09:20
Lab Sample ID: JPL111-002 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E150.1/29331 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	05/15/2008	05/15/2008	R028111

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	420		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29371 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	4.9		2.0	0.55	05/15/2008	05/15/2008	R028150
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/15/2008	05/15/2008	R028150
Sulfate as SO4	14808-79-8	10	66		10	1.7	05/15/2008	05/15/2008	R028150
Chloride	16887-00-6	10	34		10	0.76	05/15/2008	05/15/2008	R028150
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/15/2008	05/15/2008	R028150

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	210		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-4 **Date/Time Collected:** 05/14/2008 09:20
Lab Sample ID: JPL111-002 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	3	9.4		3.0	0.42	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-3 **Date/Time Collected:** 05/14/2008 10:02
Lab Sample ID: JPL111-003 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E150.1/29331 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.5		0.10	0.10	05/15/2008	05/15/2008	R028111

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	390		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29371 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	8.6		2.0	0.55	05/15/2008	05/15/2008	R028150
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/15/2008	05/15/2008	R028150
Sulfate as SO4	14808-79-8	10	71		10	1.7	05/15/2008	05/15/2008	R028150
Chloride	16887-00-6	10	39		10	0.76	05/15/2008	05/15/2008	R028150
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/15/2008	05/15/2008	R028150

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	180		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-3 **Date/Time Collected:** 05/14/2008 10:02
Lab Sample ID: JPL111-003 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	3	13		3.0	0.42	05/31/2008	06/02/2008	R028515

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-2 **Date/Time Collected:** 05/14/2008 10:41
Lab Sample ID: JPL111-004 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E150.1/29331 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.4		0.10	0.10	05/15/2008	05/15/2008	R028111

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	400		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29371 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	8.9		2.0	0.55	05/15/2008	05/15/2008	R028150
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/15/2008	05/15/2008	R028150
Sulfate as SO4	14808-79-8	10	74		10	1.7	05/15/2008	05/15/2008	R028150
Chloride	16887-00-6	10	39		10	0.76	05/15/2008	05/15/2008	R028150
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/15/2008	05/15/2008	R028150

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	180		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-2 **Date/Time Collected:** 05/14/2008 10:41
Lab Sample ID: JPL111-004 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	3	15		3.0	0.42	06/02/2008	06/03/2008	R028530

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-1 **Date/Time Collected:** 05/14/2008 11:26
Lab Sample ID: JPL111-005 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E150.1/29331 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.3		0.10	0.10	05/15/2008	05/15/2008	R028111

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	550		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29371 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	10		2.0	0.55	05/15/2008	05/15/2008	R028150
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/15/2008	05/15/2008	R028150
Sulfate as SO4	14808-79-8	10	160		10	1.7	05/15/2008	05/15/2008	R028150
Chloride	16887-00-6	10	77		10	0.76	05/15/2008	05/15/2008	R028150
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/15/2008	05/15/2008	R028150

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	170		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: MW-25-1 **Date/Time Collected:** 05/14/2008 11:26
Lab Sample ID: JPL111-005 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E314.0/29780 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	10		4.0	0.56	05/31/2008	06/02/2008	R028515

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: EB-14-05/14/08 **Date/Time Collected:** 05/14/2008 11:09
Lab Sample ID: JPL111-006 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E150.1/29331 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.5		0.10	0.10	05/15/2008	05/15/2008	R028111

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	15		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29371 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028150\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/15/2008	05/15/2008	R028150
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/15/2008	05/15/2008	R028150
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/15/2008	05/15/2008	R028150
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/15/2008	05/15/2008	R028150
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/15/2008	05/15/2008	R028150

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL111
Sample Number: EB-14-05/14/08 **Date/Time Collected:** 05/14/2008 11:09
Lab Sample ID: JPL111-006 **Date/Time Received:** 05/15/2008 08:25
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/02/2008	06/03/2008	R028530

*QBatch=QC/Preparation Batch

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL112

June 26, 2008

Pace Analytical Services, Inc.
 940 S. Harney
 Seattle, WA 98108

To: Battelle
 Project Name: JPL Groundwater
 SDG No.: JPL112
 Date of Report: June 26, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-26-2	JPL112-001	VOA/MET/INO
MW-26-1	JPL112-002	VOA/MET/INO
EB-15-5/15/08	JPL112-003	VOA/MET/INO
SB-1-2Q08	JPL112-004	VOA/MET/INO
TB-15-5/15/08	JPL112-005	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

Sample Receipt Comments:

Two of two volatiles bottles submitted for TB-15-5/15/08 contained air bubbles of greater than 1/4 inch in size.

All samples were received out of hold for pH.

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

Volatiles Fraction:

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, all samples except for the trip blank were received in the bottles from the contaminated lot and some have low level detections of chloromethane.

Tentatively Identified Compounds (TICs):

A library search was performed for non-target analytes that are not identified on the quantitation report. The results for these have been submitted on a separate form.

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 and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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	15 minutes	All samples

ICP Metals:

For the run sequence R028884, the ICV exceeded the upper control limit for potassium. All samples were not reported from this run sequence and were reanalyzed and reported from run sequences R029004 and R029050. QC were reported and were within control limits. No further corrective action was required. Data have not been flagged for this event.

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For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

For the run sequence R029004, the ICV exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the sixth CCB contained a level of potassium that was less than $-\frac{1}{2}$ the CRDL. All samples were not reported from this run sequence and were reanalyzed and reported from run sequences R029004 and R029050. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R029004, the third CCB contained a level of potassium that was greater than $\frac{1}{2}$ the CRDL. No sample results for potassium were associated with this CCB. Therefore, no corrective action was required. Data have not been flagged for this event.

Due to software limitations, which limit the amount of data that can be processed, all injections are not present on Form 14 for run sequence R029004. All calibration checks are listed and all injections surrounding the samples are listed.

The serial dilution sample for potassium was prepared at a ten fold dilution instead of a five fold dilution. Sample results for potassium were less than the CRDL. Therefore, no corrective action was taken. Data have not been flagged for this event.

ICP-MS Metals:

No comments.

Miscellaneous Inorganics:

In the run sequence R028174 for "300.0 Anions", the matrix spike duplicate recovery exceeded the established upper control limit for chloride and the matrix spike and matrix spike duplicate recoveries exceeded the established lower control limits for orthophosphate. Since all of the other quality control samples were in control, 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.
- ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.
- Z Denotes data deemed unusable by the analyst.

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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940 S. Harney
Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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."

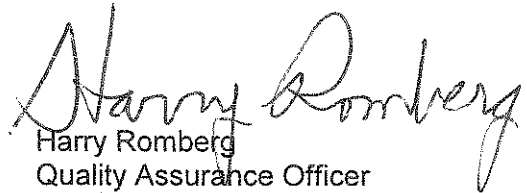
Respectfully submitted,


Kw

Kara Godineaux
Project Manager

6/26/08

(DATE)


Harry Romberg
Quality Assurance Officer

6/26/08

(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
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Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG												
Sample MtxID (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, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
JPL112-WD 001	05/16/2008 08:20 AM	05/15/2008 07:37 AM	MW-26-2	A-	A-	IN	IN	A-	IN	IN	IN	IN
*JPL112-WD 002	05/16/2008 08:20 AM	05/15/2008 08:20 AM	MW-26-1	A-	A-	IN	IN	A-	IN	IN	IN	IN
JPL112-WD 003	05/16/2008 08:20 AM	05/15/2008 08:04 AM	EB-15-5/15/08	A-	A-	IN	IN	A-	IN	IN	IN	IN
JPL112-WD 004	05/16/2008 08:20 AM	05/15/2008 07:58 AM	SB-1-2Q08	A-	A-	IN	IN	A-	IN	IN	IN	IN
JPL112-WD 005	05/16/2008 08:20 AM	05/15/2008 12:00 AM	TB-15-5/15/08									

Approved By: _____
Notes: _____

On: _____

Samples identified with a (*) client has requested QC for

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

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: JPL GW MON 2008
 PROJECT CONTACT: DAVID CONNER
 TELEPHONE: 619-726-7311 FAX:
 JOB/P.O. NO.: 6486090 / 214319

Laucks
 Testing Laboratories, Inc.
 940 South Hemery St. Seattle, WA 98108 (206) 767-5060 FAX: 206-767-5060
 1106 Leitch Ave. Valmo, WA 99102 (509) 238-4865 FAX: (509) 238-1065

CHAIN OF CUSTODY RECORD SDG # 46084 PAGE 1 OF 1
 WORK ORDER ID# JPL112 SUBMITTED AT: JPL112

TESTS TO PERFORM

LAB/SAM	SAMPLE ID / LOCATION	DATE	TIME	MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-26-2	5/15/08	737		5	VOI (5242) TOTAL C (200.8) LEAD (200.8) ARSENIC (200.8) GEN CHEM (200.8) GEN CHEM (3140) GEN CHEM (300.931/150.151)	LEVEL II QC
2	MW-26-1	5/15/08	820		10	VOI (5242) TOTAL C (200.8) LEAD (200.8) ARSENIC (200.8) GEN CHEM (200.8) GEN CHEM (3140) GEN CHEM (300.931/150.151)	MS/MSD
3	EB-15-5/15/08	5/15/08	804		5	VOI (5242) TOTAL C (200.8) LEAD (200.8) ARSENIC (200.8) GEN CHEM (200.8) GEN CHEM (3140) GEN CHEM (300.931/150.151)	EQUIPMENT BLANK
5	TR-15-5/15/08	5/15/08	-		2	VOI (5242) TOTAL C (200.8) LEAD (200.8) ARSENIC (200.8) GEN CHEM (200.8) GEN CHEM (3140) GEN CHEM (300.931/150.151)	TRIP BLANK
4	SB-1-2008	5/15/08	758		5	VOI (5242) TOTAL C (200.8) LEAD (200.8) ARSENIC (200.8) GEN CHEM (200.8) GEN CHEM (3140) GEN CHEM (300.931/150.151)	SOURCE 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

BILLING INFORMATION, IF DIFFERENT THAN ABOVE
 NAME: BATTELLE ADDRESS: 505 KING AVE.
 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

REINQUISHED BY (SIGN AND PRINT): DAVID CONNER / MARCO MENDOZA
 DATE/TIME: 5/15/08 / 1300
 RECEIVED BY (SIGN AND PRINT): RACHEL FRANK
 DATE/TIME: 5/16/08 / 8:00

**Cooler Receipt Form
Pace Analytical Services, Inc.**

SDG: JPL112

Taken By: Client

Cooler: AAT100

Transferred: FedEx

COC #: 46084

Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 5/16/2008

Date cooler was opened: 5/16/2008 8:20AM

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? YES
if YES, record carrier name and airbill number: 865543091412
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? 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: RF

B. LOG-IN PHASE:

Date samples were logged in: 5/16/2008 9:07AM

Logged-in by Rachel Frank (signature) RF

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? NO
18. Temperatures: 3.7

DISCREPANCIES:

Sample 5 has 2 of 2 Trip Blanks w/bubbles >1/4"
All samples were received out of hold for PH.

Date Printed: 5/16/2008 9:09

**Supplemental Sample Receipt Log
Pace Analytical Services, Inc.**

SDG: JPL112
Cooler: AAT100
Temperatures: 3.7
COC #: 46084

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL112-001	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
JPL112-002	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
JPL112-003	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
JPL112-004	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
JPL112-005	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

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Seattle, WA 98108

Battelle

SDG No.: JPL112

- I. Narrative: 2-8
- II. Chain-of-Custody: 9-13
- III. Index: 14-15
- IV. Volatiles Data: VOA 1-282
 - A. QC Summary Data: 1-12
 - B. Sample Data: 13-70
 - C. Standards Data: 71-230
 - D. Raw QC Data: 231-273
 - E. Bench Sheets: 274-282
- V. Metals Data: MET- 1-345
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-7
 - C. Quality Control Data: 8-53
 - D. Quarterly Verification of Instrument Parameters: 54-64
 - E. Raw Data: 65-337
 - F. Digestion & Distillation Logs: 338-345
- VI. Miscellaneous Inorganics Data: INO 1-129
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-11
 - C. Quality Control Data: 12-29
 - D. Raw Data: 30-129
- VII. Forms Summary: SUM- 1-140

Completed and checked by: Judy Ecklund Date: 6/27/08

QC SUMMARY

SDG# JPL112

Volatiles Analysis

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL112

Run Sequence: R028235

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL112-002MSD) MW-26-1MSD	115	96	95		0
(JPL112-002MS) MW-26-1MS	115	91	96		0
(JPL112-004) SB-1-2Q08	115	97	95		0
(JPL112-003) EB-15-5/15/08	114	98	98		0
(JPL112-002) MW-26-1	114	98	93		0
(JPL112-001) MW-26-2	115	102	95		0
(JPL112-005) TB-15-5/15/08	115	100	93		0
(B052008MVOWB2) B052008MVOWB2	111	94	93		0
(S052008MVOWB1) S052008MVOWB1	107	92	93		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: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028235 SDG No.: JPL112

BS Lab Sample ID: S052008MVOWB1

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	51.38	103		60-140
Chloromethane	50.0	48.53	97		60-140
Vinyl chloride	50.0	54.23	108		60-140
Bromomethane	50.0	54.29	109		60-140
Chloroethane	50.0	50.89	102		60-140
Trichlorofluoromethane	50.0	67.75	136		60-140
1,1-Dichloroethene	50.0	61.59	123		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	63.1	126		60-140
Methylene chloride	50.0	57.55	115		60-140
Methyl tert-butyl ether	50.0	55.95	112		60-140
trans-1,2-Dichloroethene	50.0	56.75	114		60-140
1,1-Dichloroethane	50.0	56.12	112		60-140
2,2-Dichloropropane	50.0	59.06	118		60-140
cis-1,2-Dichloroethene	50.0	55.94	112		60-140
2-Butanone	50.0	43.01	86		60-140
Bromochloromethane	50.0	56.29	113		60-140
Chloroform	50.0	55.95	112		60-140
1,1,1-Trichloroethane	50.0	60.94	122		60-140
Carbon tetrachloride	50.0	60.15	120		60-140
1,1-Dichloropropene	50.0	59.74	119		60-140
Benzene	50.0	51.74	103		60-140
1,2-Dichloroethane	50.0	56.3	113		60-140
Trichloroethene	50.0	52.35	105		60-140
1,2-Dichloropropane	50.0	47.88	96		60-140
Dibromomethane	50.0	51.04	102		60-140
Bromodichloromethane	50.0	51.62	103		60-140
cis-1,3-Dichloropropene	50.0	57.24	114		60-140
4-Methyl-2-pentanone	50.0	47.19	94		60-140
Toluene	50.0	49.06	98		60-140
trans-1,3-Dichloropropene	50.0	45.81	92		60-140
1,1,2-Trichloroethane	50.0	46.19	92		60-140
Tetrachloroethene	50.0	51.04	102		60-140
1,3-Dichloropropane	50.0	47.26	95		60-140
Dibromochloromethane	50.0	51.61	103		60-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/31/2008 9:37

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028235 SDG No.: JPL112
 BS Lab Sample ID: S052008MVOWB1
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	49.37	99		60-140
Chlorobenzene	50.0	49.4	99		60-140
Ethylbenzene	50.0	50.66	101		60-140
1,1,1,2-Tetrachloroethane	50.0	53.77	108		60-140
m,p-Xylene	100	101.34	101		60-140
o-Xylene	50.0	49.95	100		60-140
Styrene	50.0	49.97	100		60-140
Bromoform	50.0	50.29	101		60-140
Isopropylbenzene	50.0	53.26	107		60-140
1,1,2,2-Tetrachloroethane	50.0	44.83	90		60-140
n-Propylbenzene	50.0	48.32	97		60-140
Bromobenzene	50.0	47.54	95		60-140
1,2,3-Trichloropropane	50.0	45.31	91		60-140
2-Chlorotoluene	50.0	47.3	95		60-140
1,3,5-Trimethylbenzene	50.0	49.86	100		60-140
4-Chlorotoluene	50.0	48.65	97		60-140
tert-Butylbenzene	50.0	50.98	102		60-140
1,2,4-Trimethylbenzene	50.0	50.06	100		60-140
sec-Butylbenzene	50.0	50.93	102		60-140
4-Isopropyltoluene	50.0	52.96	106		60-140
1,3-Dichlorobenzene	50.0	48.99	98		60-140
1,4-Dichlorobenzene	50.0	48.97	98		60-140
n-Butylbenzene	50.0	50.62	101		60-140
1,2-Dichlorobenzene	50.0	48.56	97		60-140
1,2-Dibromo-3-chloropropane	50.0	46.17	92		60-140
1,2,4-Trichlorobenzene	50.0	51.27	103		60-140
Hexachlorobutadiene	50.0	50.73	101		60-140
Naphthalene	50.0	48.23	96		60-140
1,2,3-Trichlorobenzene	50.0	47.52	95		60-140

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 5/31/2008 9:37

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorMS Run Sequence: R028235 MSD Run Sequence: R028235 SDG No.: JPL112MS Client Sample No.: MW-26-1MS MSD Client Sample No.: MW-26-1MSDMS Lab Sample ID: JPL112-002MS MSD Lab Sample ID: JPL112-002MSDLevel: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Dichlorodifluoromethane	0	50.0	47.58	95	50.0	43.75	88	8	30	60-140
Chloromethane	0.65	50.0	42.8	84	50.0	40.93	81	5	30	60-140
Vinyl chloride	0	50.0	46.58	93	50.0	45.21	90	3	30	60-140
Bromomethane	0	50.0	50.63	101	50.0	51.32	103	1	30	60-140
Chloroethane	0	50.0	44.72	89	50.0	44.12	88	1	30	60-140
Trichlorofluoromethane	0	50.0	64.56	129	50.0	58.12	116	11	30	60-140
1,1-Dichloroethene	0	50.0	55.52	111	50.0	53.45	107	4	30	60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	0	50.0	56.64	113	50.0	53.31	107	6	30	60-140
Methylene chloride	0	50.0	52.91	106	50.0	51.52	103	3	30	60-140
Methyl tert-butyl ether	0	50.0	53.04	106	50.0	53.04	106	0	30	60-140
trans-1,2-Dichloroethene	0	50.0	51.95	104	50.0	50.73	101	2	30	60-140
1,1-Dichloroethane	0	50.0	52.08	104	50.0	50.54	101	3	30	60-140
2,2-Dichloropropane	0	50.0	47.18	94	50.0	45.4	91	4	30	60-140
cis-1,2-Dichloroethene	0	50.0	48.82	98	50.0	48.06	96	2	30	60-140
2-Butanone	0	50.0	42.1	84	50.0	44.05	88	5	30	60-140
Bromochloromethane	0	50.0	51.82	104	50.0	50.53	101	3	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 0 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater MonitorMS Run Sequence: R028235 MSD Run Sequence: R028235 SDG No.: JPL112MS Client Sample No.: MW-26-1MS MSD Client Sample No.: MW-26-1MSDMS Lab Sample ID: JPL112-002MS MSD Lab Sample ID: JPL112-002MSDLevel: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Chloroform	0	50.0	52.85	106	50.0	51.18	102	3	30	60-140
1,1,1-Trichloroethane	0	50.0	57.3	115	50.0	55.05	110	4	30	60-140
Carbon tetrachloride	0	50.0	56.57	113	50.0	55.43	111	2	30	60-140
1,1-Dichloropropene	0	50.0	54.99	110	50.0	53.9	108	2	30	60-140
Benzene	0	50.0	48.27	97	50.0	47.18	94	2	30	60-140
1,2-Dichloroethane	0	50.0	58.25	117	50.0	57.57	115	1	30	60-140
Trichloroethene	0	50.0	49.38	99	50.0	47.71	95	3	30	60-140
1,2-Dichloropropane	0	50.0	46.52	93	50.0	46.84	94	1	30	60-140
Dibromomethane	0	50.0	51	102	50.0	50.45	101	1	30	60-140
Bromodichloromethane	0	50.0	52.65	105	50.0	52.14	104	1	30	60-140
cis-1,3-Dichloropropene	0	50.0	57.16	114	50.0	58.58	117	3	30	60-140
4-Methyl-2-pentane	0	50.0	44.82	90	50.0	49.53	99	10	30	60-140
Toluene	0	50.0	48.15	96	50.0	46.37	93	4	30	60-140
trans-1,3-Dichloropropene	0	50.0	44.24	88	50.0	45.26	91	2	30	60-140
1,1,2-Trichloroethane	0	50.0	44.49	89	50.0	45.57	91	2	30	60-140
Tetrachloroethene	0.16	50.0	47.79	95	50.0	46.19	92	3	30	60-140
1,3-Dichloropropane	0	50.0	45.56	91	50.0	46.95	94	3	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 0 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorMS Run Sequence: R028235 MSD Run Sequence: R028235 SDG No.: JPL112MS Client Sample No.: MW-26-1MS MSD Client Sample No.: MW-26-1MSDMS Lab Sample ID: JPL112-002MS MSD Lab Sample ID: JPL112-002MSDLevel: N/AUnits: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Dibromochloromethane	0	50.0	50.31	101	50.0	49.87	100	1	30	60-140
1,2-Dibromoethane	0	50.0	47.56	95	50.0	47.92	96	1	30	60-140
Chlorobenzene	0	50.0	47.05	94	50.0	45.64	91	3	30	60-140
Ethylbenzene	0	50.0	47.64	95	50.0	46.06	92	3	30	60-140
1,1,1,2-Tetrachloroethane	0	50.0	50.82	102	50.0	47.14	94	8	30	60-140
m,p-Xylene	0	100	94.42	94	100	90.88	91	4	30	60-140
o-Xylene	0	50.0	46.11	92	50.0	43.56	87	6	30	60-140
Styrene	0	50.0	46.07	92	50.0	44.92	90	3	30	60-140
Bromoform	0	50.0	45.41	91	50.0	46.01	92	1	30	60-140
Isopropylbenzene	0	50.0	49.12	98	50.0	45.65	91	7	30	60-140
1,1,2,2-Tetrachloroethane	0	50.0	41.08	82	50.0	42.81	86	4	30	60-140
n-Propylbenzene	0	50.0	43.71	87	50.0	43.77	88	0	30	60-140
Bromobenzene	0	50.0	44.71	89	50.0	45.22	90	1	30	60-140
1,2,3-Trichloropropane	0	50.0	40.78	82	50.0	43.94	88	8	30	60-140
2-Chlorotoluene	0	50.0	44.28	89	50.0	43.55	87	2	30	60-140
1,3,5-Trimethylbenzene	0	50.0	46.19	92	50.0	45	90	3	30	60-140
4-Chlorotoluene	0	50.0	45.32	91	50.0	45.35	91	0	30	60-140
tert-Butylbenzene	0	50.0	47.73	95	50.0	45.51	91	5	30	60-140
1,2,4-Trimethylbenzene	0	50.0	46.05	92	50.0	44.92	90	3	30	60-140
sec-Butylbenzene	0	50.0	46.25	93	50.0	44.79	90	3	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limitsSpike Recovery: 0 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitor
 MS Run Sequence: R028235 MSD Run Sequence: R028235 SDG No.: JPL112
 MS Client Sample No.: MW-26-1MS MSD Client Sample No.: MW-26-1MSD
 MS Lab Sample ID: JPL112-002MS MSD Lab Sample ID: JPL112-002MSD
 Level: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
4-Isopropyltoluene	0	50.0	47.77	96	50.0	46.03	92	4	30	60-140
1,3-Dichlorobenzene	0	50.0	45.32	91	50.0	44.36	89	2	30	60-140
1,4-Dichlorobenzene	0	50.0	44.66	89	50.0	44.03	88	1	30	60-140
n-Butylbenzene	0	50.0	45.48	91	50.0	42.92	86	6	30	60-140
1,2-Dichlorobenzene	0	50.0	44.83	90	50.0	43.32	87	3	30	60-140
1,2-Dibromo-3-chloropropane	0	50.0	44.7	89	50.0	43.72	87	2	30	60-140
1,2,4-Trichlorobenzene	0	50.0	47.09	94	50.0	42.81	86	10	30	60-140
Hexachlorobutadiene	0	50.0	45.98	92	50.0	41.7	83	10	30	60-140
Naphthalene	0	50.0	44.54	89	50.0	42.37	85	5	30	60-140
1,2,3-Trichlorobenzene	0	50.0	43.77	88	50.0	39.72	79	10	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limits

Spike Recovery: 0 out of 126 outside limits

COMMENTS:

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B052008MVOWB2

Lab Name Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL112

Lab File ID: B0520013.D

Lab Sample ID: B052008MVOWB2

Date Analyzed: 05/20/2008

Time Analyzed: 11:50

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

Heated Purge: (Y/N) N

Instrument ID: 5973B

Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S052008MVOWB1	S052008MVOWB1	B0520006.D	05/20/2008	08:43	R028235
02	TB-15-5/15/08	JPL112-005	B0520024.D	05/20/2008	16:56	R028235
03	MW-26-2	JPL112-001	B0520025.D	05/20/2008	17:27	R028235
04	MW-26-1	JPL112-002	B0520026.D	05/20/2008	17:58	R028235
05	EB-15-5/15/08	JPL112-003	B0520027.D	05/20/2008	18:27	R028235
06	SB-1-2Q08	JPL112-004	B0520028.D	05/20/2008	18:57	R028235
07	MW-26-1MS	JPL112-002MS	B0520029.D	05/20/2008	19:23	R028235
08	MW-26-1MSD	JPL112-002MSD	B0520030.D	05/20/2008	19:53	R028235
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COMMENTS:

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1323 SDG No.: JPL112
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFB/VSTD050B1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028235 SDG No.: JPL112
 Lab File ID: B0520005.D BFB Injection Date: 05/20/2008
 Instrument ID: 5973B BFB Injection Time: 08:15
 GC Column DB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	15.9
75	30% to 60% of mass 95	46.3
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.9
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	111.8
175	5% to 9% of mass 17	7.6()1
176	greater than 95%, but less than 101% of mass 174	96.9()1
177	5% to 9% of mass 176	6.5()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	VSTD050B1	VSTD050B1	B0520005a.D	05/20/2008	08:15
02	S052008MVOWB1	S052008MVOWB1	B0520006.D	05/20/2008	08:43
03	B052008MVOWB2	B052008MVOWB2	B0520013.D	05/20/2008	11:50
04	TE-15-5/15/08	JPL112-005	B0520024.D	05/20/2008	16:56
05	MW-26-2	JPL112-001	B0520025.D	05/20/2008	17:27
06	MW-26-1	JPL112-002	B0520026.D	05/20/2008	17:58
07	EB-15-5/15/08	JPL112-003	B0520027.D	05/20/2008	18:27
08	SB-1-2Q08	JPL112-004	B0520028.D	05/20/2008	18:57
09	MW-26-1MS	JPL112-002MS	B0520029.D	05/20/2008	19:23
10	MW-26-1MSD	JPL112-002MSD	B0520030.D	05/20/2008	19:53
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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028235 SDG No.: JPL112
 Client Sample No. (VSTD050##): VSTD050B1 Date Analyzed: 05/20/2008
 Lab File ID (Standard): B0520005a.D Time Analyzed: 08:15
 Instrument ID: 5973B Heated Purge: (Y/N) N
 GC Column: DB-624 20m ID: 0.18 (mm)

	IS1 (FBZ) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	473206	7.53	387604	11.30	246501	13.25
UPPER LIMIT	946412	7.58	775208	11.35	493002	13.3
LOWER LIMIT	236603	7.48	193802	11.25	123250.5	13.2
CLIENT SAMPLE NO.						
01 S052008MVOWB1	447528	7.53	360272	11.30	237598	13.25
02 B052008MVOWB2	425615	7.53	344767	11.30	213727	13.25
03 TB-15-5/15/08	397118	7.52	330821	11.30	190071	13.25
04 MW-26-2	410183	7.53	342340	11.30	192927	13.25
05 MW-26-1	373378	7.52	300357	11.30	185668	13.25
06 EB-15-5/15/08	387935	7.53	310884	11.30	177557	13.25
07 SB-1-2Q08	375693	7.53	319539	11.30	190469	13.25
08 MW-26-1MS	400408	7.53	326267	11.30	214886	13.25
09 MW-26-1MSD	423525	7.52	362173	11.30	224000	13.25
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20						
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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# JPL112

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-2

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 SDG No.: JPL112 Run Sequence: R028235
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL112-001
 Sample wt/vol: 10.0 (g/mL) mL Lab File ID: B0520025.D
 Level: (LOW/MED) _____ Date Collected: 05/15/2008
 % Moisture: not dec. _____ Date/Time Analyzed: 05/20/2008 17:27
 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:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL112

Run Sequence: R028235

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL112-001

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520025.D

Level: (LOW/MED) _____

Date Collected: 05/15/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/20/2008 17:27

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: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-2

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-001
 Lab File ID: B0520025.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 17:27
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

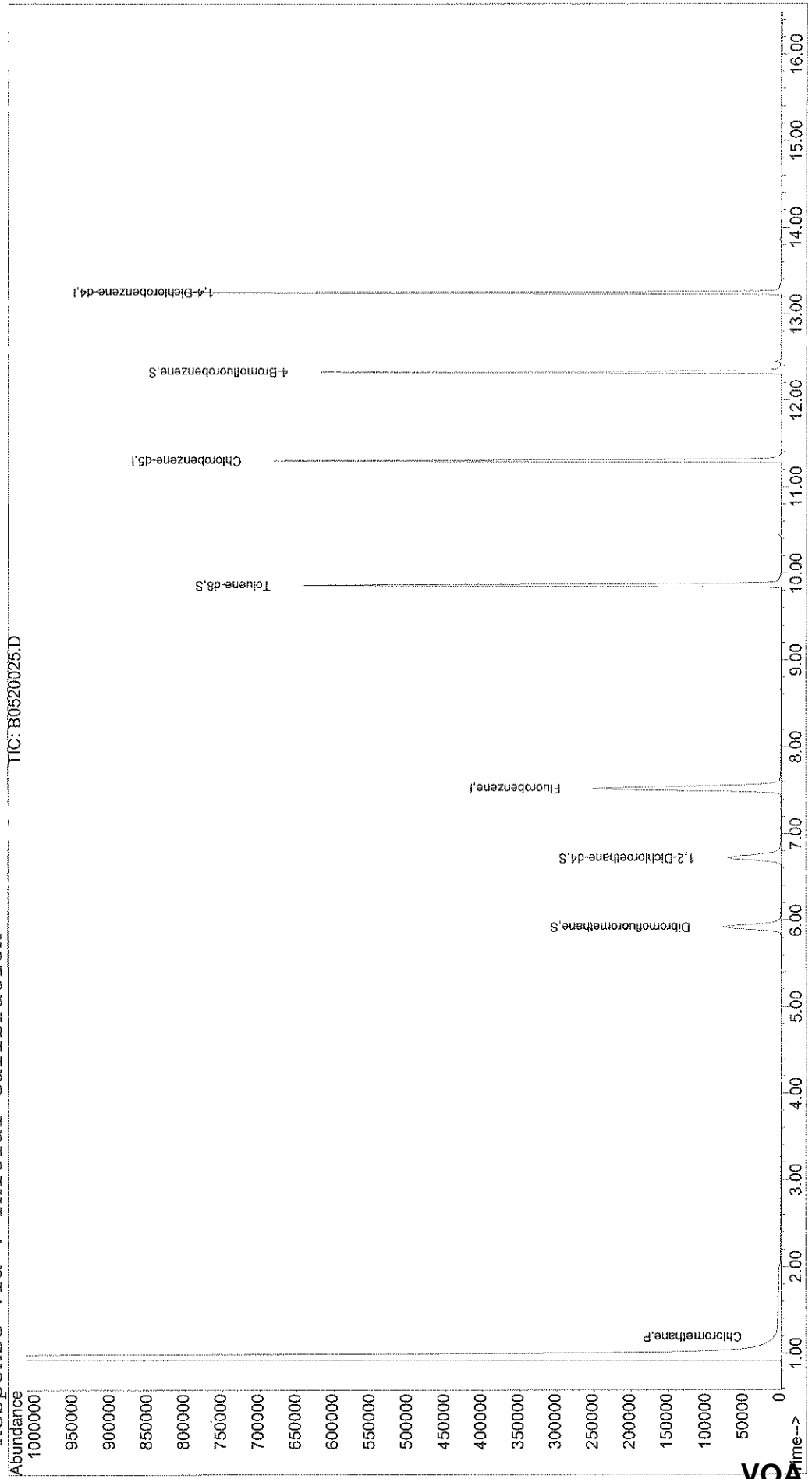
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520025.D Vial: 22
Acq On : 20 May 2008 17:27 Operator: LPM
Sample : JPL112-001 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:32 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520025.D
 Acq On : 20 May 2008 17:27
 Sample : JPL112-001
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:32 2008

Vial: 22
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	410183	25.00	ug/l	0.00	77.30%
54) Chlorobenzene-d5	11.30	117	342340	25.00	ug/l	0.00	77.81%
74) 1,4-Dichlorobenzene-d4	13.25	152	192927	25.00	ug/l	0.00	74.20%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	95106	20.62	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	103.10%	
40) 1,2-Dichloroethane-d4	6.72	65	118186	30.18	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	120.72%#	
55) Toluene-d8	9.86	98	417600	24.94	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	99.76%	
76) 4-Bromofluorobenzene	12.32	95	152223	26.65	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	106.60%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	1405	0.24	ug/l	83
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.		
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
 B0520025.D B8260W.M Wed May 21 16:32:30 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520025.D
 Acq On : 20 May 2008 17:27
 Sample : JPL112-001
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:32 2008

Vial: 22
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.73	96	34		N.D.	
30) 2-Butanone	4.84	43	32		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.42	41	31		N.D.	
34) Chloroform	0.00	83	0		N.D.	
35) 1,1,1-Trichloroethane	5.84	97	29		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	6.70	78	55		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	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	9.94	92	178		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	10.45	97	31		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.52	43	36		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	677		N.D.	
66) Chlorobenzene	11.33	112	35		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

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(#) = qualifier out of range (m) = manual integration
 B0520025.D B8260W.M Wed May 21 16:32:31 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520025.D
 Acq On : 20 May 2008 17:27
 Sample : JPL112-001
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:32 2008

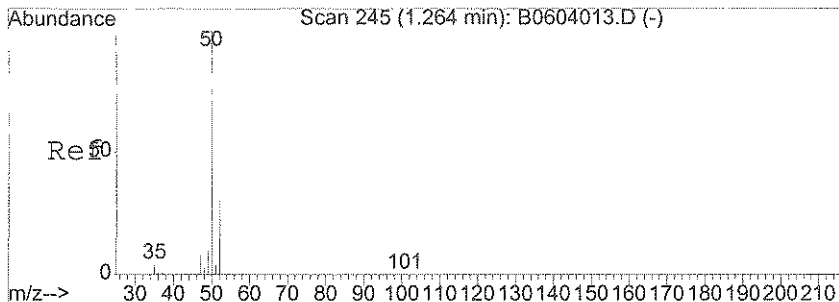
Vial: 22
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

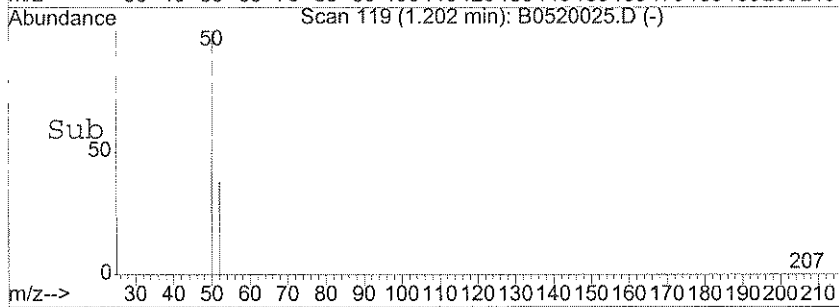
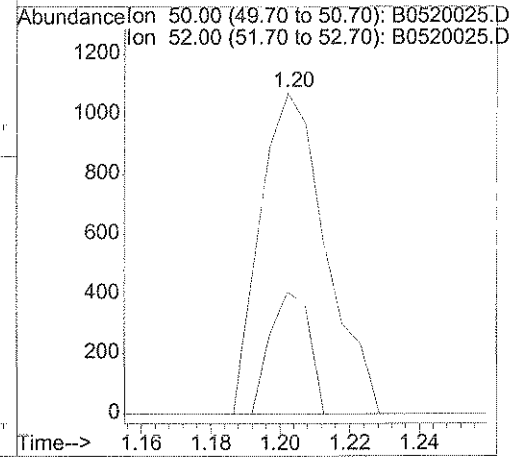
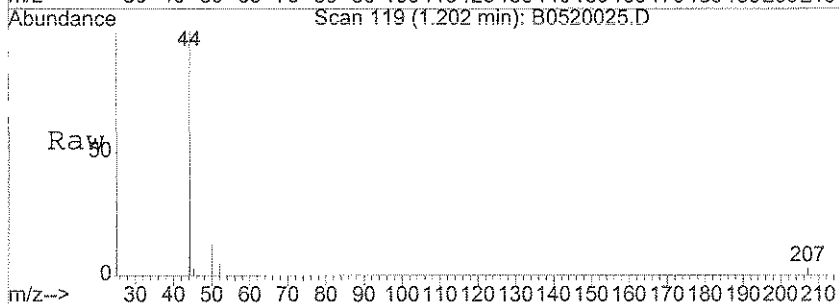
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	42		N.D.	
69) m,p-Xylene	11.53	106	35		N.D.	
70) o-xylene	11.87	106	32		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.17	105	37		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) 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	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.52	91	203		N.D.	
82) 4-Chlorotoluene	12.52	91	203		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	79		N.D.	
84) tert-Butylbenzene	12.91	119	33		N.D.	
85) 1,2,4-Trimethylbenzene	13.24	105	74		N.D.	
86) sec-butylbenzene	13.08	105	338		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	34		N.D.	
88) 4-Isopropyltoluene	13.20	119	202		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	42		N.D.	
90) 1,2-Dichlorobenzene	13.26	146	42		N.D.	
91) n-Butylbenzene	13.52	91	381		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	129		N.D.	
94) Hexachlorobutadiene	14.89	225	45		N.D.	
95) Naphthalene	14.98	128	65		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	83		N.D.	

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#3
 Chloromethane
 Concen: 0.24 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0520025.D
 Acq: 20 May 2008 17:27

Tgt Ion	Resp	Lower	Upper
50	1405		
52	23.0	12.5	52.5



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 SDG No.: JPL112 Run Sequence: R028235
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: JPL112-002
 Sample wt/vol: 10.0 (g/mL) mL Lab File ID: B0520026.D
 Level: (LOW/MED) _____ Date Collected: 05/15/2008
 % Moisture: not dec. _____ Date/Time Analyzed: 05/20/2008 17:58
 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:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.65	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-1

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-002
 Lab File ID: B0520026.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 17:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	Q
		<u>ug/L</u>	
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-26-1

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-002
 Lab File ID: B0520026.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 17:58
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

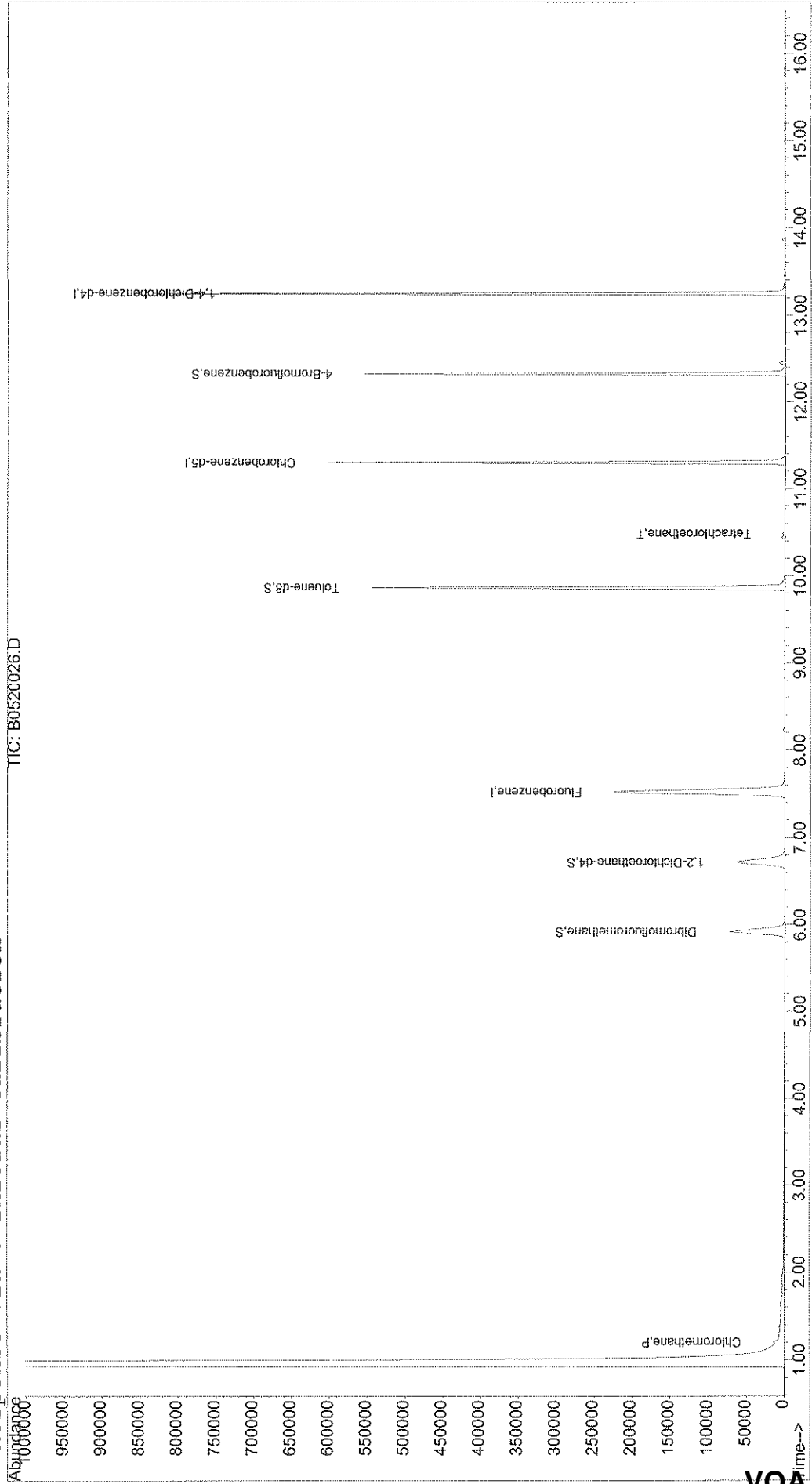
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520026.D Vial: 23
Acq On : 20 May 2008 17:58 Operator: LPM
Sample : JPL112-002 Inst : Buddha
Misc : #4 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:34 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520026.D
 Acq On : 20 May 2008 17:58
 Sample : JPL112-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:34 2008

Vial: 23
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.52	96	373378	25.00	ug/l	0.00	70.37%
54) Chlorobenzene-d5	11.30	117	300357	25.00	ug/l	0.00	68.27%
74) 1,4-Dichlorobenzene-d4	13.25	152	185668	25.00	ug/l	0.00	71.41%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	87831	20.92	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	104.60%	
40) 1,2-Dichloroethane-d4	6.72	65	106037	29.74	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	118.96%	
55) Toluene-d8	9.86	98	356522	24.27	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	97.08%	
76) 4-Bromofluorobenzene	12.32	95	140733	25.60	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	102.40%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	3506	0.65	ug/l	90
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.		
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.		

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(#) = qualifier out of range (m) = manual integration
 B0520026.D B8260W.M Wed May 21 16:34:11 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520026.D
 Acq On : 20 May 2008 17:58
 Sample : JPL112-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:34 2008

Vial: 23
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	150		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.80	96	31		N.D.	
30) 2-Butanone	4.93	43	37		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	5.54	83	63		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	6.69	78	39		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	8.22	130	282		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	8.67	41	29		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	9.93	92	265		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	10.49	166	1017	0.16	ug/l #	78
61) 1,3-Dichloropropene	0.00	76	0		N.D.	
62) 2-Hexanone	10.74	43	34		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	607		N.D.	
66) Chlorobenzene	11.32	112	33		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

spz/05/08

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520026.D
 Acq On : 20 May 2008 17:58
 Sample : JPL112-002
 Misc : #4 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:34 2008

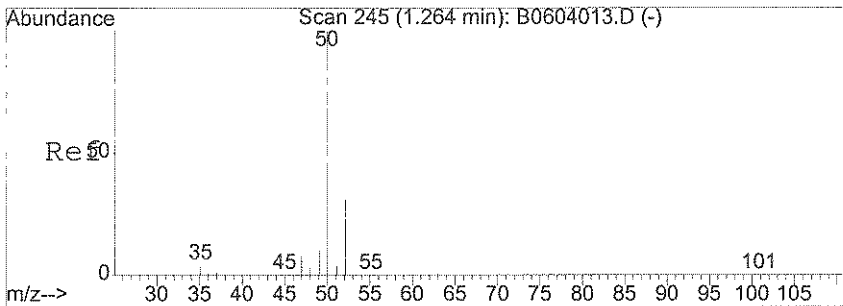
Vial: 23
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

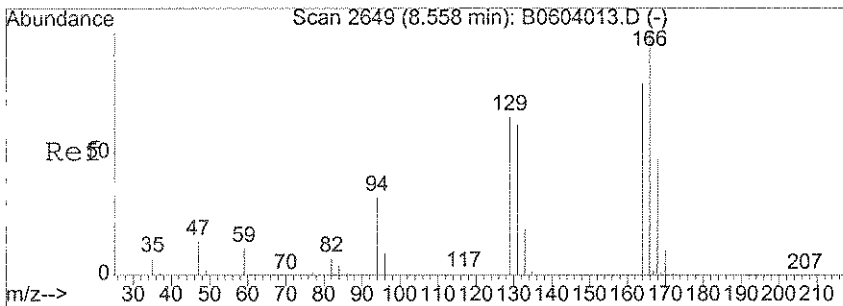
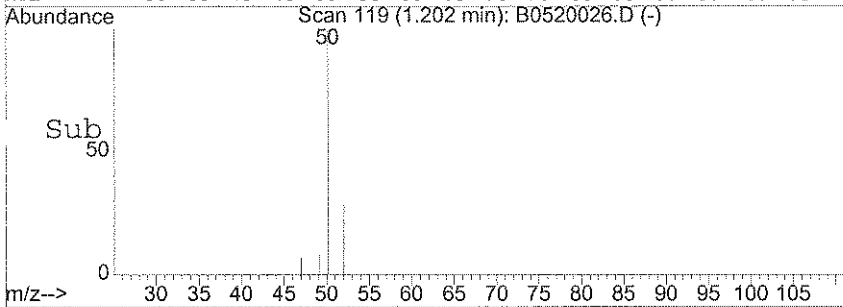
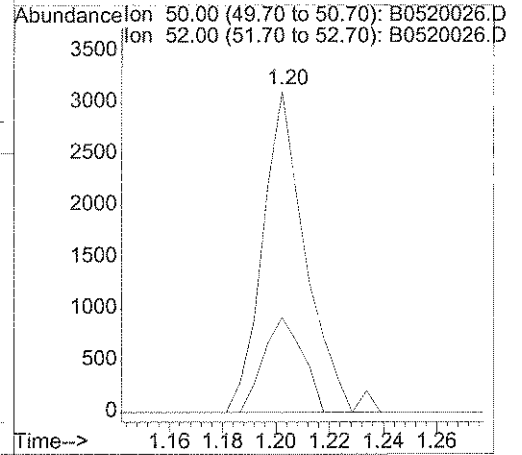
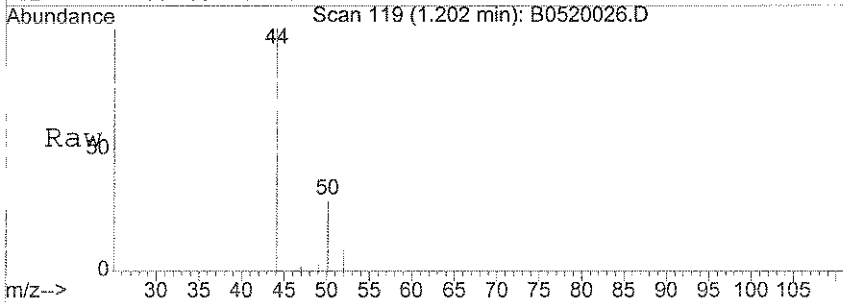
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	145		N.D.	
69) m,p-Xylene	11.52	106	279		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.31	173	76		N.D.	
73) Isopropylbenzene	12.18	105	67		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.32	156	37		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	29		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.59	91	29		N.D.	
82) 4-Chlorotoluene	12.68	91	29		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	81		N.D.	
84) tert-Butylbenzene	12.90	119	35		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	111		N.D.	
86) sec-butylbenzene	13.09	105	167		N.D.	
87) 1,3-Dichlorobenzene	13.26	146	110		N.D.	
88) 4-Isopropyltoluene	13.20	119	421		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	110		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	120		N.D.	
91) n-Butylbenzene	13.52	91	410		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	65		N.D.	
94) Hexachlorobutadiene	14.89	225	109		N.D.	
95) Naphthalene	14.99	128	313		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	127		N.D.	

5/23/08



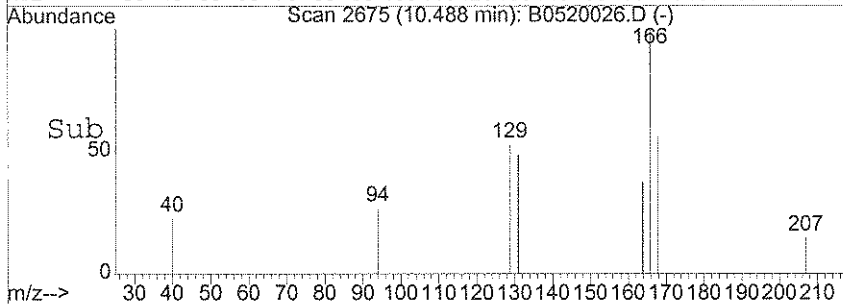
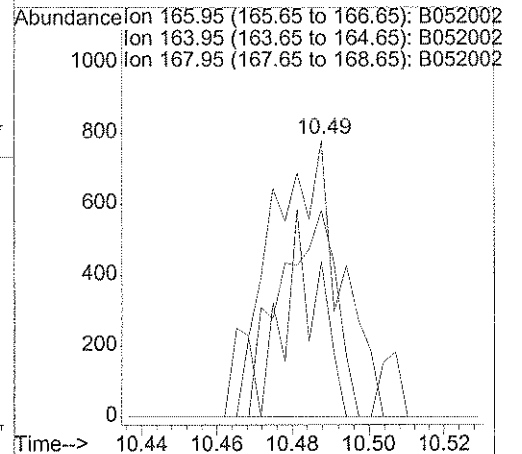
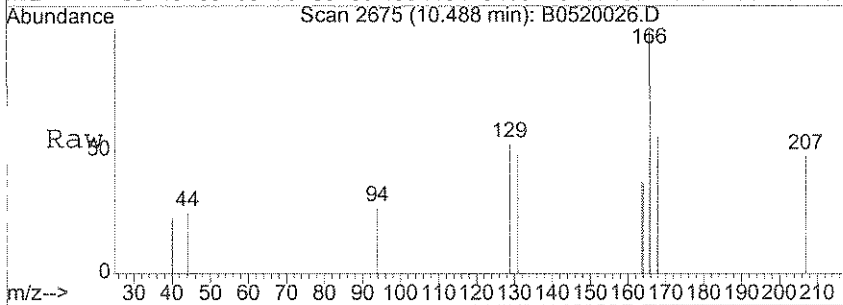
#3
 Chloromethane
 Concen: 0.65 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0520026.D
 Acq: 20 May 2008 17:58

Tgt Ion	Resp	Lower	Upper
50	3506		
52	27.0	12.5	52.5



#60
 Tetrachloroethene
 Concen: 0.16 ug/l
 RT: 10.49 min Scan# 2675
 Delta R.T. 0.00 min
 Lab File: B0520026.D
 Acq: 20 May 2008 17:58

Tgt Ion	Resp	Lower	Upper
166	1017		
164	59.0	65.6	98.4#
168	40.2	41.1	61.7#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-15-5/15/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL112

Run Sequence: R028235

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL112-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520027.D

Level: (LOW/MED) _____

Date Collected: 05/15/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/20/2008 18:27

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:	
		<u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.53	
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	0.26	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-15-5/15/08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-003
 Lab File ID: B0520027.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 18:27
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EB-15-5/15/08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL112

Run Sequence: R028235

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL112-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0520027.D

Level: (LOW/MED) _____

Date Collected: 05/15/2008

% Moisture: not dec. _____

Date/Time Analyzed: 05/20/2008 18:27

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

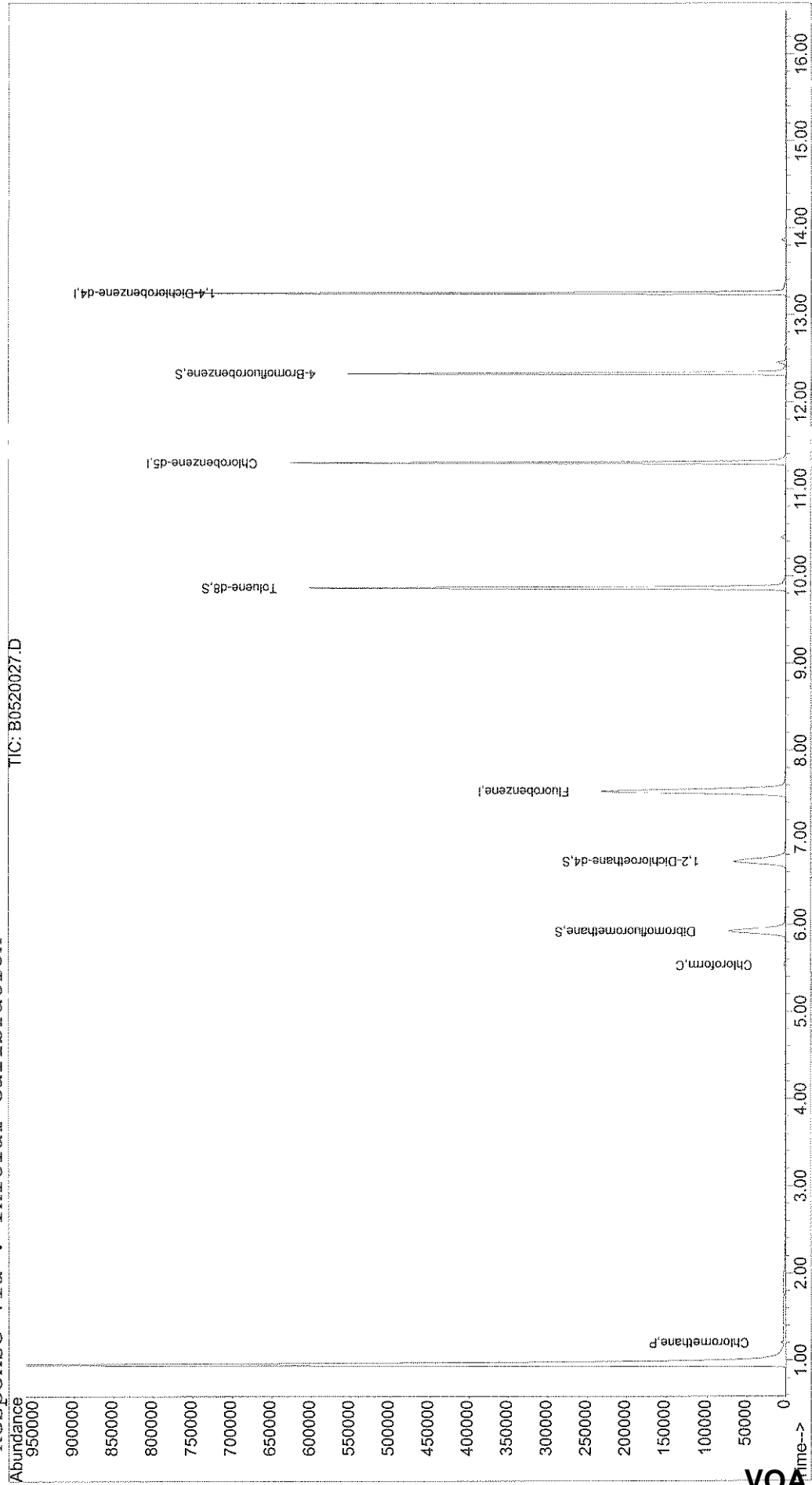
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520027.D Vial: 24
Acq On : 20 May 2008 18:27 Operator: LPM
Sample : JPL112-003 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:37 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520027.D
 Acq On : 20 May 2008 18:27
 Sample : JPL112-003
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:37 2008

Vial: 24
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	387935	25.00	ug/l	0.00 73.11%
54) Chlorobenzene-d5	11.30	117	310884	25.00	ug/l	0.00 70.66%
74) 1,4-Dichlorobenzene-d4	13.25	152	177557	25.00	ug/l	0.00 68.29%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	88816	20.36	ug/l	0.00
Spiked Amount	20.000	Range 85 - 115	Recovery	=	101.80%	
40) 1,2-Dichloroethane-d4	6.73	65	110350	29.79	ug/l	0.00
Spiked Amount	25.000	Range 70 - 120	Recovery	=	119.16%	
55) Toluene-d8	9.86	98	389192	25.59	ug/l	0.00
Spiked Amount	25.000	Range 85 - 120	Recovery	=	102.36%	
76) 4-Bromofluorobenzene	12.32	95	135222	25.72	ug/l	0.00
Spiked Amount	25.000	Range 75 - 120	Recovery	=	102.88%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	2976	0.53	ug/l	97
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	2.86	84	385	Below Cal	#	70
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.		

5/23/08 LPM

(#) = qualifier out of range (m) = manual integration
 B0520027.D B8260W.M Wed May 21 16:37:14 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520027.D
 Acq On : 20 May 2008 18:27
 Sample : JPL112-003
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:37 2008

Vial: 24
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.80	96	30		N.D.	
30) 2-Butanone	4.88	43	46		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.45	41	33		N.D.	
34) Chloroform	5.54	83	2129m ^s	0.26	ug/l #	40
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	6.70	78	36		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	8.40	83	31		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.84	41	36		N.D.	
50) Bromodichloromethane	9.08	83	30		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.87	75	38		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	761		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	10.80	43	29		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	467		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

*Spikes
low*

(#) = qualifier out of range (m) = manual integration
 B0520027.D B8260W.M Wed May 21 16:37:15 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520027.D
 Acq On : 20 May 2008 18:27
 Sample : JPL112-003
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:37 2008

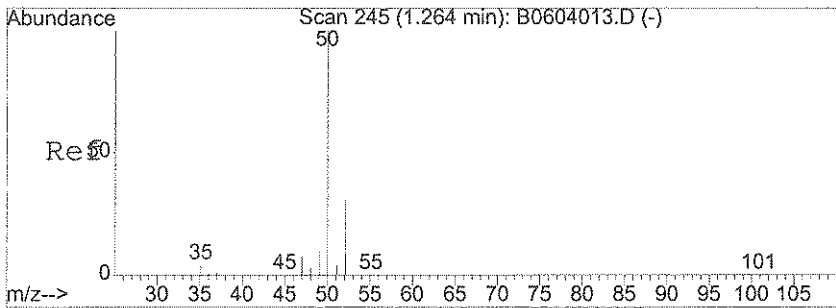
Vial: 24
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

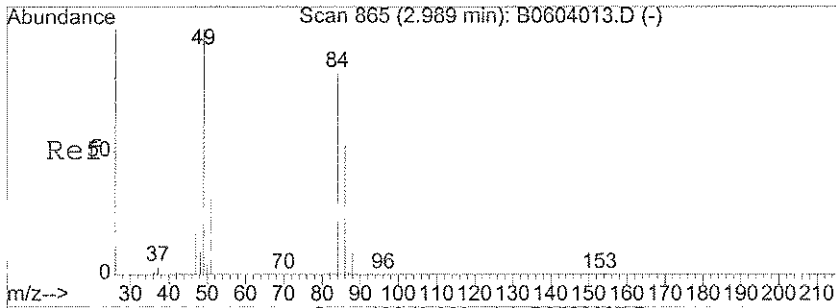
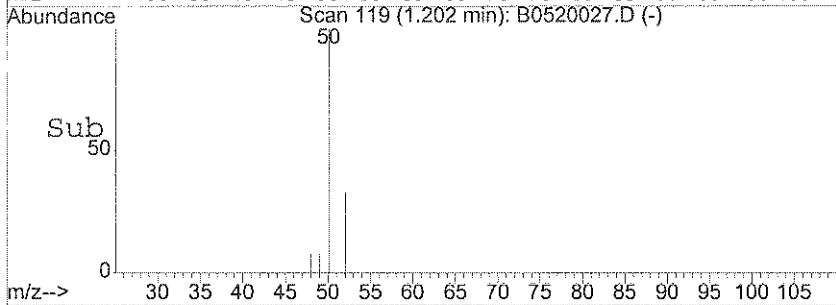
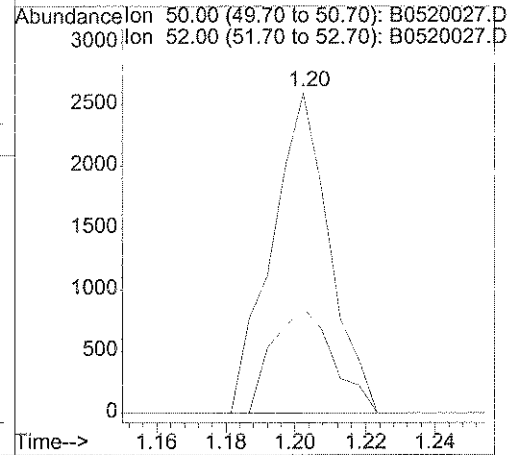
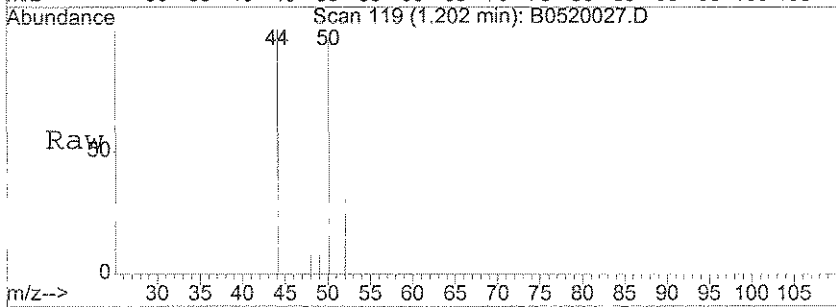
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.52	91	577		N.D.	
69) m,p-Xylene	11.53	106	97		N.D.	
70) o-xylene	11.87	106	39		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.17	105	102		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
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	75	0		N.D.	d
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.51	91	203		N.D.	
82) 4-Chlorotoluene	12.62	91	29		N.D.	
83) 1,3,5-Trimethylbenzene	12.83	105	29		N.D.	
84) tert-Butylbenzene	12.91	119	37		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	242		N.D.	
86) sec-butylbenzene	13.09	105	211		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	41		N.D.	
88) 4-Isopropyltoluene	13.20	119	208		N.D.	
89) 1,4-Dichlorobenzene	13.19	146	41		N.D.	
90) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
91) n-Butylbenzene	13.52	91	334		N.D.	
92) 1,2-Dibromo-3-chloropropan	13.87	75	39		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	177		N.D.	
94) Hexachlorobutadiene	14.88	225	110		N.D.	
95) Naphthalene	14.98	128	185		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	36		N.D.	

5/23/08 LPM



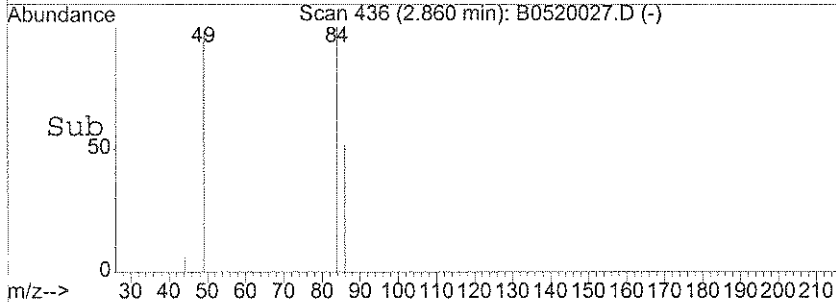
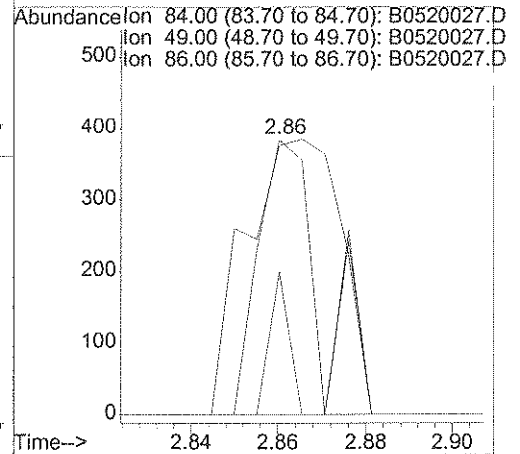
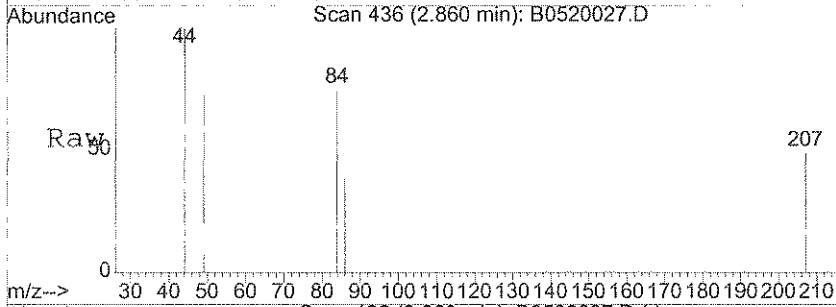
#3
 Chloromethane
 Concen: 0.53 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. 0.00 min
 Lab File: B0520027.D
 Acq: 20 May 2008 18:27

Tgt Ion	Resp	Lower	Upper
50	2976		
52	34.4	12.5	52.5



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.86 min Scan# 436
 Delta R.T. 0.00 min
 Lab File: B0520027.D
 Acq: 20 May 2008 18:27

Tgt Ion	Resp	Lower	Upper
84	385		
49	151.2	113.6	153.6
86	16.4	45.8	85.8#



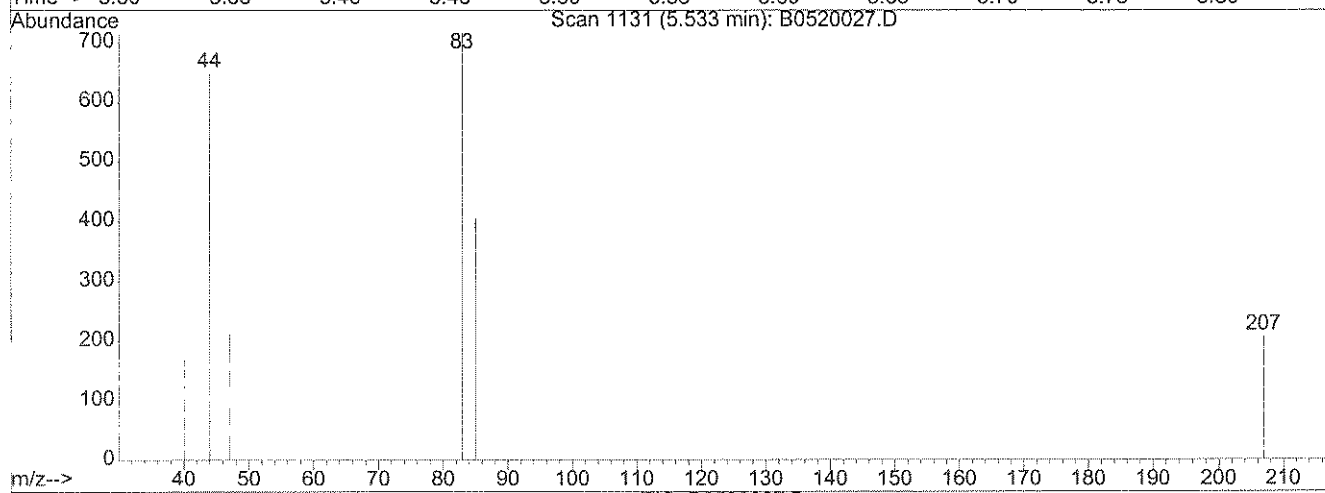
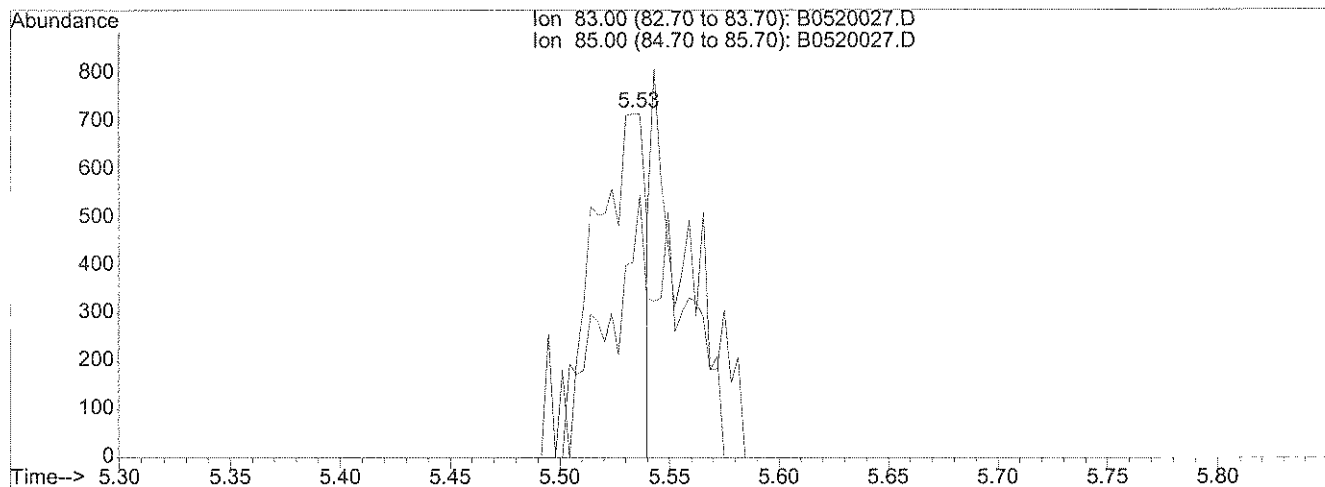
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520027.D
 Acq On : 20 May 2008 18:27
 Sample : JPL112-003
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:35 2008

Vial: 24
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



TIC: B0520027.D

(34) Chloroform (C)

5.53min 0.13ug/l

response 1104

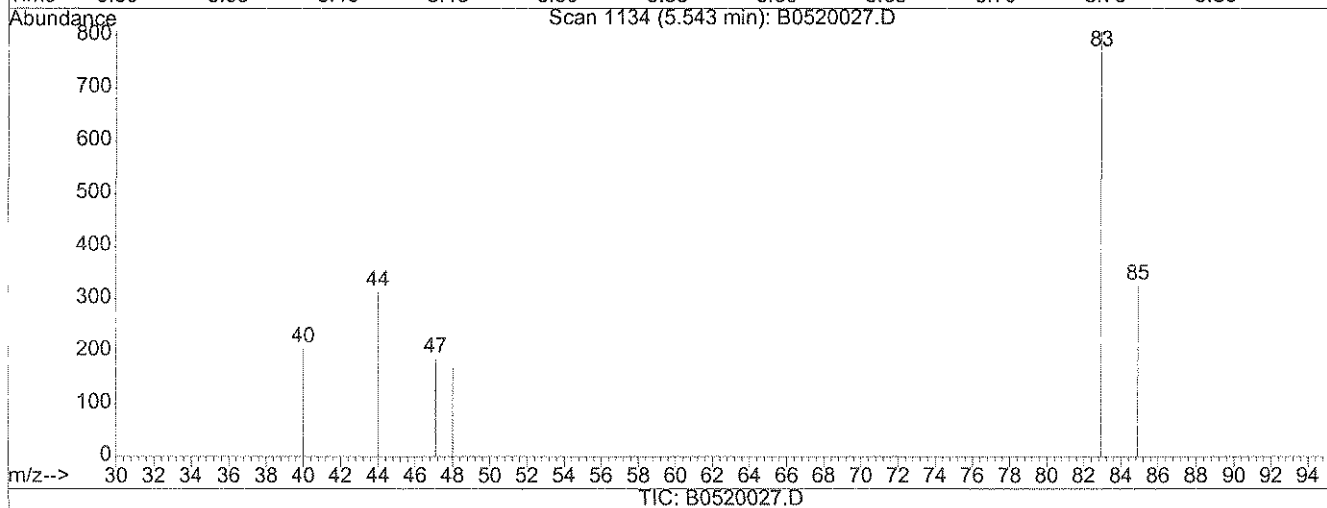
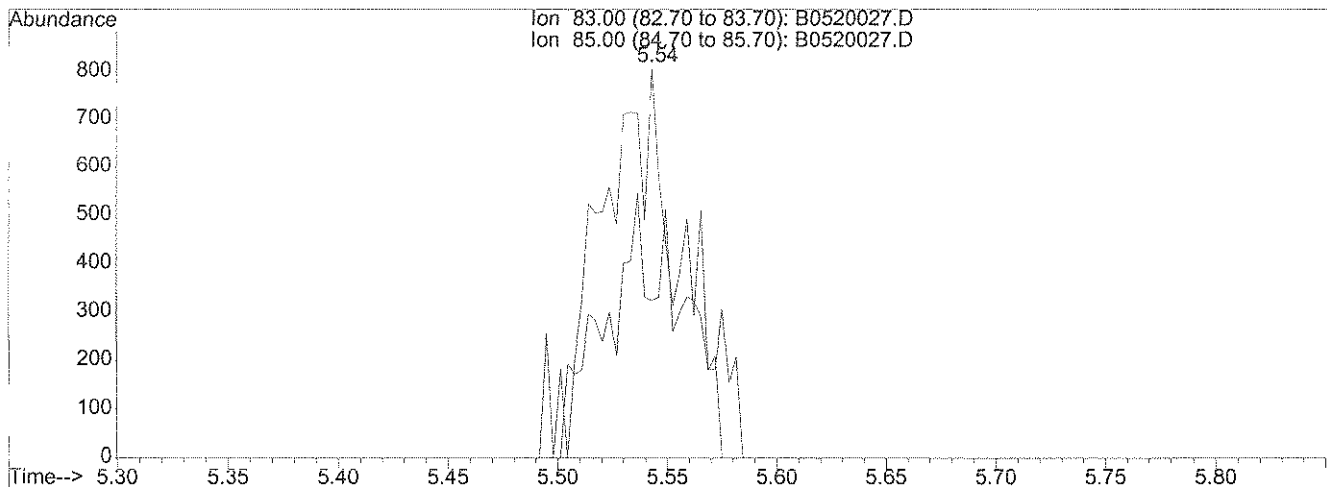
Ion	Exp%	Act%
83.00	100	100
85.00	64.00	16.76#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520027.D
 Acq On : 20 May 2008 18:27
 Sample : JPL112-003
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:36 2008

Vial: 24
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00
 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration

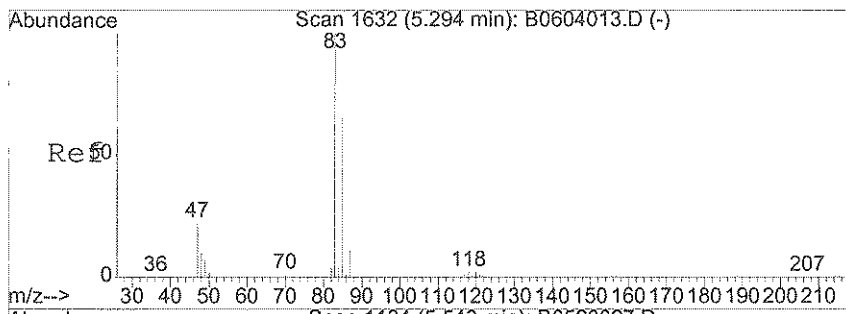


(34) Chloroform (C)

5.54min 0.26ug/l m

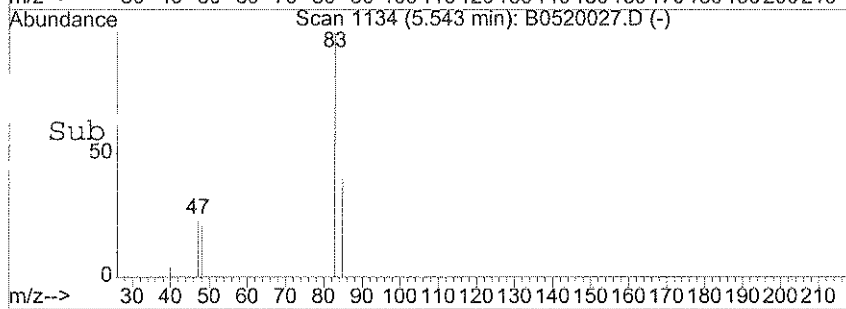
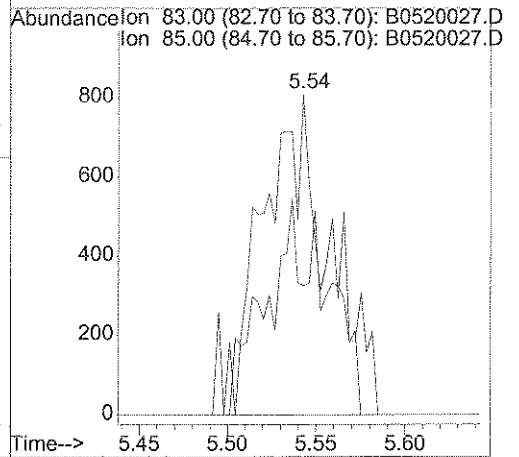
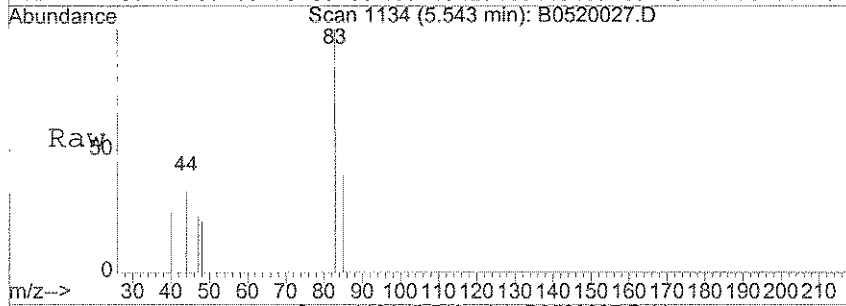
response 2129

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	8.69#
0.00	0.00	0.00
0.00	0.00	0.00



#34
 Chloroform
 Concen: 0.26 ug/l m
 RT: 5.54 min Scan# 1134
 Delta R.T. 0.00 min
 Lab File: B0520027.D
 Acq: 20 May 2008 18:27

Tgt Ion	Resp	Lower	Upper
83	2129		
85	8.7	44.0	84.0#



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-004
 Lab File ID: B0520028.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 18:57
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.43	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-004
 Lab File ID: B0520028.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 18:57
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SB-1-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-004
 Lab File ID: B0520028.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 18:57
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

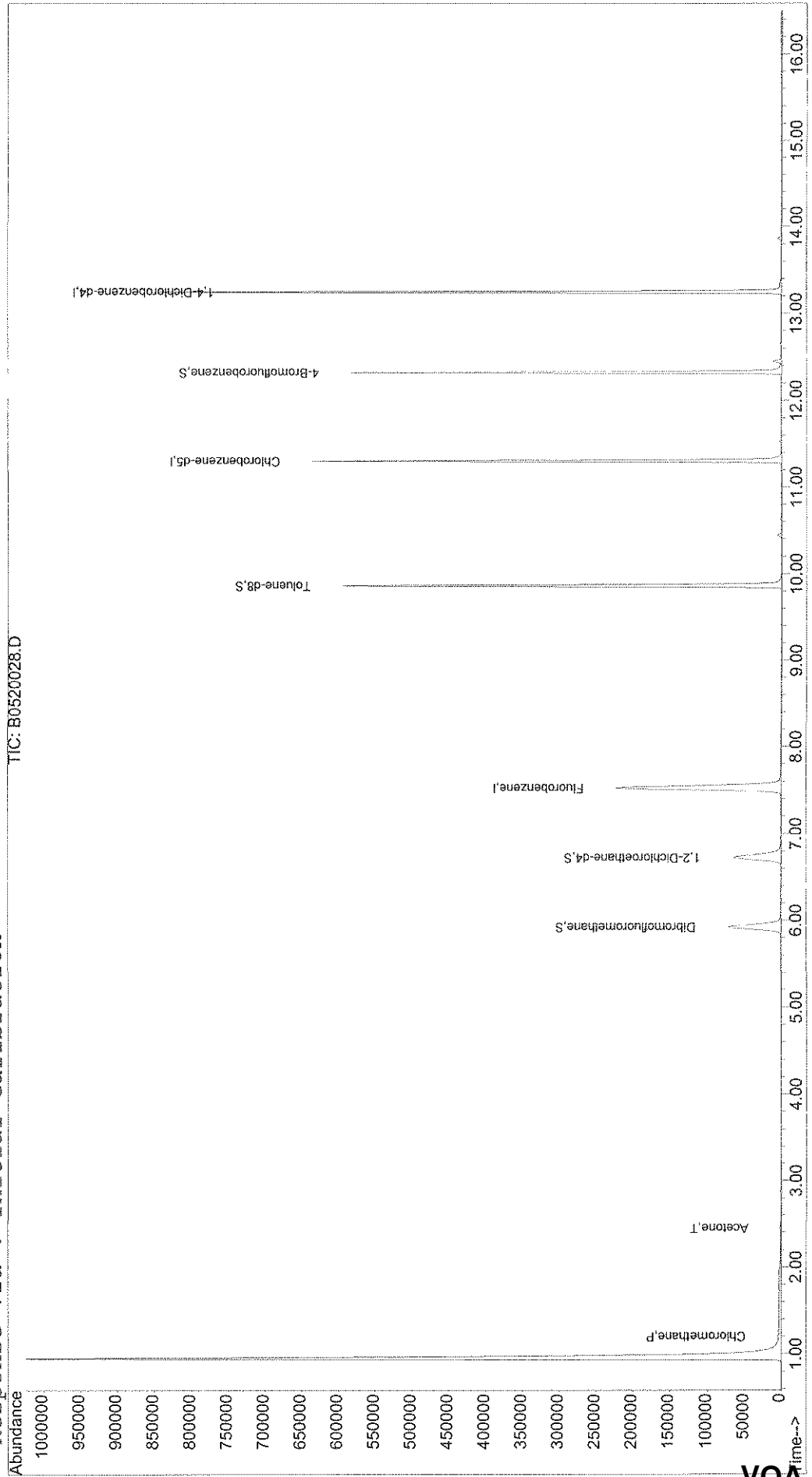
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520028.D Vial: 25
Acq On : 20 May 2008 18:57 Operator: LPM
Sample : JPL112-004 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:38 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520028.D
 Acq On : 20 May 2008 18:57
 Sample : JPL112-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:38 2008

Vial: 25
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	375693	25.00	ug/l	0.00 70.80%
54) Chlorobenzene-d5	11.30	117	319539	25.00	ug/l	0.00 72.63%
74) 1,4-Dichlorobenzene-d4	13.25	152	190469	25.00	ug/l	0.00 73.25%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	86220	20.41	ug/l	0.00
Spiked Amount	20.000	Range 85 - 115	Recovery	=	102.05%	
40) 1,2-Dichloroethane-d4	6.72	65	107900	30.08	ug/l	0.00
Spiked Amount	25.000	Range 70 - 120	Recovery	=	120.32%#	
55) Toluene-d8	9.86	98	387711	24.81	ug/l	0.00
Spiked Amount	25.000	Range 85 - 120	Recovery	=	99.24%	
76) 4-Bromofluorobenzene	12.32	95	143439	25.43	ug/l	0.00
Spiked Amount	25.000	Range 75 - 120	Recovery	=	101.72%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.21	50	2334	0.43	ug/l	91
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	2.45	43	2178	1.71	ug/l #	80
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	2.86	84	1005	Below Cal	#	71
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.		

5/23/08 LPM

(#) = qualifier out of range (m) = manual integration
 B0520028.D B8260W.M Wed May 21 16:38:46 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520028.D
 Acq On : 20 May 2008 18:57
 Sample : JPL112-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:38 2008

Vial: 25
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	5.53	83	73		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	6.71	78	34		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	8.44	83	35		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.82	41	32		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	9.94	92	126		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.	d
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	492		N.D.	
66) Chlorobenzene	0.00	112	0		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

9/23/05

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520028.D
 Acq On : 20 May 2008 18:57
 Sample : JPL112-004
 Misc : #3 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:38 2008

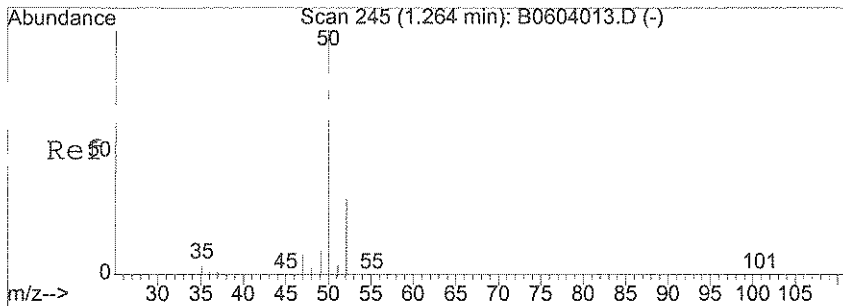
Vial: 25
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

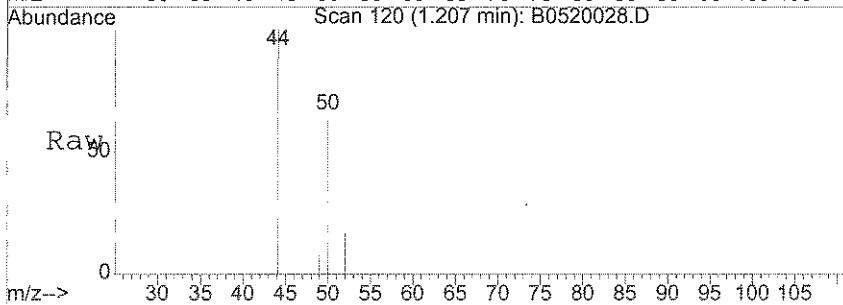
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.53	91	1247		N.D.	
69) m,p-Xylene	11.52	106	568		N.D.	
70) o-xylene	11.87	106	160		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.18	105	30		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	0.00	156	0		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	49		N.D.	
79) 1,2,3-Trichloropropane	0.00	75	0		N.D.	d
80) n-Propylbenzene	12.52	120	32		N.D.	
81) 2-Chlorotoluene	12.53	91	45		N.D.	
82) 4-Chlorotoluene	12.68	91	29		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	29		N.D.	
84) tert-Butylbenzene	12.91	119	42		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	29		N.D.	
86) sec-butylbenzene	13.08	105	163		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	42		N.D.	
88) 4-Isopropyltoluene	13.20	119	340		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	84		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	34		N.D.	
91) n-Butylbenzene	13.52	91	436		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	14.89	225	93		N.D.	
95) Naphthalene	14.97	128	334		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	76		N.D.	

5/23/08 LPM

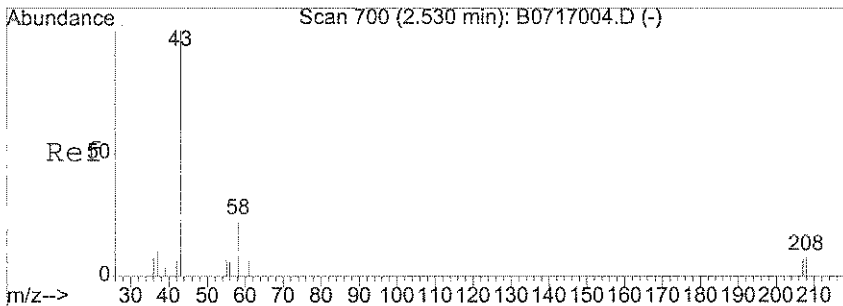
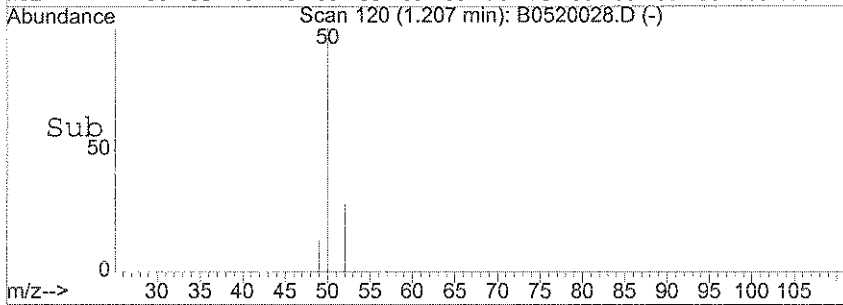
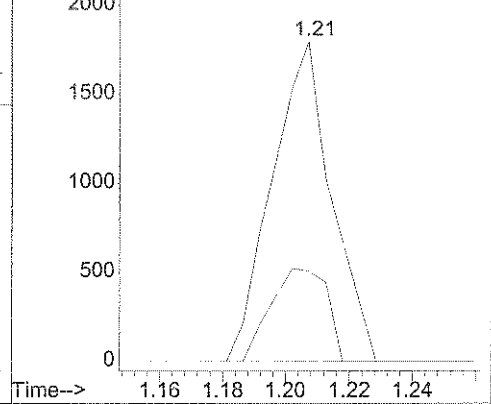


#3
 Chloromethane
 Concen: 0.43 ug/l
 RT: 1.21 min Scan# 120
 Delta R.T. 0.01 min
 Lab File: B0520028.D
 Acq: 20 May 2008 18:57

Tgt Ion: 50 Resp: 2334
 Ion Ratio Lower Upper
 50 100
 52 27.5 12.5 52.5

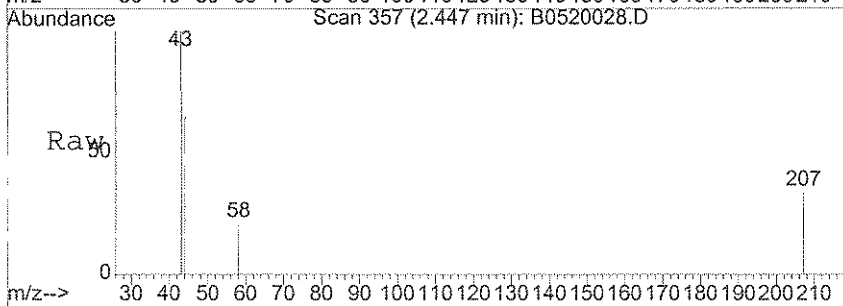


Abundance Ion 50.00 (49.70 to 50.70): B0520028.D
 Ion 52.00 (51.70 to 52.70): B0520028.D

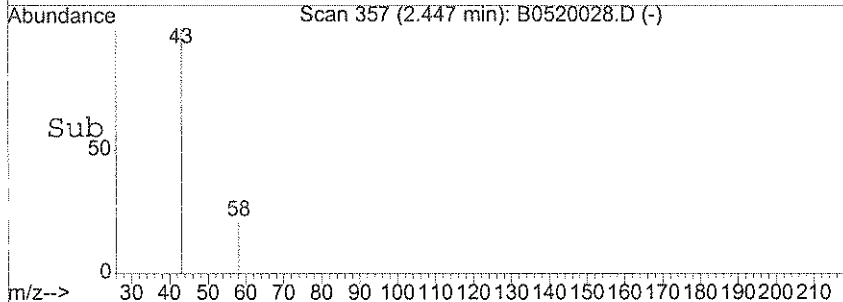
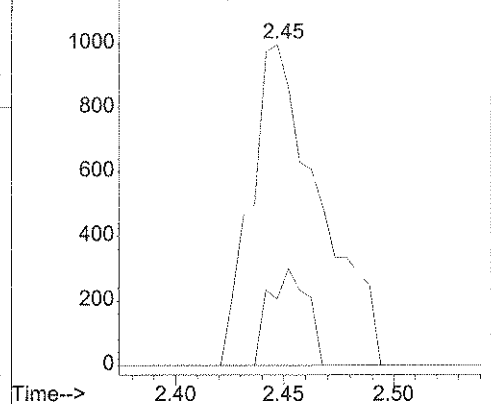


#11
 Acetone
 Concen: 1.71 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0520028.D
 Acq: 20 May 2008 18:57

Tgt Ion: 43 Resp: 2178
 Ion Ratio Lower Upper
 43 100
 58 17.1 22.0 33.0#



Abundance Ion 43.15 (42.85 to 43.85): B0520028.D
 Ion 58.05 (57.75 to 58.75): B0520028.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-15-5/15/08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-005
 Lab File ID: B0520024.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 16:56
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-15-5/15/08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-005
 Lab File ID: B0520024.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 16:56
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-15-5/15/08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-005
 Lab File ID: B0520024.D
 Date Collected: 05/15/2008
 Date/Time Analyzed: 05/20/2008 16:56
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

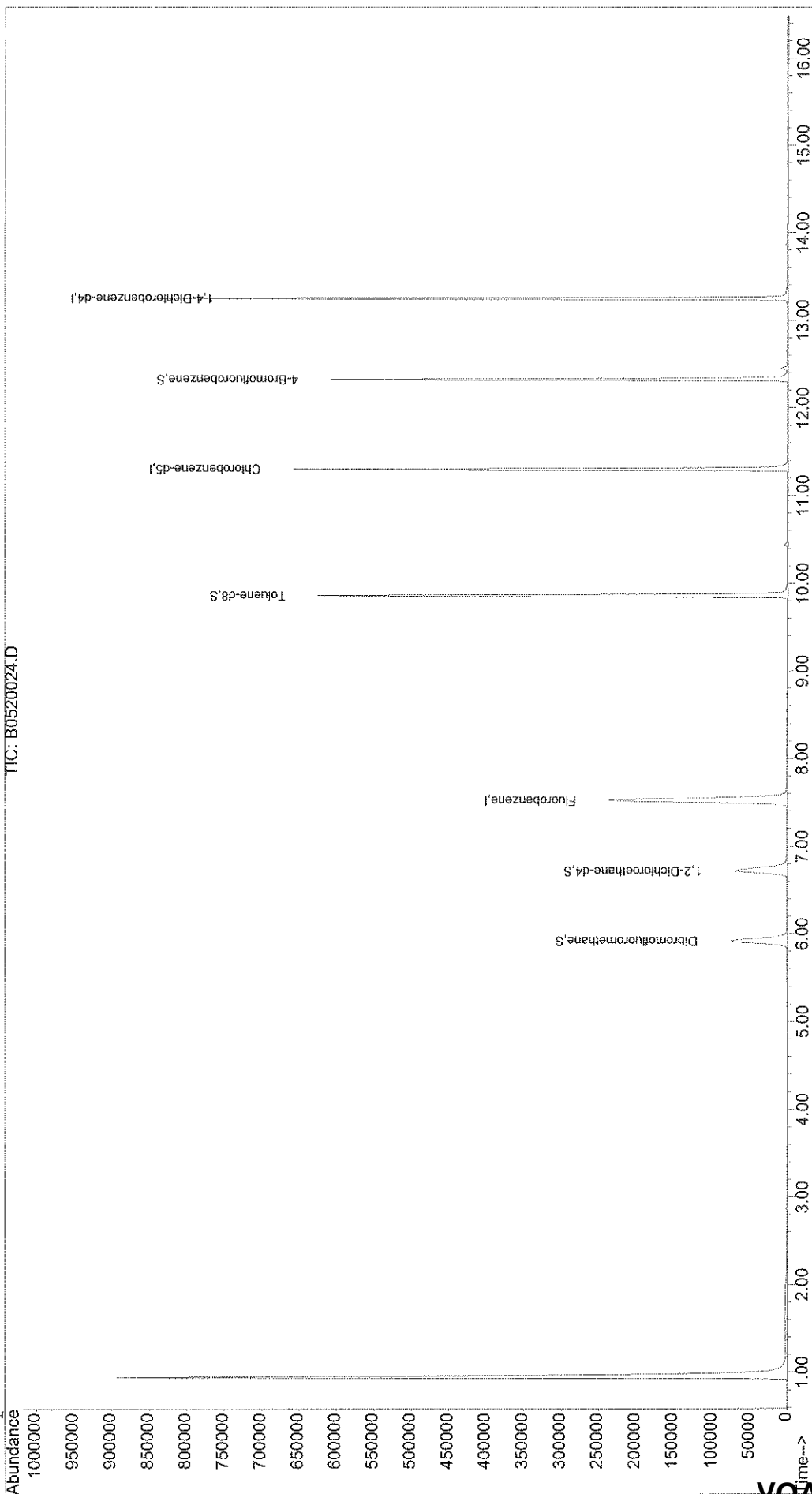
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D Vial: 21
Acq On : 20 May 2008 16:56 Operator: LPM
Sample : JPL112-005 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 21 16:31 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 21 08:45:41 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D
 Acq On : 20 May 2008 16:56
 Sample : JPL112-005
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:31 2008

Vial: 21
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.52	96	397118	25.00	ug/l	0.00	74.84%
54) Chlorobenzene-d5	11.30	117	330821	25.00	ug/l	0.00	75.20%
74) 1,4-Dichlorobenzene-d4	13.25	152	190071	25.00	ug/l	0.00	73.10%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	93450	20.93	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	104.65%		
40) 1,2-Dichloroethane-d4	6.72	65	113995m	30.06	ug/l	-0.01	
Spiked Amount	25.000	Range	70 - 120	Recovery	120.24%#		
55) Toluene-d8	9.86	98	399255	24.67	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	98.68%		
76) 4-Bromofluorobenzene	12.32	95	147671	26.24	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	104.96%		

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	41	0	N.D.		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	2.87	84	638	Below Cal		87
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
 B0520024.D B8260W.M Wed May 21 16:31:18 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D
 Acq On : 20 May 2008 16:56
 Sample : JPL112-005
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:31 2008

Vial: 21
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.98	43	30		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	6.69	78	37		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	8.40	83	30		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	9.94	92	210		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	10.47	97	30		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.78	43	41		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.33	91	37		N.D.	
66) Chlorobenzene	11.24	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

4/23/08 CPA

(#) = qualifier out of range (m) = manual integration
 B0520024.D B8260W.M Wed May 21 16:31:19 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D
 Acq On : 20 May 2008 16:56
 Sample : JPL112-005
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:31 2008

Vial: 21
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	45		N.D.	
69) m,p-Xylene	11.52	106	184		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	12.17	105	91		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	75	0		N.D.	d
80) n-Propylbenzene	12.66	120	47		N.D.	
81) 2-Chlorotoluene	12.59	91	40		N.D.	
82) 4-Chlorotoluene	12.67	91	29		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	108		N.D.	
84) tert-Butylbenzene	12.91	119	34		N.D.	
85) 1,2,4-Trimethylbenzene	12.65	105	108		N.D.	
86) sec-butylbenzene	13.08	105	157		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	65		N.D.	
88) 4-Isopropyltoluene	13.20	119	588		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	55		N.D.	
90) 1,2-Dichlorobenzene	13.26	146	55		N.D.	
91) n-Butylbenzene	13.52	91	59		N.D.	
92) 1,2-Dibromo-3-chloropropan	13.91	75	30		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	150		N.D.	
94) Hexachlorobutadiene	14.88	225	30		N.D.	
95) Naphthalene	14.99	128	47		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	65		N.D.	

5/23/08 LPM

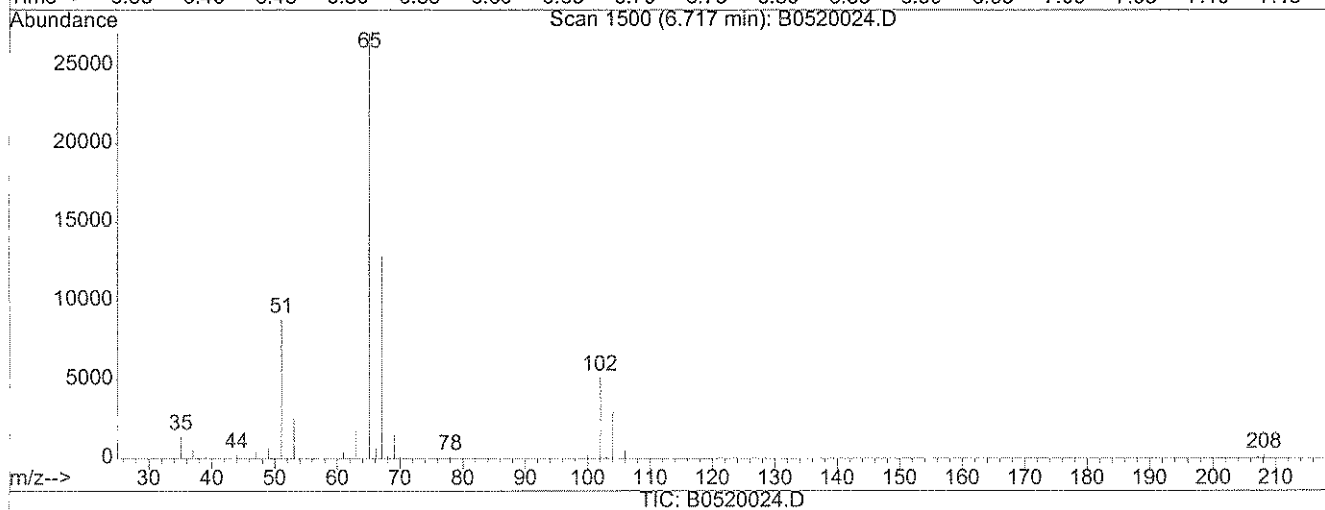
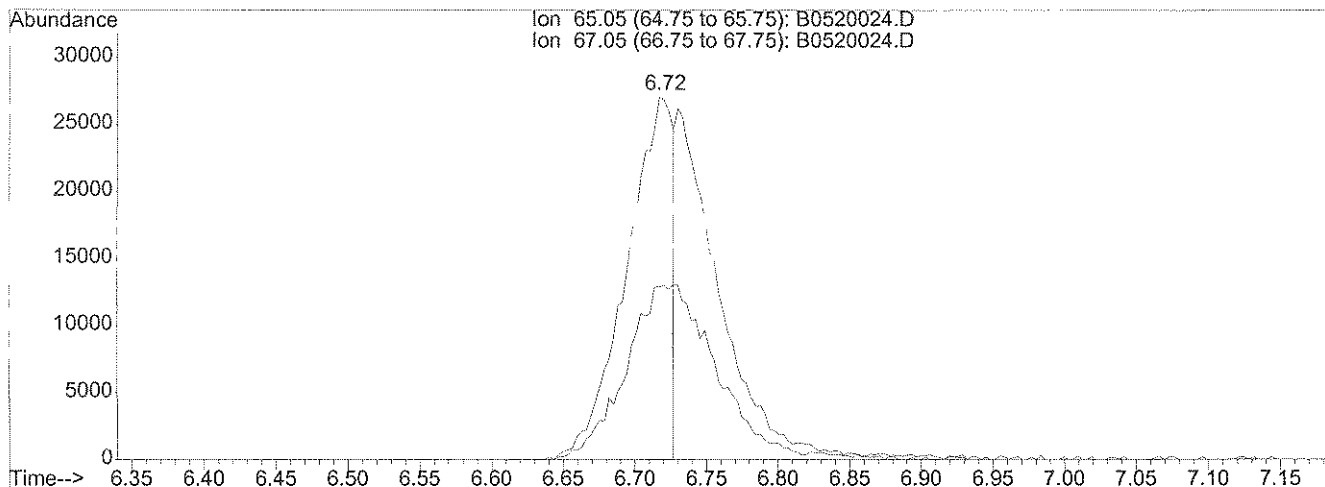
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D
 Acq On : 20 May 2008 16:56
 Sample : JPL112-005
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:30 2008

Vial: 21
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 15.95ug/l

response 60467

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	93.23#
0.00	0.00	0.00
0.00	0.00	0.00

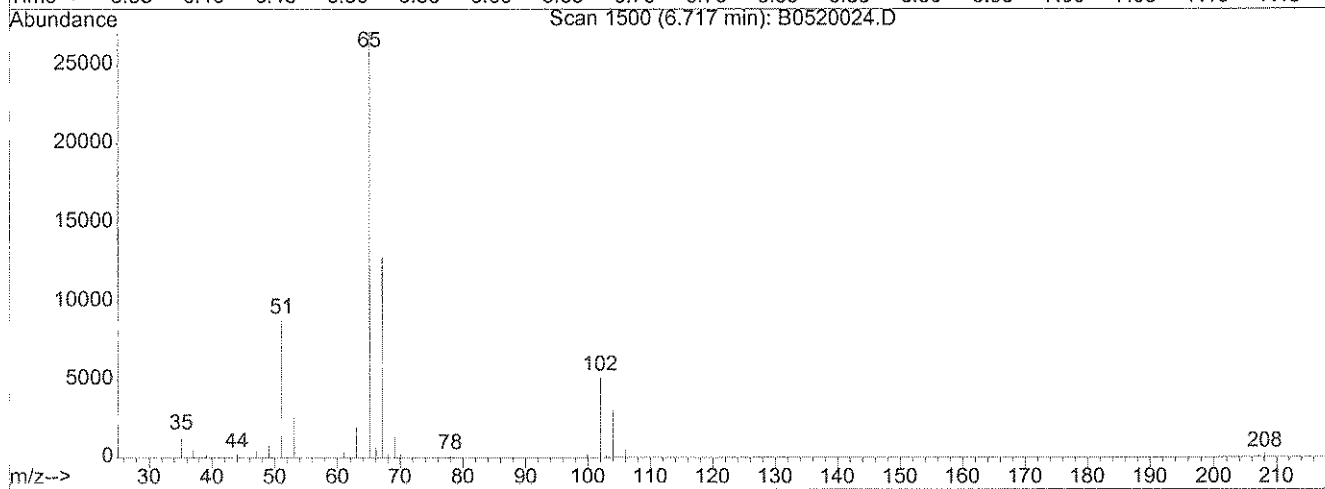
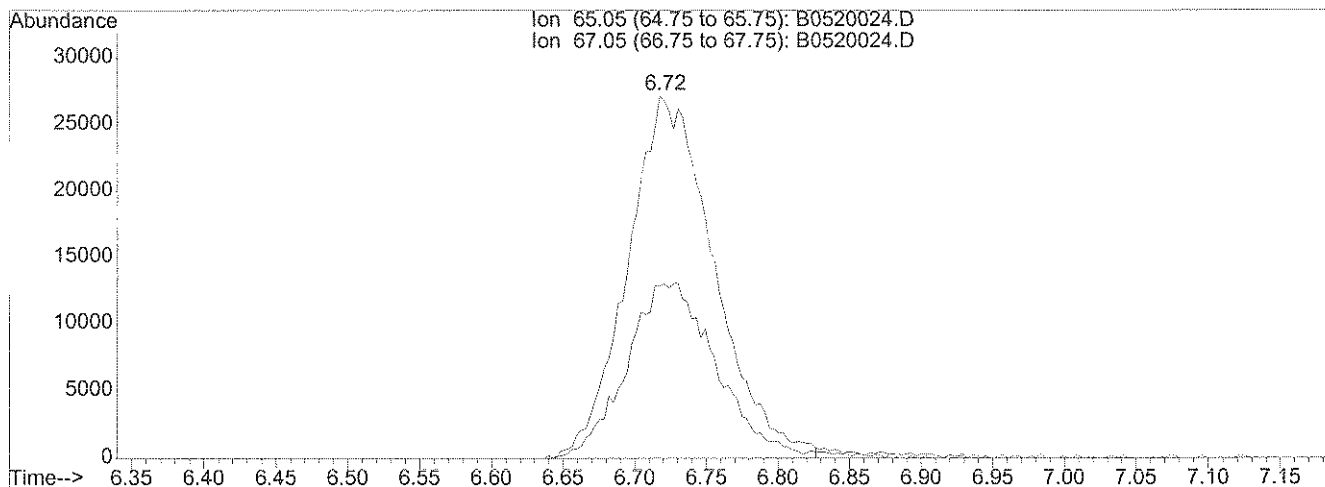
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D
 Acq On : 20 May 2008 16:56
 Sample : JPL112-005
 Misc : #2 10ML PFW+IS/SS (524)
 MS Integration Params: rteint.p
 Quant Time: May 21 16:30 2008

Vial: 21
 Operator: LPM
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 21 08:45:41 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 30.06ug/l m

response 113995

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	49.45
0.00	0.00	0.00
0.00	0.00	0.00

TIC FORMS

SDG# JPL112

Volatiles Analysis

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-26-2

Lab Name: Pace Analytical Services

SDG No.: JPL112

Matrix: (SOIL/WATER) Water

Sample wt/vol: 10.0 (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: R028235

Lab Sample ID: JPL112-001

Lab File ID: B0520025.D

Date Collected: 05/15/2008

Date Analyzed: 05/20/2008

Dilution Factor: 1.0

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
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\BUDDHA\052008\B0520025.D Vial: 22
Acq On : 20 May 2008 17:27 Operator: LPM
Sample : JPL112-001 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520025.D B8260W.M Wed May 21 16:59:15 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-26-1

Lab Name: Pace Analytical Services

SDG No.: JPL112

Matrix: (SOIL/WATER) Water

Sample wt/vol: 10.0 (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: R028235

Lab Sample ID: JPL112-002

Lab File ID: B0520026.D

Date Collected: 05/15/2008

Date Analyzed: 05/20/2008

Dilution Factor: 1.0

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
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\BUDDHA\052008\B0520026.D Vial: 23
Acq On : 20 May 2008 17:58 Operator: LPM
Sample : JPL112-002 Inst : Buddha
Misc : #4 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520026.D B8260W.M Wed May 21 16:59:27 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

EB-15-5/15/08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-003
 Lab File ID: B0520027.D
 Date Collected: 05/15/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052008\B0520027.D Vial: 24
Acq On : 20 May 2008 18:27 Operator: LPM
Sample : JPL112-003 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520027.D B8260W.M Wed May 21 16:59:41 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SB-1-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-004
 Lab File ID: B0520028.D
 Date Collected: 05/15/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520028.D Vial: 25
Acq On : 20 May 2008 18:57 Operator: LPM
Sample : JPL112-004 Inst : Buddha
Misc : #3 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520028.D B8260W.M Wed May 21 16:59:53 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-15-5/15/08

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: JPL112-005
 Lab File ID: B0520024.D
 Date Collected: 05/15/2008
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
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03				
04				
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052008\B0520024.D Vial: 21
Acq On : 20 May 2008 16:56 Operator: LPM
Sample : JPL112-005 Inst : Buddha
Misc : #2 10ML PFW+IS/SS (524) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520024.D B8260W.M Wed May 21 16:59:02 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B052008MVOWB2

Lab Name: Pace Analytical Services
 SDG No.: JPL112
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028235
 Lab Sample ID: B052008MVOWB2
 Lab File ID: B0520013.D
 Date Collected: _____
 Date Analyzed: 05/20/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052008\B0520013.D Vial: 10
Acq On : 20 May 2008 11:50 Operator: LPM
Sample : B052008MVOWB2 Inst : Buddha
Misc : 10ML PFW+IS/SS (MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0520013.D B8260W.M Fri May 23 10:26:38 2008

Metals Data

JPL112

SW-846

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL112

SOW No.: _____

<u>Sample No.</u>	<u>Lab Sample ID</u>
<u>MW-26-2</u>	<u>JPL112-001</u>
<u>MW-26-1</u>	<u>JPL112-002</u>
<u>MW-26-1MS</u>	<u>JPL112-002MS</u>
<u>MW-26-1MSD</u>	<u>JPL112-002MSD</u>
<u>EB-15-5/15/08</u>	<u>JPL112-003</u>
<u>SB-1-2008</u>	<u>JPL112-004</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: 06/26/2008

Title: Chemist

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-26-2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL112

Matrix (soil/water): Water

Lab Sample ID: JPL112-001

Level (low/med): LOW

Date Received: 05/16/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	3.42			M	R028436
7440-70-2	Calcium	43300			P	R028884
7440-47-3	Chromium	9.86			M	R028436
7439-89-6	Iron	2440			P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	14200			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	42800			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/25/2008 14:33

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-26-1

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL112Matrix (soil/water): WaterLab Sample ID: JPL112-002Level (low/med): LOWDate Received: 05/16/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	108000			P	R028884
7440-47-3	Chromium	5.40			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	38200			P	R028884
7440-09-7	Potassium	5000	U		P	R029050
7440-23-5	Sodium	31000			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/25/2008 14:33

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-15-5/15/08

Lab Name: Pace Analytical ServicesContract: JPL Groundwater MonitorinLab Code: PACESDG No.: JPL112Matrix (soil/water): WaterLab Sample ID: JPL112-003Level (low/med): LOWDate Received: 05/16/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	5000	U		P	R028884
7440-47-3	Chromium	1.00	U		M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	5000	U		P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	5000	U		P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: NoComment _____

Date Printed: 6/25/2008 14:33

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

SB-1-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL112

Matrix (soil/water): Water

Lab Sample ID: JPL112-004

Level (low/med): LOW

Date Received: 05/16/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	5000	U		P	R028884
7440-47-3	Chromium	1.00	U		M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	5000	U		P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	5000	U		P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/25/2008 14:33

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: MW-26-2 **Date/Time Collected:** 05/15/2008 07:37
Lab Sample ID: JPL112-001 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E150.1/29385 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.6		0.10	0.10	05/16/2008	05/16/2008	R028161

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	270		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29399 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028174\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.34		0.20	0.055	05/16/2008	05/16/2008	R028174
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/16/2008	05/16/2008	R028174
Sulfate as SO4	14808-79-8	10	18		10	1.7	05/16/2008	05/16/2008	R028174
Chloride	16887-00-6	10	12		10	0.76	05/16/2008	05/16/2008	R028174
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/16/2008	05/16/2008	R028174

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	200		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: MW-26-2 **Date/Time Collected:** 05/15/2008 07:37
Lab Sample ID: JPL112-001 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/02/2008	06/03/2008	R028530

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: MW-26-1 **Date/Time Collected:** 05/15/2008 08:20
Lab Sample ID: JPL112-002 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E150.1/29385 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.7		0.10	0.10	05/16/2008	05/16/2008	R028161

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	530		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29399 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028174\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	8.1		0.20	0.055	05/16/2008	05/16/2008	R028174
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/16/2008	05/16/2008	R028174
Sulfate as SO4	14808-79-8	10	91		10	1.7	05/16/2008	05/16/2008	R028174
Chloride	16887-00-6	10	82		10	0.76	05/16/2008	05/16/2008	R028174
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/16/2008	05/16/2008	R028174

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	250		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: MW-26-1 **Date/Time Collected:** 05/15/2008 08:20
Lab Sample ID: JPL112-002 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	0.56	06/02/2008	06/03/2008	R028530

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: EB-15-5/15/08 **Date/Time Collected:** 05/15/2008 08:04
Lab Sample ID: JPL112-003 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E150.1/29385 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.8		0.10	0.10	05/16/2008	05/16/2008	R028161

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	24		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29399 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028174\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/16/2008	05/16/2008	R028174
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/16/2008	05/16/2008	R028174
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/16/2008	05/16/2008	R028174
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/16/2008	05/16/2008	R028174
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/16/2008	05/16/2008	R028174

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0		2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: EB-15-5/15/08 **Date/Time Collected:** 05/15/2008 08:04
Lab Sample ID: JPL112-003 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/02/2008	06/03/2008	R028530

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL112
Sample Number: SB-1-2Q08 **Date/Time Collected:** 05/15/2008 07:58
Lab Sample ID: JPL112-004 **Date/Time Received:** 05/16/2008 08:20
Method/Qbatch*: E150.1/29385 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.6		0.10	0.10	05/16/2008	05/16/2008	R028161

Method/Qbatch*: E160.1/29386 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	10		2.0	2.0	05/16/2008	05/20/2008	R028162

Method/Qbatch*: E300.0/29399 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028174\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.20	U	0.20	0.055	05/16/2008	05/16/2008	R028174
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/16/2008	05/16/2008	R028174
Sulfate as SO4	14808-79-8	1	1.0	U	1.0	0.17	05/16/2008	05/16/2008	R028174
Chloride	16887-00-6	1	1.0	U	1.0	0.076	05/16/2008	05/16/2008	R028174
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/16/2008	05/16/2008	R028174

Method/Qbatch*: E310.1/29548 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	1	2.0	U	2.0	2.0	05/22/2008	05/22/2008	R028297

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client:	Battelle	Project:	JPL Groundwater Monitoring
SDG Number:	JPL112		
Sample Number:	SB-1-2Q08	Date/Time Collected:	05/15/2008 07:58
Lab Sample ID:	JPL112-004	Date/Time Received:	05/16/2008 08:20
Method/Qbatch*:	E314.0/29791	Unit:	ug/L
Instrument:	Ion Chromatograph (2)	File:	N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.14	06/02/2008	06/03/2008	R028530

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL113

June 24, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL113
Date of Report: June 24, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-1	JPL113-001	VOA/MET/INO
MW-9	JPL113-002	VOA/MET/INO
TB-16-5/19/08	JPL113-003	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

Sample Receipt Comments:

One of six volatiles bottles submitted for MW-1 contained bubbles of less than 1/4 inch in size.

One of three volatiles bottles submitted for MW-9 contained bubbles of less than 1/4 inch in size.

Two of two volatiles bottles submitted for TB-16-5/19/08 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."

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 Verification:

In the ICV performed on 5/12/2008 cis-1,3-dichloropropene exceeded 25% due to increased response. Because analysis of the daily second source S05/2207MVOWB2 yielded a recovery that was within the 25%, no further action was taken.

Continuing Calibration Verification (CCV):

In the CCV performed on 5/22/2008 the percent D values for dichlorodifluoromethane and trichlorofluoromethane exceeded 20% due to increased response. These analytes were not detected in any associated samples; no further action was taken.

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Seattle, WA 98108

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, sample MW-9 was received in a bottle from the contaminated lot (#031708-3) and had a low level detection of chloromethane.

Tentatively Identified Compounds (TICs):

A library search was performed for non-target analytes that are not identified on the quantitation report. The results for these have been submitted on a separate form.

Quality Control Analyses:

Analysis of the blank spike S052208MVOWB2 yielded a high recovery for trichlorofluoromethane. Because the recovery was high and the analyte was not detected in the associated samples, no further action was taken.

MS/MSD analyses performed on sample MW-1 yielded high recoveries for and trichlorofluoromethane. Dichlorodifluoromethane recovered high in the MS. Because all other analytes recovered within the control limits and neither of the analytes that recovered high were detected in the samples, no further action was taken. All RPD values were within the control limits.

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 and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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.

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<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	15 minutes	All samples

ICP Metals:

For the run sequence R028884, the ICV exceeded the upper control limit for potassium. All samples were not reported from this run sequence and were reanalyzed and reported from run sequence R029004. QC were reported and were within control limits. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R029004, the ICV exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

For the run sequence R029004, the third CCB contained a level of potassium that was greater than $\frac{1}{2}$ the CRDL. No sample results for potassium were associated with this CCB. Therefore, no corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the sixth and seventh CCBs contained a level of potassium that was less than $-\frac{1}{2}$ the CRDL. All samples were not reported from this run sequence and were reanalyzed and reported from run sequence R029004. No further corrective action was required. Data have not been flagged for this event.

Due to software limitations, which limit that amount of data that can be processed, all injections are not present on Form 14 for run sequence R029004. All calibration checks are listed and all injections surrounding the samples are listed.

ICP-MS Metals:

No comments.

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Miscellaneous Inorganics:

In the run sequence R028243 for "300.0 Anions", the matrix spike and matrix spike duplicate exceeded the established lower control limits for orthophosphate. Since all of the other quality control samples were in control, no further action was taken.

R028243

R028243

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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.
- ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.

Z Denotes data deemed unusable by the analyst.

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

Pace Analytical Services, Inc.

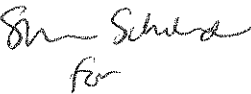
940 S. Harney
Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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,


for
Kara Godineaux
Project Manager

6/24/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/24/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG												
Sample Mtx 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, NO2, Cl, SO4, OPO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
WD *JPL113-001	05/20/2008 09:00 AM	05/19/2008 08:38 AM	MW-1	IN	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL113-002	05/20/2008 09:00 AM	05/19/2008 10:32 AM	MW-9	IN	IN	IN	IN	IN	IN	IN	IN	IN
WD JPL113-003	05/20/2008 09:00 AM	05/19/2008 12:00 AM	TB-16-5/19/08								IN	
Approved By: Notes:												
On:												
Samples identified with a '*' client has requested QC for LEGEND: -:Started , +:Completed , IN:Logged In , P:Preparation , A:Cancelled, X:Cancelled, PL:Pre-logged Matrices: Water=WD												
FORM LTL-PM-8.0												

CHAIN OF CUSTODY RECORD SDG # _____
 PAGE 1 OF 1
 SUBMITTED AT: _____
 WORK ORDER ID# SP613

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: SPL GW MON 2008
 PROJECT CONTACT: DAVID CONNER
 TELEPHONE: 619-726-7311 FAX: _____
 JOB/PO. NO.: 64486090/214319

TESTS TO PERFORM

LAB/SAT	SAMPLE ID / LOCATION	DATE	TIME	MATRIX: WATER, SOIL OR SPECIM	NO. OF CONTAINERS	TESTS TO PERFORM	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-1	5/19/08	838	W 10	X	Asst. (921.1571)	MJ/MSD
2	MW-9	1032		5	X X X X X	Asst. (921.1571) Asst. (921.1571) Asst. (921.1571) Asst. (921.1571) Asst. (921.1571)	
3	TB-16-5/19/08	-		2	X	Asst. (921.1571) Asst. (921.1571)	TRIP BLANK

A. A standard turnaround time is assumed unless otherwise marked. B. The laboratory may not be responsible for missed holding times 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

BILLING INFORMATION: IF DIFFERENT THAN ABOVE

NAME: BATTELLE ADDRESS: 505 KING AVE.
 ATTN: GERARD TOMPHINS CITY/STATE, ZIP: COLUMBUS, OH 43201

RELINQUISHED BY (SIGN AND PRINT): Mario Mendonza DATE/TIME: 5/19/08 1230
 RECEIVED BY (SIGN AND PRINT): RACHEL FRANK DATE/TIME: 5/20/08 9:00

*** 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

TOTAL NO. OF CONTAINERS: _____

Cooler Receipt Form
Pace Analytical Services, Inc.

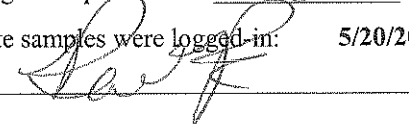
SDG: JPL113 Taken By: Client
Cooler: AAP170 Transferred: FedEx
COC #: 46058
Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: **5/20/2008**
Date cooler was opened: **5/20/2008 9:00AM**

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? **YES**
if YES, record carrier name and airbill number: **865543091423**
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? **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: RF

B. LOG-IN PHASE:

Date samples were logged-in: **5/20/2008 10:08AM**
Logged-in by Rachel Frank (sign) 

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? **NO**
18. Temperatures: **2.9**

DISCREPANCIES:

Sample 1 has 1 of 6 VOA vials w/bubbles <1/4"
Sample 2 has 1 of 3 VOA vials w/bubbles <1/4"
Sample 3 has 2 of 2 Trip Blanks w/bubbles >1/4"
Sample 1 was received out of hold for PH, sample 2 is close to hold time for PH.

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL113

Cooler: AAP170

Temperatures: 2.9

COC #: 46058

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL113-001	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	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
JPL113-002	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	None
	0004	40 ml OTWS, clear glass, HCl	N/C	None
	0005	500 ml cylinder, poly, HNO3	<2	N/A
JPL113-003	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

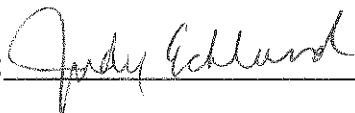
940 S. Harney
Seattle, WA 98108

Battelle

SDG No.: JPL113

- I. Narrative: 2-9
- II. Chain-of-Custody: 10-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-268
 - A. QC Summary Data: 1-12
 - B. Sample Data: 13-52
 - C. Standards Data: 53-214
 - D. Raw QC Data: 215-260
 - E. Bench Sheets: 261-268
- V. Metals Data: MET- 1-304
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-5
 - C. Quality Control Data: 6-51
 - D. Quarterly Verification of Instrument Parameters: 52-62
 - E. Raw Data: 63-296
 - F. Digestion & Distillation Logs: 294-304
- VI. Miscellaneous Inorganics Data: INO 1-120
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-7
 - C. Quality Control Data: 8-25
 - D. Raw Data: 26-120
- VII. Forms Summary: SUM- 1-126

Completed and checked by:



Date:

6/24/08

QC SUMMARY

SDG #JPL113

Volatiles Analysis

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL113

Run Sequence: R028288

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL113-001MSD) MW-1MSD	116	95	99		0
(JPL113-001MS) MW-1MS	121	93	97		0
(JPL113-002) MW-9	127	98	96		0
(JPL113-001) MW-1	125	98	95		0
(JPL113-003) TB-16-5/19/08	123	96	96		0
(B052208MVOWB1) B052208MVOWB1	122	96	94		0
(S052208MVOWB2) S052208MVOWB2	115	97	100		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: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028288 SDG No.: JPL113
 BS Lab Sample ID: S052208MVOWB2
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	67.1	134		60-140
Chloromethane	50.0	53	106		60-140
Vinyl chloride	50.0	58.08	116		60-140
Bromomethane	50.0	62.74	125		60-140
Chloroethane	50.0	55.72	111		60-140
Trichlorofluoromethane	50.0	72.65	145	*	60-140
1,1-Dichloroethene	50.0	52.32	105		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.15	106		60-140
Methylene chloride	50.0	49.95	100		60-140
Methyl tert-butyl ether	50.0	54.38	109		60-140
trans-1,2-Dichloroethene	50.0	48.67	97		60-140
1,1-Dichloroethane	50.0	48.5	97		60-140
2,2-Dichloropropane	50.0	50.14	100		60-140
cis-1,2-Dichloroethene	50.0	46.74	93		60-140
2-Butanone	50.0	48.81	98		60-140
Bromochloromethane	50.0	47.97	96		60-140
Chloroform	50.0	49.53	99		60-140
1,1,1-Trichloroethane	50.0	54.25	109		60-140
Carbon tetrachloride	50.0	54.14	108		60-140
1,1-Dichloropropene	50.0	51.23	102		60-140
Benzene	50.0	44.94	90		60-140
1,2-Dichloroethane	50.0	56.44	113		60-140
Trichloroethene	50.0	45.74	91		60-140
1,2-Dichloropropane	50.0	45.1	90		60-140
Dibromomethane	50.0	49.58	99		60-140
Bromodichloromethane	50.0	51.13	102		60-140
cis-1,3-Dichloropropene	50.0	59.79	120		60-140
4-Methyl-2-pentanone	50.0	54.15	108		60-140
Toluene	50.0	47.45	95		60-140
trans-1,3-Dichloropropene	50.0	48.67	97		60-140
1,1,2-Trichloroethane	50.0	47.01	94		60-140
Tetrachloroethene	50.0	48.57	97		60-140
1,3-Dichloropropane	50.0	48.25	97		60-140
Dibromochloromethane	50.0	52.46	105		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 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 11:13

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028288 SDG No.: JPL113
 BS Lab Sample ID: S052208MVOWB2
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	49.58	99		60-140
Chlorobenzene	50.0	47.07	94		60-140
Ethylbenzene	50.0	47.99	96		60-140
1,1,1,2-Tetrachloroethane	50.0	48.73	97		60-140
m,p-Xylene	100	94.41	94		60-140
o-Xylene	50.0	45.03	90		60-140
Styrene	50.0	46.06	92		60-140
Bromoform	50.0	48.58	97		60-140
Isopropylbenzene	50.0	48.12	96		60-140
1,1,2,2-Tetrachloroethane	50.0	44.66	89		60-140
n-Propylbenzene	50.0	45.87	92		60-140
Bromobenzene	50.0	46.45	93		60-140
1,2,3-Trichloropropane	50.0	45.66	91		60-140
2-Chlorotoluene	50.0	45.58	91		60-140
1,3,5-Trimethylbenzene	50.0	47.72	95		60-140
4-Chlorotoluene	50.0	47.35	95		60-140
tert-Butylbenzene	50.0	47.96	96		60-140
1,2,4-Trimethylbenzene	50.0	48.08	96		60-140
sec-Butylbenzene	50.0	48.3	97		60-140
4-Isopropyltoluene	50.0	50.19	100		60-140
1,3-Dichlorobenzene	50.0	45.83	92		60-140
1,4-Dichlorobenzene	50.0	45.62	91		60-140
n-Butylbenzene	50.0	47.42	95		60-140
1,2-Dichlorobenzene	50.0	45.34	91		60-140
1,2-Dibromo-3-chloropropane	50.0	47.84	96		60-140
1,2,4-Trichlorobenzene	50.0	46.53	93		60-140
Hexachlorobutadiene	50.0	47.22	94		60-140
Naphthalene	50.0	45.8	92		60-140
1,2,3-Trichlorobenzene	50.0	42.96	86		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 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 11:13

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitor
 MS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL113
 MS Client Sample No.: MW-1MS MSD Client Sample No.: MW-1MSD
 MS Lab Sample ID: JPL113-001MS MSD Lab Sample ID: JPL113-001MSD
 Level: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Dichlorodifluoromethane	0	50.0	71.83	144 *	50.0	65.49	131	9	30	60-140
Chloromethane	0	50.0	55.32	111	50.0	51.48	103	7	30	60-140
Vinyl chloride	0	50.0	61.57	123	50.0	57.06	114	8	30	60-140
Bromomethane	0	50.0	65.52	131	50.0	59.71	119	9	30	60-140
Chloroethane	0	50.0	57.94	116	50.0	51.63	103	12	30	60-140
Trichlorofluoromethane	0	50.0	78.98	158 *	50.0	72.29	145 *	9	30	60-140
1,1-Dichloroethene	0	50.0	52.89	106	50.0	49.49	99	7	30	60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	0	50.0	54.74	109	50.0	50.17	100	9	30	60-140
Methylene chloride	0	50.0	48.63	97	50.0	46.05	92	5	30	60-140
Methyl tert-butyl ether	0	50.0	55	110	50.0	53.12	106	4	30	60-140
trans-1,2-Dichloroethene	0	50.0	49.29	99	50.0	46.21	92	7	30	60-140
1,1-Dichloroethane	0	50.0	49.05	98	50.0	46.21	92	6	30	60-140
2,2-Dichloropropane	0	50.0	46.29	93	50.0	41.12	82	12	30	60-140
cis-1,2-Dichloroethene	0	50.0	45.59	91	50.0	43.71	87	4	30	60-140
2-Butanone	0	50.0	46.32	93	50.0	46.57	93	1	30	60-140
Bromochloromethane	0	50.0	46.78	94	50.0	44.85	90	4	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limits

Spike Recovery: 3 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitor
 MS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL113
 MS Client Sample No.: MW-1MS MSD Client Sample No.: MW-1MSD
 MS Lab Sample ID: JPL113-001MS MSD Lab Sample ID: JPL113-001MSD
 Level: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Chloroform	0	50.0	49.35	99	50.0	47.02	94	5	30	60-140
1,1,1-Trichloroethane	0	50.0	55.61	111	50.0	52.47	105	6	30	60-140
Carbon tetrachloride	0	50.0	56.1	112	50.0	52.89	106	6	30	60-140
1,1-Dichloropropane	0	50.0	53.1	106	50.0	50.16	100	6	30	60-140
Benzene	0	50.0	43.73	87	50.0	41.97	84	4	30	60-140
1,2-Dichloroethane	0	50.0	53.97	108	50.0	52.06	104	4	30	60-140
Trichloroethene	0	50.0	44.92	90	50.0	43.06	86	4	30	60-140
1,2-Dichloropropane	0	50.0	40.08	80	50.0	39.86	80	1	30	60-140
Dibromomethane	0	50.0	45.42	91	50.0	44.11	88	3	30	60-140
Bromodichloromethane	0	50.0	47.46	95	50.0	46.04	92	3	30	60-140
cis-1,3-Dichloropropene	0	50.0	48.25	97	50.0	48.05	96	0	30	60-140
4-Methyl-2-pentane	0	50.0	47.21	94	50.0	48.02	96	2	30	60-140
Toluene	0	50.0	44.03	88	50.0	43.36	87	2	30	60-140
trans-1,3-Dichloropropene	0	50.0	40.2	80	50.0	40.61	81	1	30	60-140
1,1,2-Trichloroethane	0	50.0	40.57	81	50.0	40.76	82	1	30	60-140
Tetrachloroethene	0	50.0	45.48	91	50.0	43.51	87	4	30	60-140
1,3-Dichloropropane	0	50.0	41.18	82	50.0	41.37	83	1	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedance because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limits

Spike Recovery: 3 out of 126 outside limits

COMMENTS:

3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitor
 MS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL113
 MS Client Sample No.: MW-1MS MSD Client Sample No.: MW-1MSD
 MS Lab Sample ID: JPL113-001MS MSD Lab Sample ID: JPL113-001MSD
 Level: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
Dibromochloromethane	0	50.0	46.58	93	50.0	45.75	92	2	30	60-140
1,2-Dibromoethane	0	50.0	43.62	87	50.0	43.5	87	0	30	60-140
Chlorobenzene	0	50.0	43.19	86	50.0	42.43	85	2	30	60-140
Ethylbenzene	0	50.0	44.75	90	50.0	43.84	88	2	30	60-140
1,1,1,2-Tetrachloroethane	0	50.0	48.24	96	50.0	46.64	93	3	30	60-140
m,p-Xylene	0	100	88.35	88	100	85.71	86	3	30	60-140
o-Xylene	0	50.0	43.94	88	50.0	42.35	85	4	30	60-140
Styrene	0	50.0	42.99	86	50.0	42.01	84	2	30	60-140
Bromoform	0	50.0	42.94	86	50.0	42.73	85	1	30	60-140
Isopropylbenzene	0	50.0	47.84	96	50.0	45.77	92	4	30	60-140
1,1,2,2-Tetrachloroethane	0	50.0	38.75	78	50.0	39.86	80	3	30	60-140
n-Propylbenzene	0	50.0	41.86	84	50.0	40.86	82	2	30	60-140
Bromobenzene	0	50.0	40.81	82	50.0	41.06	82	1	30	60-140
1,2,3-Trichloropropane	0	50.0	38.88	78	50.0	39.79	80	2	30	60-140
2-Chlorotoluene	0	50.0	42.13	84	50.0	41.35	83	2	30	60-140
1,3,5-Trimethylbenzene	0	50.0	44.33	89	50.0	43.34	87	2	30	60-140
4-Chlorotoluene	0	50.0	42.92	86	50.0	42.7	85	1	30	60-140
tert-Butylbenzene	0	50.0	45.97	92	50.0	44.98	90	2	30	60-140
1,2,4-Trimethylbenzene	0	50.0	44.32	89	50.0	43.52	87	2	30	60-140
sec-Butylbenzene	0	50.0	44.78	90	50.0	43.87	88	2	30	60-140

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits
 @ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limits
 Spike Recovery: 3 out of 126 outside limits

COMMENTS:

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitor
 MS Run Sequence: R028288 MSD Run Sequence: R028288 SDG No.: JPL113
 MS Client Sample No.: MW-1MS MSD Client Sample No.: MW-1MSD
 MS Lab Sample ID: JPL113-001MS MSD Lab Sample ID: JPL113-001MSD
 Level: N/A Units: ug/L

COMPOUND	SAMPLE CONC	MS SPIKE ADDED	MS CONC	MS % REC #	MSD SPIKE ADDED	MSD CONC	MSD % REC #	%RPD #	QC LIMITS	
									RPD	REC.
4-Isopropyltoluene	0	50.0	46.66	93	50.0	45.32	91	3	30	60-140
1,3-Dichlorobenzene	0	50.0	42.1	84	50.0	42.12	84	0	30	60-140
1,4-Dichlorobenzene	0	50.0	41.46	83	50.0	41.62	83	0	30	60-140
n-Butylbenzene	0	50.0	43.88	88	50.0	43.02	86	2	30	60-140
1,2-Dichlorobenzene	0	50.0	42.05	84	50.0	41.45	83	1	30	60-140
1,2-Dibromo-3-chloropropane	0	50.0	44.56	89	50.0	43.93	88	1	30	60-140
1,2,4-Trichlorobenzene	0	50.0	43.84	88	50.0	43.7	87	0	30	60-140
Hexachlorobutadiene	0	50.0	45.23	90	50.0	42.37	85	7	30	60-140
Naphthalene	0	50.0	42.47	85	50.0	42.92	86	1	30	60-140
1,2,3-Trichlorobenzene	0	50.0	40.04	80	50.0	41.18	82	3	30	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

@ This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

RPD: 0 out of 63 outside limits

Spike Recovery: 3 out of 126 outside limits

COMMENTS:

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B052208MVOWB1

Lab Name Pace Analytical Services Contract: JPL Groundwater Monitorin
 SDG No.: JPL113
 Lab File ID: B0522011.d Lab Sample ID: B052208MVOWB1
 Date Analyzed: 05/22/2008 Time Analyzed: 12:00
 GC Column: ZB-624 20m ID: 0.18 (mm) Heated Purge: (Y/N) N
 Instrument ID: 5973B Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S052208MVOWB2	S052208MVOWB2	B0522008.d	05/22/2008	10:34	R028288
02	TB-16-5/i9/08	JPL113-003	B0522015.d	05/22/2008	13:47	R028288
03	MW-1	JPL113-001	B0522023.d	05/22/2008	17:25	R028288
04	MW-9	JPL113-002	B0522024.d	05/22/2008	17:52	R028288
05	MW-1MS	JPL113-001MS	B0522029.d	05/22/2008	20:06	R028288
06	MW-1MSD	JPL113-001MSD	B0522030.d	05/22/2008	20:33	R028288
07						
08						
09						
10						
11						
12						
13						
14						
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28						
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30						

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CALi323 SDG No.: JPL113
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028288 SDG No.: JPL113
 Lab File ID: B0522004.D BFB Injection Date: 05/22/2008
 Instrument ID: 5973B BFB Injection Time: 08:40
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18.8
75	30% to 60% of mass 95	48.9
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	110.6
175	5% to 9% of mass 17	7.4()1
176	greater than 95%, but less than 101% of mass 174	100.4()1
177	5% to 9% of mass 176	6.7()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	VSTD050B1	VSTD050B1	B0522006.d	05/22/2008	09:37
02	S052208MVOWB2	S052208MVOWB2	B0522008.d	05/22/2008	10:34
03	B052208MVOWB1	B052208MVOWB1	B0522011.d	05/22/2008	12:00
04	TB-16-5/19/08	JPL113-003	B0522015.d	05/22/2008	13:47
05	MW-1	JPL113-001	B0522023.d	05/22/2008	17:25
06	MW-9	JPL113-002	B0522024.d	05/22/2008	17:52
07	MW-1MS	JPL113-001MS	B0522029.d	05/22/2008	20:06
08	MW-1MSD	JPL113-001MSD	B0522030.d	05/22/2008	20:33
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028288 SDG No.: JPL113
 Client Sample No. (VSTD050##): VSTD050B1 Date Analyzed: 05/22/2008
 Lab File ID (Standard): B0522006.d Time Analyzed: 09:37
 Instrument ID: 5973B 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	562537	7.53	436770	11.30	279429	13.25
UPPER LIMIT	1125074	7.58	873540	11.35	558858	13.3
LOWER LIMIT	281268.5	7.48	218385	11.25	139714.5	13.2
CLIENT SAMPLE NO.						
01 S052208MVOWB2	578274	7.52	468454	11.30	290141	13.25
02 B052208MVOWB1	519143	7.53	407353	11.30	254023	13.25
03 TB-16-5/19/08	514910	7.53	387734	11.30	237766	13.25
04 MW-1	492714	7.53	382545	11.30	231754	13.25
05 MW-9	475956	7.53	366384	11.30	222525	13.25
06 MW-1MS	556272	7.53	421362	11.30	279387	13.25
07 MW-1MSD	570207	7.52	429490	11.30	277021	13.25
08						
09						
10						
11						
12						
13						
14						
15						
16						
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

Date Printed: 5/30/2008 11:55

SAMPLE DATA

SDG # JPL113

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-001
 Lab File ID: B0522023.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 17:25
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-001
 Lab File ID: B0522023.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 17:25
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-001
 Lab File ID: B0522023.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 17:25
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

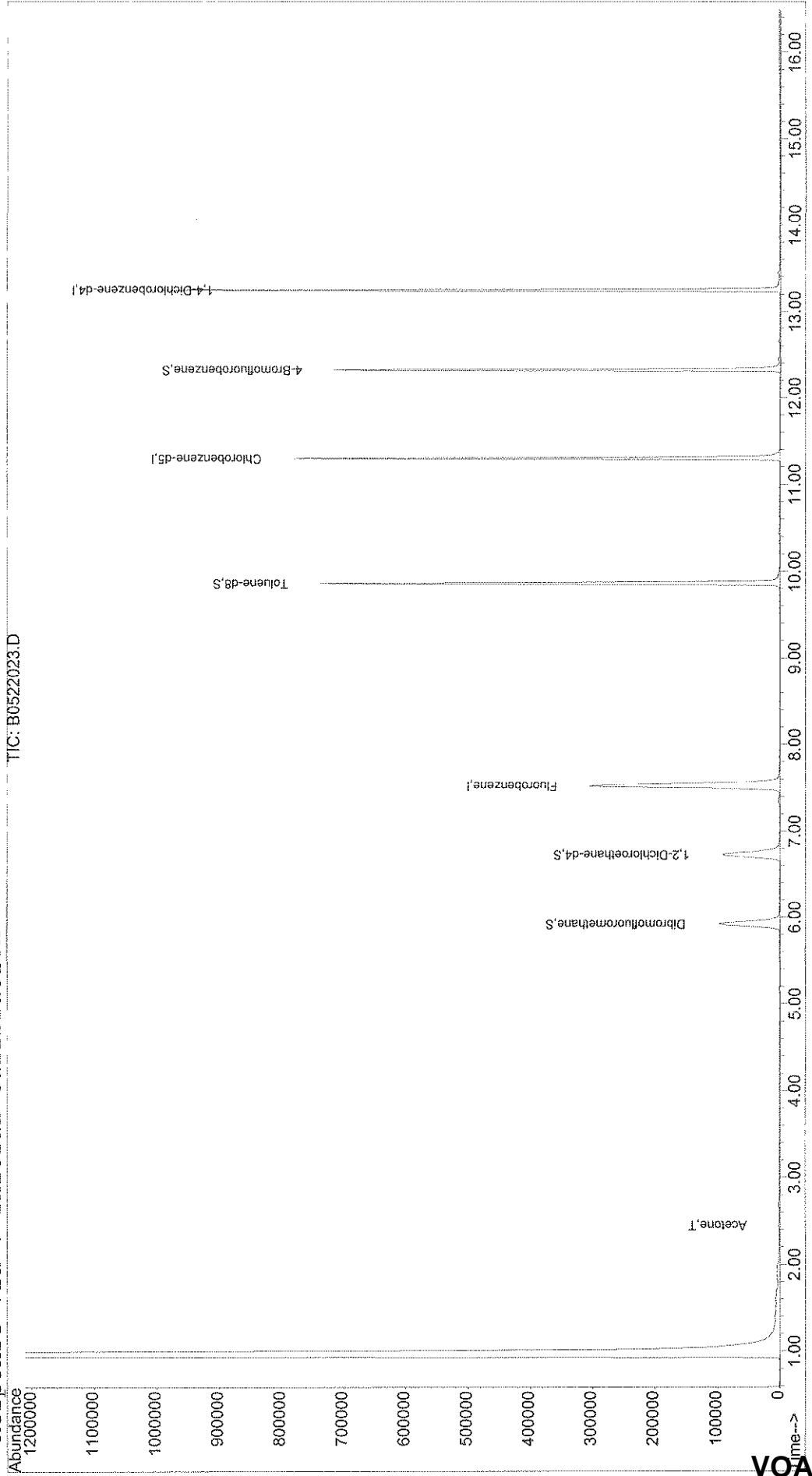
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522023.D Vial: 21
Acq On : 22 May 2008 17:25 Operator: LNH
Sample : JPL113-001 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:15 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522023.D
 Acq On : 22 May 2008 17:25
 Sample : JPL113-001 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:15 2008

Vial: 21
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	492714	25.00	ug/l	0.00	92.85%
54) Chlorobenzene-d5	11.30	117	382545	25.00	ug/l	0.00	86.95%
74) 1,4-Dichlorobenzene-d4	13.25	152	231754	25.00	ug/l	0.00	89.13%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	122238m ^s	22.06	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	110.30%	
40) 1,2-Dichloroethane-d4	6.73	65	153710	32.67	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	31.17	130.68%#	
55) Toluene-d8	9.86	98	468119	25.02	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.86	100.08%	
76) 4-Bromofluorobenzene	12.32	95	175292	25.54	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	102.16%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.			
3) Chloromethane	1.21	50	993	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	2.32	96	66	N.D.			
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.			
11) Acetone	2.45	43	2779	1.66	ug/l	#	80
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.			
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\BUDDHA\052208\B0522023.D
 Acq On : 22 May 2008 17:25
 Sample : JPL113-001 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:15 2008

Vial: 21
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.80	96	30		N.D.	
30) 2-Butanone	4.91	43	50		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.43	41	35		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	6.12	117	35		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.68	78	44		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	8.59	83	33		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.93	41	37		N.D.	
50) Bromodichloromethane	8.98	83	30		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.86	75	34		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.94	92	43		N.D.	
57) trans-1,3-Dichloropropene	10.03	75	39		N.D.	
58) Ethyl methacrylate	10.62	69	32		N.D.	
59) 1,1,2-Trichloroethane	10.58	97	34		N.D.	
60) Tetrachloroethene	10.48	166	36		N.D.	
61) 1,3-Dichloropropane	10.33	76	31		N.D.	
62) 2-Hexanone	10.72	43	47		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.32	91	31		N.D.	
66) Chlorobenzene	11.30	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Quant 5/27/08

(#) = qualifier out of range (m) = manual integration
 B0522023.D B8260W.M Fri May 23 16:16:00 2008

Quantitation Report

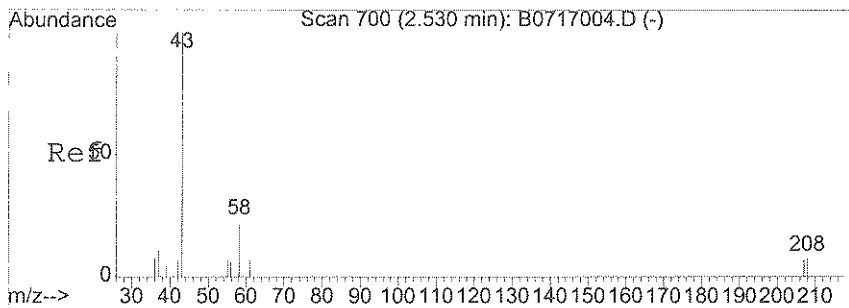
Data File : X:\MSVOA\BUDDHA\052208\B0522023.D
 Acq On : 22 May 2008 17:25
 Sample : JPL113-001 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:15 2008

Vial: 21
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

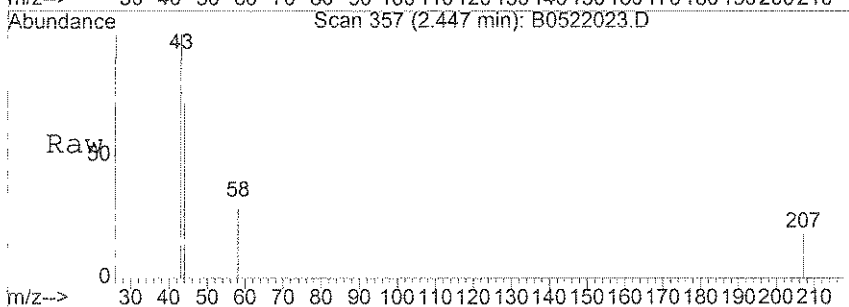
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	42		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.89	104	39		N.D.	
72) Bromoform	12.31	173	172		N.D.	
73) Isopropylbenzene	12.32	105	238		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	12.52	75	29		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.52	91	33		N.D.	
82) 4-Chlorotoluene	12.68	91	35		N.D.	
83) 1,3,5-Trimethylbenzene	12.45	105	30		N.D.	
84) tert-Butylbenzene	12.84	119	29		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	32		N.D.	
86) sec-butylbenzene	13.09	105	45		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	30		N.D.	
88) 4-Isopropyltoluene	13.20	119	117		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	58		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	42		N.D.	
91) n-Butylbenzene	13.52	91	154		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.23	75	30		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	95		N.D.	
94) Hexachlorobutadiene	14.89	225	51		N.D.	
95) Naphthalene	14.98	128	686		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	44		N.D.	

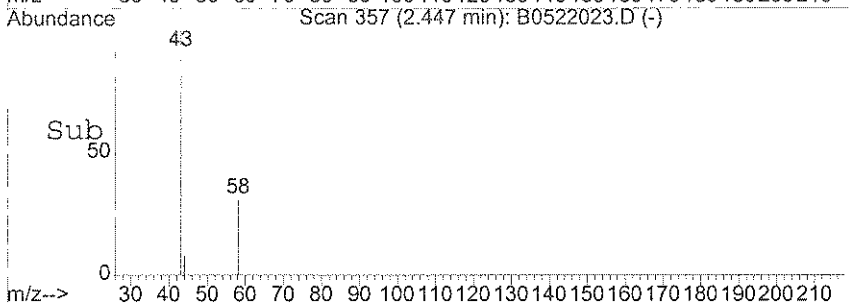
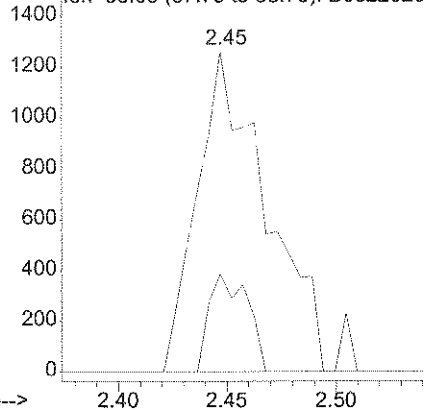


#11
 Acetone
 Concen: 1.66 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0522023.D
 Acq: 22 May 2008 17:25

Tgt Ion: 43 Resp: 2779
 Ion Ratio Lower Upper
 43 100
 58 17.1 22.0 33.0#



Abundance Ion 43.15 (42.85 to 43.85): B0522023.D
 Ion 58.05 (57.75 to 58.75): B0522023.D



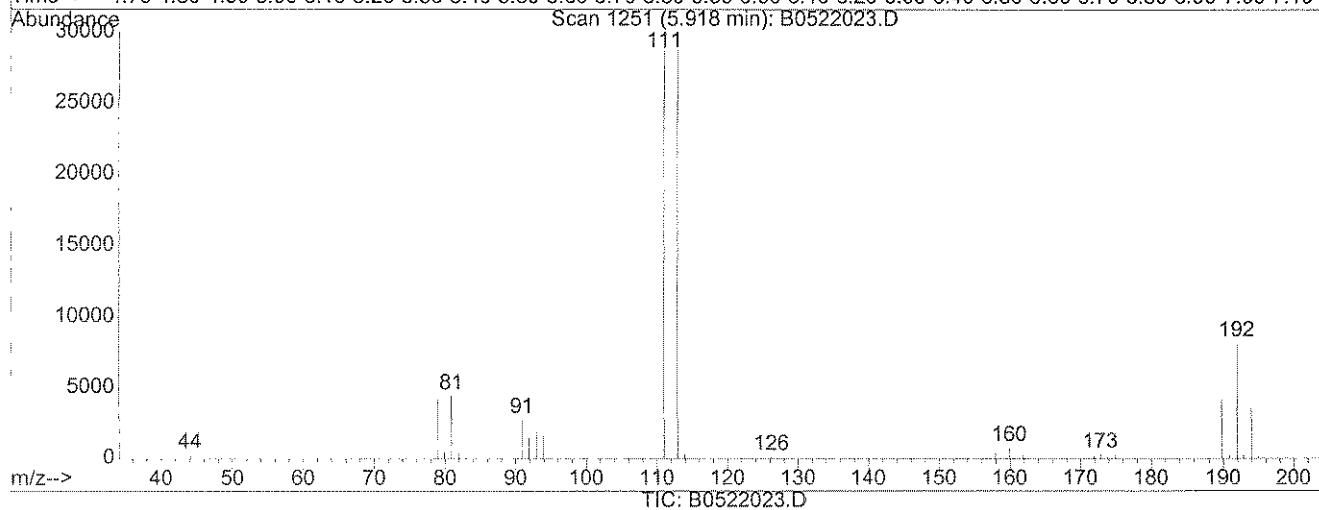
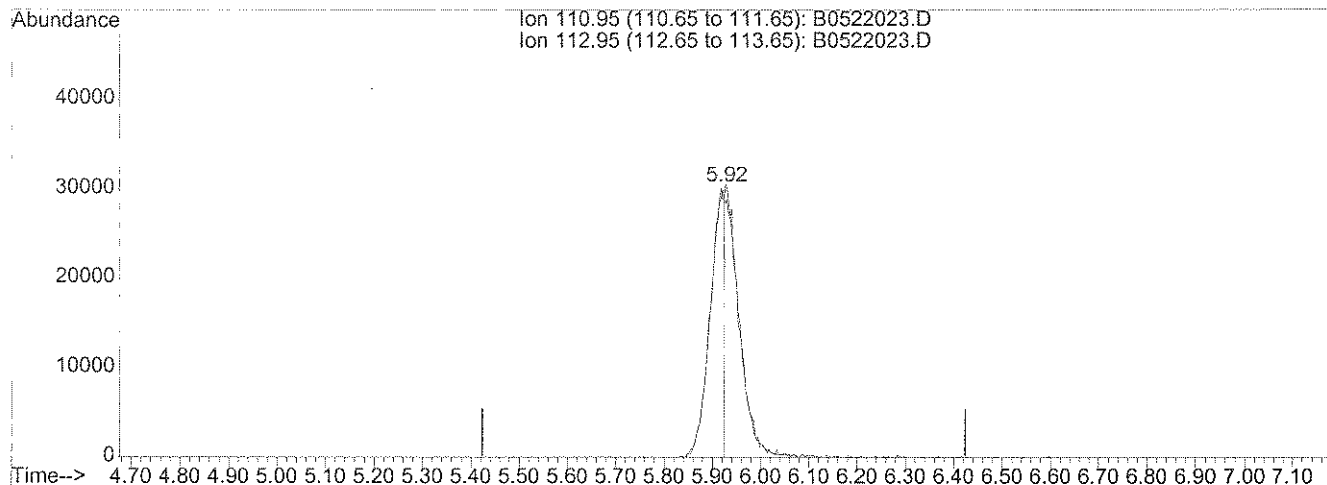
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522023.D
 Acq On : 22 May 2008 17:25
 Sample : JPL113-001 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 15:52 2008

Vial: 21
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.92min 10.94ug/l

response 60621

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	197.95#
0.00	0.00	0.00
0.00	0.00	0.00

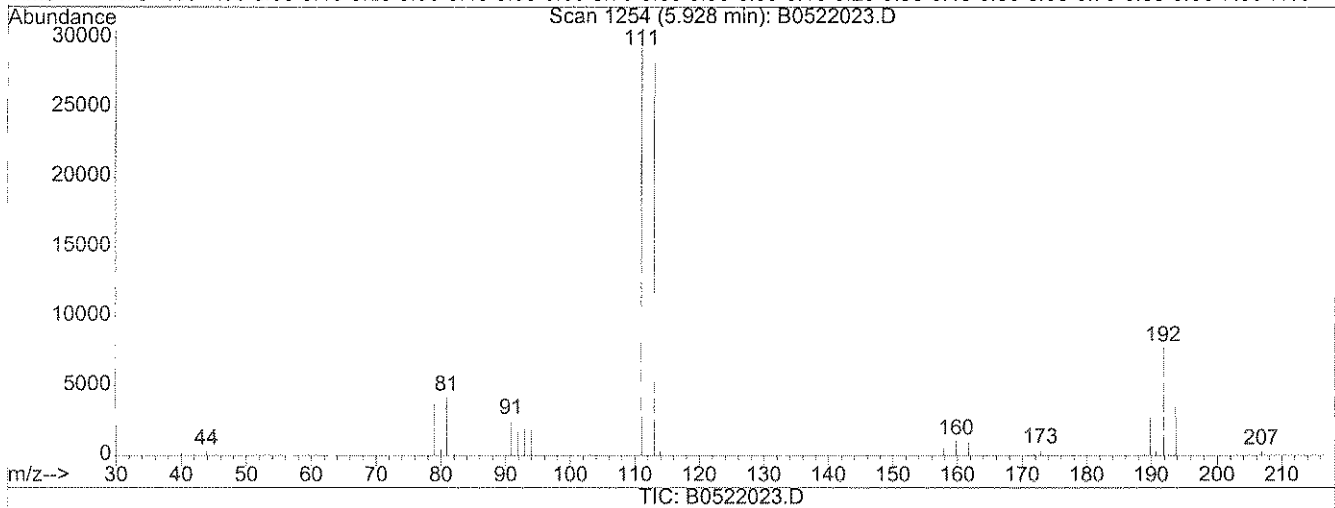
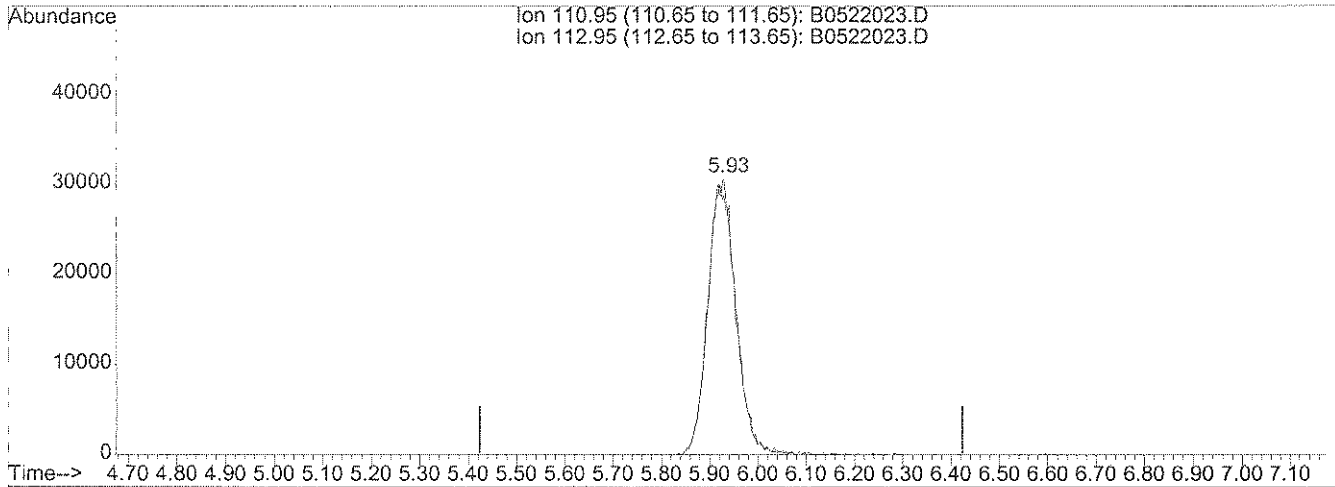
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522023.D
 Acq On : 22 May 2008 17:25
 Sample : JPL113-001 (524.2)
 Misc : #3 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:15 2008

Vial: 21
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.93min 22.06ug/l m

response 122238

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	98.17
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-002
 Lab File ID: B0522024.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 17:52
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.42	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-002
 Lab File ID: B0522024.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 17:52
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-002
 Lab File ID: B0522024.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 17:52
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

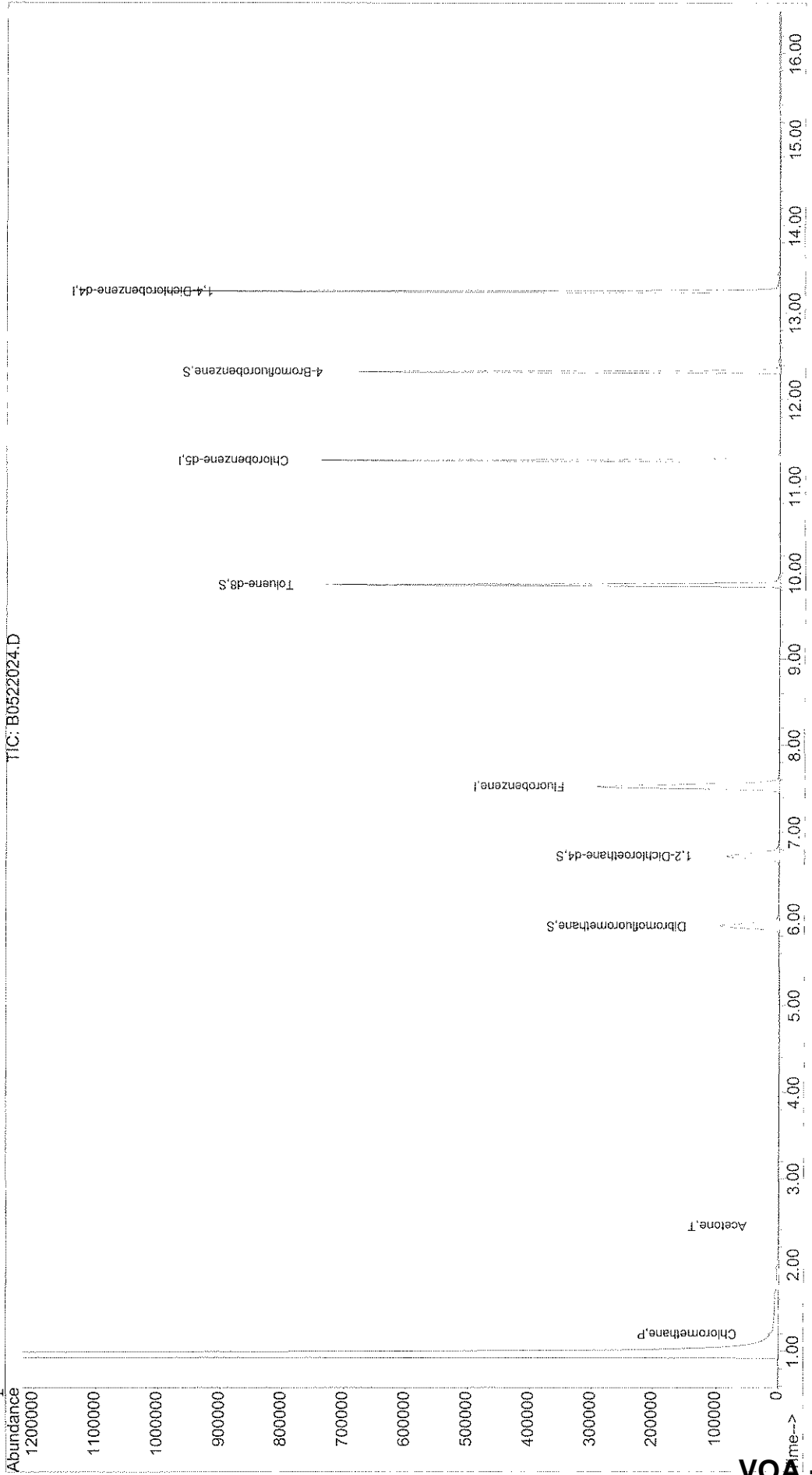
CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522024.D Vial: 22
Acq On : 22 May 2008 17:52 Operator: LNH
Sample : JPL113-002 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:18 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522024.D Vial: 22
 Acq On : 22 May 2008 17:52 Operator: LNH
 Sample : JPL113-002 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:18 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	7.53	96	475956	25.00	ug/l	0.00	89.70%
54) Chlorobenzene-d5	11.30	117	366384	25.00	ug/l	0.00	83.28%
74) 1,4-Dichlorobenzene-d4	13.25	152	222525	25.00	ug/l	0.00	85.58%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	119187	22.27	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	111.35%	
40) 1,2-Dichloroethane-d4	6.72	65	151258m	31.76	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	127.04%#	
55) Toluene-d8	9.86	98	449119	23.91	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	95.64%	
76) 4-Bromofluorobenzene	12.33	95	169188	24.53	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	98.12%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	2888	0.42	ug/l	89
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	2.45	43	1506	0.93	ug/l #	71
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.		
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\BUDDHA\052208\REQUANT\B0522024.D Vial: 22
 Acq On : 22 May 2008 17:52 Operator: LNH
 Sample : JPL113-002 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:18 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.72	96	34		N.D.	
30) 2-Butanone	5.07	43	33		N.D.	
31) Propionitrile	5.15	54	29		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.46	41	35		N.D.	
34) Chloroform	5.53	83	39		N.D.	
35) 1,1,1-Trichloroethane	5.65	97	33		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	6.68	78	30		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	8.64	63	29		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.86	41	40		N.D.	
50) Bromodichloromethane	0.00	83	0		N.D.	
51) 2-Chloroethyl vinyl ether	9.37	63	40		N.D.	
52) cis-1,3-Dichloropropene	9.81	75	31		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	110		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	10.25	69	43		N.D.	
59) 1,1,2-Trichloroethane	10.28	97	30		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.67	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	11.32	91	45		N.D.	
66) Chlorobenzene	11.32	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

Handwritten signature: LNH 5/30/08

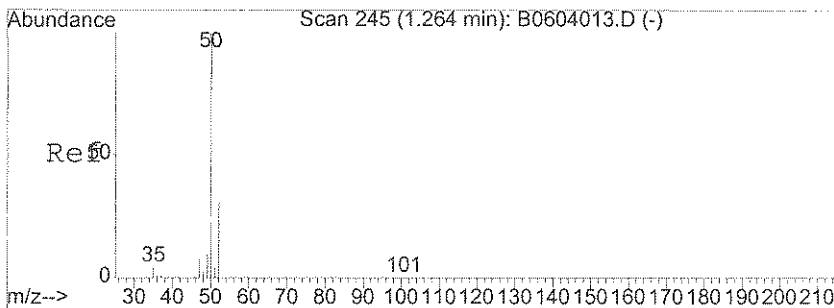
Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522024.D Vial: 22
 Acq On : 22 May 2008 17:52 Operator: LNH
 Sample : JPL113-002 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:18 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

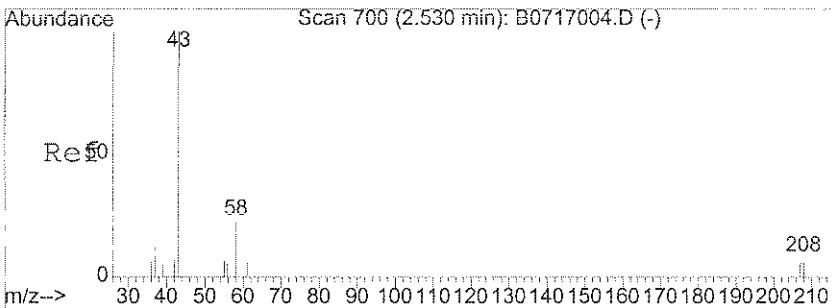
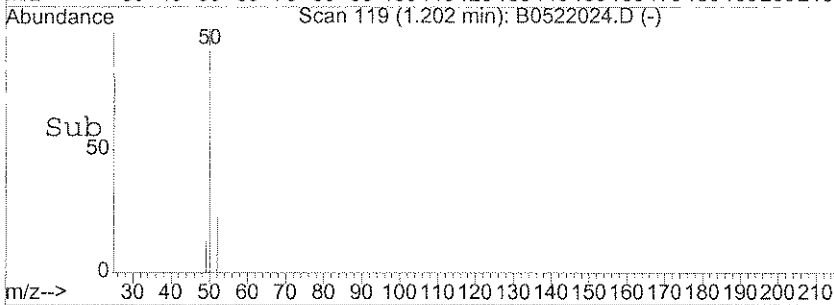
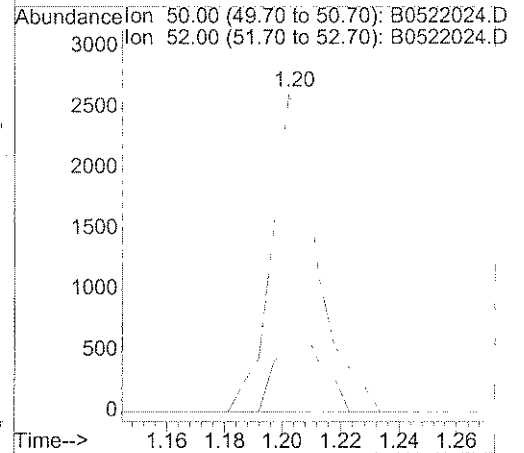
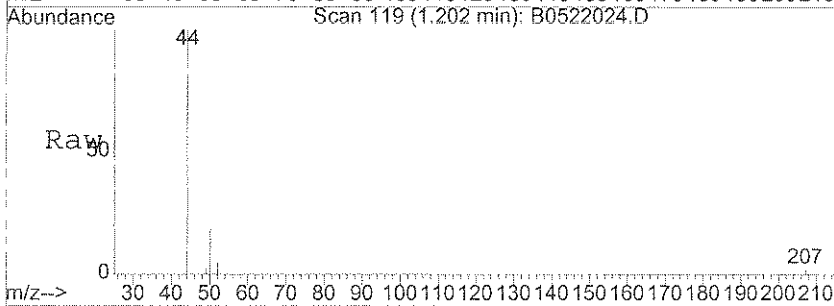
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.32	91	45		N.D.	
69) m,p-Xylene	11.53	106	70		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	12.11	104	49		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.30	105	29		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.52	156	34		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.32	83	30		N.D.	
79) 1,2,3-Trichloropropane	12.62	75	34		N.D.	
80) n-Propylbenzene	0.00	120	0		N.D.	
81) 2-Chlorotoluene	12.52	91	102		N.D.	
82) 4-Chlorotoluene	12.68	91	30		N.D.	
83) 1,3,5-Trimethylbenzene	12.95	105	31		N.D.	
84) tert-Butylbenzene	12.91	119	63		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	31		N.D.	
86) sec-butylbenzene	13.09	105	125		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	40		N.D.	
88) 4-Isopropyltoluene	13.20	119	130		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	83		N.D.	
90) 1,2-Dichlorobenzene	13.57	146	32		N.D.	
91) n-Butylbenzene	13.52	91	104		N.D.	
92) 1,2-Dibromo-3-chloropropan	0.00	75	0		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	43		N.D.	
94) Hexachlorobutadiene	14.89	225	58		N.D.	
95) Naphthalene	14.99	128	982		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	64		N.D.	

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



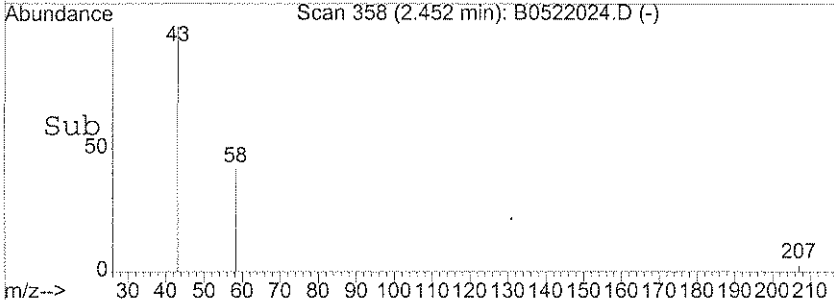
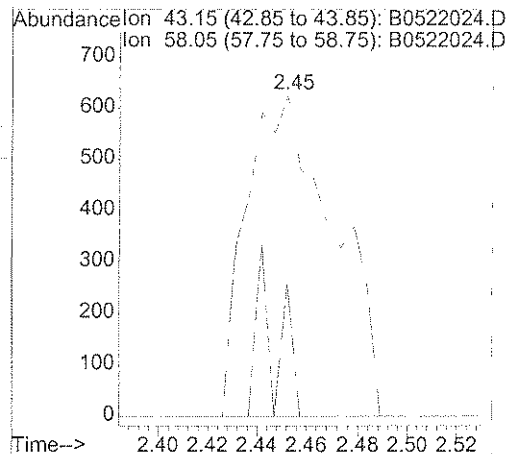
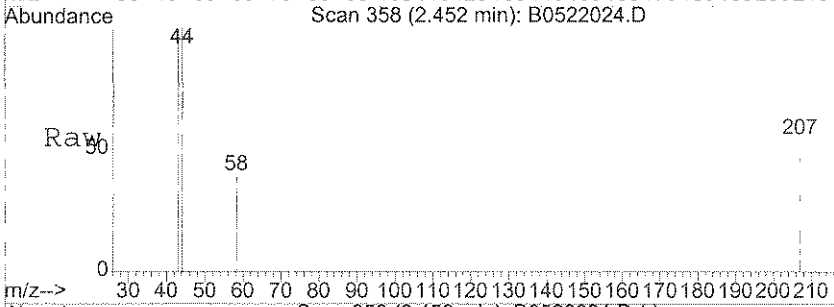
#3
 Chloromethane
 Concen: 0.42 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0522024.D
 Acq: 22 May 2008 17:52

Tgt Ion: 50 Resp: 2888
 Ion Ratio Lower Upper
 50 100
 52 26.3 12.5 52.5



#11
 Acetone
 Concen: 0.93 ug/l
 RT: 2.45 min Scan# 358
 Delta R.T. 0.03 min
 Lab File: B0522024.D
 Acq: 22 May 2008 17:52

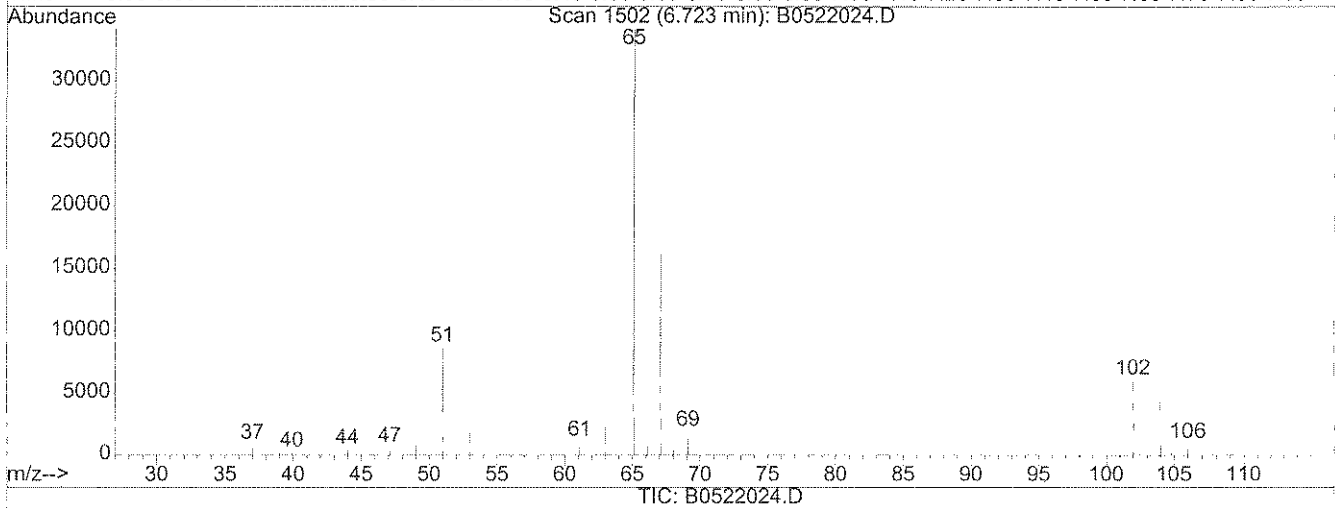
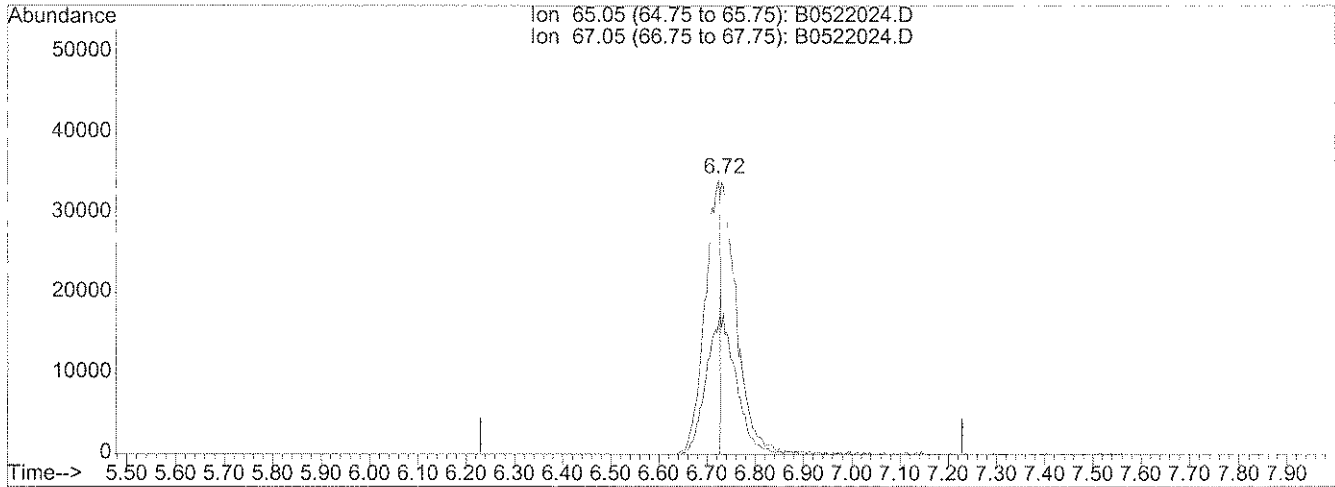
Tgt Ion: 43 Resp: 1506
 Ion Ratio Lower Upper
 43 100
 58 12.4 22.0 33.0#



Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522024.D Vial: 22
 Acq On : 22 May 2008 17:52 Operator: LNH
 Sample : JPL113-002 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 8:26 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 15.75ug/l

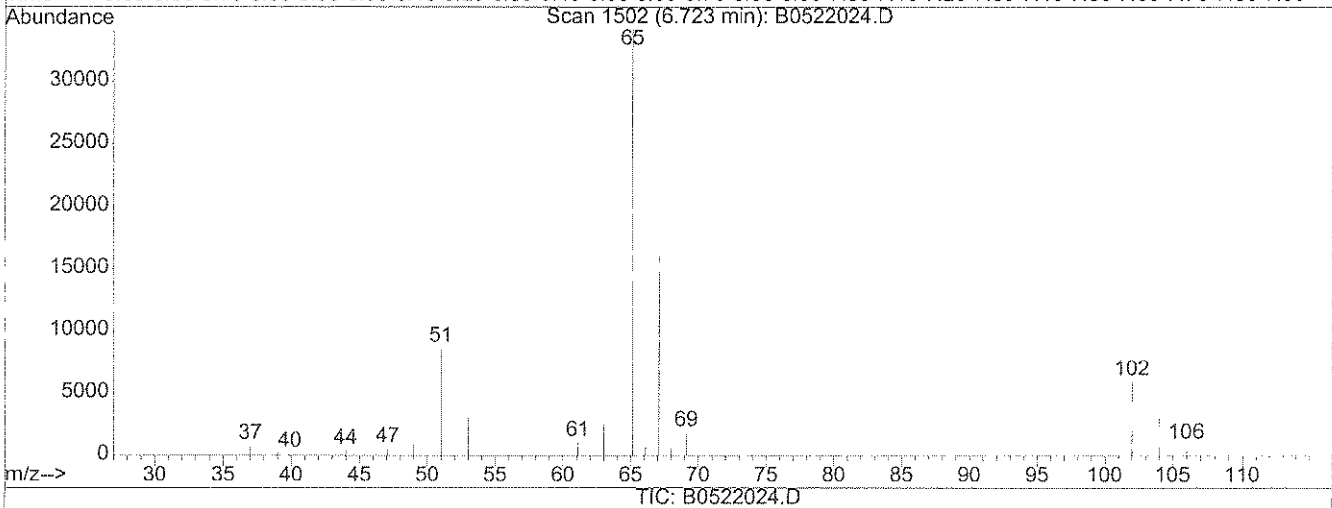
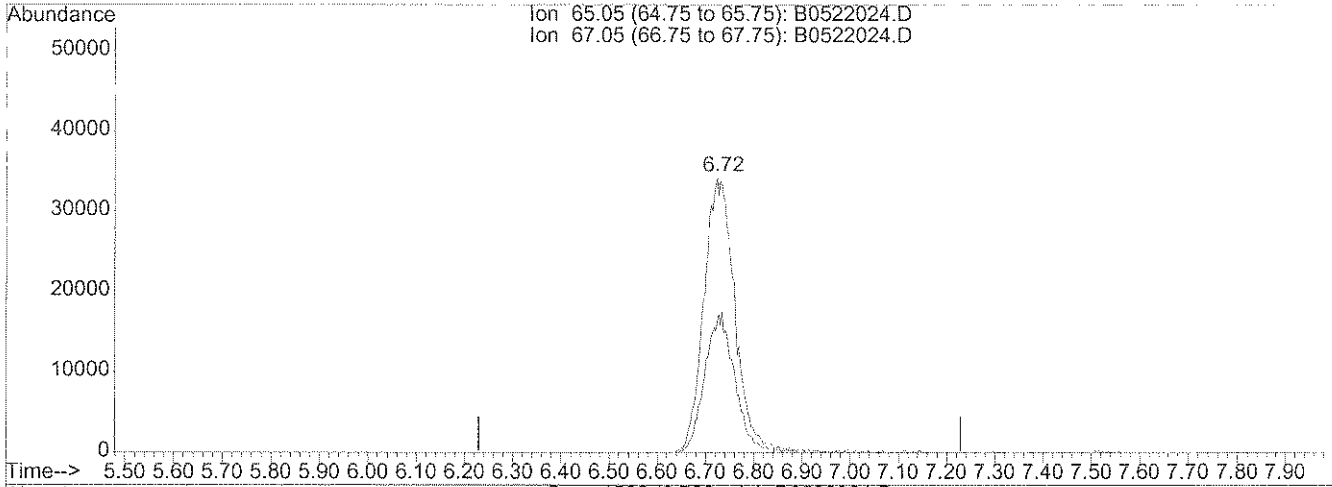
response 75029

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	98.89#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522024.D Vial: 22
 Acq On : 22 May 2008 17:52 Operator: LNH
 Sample : JPL113-002 (524.2) Inst : Buddha
 Misc : #3 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:17 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 31.76ug/l m

response 151258

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	49.05
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-16-5/19/08

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-003
 Lab File ID: B0522015.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 13:47
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-16-5/19/08

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-003
 Lab File ID: B0522015.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 13:47
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-16-5/19/08

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-003
 Lab File ID: B0522015.d
 Date Collected: 05/19/2008
 Date/Time Analyzed: 05/22/2008 13:47
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

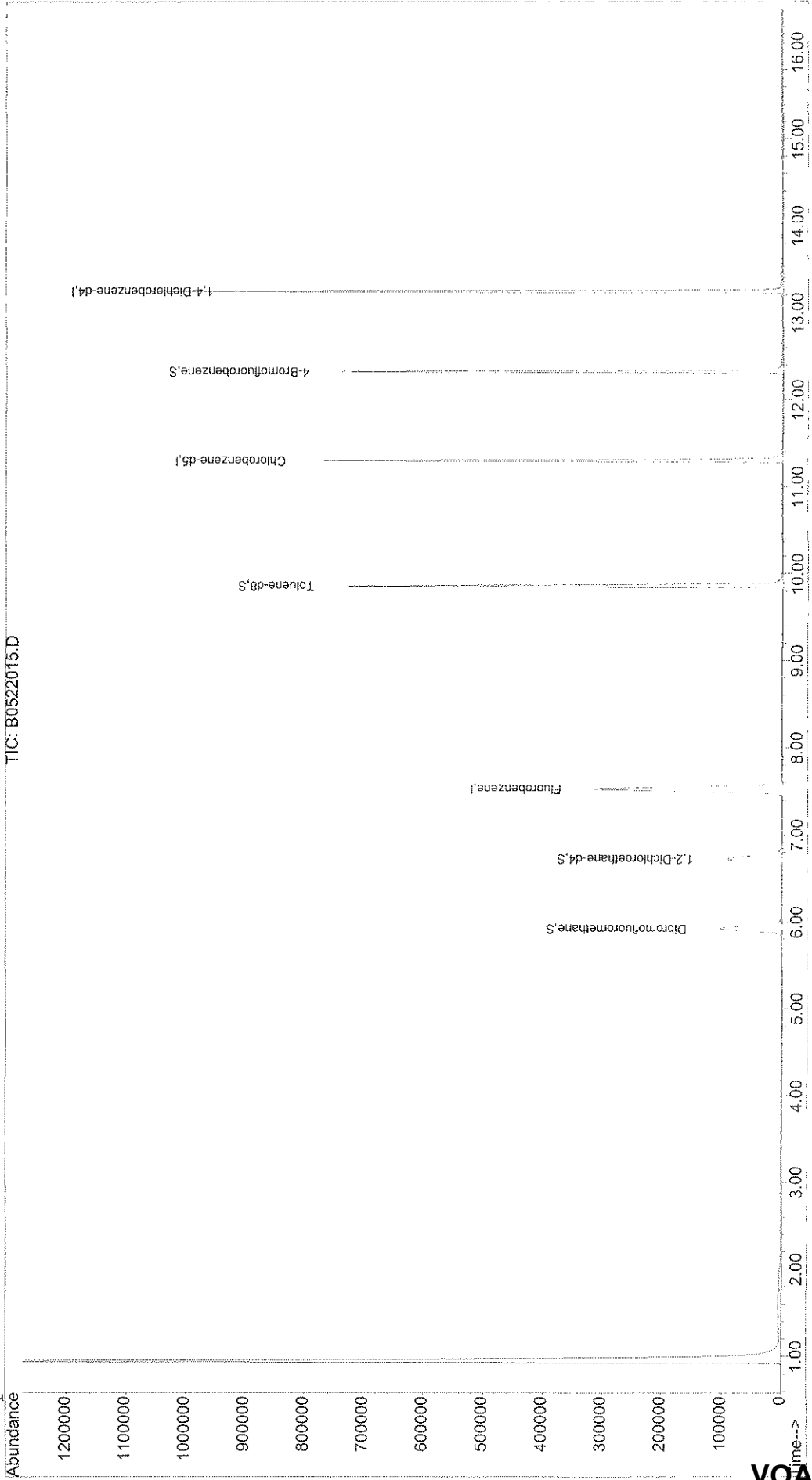
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522015.D Vial: 13
Acq On : 22 May 2008 13:47 Operator: LNH
Sample : JPL113-003 TB Inst : Buddha
Misc : #1 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 30 9:02 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522015.D Vial: 13
 Acq On : 22 May 2008 13:47 Operator: LNH
 Sample : JPL113-003 TB Inst : Buddha
 Misc : #1 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:02 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	514910	25.00	ug/l	0.00	97.04%
54) Chlorobenzene-d5	11.30	117	387734	25.00	ug/l	0.00	88.13%
74) 1,4-Dichlorobenzene-d4	13.25	152	237766	25.00	ug/l	0.00	91.44%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	126658	21.88	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	109.40%	
40) 1,2-Dichloroethane-d4	6.73	65	158489m ⁵	30.76	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	123.04%#	
55) Toluene-d8	9.86	98	476075	23.94	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	95.76%	
76) 4-Bromofluorobenzene	12.32	95	176840	24.00	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	96.00%	

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	2.49	76	138	N.D.		
15) Allyl chloride	0.00	76	0	N.D.		
16) Acetonitrile	0.00	41	0	N.D.		
17) Methyl Acetate	2.70	43	72	N.D.		
18) Methylene Chloride	2.87	84	1290	Below Cal		93
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\BUDDHA\052208\REQUANT\B0522015.D Vial: 13
 Acq On : 22 May 2008 13:47 Operator: LNH
 Sample : JPL113-003 TB Inst : Buddha
 Misc : #1 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:02 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0	N.D.		
26) Vinyl acetate	0.00	43	0	N.D.		
27) Ethyl-t-butyl ether	0.00	59	0	N.D.		
28) 2,2-Dichloropropane	4.70	77	34	N.D.		
29) cis-1,2-Dichloroethene	4.80	96	42	N.D.		
30) 2-Butanone	4.94	43	30	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.37	41	36	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	6.03	75	34	N.D.		
41) Benzene	6.70	78	34	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	7.24	43	33	N.D.		
45) Trichloroethene	8.16	130	33	N.D.		
46) Methylcyclohexane	8.40	83	40	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	8.87	93	33	N.D.		
49) Methyl methacrylate	8.90	41	36	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	9.85	75	34	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	9.94	92	325	N.D.		
57) trans-1,3-Dichloropropene	10.40	75	33	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	10.69	97	92	N.D.		
60) Tetrachloroethene	10.48	166	31	N.D.		
61) 1,3-Dichloropropane	10.59	76	35	N.D.		
62) 2-Hexanone	10.80	43	37	N.D.		
63) Dibromochloromethane	0.00	129	0	N.D.		
64) 1,2-Dibromoethane	0.00	107	0	N.D.		
65) 1-Chlorohexane	11.33	91	42	N.D.		
66) Chlorobenzene	11.33	112	30	N.D.		
67) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.		

Handwritten signature: QNH 5/30/08

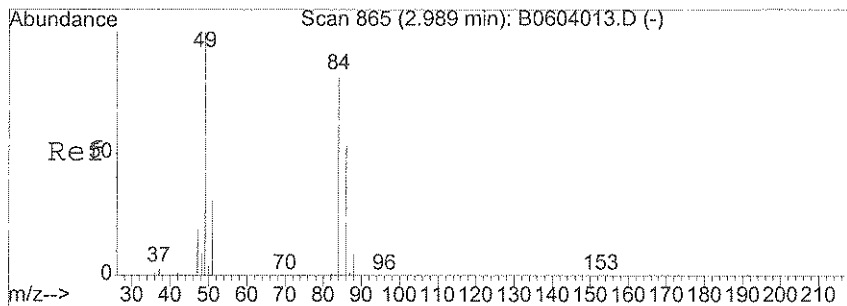
(#) = qualifier out of range (m) = manual integration
 B0522015.D B8260W.M Fri May 30 09:02:48 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522015.D Vial: 13
 Acq On : 22 May 2008 13:47 Operator: LNH
 Sample : JPL113-003 TB Inst : Buddha
 Misc : #1 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:02 2008 Quant Results File: B8260W.RES

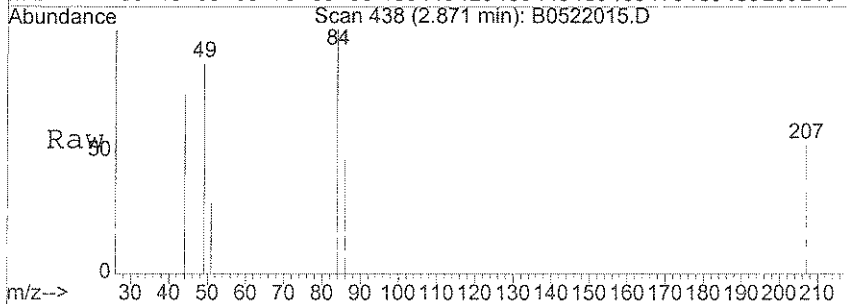
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.52	91	614		N.D.	
69) m,p-Xylene	11.53	106	103		N.D.	
70) o-xylene	11.87	106	32		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.34	173	91		N.D.	
73) Isopropylbenzene	12.18	105	170		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.50	156	30		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.48	83	33		N.D.	
79) 1,2,3-Trichloropropane	12.51	75	65		N.D.	
80) n-Propylbenzene	12.51	120	71		N.D.	
81) 2-Chlorotoluene	12.59	91	177		N.D.	
82) 4-Chlorotoluene	12.59	91	177		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	322		N.D.	
84) tert-Butylbenzene	12.92	119	295		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	277		N.D.	
86) sec-butylbenzene	13.08	105	567		N.D.	
87) 1,3-Dichlorobenzene	13.18	146	230		N.D.	
88) 4-Isopropyltoluene	13.21	119	1136		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	282		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	60		N.D.	
91) n-Butylbenzene	13.52	91	703		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.19	75	30		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	639		N.D.	
94) Hexachlorobutadiene	14.89	225	544		N.D.	
95) Naphthalene	14.98	128	539		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	562		N.D.	

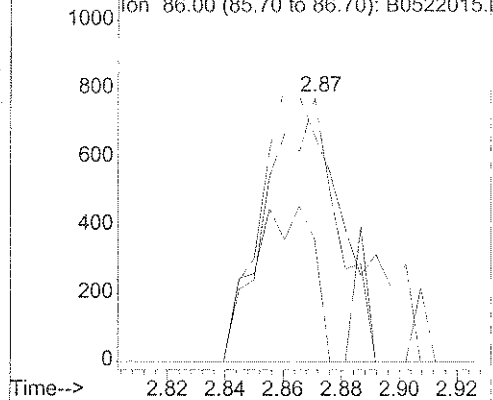
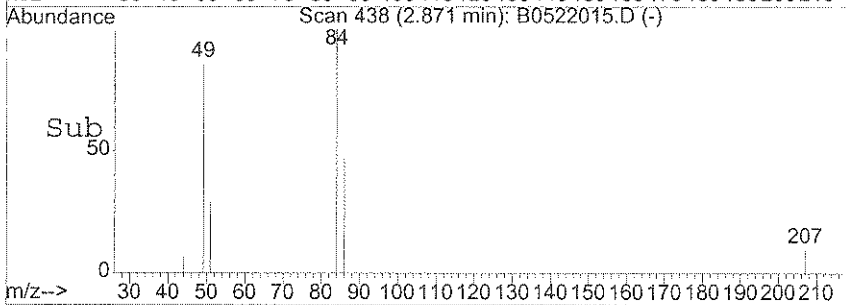


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 438
 Delta R.T. 0.01 min
 Lab File: B0522015.D
 Acq: 22 May 2008 13:47

Tgt Ion	Resp	Lower	Upper
84	1290		
84	100		
49	131.9	113.6	153.6
86	51.7	45.8	85.8



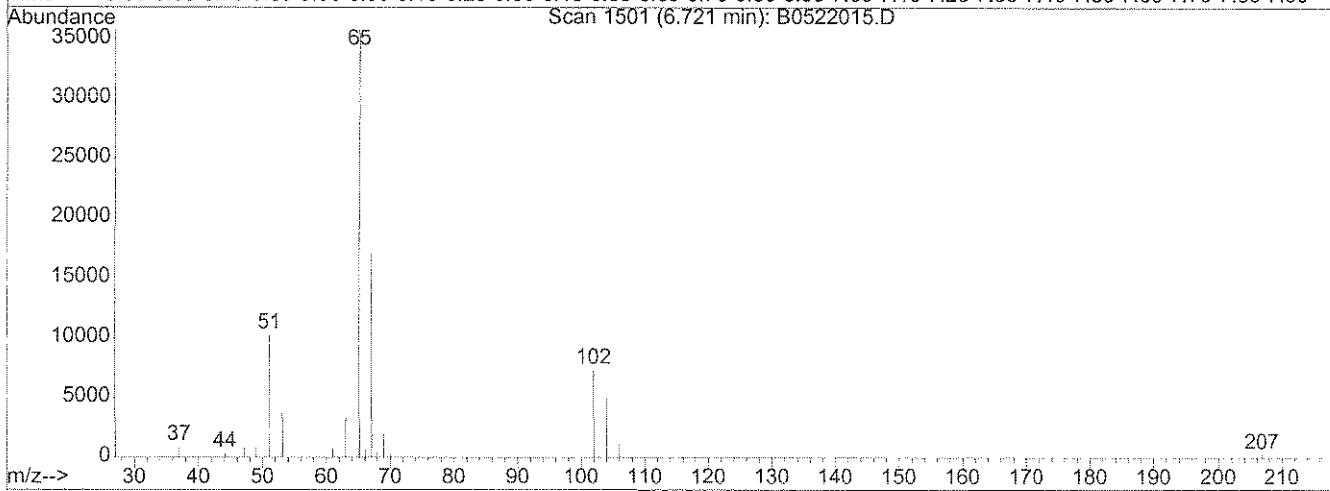
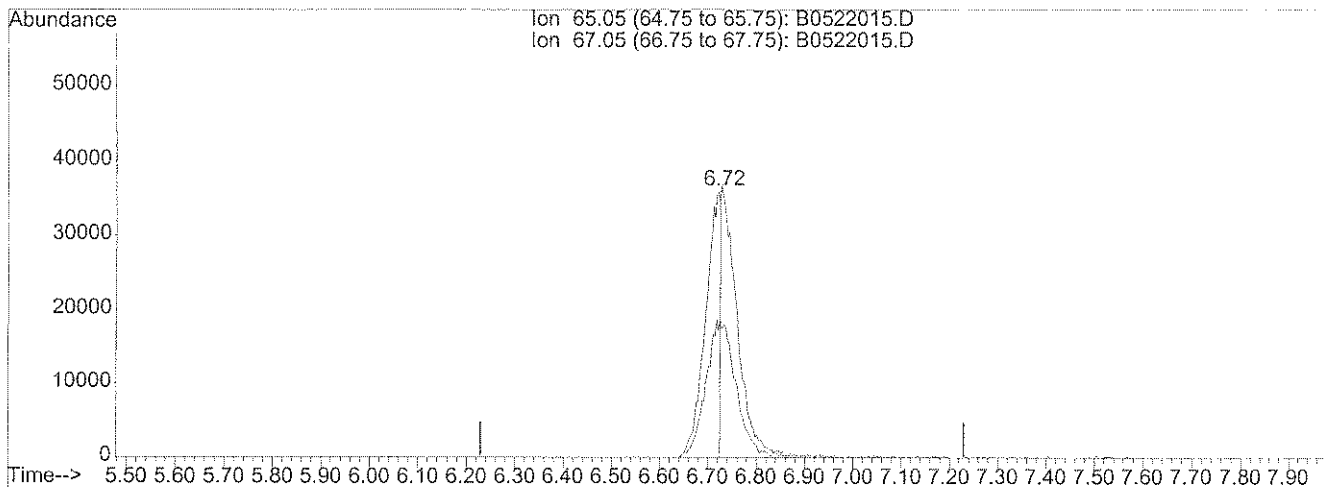
Abundance Ion 84.00 (83.70 to 84.70): B0522015.D
 Ion 49.00 (48.70 to 49.70): B0522015.D
 Ion 86.00 (85.70 to 86.70): B0522015.D



Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522015.D Vial: 13
 Acq On : 22 May 2008 13:47 Operator: LNH
 Sample : JPL113-003 TB Inst : Buddha
 Misc : #1 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 8:25 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 14.44ug/l

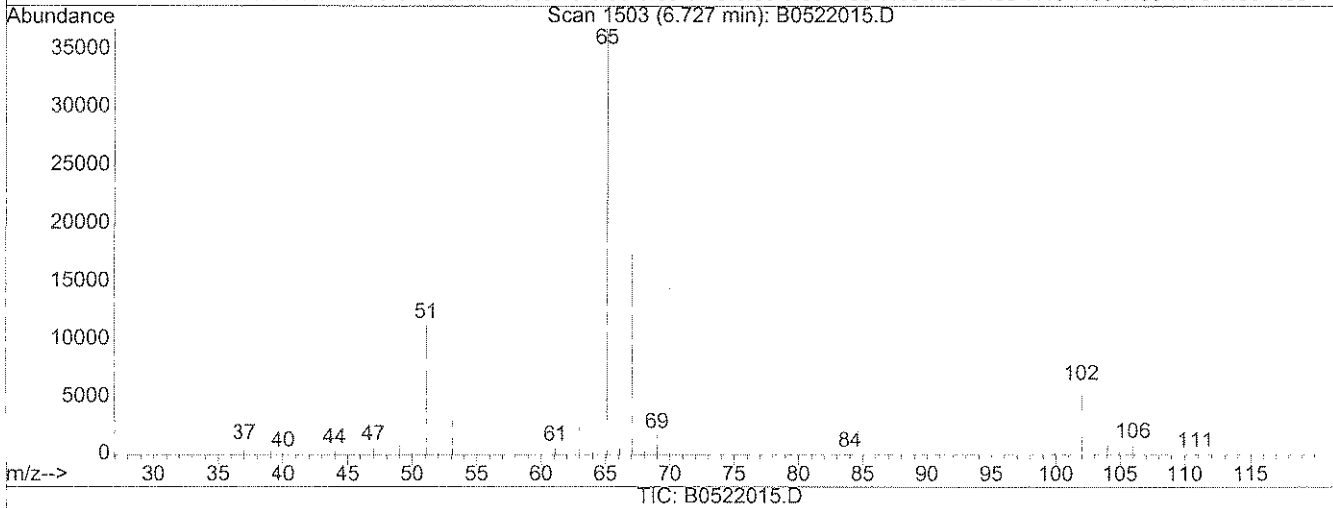
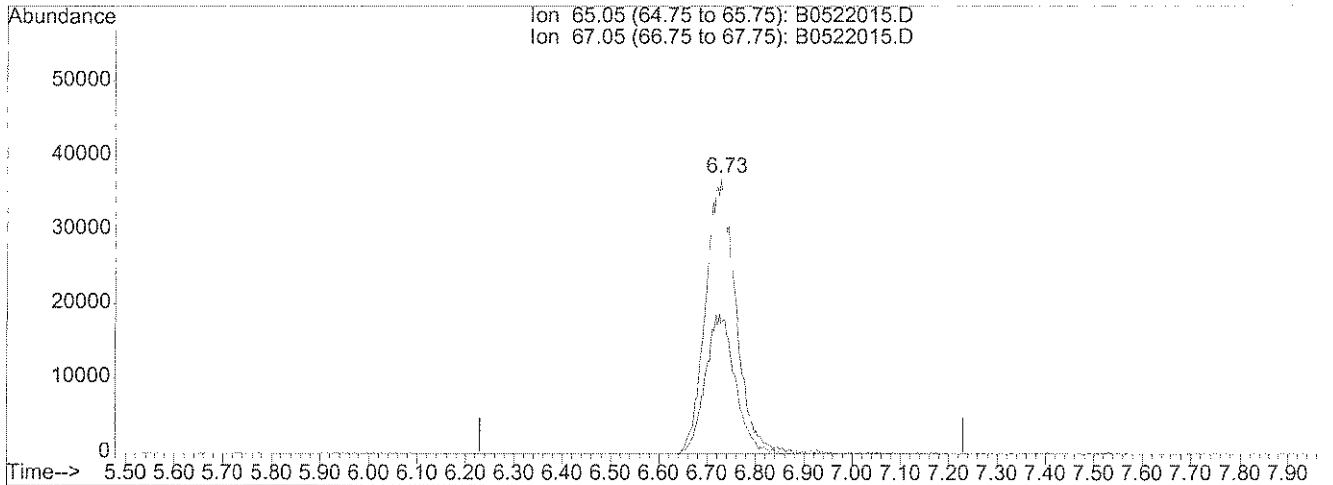
response 74413

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	105.32#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\REQUANT\B0522015.D Vial: 13
 Acq On : 22 May 2008 13:47 Operator: LNH
 Sample : JPL113-003 TB Inst : Buddha
 Misc : #1 10ML+IS/SS Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 30 9:02 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.73min 30.76ug/l m

response 158489

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	49.45
0.00	0.00	0.00
0.00	0.00	0.00

TIC DATA

SDG #JPL113

Volatiles Analysis

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-1

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-001
 Lab File ID: B0522023.d
 Date Collected: 05/19/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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				
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26				
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28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522023.D Vial: 21
Acq On : 22 May 2008 17:25 Operator: LNH
Sample : JPL113-001 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522023.D B8260W.M Fri May 23 16:16:04 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-9

Lab Name: Pace Analytical Services
 SDG No.: JPL113
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL113-002
 Lab File ID: B0522024.d
 Date Collected: 05/19/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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19				
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21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522024.D Vial: 22
Acq On : 22 May 2008 17:52 Operator: LNH
Sample : JPL113-002 (524.2) Inst : Buddha
Misc : #3 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522024.D B8260W.M Fri May 23 16:17:01 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-16-5/19/08

Lab Name: Pace Analytical Services

SDG No.: JPL113

Matrix: (SOIL/WATER) Water

Sample wt/vol: 10.0 (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: R028288

Lab Sample ID: JPL113-003

Lab File ID: B0522015.d

Date Collected: 05/19/2008

Date Analyzed: 05/22/2008

Dilution Factor: 1.0

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
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\BUDDHA\052208\B0522015.D Vial: 13
Acq On : 22 May 2008 13:47 Operator: LNH
Sample : JPL113-003 TB Inst : Buddha
Misc : #1 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522015.D B8260W.M Fri May 23 16:08:00 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B052208MVOWB1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL113

Run Sequence: R028288

Matrix: (SOIL/WATER) Water

Lab Sample ID: B052208MVOWB1

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522011.d

Level: (LOW/MED) _____

Date Collected: _____

% Moisture: not dec. _____

Date Analyzed: 05/22/2008

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

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\BUDDHA\052208\B0522011.D Vial: 10
Acq On : 22 May 2008 12:00 Operator: LNH
Sample : B052208MVOWB1 Inst : Buddha
Misc : 10ML PFW+IS/SS(MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522011.D B8260W.M Tue May 27 09:37:14 2008

Metals Data

JPL113

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL113

SOW No.: _____

Sample No.	Lab Sample ID
<u>MW-1</u>	<u>JPL113-001</u>
<u>MW-1MS</u>	<u>JPL113-001MS</u>
<u>MW-1MSD</u>	<u>JPL113-001MSD</u>
<u>MW-9</u>	<u>JPL113-002</u>

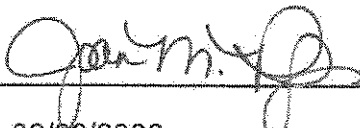
Were ICP interelement corrections applied? Yes/No YES

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: 06/23/2008

Title: Chemist

Metals Analysis Data Sheets

SW-846

-1-

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-1

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL113

Matrix (soil/water): Water

Lab Sample ID: JPL113-001

Level (low/med): LOW

Date Received: 05/20/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.15			M	R028436
7440-70-2	Calcium	58900			P	R028884
7440-47-3	Chromium	5.15			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	18800			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	32500			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 8:15

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-9

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL113

Matrix (soil/water): Water

Lab Sample ID: JPL113-002

Level (low/med): LOW

Date Received: 05/20/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	52500			P	R028884
7440-47-3	Chromium	4.45			M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.31			M	R028436
7439-95-4	Magnesium	17200			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	24700			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 8:15

Miscellaneous Inorganic Data

JPL113

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL113

SOW No.: _____

Sample No.
MW-1
MW-9

Lab Sample ID
JPL113-001
JPL113-002

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: Paul J. Nivalo

Date: June 10, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL113
Sample Number: MW-1 **Date/Time Collected:** 05/19/2008 08:38
Lab Sample ID: JPL113-001 **Date/Time Received:** 05/20/2008 09:00
Method/Qbatch*: E150.1/29507 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.2		0.10	0.10	05/20/2008	05/20/2008	R028262

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	190		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29473 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028243\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.69		0.20	0.055	05/20/2008	05/20/2008	R028243
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/20/2008	05/20/2008	R028243
Sulfate as SO4	14808-79-8	10	50		10	1.7	05/20/2008	05/20/2008	R028243
Chloride	16887-00-6	10	25		10	0.76	05/20/2008	05/20/2008	R028243
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/20/2008	05/20/2008	R028243

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	190		4.0	4.0	05/29/2008	05/29/2008	R028444

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL113
Sample Number: MW-1 **Date/Time Collected:** 05/19/2008 08:38
Lab Sample ID: JPL113-001 **Date/Time Received:** 05/20/2008 09:00
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/02/2008	06/03/2008	R028530

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL113
Sample Number: MW-9 **Date/Time Collected:** 05/19/2008 10:32
Lab Sample ID: JPL113-002 **Date/Time Received:** 05/20/2008 09:00
Method/Qbatch*: E150.1/29507 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.9		0.10	0.10	05/20/2008	05/20/2008	R028262

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	270		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29473 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028243\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	1.4		0.20	0.055	05/20/2008	05/20/2008	R028243
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/20/2008	05/20/2008	R028243
Sulfate as SO4	14808-79-8	10	53		10	1.7	05/20/2008	05/20/2008	R028243
Chloride	16887-00-6	10	19		10	0.76	05/20/2008	05/20/2008	R028243
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/20/2008	05/20/2008	R028243

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	160		4.0	4.0	05/29/2008	05/29/2008	R028444

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL113
Sample Number: MW-9 **Date/Time Collected:** 05/19/2008 10:32
Lab Sample ID: JPL113-002 **Date/Time Received:** 05/20/2008 09:00
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/02/2008	06/03/2008	R028530

*QBatch=QC/Preparation Batch

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL114

June 24, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL114
Date of Report: June 24, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-7	JPL114-001	VOA/MET/INO
DUPE-5-2Q08	JPL114-002	VOA/MET/INO
TB-17-5/20/08	JPL114-003	VOA

Analytical Request Key:

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

Summary of NELAC test accreditation

Determination	NELAC approved
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300.0 NO3, NO2, Cl, SO4, OPO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

Sample Receipt Comments:

One of three volatiles bottles submitted for MW-7 contained bubbles of less than 1/4 inch in size.
Two of three volatiles bottles submitted for Dupe 5-2Q08 contained bubbles of less than 1/4 inch in size.
One of two volatiles bottles submitted for TB-17-5/20/08 contained bubbles of greater than 1/4 inch in size.
One of two volatiles bottles submitted for TB-17-5/20/08 contained bubbles of less 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."

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

Volatiles Fraction:

Continuing Calibration Verification (CCV):

In the CCV performed on 5/22/2008 the % D values for dichlorodifluoromethane and trichlorofluoromethane exceeded 20% due to increased response. These analytes were not detected in any associated samples so no further action was taken.

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, sample MW-7 was received in a bottles from the contaminated lot (#031708-3) and had a low level detection of chloromethane.

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

Tic Analysis:

Tic analyses were performed for analytes that are not identified on the quantitation report.

Quality Control Analyses:

Analysis of the blank spike S052208MVOWB2 yielded a high recovery for trichlorofluoromethane. Because the recovery was high and this analyte was not detected in the associated samples, no further action was taken.

MS/MSD analyses for this sample batch were performed on sample MW-25-1 from the SDG JPL111 and sample MW-1 from the SDG JPL113.

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 and ICP-MS Metals:

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

SPECIFIC REMARKS ON INORGANIC ANALYSES:

Holding Time Compliance:

Pace 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

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Seattle, WA 98108

Alkalinity	14 days	None
Total Dissolved Solids	7 days	None
pH	15 minutes	All samples

ICP Metals:

For the run sequences R028884, the ICV exceeded the upper control limit for potassium. All samples were not reported from this run sequence and were reanalyzed and reported from run sequence R029004. QC were reported and were within control limits. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R029004, the ICV exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

For the run sequence R029004, the third CCB contained a level of potassium that was greater than ½ the CRDL. No sample results for potassium were associated with this CCB. Therefore, no corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the sixth and seventh CCBs contained a level of potassium that was less than -½ the CRDL. All samples were not reported from this run sequence and were reanalyzed and reported from run sequence R029004. No further corrective action was required. Data have not been flagged for this event.

Due to software limitations, which limit that amount of data that can be processed, all injections are not present on Form 14 for run sequence R029004. All calibration checks are listed and all injections surrounding the samples are listed.

ICP-MS Metals:

The serial dilution for the element chromium did not agree within 10% of the original determination after correction for dilution for sample DUPE-5-2Q08. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and 9.

Miscellaneous Inorganics:

In the run sequence R028280 for "300.0 Anions", the matrix spike duplicate exceeded the established upper control limit for chloride. Also the matrix spike and matrix spike duplicate exceeded the established lower control limits for nitrate and orthophosphate. Since all of the other quality control samples were in control, no further action was taken.

Pace Analytical Services, Inc.

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.
 - ~ This result has been identified as non-primary based on the analyst's professional judgment.
- CRQL Client requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.

Pace Analytical Services, Inc.

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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.

Z Denotes data deemed unusable by the analyst.

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

Pace Analytical Services, Inc.


940 S. Harney
Seattle, WA 98108

RELEASE OF DATA

Pace Analytical Services, Inc. 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,


for
Kara Godineaux
Project Manager

6/24/08
(DATE)


Harry Romberg
Quality Assurance Officer

6/24/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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.

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT A

Chain-of-Custody Copies

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG

Sample MxID (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 ₃ , NO ₂ , Cl, SO ₄ , OPO ₄	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate	524.2 Volatile Organics + TICs (JPL Special list)	TurMet for 200.7/200.8 TurMet
WD JPL114-001	05/21/2008 10:25 AM	05/20/2008 09:40 AM	MW-7	IN	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL114-002	05/21/2008 10:25 AM	05/20/2008 12:00 AM	DUPE-5-2008	IN	IN	IN	IN	A-	IN	IN	IN	IN
WD JPL114-003	05/21/2008 10:25 AM	05/20/2008 12:00 AM	TB-17-5/20/08								IN	

Approved By:

On:

Notes:

Samples identified with a *st client has requested QC for

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

Matrices: Water=WD

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 GW MON 2008
 PROJECT CONTACT: DAVID CONNER
 TELEPHONE: 619-726-7311 FAX: _____
 JOB/PO. NO.: 648 6090 / 214319

CHAIN OF CUSTODY RECORD SDG # _____
 46057
 WORK ORDER ID# JPLW

DATE/TIME: 5/12/08 1400
 RECEIVED BY (SIGN AND PRINT): RACHEL FRANK
 SUBMITTED AT: 1100 Ledwith Ave., Yakima, WA 98912

LSH-7298

MATRIX: WATER, SOIL OR SPECIFY
 NO. OF CONTAINERS
5 (524.2)
 TOTAL CR (200.8)
 LEAD (200.8)
 ARSENIC (200.8)
 COPPER CHEM (200.7)
 CHLORIDE CHEM (314.0)
 NITRATE CHEM (30.110.151)
 WITH TE (200.8)
 (200.8)

TESTS TO PERFORM

OBSERVATIONS,
 COMMENTS, SPECIAL
 INSTRUCTIONS

LAB #/A	SAMPLE ID / LOCATION	DATE	TIME	MATRIX	NO. OF CONTAINERS	TOTAL CR	LEAD	ARSENIC	COPPER CHEM	CHLORIDE CHEM	NITRATE CHEM	WITH TE	OTHER	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-7	5/12/08	940	WS	5	X	X	X	X	X	X	X		LEVEL IV GC
2	DUPE-5-2008				5	X	X	X	X	X	X	X		DUPLICATE
3	TB-17-5/12/08/08				2	X								TAP 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): MARCO MENDOZA

NAME: BATELLE
 ATTN: GERARD TOMPKINS
 ADDRESS: 505 KINL AVE.
 CITY, STATE, ZIP: COLUMBUS, OH, 43201

DATE/TIME: 5/12/08 1400
 RECEIVED BY (SIGN AND PRINT): RACHEL FRANK

DATE/TIME: 5/12/08 1035

* 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




**Cooler Receipt Form
Pace Analytical Services, Inc.**

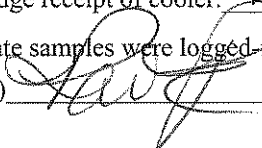
SDG: JPL114 Taken By: Client
Cooler: AAD848 Transferred: FedEx
COC #: 46057
Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 5/21/2008
Date cooler was opened: 5/21/2008 10:25AM

A. PRELIMINARY EXAMINATION PHASE:

1. Did cooler come with a shipping slip (airbill, etc.)? YES
if YES, record carrier name and airbill number: 865543091434
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? 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: 

B. LOG-IN PHASE:

Date samples were logged-in: 5/21/2008 10:29AM
Logged-in by Rachel Frank (sign) 

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? NO
18. Temperatures: 1.4

DISCREPANCIES:

Sample 1 has 1 of 3 VOA vials w/bubbles <1/4"
Sample 2 has 2 of 3 VOA vials w/bubbles <1/4"
Sample 3 has 1 of 2 Trip Blanks w/bubbles >1/4" and 1 of 2 Trip Blanks w/bubbles <1/4"
Sample 1 was received out of hold for PH.

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL114

Cooler: AAD848

Temperatures: 1.4

COC #: 46057

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL114-001	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
JPL114-002	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
JPL114-003	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

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

ATTACHMENT B

Index

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

Battelle

SDG No.: JPL114

- I. Narrative: 2-8
- II. Chain-of-Custody: 9-13
- III. Index: 14-15
- IV. Volatiles Data: VOA 1-247
 - A. QC Summary Data: 1-8
 - B. Sample Data: 9-53
 - C. Standards Data: 54-215
 - D. Raw QC Data: 216-239
 - E. Bench Sheets: 240-247
- V. Metals Data: MET- 1-309
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-5
 - C. Quality Control Data: 6-51
 - D. Quarterly Verification of Instrument Parameters: 52-62
 - E. Raw Data: 63-300
 - F. Digestion & Distillation Logs: 301-309
- VI. Miscellaneous Inorganics Data: INO 1-113
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-7
 - C. Quality Control Data: 8-23
 - D. Raw Data: 24-113
- VII. Forms Summary: SUM- 1-114

Completed and checked by:

Andy Ecklund

Date:

6/24/08

QC SUMMARY

SDG #JPL114

Volatiles Analysis

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL114

Run Sequence: R028288

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL114-002) DUPE-5-2Q08	132	95	92		0
(JPL114-001) MW-7	128	96	93		0
(JPL114-003) TB-17-5/20/08	129	94	94		0
(B052208MVOWB1) B052208MVOWB1	122	96	94		0
(S052208MVOWB2) S052208MVOWB2	115	97	100		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: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028288 SDG No.: JPL114
 BS Lab Sample ID: S052208MVOWB2
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	67.1	134		60-140
Chloromethane	50.0	53	106		60-140
Vinyl chloride	50.0	58.08	116		60-140
Bromomethane	50.0	62.74	125		60-140
Chloroethane	50.0	55.72	111		60-140
Trichlorofluoromethane	50.0	72.65	145	*	60-140
1,1-Dichloroethene	50.0	52.32	105		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.15	106		60-140
Methylene chloride	50.0	49.95	100		60-140
Methyl tert-butyl ether	50.0	54.38	109		60-140
trans-1,2-Dichloroethene	50.0	48.67	97		60-140
1,1-Dichloroethane	50.0	48.5	97		60-140
2,2-Dichloropropane	50.0	50.14	100		60-140
cis-1,2-Dichloroethene	50.0	46.74	93		60-140
2-Butanone	50.0	48.81	98		60-140
Bromochloromethane	50.0	47.97	96		60-140
Chloroform	50.0	49.53	99		60-140
1,1,1-Trichloroethane	50.0	54.25	109		60-140
Carbon tetrachloride	50.0	54.14	108		60-140
1,1-Dichloropropene	50.0	51.23	102		60-140
Benzene	50.0	44.94	90		60-140
1,2-Dichloroethane	50.0	56.44	113		60-140
Trichloroethene	50.0	45.74	91		60-140
1,2-Dichloropropane	50.0	45.1	90		60-140
Dibromomethane	50.0	49.58	99		60-140
Bromodichloromethane	50.0	51.13	102		60-140
cis-1,3-Dichloropropene	50.0	59.79	120		60-140
4-Methyl-2-pentanone	50.0	54.15	108		60-140
Toluene	50.0	47.45	95		60-140
trans-1,3-Dichloropropene	50.0	48.67	97		60-140
1,1,2-Trichloroethane	50.0	47.01	94		60-140
Tetrachloroethene	50.0	48.57	97		60-140
1,3-Dichloropropane	50.0	48.25	97		60-140
Dibromochloromethane	50.0	52.46	105		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 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 12:04

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin

BS Run Sequence: R028288 SDG No.: JPL114

ES Lab Sample ID: S052208MVOWE2

Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	49.58	99		60-140
Chlorobenzene	50.0	47.07	94		60-140
Ethylbenzene	50.0	47.99	96		60-140
1,1,1,2-Tetrachloroethane	50.0	48.73	97		60-140
m,p-Xylene	100	94.41	94		60-140
o-Xylene	50.0	45.03	90		60-140
Styrene	50.0	46.06	92		60-140
Bromoform	50.0	48.58	97		60-140
Isopropylbenzene	50.0	48.12	96		60-140
1,1,1,2-Tetrachloroethane	50.0	44.66	89		60-140
n-Propylbenzene	50.0	45.87	92		60-140
Bromobenzene	50.0	46.45	93		60-140
1,2,3-Trichloropropane	50.0	45.66	91		60-140
2-Chlorotoluene	50.0	45.58	91		60-140
1,3,5-Trimethylbenzene	50.0	47.72	95		60-140
4-Chlorotoluene	50.0	47.35	95		60-140
tert-Butylbenzene	50.0	47.96	96		60-140
1,2,4-Trimethylbenzene	50.0	48.08	96		60-140
sec-Butylbenzene	50.0	48.3	97		60-140
4-Isopropyltoluene	50.0	50.19	100		60-140
1,3-Dichlorobenzene	50.0	45.83	92		60-140
1,4-Dichlorobenzene	50.0	45.62	91		60-140
n-Butylbenzene	50.0	47.42	95		60-140
1,2-Dichlorobenzene	50.0	45.34	91		60-140
1,2-Dibromo-3-chloropropane	50.0	47.84	96		60-140
1,2,4-Trichlorobenzene	50.0	46.53	93		60-140
Hexachlorobutadiene	50.0	47.22	94		60-140
Naphthalene	50.0	45.8	92		60-140
1,2,3-Trichlorobenzene	50.0	42.96	86		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 63 outside limits

COMMENTS:

Date Printed: 5/30/2008 12:04

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B052208MVOWB1

Lab Name Face Analytical Services Contract: JPL Groundwater Monitorin
 SDG No.: JPL114
 Lab File ID: B0522011.d Lab Sample ID: B052208MVOWB1
 Date Analyzed: 05/22/2008 Time Analyzed: 12:00
 GC Column: ZB-624 20m ID: 0.18 (mm) Heated Purge: (Y/N) N
 Instrument ID: 5973B Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S052208MVOWB2	S052208MVOWB2	B0522008.d	05/22/2008	10:34	R028288
02	TB-17-5/20/08	JPL114-003	B0522016.d	05/22/2008	14:14	R028288
03	MW-7	JPL114-001	B0522025.d	05/22/2008	18:19	R028288
04	DUPE-5-2Q08	JPL114-002	B0522026.d	05/22/2008	18:45	R028288
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COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1323 SDG No.: JPL114
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028288 SDG No.: JPL114
 Lab File ID: B0522004.D BFB Injection Date: 05/22/2008
 Instrument ID: 5973B BFB Injection Time: 08:40
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	18.8
75	30% to 60% of mass 95	48.9
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.8
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	110.6
175	5% to 9% of mass 17	7.4()1
176	greater than 95%, but less than 101% of mass 174	100.4()1
177	5% to 9% of mass 176	6.7()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	VSTD050B1	VSTD050B1	B0522006.d	05/22/2008	09:37
02	S052208MVOWB2	S052208MVOWB2	B0522008.d	05/22/2008	10:34
03	B052208MVOWB1	B052208MVOWB1	B0522011.d	05/22/2008	12:00
04	TB-17-5/20/08	JPL114-003	B0522016.d	05/22/2008	14:14
05	MW-7	JPL114-001	B0522025.d	05/22/2008	18:19
06	DUPE-5-2Q08	JPL114-002	B0522026.d	05/22/2008	18:45
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22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028288 SDG No.: JPL114
 Client Sample No. (VSTD050##): VSTD050B1 Date Analyzed: 05/22/2008
 Lab File ID (Standard): B0522006.d Time Analyzed: 09:37
 Instrument ID: 5973B 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	562537	7.53	436770	11.30	279429	13.25
UPPER LIMIT	1125074	7.58	873540	11.35	558858	13.3
LOWER LIMIT	281268.5	7.48	218385	11.25	139714.5	13.2
CLIENT SAMPLE NO.						
01 S052208MVOWB2	578274	7.52	468454	11.30	290141	13.25
02 B052208MVOWB1	519143	7.53	407353	11.30	254023	13.25
03 TB-17-5/20/08	474904	7.53	372396	11.30	236227	13.25
04 MW-7	462899	7.53	357155	11.30	226536	13.25
05 DUPE-5-2Q08	393781	7.52	316731	11.30	206244	13.25
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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

Date Printed: 5/30/2008 12:06

SAMPLE DATA

SDG # JPL114

Volatiles Analysis

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-001
 Lab File ID: B0522025.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 18:19
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.31	J
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	33	
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	0.39	J
75-27-4	Bromodichloromethane	30	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-001
 Lab File ID: B0522025.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 18:19
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.32	J
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	12	
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	0.95	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-001
 Lab File ID: B0522025.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 18:19
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

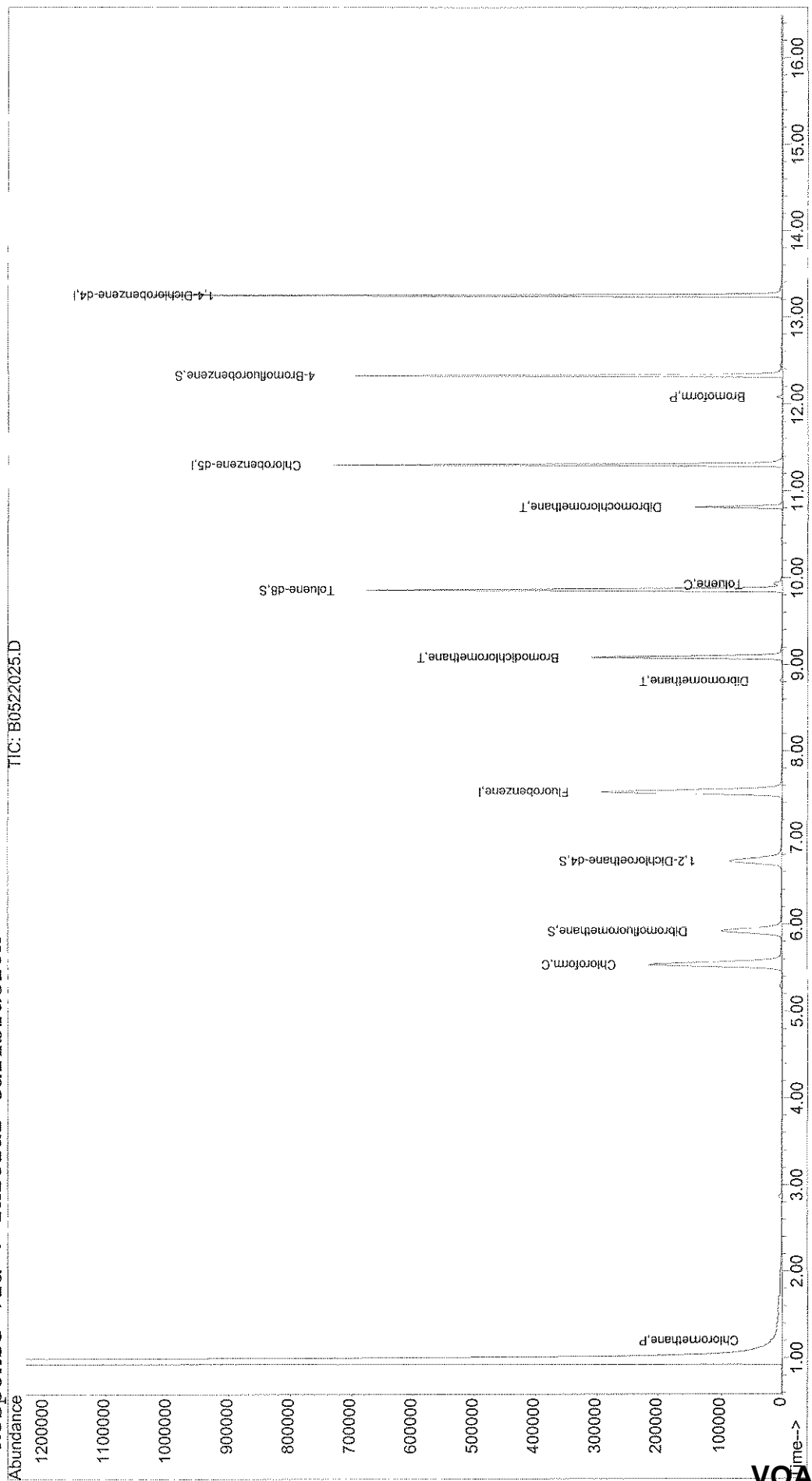
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D Vial: 23
Acq On : 22 May 2008 18:19 Operator: LNH
Sample : JPL114-001 (524.2) Inst : Buddha
Misc : #4 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:19 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D
 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:19 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.53	96	462899	25.00	ug/l	0.00 87.24%
54) Chlorobenzene-d5	11.30	117	357155	25.00	ug/l	0.00 81.18%
74) 1,4-Dichlorobenzene-d4	13.25	152	226536	25.00	ug/l	0.00 87.12%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	118260mS	22.72	ug/l	0.00
Spiked Amount	20.000	Range 85 - 115	Recovery	=	113.60%	
40) 1,2-Dichloroethane-d4	6.72	65	147679	33.41 31.81	ug/l	0.00
Spiked Amount	25.000	Range 70 - 120	Recovery	=	133.64%#	
55) Toluene-d8	9.86	98	424345	24.29 23.17	ug/l	0.00
Spiked Amount	25.000	Range 85 - 120	Recovery	=	97.16%	
76) 4-Bromofluorobenzene	12.32	95	168160	25.07 23.95	ug/l	0.00
Spiked Amount	25.000	Range 75 - 120	Recovery	=	100.28%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	2079	0.31	ug/l	94
4) Vinyl Chloride	1.28	62	369	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	2.87	84	2446	Below Cal	#	77
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\BUDDHA\052208\B0522025.D
 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:19 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	0		N.D.	
27) Ethyl-t-butyl ether	4.38	59	29		N.D.	
28) 2,2-Dichloropropane	0.00	77	0		N.D.	
29) cis-1,2-Dichloroethene	4.81	96	29		N.D.	
30) 2-Butanone	4.90	43	40		N.D.	
31) Propionitrile	5.06	54	30		N.D.	
32) Bromochloromethane	5.29	128	436		N.D.	
33) Methacrylonitrile	5.36	41	30		N.D.	
34) Chloroform	5.54	83	325955	33.14	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	6.09	117	134		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.67	78	34		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	7.13	43	33		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	0.00	83	0		N.D.	
47) 1,2-Dichloropropane	8.68	63	32		N.D.	
48) Dibromomethane	8.81	93	1221mS	0.39	ug/l #	1
49) Methyl methacrylate	8.92	41	35		N.D.	
50) Bromodichloromethane	9.09	83	210662	29.89	ug/l	98
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.86	75	125		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	9.93	92	4279	0.32	ug/l	94
57) trans-1,3-Dichloropropene	10.40	75	31		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	10.42	97	73		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	10.66	76	31		N.D.	
62) 2-Hexanone	10.61	43	37		N.D.	
63) Dibromochloromethane	10.82	129	67748	12.12	ug/l	98
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	752		N.D.	
66) Chlorobenzene	11.40	112	30		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

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

Quantitation Report

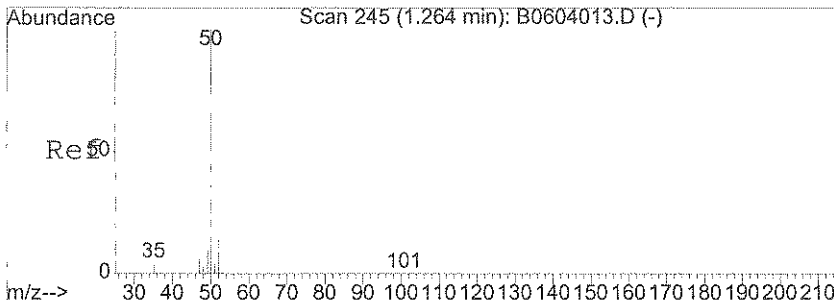
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 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:19 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

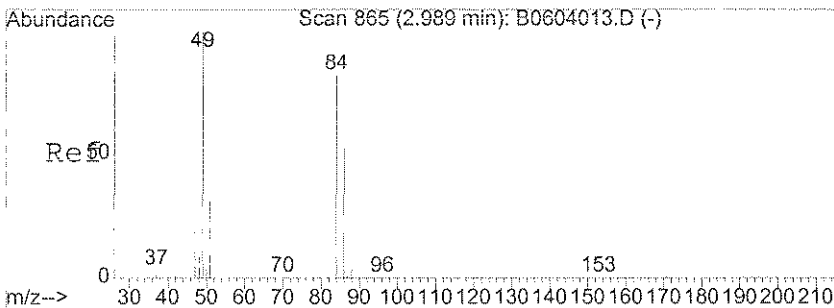
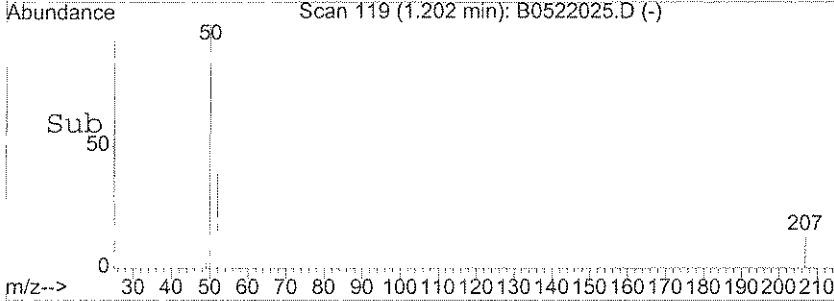
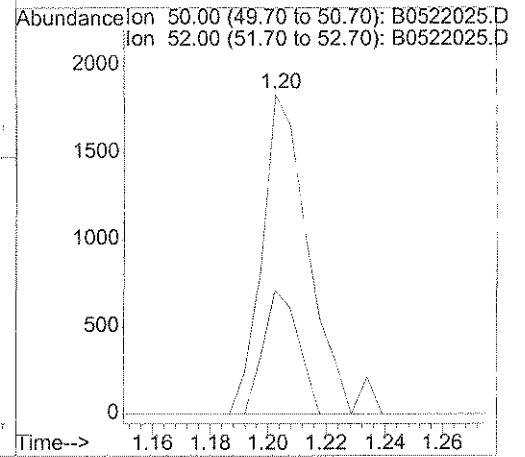
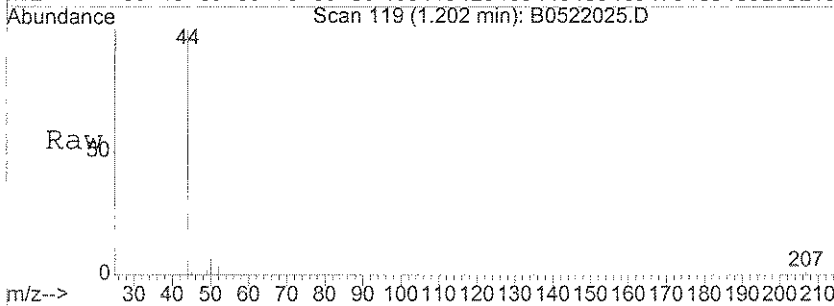
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.33	91	39		N.D.	
69) m,p-Xylene	11.24	106	33		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.08	173	4059	0.95	ug/l	98
73) Isopropylbenzene	12.31	105	36		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.33	156	30		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.33	83	59		N.D.	
79) 1,2,3-Trichloropropane	12.50	75	63		N.D.	
80) n-Propylbenzene	12.53	120	45		N.D.	
81) 2-Chlorotoluene	12.62	91	37		N.D.	
82) 4-Chlorotoluene	12.68	91	60		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	36		N.D.	
84) tert-Butylbenzene	13.18	119	36		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	37		N.D.	
86) sec-butylbenzene	13.08	105	138		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	40		N.D.	
88) 4-Isopropyltoluene	13.20	119	135		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	33		N.D.	
90) 1,2-Dichlorobenzene	13.26	146	33		N.D.	
91) n-Butylbenzene	13.52	91	86		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.11	75	29		N.D.	
93) 1,2,4-Trichlorobenzene	14.78	180	101		N.D.	
94) Hexachlorobutadiene	14.90	225	105		N.D.	
95) Naphthalene	14.97	128	160		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	110		N.D.	



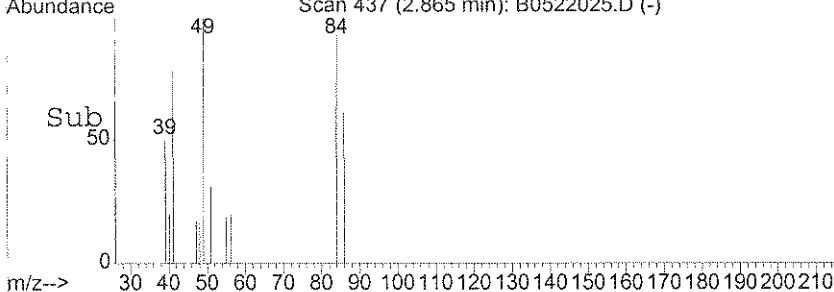
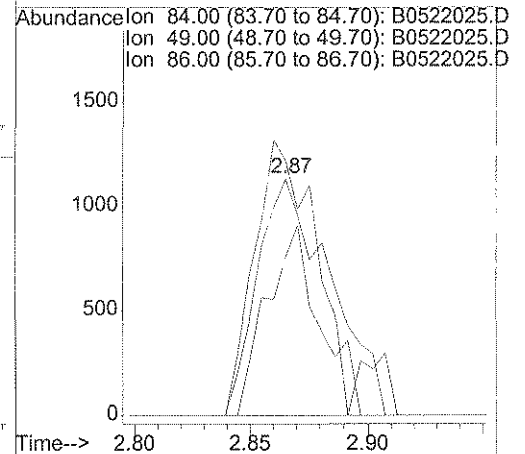
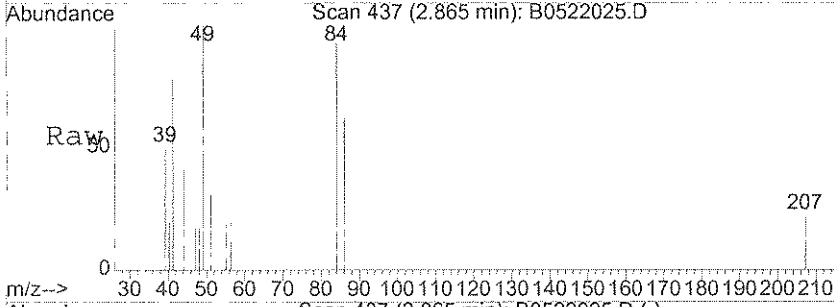
#3
 Chloromethane
 Concen: 0.31 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

Tgt Ion	Resp	Lower	Upper
50	2079		
52	29.2	12.5	52.5



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

Tgt Ion	Resp	Lower	Upper
84	2446		
49	98.1	113.6	153.6#
86	59.0	45.8	85.8



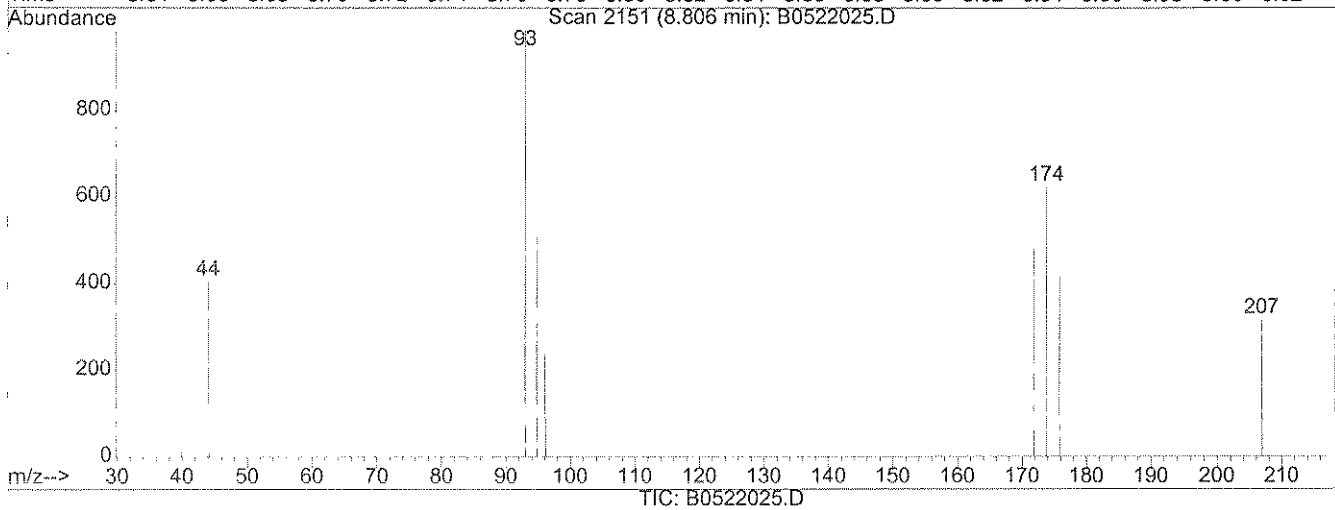
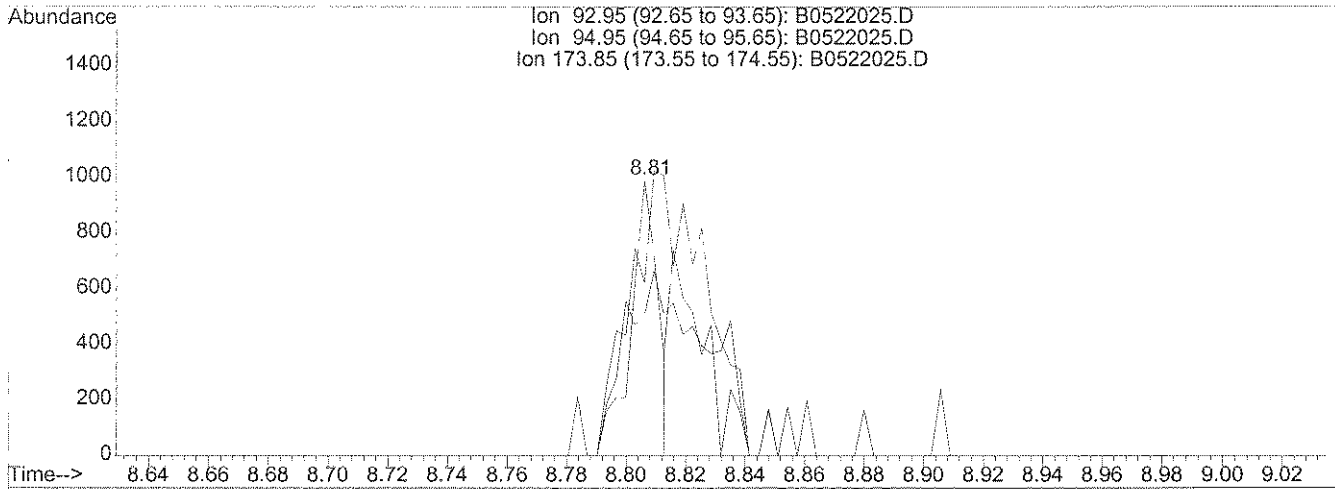
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D
 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:18 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(48) Dibromomethane (T)

8.81min 0.20ug/l

response 632

Ion	Exp%	Act%
92.95	100	100
94.95	78.90	196.99#
173.85	120.30	280.54#
0.00	0.00	0.00

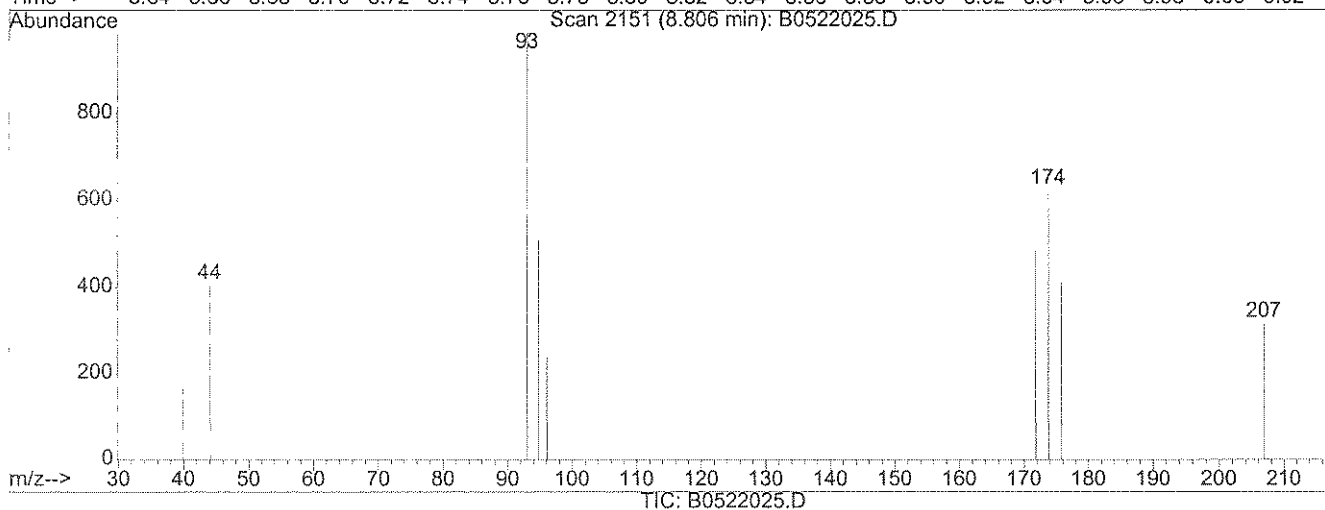
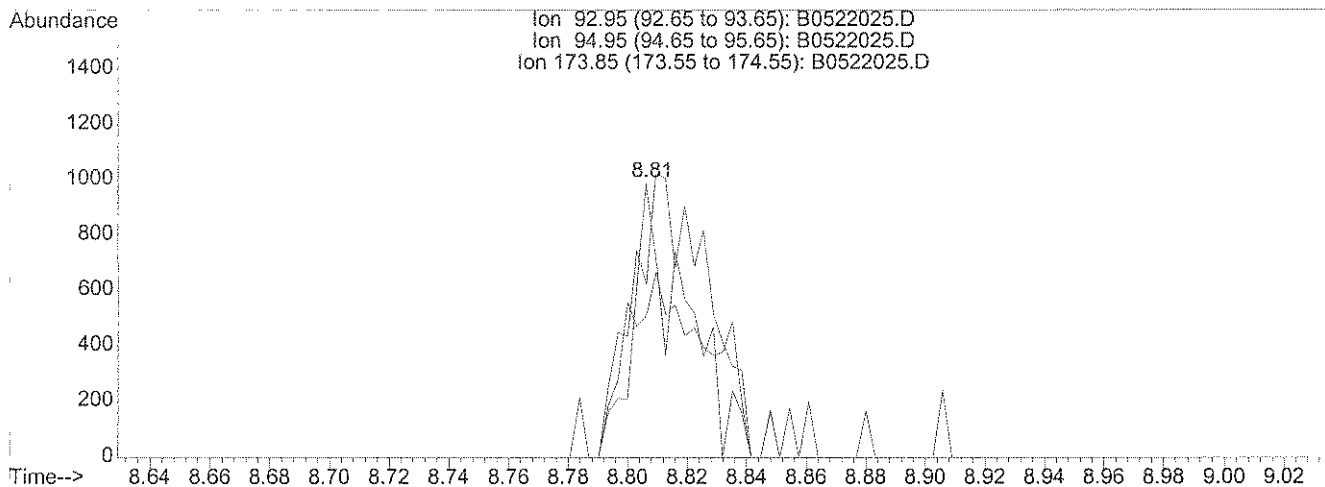
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D
 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:18 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration

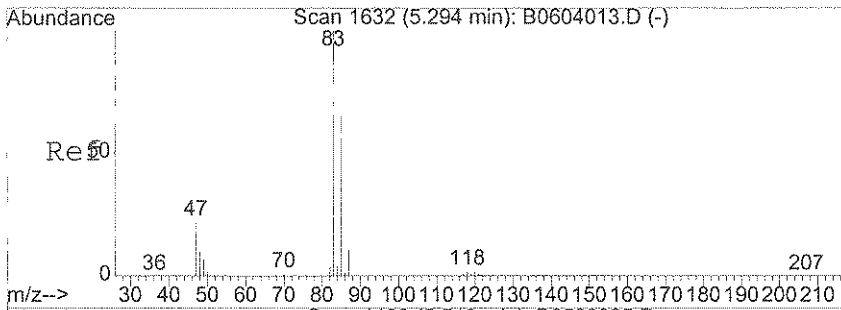


(48) Dibromomethane (T)

8.81min 0.39ug/l m

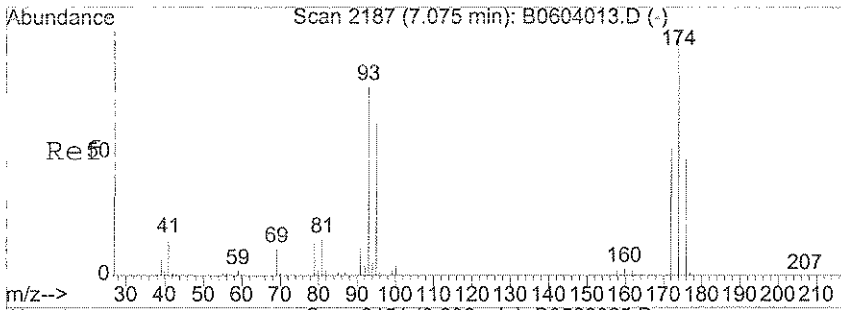
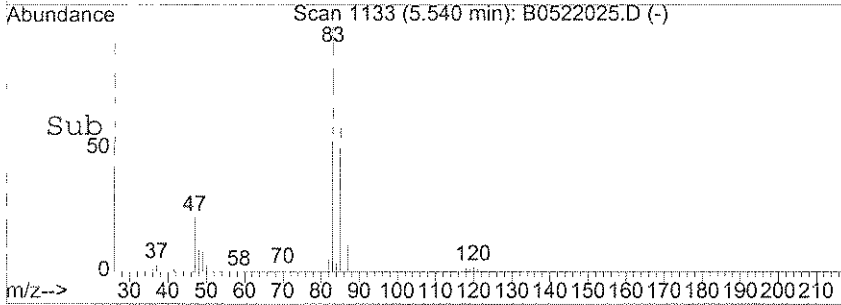
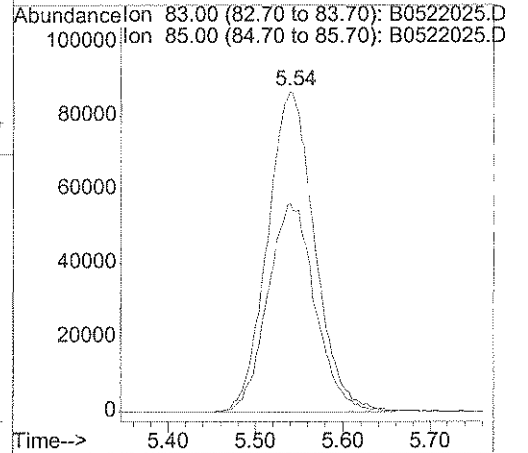
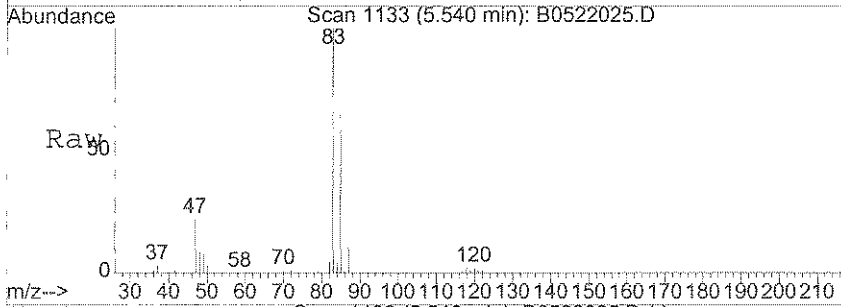
response 1221

Ion	Exp%	Act%
92.95	100	100
94.95	78.90	101.97#
173.85	120.30	145.21#
0.00	0.00	0.00



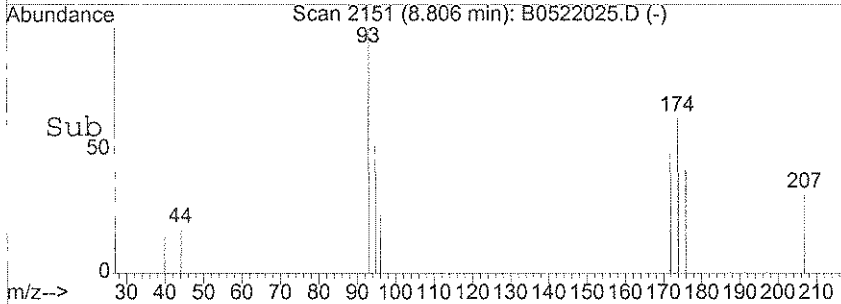
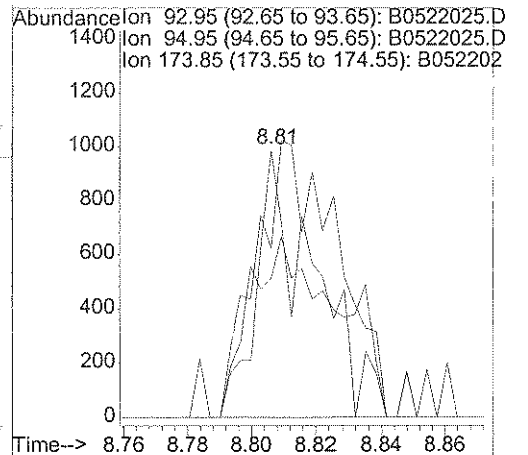
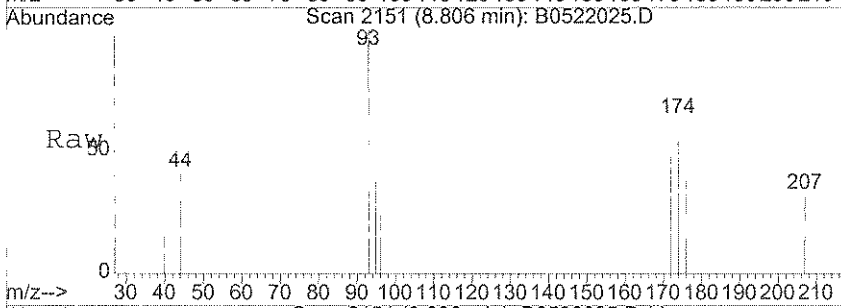
#34
 Chloroform
 Concen: 33.14 ug/l
 RT: 5.54 min Scan# 1133
 Delta R.T. -0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

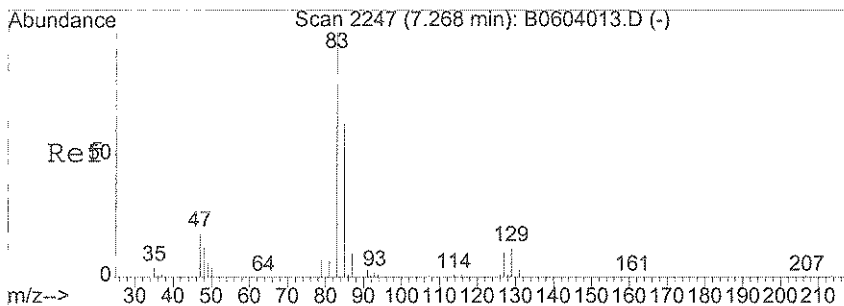
Tgt Ion	Resp	Lower	Upper
83	325955		
85	64.9	44.0	84.0



#48
 Dibromomethane
 Concen: 0.39 ug/l m
 RT: 8.81 min Scan# 2151
 Delta R.T. -0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

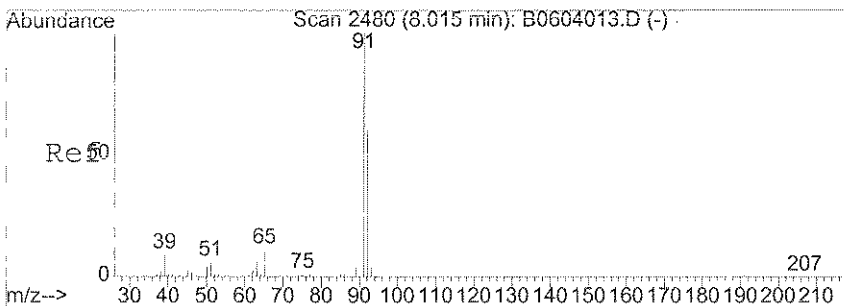
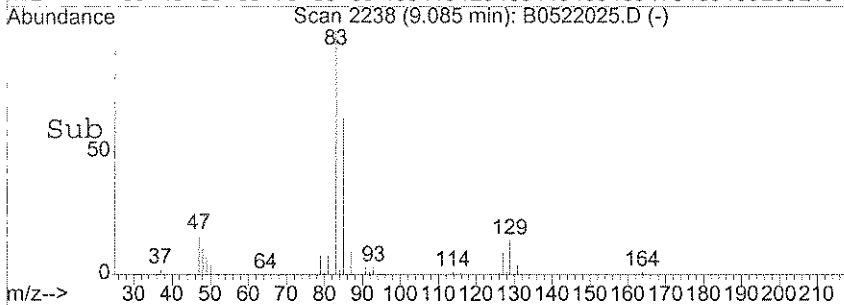
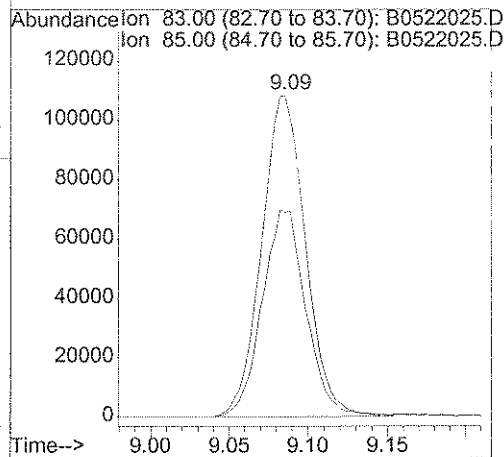
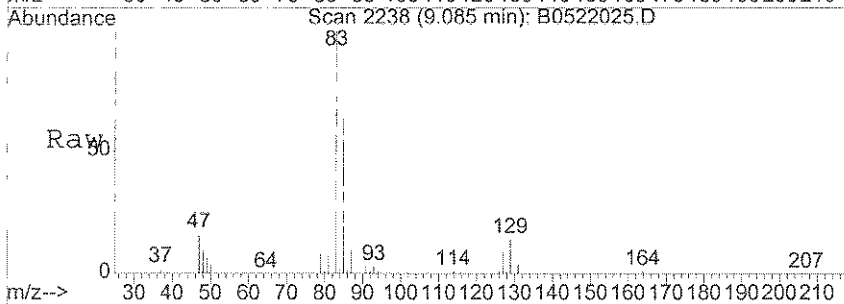
Tgt Ion	Resp	Lower	Upper
93	1221		
95	102.0	63.1	94.7#
174	145.2	96.2	144.4#





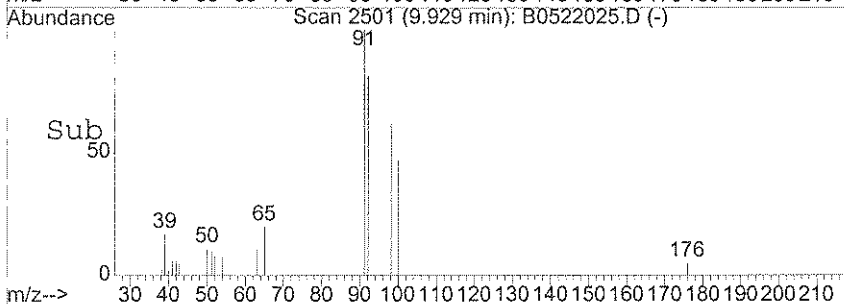
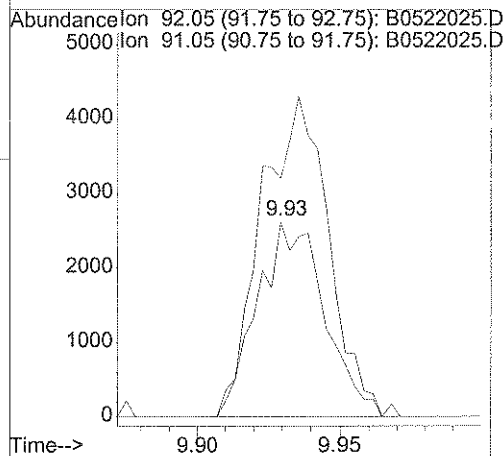
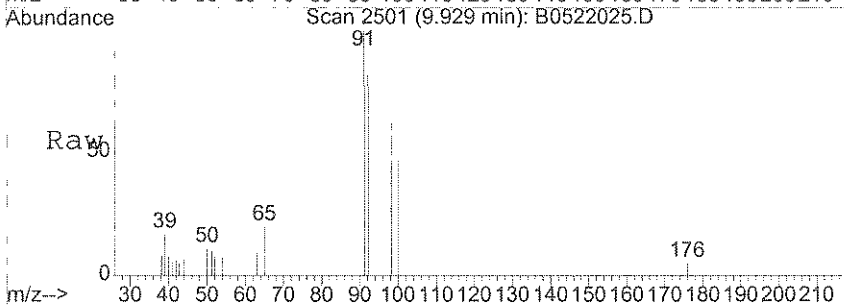
#50
 Bromodichloromethane
 Concen: 29.89 ug/l
 RT: 9.09 min Scan# 2238
 Delta R.T. 0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

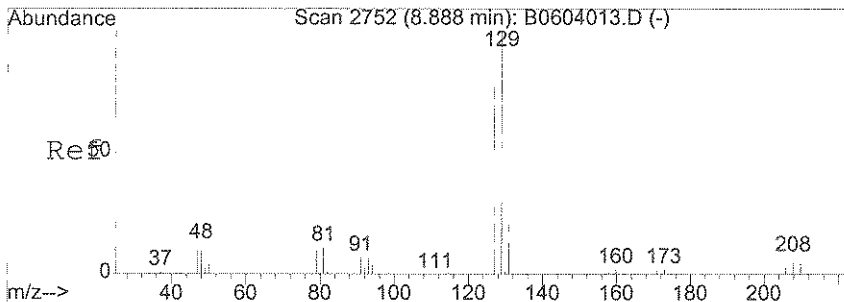
Tgt Ion:	83	Resp:	210662
Ion Ratio	Lower	Upper	
83	100		
85	64.2	43.0	83.0



#56
 Toluene
 Concen: 0.32 ug/l
 RT: 9.93 min Scan# 2501
 Delta R.T. -0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

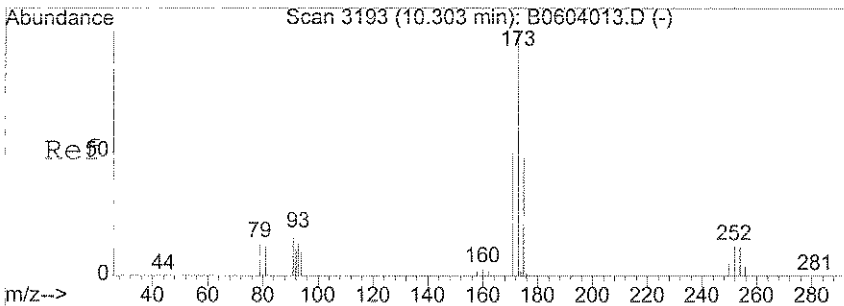
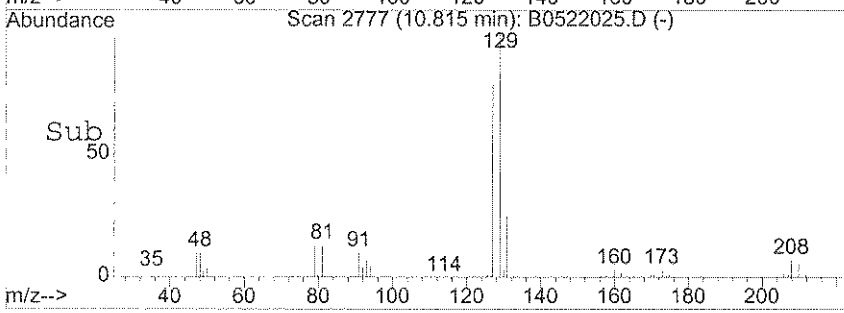
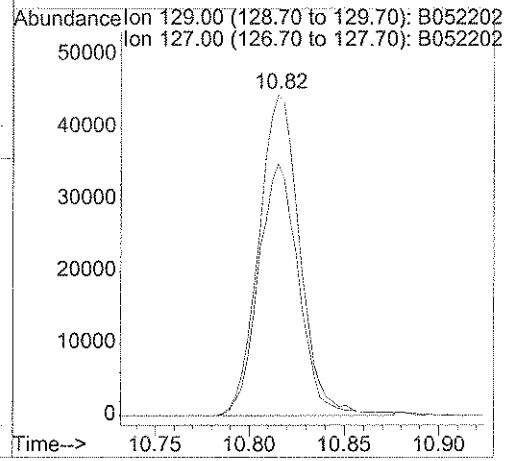
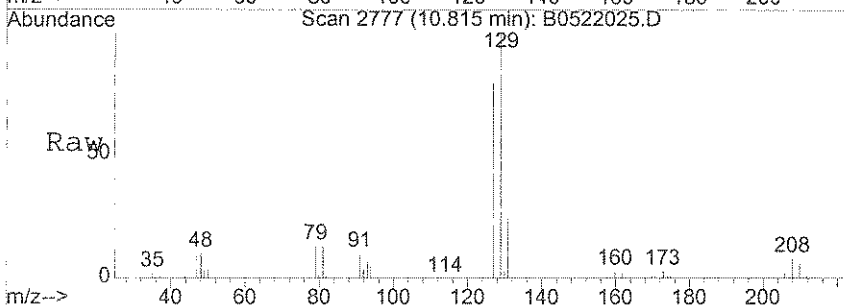
Tgt Ion:	92	Resp:	4279
Ion Ratio	Lower	Upper	
92	100		
91	163.8	137.6	206.4





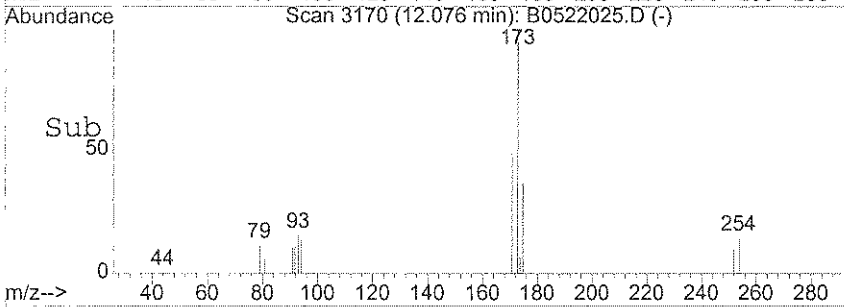
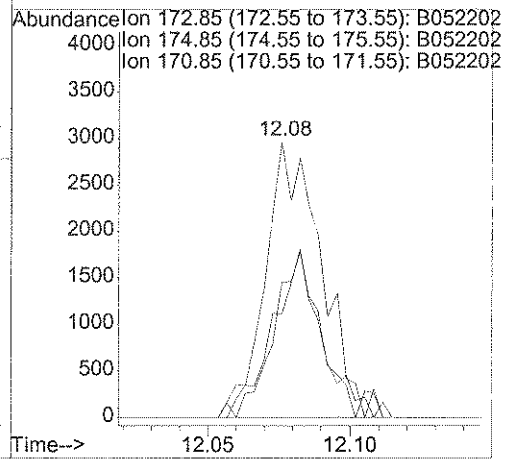
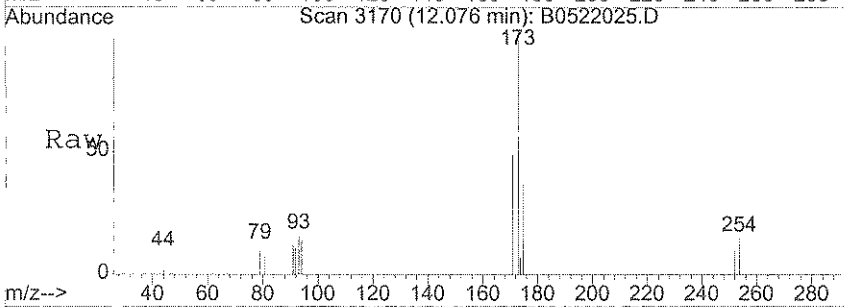
#63
 Dibromochloromethane
 Concen: 12.12 ug/l
 RT: 10.82 min Scan# 2777
 Delta R.T. -0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

Tgt Ion	Resp	Lower	Upper
129	67748		
127	76.8	58.5	98.5



#72
 Bromoform
 Concen: 0.95 ug/l
 RT: 12.08 min Scan# 3170
 Delta R.T. -0.00 min
 Lab File: B0522025.D
 Acq: 22 May 2008 18:19

Tgt Ion	Resp	Lower	Upper
173	4059		
175	51.1	39.4	59.0
171	52.1	40.9	61.3



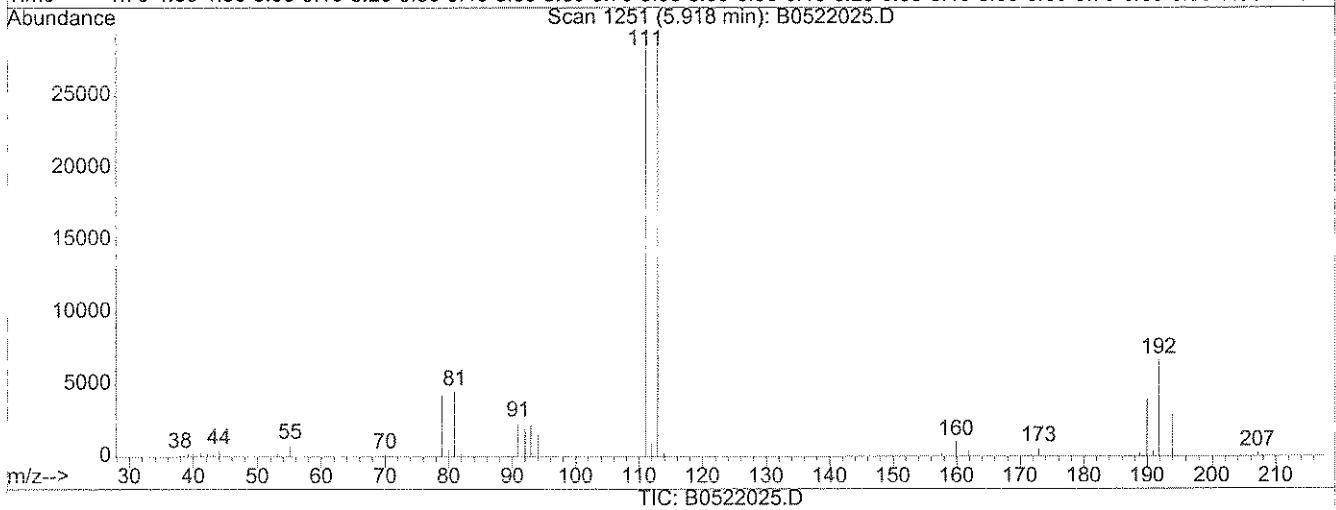
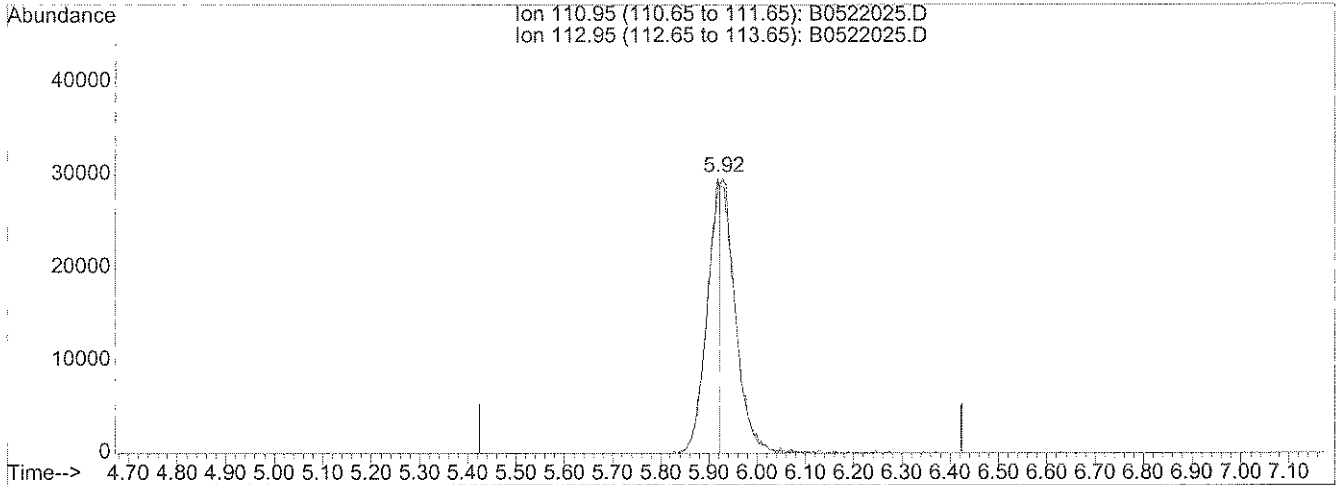
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D
 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:17 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.92min 10.23ug/l

response 53265

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	219.77#
0.00	0.00	0.00
0.00	0.00	0.00

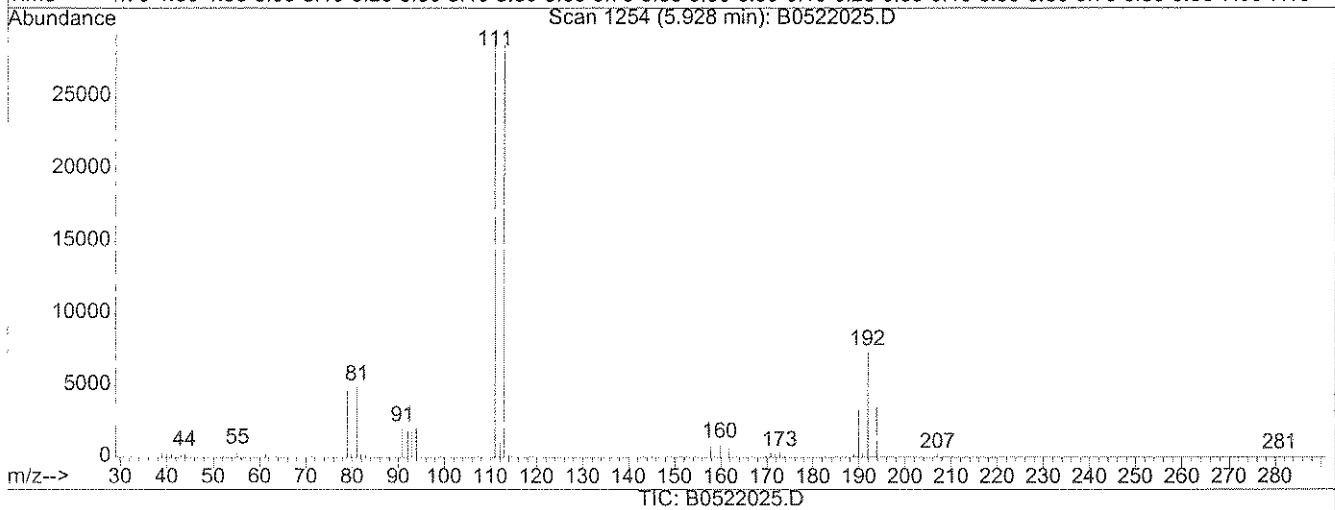
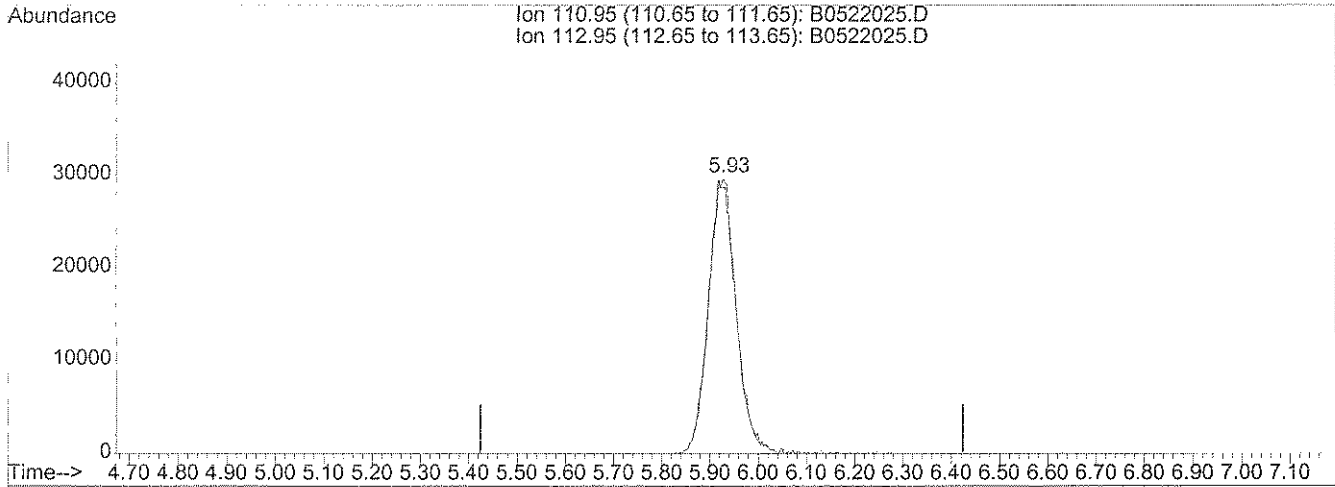
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D
 Acq On : 22 May 2008 18:19
 Sample : JPL114-001 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:18 2008

Vial: 23
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.93min 22.72ug/l m

response 118260

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	98.98
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-5-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-002
 Lab File ID: B0522026.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 18:45
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <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	36	
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	0.41	J
75-27-4	Bromodichloromethane	30	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-5-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-002
 Lab File ID: B0522026.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 18:45
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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	12	
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	1.0	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-5-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-002
 Lab File ID: B0522026.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 18:45
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

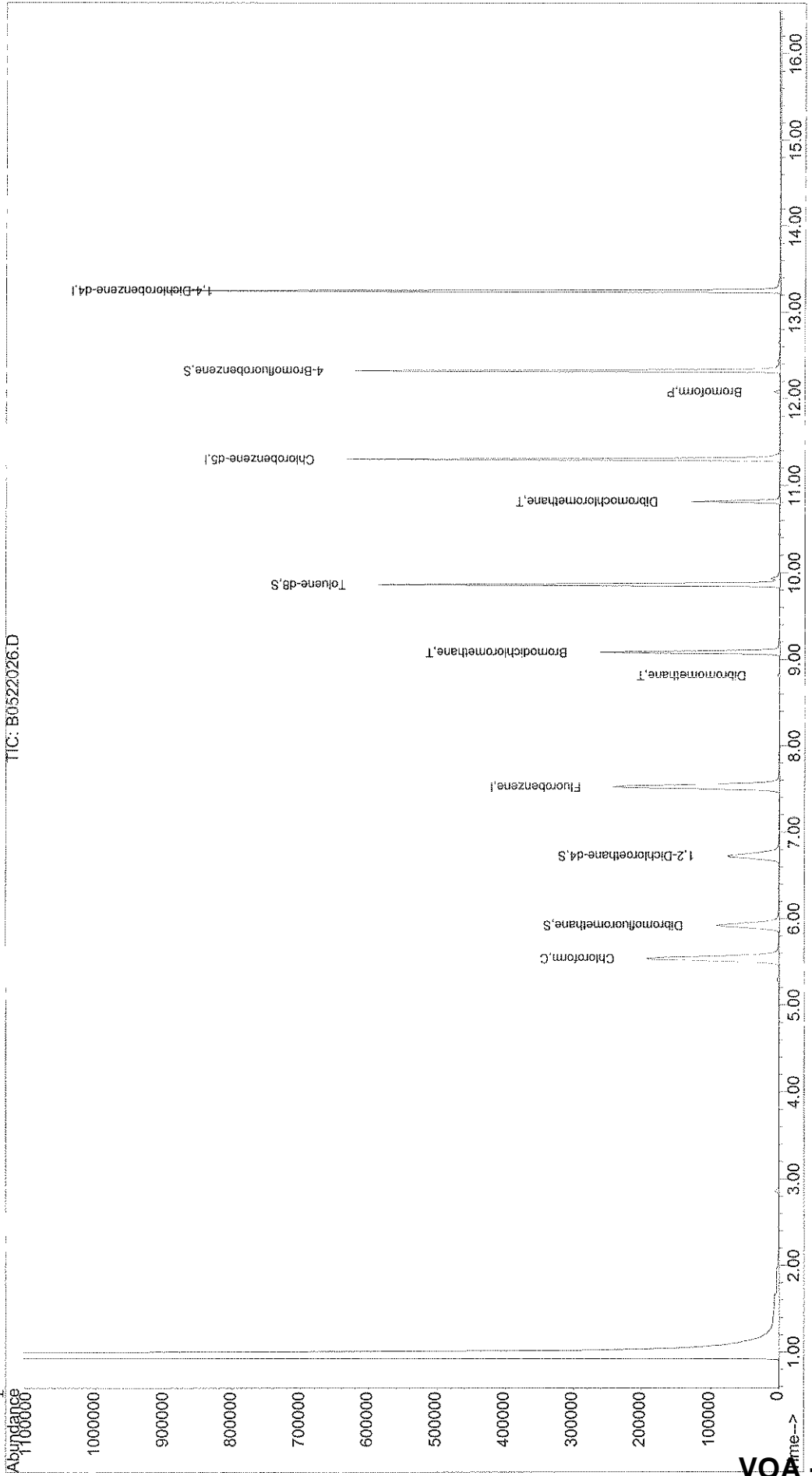
CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D Vial: 24
Acq On : 22 May 2008 18:45 Operator: LNH
Sample : JPL114-002 (524.2) Inst : Buddha
Misc : #4 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:20 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D
 Acq On : 22 May 2008 18:45
 Sample : JPL114-002 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:20 2008

Vial: 24
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.52	96	393781	25.00	ug/l	0.00 74.21%
54) Chlorobenzene-d5	11.30	117	316731	25.00	ug/l	0.00 71.99%
74) 1,4-Dichlorobenzene-d4	13.25	152	206244	25.00	ug/l	0.00 79.32%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	106828	24.13	ug/l	0.00
Spiked Amount	20.000	Range 85 - 115	Recovery	=	120.65%#	
40) 1,2-Dichloroethane-d4	6.72	65	130084	34.60	ug/l	0.00
Spiked Amount	25.000	Range 70 - 120	Recovery	33.01	=	138.40%#
55) Toluene-d8	9.86	98	375070	24.21	ug/l	0.00
Spiked Amount	25.000	Range 85 - 120	Recovery	23.09	=	96.84%
76) 4-Bromofluorobenzene	12.32	95	152175	24.92	ug/l	0.00
Spiked Amount	25.000	Range 75 - 120	Recovery	=	99.68%	

Target Compounds

2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	725	N.D.		
4) Vinyl Chloride	1.28	62	243	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	2.87	84	2328	Below Cal		86
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.		

23.81
 OLNH 5/23/08
 Qvalue

OLNH 5/27/08

(#) = qualifier out of range (m) = manual integration
 B0522026.D B8260W.M Fri May 23 16:20:33 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D
 Acq On : 22 May 2008 18:45
 Sample : JPL114-002 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:20 2008

Vial: 24
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	63		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.76	96	32		N.D.	
30) 2-Butanone	4.97	43	46		N.D.	
31) Propionitrile	5.13	54	29		N.D.	
32) Bromochloromethane	5.30	128	365		N.D.	
33) Methacrylonitrile	5.48	41	37		N.D.	
34) Chloroform	5.53	83	299325mS	35.77	ug/l	19
35) 1,1,1-Trichloroethane	5.76	97	29		N.D.	
36) Cyclohexane	5.74	56	34		N.D.	
38) Carbon Tetrachloride	6.08	117	167		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.69	78	43		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	8.81	93	1093	0.41	ug/l #	68
49) Methyl methacrylate	8.96	41	34		N.D.	
50) Bromodichloromethane	9.08	83	182703	30.48	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	9.93	92	1697		N.D.	
57) trans-1,3-Dichloropropene	10.21	75	30		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	10.73	43	33		N.D.	
63) Dibromochloromethane	10.81	129	60684	12.25	ug/l	99
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	425		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
 B0522026.D B8260W.M Fri May 23 16:20:33 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D
 Acq On : 22 May 2008 18:45
 Sample : JPL114-002 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:20 2008

Vial: 24
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.45	91	35		N.D.	
69) m,p-Xylene	0.00	106	0		N.D.	
70) o-xylene	12.15	106	29		N.D.	
71) Styrene	11.89	104	31		N.D.	
72) Bromoform	12.08	173	3960	1.04	ug/l	90
73) Isopropylbenzene	12.31	105	33		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.32	156	66		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.36	83	39		N.D.	
79) 1,2,3-Trichloropropane	12.65	75	46		N.D.	
80) n-Propylbenzene	12.65	120	31		N.D.	
81) 2-Chlorotoluene	12.52	91	73		N.D.	
82) 4-Chlorotoluene	12.68	91	57		N.D.	
83) 1,3,5-Trimethylbenzene	12.95	105	31		N.D.	
84) tert-Butylbenzene	13.20	119	51		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	31		N.D.	
86) sec-butylbenzene	13.08	105	35		N.D.	
87) 1,3-Dichlorobenzene	0.00	146	0		N.D.	
88) 4-Isopropyltoluene	13.20	119	51		N.D.	
89) 1,4-Dichlorobenzene	13.56	146	44		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	44		N.D.	
91) n-Butylbenzene	13.52	91	86		N.D.	
92) 1,2-Dibromo-3-chloropropan	13.85	75	32		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	67		N.D.	
94) Hexachlorobutadiene	14.89	225	40		N.D.	
95) Naphthalene	14.98	128	64		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	50		N.D.	

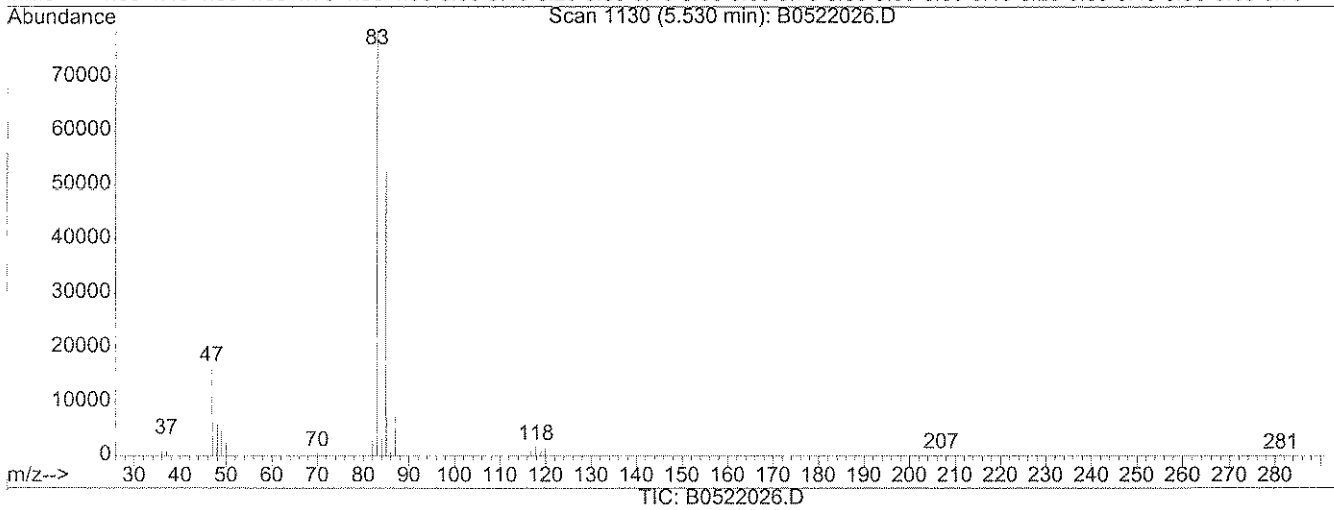
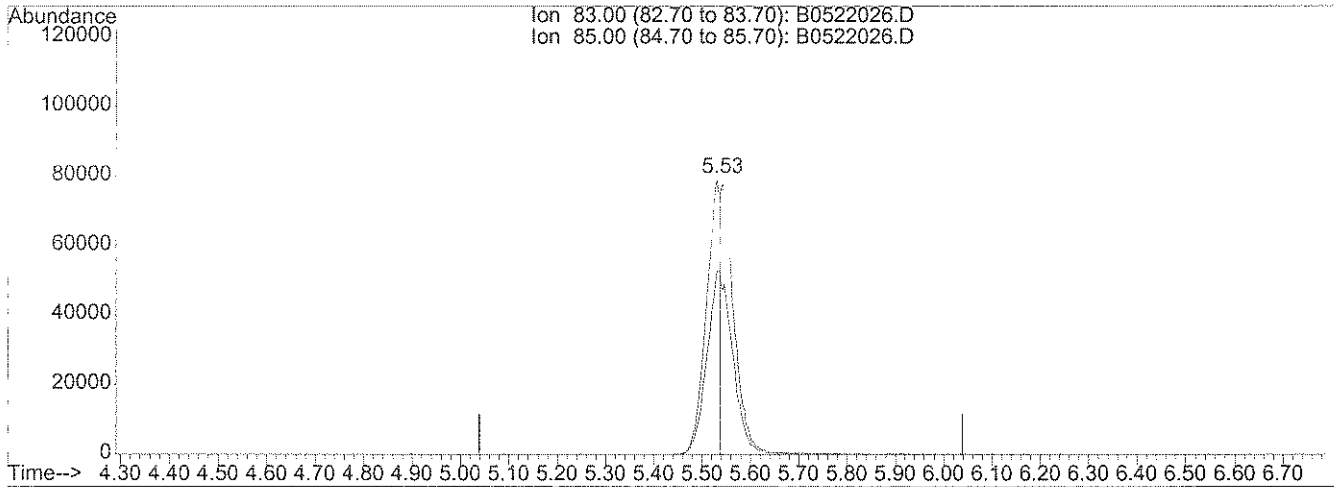
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D
Acq On : 22 May 2008 18:45
Sample : JPL114-002 (524.2)
Misc : #4 10ML+IS/SS
MS Integration Params: rteint.p
Quant Time: May 23 16:20 2008

Vial: 24
Operator: LNH
Inst : Buddha
Multiplr: 1.00
Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Multiple Level Calibration



(34) Chloroform (C)

5.53min 18.24ug/l

response 152646

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	127.35#
0.00	0.00	0.00
0.00	0.00	0.00

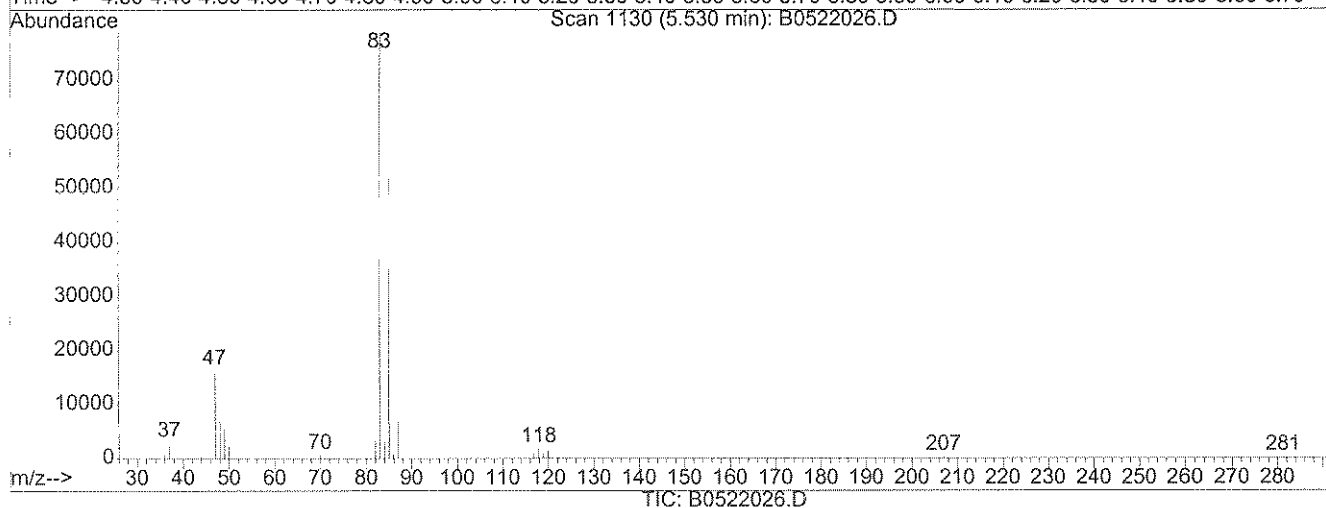
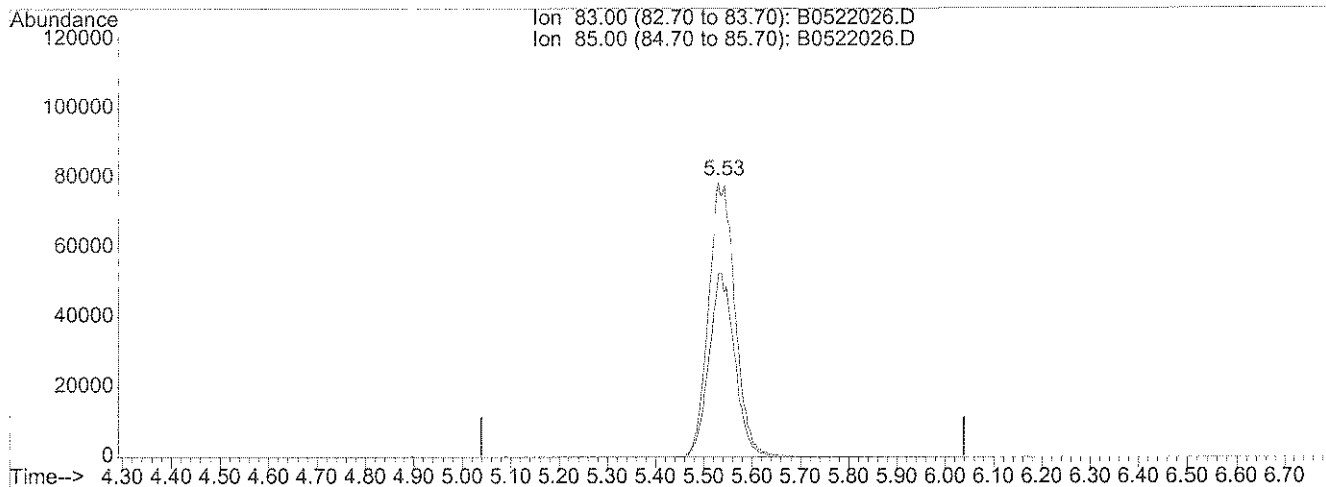
Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D
 Acq On : 22 May 2008 18:45
 Sample : JPL114-002 (524.2)
 Misc : #4 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:20 2008

Vial: 24
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Multiple Level Calibration

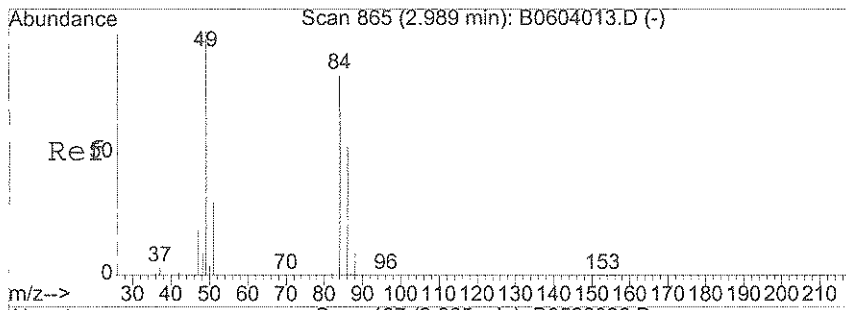


(34) Chloroform (C)

5.53min 35.77ug/l m

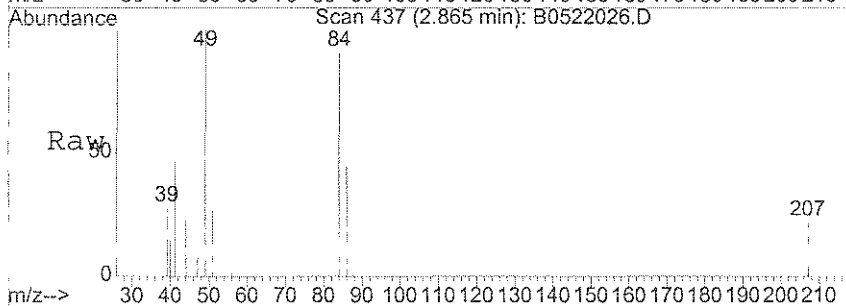
response 299325

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	64.94
0.00	0.00	0.00
0.00	0.00	0.00

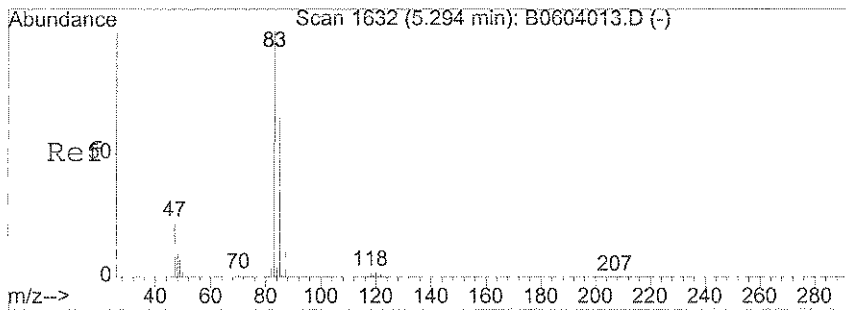
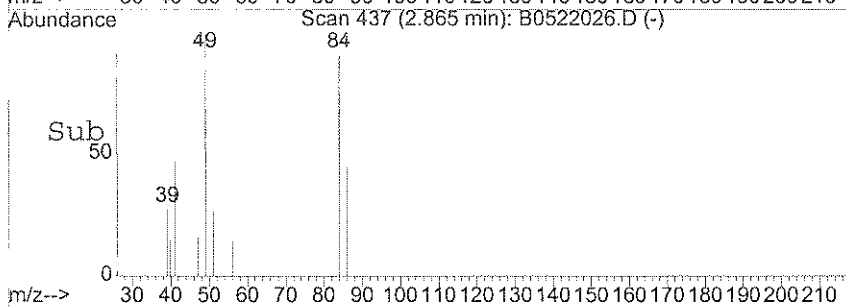
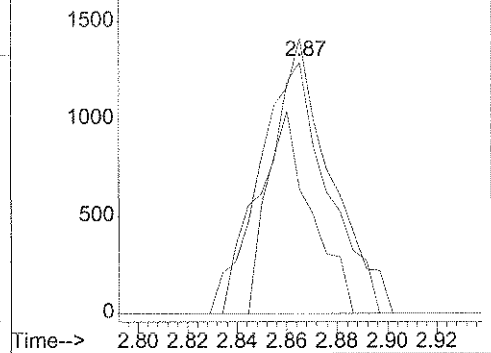


#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0522026.D
 Acq: 22 May 2008 18:45

Tgt Ion	Resp	Lower	Upper
84	2328		
49	116.4	113.6	153.6
86	56.0	45.8	85.8

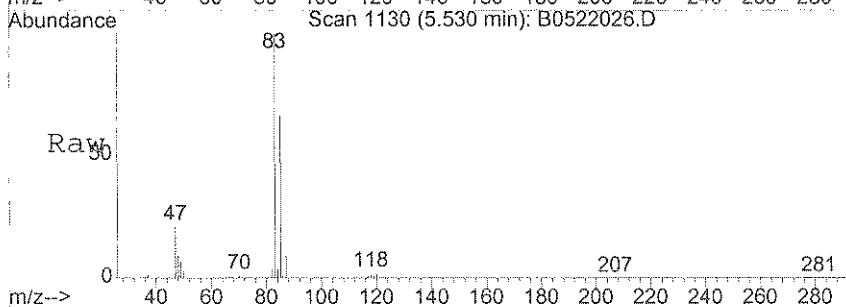


Abundance Ion 84.00 (83.70 to 84.70): B0522026.D
 Ion 49.00 (48.70 to 49.70): B0522026.D
 Ion 86.00 (85.70 to 86.70): B0522026.D

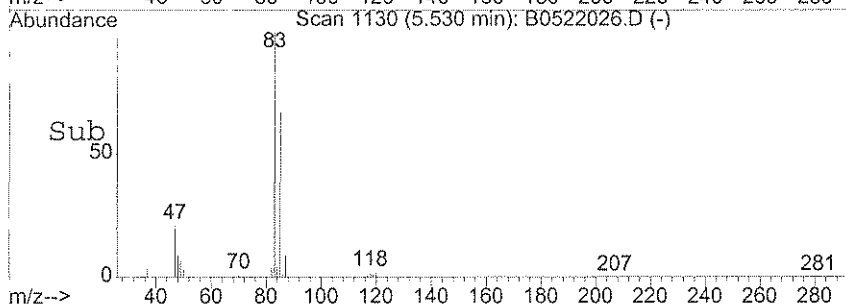
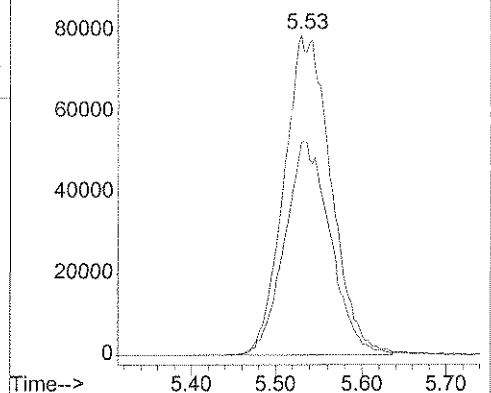


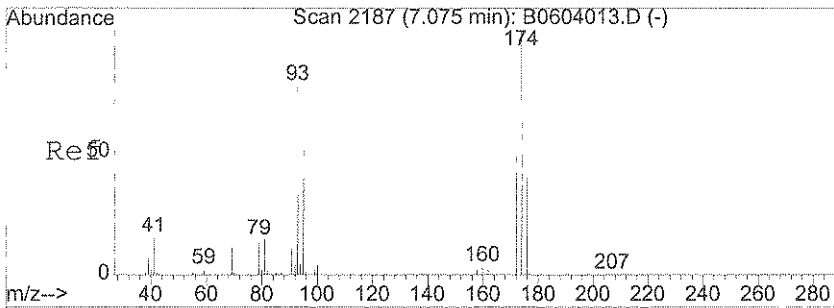
#34
 Chloroform
 Concen: 35.77 ug/l m
 RT: 5.53 min Scan# 1130
 Delta R.T. -0.01 min
 Lab File: B0522026.D
 Acq: 22 May 2008 18:45

Tgt Ion	Resp	Lower	Upper
83	299325		
85	64.9	44.0	84.0



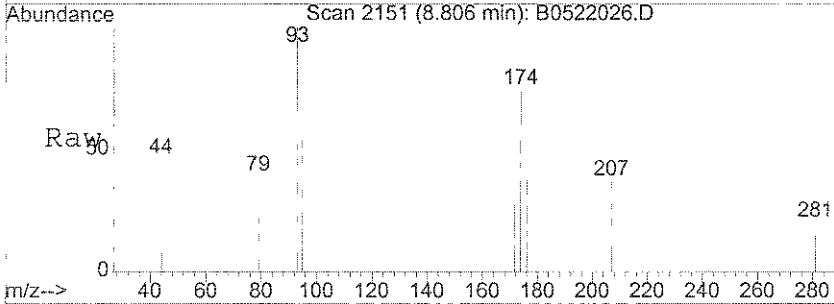
Abundance Ion 83.00 (82.70 to 83.70): B0522026.D
 Ion 85.00 (84.70 to 85.70): B0522026.D



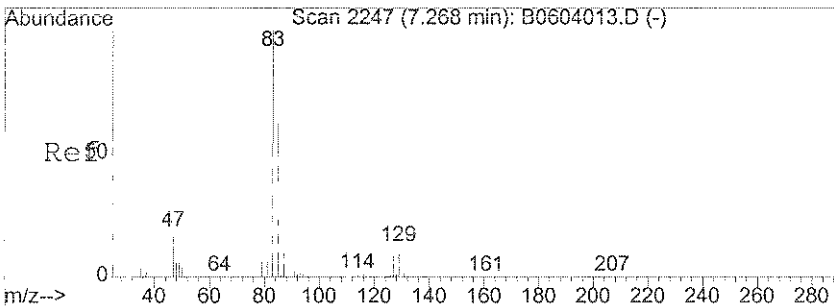
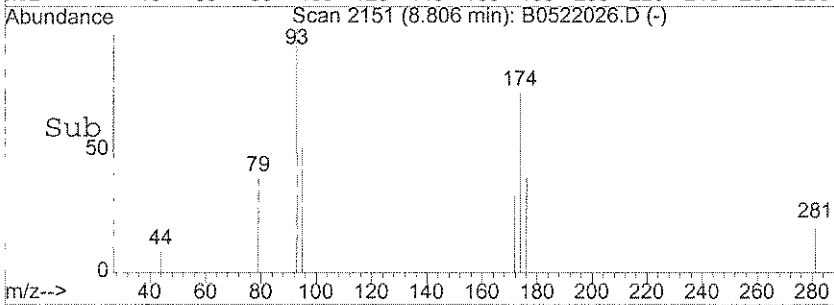
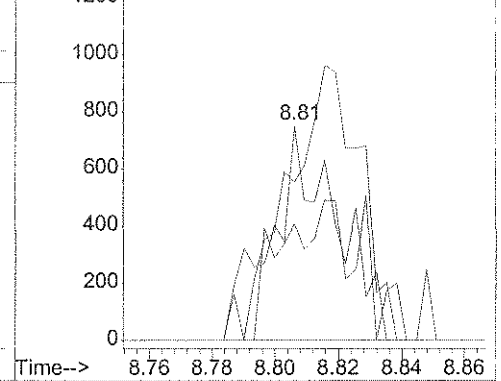


#48
 Dibromomethane
 Concen: 0.41 ug/l
 RT: 8.81 min Scan# 2151
 Delta R.T. -0.00 min
 Lab File: B0522026.D
 Acq: 22 May 2008 18:45

Tgt Ion	Resp	Lower	Upper
93	1093		
95	30.7	63.1	94.7#
174	139.5	96.2	144.4

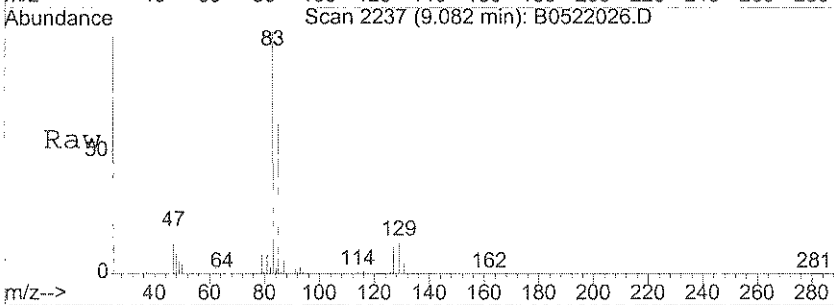


Abundance
 Ion 92.95 (92.65 to 93.65): B0522026.D
 Ion 94.95 (94.65 to 95.65): B0522026.D
 Ion 173.85 (173.55 to 174.55): B0522026.D

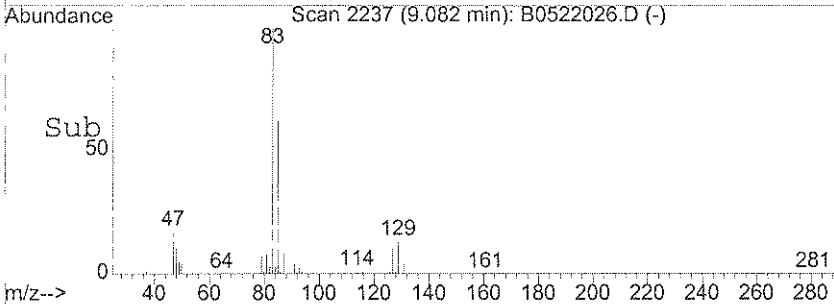
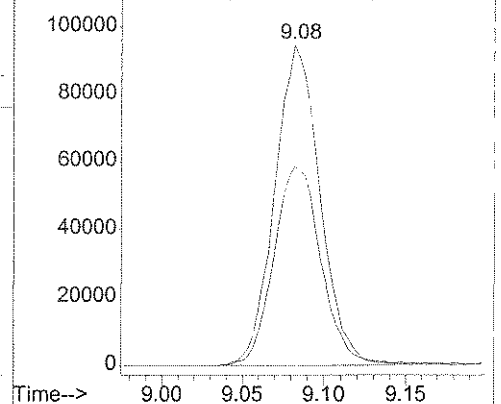


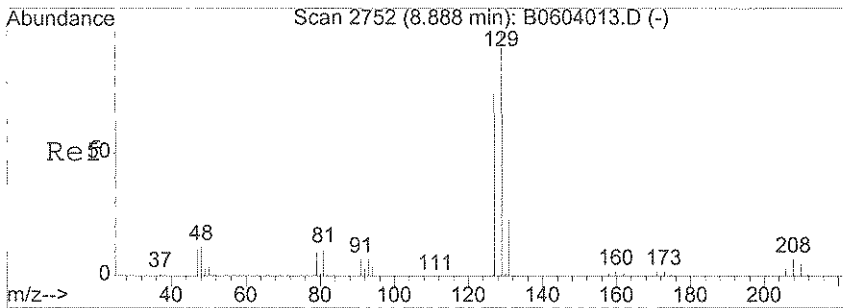
#50
 Bromodichloromethane
 Concen: 30.48 ug/l
 RT: 9.08 min Scan# 2237
 Delta R.T. -0.00 min
 Lab File: B0522026.D
 Acq: 22 May 2008 18:45

Tgt Ion	Resp	Lower	Upper
83	182703		
85	64.6	43.0	83.0



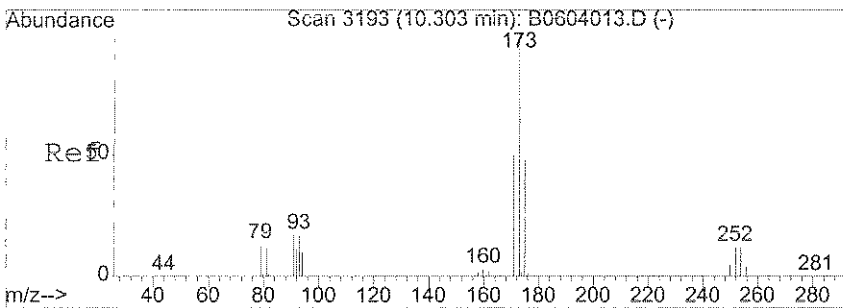
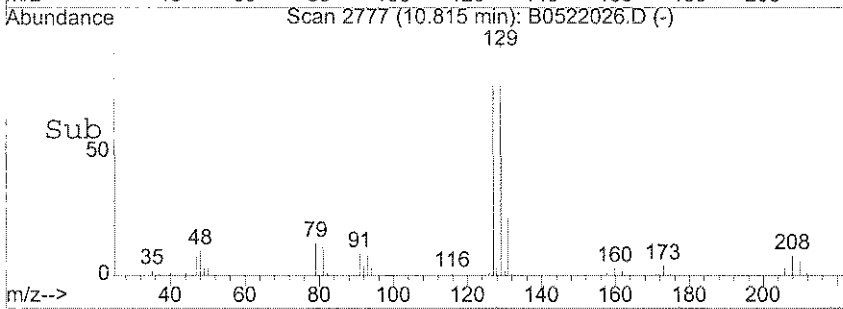
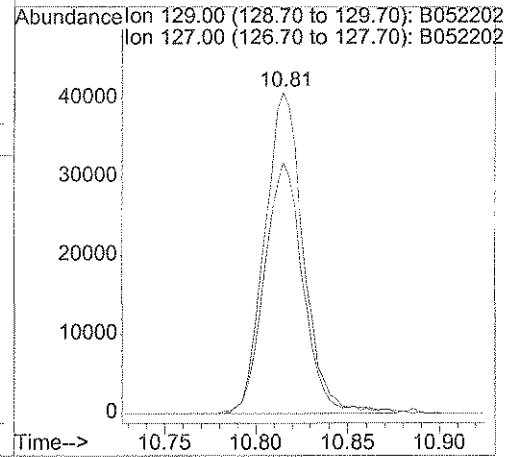
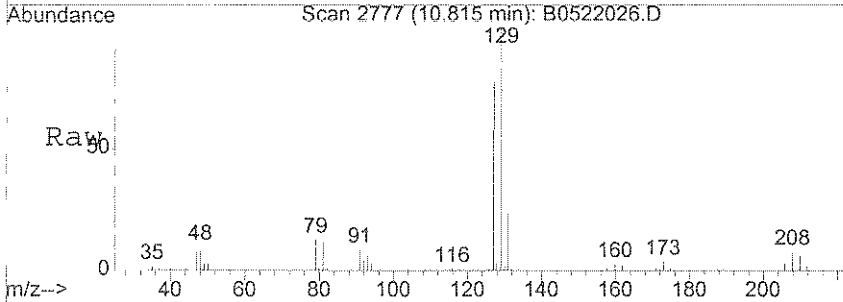
Abundance
 Ion 83.00 (82.70 to 83.70): B0522026.D
 Ion 85.00 (84.70 to 85.70): B0522026.D





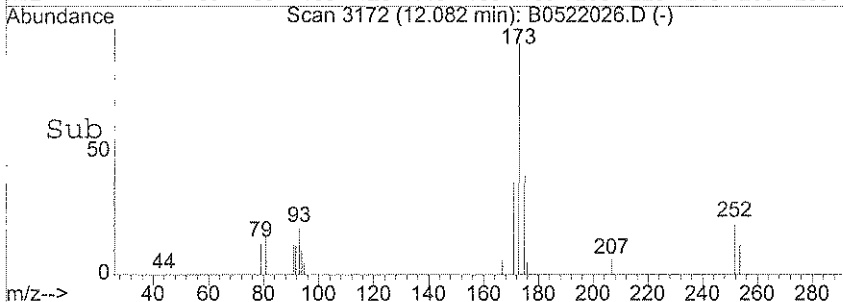
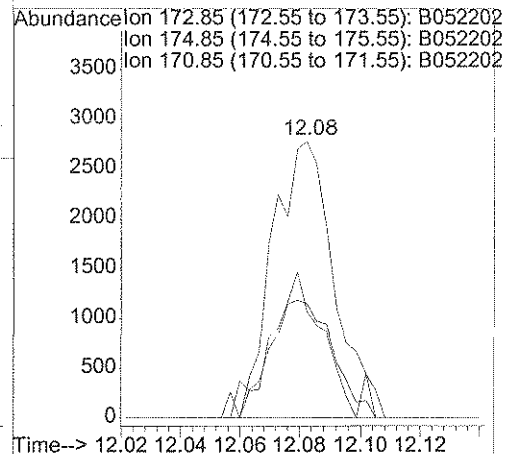
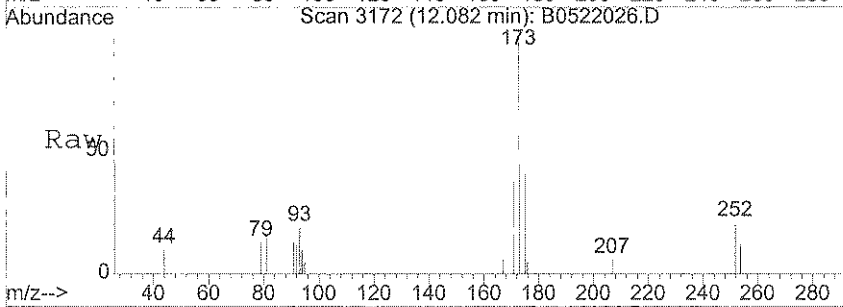
#63
 Dibromochloromethane
 Concen: 12.25 ug/l
 RT: 10.81 min Scan# 2777
 Delta R.T. -0.00 min
 Lab File: B0522026.D
 Acq: 22 May 2008 18:45

Tgt Ion:129 Resp: 60684
 Ion Ratio Lower Upper
 129 100
 127 78.1 58.5 98.5



#72
 Bromoform
 Concen: 1.04 ug/l
 RT: 12.08 min Scan# 3172
 Delta R.T. 0.00 min
 Lab File: B0522026.D
 Acq: 22 May 2008 18:45

Tgt Ion:173 Resp: 3960
 Ion Ratio Lower Upper
 173 100
 175 43.1 39.4 59.0
 171 43.3 40.9 61.3



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-17-5/20/08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-003
 Lab File ID: B0522016.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 14:14
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-17-5/20/08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-003
 Lab File ID: B0522016.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 14:14
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-17-5/20/08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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

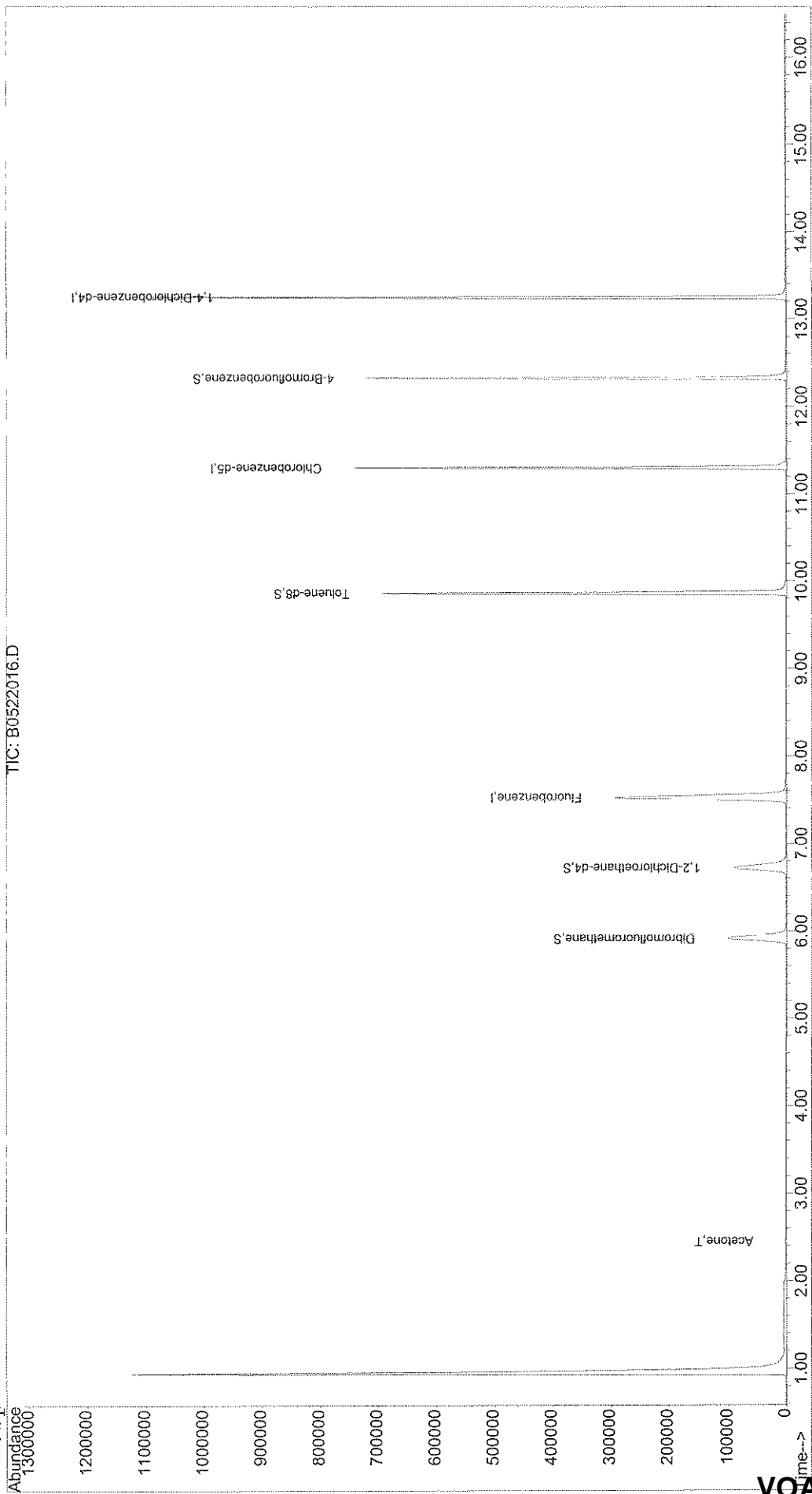
Contract: JPL Groundwater Monitorin
 Run Sequence: R028288
 Lab Sample ID: JPL114-003
 Lab File ID: B0522016.d
 Date Collected: 05/20/2008
 Date/Time Analyzed: 05/22/2008 14:14
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	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:

Data File : X:\MSVOA\BUDDHA\052208\B0522016.D Vial: 14
Acq On : 22 May 2008 14:14 Operator: LNH
Sample : JPL114-003 TB Inst : Buddha
Misc : #2 10ML+IS/SS Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 23 16:08 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Thu May 22 11:59:50 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522016.D
 Acq On : 22 May 2008 14:14
 Sample : JPL114-003 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:08 2008

Vial: 14
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.53	96	474904	25.00	ug/l	0.00	89.50%
54) Chlorobenzene-d5	11.30	117	372396	25.00	ug/l	0.00	84.65%
74) 1,4-Dichlorobenzene-d4	13.25	152	236227	25.00	ug/l	0.00	90.85%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	125621	23.52	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	117.60%#	
40) 1,2-Dichloroethane-d4	6.72	65	152697	33.68	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	32.13	134.72%#	
55) Toluene-d8	9.86	98	447002	24.54	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	23.41	98.16%	
76) 4-Bromofluorobenzene	12.32	95	172929	24.72	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	98.88%	

Target Compounds

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	2.45	43	1512	0.94	ug/l #	59	
12) Iodomethane	0.00	142	0	N.D.			
13) Bromoethane	0.00	108	0	N.D.			
14) Carbon Disulfide	2.50	76	145	N.D.			
15) Allyl chloride	0.00	76	0	N.D.			
16) Acetonitrile	0.00	41	0	N.D.			
17) Methyl Acetate	2.75	43	65	N.D.			
18) Methylene Chloride	2.87	84	1330	Below Cal	#	69	
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.			

23.62
Chart 5/20/08
 Qvalue

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052208\B0522016.D
 Acq On : 22 May 2008 14:14
 Sample : JPL114-003 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:08 2008

Vial: 14
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.77	96	31		N.D.	
30) 2-Butanone	4.93	43	48		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	6.71	78	36		N.D.	
42) 1,2-Dichloroethane	6.92	62	33		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	7.27	43	30		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	8.41	83	46		N.D.	
47) 1,2-Dichloropropane	8.40	63	30		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.83	41	39		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	9.93	92	190		N.D.	
57) trans-1,3-Dichloropropene	0.00	75	0		N.D.	
58) Ethyl methacrylate	10.35	69	36		N.D.	
59) 1,1,2-Trichloroethane	10.39	97	33		N.D.	
60) Tetrachloroethene	10.48	166	31		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.73	43	74		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.32	91	139		N.D.	
66) Chlorobenzene	11.32	112	38		N.D.	
67) 1,1,1,2-Tetrachloroethane	11.43	131	30		N.D.	

QAM 5/27/08

(#) = qualifier out of range (m) = manual integration
 B0522016.D B8260W.M Fri May 23 16:08:49 2008

Quantitation Report

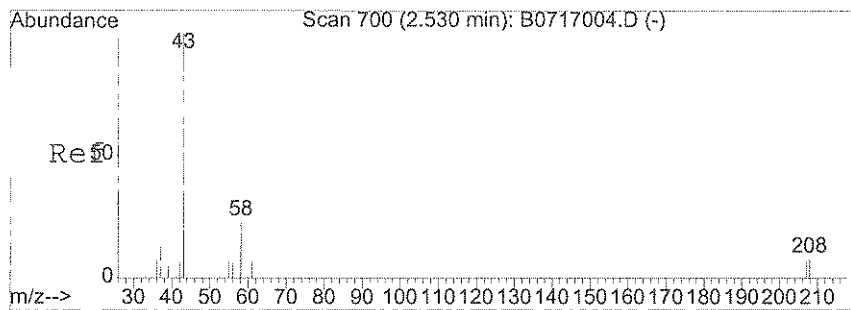
Data File : X:\MSVOA\BUDDHA\052208\B0522016.D
 Acq On : 22 May 2008 14:14
 Sample : JPL114-003 TB
 Misc : #2 10ML+IS/SS
 MS Integration Params: rteint.p
 Quant Time: May 23 16:08 2008

Vial: 14
 Operator: LNH
 Inst : Buddha
 Multiplr: 1.00

Quant Results File: B8260W.RES

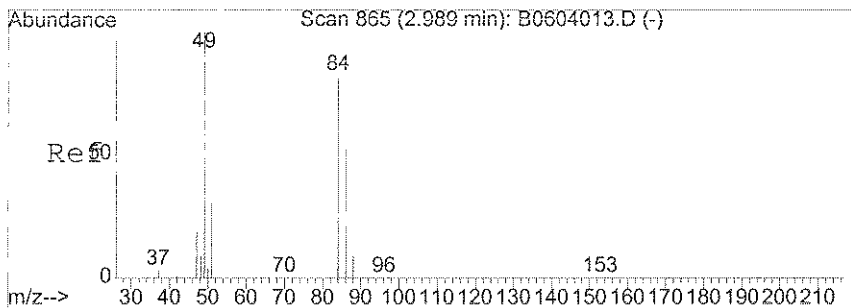
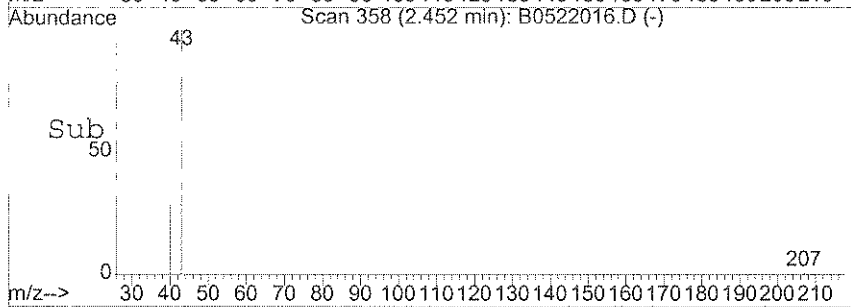
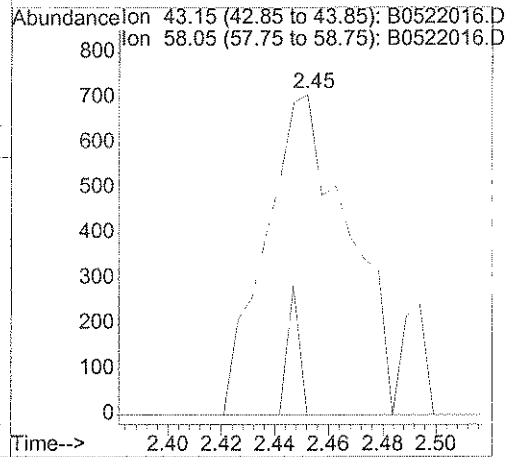
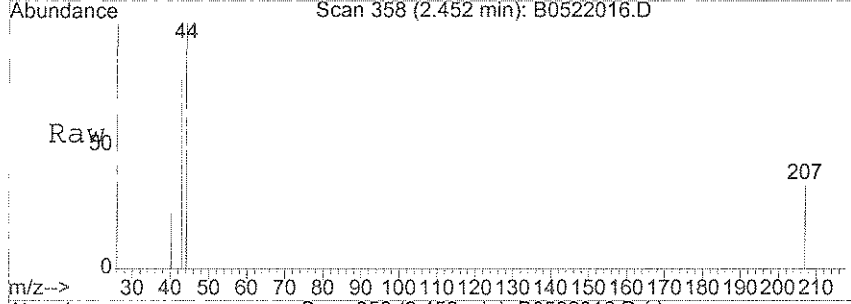
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Thu May 22 11:59:50 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.53	91	475		N.D.	
69) m,p-Xylene	11.53	106	109		N.D.	
70) o-xylene	11.87	106	102		N.D.	
71) Styrene	11.90	104	29		N.D.	
72) Bromoform	12.24	173	50		N.D.	
73) Isopropylbenzene	12.17	105	41		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.36	156	52		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.47	83	32		N.D.	
79) 1,2,3-Trichloropropane	12.51	75	35		N.D.	
80) n-Propylbenzene	12.51	120	29		N.D.	
81) 2-Chlorotoluene	12.31	91	232		N.D.	
82) 4-Chlorotoluene	12.68	91	143		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	164		N.D.	
84) tert-Butylbenzene	12.91	119	209		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	275		N.D.	
86) sec-butylbenzene	13.08	105	355		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	327		N.D.	
88) 4-Isopropyltoluene	13.20	119	881		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	218		N.D.	
90) 1,2-Dichlorobenzene	13.57	146	108		N.D.	
91) n-Butylbenzene	13.52	91	530		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.19	75	71		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	243		N.D.	
94) Hexachlorobutadiene	14.89	225	339		N.D.	
95) Naphthalene	14.99	128	583		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	210		N.D.	



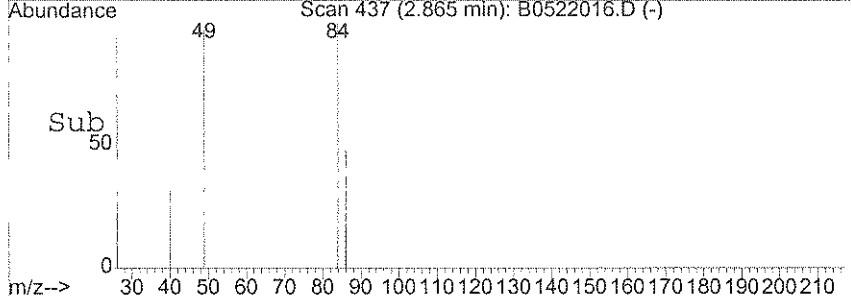
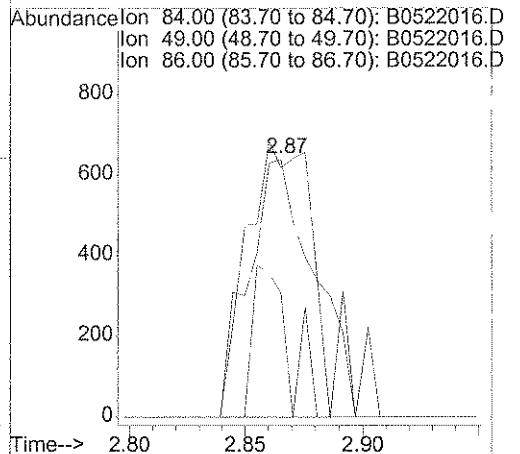
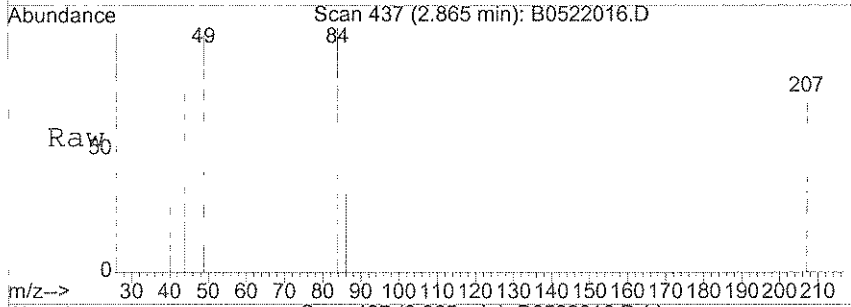
#11
 Acetone
 Concen: 0.94 ug/l
 RT: 2.45 min Scan# 358
 Delta R.T. 0.03 min
 Lab File: B0522016.D
 Acq: 22 May 2008 14:14

Tgt Ion: 43 Resp: 1512
 Ion Ratio Lower Upper
 43 100
 58 6.0 22.0 33.0#



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0522016.D
 Acq: 22 May 2008 14:14

Tgt Ion: 84 Resp: 1330
 Ion Ratio Lower Upper
 84 100
 49 104.7 113.6 153.6#
 86 31.1 45.8 85.8#



TIC DATA

SDG #JPL114

Volatiles Analysis

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-7

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-001
 Lab File ID: B0522025.d
 Date Collected: 05/20/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
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28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522025.D Vial: 23
Acq On : 22 May 2008 18:19 Operator: LNH
Sample : JPL114-001 (524.2) Inst : Buddha
Misc : #4 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522025.D B8260W.M Fri May 23 16:19:34 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-5-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL114

Run Sequence: R028288

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL114-002

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0522026.d

Level: (LOW/MED) _____

Date Collected: 05/20/2008

% Moisture: not dec. _____

Date Analyzed: 05/22/2008

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
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24				
25				
26				
27				
28				
29				
30				

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522026.D Vial: 24
Acq On : 22 May 2008 18:45 Operator: LNH
Sample : JPL114-002 (524.2) Inst : Buddha
Misc : #4 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522026.D B8260W.M Fri May 23 16:20:40 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-17-5/20/08

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: JPL114-003
 Lab File ID: B0522016.d
 Date Collected: 05/20/2008
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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19					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052208\B0522016.D Vial: 14
Acq On : 22 May 2008 14:14 Operator: LNH
Sample : JPL114-003 TB Inst : Buddha
Misc : #2 10ML+IS/SS Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522016.D B8260W.M Fri May 23 16:08:53 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B052208MVOWB1

Lab Name: Pace Analytical Services
 SDG No.: JPL114
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028288
 Lab Sample ID: B052208MVOWB1
 Lab File ID: B0522011.d
 Date Collected: _____
 Date Analyzed: 05/22/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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\BUDDHA\052208\B0522011.D Vial: 10
Acq On : 22 May 2008 12:00 Operator: LNH
Sample : B052208MVOWB1 Inst : Buddha
Misc : 10ML PFW+IS/SS (MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0522011.D B8260W.M Tue May 27 09:37:14 2008

Metals Data

JPL114

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

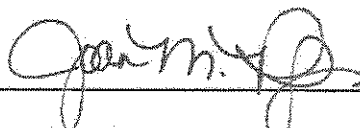
Lab Name: Pace Analytical Services, Inc Contract: JPL Groundwater Monitorin
 Lab Code: PACE SDG No.: JPL114
 SOW No.: _____

Sample No.	Lab Sample ID
<u>MW-7</u>	<u>JPL114-001</u>
<u>MW-7MS</u>	<u>JPL114-001MS</u>
<u>MW-7MSD</u>	<u>JPL114-001MSD</u>
<u>DUPE-5-2008</u>	<u>JPL114-002</u>
<u>DUPE-5-2008MS</u>	<u>JPL114-002MS</u>
<u>DUPE-5-2008MSD</u>	<u>JPL114-002MSD</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: 06/23/2008 Title: Chemist

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-7

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL114

Matrix (soil/water): Water

Lab Sample ID: JPL114-001

Level (low/med): LOW

Date Received: 05/21/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	67100			P	R028884
7440-47-3	Chromium	18.2		E	M	R028436
7439-89-6	Iron	1100			P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	22300			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	32100			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/23/2008 16:51

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-5-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL114

Matrix (soil/water): Water

Lab Sample ID: JPL114-002

Level (low/med): LOW

Date Received: 05/21/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	64800			P	R028884
7440-47-3	Chromium	15.6		E	M	R028436
7439-89-6	Iron	1120			P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	22600			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	30600			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/23/2008 16:51

Miscellaneous Inorganic Data

JPL114

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL114

SOW No.: _____

Sample No.
MW-7
DUPE-5-2008

Lab Sample ID
JPL114-001
JPL114-002

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: Rose J. Alvo

Date: June 10, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL114
Sample Number: MW-7 **Date/Time Collected:** 05/20/2008 09:40
Lab Sample ID: JPL114-001 **Date/Time Received:** 05/21/2008 10:25
Method/Qbatch*: E150.1/29555 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.0		0.10	0.10	05/21/2008	05/21/2008	R028303

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	340		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29525 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028280\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.73		0.20	0.055	05/21/2008	05/21/2008	R028280
Nitrite - N	14797-65-0	1	0.10	U	0.10	0.017	05/21/2008	05/21/2008	R028280
Sulfate as SO4	14808-79-8	10	46		10	1.7	05/21/2008	05/21/2008	R028280
Chloride	16887-00-6	10	69		10	0.76	05/21/2008	05/21/2008	R028280
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/21/2008	05/21/2008	R028280

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	180		4.0	4.0	05/29/2008	05/29/2008	R028444

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL114
Sample Number: MW-7 **Date/Time Collected:** 05/20/2008 09:40
Lab Sample ID: JPL114-001 **Date/Time Received:** 05/21/2008 10:25
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/02/2008	06/03/2008	R028530

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL114
Sample Number: DUPE-5-2Q08 **Date/Time Collected:** 05/20/2008 00:00
Lab Sample ID: JPL114-002 **Date/Time Received:** 05/21/2008 10:25
Method/Qbatch*: E150.1/29555 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	05/21/2008	05/21/2008	R028303

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	320		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29525 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028280\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.73		0.20	0.055	05/21/2008	05/21/2008	R028280
Nitrite - N	14797-65-0	10	1.0	U	1.0	0.17	05/21/2008	05/21/2008	R028280
Sulfate as SO4	14808-79-8	10	46		10	1.7	05/21/2008	05/21/2008	R028280
Chloride	16887-00-6	10	69		10	0.76	05/21/2008	05/21/2008	R028280
Orthophosphate	7723-14-0	1	1.0	U	1.0	0.33	05/21/2008	05/21/2008	R028280

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	180		4.0	4.0	05/29/2008	05/29/2008	R028444

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL114
Sample Number: DUPE-5-2Q08 **Date/Time Collected:** 05/20/2008 00:00
Lab Sample ID: JPL114-002 **Date/Time Received:** 05/21/2008 10:25
Method/Qbatch*: E314.0/29791 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	2.0	U	2.0	0.28	06/02/2008	06/03/2008	R028530

*QBatch=QC/Preparation Batch

PACE ANALYTICAL SERVICES, INC.

SAMPLE DATA PACKAGE

BATTELLE

SDG NO.: JPL115

June 24, 2008

Pace Analytical Services, Inc.

940 S. Harney
Seattle, WA 98108

To: Battelle
Project Name: JPL Groundwater
SDG No.: JPL115
Date of Report: June 24, 2008

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>Pace Sample Identification</u>	<u>Testing Analytical Request</u>
MW-13	JPL115-001	VOA/SVOA/MET/INO
MW-16	JPL115-002	VOA/SVOA/MET/INO
MW-8	JPL115-003	VOA/MET/INO
DUPE-6-2Q08	JPL115-004	VOA/SVOA/MET/INO
TB-18-5/21/08	JPL115-005	VOA

Analytical Request Key:

VOA =	Volatiles (524.2)
SVOA =	1,4-Dioxane (8270)
MET =	Metals (200.7/200.8)
INO =	Chloride, Sulfate, Ortho phosphorus (300.0) Nitrate + Nitrite (353.2) Nitrate (353.2) Nitrite (354.1) Alkalinity (310.1) Perchlorate (314.0) Total Dissolved Solids (160.1) pH (150.1)

Summary of NELAC test accreditation

<u>Determination</u>	<u>NELAC approved</u>
150.1 pH	YES
160.1 Total Dissolved Solids	YES
200.7 K, Na, Mg, Ca, Fe	YES
200.8 As, Cr, Pb	YES
300 Anions OP, Cl and SO4	YES
310.1M Carb./Bicarb. Alkalinity	YES
314.0 Perchlorate	YES
353.2 Nitrate (as N) by Calc., water	YES
353.2 Nitrate + Nitrite (as N), Water	YES

Pace Analytical Services, Inc.
940 S. Harney
Seattle, WA 98108

354.1 Nitrite (as N), Water	YES
365.2 Ortho-Phosphorus as P, Water	YES
524.2 Volatile Organics + TICs (JPL Special list)	YES
8270SIM-level 1,4-Dioxane (1.5 ppb RL; J to 1 ppb)	YES
TurMet for 200.7/200.8 TurMet	NO

We assert that the results reported here relate only to the samples listed in this report.

Sample Receipt Comments:

The following discrepancies were noted in association with the receipt of these samples.

Several samples received for volatiles analysis contained bubbles of various sizes. See the sample receipt logs for documentation.

All samples submitted for pH analysis were received after the analytical holding time had expired.

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 the date of collection in both soil and water samples. All samples were analyzed within holding times.

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.

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Volatiles Fraction:

Initial Calibration Verification:

In the ICV performed on 5/12/2008 cis-1,3-dichloropropene exceeded 25% due to increased response. Because analysis of the daily second source S052207MVOWB2 yielded a recovery that was within the 25%, no further action was taken.

Continuing Calibration Verification (CCV):

In the CCV performed on 5/27/2008 the %D values for trichlorofluoromethane exceeded 20% due to increased response. This analyte was not detected in any associated samples; no further action was taken.

Sample Analysis:

Chloromethane contamination was found in vials provided by our bottle supplier. We have now changed to a different lot that has passed our quality control. However, all samples except for the trip blank were received in the bottles from the contaminated lot and some have low level detections of chloromethane.

Tentatively Identified Compounds (TICs):

A library search was performed for non-target analytes that are not identified on the quantitation report. The results for these have been submitted on a separate form.

Quality Control Analyses:

MS/MSD analyses were not performed due to insufficient sample volume. All spiking analytes in the blank spike analysis recovered within control limits.

Semivolatiles Fraction:

Surrogate Recoveries:

Analysis of sample extract MW-13 and S052708MSVWLS yielded low recoveries for 2-fluorophenol and 2,4,6-tribromophenol. Normally, the samples would be re-extracted and reanalyzed; however, due to insufficient sample available, re-extraction was not performed. The low surrogate recoveries were for two analytes that are acid type compounds. Because the target analyte for this SDG is 1,4-dioxane, and it is not an acid compound, most likely the data were not impacted.

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 and ICP-MS Metals:

On the first timed and dated page of each ICP and 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:

Pace 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 + Nitrite	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	15 minutes	All samples

ICP Metals:

For the run sequence R028884, the ICV exceeded the upper control limit for potassium. All samples were not reported from this run sequence and were reanalyzed and reported from run sequence R029004. QC were reported and were within control limits. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the ICV exceeded the upper control limit for sodium. Also, the second CCB result for sodium was greater than the CRDL. Therefore, all sodium results may be biased high. Data have not been flagged for these events.

For the run sequence R029004, the ICV exceeded the upper control limit for potassium. All sample results for potassium were less than the CRDL. No corrective action was required. Data have not been flagged for this event.

For the run sequence R028884, the sixth, seventh, and eighth CCBs contained levels of potassium that were less than $-\frac{1}{2}$ the CRDL. All samples were not reported from this run sequence and were

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reanalyzed and reported from run sequence R029004. No further corrective action was required. Data have not been flagged for this event.

For the run sequence R029004, the third CCB contained a level of potassium that was greater than ½ the CRDL. No sample results for potassium were associated with this CCB. Therefore, no corrective action was required. Data have not been flagged for this event.

Due to software limitations, which limit that amount of data that can be processed, all injections are not present on Form 14 for run sequence R029004. All calibration checks are listed and all injections surrounding the samples are listed.

ICP-MS Metals:

The serial dilution for the element chromium did not agree within 10% of the original determination after correction for dilution for sample MW-8. No further corrective action was required. All relevant data have been flagged with an "E" on the applicable Forms I and 9.

For the run sequence R028436, the scandium internal standard recovery for sample MW-13 drifted above the recommended control limit of 120% 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 higher, it is assumed that the internal standard is making appropriate corrections to the results. The sample was reported because the internal standard recovery was within 30-120% 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.

Miscellaneous Inorganics:

No comment.

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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.
- ~ This result has been identified as non-primary based on the analyst's professional judgment.
- 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.
 - Z Denotes data deemed unusable by the analyst.
- CRDL Client Requested Detection Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Detection Limit.

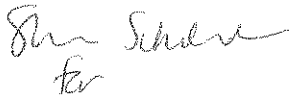
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RELEASE OF DATA

Pace Analytical Services, Inc. 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

6/25/08
(DATE)



Harry Romberg
Quality Assurance Officer

6/25/08
(DATE)

HOW TO CONTACT US:

All Pace Analytical Services, Inc. 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, Pace 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

PACE ANALYTICAL SERVICES, INC. - SAMPLE CONFIRMATION LOG																	
Sample MixID (SDBG-#)	VISR	Collected On	Client ID	350.1 PH	150.1 Total Dissolved Solids	200.7 K, Na, Mg, Ca, Fe	200.8 As, Cr, Pb	300 Antions Cl and SO4	310.1M Carb./Bicarb. Alkalinity	314.0 Perchlorate (N) by Calc. Water	353.2 Nitrate (as Nitrate (N) Water	353.2 Nitrate + Nitrite (as N) Water	354.1 Nitrite (as N) Water	355.2 Ortho-Phosphorus as P, Water	524.2 Volatile Organics + TICs (SpL Special list)	8270SIM-level 1,4-Dioxane (1.5 ppb RL; 3 to 1 ppb)	TurMet for 200.7/200.8 TurMet
WD 001	05/22/2008 08:30 AM	05/21/2008 08:55 AM	MW-13	IN	A-	IN	IN	IN	IN	IN	IN	IN	A-	A-	IN	IN	IN
JPL115-002	05/22/2008 08:30 AM	05/21/2008 11:26 AM	MW-16	IN	A-	IN	IN	IN	IN	IN	IN	IN	A-	A-	IN	IN	IN
JPL115-003	05/22/2008 08:30 AM	05/21/2008 01:43 PM	MW-8	IN	A-	IN	IN	IN	IN	IN	IN	IN	A-	A-	IN	IN	IN
JPL115-004	05/22/2008 08:30 AM	05/21/2008 12:00 AM	IDUPE-6	IN	A-	IN	IN	IN	IN	IN	IN	IN	A-	A-	IN	IN	IN
JPL115-005	05/22/2008 08:30 AM	05/21/2008 12:00 AM	TB-18-	IN	A-	IN	IN	IN	IN	IN	IN	IN	A-	A-	IN	IN	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
 Matrix: Water=WD
 FORM LTL-PM-8.0



COMPANY: BATTLE
 ADDRESS: 3980 OLD TOWN ME, c-205
SAN DIEGO, CA 92110
 ATTENTION: DAVID CAWVER
 PROJECT NAME: SFE GW MW/ 2008
 PROJECT CONTACT: DAVID CAWVER
 TELEPHONE: 619-726-7311 FAX:
 JOB/P.O. NO.: 6486090 / 214319

WORK ORDER ID# SP115
 TESTS TO PERFORM: 1ST 7391
 SUBMITTED AT: 940 South Haney St, Seattle, WA 98108 (206) 767-5060 FAX 767-5063
 1106 Ludwick Ave, Yakima, WA 98912 (509) 248-4695 FAX 432-1265

MATRIX: WATER, SOIL OR SPECIFY	NO. OF CONTAINERS
<u>VOC (574.2)</u>	
<u>TOTAL C (200.8)</u>	
<u>LEAD (200.8)</u>	
<u>PHENOL (200.8)</u>	
<u>GEN TOX (200.8)</u>	
<u>CHLORIDE (314.0)</u>	
<u>300.310.1 (101.151.1)</u>	
<u>NITRATE (300.3)</u>	
<u>1,4 DIOXANE (827.0)</u>	

LAB SAM	SAMPLE ID / LOCATION	DATE	TIME	W	X	X	X	X	X	X	X	OBSERVATIONS, COMMENTS, SPECIAL INSTRUCTIONS
1	MW-13	5/21/08	855		X	X	X	X	X	X	X	
2	MW-16		1126		X	X	X	X	X	X	X	
3	MW-8		1343		X	X	X	X	X	X	X	
4	DUPE-6-25068		-		X	X	X	X	X	X	X	DUPPLICATE
5	TB-18-5/21/08		-		X	X	X	X	X	X	X	TAP 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.

BILLING INFORMATION (DIFFERENT THAN ABOVE)
 NAME: BATTLE
 ADDRESS: 505 KINK AVE.
 CITY, STATE, ZIP: COLUMBUS, OH 43201

RECEIVED BY (SIGN AND PRINT): RACHEL FRANK
 DATE: 5/21/08
 TIME: 1500


* 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
Pace Analytical Services, Inc.

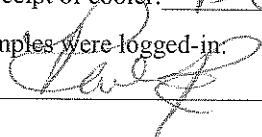
SDG: JPL115 Taken By: Client
Cooler: AAD453 Transferred: FedEx
COC #: 46079
Project: JPL Groundwater Monitoring (Battelle)

Date samples were received at the laboratory: 5/22/2008
Date cooler was opened: 5/22/2008 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: 865543091445
- 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? 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: 

B. LOG-IN PHASE:

Date samples were logged-in: 5/22/2008 8:51AM
Logged-in by Rachel Frank (sign) 

- 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? NO
- 18. Temperatures: 3.5

DISCREPANCIES:

Sample 1 has 2 of 3 VOA vials w/bubbles <1/4"; Sample 2 has 1 of 3 VOA vials w/bubbles >1/4"; Sample 3 has 1 of 3 VOA vials w/bubbles <1/4"; Sample 4 has 1 of 3 VOA vials w/bubbles >1/4"; Sample 5 has 2 of 2 Trip Blanks w/bubbles >1/4"

Sample 1 was received w/in hold time for PH, but went out of hold while samples were getting logged in.

Supplemental Sample Receipt Log
Pace Analytical Services, Inc.

SDG: JPL115
Cooler: AAD453
Temperatures: 3.5
COC #: 46079

Sample	Bottle #	Bottle Description	pH	Bubbles
JPL115-001	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	< 1/4
	0005	40 ml OTWS, clear glass, HCl	N/C	None
	0006	500 ml cylinder, poly, HNO3	<2	N/A
	0007	250 ml cylinder, poly, H2SO4	<2	N/A
JPL115-002	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	> 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
	0007	250 ml cylinder, poly, H2SO4	<2	N/A
JPL115-003	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
	0006	250 ml cylinder, poly, H2SO4	<2	N/A
JPL115-004	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
	0007	250 ml cylinder, poly, H2SO4	<2	N/A
JPL115-005	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

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ATTACHMENT B

Index

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Battelle

SDG No.: JPL115

- I. Narrative: 2-9
- II. Chain-of-Custody: 10-14
- III. Index: 15-16
- IV. Volatiles Data: VOA 1-283
 - A. QC Summary Data: 1-8
 - B. Sample Data: 9-81
 - C. Standards Data: 82-243
 - D. Raw QC Data: 244-275
 - E. Bench Sheets: 276-283
- V. Semivolatiles Data: SVOA 1-126
 - A. QC Summary Data: 1-9
 - B. Sample Data: 10-28
 - C. Standards Data: 29-84
 - D. Raw QC Data: 85-105
 - E. Bench Sheets: 106-126
- VI. Metals Data: MET- 1-333
 - A. Cover Page: 2
 - B. Metals Analysis Data Sheets: 3-7
 - C. Quality Control Data: 8-56
 - D. Quarterly Verification of Instrument Parameters: 57-67
 - E. Raw Data: 68-325
 - F. Digestion & Distillation Logs: 326-333
- VII. Miscellaneous Inorganics Data: INO 1-171
 - A. Cover Page: 2
 - B. Inorganics Analysis Data Sheets: 3-11
 - C. Quality Control Data: 12-41
 - D. Raw Data: 42-171
- VIII. Forms Summary: SUM- 1-165

Completed and checked by: Andy Ecklund Date: 6/25/08

QC SUMMARY

SDG JPL115

VOLATILES ANALYSIS

2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL115

Run Sequence: R028383

Level: (LOW/MED) NONE

CLIENT SAMPLE NUMBER	SMC1 (DCA) #	SMC2 (BFB) #	SMC3 (TOL) #	SMC4 () #	TOT OUT
(JPL115-004) DUPE-6-2Q08	121	95	93		0
(JPL115-003) MW-8	118	95	93		0
(JPL115-002) MW-16	117	97	94		0
(JPL115-001) MW-13	122	90	91		0
(JPL115-005) TB-18-5/21/08	116	91	93		0
(B052708MVOWB2) B052708MVOWB2	119	91	91		0
(S052708MVOWB1) S052708MVOWB1	111	89	96		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: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028383 SDG No.: JPL115
 BS Lab Sample ID: S052708MVOWB1
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
Dichlorodifluoromethane	50.0	42.63	85		60-140
Chloromethane	50.0	38.81	78		60-140
Vinyl chloride	50.0	46.32	93		60-140
Bromomethane	50.0	55.99	112		60-140
Chloroethane	50.0	46.91	94		60-140
Trichlorofluoromethane	50.0	62.87	126		60-140
1,1-Dichloroethene	50.0	60.57	121		60-140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.46	93		60-140
Methylene chloride	50.0	55.31	111		60-140
Methyl tert-butyl ether	50.0	52.96	106		60-140
trans-1,2-Dichloroethene	50.0	55.04	110		60-140
1,1-Dichloroethane	50.0	51.92	104		60-140
2,2-Dichloropropane	50.0	51.5	103		60-140
cis-1,2-Dichloroethene	50.0	50.87	102		60-140
2-Butanone	50.0	40.65	81		60-140
Bromochloromethane	50.0	54.31	109		60-140
Chloroform	50.0	54.32	109		60-140
1,1,1-Trichloroethane	50.0	56.81	114		60-140
Carbon tetrachloride	50.0	58.7	117		60-140
1,1-Dichloropropene	50.0	57.98	116		60-140
Benzene	50.0	48.87	98		60-140
1,2-Dichloroethane	50.0	57.78	116		60-140
Trichloroethene	50.0	52.59	105		60-140
1,2-Dichloropropane	50.0	44.91	90		60-140
Dibromomethane	50.0	51.98	104		60-140
Bromodichloromethane	50.0	53.58	107		60-140
cis-1,3-Dichloropropene	50.0	59.3	119		60-140
4-Methyl-2-pentanone	50.0	42.76	86		60-140
Toluene	50.0	49.72	99		60-140
trans-1,3-Dichloropropene	50.0	47.31	95		60-140
1,1,2-Trichloroethane	50.0	47.63	95		60-140
Tetrachloroethene	50.0	54.19	108		60-140
1,3-Dichloropropane	50.0	47.64	95		60-140
Dibromochloromethane	50.0	54.8	110		60-140

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 6/3/2008 12:09

3B
WATER VOLATILE BLANK SPIKE RECOVERY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 BS Run Sequence: R028383 SDG No.: JPL115
 BS Lab Sample ID: S052708MVOWB1
 Level: N/A Units: ug/L

Analyte	Spike Added	Found	% Rec	#	Rec Limit
1,2-Dibromoethane	50.0	50.62	101		60-140
Chlorobenzene	50.0	50	100		60-140
Ethylbenzene	50.0	50.38	101		60-140
1,1,1,2-Tetrachloroethane	50.0	54.28	109		60-140
m,p-Xylene	100	100.98	101		60-140
o-Xylene	50.0	49.06	98		60-140
Styrene	50.0	49.38	99		60-140
Bromoform	50.0	52.07	104		60-140
Isopropylbenzene	50.0	52.9	106		60-140
1,1,2,2-Tetrachloroethane	50.0	44.03	88		60-140
n-Propylbenzene	50.0	47.83	96		60-140
Bromobenzene	50.0	48.25	97		60-140
1,2,3-Trichloropropane	50.0	45.12	90		60-140
2-Chlorotoluene	50.0	46.49	93		60-140
1,3,5-Trimethylbenzene	50.0	49.77	100		60-140
4-Chlorotoluene	50.0	48.36	97		60-140
tert-Butylbenzene	50.0	51.68	103		60-140
1,2,4-Trimethylbenzene	50.0	50.12	100		60-140
sec-Butylbenzene	50.0	51.39	103		60-140
4-Isopropyltoluene	50.0	53.73	107		60-140
1,3-Dichlorobenzene	50.0	50.03	100		60-140
1,4-Dichlorobenzene	50.0	49.55	99		60-140
n-Butylbenzene	50.0	50.01	100		60-140
1,2-Dichlorobenzene	50.0	49.43	99		60-140
1,2-Dibromo-3-chloropropane	50.0	46.59	93		60-140
1,2,4-Trichlorobenzene	50.0	52.71	105		60-140
Hexachlorobutadiene	50.0	54.02	108		60-140
Naphthalene	50.0	49.55	99		60-140
1,2,3-Trichlorobenzene	50.0	49.3	99		60-140

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

Spike Recovery: 0 out of 63 outside limits

COMMENTS:

Date Printed: 6/3/2008 12:09

4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

B052708MVOWB2

Lab Name Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL115

Lab File ID: B0527015.D

Lab Sample ID: B052708MVOWB2

Date Analyzed: 05/27/2008

Time Analyzed: 15:02

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

Heated Purge: (Y/N) N

Instrument ID: 5973B

Matrix: Water

	CLIENT SAMPLE NO.	LAB SAMPLE ID.	LAB FILE ID.	DATE ANALYZED	TIME ANALYZED	RUN SEQUENCE
01	S052708MVOWB1	S052708MVOWB1	B0527011.D	05/27/2008	13:17	R028383
02	TB-18-5/21/08	JPL115-005	B0527018.D	05/27/2008	16:25	R028383
03	MW-13	JPL115-001	B0527025.D	05/27/2008	19:35	R028383
04	MW-16	JPL115-002	B0527026.D	05/27/2008	20:04	R028383
05	MW-8	JPL115-003	B0527027.D	05/27/2008	20:31	R028383
06	DUPE-6-2Q08	JPL115-004	B0527028.D	05/27/2008	21:01	R028383
07						
08						
09						
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27						
28						
29						
30						

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: CAL1323 SDG No.: JPL115
 Lab File ID: B0512011.D BFB Injection Date: 05/12/2008
 Instrument ID: 5973B BFB Injection Time: 13:50
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16
75	30% to 60% of mass 95	43.5
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6.4
173	less than 2% of mass 174	0()1
174	greater than 50% of mass 95	107.4
175	5% to 9% of mass 17	7.3()1
176	greater than 95%, but less than 101% of mass 174	95.4()1
177	5% to 9% of mass 176	6.5()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	VSTD0.3	VSTD0.3	B0512012.D	05/12/2008	14:16
02	VSTD0.5	VSTD0.5	B0512013.D	05/12/2008	14:43
03	VSTD001	VSTD001	B0512014.D	05/12/2008	15:10
04	VSTD005	VSTD005	B0512015.D	05/12/2008	15:37
05	VSTD010	VSTD010	B0512016.D	05/12/2008	16:04
06	VSTD050	VSTD050	B0512017.D	05/12/2008	16:31
07	VSTD100	VSTD100	B0512018.D	05/12/2008	16:57
08	VSTD200	VSTD200	B0512019.D	05/12/2008	17:24
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

BFBB1

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitorin
 Run Sequence: R028383 SDG No.: JPL115
 Lab File ID: B0527009.D BFB Injection Date: 05/27/2008
 Instrument ID: 5973B BFB Injection Time: 12:23
 GC Column ZB-624 20m ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15% to 40% of mass 95	16.9
75	30% to 60% of mass 95	47.7
95	base peak, 100% relative abundance	100
96	5% to 9% of mass 95	6
173	less than 2% of mass 174	0 ()1
174	greater than 50% of mass 95	112.9
175	5% to 9% of mass 17	7.2 ()1
176	greater than 95%, but less than 101% of mass 174	98.1 ()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	VSTD050B1	VSTD050B1	B0527010.D	05/27/2008	12:47
02	S052708MVOWB1	S052708MVOWB1	B0527011.D	05/27/2008	13:17
03	B052708MVOWB2	B052708MVOWB2	B0527015.D	05/27/2008	15:02
04	TB-18-5/21/08	JPL115-005	B0527018.D	05/27/2008	16:25
05	MW-13	JPL115-001	B0527025.D	05/27/2008	19:35
06	MW-16	JPL115-002	B0527026.D	05/27/2008	20:04
07	MW-8	JPL115-003	B0527027.D	05/27/2008	20:31
08	DUPE-6-2Q08	JPL115-004	B0527028.D	05/27/2008	21:01
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Services Contract: JPL Groundwater Monitoring
 Run Sequence: R028383 SDG No.: JPL115
 Client Sample No. (VSTD050##): VSTD050B1 Date Analyzed: 05/27/2008
 Lab File ID (Standard): B0527010.D Time Analyzed: 12:47
 Instrument ID: 5973B 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	688115	7.52	619743	11.30	394191	13.25
UPPER LIMIT	1376230	7.57	1239486	11.35	788382	13.3
LOWER LIMIT	344057.5	7.47	309871.5	11.25	197095.5	13.2
CLIENT SAMPLE NO.						
01 S052708MVOWB1	721281	7.52	580877	11.30	381150	13.25
02 B052708MVOWB2	617764	7.52	496272	11.30	318714	13.25
03 TB-18-5/21/08	654673	7.53	527045	11.30	326315	13.25
04 MW-13	579029	7.52	464701	11.30	299813	13.25
05 MW-16	650559	7.53	546307	11.30	313593	13.25
06 MW-8	619864	7.52	514014	11.30	302760	13.25
07 DUPE-6-2Q08	618492	7.52	521700	11.30	307394	13.25
08						
09						
10						
11						
12						
13						
14						
15						
16						
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

Date Printed: 6/3/2008 12:13

SAMPLE DATA

SDG JPL115

VOLATILES ANALYSIS

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-001
 Lab File ID: B0527025.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 19:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <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	1.2	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-001
 Lab File ID: B0527025.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 19:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
108-88-3	Toluene	1.5	
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.47	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-001
 Lab File ID: B0527025.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 19:35
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

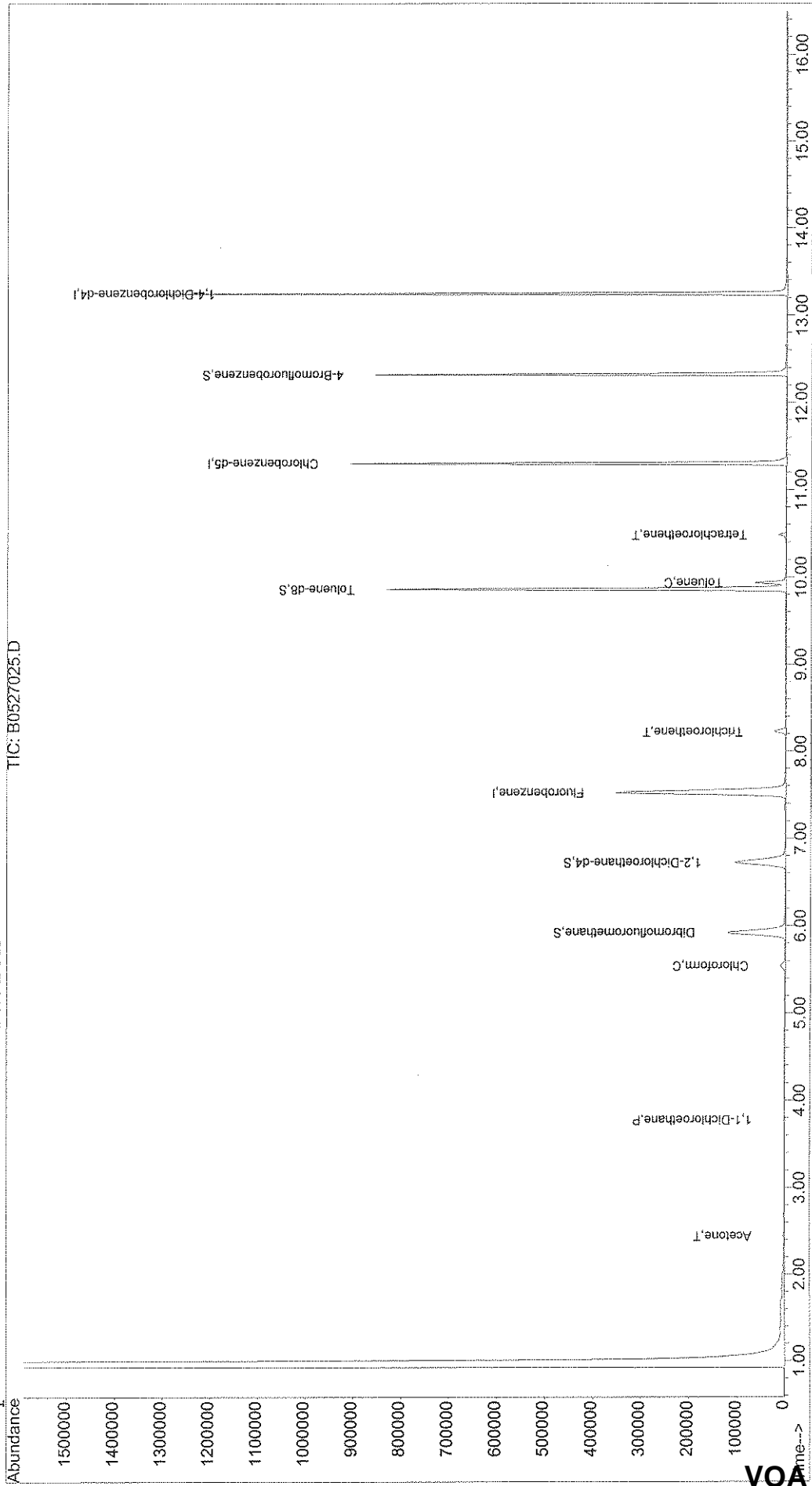
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
Acq On : 27 May 2008 19:35 Operator: DGA
Sample : JPL115-001 Inst : Buddha
Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 11:24 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:24 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)	Rcv (Ar)
1) Fluorobenzene	7.52	96	579029	25.00	ug/l	0.00	109.12%
54) Chlorobenzene-d5	11.30	117	464701	25.00	ug/l	0.00	105.63%
74) 1,4-Dichlorobenzene-d4	13.25	152	299813	25.00	ug/l	0.00	115.31%

System Monitoring Compounds

37) Dibromofluoromethane	5.93	111	149756m	23.00	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	115.00%	
40) 1,2-Dichloroethane-d4	6.72	65	176852	30.52	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	122.08%#	
55) Toluene-d8	9.86	98	544408	22.85	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	91.40%	
76) 4-Bromofluorobenzene	12.32	95	208063	22.39	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	89.56%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	723	N.D.		
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.55	96	159	Below Cal		84
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	1.82	101	1147	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	2.29	101	337	N.D.		
11) Acetone	2.45	43	3014	1.53 ug/l #		88
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	2.79	41	86	N.D.		
17) Methyl Acetate	2.70	43	157	N.D.		
18) Methylene Chloride	2.88	84	581	Below Cal #		3
19) trans-1,2-Dichloroethene	3.24	96	104	N.D.		
20) t-Butyl alcohol	0.00	59	0	N.D.		
21) Methyl tert-butyl ether	3.18	73	80	N.D.		
22) Acrylonitrile	0.00	53	0	N.D.		

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

J. C. / 2/10

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:24 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	2001	0.15	ug/l #	59
24) Chloroprene	0.00	53	0	N.D.		
25) Isopropyl ether	0.00	45	0	N.D.		
26) Vinyl acetate	0.00	43	0	N.D.		
27) Ethyl-t-butyl ether	4.50	59	54	N.D.		
28) 2,2-Dichloropropane	0.00	77	0	N.D.		
29) cis-1,2-Dichloroethene	4.79	96	68	N.D.		
30) 2-Butanone	4.94	43	37	N.D.		
31) Propionitrile	0.00	54	0	N.D.		
32) Bromochloromethane	0.00	128	0	N.D.		
33) Methacrylonitrile	5.49	41	40	N.D.		
34) Chloroform	5.53	83	14275mS	1.16	ug/l #	79
35) 1,1,1-Trichloroethane	5.62	97	43	N.D.		
36) Cyclohexane	0.00	56	0	N.D.		
38) Carbon Tetrachloride	6.11	117	229	N.D.		
39) 1,1-Dichloropropene	0.00	75	0	N.D.		
41) Benzene	6.70	78	40	N.D.		
42) 1,2-Dichloroethane	6.81	62	33	N.D.		
43) t-Amyl methyl ether	0.00	73	0	N.D.		
44) Isobutanol	0.00	43	0	N.D.	d	
45) Trichloroethene	8.23	130	11490	1.38	ug/l #	74
46) Methylcyclohexane	8.40	83	72	N.D.		
47) 1,2-Dichloropropane	0.00	63	0	N.D.		
48) Dibromomethane	8.61	93	42	N.D.		
49) Methyl methacrylate	9.08	41	30	N.D.		
50) Bromodichloromethane	9.07	83	83	N.D.		
51) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.		
52) cis-1,3-Dichloropropene	9.82	75	34	N.D.		
53) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d	
56) Toluene	9.93	92	26202	1.49	ug/l	93
57) trans-1,3-Dichloropropene	10.17	75	32	N.D.		
58) Ethyl methacrylate	0.00	69	0	N.D.		
59) 1,1,2-Trichloroethane	10.45	97	295	N.D.		
60) Tetrachloroethene	10.49	166	4506	0.47	ug/l	93
61) 1,3-Dichloropropane	0.00	76	0	N.D.		
62) 2-Hexanone	10.76	43	30	N.D.		
63) Dibromochloromethane	10.81	129	223	N.D.		
64) 1,2-Dibromoethane	11.06	107	35	N.D.		
65) 1-Chlorohexane	11.33	91	88	N.D.		
66) Chlorobenzene	11.32	112	86	N.D.		
67) 1,1,1,2-Tetrachloroethane	11.29	131	38	N.D.		

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

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:24 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

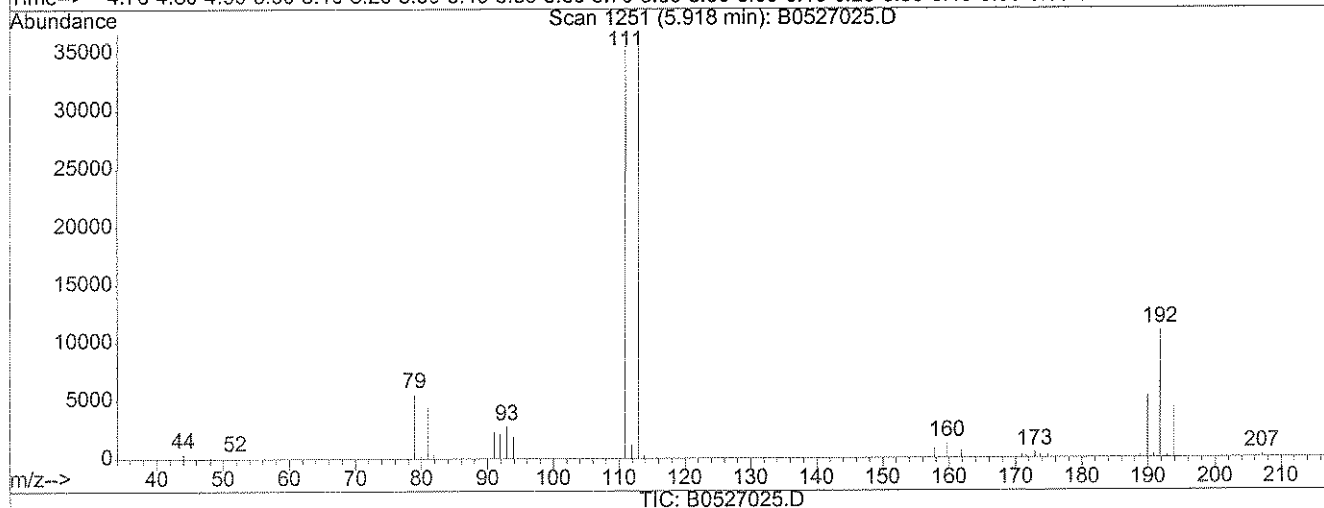
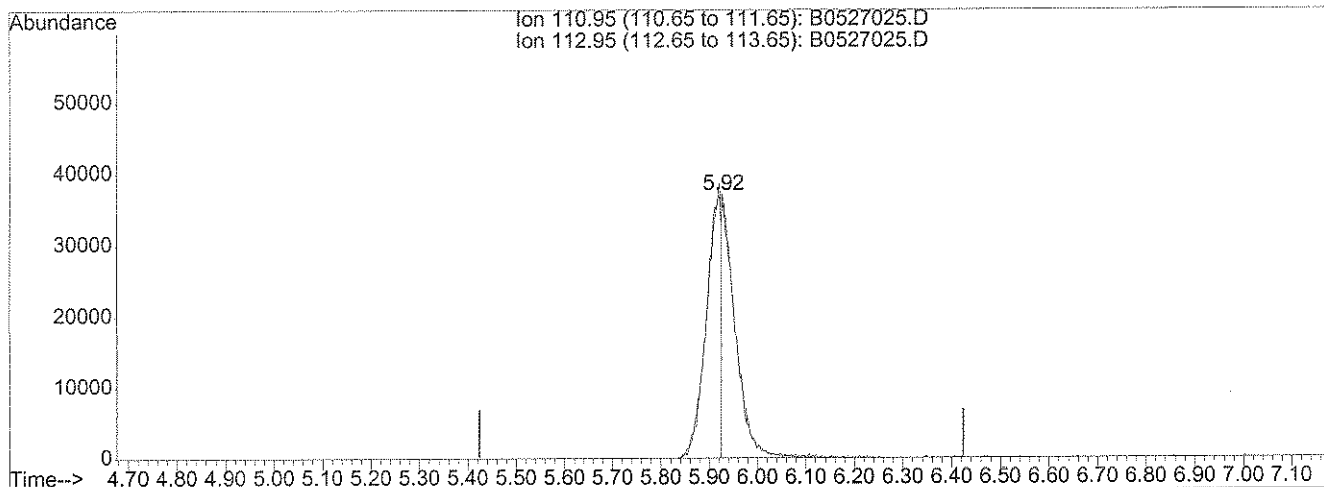
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.43	91	30		N.D.	
69) m,p-Xylene	11.53	106	33		N.D.	
70) o-xylene	11.86	106	34		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.09	173	29		N.D.	
73) Isopropylbenzene	12.18	105	38		N.D.	
75) trans-1,4-Dichloro-2-buten	12.01	53	33		N.D.	
77) Bromobenzene	12.32	156	150		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.59	83	53		N.D.	
79) 1,2,3-Trichloropropane	12.50	75	34		N.D.	
80) n-Propylbenzene	12.50	120	37		N.D.	
81) 2-Chlorotoluene	12.58	91	29		N.D.	
82) 4-Chlorotoluene	12.68	91	34		N.D.	
83) 1,3,5-Trimethylbenzene	12.96	105	83		N.D.	
84) tert-Butylbenzene	12.90	119	35		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	83		N.D.	
86) sec-butylbenzene	13.08	105	316		N.D.	
87) 1,3-Dichlorobenzene	13.25	146	59		N.D.	
88) 4-Isopropyltoluene	13.21	119	263		N.D.	
89) 1,4-Dichlorobenzene	13.28	146	84		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	61		N.D.	
91) n-Butylbenzene	13.52	91	384		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.18	75	35		N.D.	
93) 1,2,4-Trichlorobenzene	14.80	180	204		N.D.	
94) Hexachlorobutadiene	14.88	225	122		N.D.	
95) Naphthalene	14.98	128	84		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	159		N.D.	

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

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:24 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(37) Dibromofluoromethane (S)

5.92min 12.20ug/l

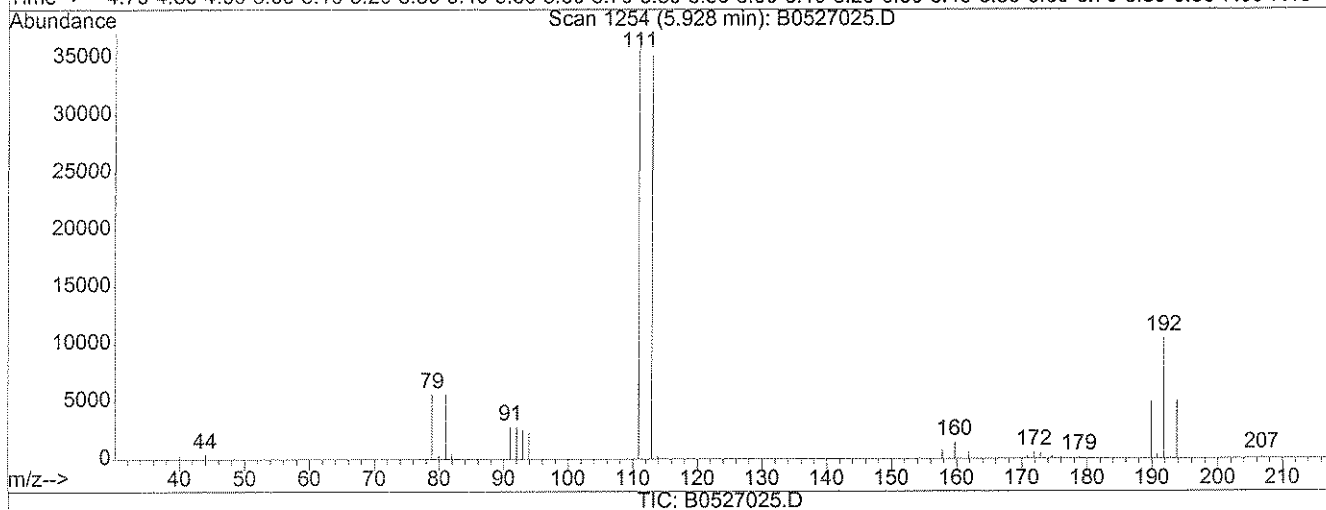
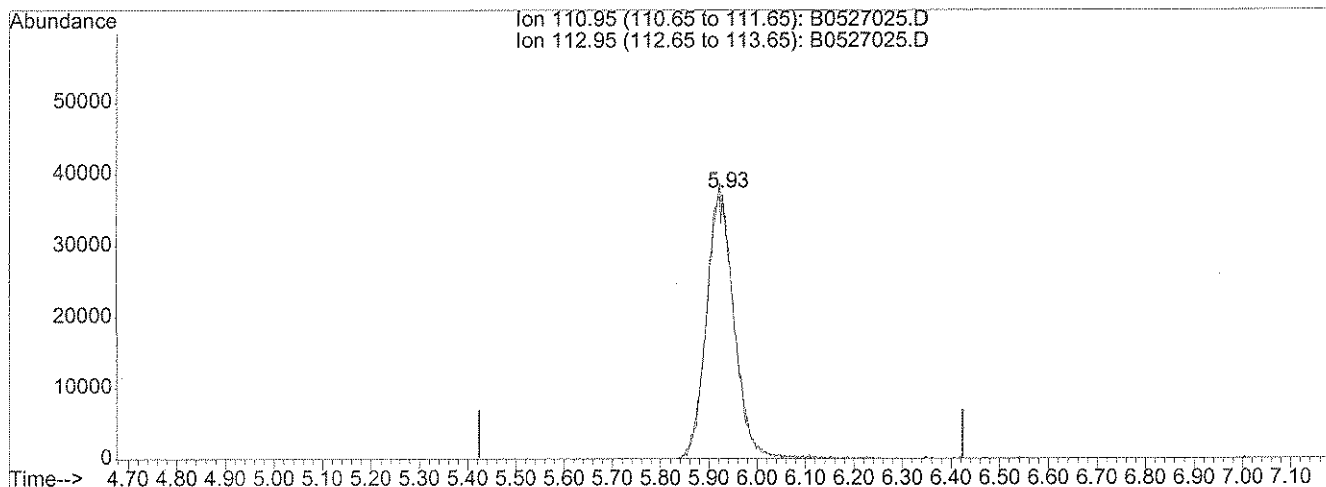
response 79427

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	183.38#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:24 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration

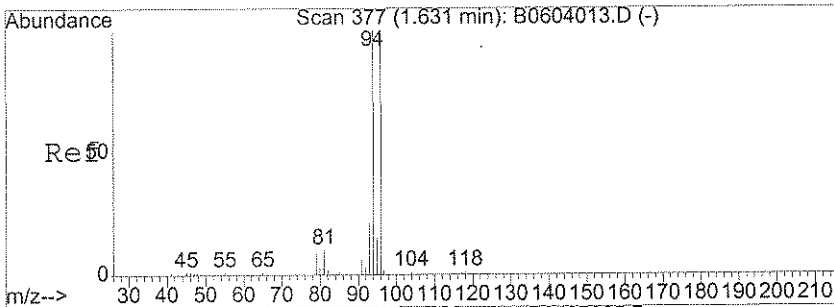


(37) Dibromofluoromethane (S)

5.93min 23.00ug/l m

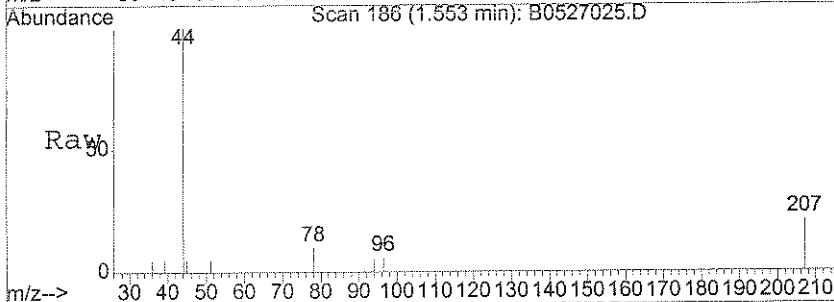
response 149756

Ion	Exp%	Act%
110.95	100	100
112.95	102.80	97.26
0.00	0.00	0.00
0.00	0.00	0.00

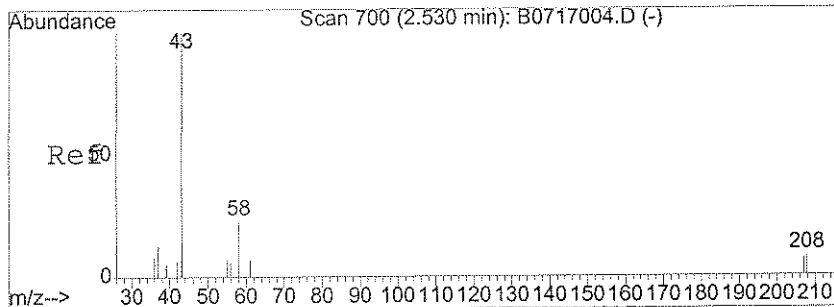
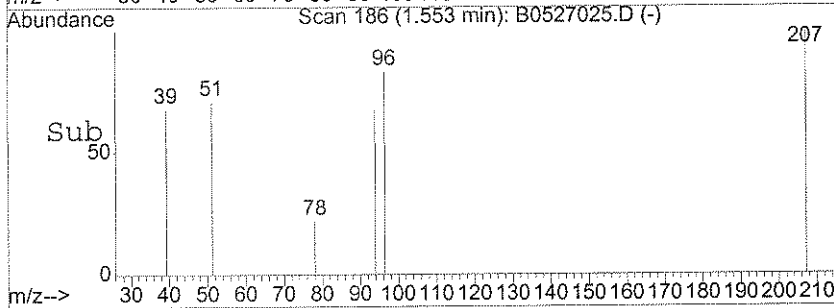
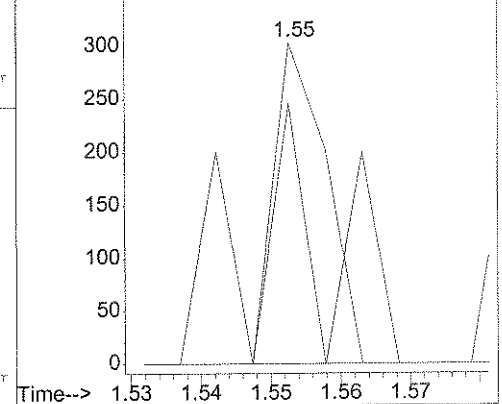


#5
 Bromomethane
 Concen: Below Cal
 RT: 1.55 min Scan# 186
 Delta R.T. 0.00 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

Tgt Ion: 96 Resp: 159
 Ion Ratio Lower Upper
 96 100
 94 88.1 84.9 124.9

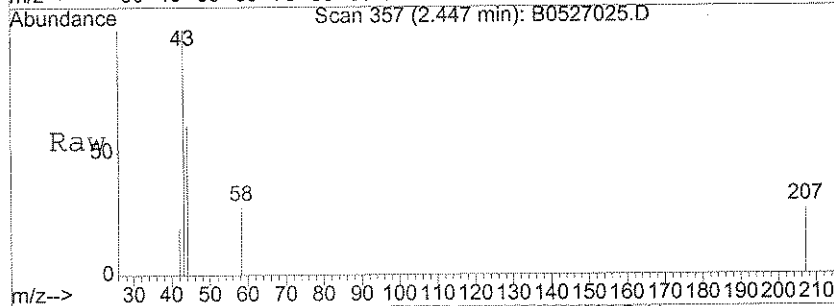


Abundance Ion 96.00 (95.70 to 96.70): B0527025.D
 Ion 94.00 (93.70 to 94.70): B0527025.D

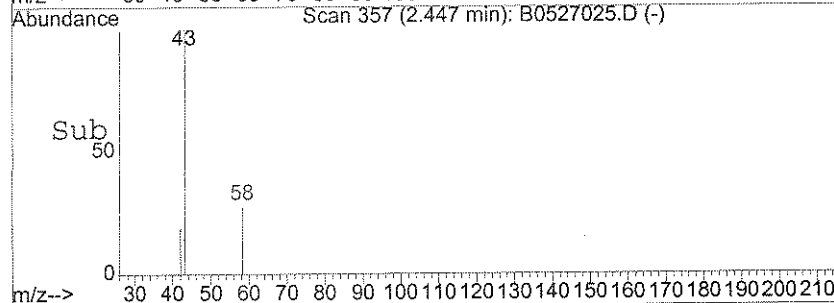
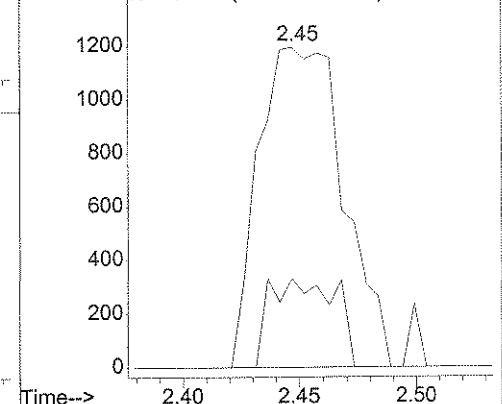


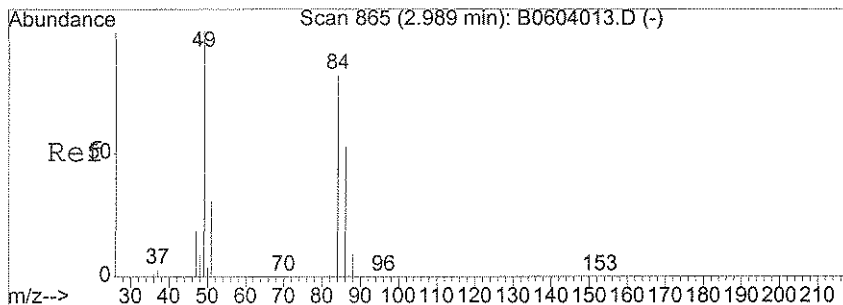
#11
 Acetone
 Concen: 1.53 ug/l
 RT: 2.45 min Scan# 357
 Delta R.T. 0.03 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

Tgt Ion: 43 Resp: 3014
 Ion Ratio Lower Upper
 43 100
 58 21.3 22.0 33.0#



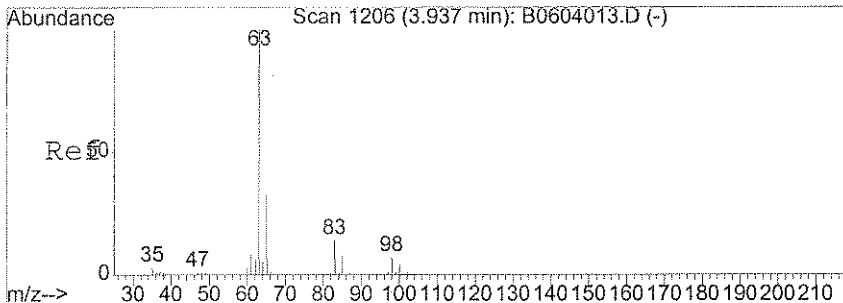
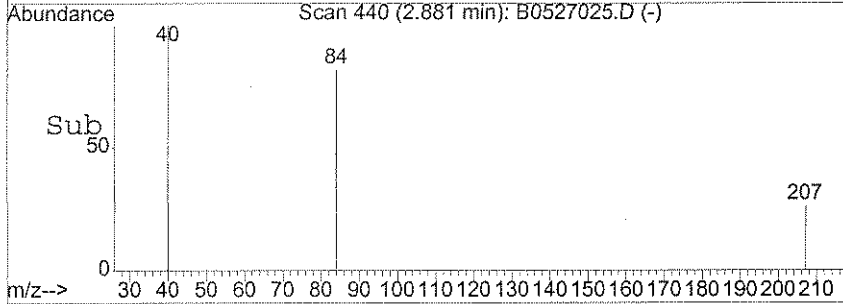
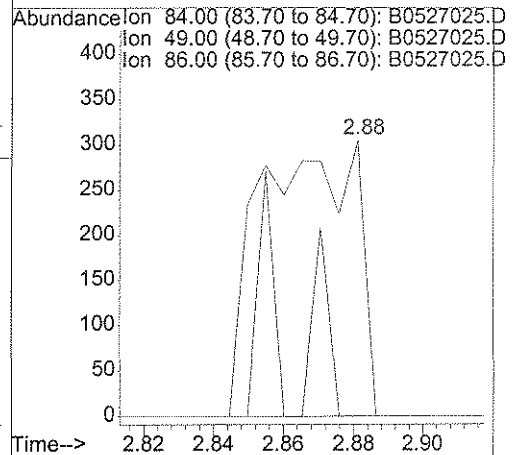
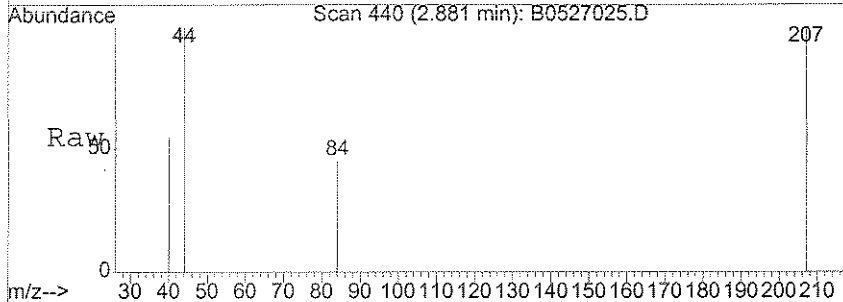
Abundance Ion 43.15 (42.85 to 43.85): B0527025.D
 Ion 58.05 (57.75 to 58.75): B0527025.D





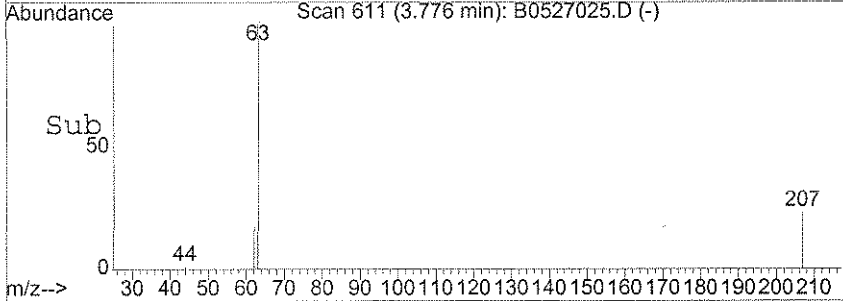
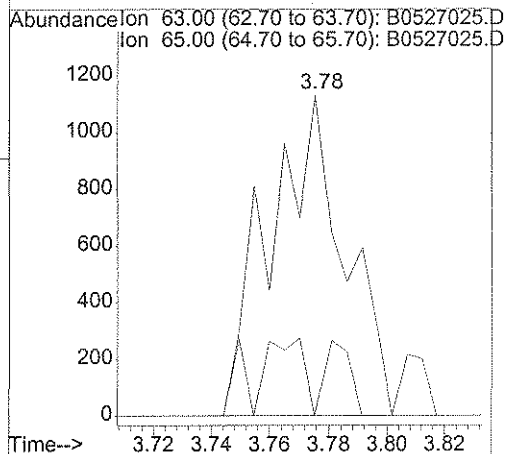
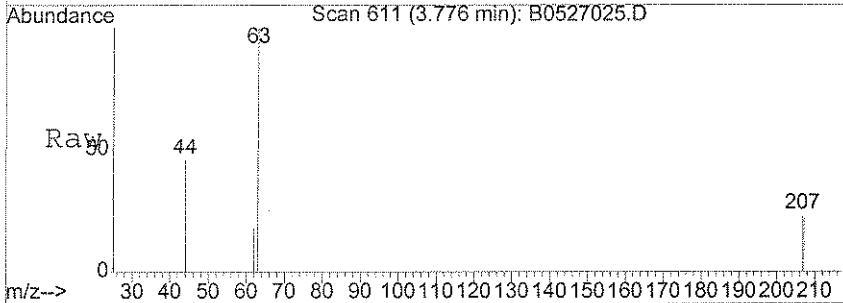
#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.88 min Scan# 440
 Delta R.T. 0.02 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

Tgt Ion	Resp	Lower	Upper
84	581		
84	100		
49	11.4	113.6	153.6#
86	0.0	45.8	85.8#



#23
 1,1-Dichloroethane
 Concen: 0.15 ug/l
 RT: 3.78 min Scan# 611
 Delta R.T. 0.01 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

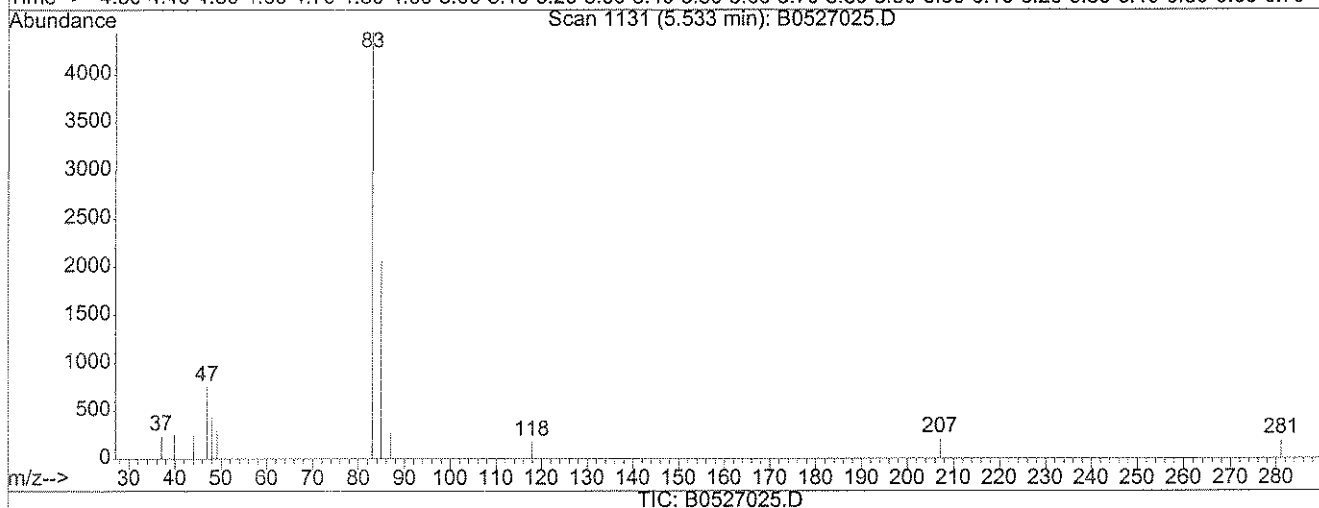
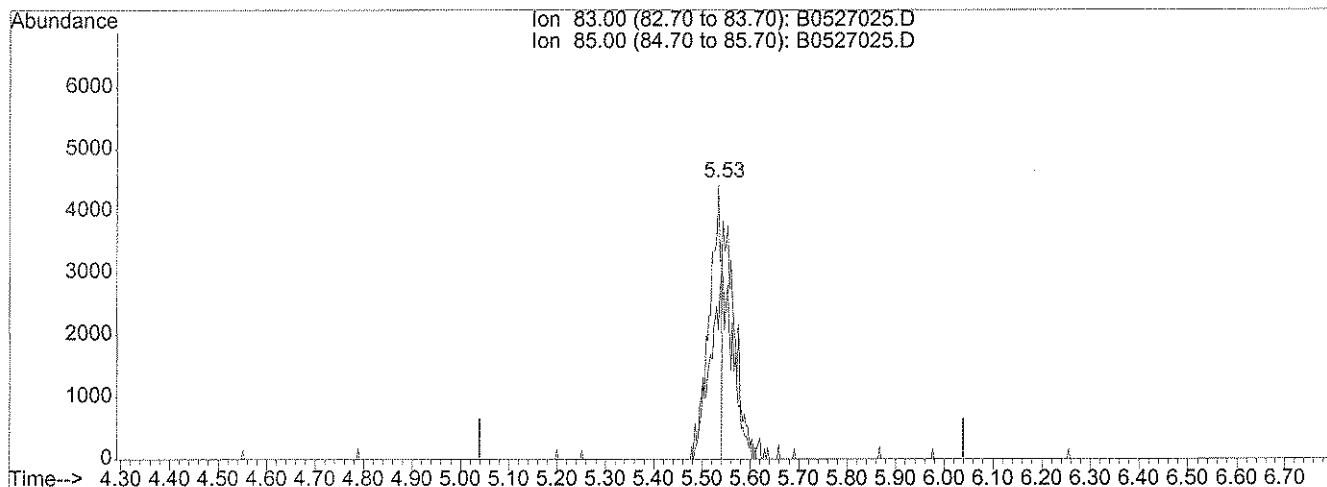
Tgt Ion	Resp	Lower	Upper
63	2001		
63	100		
65	7.7	10.2	50.2#



Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: May 29 15:29 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(34) Chloroform (C)

5.53min 0.60ug/l

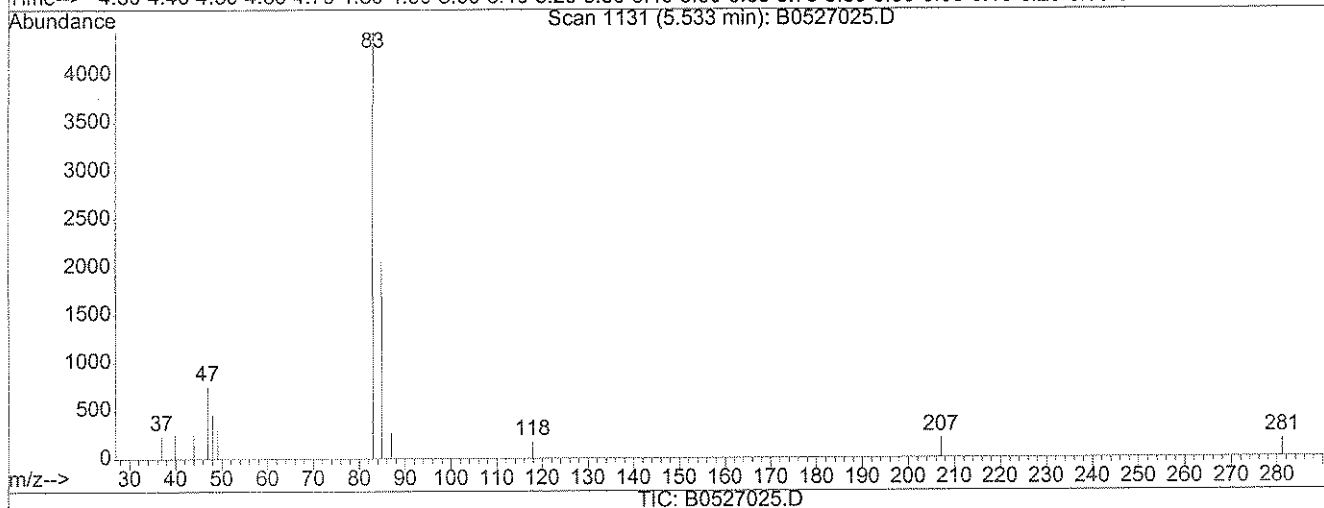
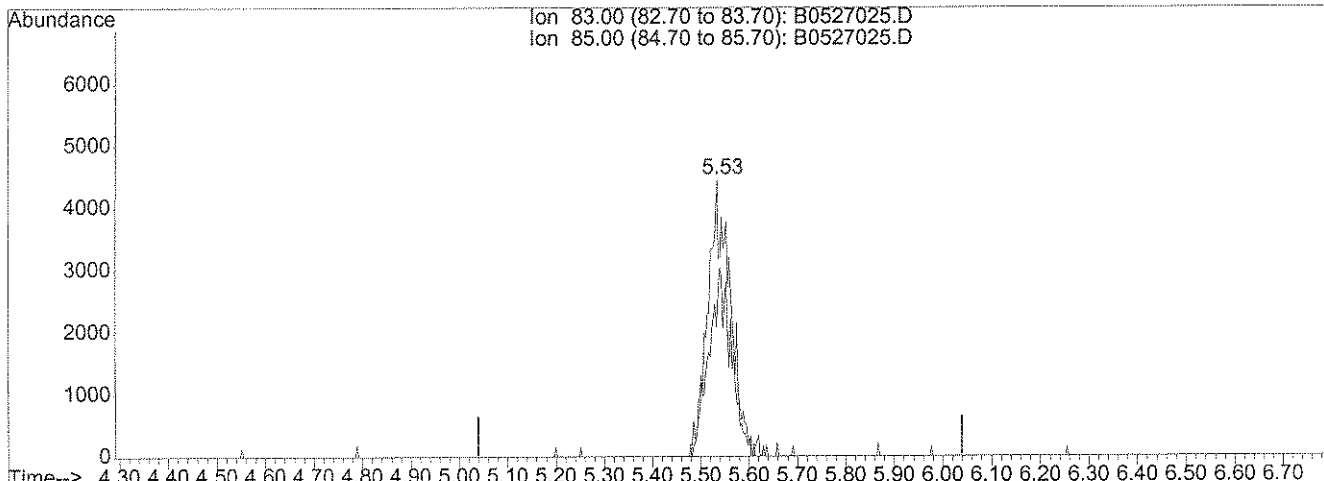
response 7441

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	80.38
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

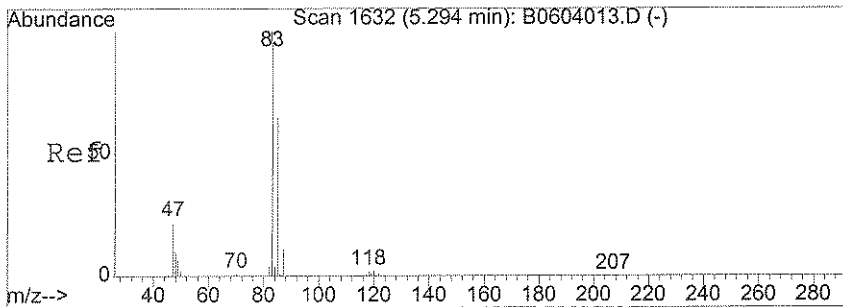
Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
 Acq On : 27 May 2008 19:35 Operator: DGA
 Sample : JPL115-001 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:24 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



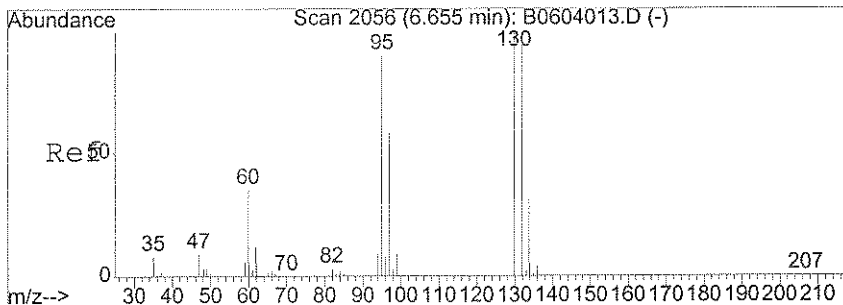
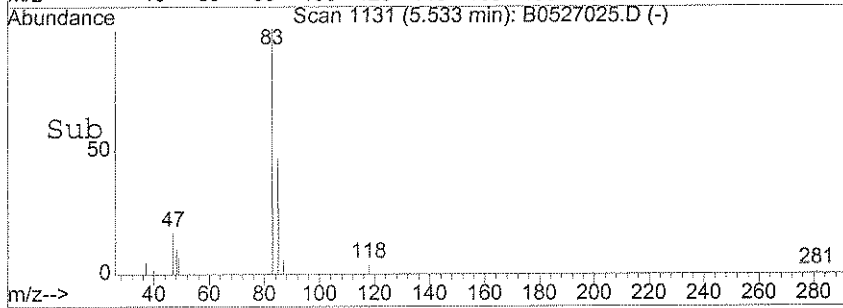
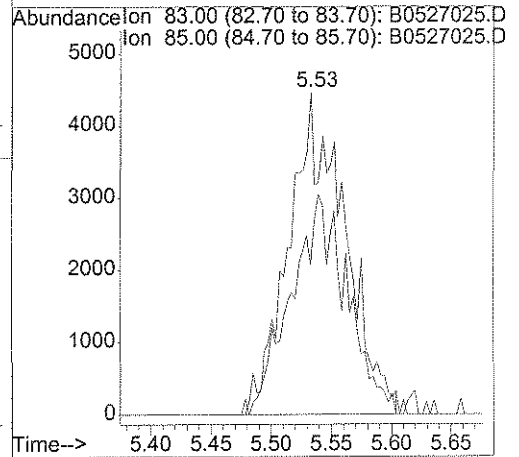
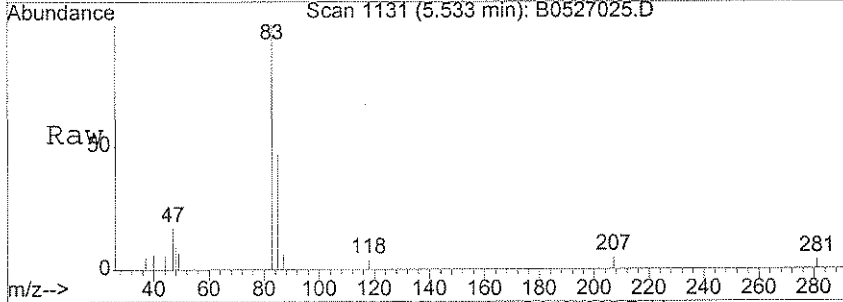
(34) Chloroform (C)
 5.53min 1.16ug/l m
 response 14275

Ion	Exp%	Act%
83.00	100	100
85.00	64.00	41.90#
0.00	0.00	0.00
0.00	0.00	0.00



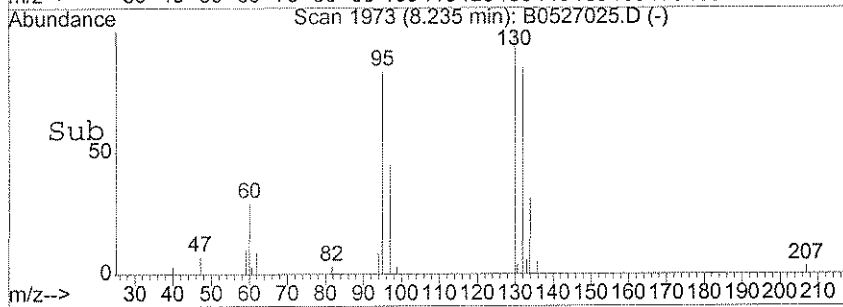
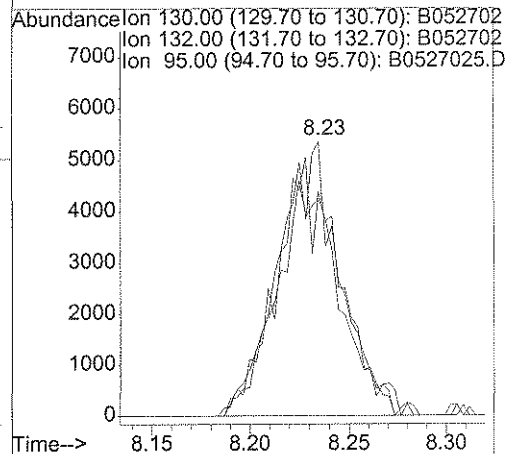
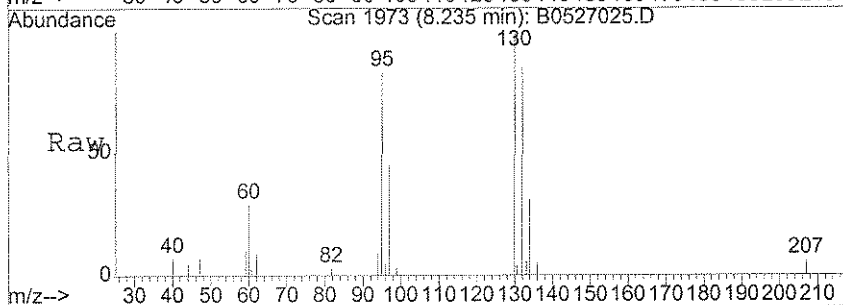
#34
 Chloroform
 Concen: 1.16 ug/l m
 RT: 5.53 min Scan# 1131
 Delta R.T. -0.01 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

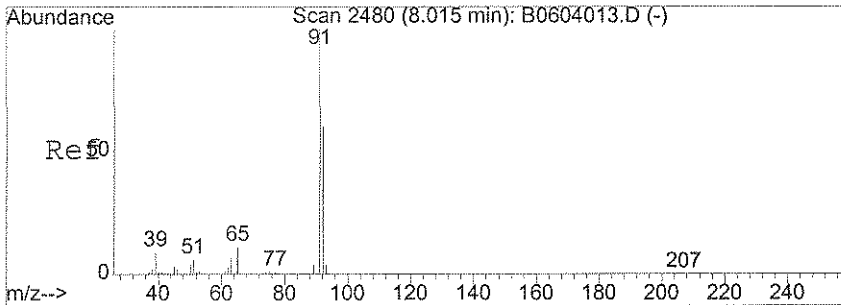
Tgt Ion	Resp	Lower	Upper
83	14275		
85	41.9	44.0	84.0#



#45
 Trichloroethene
 Concen: 1.38 ug/l
 RT: 8.23 min Scan# 1973
 Delta R.T. 0.01 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

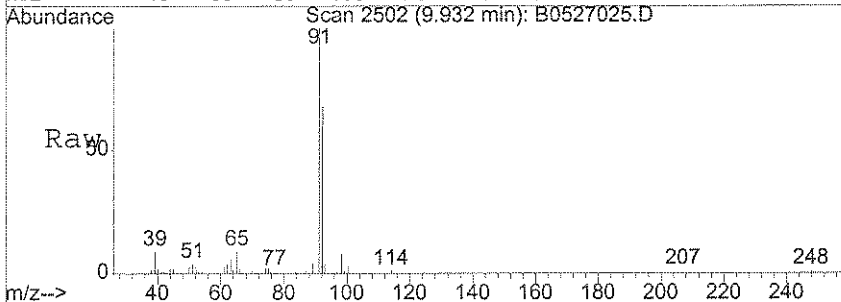
Tgt Ion	Resp	Lower	Upper
130	11490		
132	55.0	80.2	120.2#
95	89.1	75.8	115.8



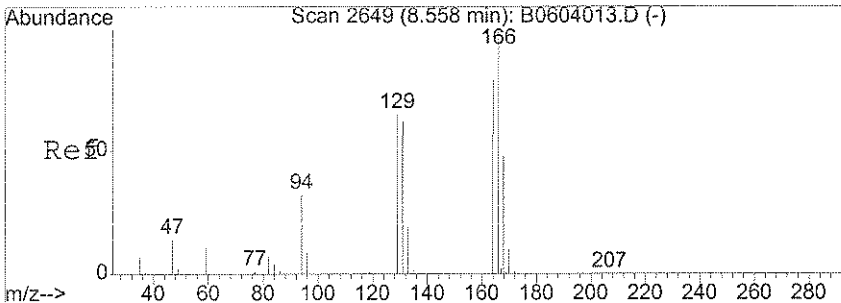
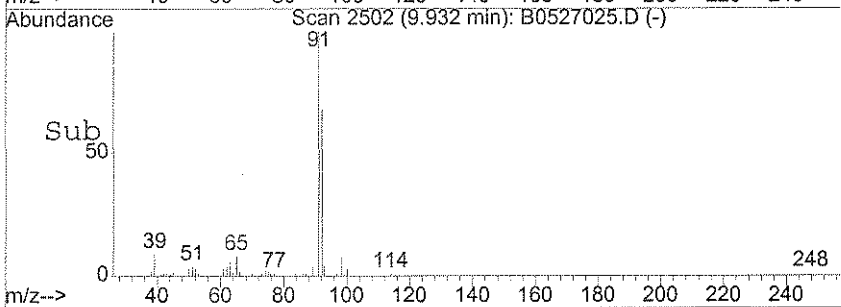
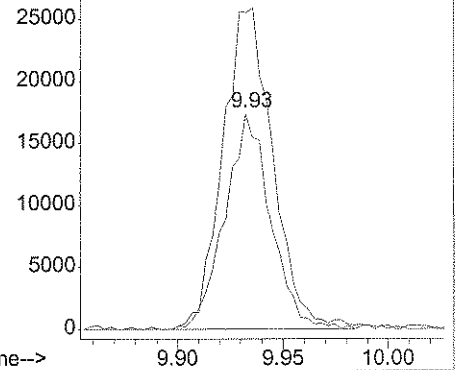


#56
 Toluene
 Concen: 1.49 ug/l
 RT: 9.93 min Scan# 2502
 Delta R.T. -0.00 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

Tgt Ion: 92 Resp: 26202
 Ion Ratio Lower Upper
 92 100
 91 162.4 137.6 206.4

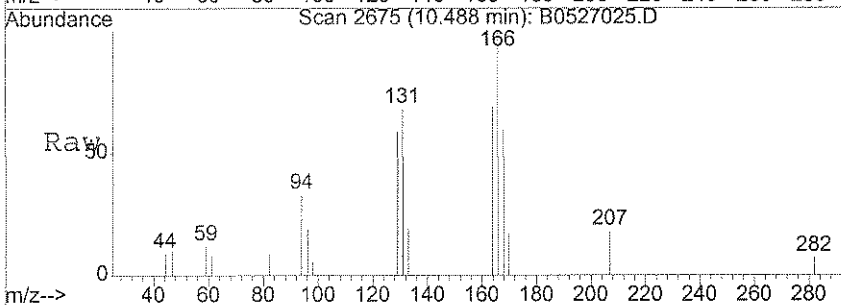


Abundance Ion 92.05 (91.75 to 92.75): B0527025.D
 30000 Ion 91.05 (90.75 to 91.75): B0527025.D

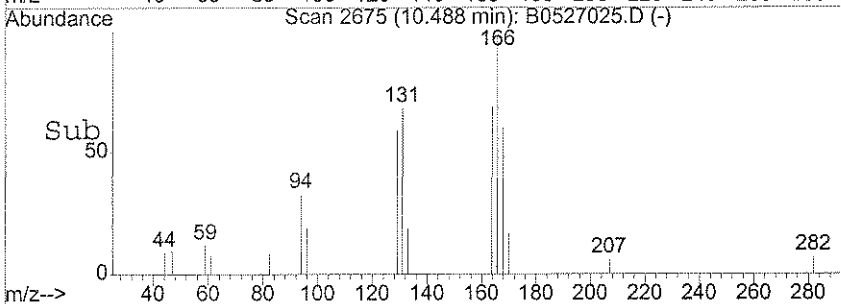
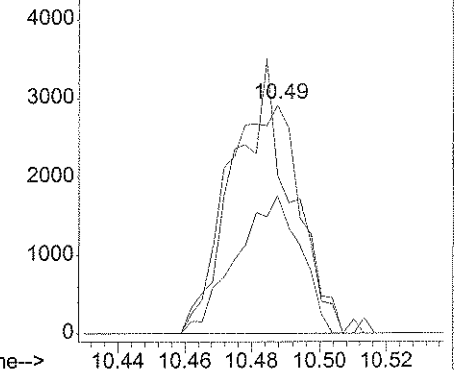


#60
 Tetrachloroethene
 Concen: 0.47 ug/l
 RT: 10.49 min Scan# 2675
 Delta R.T. 0.00 min
 Lab File: B0527025.D
 Acq: 27 May 2008 19:35

Tgt Ion: 166 Resp: 4506
 Ion Ratio Lower Upper
 166 100
 164 91.5 65.6 98.4
 168 51.3 41.1 61.7



Abundance Ion 165.95 (165.65 to 166.65): B052702
 Ion 163.95 (163.65 to 164.65): B052702
 Ion 167.95 (167.65 to 168.65): B052702



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-002
 Lab File ID: B0527026.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 20:04
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <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	23	
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	27	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-002
 Lab File ID: B0527026.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 20:04
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	1.5	
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	21	
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	5.9	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-002
 Lab File ID: B0527026.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 20:04
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

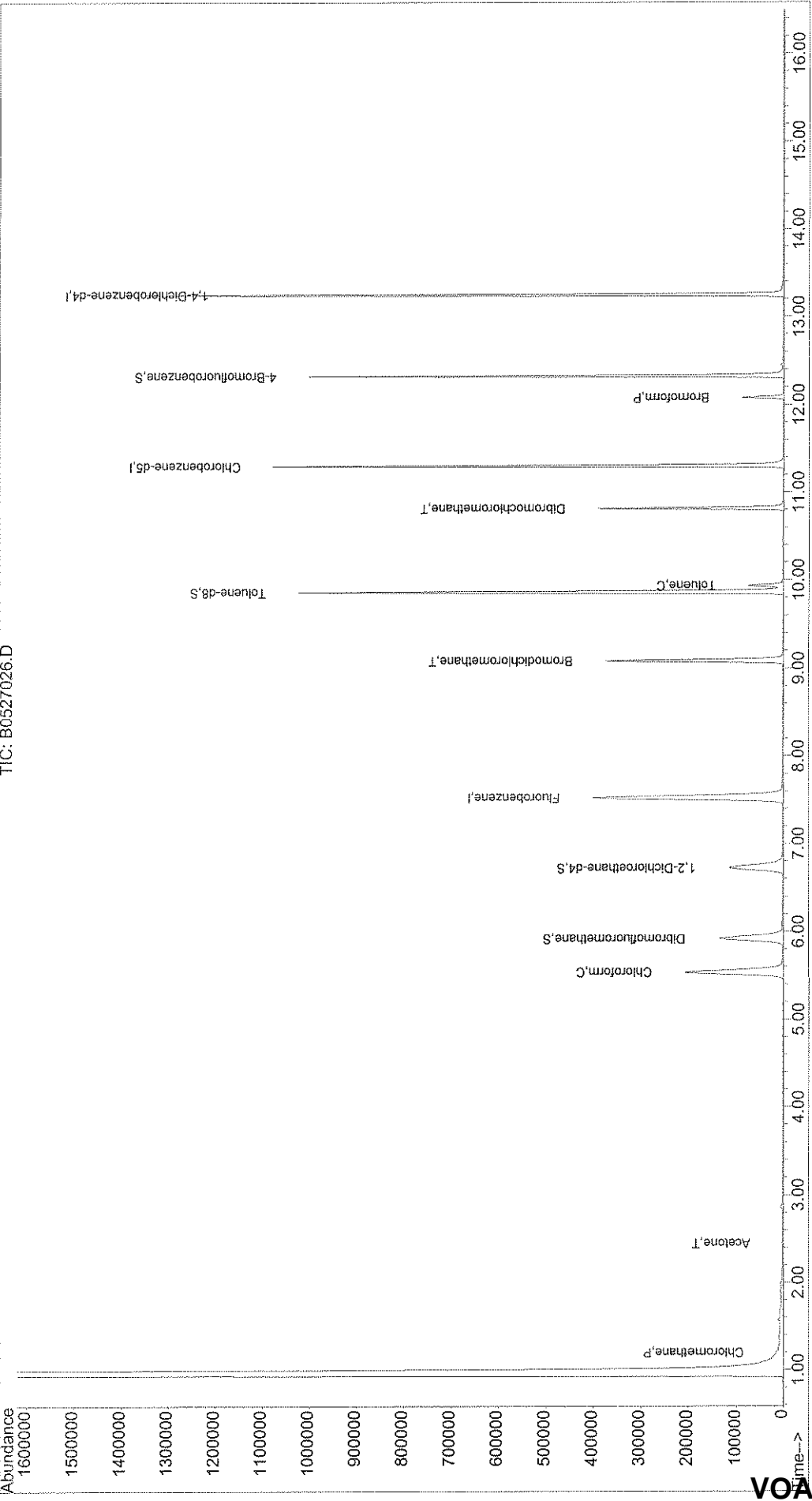
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527026.D Vial: 21
Acq On : 27 May 2008 20:04 Operator: DGA
Sample : JPL115-002 Inst : Buddha
Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 11:25 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527026.D Vial: 21
 Acq On : 27 May 2008 20:04 Operator: DGA
 Sample : JPL115-002 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:25 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Dev(Max)
						Rcv(Ar)	
1) Fluorobenzene	7.53	96	650559	25.00	ug/l	0.00	122.60%
54) Chlorobenzene-d5	11.30	117	546307	25.00	ug/l	0.00	124.17%
74) 1,4-Dichlorobenzene-d4	13.25	152	313593	25.00	ug/l	0.00	120.61%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	158291	21.64	ug/l	0.00	
Spiked Amount	20.000						
Range	85 - 115						Recovery = 108.20%
40) 1,2-Dichloroethane-d4	6.71	65	191227	29.37	ug/l	-0.02	
Spiked Amount	25.000						
Range	70 - 120						Recovery = 117.48%
55) Toluene-d8	9.86	98	655543	23.40	ug/l	0.00	
Spiked Amount	25.000						
Range	85 - 120						Recovery = 93.60%
76) 4-Bromofluorobenzene	12.32	95	235981	24.28	ug/l	0.00	
Spiked Amount	25.000						
Range	75 - 120						Recovery = 97.12%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	1818	0.19 ug/l		93
4) Vinyl Chloride	1.29	62	148	N.D.		
5) Bromomethane	1.53	96	67	Below Cal		95
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	2.28	96	134	N.D.		
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.		
11) Acetone	2.45	43	2166	0.98 ug/l #		61
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. d		
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	2.87	84	1750	Below Cal #		73
19) trans-1,2-Dichloroethene	3.13	96	81	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
 B0527026.D B8260W.M Mon Jun 02 11:25:32 2008

J. G. P. H.
 Page 1
VOA - 29

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527026.D Vial: 21
 Acq On : 27 May 2008 20:04 Operator: DGA
 Sample : JPL115-002 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:25 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	107		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	4.82	77	30		N.D.	
29) cis-1,2-Dichloroethene	4.79	96	54		N.D.	
30) 2-Butanone	4.91	43	53		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	5.28	128	39		N.D.	
33) Methacrylonitrile	5.41	41	46		N.D.	
34) Chloroform	5.54	83	318962	23.07	ug/l	99
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.73	56	33		N.D.	
38) Carbon Tetrachloride	6.15	117	110		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.69	78	286		N.D.	
42) 1,2-Dichloroethane	6.82	62	33		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	7.34	43	30		N.D.	
45) Trichloroethene	8.24	130	49		N.D.	
46) Methylcyclohexane	8.40	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	8.88	41	63		N.D.	
50) Bromodichloromethane	9.09	83	263357	26.59	ug/l	99
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.64	75	37		N.D.	
53) 4-Methyl-2-pentanone	9.85	43	951		N.D.	
56) Toluene	9.94	92	30098	1.46	ug/l	95
57) trans-1,3-Dichloropropene	10.28	75	38		N.D.	
58) Ethyl methacrylate	10.17	69	29		N.D.	
59) 1,1,2-Trichloroethane	10.26	97	42		N.D.	
60) Tetrachloroethene	10.49	166	263		N.D.	
61) 1,3-Dichloropropane	10.70	76	30		N.D.	
62) 2-Hexanone	10.71	43	56		N.D.	
63) Dibromochloromethane	10.81	129	179995	21.06	ug/l	100
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	927		N.D.	
66) Chlorobenzene	11.33	112	31		N.D.	
67) 1,1,1,2-Tetrachloroethane	0.00	131	0		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0527026.D B8260W.M Mon Jun 02 11:25:32 2008

J. G. P. H.

Quantitation Report

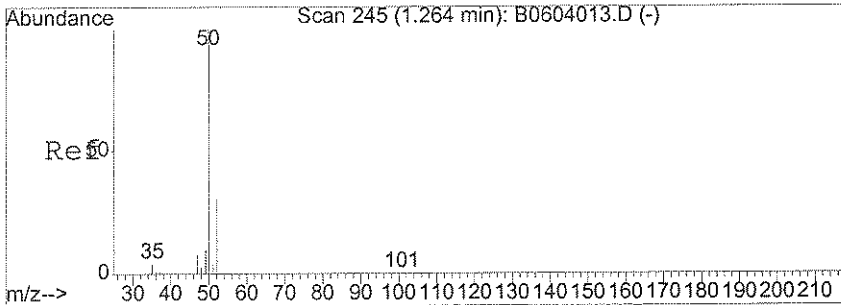
Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527026.D Vial: 21
 Acq On : 27 May 2008 20:04 Operator: DGA
 Sample : JPL115-002 Inst : Buddha
 Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:25 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

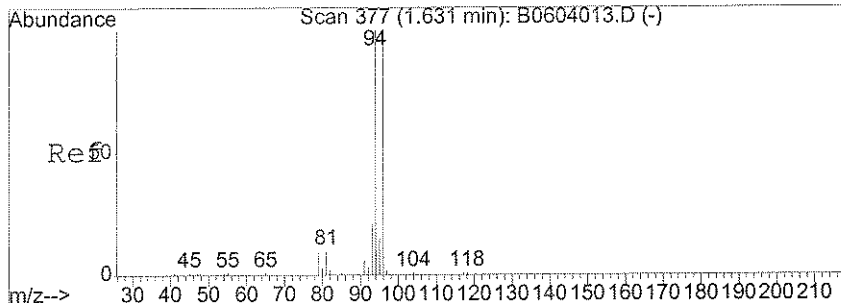
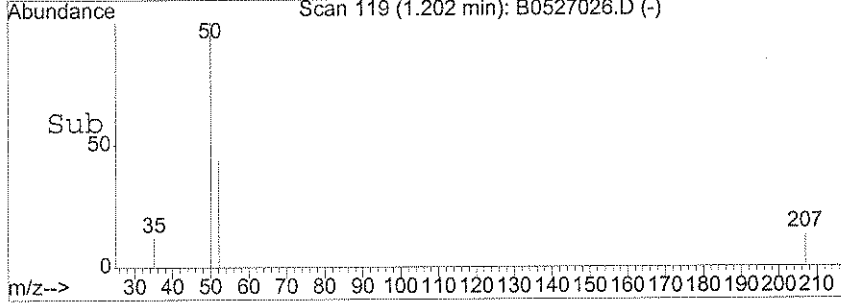
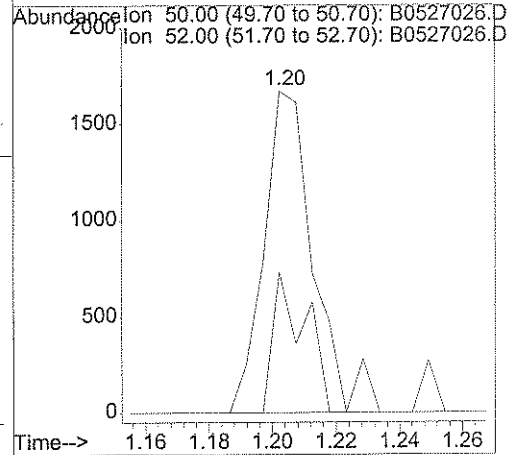
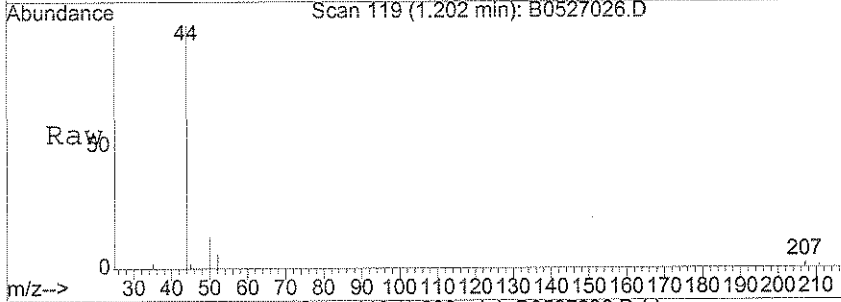
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	179		N.D.	
69) m,p-Xylene	11.53	106	34		N.D.	
70) o-xylene	11.64	106	31		N.D.	
71) Styrene	11.90	104	232		N.D.	
72) Bromoform	12.08	173	38778	5.93	ug/l	99
73) Isopropylbenzene	12.19	105	38		N.D.	
75) trans-1,4-Dichloro-2-buten	12.32	53	37		N.D.	
77) Bromobenzene	12.37	156	29		N.D.	
78) 1,1,2,2-Tetrachloroethane	0.00	83	0		N.D.	
79) 1,2,3-Trichloropropane	12.63	75	58		N.D.	
80) n-Propylbenzene	12.51	120	63		N.D.	
81) 2-Chlorotoluene	12.52	91	110		N.D.	
82) 4-Chlorotoluene	12.68	91	44		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	122		N.D.	
84) tert-Butylbenzene	12.92	119	81		N.D.	
85) 1,2,4-Trimethylbenzene	13.21	105	66		N.D.	
86) sec-butylbenzene	13.08	105	77		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	62		N.D.	
88) 4-Isopropyltoluene	13.19	119	92		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	97		N.D.	
90) 1,2-Dichlorobenzene	13.57	146	33		N.D.	
91) n-Butylbenzene	13.52	91	208		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.36	75	30		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	173		N.D.	
94) Hexachlorobutadiene	14.89	225	40		N.D.	
95) Naphthalene	14.99	128	164		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	99		N.D.	

[Handwritten signature]



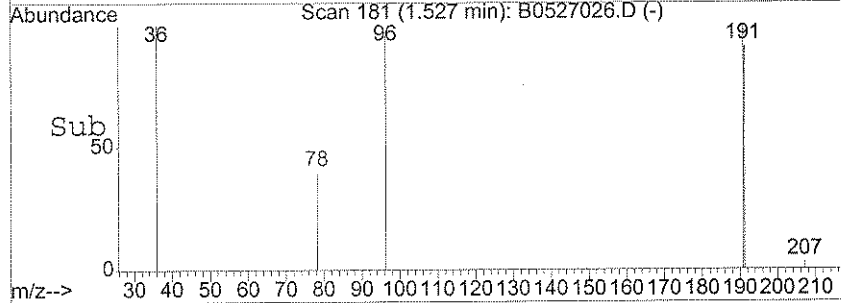
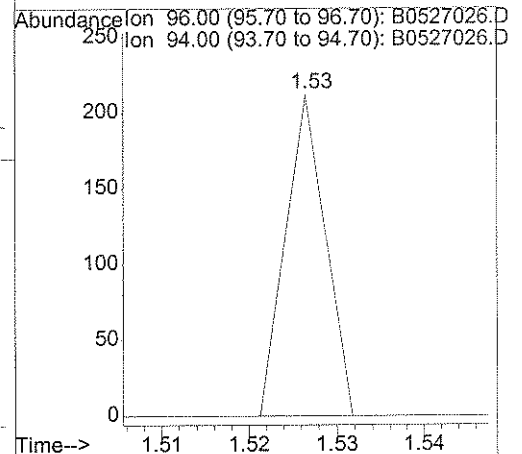
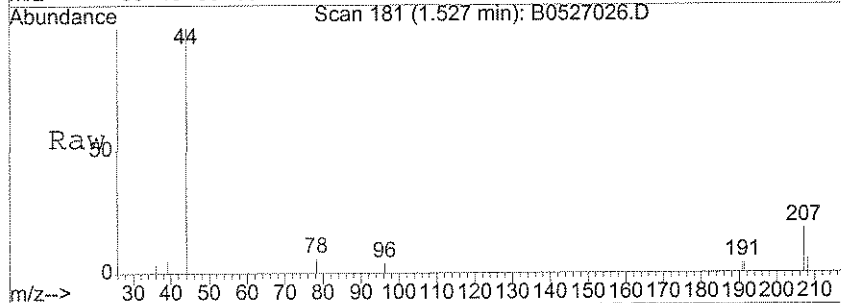
#3
 Chloromethane
 Concen: 0.19 ug/l
 RT: 1.20 min Scan# 119
 Delta R.T. -0.00 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

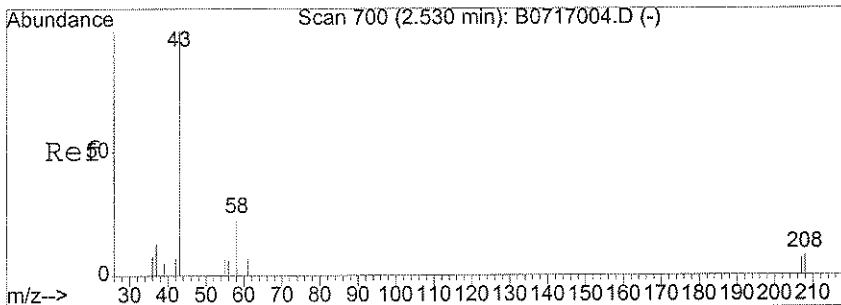
Tgt Ion	Resp	Lower	Upper
50	1818		
52	28.8	12.5	52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.53 min Scan# 181
 Delta R.T. -0.03 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

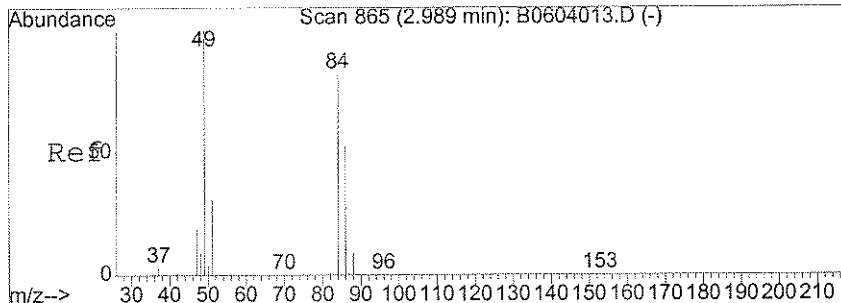
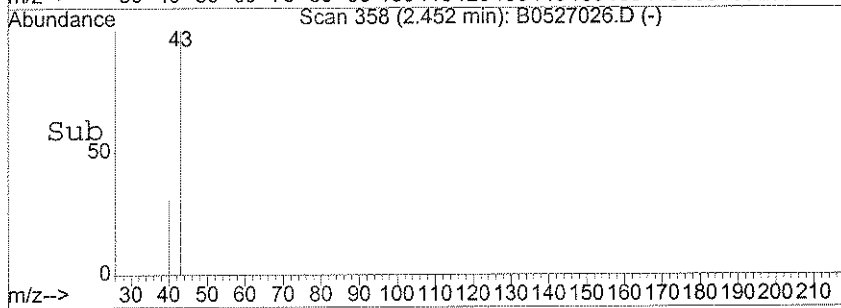
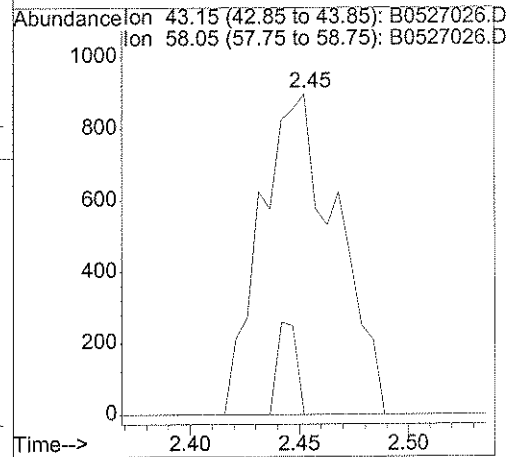
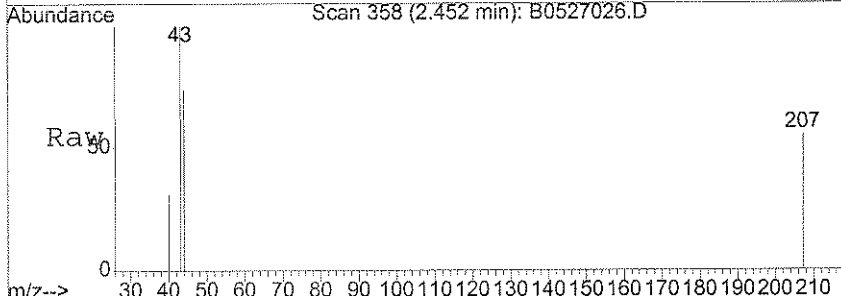
Tgt Ion	Resp	Lower	Upper
96	67		
94	100.0	84.9	124.9





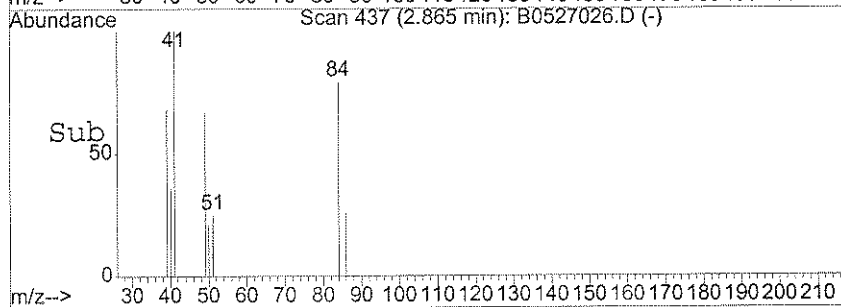
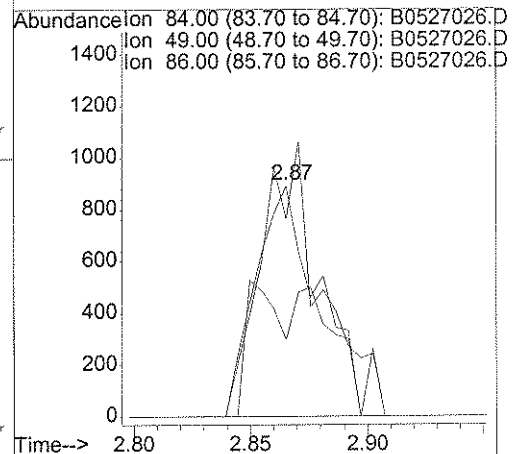
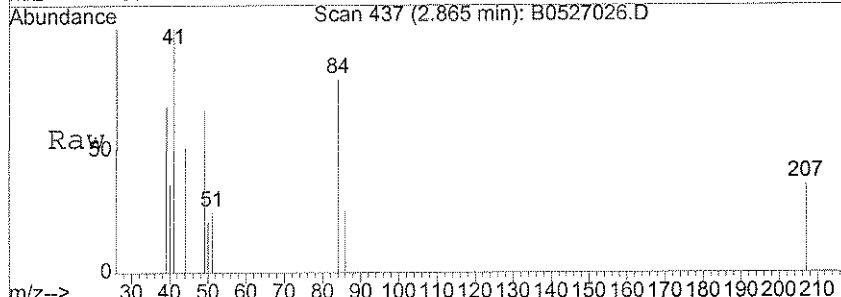
#11
 Acetone
 Concen: 0.98 ug/l
 RT: 2.45 min Scan# 358
 Delta R.T. 0.03 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

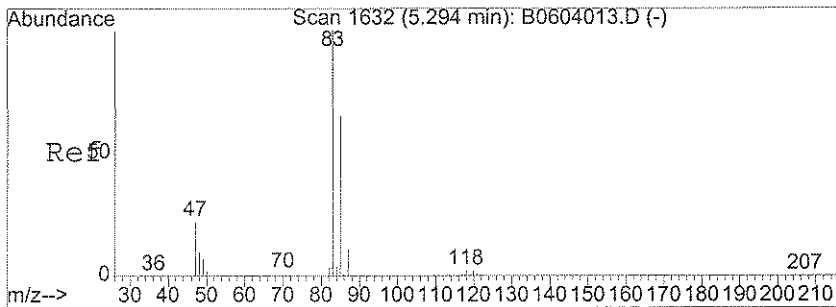
Tgt Ion: 43 Resp: 2166
 Ion Ratio Lower Upper
 43 100
 58 7.4 22.0 33.0#



#18
 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

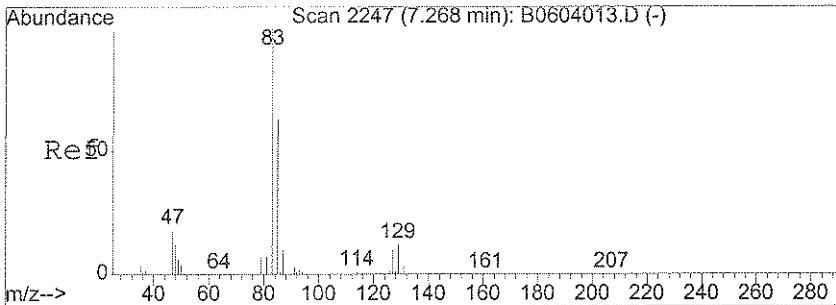
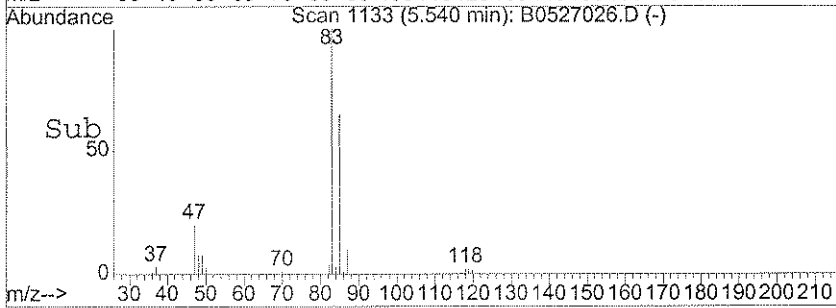
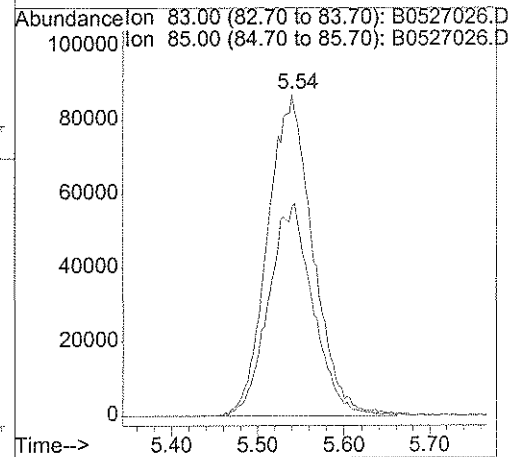
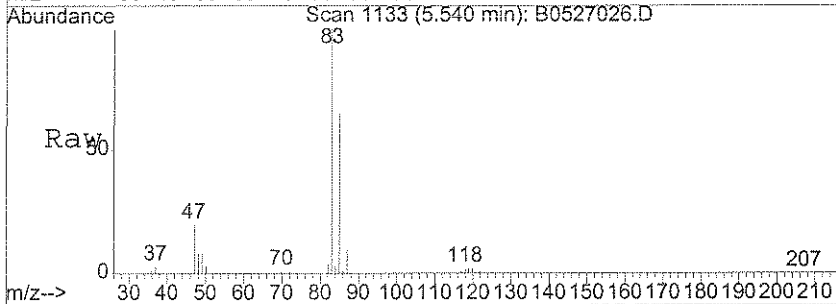
Tgt Ion: 84 Resp: 1750
 Ion Ratio Lower Upper
 84 100
 49 108.5 113.6 153.6#
 86 35.0 45.8 85.8#





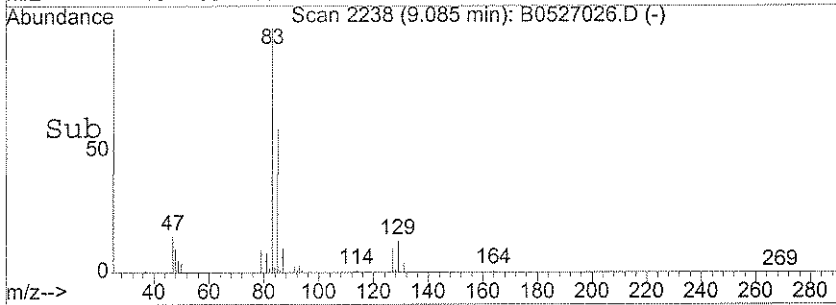
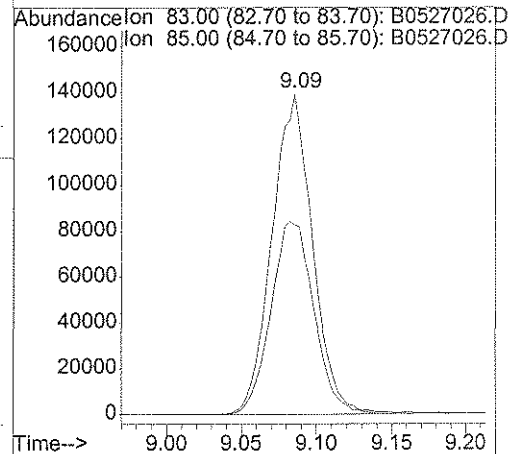
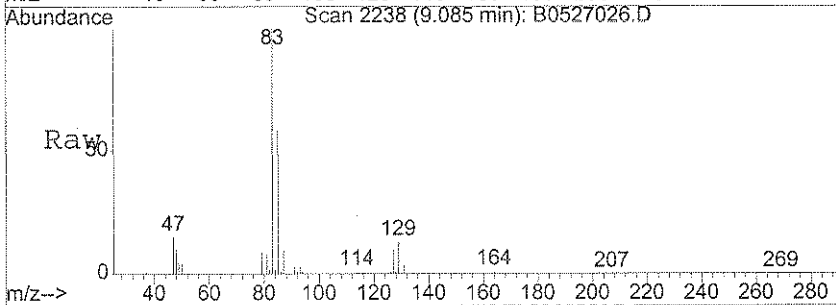
#34
 Chloroform
 Concen: 23.07 ug/l
 RT: 5.54 min Scan# 1133
 Delta R.T. -0.00 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

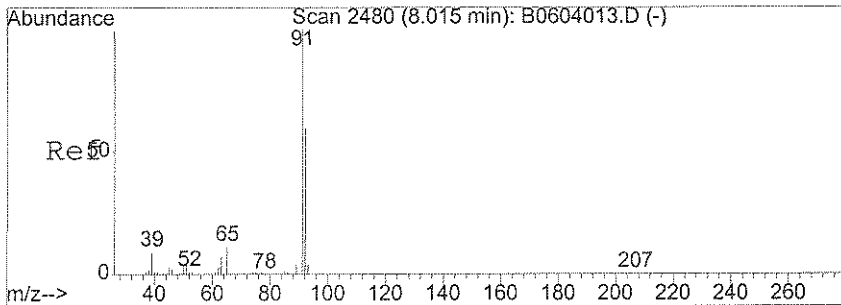
Tgt Ion: 83 Resp: 318962
 Ion Ratio Lower Upper
 83 100
 85 64.4 44.0 84.0



#50
 Bromodichloromethane
 Concen: 26.59 ug/l
 RT: 9.09 min Scan# 2238
 Delta R.T. 0.00 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

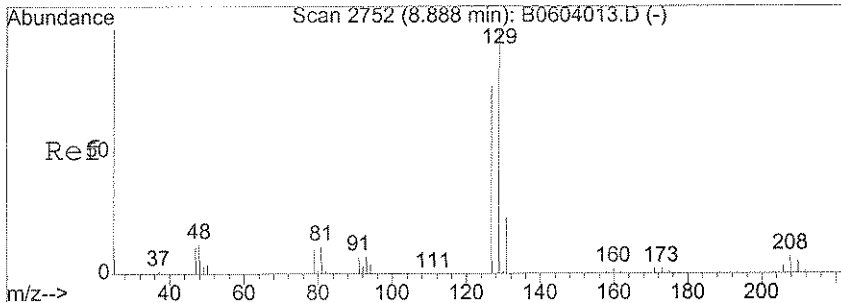
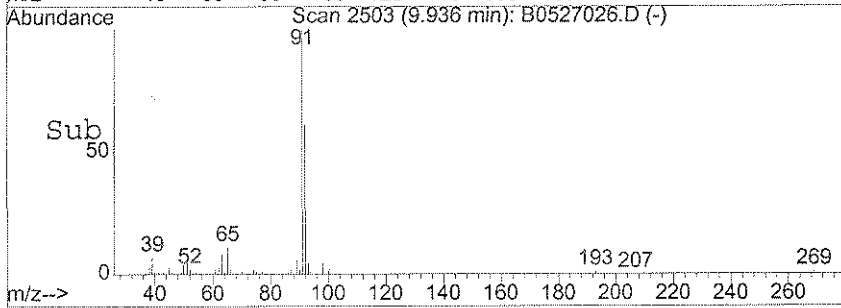
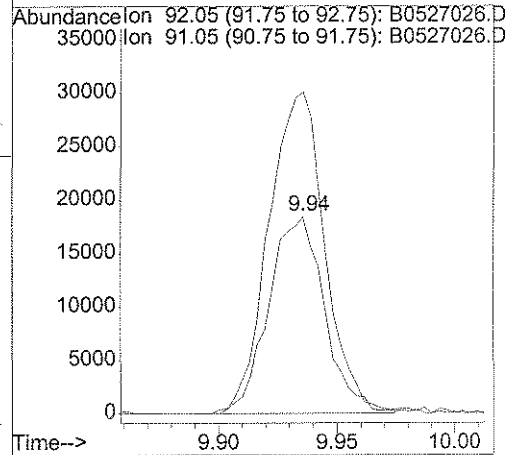
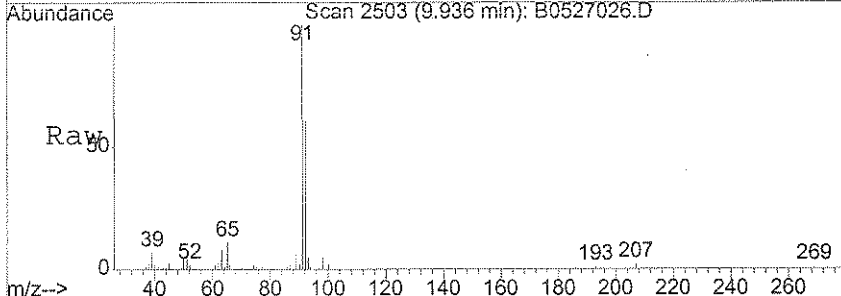
Tgt Ion: 83 Resp: 263357
 Ion Ratio Lower Upper
 83 100
 85 63.7 43.0 83.0





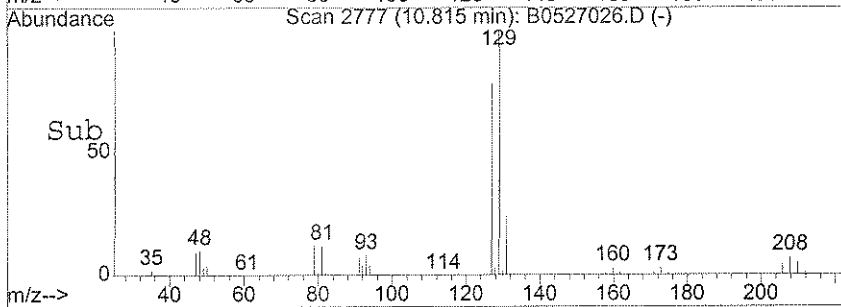
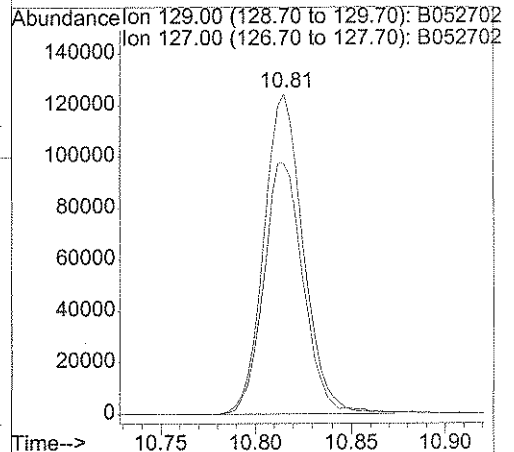
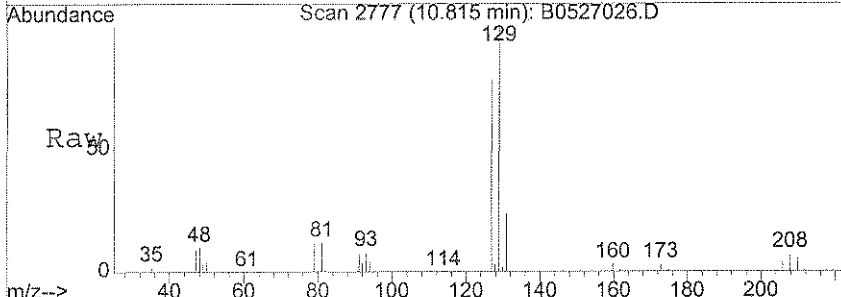
#56
 Toluene
 Concen: 1.46 ug/l
 RT: 9.94 min Scan# 2503
 Delta R.T. 0.00 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

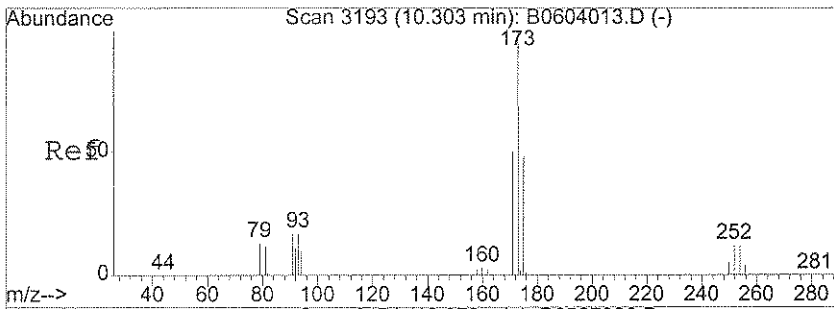
Tgt Ion: 92 Resp: 30098
 Ion Ratio Lower Upper
 92 100
 91 164.4 137.6 206.4



#63
 Dibromochloromethane
 Concen: 21.06 ug/l
 RT: 10.81 min Scan# 2777
 Delta R.T. -0.00 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

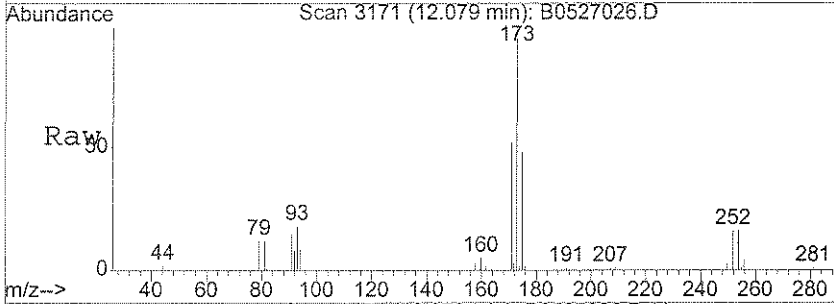
Tgt Ion: 129 Resp: 179995
 Ion Ratio Lower Upper
 129 100
 127 78.6 58.5 98.5



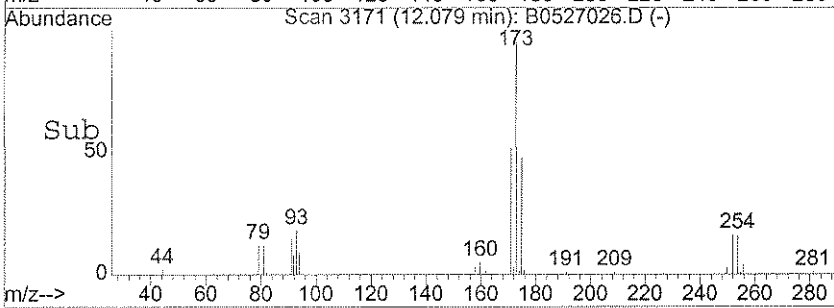
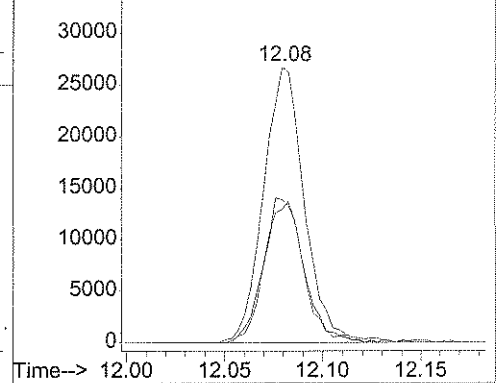


#72
 Bromoform
 Concen: 5.93 ug/l
 RT: 12.08 min Scan# 3171
 Delta R.T. -0.00 min
 Lab File: B0527026.D
 Acq: 27 May 2008 20:04

Tgt Ion	Resp	Lower	Upper
173	100		
175	49.8	39.4	59.0
171	51.9	40.9	61.3



Abundance
 Ion 172.85 (172.55 to 173.55): B052702
 Ion 174.85 (174.55 to 175.55): B052702
 Ion 170.85 (170.55 to 171.55): B052702



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-003
 Lab File ID: B0527027.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 20:31
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-003
 Lab File ID: B0527027.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 20:31
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.45	J
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-003
 Lab File ID: B0527027.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 20:31
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

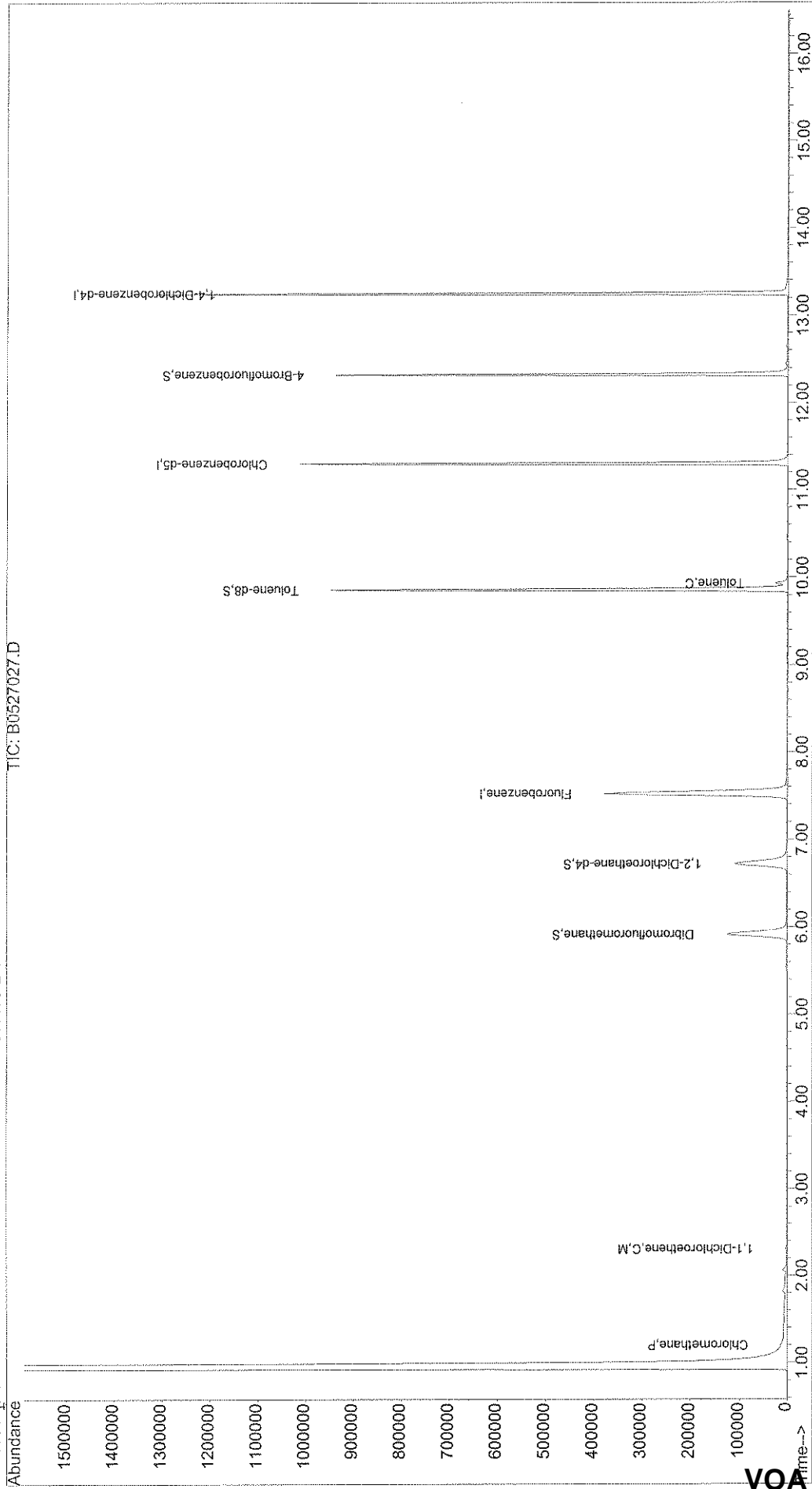
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	<u>Q</u>
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527027.D Vial: 22
Acq On : 27 May 2008 20:31 Operator: DGA
Sample : JPL115-003 Inst : Buddha
Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 11:26 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527027.D Vial: 22
 Acq On : 27 May 2008 20:31 Operator: DGA
 Sample : JPL115-003 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:26 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	Rcv(Ar)
1) Fluorobenzene	7.52	96	619864	25.00	ug/l	0.00	116.82%
54) Chlorobenzene-d5	11.30	117	514014	25.00	ug/l	0.00	116.83%
74) 1,4-Dichlorobenzene-d4	13.25	152	302760	25.00	ug/l	0.00	116.44%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	151522	21.74	ug/l	0.00	
Spiked Amount	20.000	Range	85 - 115	Recovery	=	108.70%	
40) 1,2-Dichloroethane-d4	6.72	65	182327	29.39	ug/l	0.00	
Spiked Amount	25.000	Range	70 - 120	Recovery	=	117.56%	
55) Toluene-d8	9.86	98	611911	23.22	ug/l	0.00	
Spiked Amount	25.000	Range	85 - 120	Recovery	=	92.88%	
76) 4-Bromofluorobenzene	12.32	95	222412	23.70	ug/l	0.00	
Spiked Amount	25.000	Range	75 - 120	Recovery	=	94.80%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	2063	0.23	ug/l	78
4) Vinyl Chloride	0.00	62	0	N.D.		
5) Bromomethane	1.56	96	69	Below Cal	#	1
6) Chloroethane	0.00	64	0	N.D.		
7) Trichlorofluoromethane	0.00	101	0	N.D.	d	
8) Acrolein	0.00	56	0	N.D.		
9) 1,1-Dichloroethene	2.31	96	1405	0.18	ug/l #	63
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	2.76	41	91	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) 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

B0527027.D B8260W.M Mon Jun 02 11:26:50 2008

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527027.D Vial: 22
 Acq On : 27 May 2008 20:31 Operator: DGA
 Sample : JPL115-003 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:26 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	0		N.D.	
27) Ethyl-t-butyl ether	0.00	59	0		N.D.	
28) 2,2-Dichloropropane	4.82	77	30		N.D.	
29) cis-1,2-Dichloroethene	4.78	96	53		N.D.	
30) 2-Butanone	4.96	43	103		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.30	41	29		N.D.	
34) Chloroform	5.53	83	596		N.D.	
35) 1,1,1-Trichloroethane	5.73	97	31		N.D.	
36) Cyclohexane	5.64	56	29		N.D.	
38) Carbon Tetrachloride	6.06	117	34		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.68	78	80		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	7.26	43	31		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	8.40	83	44		N.D.	
47) 1,2-Dichloropropane	8.58	63	36		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.86	41	57		N.D.	
50) Bromodichloromethane	9.08	83	499		N.D.	
51) 2-Chloroethyl vinyl ether	0.00	63	0		N.D.	
52) cis-1,3-Dichloropropene	9.58	75	33		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	
56) Toluene	9.93	92	8737	0.45	ug/l	96
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	10.46	97	39		N.D.	
60) Tetrachloroethene	10.48	166	428		N.D.	
61) 1,3-Dichloropropane	0.00	76	0		N.D.	
62) 2-Hexanone	10.71	43	33		N.D.	
63) Dibromochloromethane	10.81	129	464		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.32	91	30		N.D.	
66) Chlorobenzene	11.34	112	33		N.D.	
67) 1,1,1,2-Tetrachloroethane	11.30	131	30		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0527027.D B8260W.M Mon Jun 02 11:26:51 2008

Quantitation Report

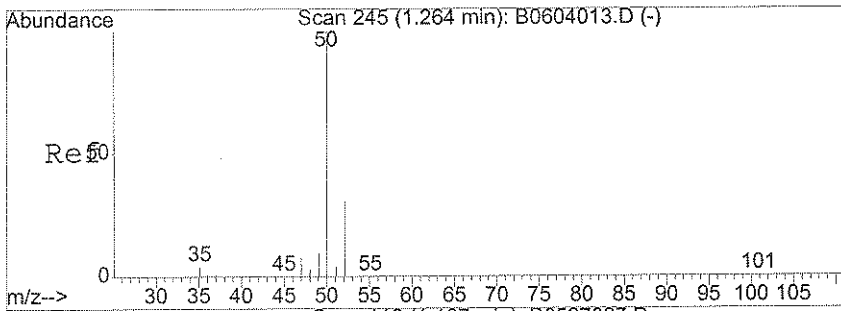
Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527027.D Vial: 22
 Acq On : 27 May 2008 20:31 Operator: DGA
 Sample : JPL115-003 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:26 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

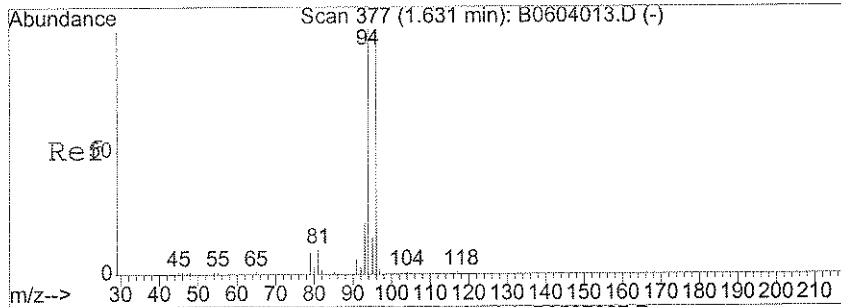
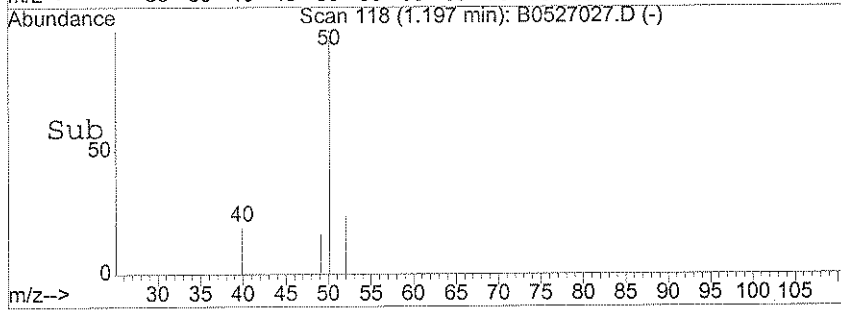
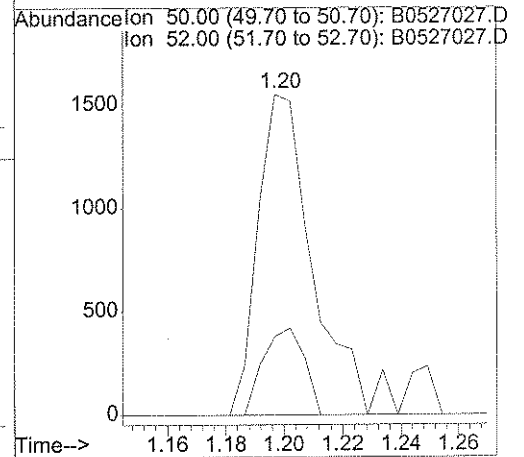
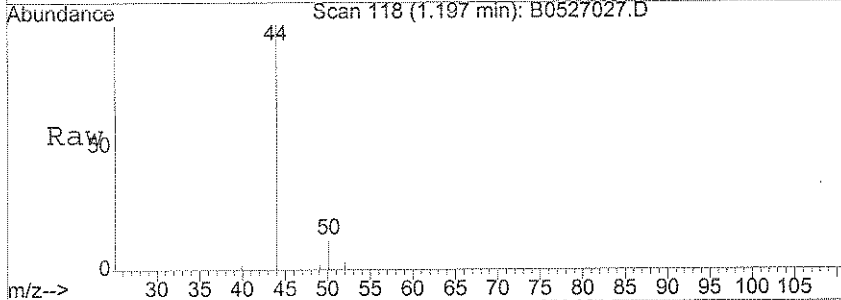
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.52	91	78		N.D.	
69) m,p-Xylene	11.52	106	31		N.D.	
70) o-xylene	11.93	106	39		N.D.	
71) Styrene	0.00	104	0		N.D.	
72) Bromoform	12.08	173	113		N.D.	
73) Isopropylbenzene	12.18	105	92		N.D.	
75) trans-1,4-Dichloro-2-buten	0.00	53	0		N.D.	
77) Bromobenzene	12.44	156	30		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.55	83	29		N.D.	
79) 1,2,3-Trichloropropane	12.54	75	100		N.D.	
80) n-Propylbenzene	12.51	120	35		N.D.	
81) 2-Chlorotoluene	12.62	91	34		N.D.	
82) 4-Chlorotoluene	12.69	91	41		N.D.	
83) 1,3,5-Trimethylbenzene	12.66	105	47		N.D.	
84) tert-Butylbenzene	12.90	119	42		N.D.	
85) 1,2,4-Trimethylbenzene	12.96	105	32		N.D.	
86) sec-butylbenzene	13.07	105	87		N.D.	
87) 1,3-Dichlorobenzene	13.26	146	31		N.D.	
88) 4-Isopropyltoluene	13.20	119	155		N.D.	
89) 1,4-Dichlorobenzene	13.26	146	31		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	33		N.D.	
91) n-Butylbenzene	13.52	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	14.90	225	70		N.D.	
95) Naphthalene	14.98	128	113		N.D.	
96) 1,2,3-Trichlorobenzene	15.17	180	35		N.D.	

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



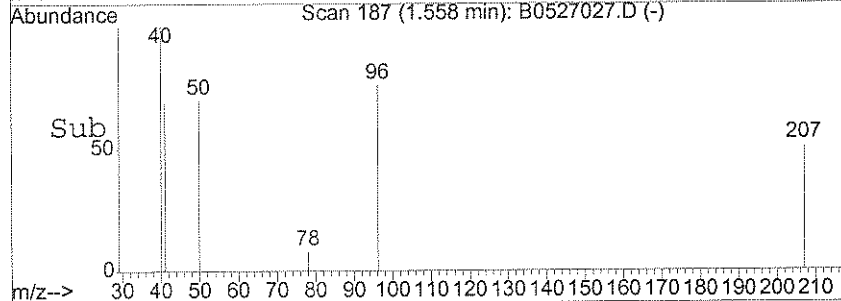
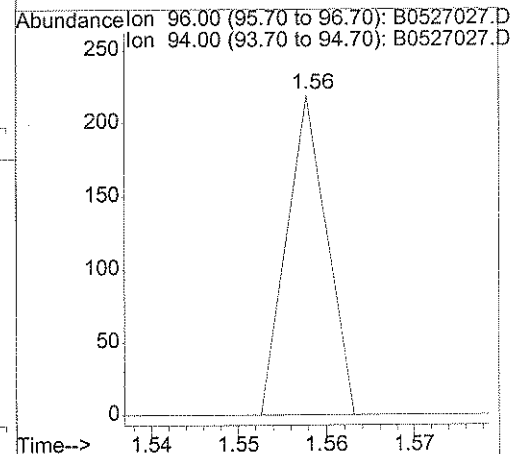
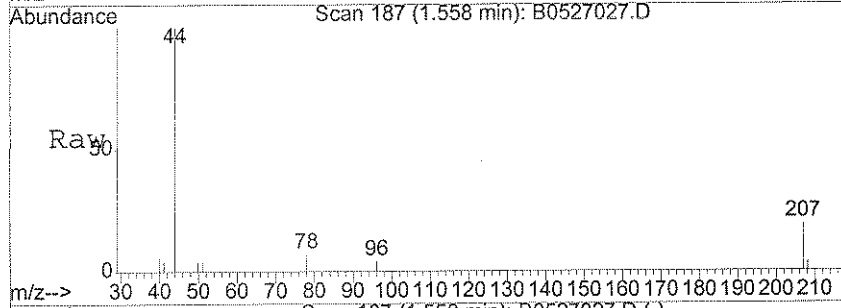
#3
 Chloromethane
 Concen: 0.23 ug/l
 RT: 1.20 min Scan# 118
 Delta R.T. -0.01 min
 Lab File: B0527027.D
 Acq: 27 May 2008 20:31

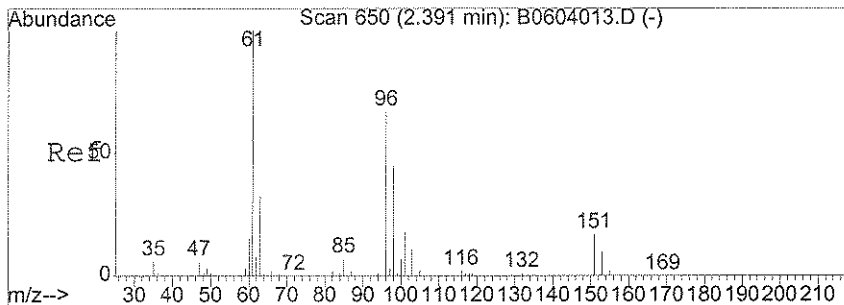
Tgt Ion: 50 Resp: 2063
 Ion Ratio Lower Upper
 50 100
 52 19.9 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.56 min Scan# 187
 Delta R.T. 0.01 min
 Lab File: B0527027.D
 Acq: 27 May 2008 20:31

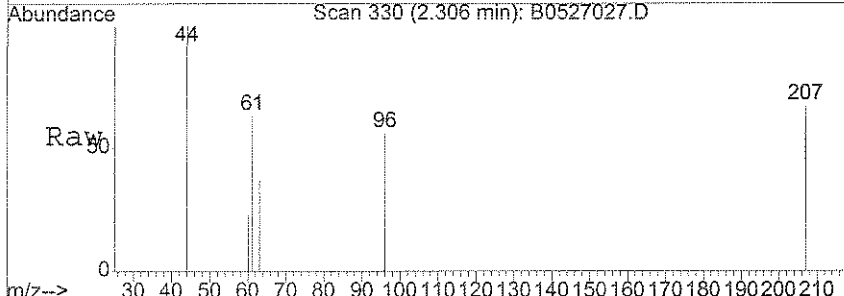
Tgt Ion: 96 Resp: 69
 Ion Ratio Lower Upper
 96 100
 94 0.0 84.9 124.9#



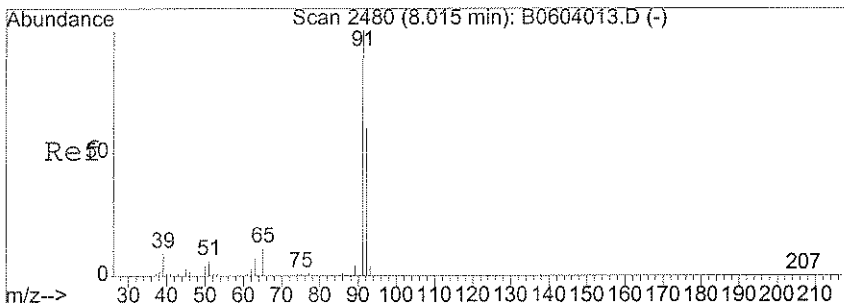
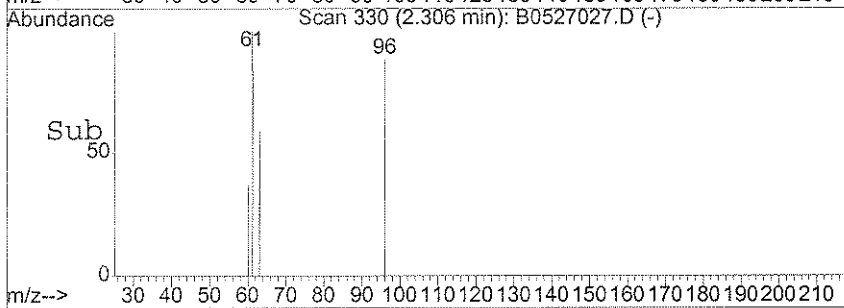
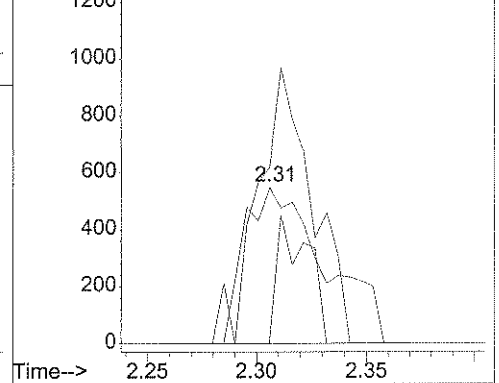


#9
 1,1-Dichloroethene
 Concen: 0.18 ug/l
 RT: 2.31 min Scan# 330
 Delta R.T. 0.01 min
 Lab File: B0527027.D
 Acq: 27 May 2008 20:31

Tgt Ion	Resp	Lower	Upper
96	1405		
61	120.4	148.9	188.9#
98	31.7	44.8	84.8#

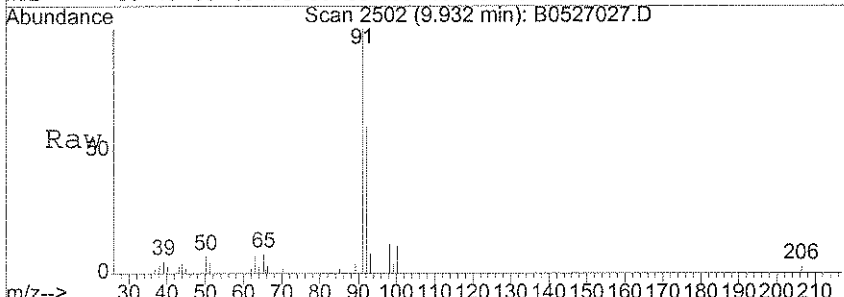


Abundance
 Ion 96.00 (95.70 to 96.70): B0527027.D
 Ion 61.00 (60.70 to 61.70): B0527027.D
 Ion 98.00 (97.70 to 98.70): B0527027.D

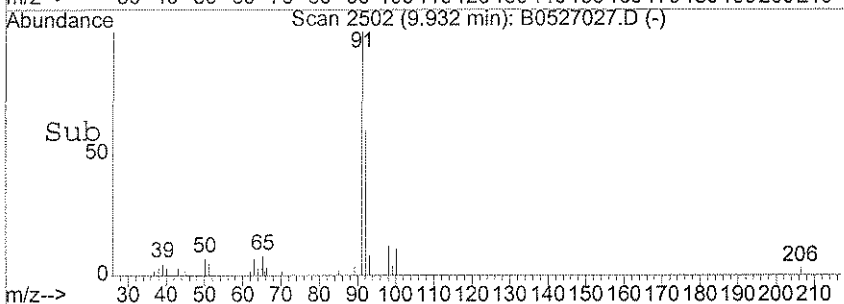
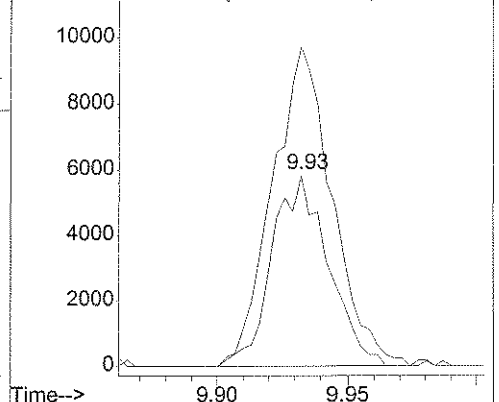


#56
 Toluene
 Concen: 0.45 ug/l
 RT: 9.93 min Scan# 2502
 Delta R.T. -0.00 min
 Lab File: B0527027.D
 Acq: 27 May 2008 20:31

Tgt Ion	Resp	Lower	Upper
92	8737		
91	177.0	137.6	206.4



Abundance
 Ion 92.05 (91.75 to 92.75): B0527027.D
 Ion 91.05 (90.75 to 91.75): B0527027.D



1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-004
 Lab File ID: B0527028.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 21:01
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.38	J
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	24	
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	27	
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-004
 Lab File ID: B0527028.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 21:01
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
108-88-3	Toluene	1.5	
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	22	
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	6.4	
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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-004
 Lab File ID: B0527028.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 21:01
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

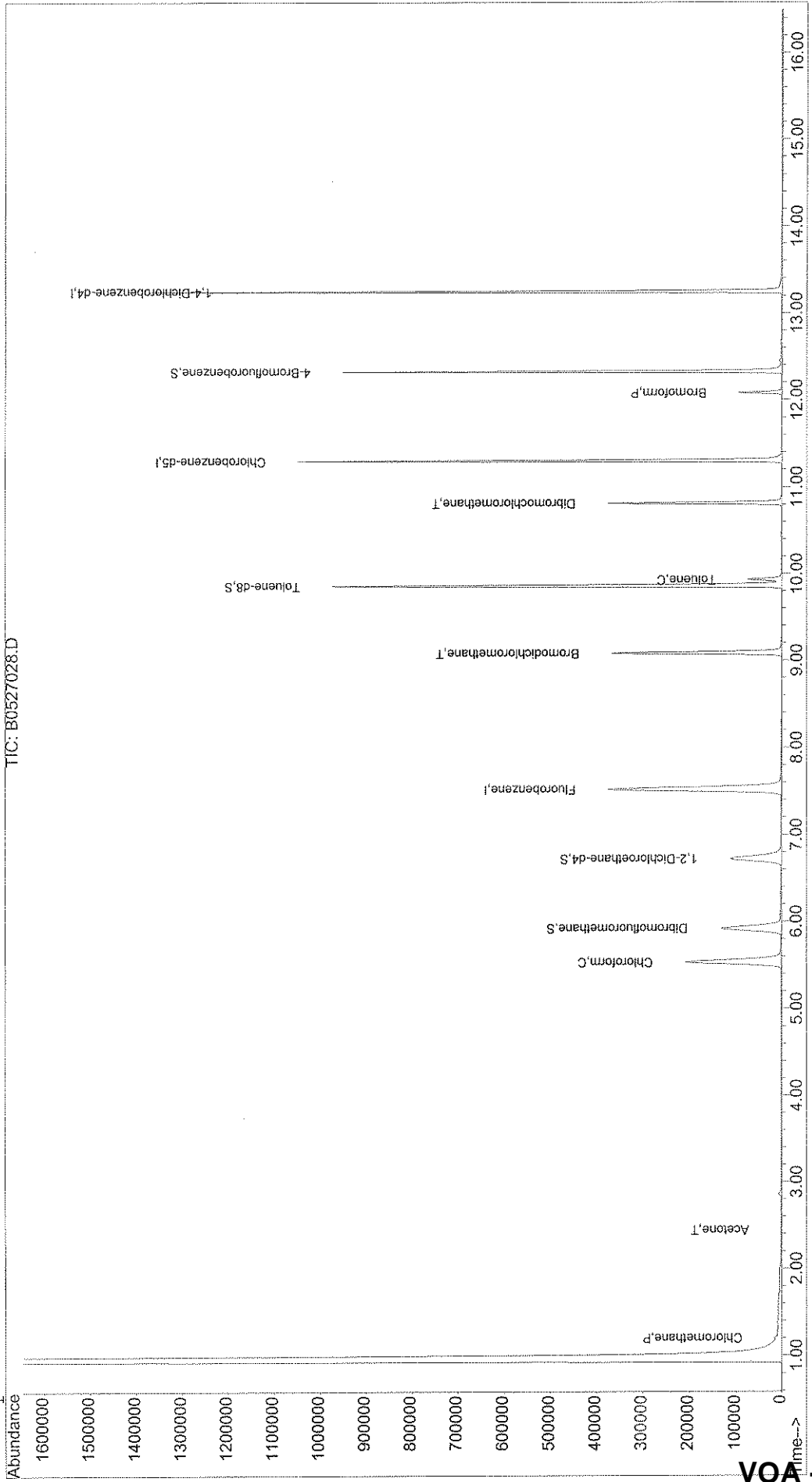
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
Acq On : 27 May 2008 21:01 Operator: DGA
Sample : JPL115-004 Inst : Buddha
Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 11:27 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
 Acq On : 27 May 2008 21:01 Operator: DGA
 Sample : JPL115-004 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:27 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	7.52	96	618492	25.00	ug/l	0.00 116.56%
54) Chlorobenzene-d5	11.30	117	521700	25.00	ug/l	0.00 118.58%
74) 1,4-Dichlorobenzene-d4	13.25	152	307394	25.00	ug/l	0.00 118.22%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	155242	22.32	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	111.60%
40) 1,2-Dichloroethane-d4	6.72	65	186908m	30.20	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	120.80%#
55) Toluene-d8	9.86	98	622187	23.26	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	93.04%
76) 4-Bromofluorobenzene	12.32	95	225498	23.67	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	94.68%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.		
3) Chloromethane	1.20	50	3409	0.38	ug/l	97
4) Vinyl Chloride	1.28	62	215	N.D.		
5) Bromomethane	1.54	96	92	Below Cal	#	67
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	2.44	43	2292	1.09	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	41	0	N.D.	d	
17) Methyl Acetate	0.00	43	0	N.D.		
18) Methylene Chloride	2.87	84	1737	Below Cal	#	40
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	3.13	73	64	N.D.		
22) Acrylonitrile	3.26	53	68	N.D.		

(#) = qualifier out of range (m) = manual integration
 B0527028.D B8260W.M Mon Jun 02 11:27:42 2008

J. A. P. H.
 VOA - 50

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
 Acq On : 27 May 2008 21:01 Operator: DGA
 Sample : JPL115-004 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:27 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
23) 1,1-Dichloroethane	3.78	63	75		N.D.	
24) Chloroprene	0.00	53	0		N.D.	
25) Isopropyl ether	0.00	45	0		N.D.	
26) Vinyl acetate	0.00	43	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	4.78	96	29		N.D.	
30) 2-Butanone	4.95	43	36		N.D.	
31) Propionitrile	5.09	54	73		N.D.	
32) Bromochloromethane	5.30	128	30		N.D.	
33) Methacrylonitrile	5.36	41	33		N.D.	
34) Chloroform	5.53	83	312954	23.81	ug/l	98
35) 1,1,1-Trichloroethane	5.83	97	47		N.D.	
36) Cyclohexane	0.00	56	0		N.D.	
38) Carbon Tetrachloride	6.08	117	286		N.D.	
39) 1,1-Dichloropropene	6.11	75	63		N.D.	
41) Benzene	6.69	78	84		N.D.	
42) 1,2-Dichloroethane	6.78	62	30		N.D.	
43) t-Amyl methyl ether	0.00	73	0		N.D.	
44) Isobutanol	0.00	43	0		N.D. d	
45) Trichloroethene	8.22	130	33		N.D.	
46) Methylcyclohexane	8.32	83	32		N.D.	
47) 1,2-Dichloropropane	8.60	63	38		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.91	41	32		N.D.	
50) Bromodichloromethane	9.09	83	257856	27.38	ug/l	98
51) 2-Chloroethyl vinyl ether	9.44	63	135		N.D.	
52) cis-1,3-Dichloropropene	9.40	75	35		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D. d	
56) Toluene	9.93	92	29910	1.52	ug/l	95
57) trans-1,3-Dichloropropene	10.24	75	40		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	10.38	97	79		N.D.	
60) Tetrachloroethene	10.49	166	279		N.D.	
61) 1,3-Dichloropropane	10.43	76	30		N.D.	
62) 2-Hexanone	10.70	43	55		N.D.	
63) Dibromochloromethane	10.81	129	178900	21.92	ug/l	98
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.30	91	943		N.D.	
66) Chlorobenzene	11.33	112	75		N.D.	
67) 1,1,1,2-Tetrachloroethane	11.34	131	33		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0527028.D B8260W.M Mon Jun 02 11:27:42 2008

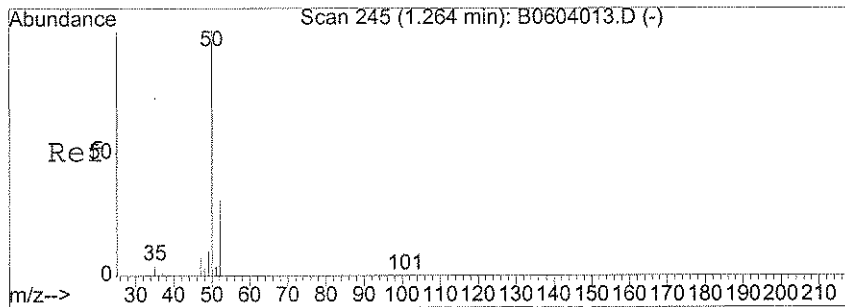
J. G. P. H.
 Page 2
 VOA - 51

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
 Acq On : 27 May 2008 21:01 Operator: DGA
 Sample : JPL115-004 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:27 2008 Quant Results File: B8260W.RES

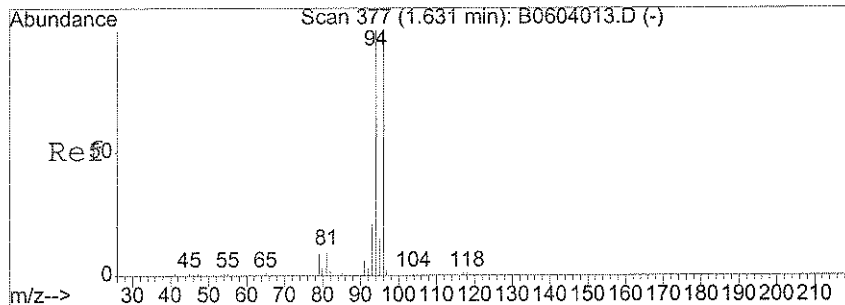
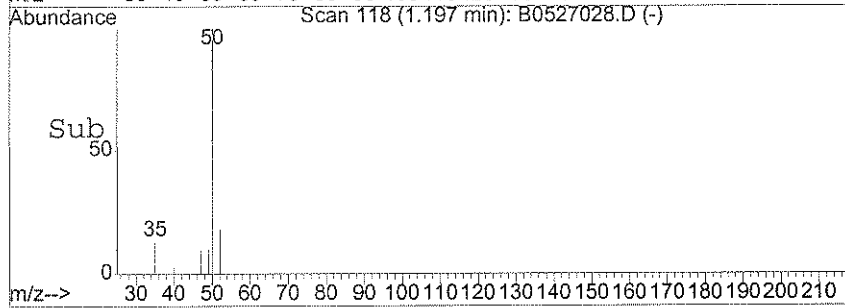
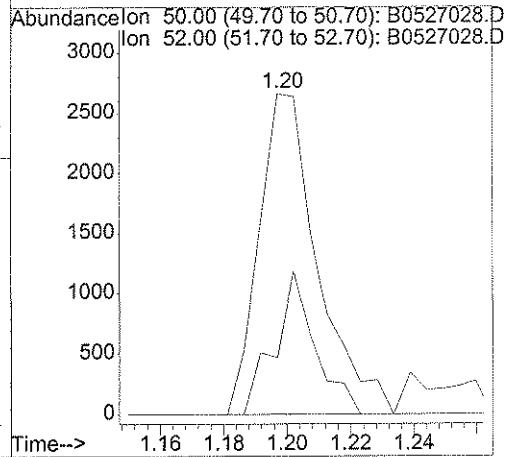
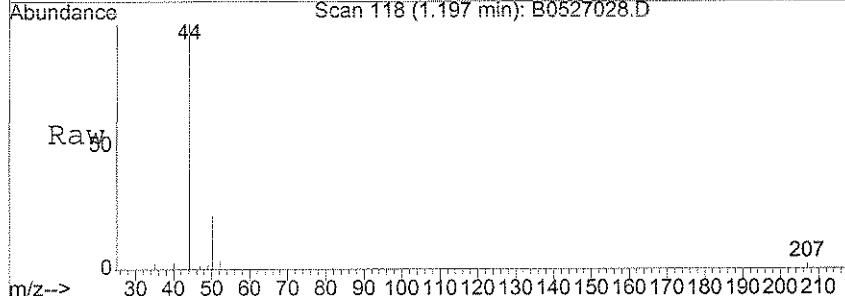
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	133		N.D.	
69) m,p-Xylene	11.53	106	29		N.D.	
70) o-xylene	11.87	106	47		N.D.	
71) Styrene	11.90	104	106		N.D.	
72) Bromoform	12.08	173	39998	6.41	ug/l	98
73) Isopropylbenzene	12.18	105	121		N.D.	
75) trans-1,4-Dichloro-2-buten	12.24	53	41		N.D.	
77) Bromobenzene	12.39	156	30		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.36	83	35		N.D.	
79) 1,2,3-Trichloropropane	12.44	75	68		N.D.	
80) n-Propylbenzene	12.51	120	29		N.D.	
81) 2-Chlorotoluene	12.52	91	115		N.D.	
82) 4-Chlorotoluene	12.69	91	68		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	33		N.D.	
84) tert-Butylbenzene	12.92	119	34		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	103		N.D.	
86) sec-butylbenzene	13.07	105	296		N.D.	
87) 1,3-Dichlorobenzene	13.20	146	102		N.D.	
88) 4-Isopropyltoluene	13.20	119	390		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	137		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	119		N.D.	
91) n-Butylbenzene	13.52	91	397		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.13	75	33		N.D.	
93) 1,2,4-Trichlorobenzene	14.82	180	30		N.D.	
94) Hexachlorobutadiene	14.89	225	94		N.D.	
95) Naphthalene	14.98	128	83		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	47		N.D.	



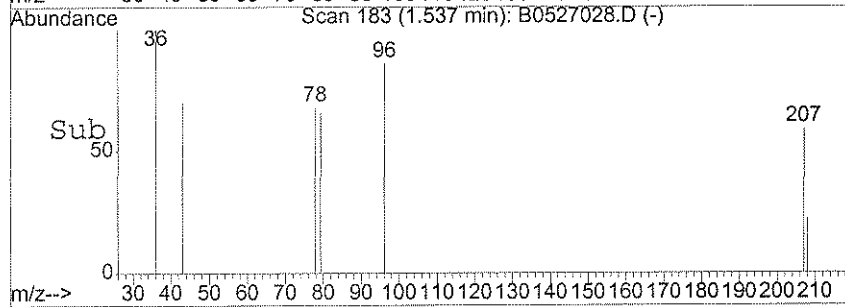
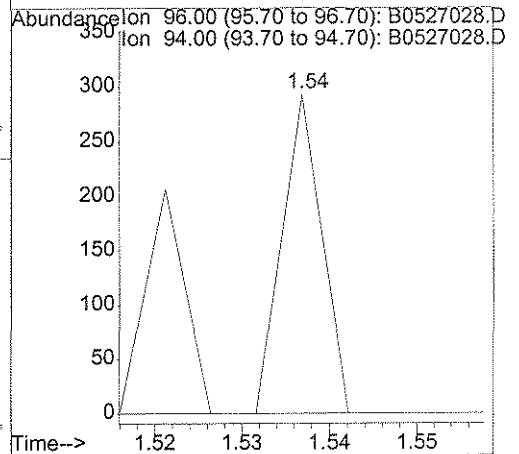
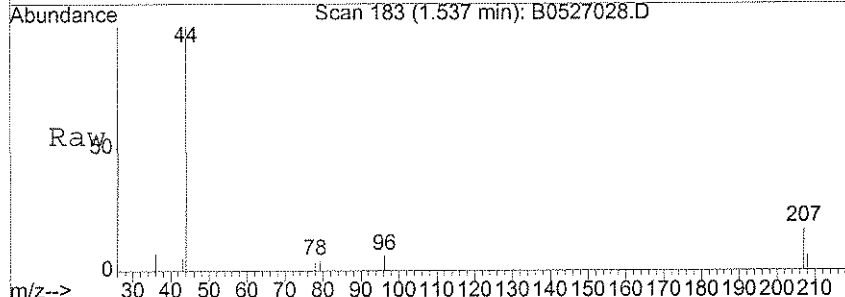
#3
 Chloromethane
 Concen: 0.38 ug/l
 RT: 1.20 min Scan# 118
 Delta R.T. -0.01 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

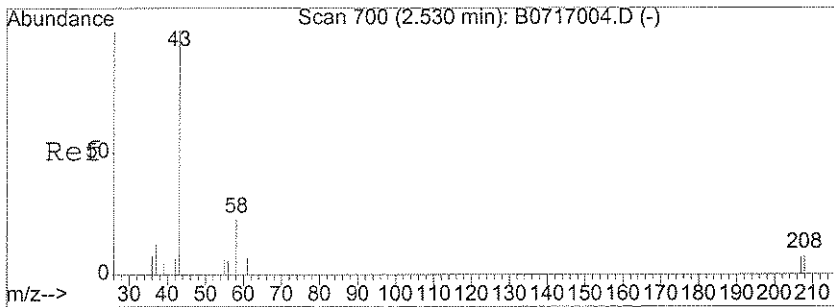
Tgt Ion: 50 Resp: 3409
 Ion Ratio Lower Upper
 50 100
 52 30.7 12.5 52.5



#5
 Bromomethane
 Concen: Below Cal
 RT: 1.54 min Scan# 183
 Delta R.T. -0.02 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

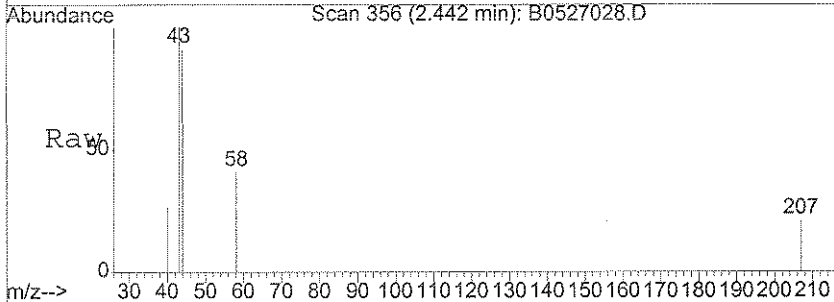
Tgt Ion: 96 Resp: 92
 Ion Ratio Lower Upper
 96 100
 94 70.7 84.9 124.9#



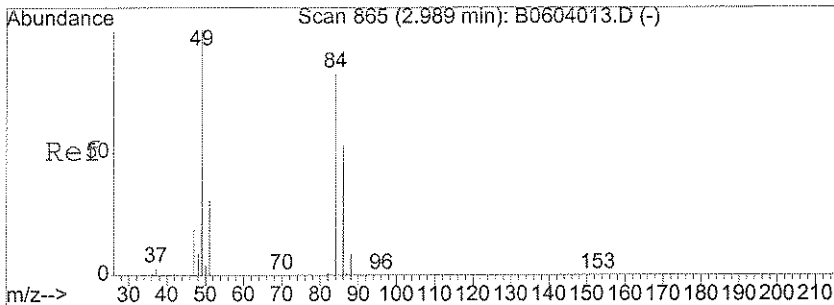
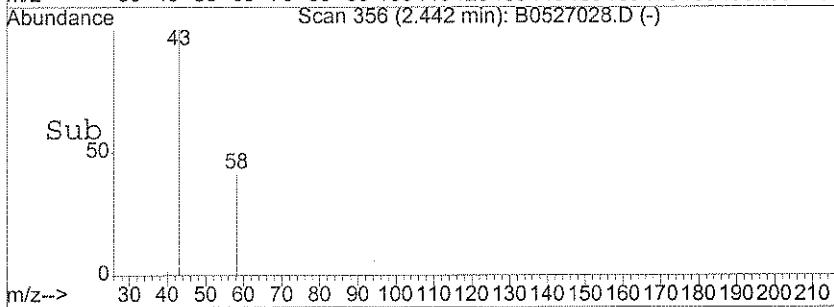
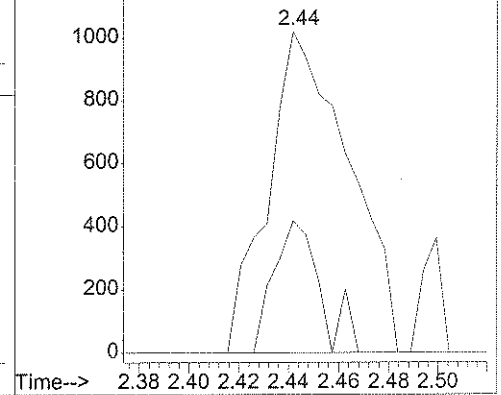


#11
 Acetone
 Concen: 1.09 ug/l
 RT: 2.44 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

Tgt Ion: 43 Resp: 2292
 Ion Ratio Lower Upper
 43 100
 58 23.7 22.0 33.0

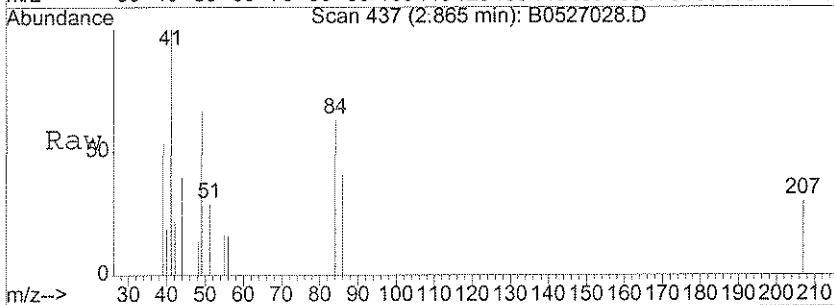


Abundance Ion 43.15 (42.85 to 43.85): B0527028.D
 Ion 58.05 (57.75 to 58.75): B0527028.D

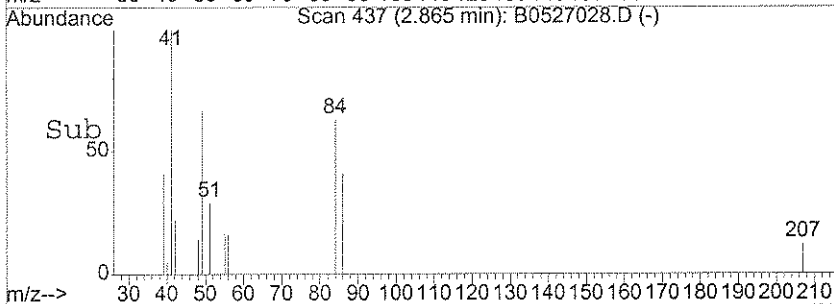
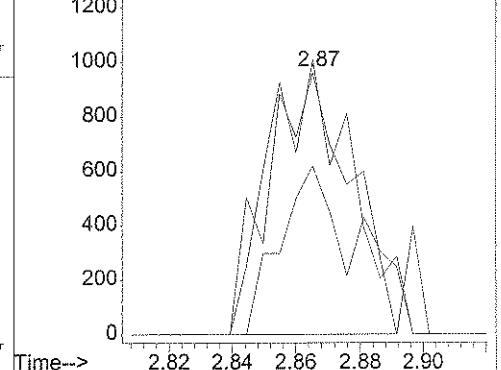


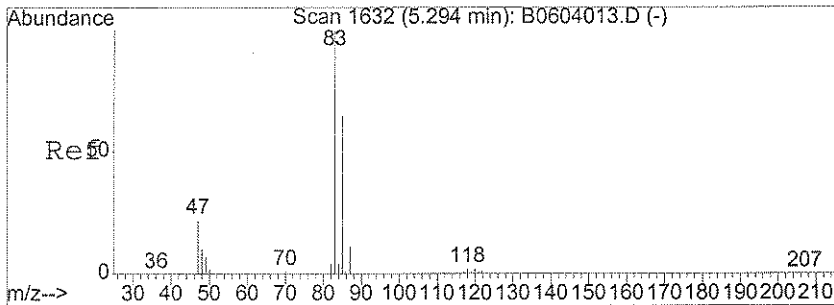
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 Methylene Chloride
 Concen: Below Cal
 RT: 2.87 min Scan# 437
 Delta R.T. 0.01 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

Tgt Ion: 84 Resp: 1737
 Ion Ratio Lower Upper
 84 100
 49 44.3 113.6 153.6#
 86 43.1 45.8 85.8#



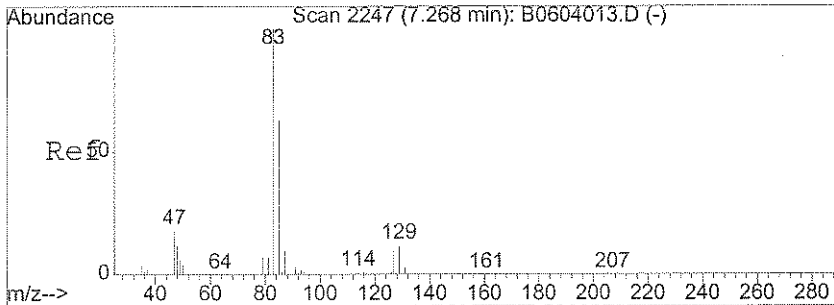
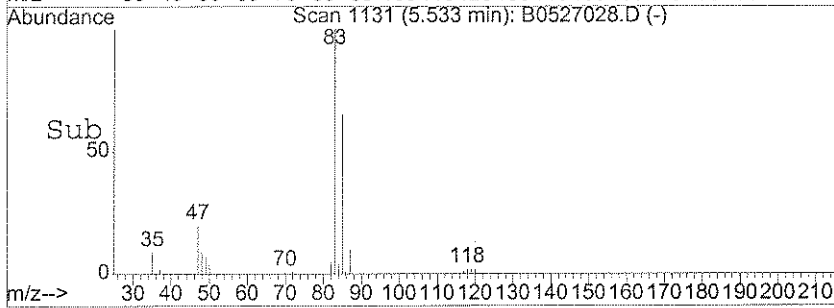
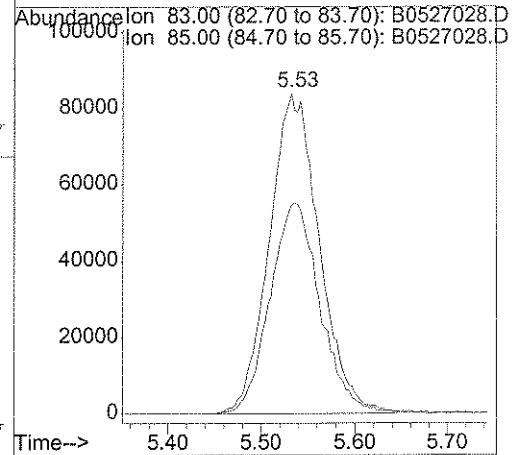
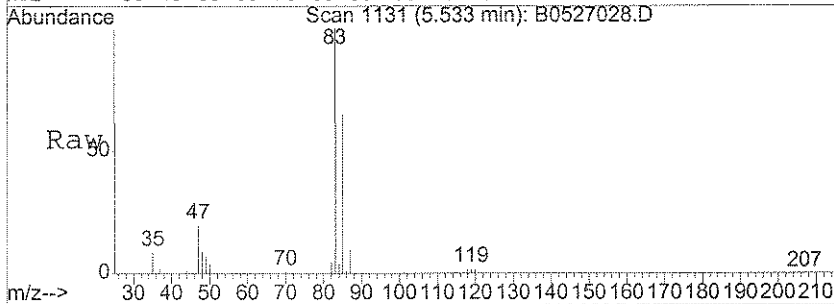
Abundance Ion 84.00 (83.70 to 84.70): B0527028.D
 Ion 49.00 (48.70 to 49.70): B0527028.D
 Ion 86.00 (85.70 to 86.70): B0527028.D





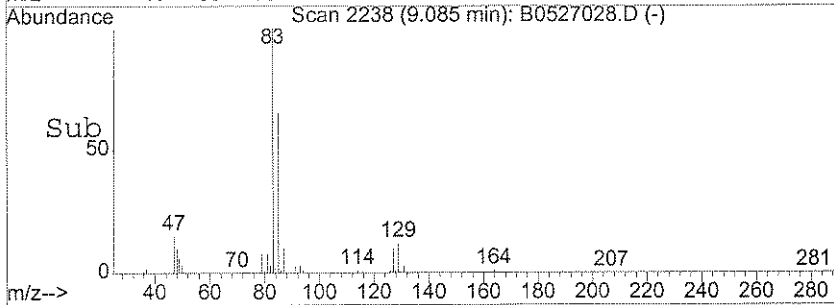
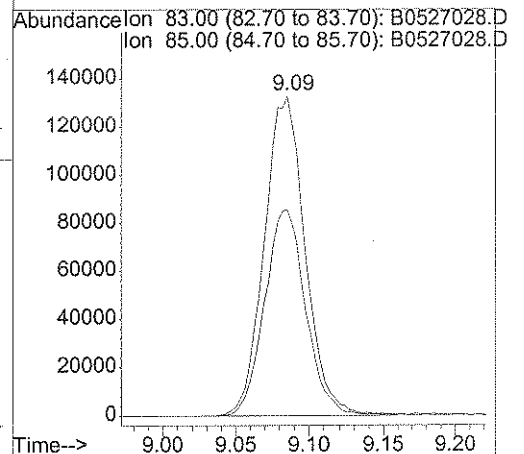
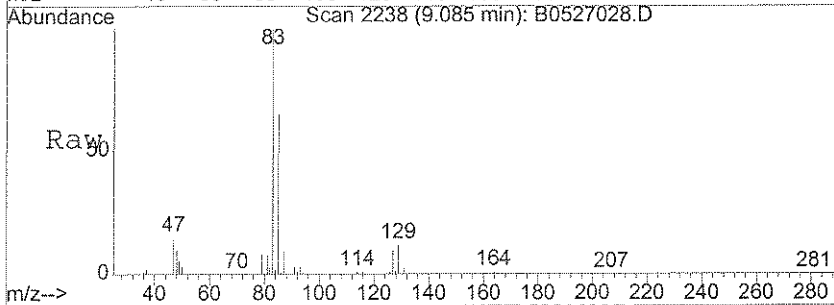
#34
 Chloroform
 Concen: 23.81 ug/l
 RT: 5.53 min Scan# 1131
 Delta R.T. -0.01 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

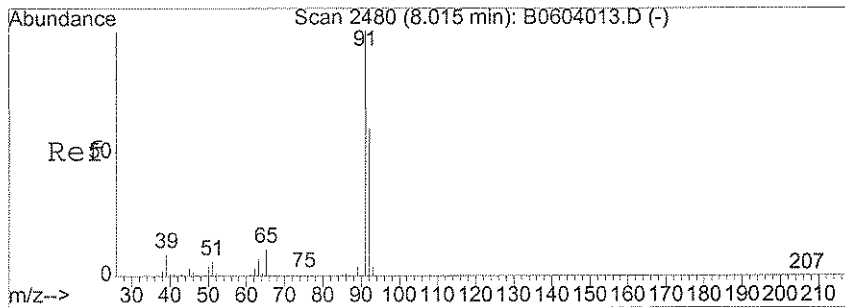
Tgt Ion: 83 Resp: 312954
 Ion Ratio Lower Upper
 83 100
 85 65.6 44.0 84.0



#50
 Bromodichloromethane
 Concen: 27.38 ug/l
 RT: 9.09 min Scan# 2238
 Delta R.T. 0.00 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

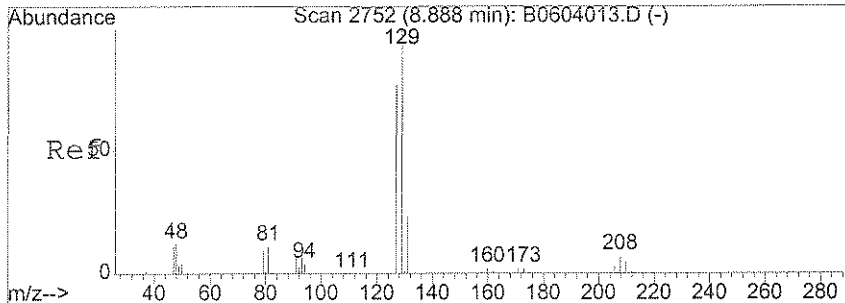
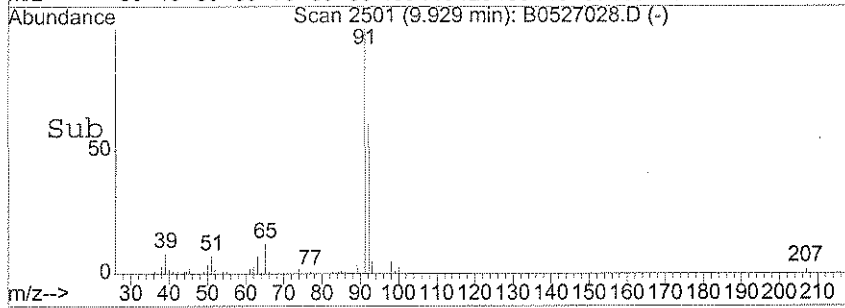
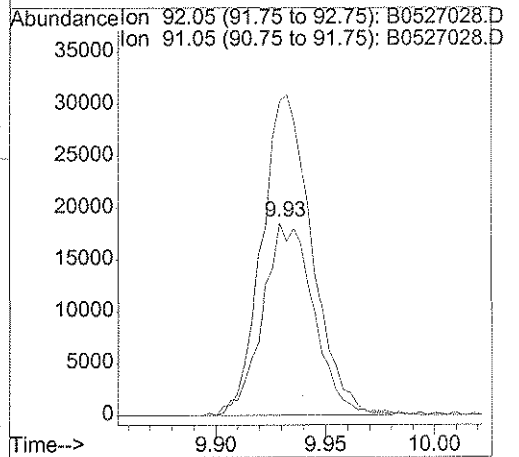
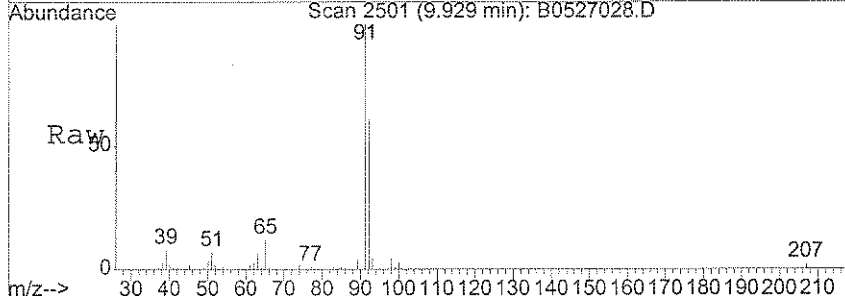
Tgt Ion: 83 Resp: 257856
 Ion Ratio Lower Upper
 83 100
 85 64.5 43.0 83.0





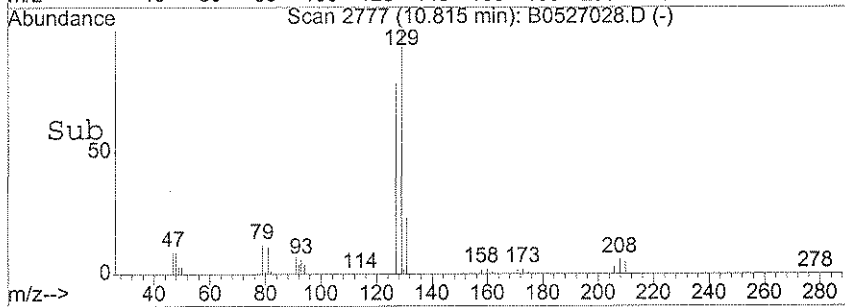
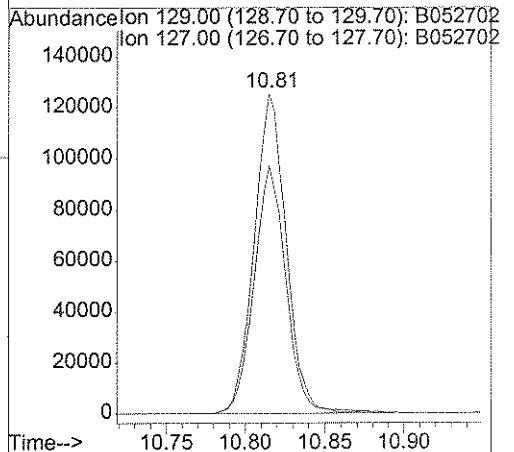
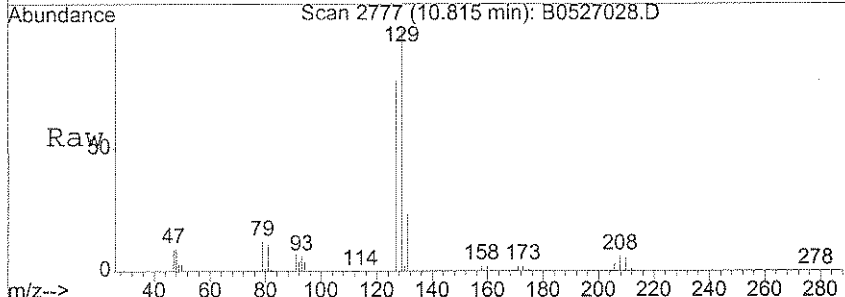
#56
 Toluene
 Concen: 1.52 ug/l
 RT: 9.93 min Scan# 2501
 Delta R.T. -0.00 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

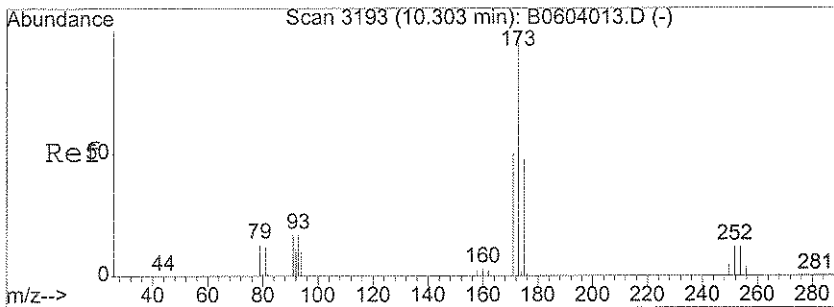
Tgt Ion: 92 Resp: 29910
 Ion Ratio Lower Upper
 92 100
 91 164.9 137.6 206.4



#63
 Dibromochloromethane
 Concen: 21.92 ug/l
 RT: 10.81 min Scan# 2777
 Delta R.T. -0.00 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

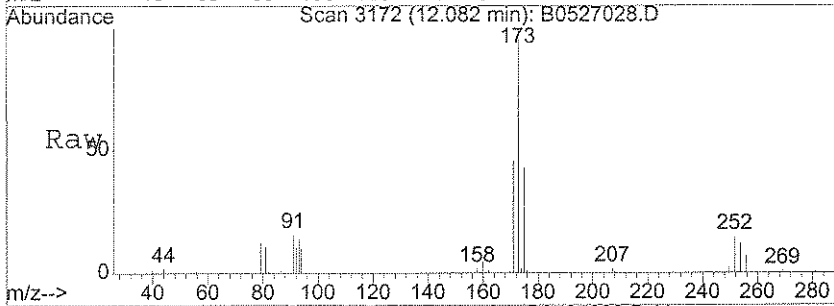
Tgt Ion: 129 Resp: 178900
 Ion Ratio Lower Upper
 129 100
 127 76.4 58.5 98.5



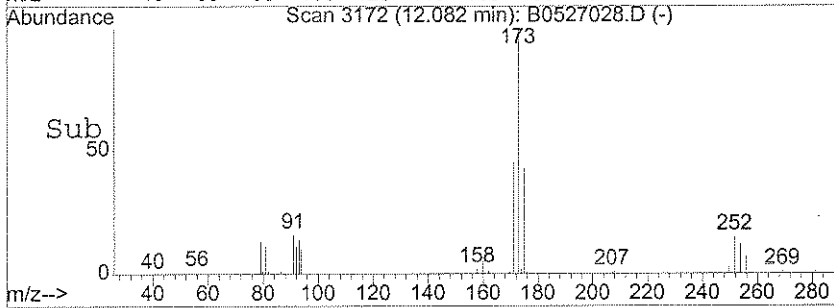
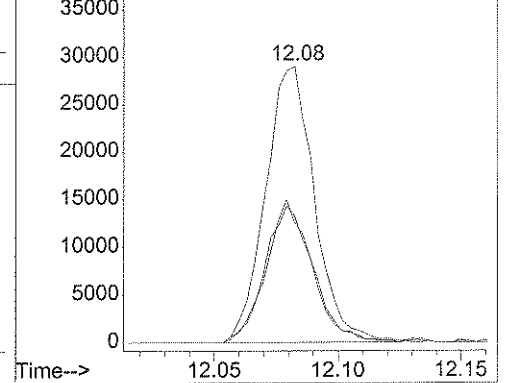


#72
 Bromoform
 Concen: 6.41 ug/l
 RT: 12.08 min Scan# 3172
 Delta R.T. 0.00 min
 Lab File: B0527028.D
 Acq: 27 May 2008 21:01

Tgt Ion	Resp	Lower	Upper
173	100		
175	48.1	39.4	59.0
171	48.8	40.9	61.3



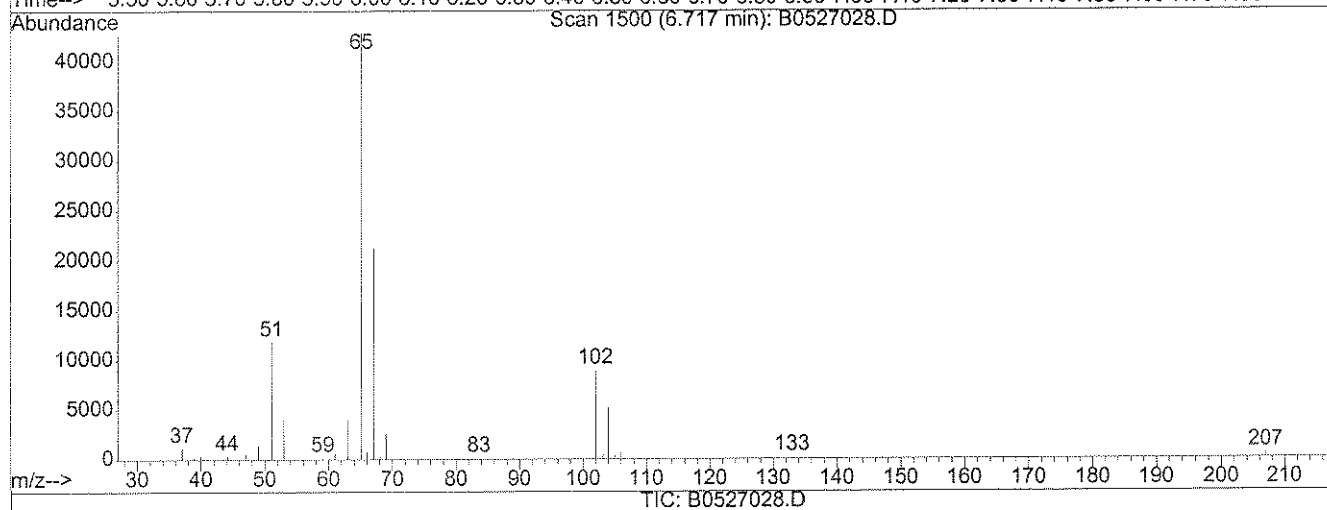
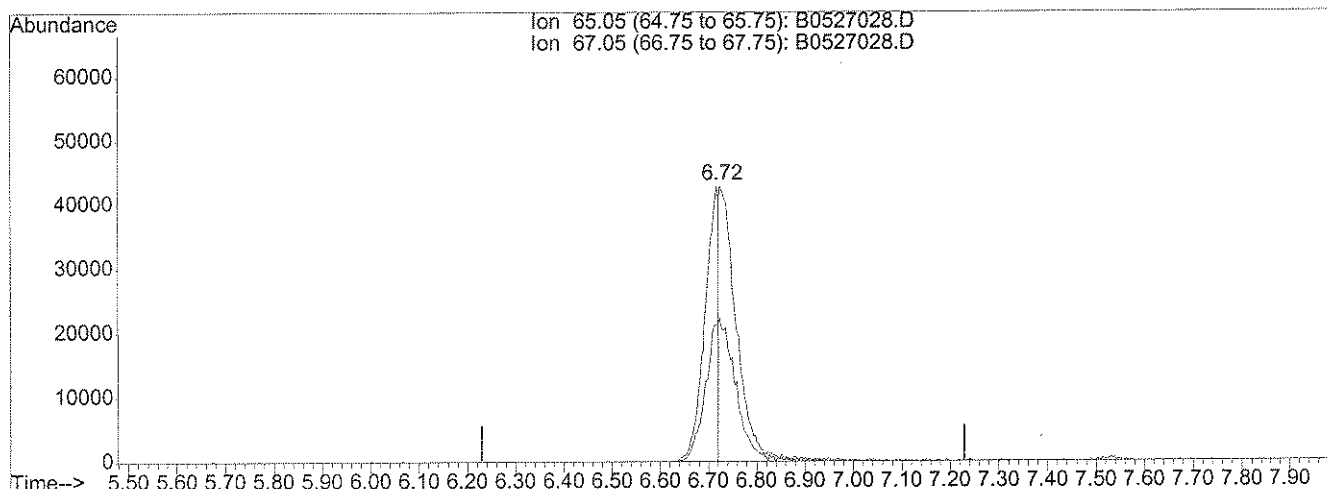
Abundance
 Ion 172.85 (172.55 to 173.55): B052702
 Ion 174.85 (174.55 to 175.55): B052702
 Ion 170.85 (170.55 to 171.55): B052702



Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
 Acq On : 27 May 2008 21:01 Operator: DGA
 Sample : JPL115-004 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:27 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 13.40ug/l

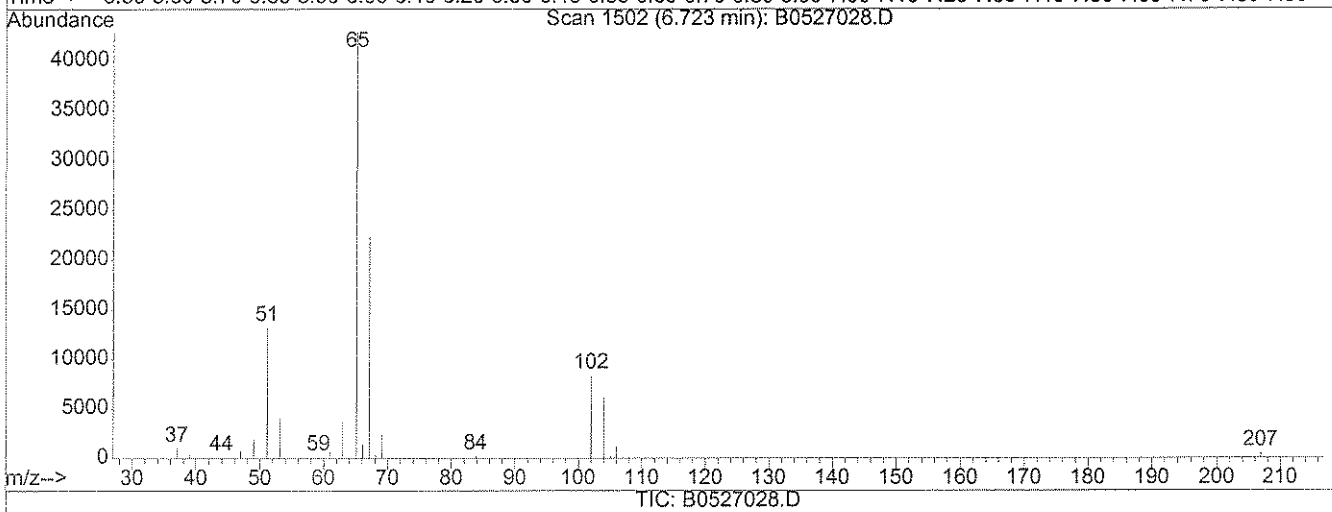
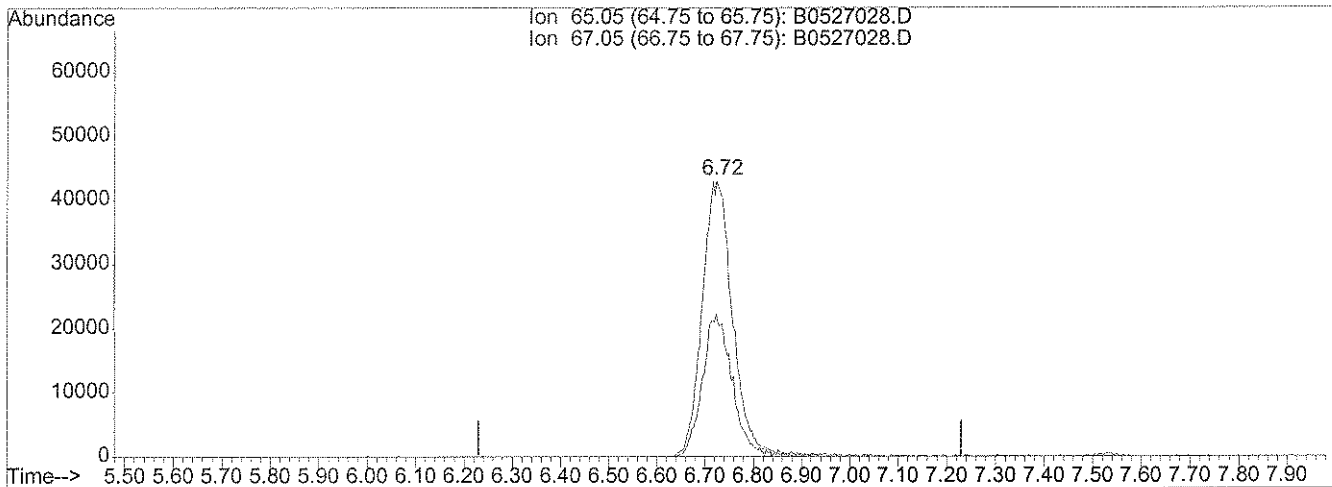
response 82921

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	113.86#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
 Acq On : 27 May 2008 21:01 Operator: DGA
 Sample : JPL115-004 Inst : Buddha
 Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 11:27 2008 Quant Results File: temp.res

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Multiple Level Calibration



(40) 1,2-Dichloroethane-d4 (S)

6.72min 30.20ug/l m

response 186908

Ion	Exp%	Act%
65.05	100	100
67.05	49.30	50.51
0.00	0.00	0.00
0.00	0.00	0.00

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-18-5/21/08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-005
 Lab File ID: B0527018.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 16:25
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: <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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-18-5/21/08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-005
 Lab File ID: B0527018.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 16:25
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
108-88-3	Toluene	0.50	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

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-18-5/21/08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/SED/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-005
 Lab File ID: B0527018.D
 Date Collected: 05/21/2008
 Date/Time Analyzed: 05/27/2008 16:25
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)

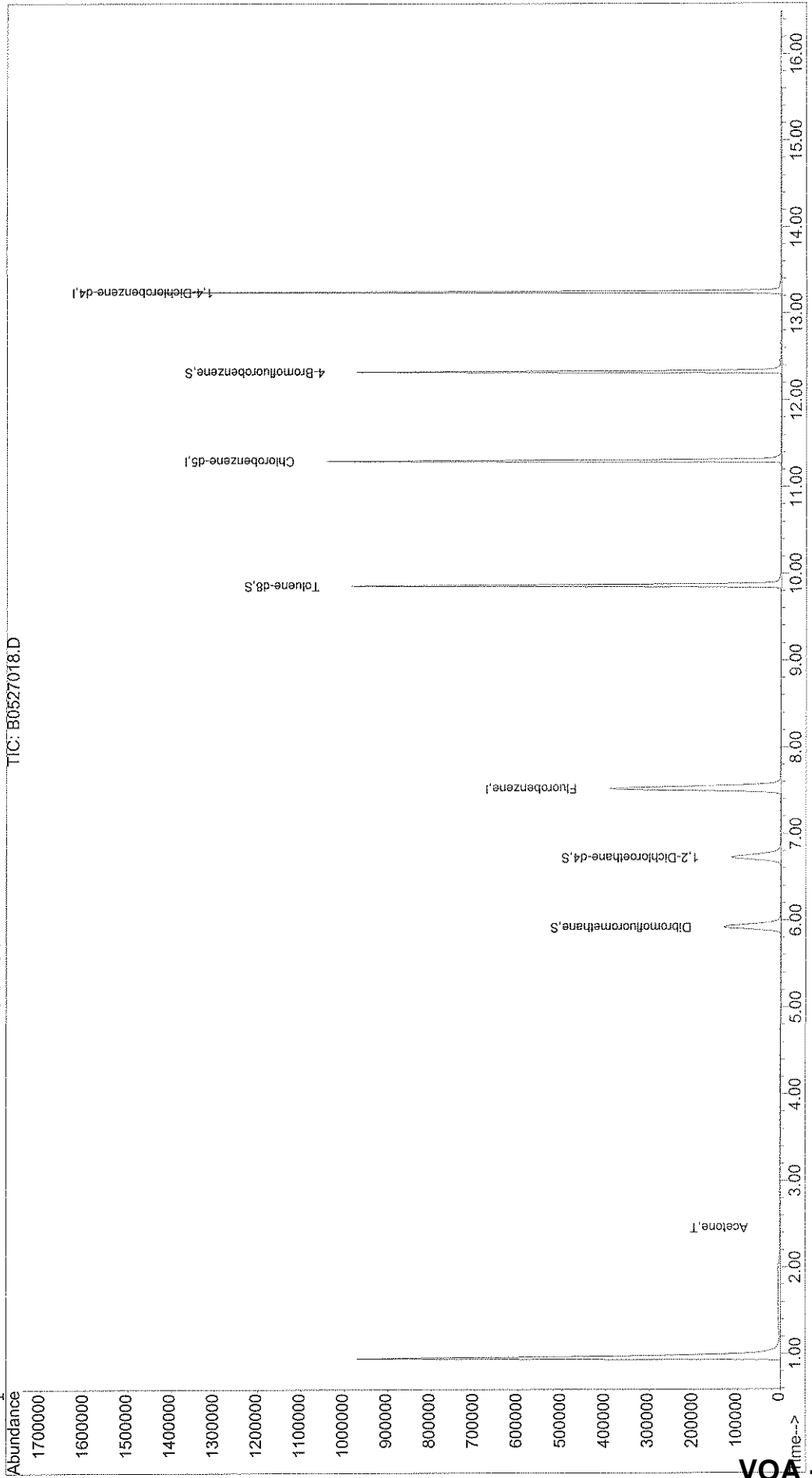
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		<u>ug/L</u>	Q
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527018.D Vial: 14
Acq On : 27 May 2008 16:25 Operator: DGA
Sample : JPL115-005 Inst : Buddha
Misc : #1 10ML+IS/SS(524.2) TB Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jun 2 10:24 2008 Quant Results File: B8260W.RES

Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Last Update : Wed May 28 16:23:03 2008
Response via : Initial Calibration



VOA-93

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527018.D Vial: 14
 Acq On : 27 May 2008 16:25 Operator: DGA
 Sample : JPL115-005 Inst : Buddha
 Misc : #1 10ML+IS/SS(524.2) TB Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 10:24 2008 Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B
 IS QA File : X:\MSVOA\BUDDHA\051208\B0512017.D (12 May 2008 16:31)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
						Rcv (Ar)
1) Fluorobenzene	7.53	96	654673	25.00	ug/l	0.00 123.38%
54) Chlorobenzene-d5	11.30	117	527045	25.00	ug/l	0.00 119.80%
74) 1,4-Dichlorobenzene-d4	13.25	152	326315	25.00	ug/l	0.00 125.50%

System Monitoring Compounds

37) Dibromofluoromethane	5.92	111	161503	21.94	ug/l	0.00
Spiked Amount	20.000	Range	85 - 115	Recovery	=	109.70%
40) 1,2-Dichloroethane-d4	6.72	65	190714	29.11	ug/l	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	116.44%
55) Toluene-d8	9.86	98	626088	23.17	ug/l	0.00
Spiked Amount	25.000	Range	85 - 120	Recovery	=	92.68%
76) 4-Bromofluorobenzene	12.32	95	229760	22.72	ug/l	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	90.88%

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	1.59	96	72	Below Cal #	78
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	2.46	43	1775	0.80 ug/l #	62
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.49	76	75	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	2.86	84	322	Below Cal #	62
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. J. J.
 Page 1
VOA - 64

Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527018.D Vial: 14
 Acq On : 27 May 2008 16:25 Operator: DGA
 Sample : JPL115-005 Inst : Buddha
 Misc : #1 10ML+IS/SS(524.2) TB Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 10:24 2008

Quant Results File: B8260W.RES

Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

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	45	0		N.D.	
26) Vinyl acetate	0.00	43	0		N.D.	
27) Ethyl-t-butyl ether	4.54	59	30		N.D.	
28) 2,2-Dichloropropane	4.62	77	48		N.D.	
29) cis-1,2-Dichloroethene	4.79	96	38		N.D.	
30) 2-Butanone	4.89	43	30		N.D.	
31) Propionitrile	0.00	54	0		N.D.	
32) Bromochloromethane	0.00	128	0		N.D.	
33) Methacrylonitrile	5.29	41	38		N.D.	
34) Chloroform	5.45	83	42		N.D.	
35) 1,1,1-Trichloroethane	0.00	97	0		N.D.	
36) Cyclohexane	5.74	56	30		N.D.	
38) Carbon Tetrachloride	6.06	117	30		N.D.	
39) 1,1-Dichloropropene	0.00	75	0		N.D.	
41) Benzene	6.69	78	66		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	7.23	43	33		N.D.	
45) Trichloroethene	0.00	130	0		N.D.	
46) Methylcyclohexane	8.42	83	29		N.D.	
47) 1,2-Dichloropropane	0.00	63	0		N.D.	
48) Dibromomethane	0.00	93	0		N.D.	
49) Methyl methacrylate	8.91	41	82		N.D.	
50) Bromodichloromethane	9.09	83	35		N.D.	
51) 2-Chloroethyl vinyl ether	9.54	63	39		N.D.	
52) cis-1,3-Dichloropropene	9.65	75	30		N.D.	
53) 4-Methyl-2-pentanone	0.00	43	0		N.D.	d
56) Toluene	9.93	92	125		N.D.	
57) trans-1,3-Dichloropropene	10.12	75	31		N.D.	
58) Ethyl methacrylate	0.00	69	0		N.D.	
59) 1,1,2-Trichloroethane	10.35	97	69		N.D.	
60) Tetrachloroethene	0.00	166	0		N.D.	
61) 1,3-Dichloropropane	10.58	76	37		N.D.	
62) 2-Hexanone	10.69	43	29		N.D.	
63) Dibromochloromethane	0.00	129	0		N.D.	
64) 1,2-Dibromoethane	0.00	107	0		N.D.	
65) 1-Chlorohexane	11.31	91	638		N.D.	
66) Chlorobenzene	11.33	112	177		N.D.	
67) 1,1,1,2-Tetrachloroethane	11.25	131	40		N.D.	

(#) = qualifier out of range (m) = manual integration
 B0527018.D B8260W.M Mon Jun 02 10:24:56 2008

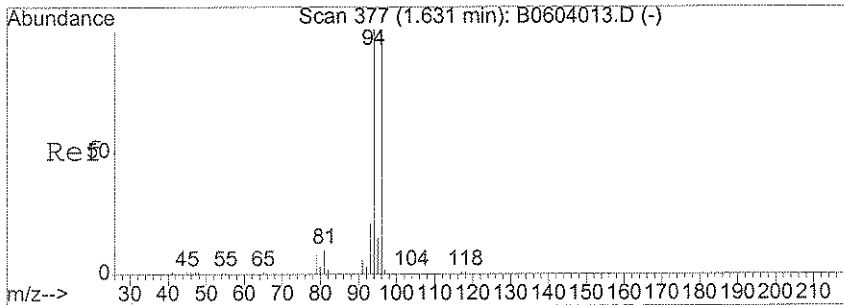
Quantitation Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527018.D Vial: 14
 Acq On : 27 May 2008 16:25 Operator: DGA
 Sample : JPL115-005 Inst : Buddha
 Misc : #1 10ML+IS/SS(524.2) TB Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Jun 2 10:24 2008

Quant Results File: B8260W.RES

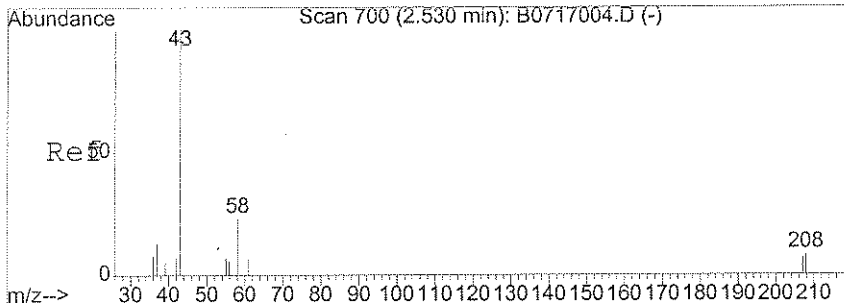
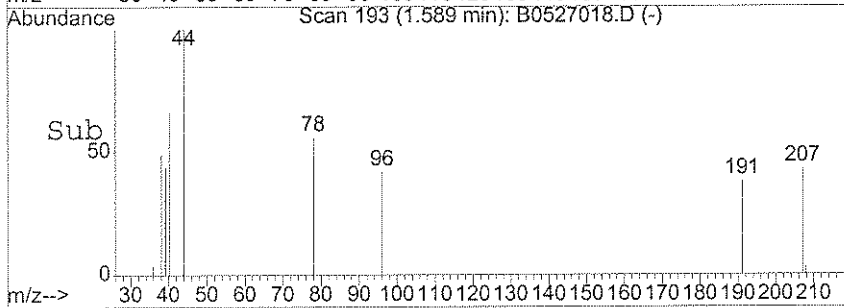
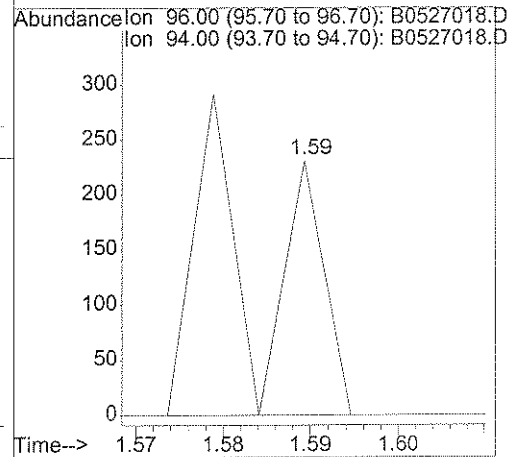
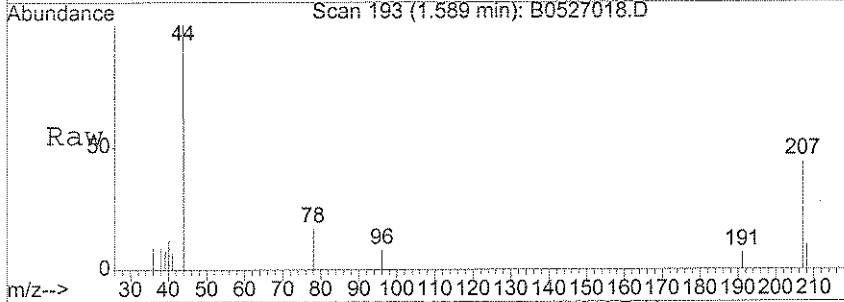
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
 Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
 Last Update : Wed May 28 16:23:03 2008
 Response via : Initial Calibration
 DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
68) Ethylbenzene	11.42	91	245		N.D.	
69) m,p-Xylene	11.53	106	48		N.D.	
70) o-xylene	0.00	106	0		N.D.	
71) Styrene	11.90	104	71		N.D.	
72) Bromoform	0.00	173	0		N.D.	
73) Isopropylbenzene	12.18	105	180		N.D.	
75) trans-1,4-Dichloro-2-buten	12.37	53	36		N.D.	
77) Bromobenzene	12.33	156	84		N.D.	
78) 1,1,2,2-Tetrachloroethane	12.49	83	45		N.D.	
79) 1,2,3-Trichloropropane	12.53	75	123		N.D.	
80) n-Propylbenzene	12.60	120	30		N.D.	
81) 2-Chlorotoluene	12.59	91	155		N.D.	
82) 4-Chlorotoluene	12.68	91	140		N.D.	
83) 1,3,5-Trimethylbenzene	12.65	105	117		N.D.	
84) tert-Butylbenzene	12.91	119	86		N.D.	
85) 1,2,4-Trimethylbenzene	12.95	105	242		N.D.	
86) sec-butylbenzene	13.08	105	193		N.D.	
87) 1,3-Dichlorobenzene	13.19	146	298		N.D.	
88) 4-Isopropyltoluene	13.19	119	831		N.D.	
89) 1,4-Dichlorobenzene	13.27	146	244		N.D.	
90) 1,2-Dichlorobenzene	13.56	146	207		N.D.	
91) n-Butylbenzene	13.52	91	627		N.D.	
92) 1,2-Dibromo-3-chloropropan	14.35	75	32		N.D.	
93) 1,2,4-Trichlorobenzene	14.79	180	202		N.D.	
94) Hexachlorobutadiene	14.88	225	98		N.D.	
95) Naphthalene	14.98	128	406		N.D.	
96) 1,2,3-Trichlorobenzene	15.16	180	395		N.D.	



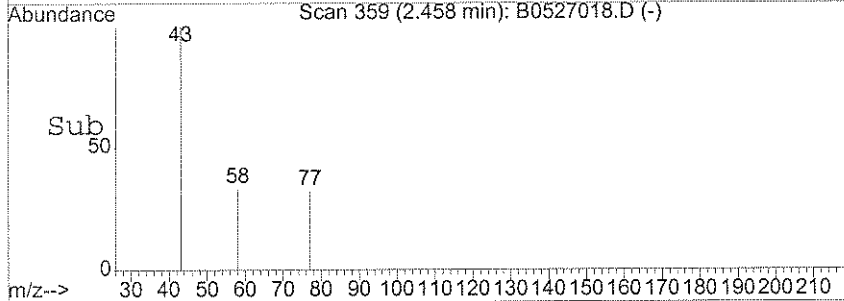
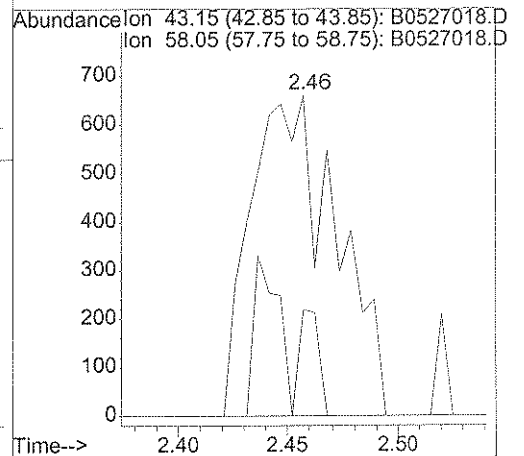
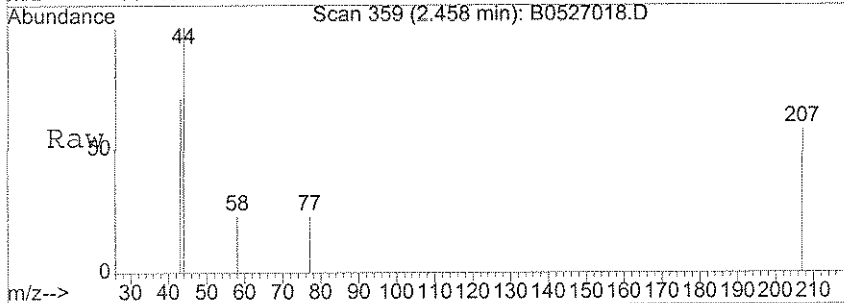
#5
 Bromomethane
 Concen: Below Cal
 RT: 1.59 min Scan# 193
 Delta R.T. 0.04 min
 Lab File: B0527018.D
 Acq: 27 May 2008 16:25

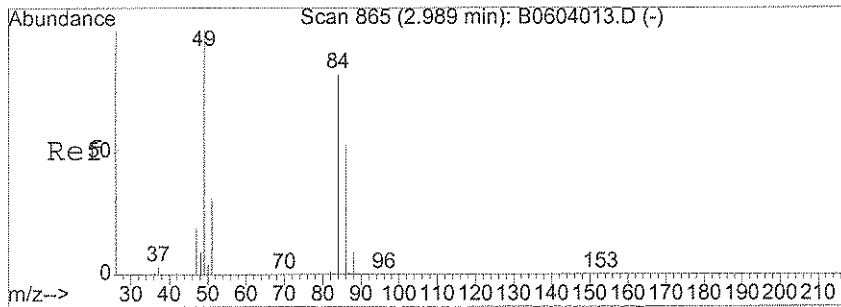
Tgt Ion: 96 Resp: 72
 Ion Ratio Lower Upper
 96 100
 94 127.8 84.9 124.9#



#11
 Acetone
 Concen: 0.80 ug/l
 RT: 2.46 min Scan# 359
 Delta R.T. 0.04 min
 Lab File: B0527018.D
 Acq: 27 May 2008 16:25

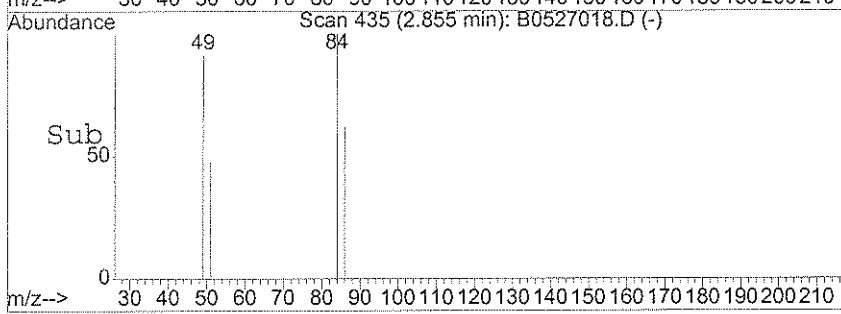
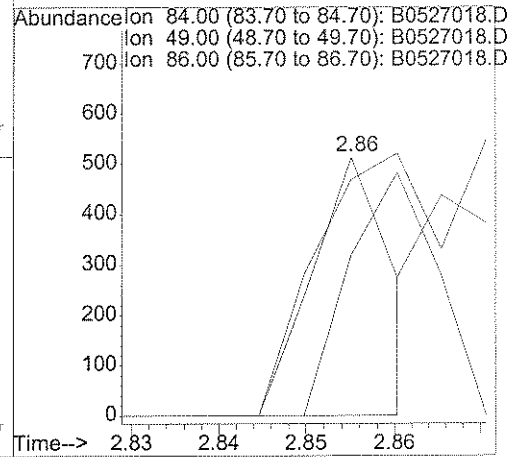
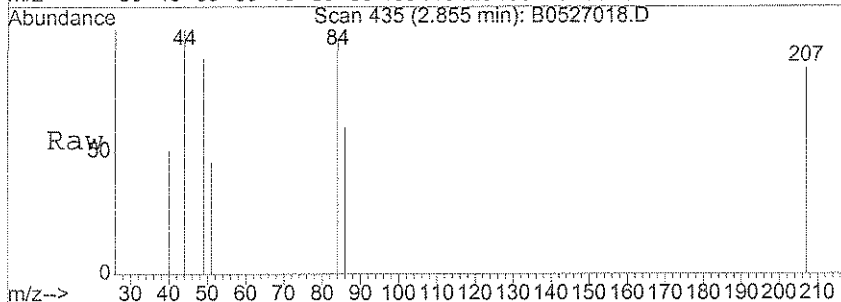
Tgt Ion: 43 Resp: 1775
 Ion Ratio Lower Upper
 43 100
 58 7.7 22.0 33.0#





#18
 Methylene Chloride
 Concn: Below Cal
 RT: 2.86 min Scan# 435
 Delta R.T. -0.00 min
 Lab File: B0527018.D
 Acq: 27 May 2008 16:25

Tgt Ion	Resp	Lower	Upper
84	322		
49	156.2	113.6	153.6#
86	125.5	45.8	85.8#



TIC FORMS

SDG JPL115

VOLATILES ANALYSIS

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-13

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-001
 Lab File ID: B0527025.D
 Date Collected: 05/21/2008
 Date Analyzed: 05/27/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
ug/L

01	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
02					
03					
04					
05					
06					
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08					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527025.D Vial: 20
Acq On : 27 May 2008 19:35 Operator: DGA
Sample : JPL115-001 Inst : Buddha
Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0527025.D B8260W.M Mon Jun 02 11:24:56 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-16

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-002
 Lab File ID: B0527026.D
 Date Collected: 05/21/2008
 Date Analyzed: 05/27/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527026.D Vial: 21
Acq On : 27 May 2008 20:04 Operator: DGA
Sample : JPL115-002 Inst : Buddha
Misc : #4 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0527026.D B8260W.M Mon Jun 02 11:25:38 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-8

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL115

Run Sequence: R028383

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL115-003

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0527027.D

Level: (LOW/MED) _____

Date Collected: 05/21/2008

% Moisture: not dec. _____

Date Analyzed: 05/27/2008

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

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

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527027.D Vial: 22
Acq On : 27 May 2008 20:31 Operator: DGA
Sample : JPL115-003 Inst : Buddha
Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0527027.D B8260W.M Mon Jun 02 11:26:55 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-6-2Q08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-004
 Lab File ID: B0527028.D
 Date Collected: 05/21/2008
 Date Analyzed: 05/27/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527028.D Vial: 23
Acq On : 27 May 2008 21:01 Operator: DGA
Sample : JPL115-004 Inst : Buddha
Misc : #3 10ML+IS/SS(524.2) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0527028.D B8260W.M Mon Jun 02 11:27:50 2008

1 TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-18-5/21/08

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 10.0 (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: R028383
 Lab Sample ID: JPL115-005
 Lab File ID: B0527018.D
 Date Collected: 05/21/2008
 Date Analyzed: 05/27/2008
 Dilution Factor: 1.0
 Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS:
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:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527018.D Vial: 14
Acq On : 27 May 2008 16:25 Operator: DGA
Sample : JPL115-005 Inst : Buddha
Misc : #1 10ML+IS/SS(524.2) TB Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0527018.D B8260W.M Tue Jun 03 14:33:29 2008

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B052708MVOWB2

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL115

Run Sequence: R028383

Matrix: (SOIL/WATER) Water

Lab Sample ID: B052708MVOWB2

Sample wt/vol: 10.0 (g/mL) mL

Lab File ID: B0527015.D

Level: (LOW/MED) _____

Date Collected: _____

% Moisture: not dec. _____

Date Analyzed: 05/27/2008

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

	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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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\BUDDHA\052708\REQUANT\B0527015.D Vial: 11
Acq On : 27 May 2008 15:02 Operator: DGA
Sample : B052708MVOWB2 Inst : Buddha
Misc : 10ML PFW+IS/SS (MV8-47-19) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\BUDDHA\QUANT\B8260W.M (RTE Integrator)
Title : VOA 8260/524.2/624- 10ML Water Calibration 5973B
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

B0527015.D B8260W.M Tue Jun 03 14:33:05 2008

SAMPLE DATA

SDG# JPL115

Semivolatiles

1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Pace Analytical Services
SDG No.: JPL115
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 & >11

Contract: JPL Groundwater Monitorin
Run Sequence: R028500
Lab Sample ID: JPL115-001
Lab File ID: T0530006.D
Date Collected: 05/21/2008
Date Extracted: 05/27/2008
Date Analyzed: 05/30/2008
Dilution Factor: 1.0
Extraction: (Type) CONT

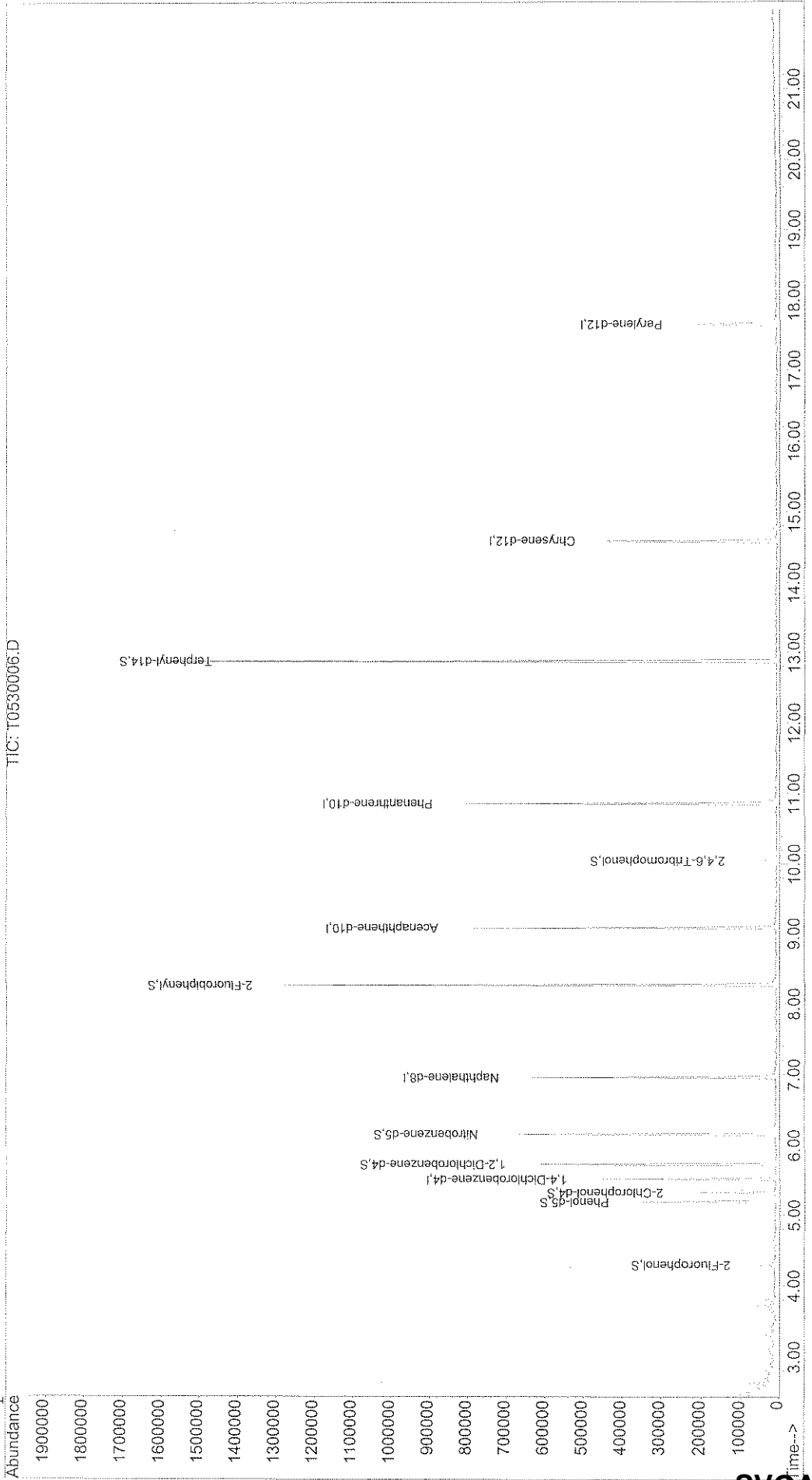
CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane	2.3	

Comments:

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530006.D Vial: 4
Acq On : 30 May 2008 14:47 Operator: VM
Sample : JPL115-001 Inst : GC/MS Ins
Misc : T5972 1040ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 2 6:57 2008 Quant Results File: T8270M.RES

Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
Title : 8270 (625) SW846 BNA Calibration 5972T
Last Update : Mon Jun 02 06:54:49 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530006.D
 Acq On : 30 May 2008 14:47
 Sample : JPL115-001
 Misc : T5972 1040ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:57 2008

Vial: 4
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND
 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	5.52	152	73638	20.00	ng/ul	0.00	NA%
24) Naphthalene-d8	6.96	136	301537	20.00	ng/ul	-0.01	NA%
40) Acenaphthene-d10	9.08	164	170338	20.00	ng/ul	-0.01	NA%
68) Phenanthrene-d10	10.86	188	275256	20.00	ng/ul	-0.01	NA%
82) Chrysene-d12	14.59	240	229057	20.00	ng/ul	-0.01	NA%
92) Perylene-d12	17.66	264	130751	20.00	ng/ul	-0.01	NA%

System Monitoring Compounds

5) 2-Fluorophenol	4.29	112	20588	2.86	ng/ul	0.01	
Spiked Amount	75.000	Range	23 - 117	Recovery	=	3.81%#	
7) Phenol-d5	5.19	99	170836	17.37	ng/ul	-0.01	
Spiked Amount	75.000	Range	36 - 121	Recovery	=	23.16%#	
11) 2-Chlorophenol-d4	5.33	132	63891	9.37	ng/ul	0.00	
Spiked Amount	75.000	Range	48 - 117	Recovery	=	12.49%#	
15) 1,2-Dichlorobenzene-d4	5.73	152	130192	32.63	ng/ul	0.00	
Spiked Amount	50.000	Range	38 - 82	Recovery	=	65.26%	
25) Nitrobenzene-d5	6.16	82	289221	36.29	ng/ul	0.00	
Spiked Amount	50.000	Range	57 - 102	Recovery	=	72.58%	
46) 2-Fluorobiphenyl	8.27	172	399407	31.11	ng/ul	-0.01	
Spiked Amount	50.000	Range	46 - 106	Recovery	=	62.22%	
72) 2,4,6-Tribromophenol	10.05	330	9650	3.28	ng/ul	-0.01	
Spiked Amount	75.000	Range	41 - 149	Recovery	=	4.37%#	
85) Terphenyl-d14	12.88	244	606825	40.06	ng/ul	0.00	
Spiked Amount	50.000	Range	79 - 136	Recovery	=	80.12%	

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.81	88	7670	2.42	ng/ul	93
3) N-nitrosodimethylamine	2.91	74	134	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	5.19	77	108	N.D.		
8) Phenol	5.20	94	355	N.D.		
9) Aniline	0.00	93	0	N.D.		
10) Bis(2-Chloroethyl)ether	0.00	93	0	N.D.		

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

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530006.D
 Acq On : 30 May 2008 14:47
 Sample : JPL115-001
 Misc : T5972 1040ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:57 2008

Vial: 4
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

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	5.73	108	1137		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	5.73	108	1137		N.D.	
19) Bis(2-chloroisopropyl) ethe	5.76	45	111		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	0.00	70	0		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	6.16	77	817		N.D.	
27) Isophorone	6.50	82	247		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	6.98	128	156		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	8.37	154	440		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	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.	

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

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530006.D
 Acq On : 30 May 2008 14:47
 Sample : JPL115-001
 Misc : T5972 1040ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:57 2008

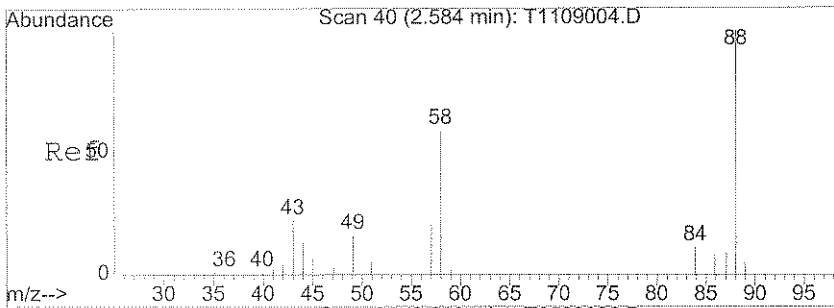
Vial: 4
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

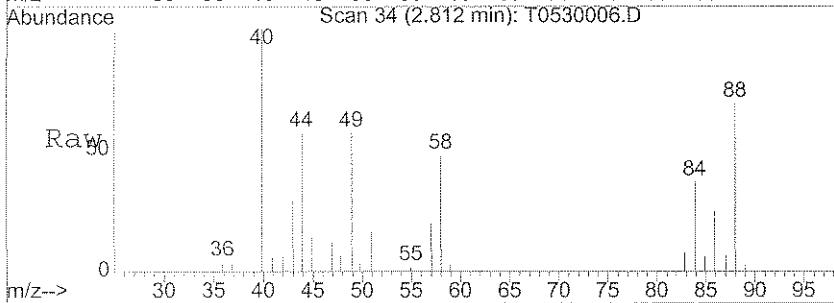
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	9.08	109	243		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	9.65	149	701		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	10.05	169	147		N.D.	
71) 1,2-Diphenylhydrazine	0.00	77	0		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	11.64	149	1426		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	14.59	228	436		N.D.	
90) bis(2-Ethylhexyl)phthalate	0.00	149	0		N.D.	d
91) Chrysene	14.59	228	436		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	17.66	252	132		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.	

(#) = qualifier out of range (m) = manual integration
 T0530006.D T8270M.M Mon Jun 02 06:57:30 2008

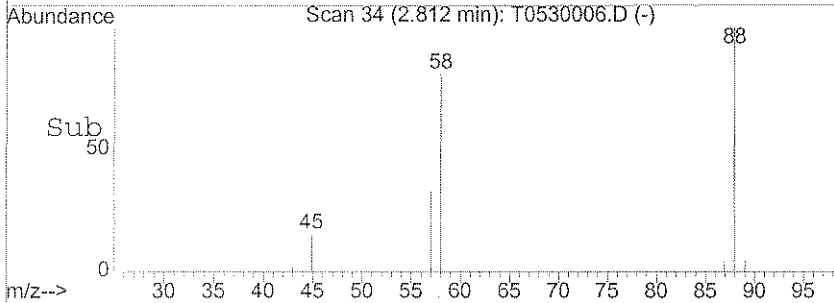
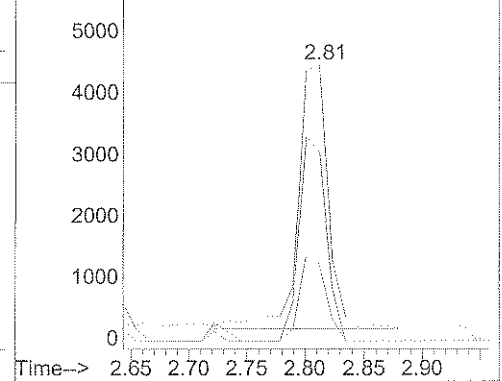


#2
 1,4-Dioxane
 Concen: 2.42 ng/ul
 RT: 2.81 min Scan# 34
 Delta R.T. 0.01 min
 Lab File: T0530006.D
 Acq: 30 May 2008 14:47

Tgt Ion	Resp	Lower	Upper
88	7670		
58	69.7	51.5	77.3
57	28.0	19.3	28.9



Abundance Ion 88.05 (87.75 to 88.75): T0530006.D
 6000 Ion 58.00 (57.70 to 58.70): T0530006.D
 Ion 57.00 (56.70 to 57.70): T0530006.D



1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Pace Analytical Services
 SDG No.: JPL115
 Matrix: (SOIL/WATER) Water
 Sample wt/vol: 990.0 (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 & >11

Contract: JPL Groundwater Monitorin
 Run Sequence: R028500
 Lab Sample ID: JPL115-002
 Lab File ID: T0530007.D
 Date Collected: 05/21/2008
 Date Extracted: 05/27/2008
 Date Analyzed: 05/30/2008
 Dilution Factor: 1.0
 Extraction: (Type) CONT

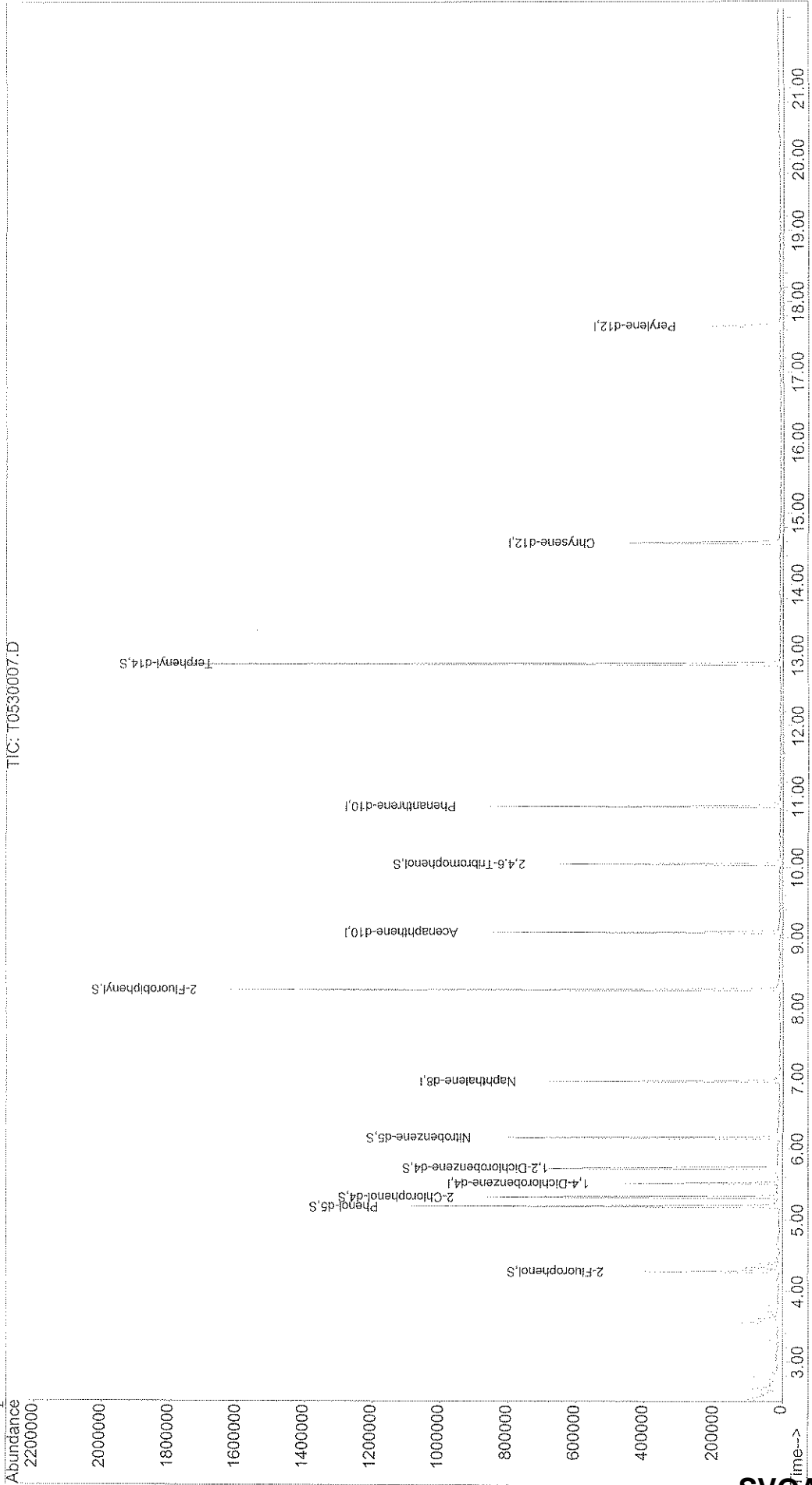
CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	1.7	

Comments:

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530007.D Vial: 5
Acq On : 30 May 2008 15:18 Operator: VM
Sample : JPL115-002 Inst : GC/MS Ins
Misc : T5972 990ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 2 6:58 2008 Quant Results File: T8270M.RES

Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
Title : 8270 (625) SW846 BNA Calibration 5972T
Last Update : Mon Jun 02 06:54:49 2008
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530007.D
 Acq On : 30 May 2008 15:18
 Sample : JPL115-002
 Misc : T5972 990ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:58 2008

Vial: 5
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

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	5.52	152	75150	20.00	ng/ul	0.00	NA%
24) Naphthalene-d8	6.96	136	314913	20.00	ng/ul	0.00	NA%
40) Acenaphthene-d10	9.08	164	182259	20.00	ng/ul	0.00	NA%
68) Phenanthrene-d10	10.86	188	292937	20.00	ng/ul	0.00	NA%
82) Chrysene-d12	14.58	240	227009	20.00	ng/ul	-0.02	NA%
92) Perylene-d12	17.66	264	127834	20.00	ng/ul	0.00	NA%

System Monitoring Compounds

5) 2-Fluorophenol	4.28	112	158536	21.59	ng/ul	0.00	
Spiked Amount	75.000	Range	23 - 117	Recovery	=	28.79%	
7) Phenol-d5	5.19	99	476980	47.51	ng/ul	0.00	
Spiked Amount	75.000	Range	36 - 121	Recovery	=	63.35%	
11) 2-Chlorophenol-d4	5.33	132	307741	44.21	ng/ul	0.00	
Spiked Amount	75.000	Range	48 - 117	Recovery	=	58.95%	
15) 1,2-Dichlorobenzene-d4	5.73	152	142530	35.00	ng/ul	0.00	
Spiked Amount	50.000	Range	38 - 82	Recovery	=	70.00%	
25) Nitrobenzene-d5	6.16	82	352356	42.33	ng/ul	0.00	
Spiked Amount	50.000	Range	57 - 102	Recovery	=	84.66%	
46) 2-Fluorobiphenyl	8.27	172	500502	36.44	ng/ul	0.00	
Spiked Amount	50.000	Range	46 - 106	Recovery	=	72.88%	
72) 2,4,6-Tribromophenol	10.05	330	104260	33.30	ng/ul	0.00	
Spiked Amount	75.000	Range	41 - 149	Recovery	=	44.40%	
85) Terphenyl-d14	12.88	244	669735	44.31	ng/ul	0.00	
Spiked Amount	50.000	Range	79 - 136	Recovery	=	88.62%	

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.80	88	5324	1.65	ng/ul	92
3) N-nitrosodimethylamine	2.92	74	147	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	5.07	77	395	N.D.		
8) Phenol	5.20	94	1319	N.D.		
9) Aniline	5.33	93	387	N.D.		
10) Bis(2-Chloroethyl)ether	5.33	93	387	N.D.		

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

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530007.D
 Acq On : 30 May 2008 15:18
 Sample : JPL115-002
 Misc : T5972 990ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:58 2008

Vial: 5
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

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	5.72	108	1240		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	5.72	108	1240		N.D.	
19) Bis(2-chloroisopropyl) ethe	5.68	45	362		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	0.00	70	0		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	6.16	77	830		N.D.	
27) Isophorone	6.44	82	741		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	6.98	128	191		N.D.	
35) 4-Chloroaniline	7.09	127	2046		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	8.37	154	425		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	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.	

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

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530007.D
 Acq On : 30 May 2008 15:18
 Sample : JPL115-002
 Misc : T5972 990ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:58 2008

Vial: 5
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

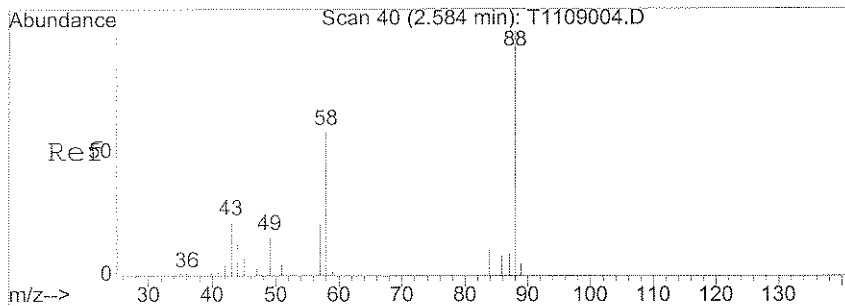
Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	9.08	109	206		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	9.65	149	508		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	10.05	169	2472		N.D.	
71) 1,2-Diphenylhydrazine	10.05	77	529		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	11.63	149	1271		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	14.59	228	405		N.D.	
90) bis(2-Ethylhexyl) phthalate	0.00	149	0		N.D.	d
91) Chrysene	14.59	228	405		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	17.66	252	246		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.	

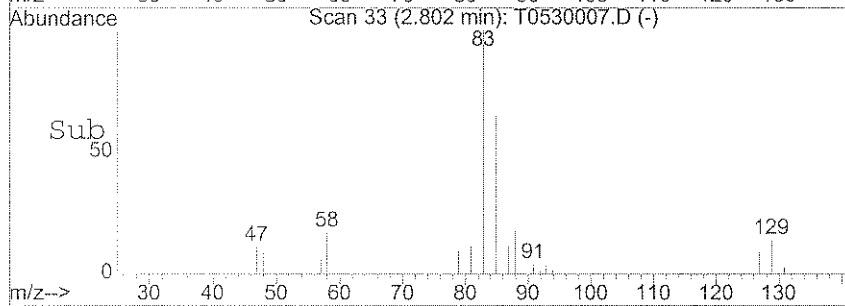
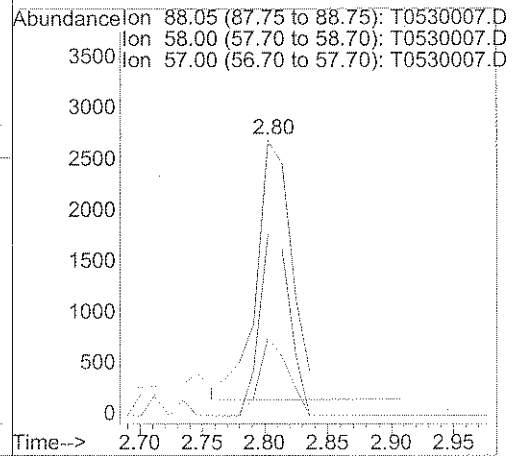
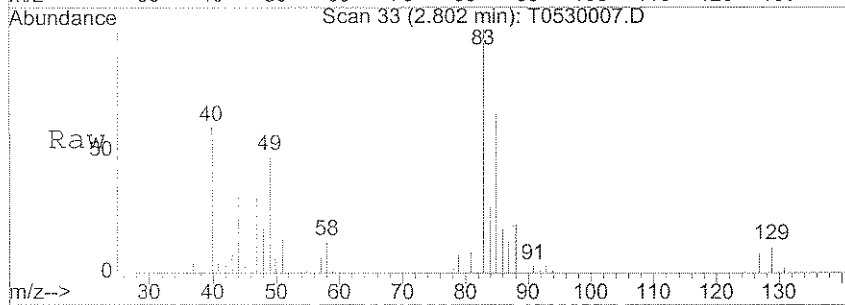
(#) = qualifier out of range (m) = manual integration

T0530007.D T8270M.M Mon Jun 02 06:58:40 2008



#2
 1,4-Dioxane
 Concen: 1.65 ng/ul
 RT: 2.80 min Scan# 33
 Delta R.T. 0.00 min
 Lab File: T0530007.D
 Acq: 30 May 2008 15:18

Tgt Ion:	88	Resp:	5324
Ion Ratio	Lower	Upper	
88	100		
58	56.8	51.5	77.3
57	22.9	19.3	28.9



1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-6-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

SDG No.: JPL115

Run Sequence: R028500

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL115-004

Sample wt/vol: 980.0 (g/mL) mL

Lab File ID: T0530008.D

Level: (LOW/MED) _____

Date Collected: 05/21/2008

% Moisture: _____ Decanted: (Y/N) N

Date Extracted: 05/27/2008

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 05/30/2008

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: <2 & >11

Extraction: (Type) CONT

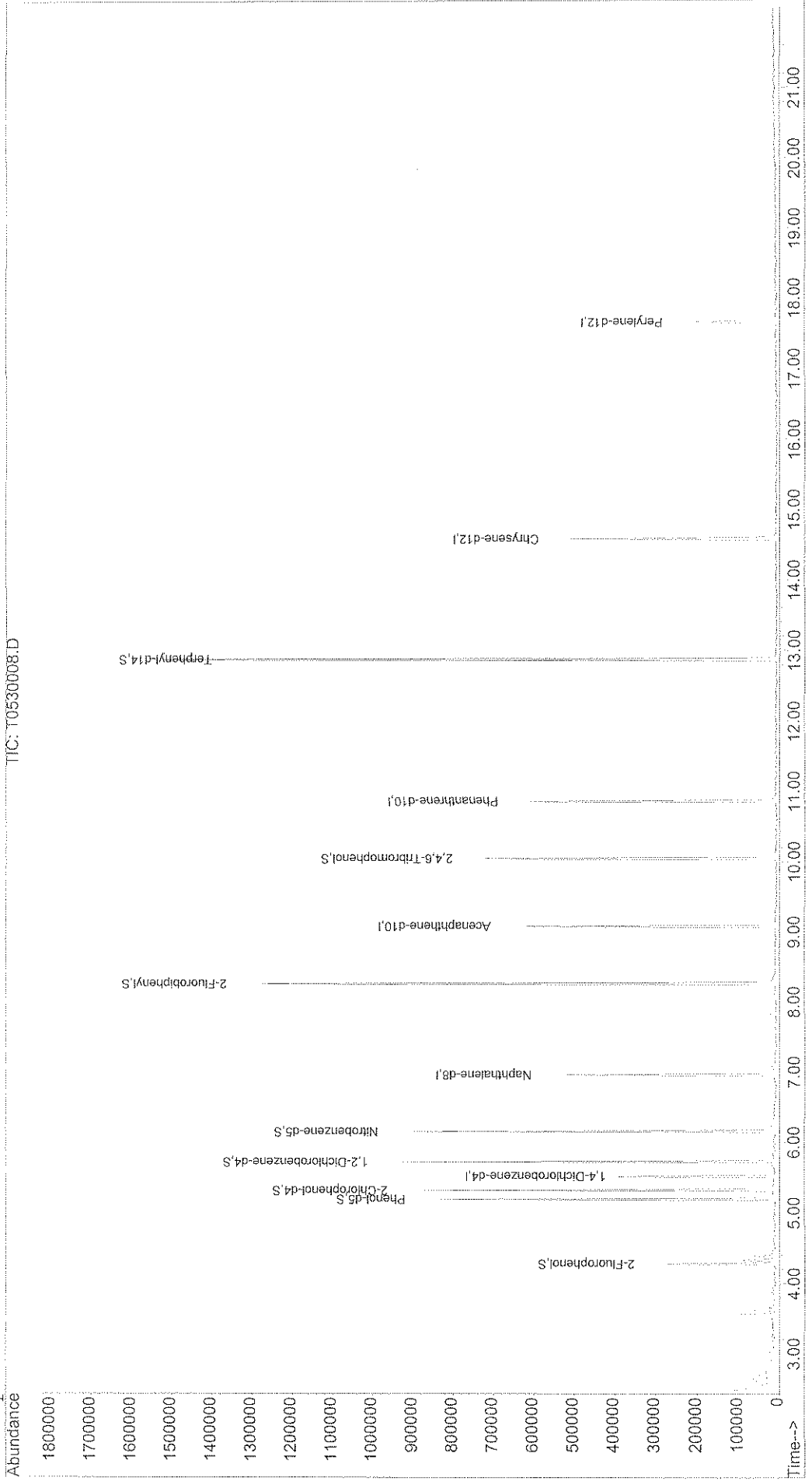
CAS NO.	COMPOUND	CONCENTRATION UNITS: <u>ug/L</u>	Q
123-91-1	1,4-Dioxane	1.5	

Comments:

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530008.D Vial: 6
Acq On : 30 May 2008 15:49 Operator: VM
Sample : JPL115-004 Inst : GC/MS Ins
Misc : T5972 980ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 2 6:59 2008 Quant Results File: T8270M.RE5

Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
Title : 8270 (625) SW846 BNA Calibration 5972T
Last Update : Mon Jun 02 06:54:49 2008
Response via : Initial Calibration



TIC: T0530008.D

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530008.D Vial: 6
 Acq On : 30 May 2008 15:49 Operator: VM
 Sample : JPL115-004 Inst : GC/MS Ins
 Misc : T5972 980ML->1ML+IS Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:59 2008 Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND
 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	5.52	152	80910	20.00	ng/ul	0.00 NA%
24) Naphthalene-d8	6.97	136	328178	20.00	ng/ul	0.00 NA%
40) Acenaphthene-d10	9.08	164	181820	20.00	ng/ul	0.00 NA%
68) Phenanthrene-d10	10.87	188	290033	20.00	ng/ul	0.00 NA%
82) Chrysene-d12	14.59	240	223829	20.00	ng/ul	-0.01 NA%
92) Perylene-d12	17.66	264	126342	20.00	ng/ul	0.00 NA%

System Monitoring Compounds

5) 2-Fluorophenol	4.28	112	129443	16.37	ng/ul	0.00
Spiked Amount	75.000	Range	23 - 117	Recovery	=	21.83%#
7) Phenol-d5	5.20	99	418114	38.68	ng/ul	0.00
Spiked Amount	75.000	Range	36 - 121	Recovery	=	51.57%
11) 2-Chlorophenol-d4	5.32	132	272226	36.33	ng/ul	0.00
Spiked Amount	75.000	Range	48 - 117	Recovery	=	48.44%
15) 1,2-Dichlorobenzene-d4	5.73	152	152994	34.90	ng/ul	0.00
Spiked Amount	50.000	Range	38 - 82	Recovery	=	69.80%
25) Nitrobenzene-d5	6.15	82	367011	42.31	ng/ul	0.00
Spiked Amount	50.000	Range	57 - 102	Recovery	=	84.62%
46) 2-Fluorobiphenyl	8.27	172	546262	39.87	ng/ul	0.00
Spiked Amount	50.000	Range	46 - 106	Recovery	=	79.74%
72) 2,4,6-Tribromophenol	10.05	330	149395	48.19	ng/ul	0.00
Spiked Amount	75.000	Range	41 - 149	Recovery	=	64.25%
85) Terphenyl-d14	12.88	244	686695	45.97	ng/ul	0.00
Spiked Amount	50.000	Range	79 - 136	Recovery	=	91.94%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.81	88	5183	1.49	ng/ul	95
3) N-nitrosodimethylamine	2.92	74	262	N.D.		
4) Pyridine	0.00	79	0	N.D.		
6) Benzaldehyde	5.07	77	248	N.D.		
8) Phenol	5.21	94	1177	N.D.		
9) Aniline	5.32	93	383	N.D.		
10) Bis(2-Chloroethyl)ether	5.32	93	383	N.D.		

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

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530008.D
 Acq On : 30 May 2008 15:49
 Sample : JPL115-004
 Misc : T5972 980ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:59 2008

Vial: 6
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

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	5.73	108	1321		N.D.	
17) 1,2-Dichlorobenzene	0.00	146	0		N.D.	
18) 2-Methylphenol	5.73	108	1321		N.D.	
19) Bis(2-chloroisopropyl) ethe	5.86	45	105		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	0.00	70	0		N.D.	
23) Hexachloroethane	0.00	117	0		N.D.	
26) Nitrobenzene	6.15	77	824		N.D.	
27) Isophorone	6.44	82	907		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	6.99	128	333		N.D.	
35) 4-Chloroaniline	7.08	127	1921		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	8.36	154	502		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	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.	

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

Quantitation Report

Data File : X:\MSABN\DONALD\053008\T0530008.D
 Acq On : 30 May 2008 15:49
 Sample : JPL115-004
 Misc : T5972 980ML->1ML+IS
 MS Integration Params: RTEINT.P
 Quant Time: Jun 2 6:59 2008

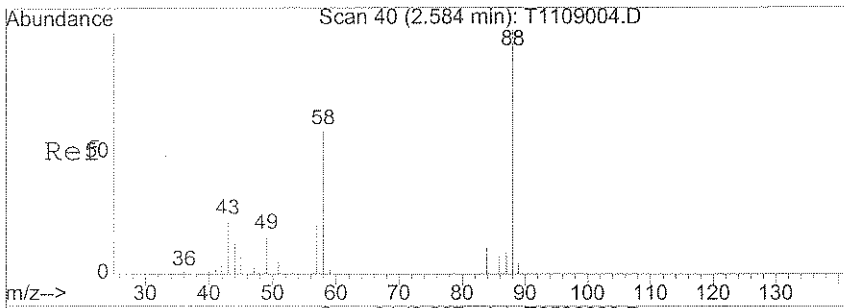
Vial: 6
 Operator: VM
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: T8270M.RES

Quant Method : X:\MSABN\DONALD\QUANT\T8270M.M (RTE Integrator)
 Title : 8270 (625) SW846 BNA Calibration 5972T
 Last Update : Mon Jun 02 06:54:49 2008
 Response via : Initial Calibration
 DataAcq Meth : ABND

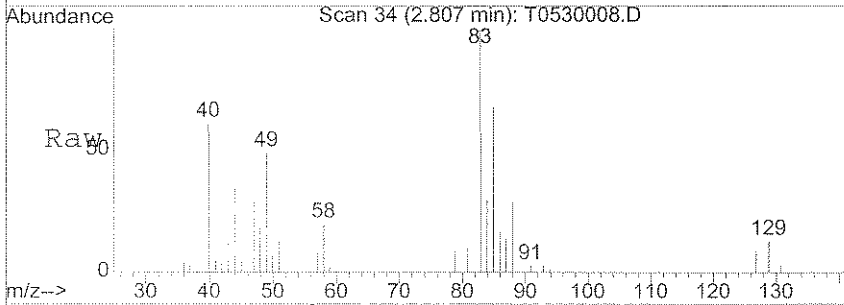
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58) 2,4-Dinitrophenol	0.00	184	0		N.D.	
59) 4-Nitrophenol	0.00	109	0		N.D.	
60) Dibenzofuran	0.00	168	0		N.D.	
61) 2,4-Dinitrotoluene	0.00	165	0		N.D.	
62) 2,3,5,6-tetrachlorophenol	0.00	232	0		N.D.	
63) 2,3,4,6-tetrachlorophenol	0.00	232	0		N.D.	
64) Diethylphthalate	9.65	149	641		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	10.04	198	225		N.D.	
70) N-nitrosodiphenylamine	10.04	169	3329		N.D.	
71) 1,2-Diphenylhydrazine	10.04	77	619		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	11.63	149	1518		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.	d
88) 3,3'-Dichlorobenzidine	0.00	252	0		N.D.	
89) Benzo[a]anthracene	14.59	228	541		N.D.	
90) bis(2-Ethylhexyl) phthalate	0.00	149	0		N.D.	d
91) Chrysene	14.59	228	541		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	17.66	252	145		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.	

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

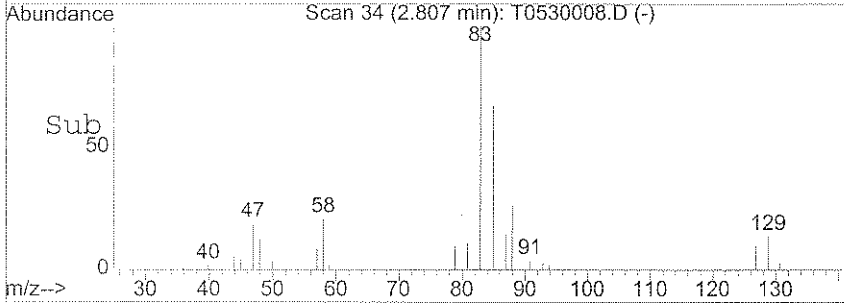
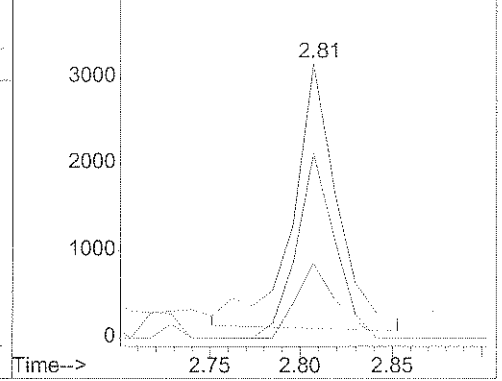


#2
 1,4-Dioxane
 Concen: 1.49 ng/ul
 RT: 2.81 min Scan# 34
 Delta R.T. 0.01 min
 Lab File: T0530008.D
 Acq: 30 May 2008 15:49

Tgt Ion	Resp	Lower	Upper
88	5183		
58	59.8	51.5	77.3
57	25.1	19.3	28.9



Abundance Ion 88.05 (87.75 to 88.75): T0530008.D
 Ion 58.00 (57.70 to 58.70): T0530008.D
 Ion 57.00 (56.70 to 57.70): T0530008.D



Metals Data

JPL115

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

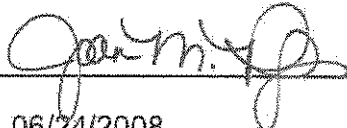
Lab Name: Pace Analytical Services, Inc. Contract: JPL Groundwater Monitorin
 Lab Code: PACE SDG No.: JPL115
 SOW No.: _____

Sample No.	Lab Sample ID
MW-13	JPL115-001
MW-13MS	JPL115-001MS
MW-13MSD	JPL115-001MSD
MW-16	JPL115-002
MW-8	JPL115-003
MW-8MS	JPL115-003MS
MW-8MSD	JPL115-003MSD
DUPE-6-2Q08	JPL115-004

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: Joan M. Phillips
 Date: 06/24/2008 Title: Chemist

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-13

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL115

Matrix (soil/water): Water

Lab Sample ID: JPL115-001

Level (low/med): LOW

Date Received: 05/22/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.00	U		M	R028436
7440-70-2	Calcium	68300			P	R028884
7440-47-3	Chromium	51.6		E	M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	24600			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	30000			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 12:12

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-16

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL115

Matrix (soil/water): Water

Lab Sample ID: JPL115-002

Level (low/med): LOW

Date Received: 05/22/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.47			M	R028436
7440-70-2	Calcium	57300			P	R028884
7440-47-3	Chromium	18.1		E	M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	23800			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	34700			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 12:12

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-8

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL115

Matrix (soil/water): Water

Lab Sample ID: JPL115-003

Level (low/med): LOW

Date Received: 05/22/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	1.02			M	R028436
7440-70-2	Calcium	67700			P	R028884
7440-47-3	Chromium	8.77		E	M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.80			M	R028436
7439-95-4	Magnesium	24100			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	21600			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 12:12

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-6-2Q08

Lab Name: Pace Analytical Services

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL115

Matrix (soil/water): Water

Lab Sample ID: JPL115-004

Level (low/med): LOW

Date Received: 05/22/2008

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-38-2	Arsenic	2.35			M	R028436
7440-70-2	Calcium	56100			P	R028884
7440-47-3	Chromium	17.4		E	M	R028436
7439-89-6	Iron	100	U		P	R028884
7439-92-1	Lead	1.00	U		M	R028436
7439-95-4	Magnesium	24100			P	R028884
7440-09-7	Potassium	5000	U		P	R029004
7440-23-5	Sodium	33800			P	R028884

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: No

Comment _____

Date Printed: 6/24/2008 12:12

Miscellaneous Inorganic Data

JPL115

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Pace Analytical Services, Inc.

Contract: JPL Groundwater Monitorin

Lab Code: PACE

SDG No.: JPL115

SOW No.: 1

<u>Sample No.</u>
<u>MW-13</u>
<u>MW-16</u>
<u>MW-8</u>
<u>DUPE-6-2Q08</u>

<u>Lab Sample ID</u>
<u>JPL115-001</u>
<u>JPL115-002</u>
<u>JPL115-003</u>
<u>JPL115-004</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: Paul J. Nix

Date: June 20, 2008

Title: Inorganic Supervisor

Inorganic Analysis Data Sheets

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: MW-13 **Date/Time Collected:** 05/21/2008 08:55
Lab Sample ID: JPL115-001 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E150.1/29596 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	6.9		0.10	0.10	05/22/2008	05/22/2008	R028346

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	330		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29915 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028654\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Sulfate	14808-79-8	10	60		10	1.7	06/05/2008	06/05/2008	R028654
Chloride	16887-00-6	10	40		10	0.76	06/05/2008	06/05/2008	R028654

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	180		4.0	4.0	05/29/2008	05/29/2008	R028444

Method/Qbatch*: E314.0/30240 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	20	700		20	2.8	06/17/2008	06/17/2008	R028939

*QBatch=QC/Preparation Batch
 FORM LTL-RSR-27.0

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: MW-13 **Date/Time Collected:** 05/21/2008 08:55
Lab Sample ID: JPL115-001 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E353.2/29711 **Unit:** mg/L
Instrument: ASE (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	10	7.1		0.50	0.16	05/29/2008	05/29/2008	R028459

Method/Qbatch*: E353.2/29736 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	7.1		0.50	0.010	05/29/2008	05/29/2008	R028479

Method/Qbatch*: E354.1/29561 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	05/22/2008	05/22/2008	R028308

Method/Qbatch*: E365.2/29560 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Phosphorus, Orthophosphate (as P)	7723-14-0	1	0.10	U	0.10	0.0025	05/22/2008	05/22/2008	R028307

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: MW-16 **Date/Time Collected:** 05/21/2008 11:26
Lab Sample ID: JPL115-002 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E150.1/29596 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.2		0.10	0.10	05/22/2008	05/22/2008	R028346

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	350		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29915 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028654\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Sulfate	14808-79-8	10	45		10	1.7	06/05/2008	06/05/2008	R028654
Chloride	16887-00-6	10	72		10	0.76	06/05/2008	06/05/2008	R028654

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO ₃)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO ₃)	71-52-3	2	160		4.0	4.0	05/29/2008	05/29/2008	R028444

Method/Qbatch*: E314.0/30240 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	4.8		2.0	0.28	06/17/2008	06/17/2008	R028939

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: MW-16 **Date/Time Collected:** 05/21/2008 11:26
Lab Sample ID: JPL115-002 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E353.2/29711 **Unit:** mg/L
Instrument: ASE (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.49		0.050	0.016	05/29/2008	05/29/2008	R028459

Method/Qbatch*: E353.2/29736 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.50	U	0.50	0.010	05/29/2008	05/29/2008	R028479

Method/Qbatch*: E354.1/29561 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	05/22/2008	05/22/2008	R028308

Method/Qbatch*: E365.2/29560 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Phosphorus, Orthophosphate (as P)	7723-14-0	1	0.10	U	0.10	0.0025	05/22/2008	05/22/2008	R028307

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: MW-8 **Date/Time Collected:** 05/21/2008 13:43
Lab Sample ID: JPL115-003 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E150.1/29596 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.1		0.10	0.10	05/22/2008	05/22/2008	R028346

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	410		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29915 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028654\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Sulfate	14808-79-8	10	76		10	1.7	06/05/2008	06/05/2008	R028654
Chloride	16887-00-6	10	39		10	0.76	06/05/2008	06/05/2008	R028654

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO ₃)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO ₃)	71-52-3	2	170		4.0	4.0	05/29/2008	05/29/2008	R028444

Method/Qbatch*: E314.0/30240 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	30		2.0	0.28	06/17/2008	06/17/2008	R028939

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: MW-8 **Date/Time Collected:** 05/21/2008 13:43
Lab Sample ID: JPL115-003 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E353.2/29711 **Unit:** mg/L
Instrument: ASE (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	2.3		0.050	0.016	05/29/2008	05/29/2008	R028459

Method/Qbatch*: E353.2/29736 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	2.3		0.50	0.010	05/29/2008	05/29/2008	R028479

Method/Qbatch*: E354.1/29561 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	05/22/2008	05/22/2008	R028308

Method/Qbatch*: E365.2/29560 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Phosphorus, Orthophosphate (as P)	7723-14-0	1	0.10	U	0.10	0.0025	05/22/2008	05/22/2008	R028307

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: DUPE-6-2Q08 **Date/Time Collected:** 05/21/2008 00:00
Lab Sample ID: JPL115-004 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E150.1/29596 **Unit:** pH Units
Instrument: pH meter (1) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
pH	pH	1	7.3		0.10	0.10	05/22/2008	05/22/2008	R028346

Method/Qbatch*: E160.1/29558 **Unit:** mg/L
Instrument: Balance (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Dissolved Solids (TDS)	TDS	1	380		2.0	2.0	05/22/2008	05/27/2008	R028305

Method/Qbatch*: E300.0/29915 **Unit:** mg/L
Instrument: Ion Chromatograph (2) **File:** R028654\results.1.txt

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Sulfate	14808-79-8	10	45		10	1.7	06/05/2008	06/05/2008	R028654
Chloride	16887-00-6	10	71		10	0.76	06/05/2008	06/05/2008	R028654

Method/Qbatch*: E310.1/29694 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Alkalinity, Carbonate (As CaCO3)	3812-32-6	2	4.0	U	4.0	4.0	05/29/2008	05/29/2008	R028444
Alkalinity, Bicarbonate (As CaCO3)	71-52-3	2	160		4.0	4.0	05/29/2008	05/29/2008	R028444

Method/Qbatch*: E314.0/30240 **Unit:** ug/L
Instrument: Ion Chromatograph (2) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	4.8		2.0	0.28	06/17/2008	06/17/2008	R028939

*QBatch=QC/Preparation Batch

Pace Analytical Services, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring
SDG Number: JPL115
Sample Number: DUPE-6-2Q08 **Date/Time Collected:** 05/21/2008 00:00
Lab Sample ID: JPL115-004 **Date/Time Received:** 05/22/2008 08:30
Method/Qbatch*: E353.2/29711 **Unit:** mg/L
Instrument: ASE (01) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Total Nitrate / Nitrite	N+N	1	0.49		0.050	0.016	05/29/2008	05/29/2008	R028459

Method/Qbatch*: E353.2/29736 **Unit:** mg/L
Instrument: None **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.50	U	0.50	0.010	05/29/2008	05/29/2008	R028479

Method/Qbatch*: E354.1/29561 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrite - N	14797-65-0	1	0.0050	U	0.0050	0.0012	05/22/2008	05/22/2008	R028308

Method/Qbatch*: E365.2/29560 **Unit:** mg/L
Instrument: UVVis (Cary) **File:** N/A

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Phosphorus, Orthophosphate (as P)	7723-14-0	1	0.10	U	0.10	0.0025	05/22/2008	05/22/2008	R028307

Quality Control Data

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: JPL115 Contract: JPL Groundwater Monitoring
 Run Sequence No. R028654 Concentration Units: mg/L
 Determination Name: 300 Anions Cl and SO4
 Initial Calibration Source: IC-7-25-5
 Continuing Calibration Source: IC-7-30-8

Analyte	ICV 06/05/2008 15:52				CCV1 06/05/08 19:06			CCV2 06/05/08 22:19			CCV Limits
	True	Found	Recovery	Limits	True	Found	Recovery	True	Found	Recovery	
Chloride	1.510	1.514	100.3	90-110	5.023	4.665	92.9	5.023	4.705	93.7	90-110
Sulfate	7.500	7.521	100.3	90-110	10.018	9.407	93.9	10.018	9.515	95	90-110

* = Percent recovery not within control limits

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: JPL115 Contract: JPL Groundwater Monitoring
 Run Sequence No. R028654 Concentration Units: mg/L
 Determination Name: 300 Anions Cl and SO4
 Initial Calibration Source: IC-7-25-5
 Continuing Calibration Source: IC-7-30-8

Analyte					CCV3 06/06/08 01:33						CCV
	True	Found	Recovery	Limits	True	Found	Recovery	True	Found	Recovery	Limits
Chloride					5.023	4.707	93.7				90-110
Sulfate					10.018	9.571	95.5				90-110

* = Percent recovery not within control limits

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: JPL115 Contract: JPL Groundwater Monitoring
 Run Sequence No. R028459 Concentration Units: mg/L
 Determination Name: 353.2 Nitrate + Nitrite (as N), Water
 Initial Calibration Source: AP-49-2
 Continuing Calibration Source: AP-59-20

Analyte	ICV-0508-159 05/29/2008 12:45				CCV1 05/29/08 13:03			CCV2 05/29/08 13:20			CCV
	True	Found	Recovery	Limits	True	Found	Recovery	True	Found	Recovery	Limits
Total Nitrate / Nitrite	1.519	1.522	100.2	90-110	1.002	0.991	99	1.002	1.009	100.7	90-110

* = Percent recovery not within control limits

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: JPL115 Contract: JPL Groundwater Monitoring
 Run Sequence No. R028308 Concentration Units: mg/L
 Determination Name: 354.1 Nitrite (as N), Water
 Initial Calibration Source: IC-7-27-12
 Continuing Calibration Source: IOM-3-57-11

Analyte	ICV 05/22/2008 18:40				CCV1 05/22/08 18:40						CCV
	True	Found	Recovery	Limits	True	Found	Recovery	True	Found	Recovery	Limits
Nitrite - N	0.030	0.031	100.2	90-110	0.025	0.026	102.4				90-110

* = Percent recovery not within control limits

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: JPL115 Contract: JPL Groundwater Monitoring
 Run Sequence No. R028307 Concentration Units: mg/L
 Determination Name: 365.2 Ortho-Phosphorus as P, Water
 Initial Calibration Source: IC-7-27-12
 Continuing Calibration Source: IOM-3-48-2

Analyte	ICV 05/22/2008 18:23				CCV1 05/22/08 18:23						CCV
	True	Found	Recovery	Limits	True	Found	Recovery	True	Found	Recovery	Limits
Phosphorus, Orthophosphat	0.241	0.242	100.2	90-110	0.250	0.254	101.3				90-110

* = Percent recovery not within control limits

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: JPL115 Contract: JPL Groundwater Monitoring
 Run Sequence No. R028939 Concentration Units: ug/L
 Determination Name: 314.0 Perchlorate
 Initial Calibration Source: IC-7-30-12
 Continuing Calibration Source: IC-7-30-14

Analyte	ICV 06/17/2008 14:37				CCV1 06/17/08 21:13						CCV
	True	Found	Recovery	Limits	True	Found	Recovery	True	Found	Recovery	Limits
Perchlorate	40.151	40.362	100.5	75-125	9.988	10.101	101.1				85-115

* = Percent recovery not within control limits

Pace Analytical Services, Inc.

INITIAL AND CONTINUING CALIBRATION BLANKS

SDG No: JPL115

Contract: JPL Groundwater Monitoring

Run	Determination	Sample	Analyzed	Analyte	Result	Unit	Limit
R028307	365.2 Ortho-Phosphorus as P, Water	ICB	05/22/2008	Phosphorus, Orthophosphat	0.10 U	mg/L	0.050000
	365.2 Ortho-Phosphorus as P, Water	CCB1	05/22/2008	Phosphorus, Orthophosphat	0.10 U	mg/L	0.050000
R028308	354.1 Nitrite (as N), Water	ICB	05/22/2008	Nitrite - N	0.0050 U	mg/L	
	354.1 Nitrite (as N), Water	CCB1	05/22/2008	Nitrite - N	0.0050 U	mg/L	
R028459	353.2 Nitrate + Nitrite (as N), Water	ICB-0508-159	05/29/2008	Total Nitrate / Nitrite	0.050 U	mg/L	0.025000
	353.2 Nitrate + Nitrite (as N), Water	CCB1	05/29/2008	Total Nitrate / Nitrite	0.050 U	mg/L	0.025000
	353.2 Nitrate + Nitrite (as N), Water	CCB2	05/29/2008	Total Nitrate / Nitrite	0.050 U	mg/L	0.025000
R028654	300 Anions Cl and SO4	ICB	06/05/2008	Chloride	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	CCB1	06/05/2008	Chloride	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	CCB2	06/05/2008	Chloride	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	CCB3	06/06/2008	Chloride	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	ICB	06/05/2008	Sulfate	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	CCB1	06/05/2008	Sulfate	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	CCB2	06/05/2008	Sulfate	1.0 U	mg/L	0.500000
	300 Anions Cl and SO4	CCB3	06/06/2008	Sulfate	1.0 U	mg/L	0.500000
R028939	314.0 Perchlorate	ICB	06/17/2008	Perchlorate	1.0 U	ug/L	0.500000
	314.0 Perchlorate	CCB1	06/17/2008	Perchlorate	1.0 U	ug/L	0.500000

* = Control limit exceeded

Pace Analytical Services, Inc.

Blank Report

Test: 310.1M Carb./Bicarb. Alkalinity

SDG ID: JPL115

Lab Sample ID: B052908ALKW01

Preparation Date: 5/29/2008

Run Sequence ID: R028444

Analysis Date: 05/29/2008 18:00

Units: mg/L

Matrix: Water

Analyte	Reported	Flag	Limit
Alkalinity, Bicarbonate (As CaCO3)	2.0	U	2
Alkalinity, Carbonate (As CaCO3)	2.0	U	2

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.

Blank Report

Test: 300 Anions Cl and SO4

SDG ID: JPL115

Lab Sample ID: B060508AIW02

Preparation Date: 6/5/2008

Run Sequence ID: R028654

Analysis Date: 06/05/2008 16:41

Units: mg/L

Matrix: Water

Analyte	Reported	Flag	Limit
Chloride	1.0	U	0.5
Sulfate	1.0	U	0.5

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 10X	MW-13
JPL115-002 10X	MW-16
JPL115-003 10X	MW-8
JPL115-004 10X	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.

Blank Report

Test: 353.2 Nitrate + Nitrite (as N), Water

SDG ID: JPL115

Lab Sample ID: B052908NNW02

Preparation Date: 5/29/2008

Run Sequence ID: R028459

Analysis Date: 05/29/2008 12:47

Units: mg/L

Matrix: Water

Analyte	Reported	Flag	Limit
Total Nitrate / Nitrite	0.050	U	0.025

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.

Blank Report

Test: 354.1 Nitrite (as N), Water

SDG ID: JPL115

Lab Sample ID: B052208NO2W01

Preparation Date: 5/22/2008

Run Sequence ID: R028308

Analysis Date: 05/22/2008 18:40

Units: mg/L

Matrix: Water

Analyte	Reported	Flag	Limit
Nitrite - N	0.0050	U	0.005

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.

Blank Report

Test: 365.2 Ortho-Phosphorus as P, Water

SDG ID: JPL115

Lab Sample ID: B052208OPW01

Preparation Date: 5/22/2008

Run Sequence ID: R028307

Analysis Date: 05/22/2008 18:23

Units: mg/L

Matrix: Water

Analyte	Reported	Flag	Limit
Phosphorus, Orthophosphate (as P)	0.10	U	0.05

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.

Blank Report

Test: 314.0 Perchlorate

SDG ID: JPL115

Lab Sample ID: B061708PERCW01

Preparation Date: 6/17/2008

Run Sequence ID: R028939

Analysis Date: 06/17/2008 17:01

Units: ug/L

Matrix: Water

Analyte	Reported	Flag	Limit
Perchlorate	1.0	U	0.5

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 20X	MW-13
JPL115-002 2X	MW-16
JPL115-003 2X	MW-8
JPL115-004 2X	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.

Blank Report

Test: 160.1 Total Dissolved Solids

SDG ID: JPL115

Lab Sample ID: B052208TDSW01

Preparation Date: 5/22/2008

Run Sequence ID: R028305

Analysis Date: 05/22/2008 11:00

Units: mg/L

Matrix: Water

Analyte	Reported	Flag	Limit
Total Dissolved Solids (TDS)	2.0	U	2

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* Measured blank concentration exceeded the established control limit

Pace Analytical Services, Inc.
Matrix Spike/Matrix Spike Duplicate Report

Test:	300 Anions Cl and SO4	SDG ID:	JPL115
		Preparation Date:	06/05/2008
MS Lab Sample ID:	JPL115-004MS 10X	Run Sequence ID:	R028654
MSD Lab Sample ID:	JPL115-004MSD 10X	Analysis Date:	06/05/2008
Client Sample ID:	DUPE-6-2Q08	Units:	mg/L
		Matrix:	Water

Analyte	Sample Found	MS Spike	MS Found	MS Recovery	MSD Spike	MSD Found	MSD Recovery	RPD	Limits	
									Recovery	RPD
Chloride	71.119	20.1	91.75	103%	20.1	91.087	99%	1%	90-110	11
Sulfate	45.2897	40.1	82.8497	94%	40.1	83.075	94%	0%	90-110	10

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 10X	MW-13
JPL115-002 10X	MW-16
JPL115-003 10X	MW-8
JPL115-004 10X	DUPE-6-2Q08

* = RPD or percent recovery is outside established control limits

= This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.
Matrix Spike/Matrix Spike Duplicate Report

Test:	353.2 Nitrate + Nitrite (as N), Water	SDG ID:	JPL115
		Preparation Date:	05/29/2008
MS Lab Sample ID:	JPL115-004MS	Run Sequence ID:	R028459
MSD Lab Sample ID:	JPL115-004MSD	Analysis Date:	05/29/2008
Client Sample ID:	DUPE-6-2Q08	Units:	mg/L
		Matrix:	Water

Analyte	Sample Found	MS Spike	MS Found	MS Recovery	MSD Spike	MSD Found	MSD Recovery	RPD	Limits	
									Recovery	RPD
Total Nitrate / Nitrite	0.4917	1.00	1.5482	105%	1.00	1.5079	101%	3%	90-110	10

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = RPD or percent recovery is outside established control limits

= This RPD or percent recovery is not flagged as an exceedance because the Sample Found amount is five times or more than the Spike Added amount.

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.
Matrix Spike/Matrix Spike Duplicate Report

Test:	354.1 Nitrite (as N), Water	SDG ID:	JPL115
		Preparation Date:	05/22/2008
MS Lab Sample ID:	JPL115-001MS	Run Sequence ID:	R028308
MSD Lab Sample ID:	JPL115-001MSD	Analysis Date:	05/22/2008
Client Sample ID:	MW-13	Units:	mg/L
		Matrix:	Water

Analyte	Sample Found	MS Spike	MS Found	MS Recovery	MSD Spike	MSD Found	MSD Recovery	RPD	Limits	
									Recovery	RPD
Nitrite - N	0.0016	0.0250	0.0266	100%	0.0250	0.0256	96%	4%	71-109	10

Associated Samples	
Lab Sample ID	Client Sample ID
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = RPD or percent recovery is outside established control limits

= This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.
Matrix Spike/Matrix Spike Duplicate Report

Test:	365.2 Ortho-Phosphorus as P, Water	SDG ID:	JPL115
		Preparation Date:	05/22/2008
MS Lab Sample ID:	JPL115-001MS	Run Sequence ID:	R028307
MSD Lab Sample ID:	JPL115-001MSD	Analysis Date:	05/22/2008
Client Sample ID:	MW-13	Units:	mg/L
		Matrix:	Water

Analyte	Sample Found	MS Spike	MS Found	MS Recovery	MSD Spike	MSD Found	MSD Recovery	RPD	Limits	
									Recovery	RPD
Phosphorus, Orthophosphate (a	0.0682	0.100	0.1667	98%	0.100	0.1649	97%	1%	80-112	10

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = RPD or percent recovery is outside established control limits

= This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Matrix Spike/Matrix Spike Duplicate Report

Test:	314.0 Perchlorate	SDG ID:	JPL115
MS Lab Sample ID:	JPL115-004MS 2X	Preparation Date:	06/17/2008
MSD Lab Sample ID:	JPL115-004MSD 2X	Run Sequence ID:	R028939
Client Sample ID:	DUPE-6-2Q08	Analysis Date:	06/17/2008
		Units:	ug/L
		Matrix:	Water

Analyte	Sample Found	MS Spike	MS Found	MS Recovery	MSD Spike	MSD Found	MSD Recovery	RPD	Limits	
									Recovery	RPD
Perchlorate	4.7768	40.0	46.4654	104%	40.0	46.513	104%	0%	80-120	15

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 20X	MW-13
JPL115-002 2X	MW-16
JPL115-003 2X	MW-8
JPL115-004 2X	DUPE-6-2Q08

* = RPD or percent recovery is outside established control limits

= This RPD or percent recovery is not flagged as an exceedence because the Sample Found amount is five times or more than the Spike Added amount.

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Duplicate Report

Test:	310.1M Carb./Bicarb. Alkalinity	SDG ID:	JPL115
Lab Sample ID:	JPL115-004D	Preparation Date:	5/29/2008
Client Sample ID:	DUPE-6-2Q08	Run Sequence ID:	R028444
		Analysis Date:	05/29/2008 18:00
		Units:	mg/L
		Matrix:	Water

Analyte	Parent Found	Duplicate Found	RPD	Limit
Alkalinity, Bicarbonate (As CaCO3)	164	162	1%	10
Alkalinity, Carbonate (As CaCO3)	0	0	0%	10

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

= RPD Value is not flagged as an outlier because either the parent found amount or duplicate found amount or both are less than five times the reporting limit

* = Value exceeded established control limits

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Duplicate Report

Test:	160.1 Total Dissolved Solids	SDG ID:	JPL115
Lab Sample ID:	JPL115-004D	Preparation Date:	5/22/2008
Client Sample ID:	DUPE-6-2Q08	Run Sequence ID:	R028305
		Analysis Date:	05/22/2008 11:00
		Units:	mg/L
		Matrix:	Water

Analyte	Parent Found	Duplicate Found	RPD	Limit
Total Dissolved Solids (TDS)	378	369	2%	30

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

= RPD Value is not flagged as an outlier because either the parent found amount or duplicate found amount or both are less than five times the reporting limit

* = Value exceeded established control limits

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

BS/BSD Report

Test: 314.0 Perchlorate

SDG ID: JPL115

BS Sample ID: S061708PERCW01

Preparation Date: 06/17/2008

BSD Sample ID: S061708PERCW01D

Run Sequence ID: R028939

Analysis Date: 06/17/2008 15:40

Units: ug/L

Matrix: Water

Analyte	Blank Spike			Blank Spike Duplicate			RPD	Limits	
	Added	Found	Recovery	Added	Found	Recovery		Recovery	RPD
Perchlorate	20.0	19.2237	96%	20.0	19.1016	96%	1%	85-115	15

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 20X	MW-13
JPL115-002 2X	MW-16
JPL115-003 2X	MW-8
JPL115-004 2X	DUPE-6-2Q08

* = RPD or recovery is outside the established control limits

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Blank Spike Report

Test: 310.1M Carb./Bicarb. Alkalinity

SDG ID: JPL115

Lab Sample ID: S052908ALKW01

Preparation Date: 05/29/2008

Run Sequence ID: R028444

Analysis Date: 05/29/2008 18:00

Matrix: Water

Units: mg/L

Analyte	Spike Added	Found	% Recovery	Limit
Alkalinity, Bicarbonate (As CaCO3)	57.0	60	105%	90-110

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Blank Spike Report

Test: 300 Anions Cl and SO4

SDG ID: JPL115

Lab Sample ID: S060508AIW02

Preparation Date: 06/05/2008

Run Sequence ID: R028654

Analysis Date: 06/05/2008 16:25

Matrix: Water

Units: mg/L

Analyte	Spike Added	Found	% Recovery	Limit
Chloride	1.51	1.5618	103%	90-110
Sulfate	7.50	7.5724	101%	90-110

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 10X	MW-13
JPL115-002 10X	MW-16
JPL115-003 10X	MW-8
JPL115-004 10X	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Blank Spike Report

Test: 353.2 Nitrate + Nitrite (as N), Water

SDG ID: JPL115

Lab Sample ID: S052908NNW02

Preparation Date: 05/29/2008

Run Sequence ID: R028459

Analysis Date: 05/29/2008 12:45

Matrix: Water

Units: mg/L

Analyte	Spike Added	Found	% Recovery	Limit
Total Nitrate / Nitrite	1.52	1.5218	100%	90-110

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Blank Spike Report

Test: 354.1 Nitrite (as N), Water

SDG ID: JPL115

Lab Sample ID: S052208NO2W01

Preparation Date: 05/22/2008

Run Sequence ID: R028308

Analysis Date: 05/22/2008 18:40

Matrix: Water

Units: mg/L

Analyte	Spike Added	Found	% Recovery	Limit
Nitrite - N	0.0304	0.0305	100%	90-110

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.

Blank Spike Report

Test: 365.2 Ortho-Phosphorus as P, Water

SDG ID: JPL115

Lab Sample ID: S052208OPW01

Preparation Date: 05/22/2008

Run Sequence ID: R028307

Analysis Date: 05/22/2008 18:23

Matrix: Water

Units: mg/L

Analyte	Spike Added	Found	% Recovery	Limit
Phosphorus, Orthophosphate (as P)	0.241	0.2418	100%	90-110

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.
Blank Spike Report

Test: 314.0 Perchlorate

SDG ID: JPL115

Lab Sample ID: S061708PERCW01

Preparation Date: 06/17/2008

Run Sequence ID: R028939

Analysis Date: 06/17/2008 15:40

Matrix: Water

Units: ug/L

Analyte	Spike Added	Found	% Recovery	Limit
Perchlorate	20.0	19.2237	96%	85-115

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001 20X	MW-13
JPL115-002 2X	MW-16
JPL115-003 2X	MW-8
JPL115-004 2X	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Pace Analytical Services, Inc.
Blank Spike Report

Test:	160.1 Total Dissolved Solids	SDG ID:	JPL115
Lab Sample ID:	S052208TDSW01	Preparation Date:	05/22/2008
		Run Sequence ID:	R028305
		Analysis Date:	05/22/2008 11:00
		Matrix:	Water
		Units:	mg/L

Analyte	Spike Added	Found	% Recovery	Limit
Total Dissolved Solids (TDS)	300	274	91%	85-115

Associated Samples	
<u>Lab Sample ID</u>	<u>Client Sample ID</u>
JPL115-001	MW-13
JPL115-002	MW-16
JPL115-003	MW-8
JPL115-004	DUPE-6-2Q08

* = Recovery exceeded the established control limit

The concentration values on this report may have non-significant digits tabulated. These are the same values used to compute the recovery and/or RPD values listed and are available during data review to verify our calculations.

Raw Data

Alkalinity Data

PACE ANALYTICAL SERVICES, INC.
Instrument Log Sheet

Run sequence#: R028444		Date/Time Started: 05/29/08 18:00			Analyst: Liam Cover		
Instrument ID: None							
Sample Number	Type	DF	Method No.	Bottle #	Prep ID	Date Analyzed	Comments
B052908ALKW01	B	1.00	310.1		P029694	05/29/08 18:00	
S052908ALKW01	S	1.00	310.1		P029694	05/29/08 18:00	25 mL IOM-3-54-15
JPL115-001	SAMP	2.00	310.1		P029694	05/29/08 18:00	
JPL115-002	SAMP	2.00	310.1		P029694	05/29/08 18:00	
JPL115-003	SAMP	2.00	310.1		P029694	05/29/08 18:00	
JPL115-004	SAMP	2.00	310.1		P029694	05/29/08 18:00	
JPL115-004D	D	2.00	310.1		P029694	05/29/08 18:00	

Pace Analytical Services, Inc.

Alkalinity by SM 2320B (EPA 310.1) - Water

Analysis Date: 05-29-08

Checked by: 

Analyst: LC

Lab ID	Sample ID	Container ID	Sample Volume, mL	HCl, N	Titrate			Carbonate Alkalinity, mg/L	Bicarbonate Alkalinity, mg/L	Total Alkalinity, mg/L	RL "U" Value (Based on 0.2 ml)	Total Carbon Dioxide*, mg/L
					pH 8.3, mL	pH 4.5, mL	Hydroxide Alkalinity, mg/L					
1	B052908ALKW01	-----	100	0.0200	0.00	0.10	U	U	1.0	2	1	
2	S052908ALKW01	-----	25	0.0200	0.00	1.50	U	U	60	8	53	
3	ACOU080501-001	11	50	0.0200	0.00	7.90	U	U	158	4	139	
4	ACOU080501-002	17	50	0.0200	0.00	12.00	U	U	240	4	211	
5	JPL113-001	2	50	0.0200	0.00	9.50	U	U	190	4	167	
6	JPL113-001 Dup	2	50	0.0200	0.00	9.60	U	U	192	4	169	
7	JPL113-002	1	50	0.0200	0.00	7.90	U	U	158	4	139	
9	JPL114-001	1	50	0.0200	0.00	9.00	U	U	180	4	158	
10	JPL114-002	1	50	0.0200	0.00	9.10	U	U	182	4	160	
11	JPL115-001	2	50	0.0200	0.00	9.10	U	U	182	4	160	
12	JPL115-002	2	50	0.0200	0.00	8.00	U	U	160	4	141	
13	JPL115-003	1	50	0.0200	0.00	8.60	U	U	172	4	151	
14	JPL115-004	2	50	0.0200	0.00	8.20	U	U	164	4	144	
15	JPL115-004 Dup	2	50	0.0200	0.00	8.10	U	U	162	4	143	
16	KC050812-001	1	50	0.0200	0.00	2.80	U	U	56	4	49	
17	KC050813-001	2	50	0.0200	0.00	2.50	U	U	50	4	44	
18	KC050813-002	5	2.5	0.0200	0.00	9.00	U	U	3600	80	3168	
19	KC050814-001	1	50	0.0200	0.00	3.30	U	U	66	4	58	
20	KC070806-001	1	50	0.0200	0.00	3.20	U	U	64	4	56	
21	KC210802-001	7	50	0.0200	0.00	5.10	U	U	102	4	90	
22	KC210802-002	7	25	0.0200	0.00	10.50	U	U	420	8	370	
23	KC210802-003	6	50	0.0200	0.00	9.00	U	U	180	4	158	
24	KC230813-001	5	25	0.0200	0.00	8.00	U	U	320.0	8	282	
25	KC230813-002	4	2.5	0.0200	0.00	9.00	U	U	3600.0	80	3168	

* This calculation assumes that there is no Free Carbon Dioxide

PACE ANALYTICAL SERVICES

Total Alkalinity Benchsheet

Standard Methods 2320
EPA 310.1Mod

Item	Date	Analyst	Checker
Analysis	5/29/08	LC	

Total Alkalinity

Sample ID	Bottle Number	Sample Volume (mL)	Titrate to pH 8.3 (mL)	Titrate to pH 4.5 (mL)	Alkalinity as Hydroxide (mg/L)	Alkalinity as Carbonate (mg/L)	Alkalinity as Bicarbonate (mg/L)	Total Alkalinity (mg/L)
B052908ALKW01	----	100	∅	0.10				
S052908ALKW01	----	25	∅	1.50				
AC00070501-001	11	50	∅	7.90				
AC00080501-002	17	50	∅	12.00				
JPL113-001	2	50	∅	9.50				
↓ -001 Dup	2	50	∅	9.60				
JPL113-002	1	50	∅	7.96				
JPL114-001	1	50	∅	9.00				
↓ -002	1	50	∅	9.10				
JPL115-001	2	50	∅	9.10				
↓ -002	2	50	∅	8.00				
↓ -003	1	50	∅	8.60				
↓ -004	2	50	∅	8.20				
↓ -004 Dup	2	50	∅	8.10				
KC050812-001	1	30	∅	2.80				
KC050813-001	2	50	∅	2.50				
↓ -002	5	2.50	∅	9.00				
KC050814-001	1	50	∅	3.30				
KC070806-001	1	50	∅	3.20				
KC210802-001	7	50	∅	5.10				
↓ -002	7	25	∅	10.50				
↓ -003	6	50	∅	9.00				
KC230813-001	5	25	∅	8.00				
↓ -002	4	2.50	∅	9.00				

Standard Information :

Phenolphthalein = REA2-56-4
Bromocresol Green REA2-58-7

Hydrochloric Acid Standardized @ 0.02 N, Lab. Ref. # IOM 3 - 57 - 17.

Blank Spike Solution, TV= 36 mg/L, Lab. Ref. # IOM 3 - 54 - 15.

Calculations :

Total Alkalinity, mg CaCO₃/L = (Titrant to pH 4.5, mL)(Normality of HCl)(50000) / Sample Volume, mL



STANDARD SOLUTION DATA SHEET

1. STANDARD INFORMATION

Name: Alkalinity Spike

Log Entry: IOM-3-54-15

Received/Prepared Date: 03/24/2008

Expiration Date: 06/23/2008

Location:

Manufacturer's Exp. Date: 12/31/2008

Vendor: RTC

Catalog Number:

Lot Number: 1063810639

Solvent:

Certificate Number: MIN-0638/639

Notes:

2. COMPOSITION - ANALYTES

CHEMICAL	CAS #	STOCK CONC.	FINAL CONC.
<i>Alkalinity, Bicarbonate (As CaCO₃)</i>	71-52-3	57.0 mg/L	-
<i>Alkalinity, Total (As CaCO₃)</i>	ALK	57.0 mg/L	-
<i>Hardness</i>	HARDNESS	358 mg/L	-

FORM LTL-SS-3.0



STANDARD SOLUTION DATA SHEET

1. STANDARD INFORMATION

Name: **0.02N HCL**
 Log Entry: IOM-3-57-17 Received/Prepared Date: 05/20/2008 Expiration Date: 07/20/2008
 Location: Manufacturer's Exp. Date:
 Prepared By: Liam Cover Final Volume: 0 mL
 Solvent: -
 Notes: Standardized against 0.1N NaOH on 5/20/08. Results were: 0.02 0.020100
 0.0203046 ----- 0.020135N Average .1N naoh* 5ml/25ml=0.02N

2. COMPOSITION - STANDARDS

SOLUTION	LOG ENTRY	CREATED/RECV'D.	EXP.	MANU EXP.
0.02N HCL	IOM-3-57-17 (ORIGINAL)			

3. COMPOSITION - ANALYTES

CHEMICAL	CAS #	STOCK CONC.	FINAL CONC.

FORM LTL-SS-3.0