ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2

LABORATORY NAME Mitkem Laboratories
CITY/STATE Warwick, RI
CASE NO. 40275 SDG NO. F3JJ4
SDG NOs. TO FOLLOW — — —
MOD. REF. NO. —
CONTRACT NO. EP-W-05-030
SOW NO. SOM01.2

622138

All documents delivered in the Complete SDG File (CSF) must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
1. **Inventory Sheet** (Form DC-2) (Do not number)				✓
2. **SDG Case Narrative**	0001	0004	✓	✓
3. **SDG Cover Sheet/Traffic Report**	0005	0008	✓	✓
4. **Trace Volatiles Data**				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	0009	0010	✓	✓
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region)	0011	0011	✓	✓
Method Blank Summary (Form IV VOA)	0012	0013	✓	✓
GC/MS Instrument Performance Check (Form V VOA)	0014	0016	✓	✓
Internal Standard Area and RT Summary (Form VIII VOA)	0017	0019	✓	✓
b. Sample Data	0020	0158	✓	✓
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)			✓	✓
Tentatively Identified Compounds (Form I VOA-TIC)			✓	✓
Reconstructed total ion chromatograms (RIC) for each sample			✓	✓
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	✓
Quantitation reports			✓	✓
Mass Spectra of all reported TICs with three best library matches			✓	✓
c. Standards Data (All Instruments)	0159	0194		
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)			✓	✓
RICs and Quantitation Reports for all Standards			✓	✓
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)			✓	✓
RICs and Quantitation Reports for all Standards			✓	✓
d. Raw/Quality Control (QC) Data			✓	✓
BFB	0195	0200	✓	✓
Blank Data	0201	0218	✓	✓

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 40275 SDG NO. F3JJ4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	0219	0228	✓	✓
e. Trace SIM Data (Place at the end of the Trace Volatiles Section)	N/A	N/A	NA	NA
[Form I VOA-SIM; Form II VOA-SIM1 and VOA-SIM2; Form IV-VOA-SIM; Form VI VOA-SIM; Form VII VOA-SIM; Form VIII VOA-SIM; and all raw data for QC, Samples, and Standards.]				
5. Low/Med Volatiles Data				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1, VOA-2, VOA-3, VOA-4)	N/A	N/A	NA	NA
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (if requested by USEPA Region)				
Method Blank Summary (Form IV VOA)				
GC/MS Instrument Performance Check (Form V VOA)				
Internal Standard Area and RT Summary (Form VIII VOA)				
b. Sample Data				
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)				
Tentatively Identified Compounds (Form I VOA-TIC)				
Reconstructed total ion chromatograms (RIC) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified				
Quantitation reports				
Mass Spectra of all reported TICs with three best library matches				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)				
RICs and Quantitation Reports for all Standards				
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)				
RICs and Quantitation Reports for all Standards				
d. Raw/Quality Control (QC) Data				
BFB				
Blank Data	N/A	N/A	NA	✓

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 40275 SDG NO. F3JJ4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
Martix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	N/A	N/A	NA	NA
6. **Semivolatiles Data**				
a. *QC Summary*				
Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)	N/A	N/A	NA	NA
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)				
Method Blank Summary (Form IV SV)				
GC/MS Instrument Performance Check (Form V SV)				
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)				
b. Sample Data				
TCL Results - Organics Analysis Data Sheet (Form I SV-1 and SV-2)				
Tentatively Identified Compounds (Form I SV-TIC)				
Reconstructed total ion chromatograms (RICs) for each sample				
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds				
Quantitation reports				
Mass Spectra of TICs with three best library matches				
GPC chromatograms (if GPC is required)				
c. Standards Data (All Instruments)				
Initial Calibration Data (Form VI SV-1, SV-2, SV-3)				
RICs and Quantitation Reports for all Standards				
Continuing Calibration Data (Form VII SV-1, SV-2, SV-3)				
RICs and Quantitation Reports for all Standards				
d. Raw QC Data				
DFTPP				
Blank Data				
MS/MSD Data (if requested by USEPA Region)				
e. Raw GPC Data	N/A	N/A	NA	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 40275 SDG NO. F3J54 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
f. Semivolatile SIM Data	NA	NA	NA	NA
[Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III SV-SIM1 and SV-SIM2 (if required); Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.]				
7. Pesticides Data				
a. QC Summary				
Surrogate Recovery Summary (Form II PEST-1 and PEST-2)	NA	NA	NA	NA
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III PEST-1 and PEST-2)				
Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4)				
Method Blank Summary (Form IV PEST)				
b. Sample Data	NA	NA		
TCL Results - Organics Analysis Data Sheet (Form I PEST)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout				
Manual work sheets				
For pesticides by GC/MS				
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)				
c. Standards Data	NA	NA		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)				
Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4)				
Analyte Resolution Summary (Form VI PEST-5, per column)				
Performance Evaluation Mixture (Form VI PEST-6)				
Individual Standard Mixture A (Form VI PEST-7)				
Individual Standard Mixture B (Form VI PEST-8)				
Individual Standard Mixture C (Form VI PEST-9 and PEST-10)				
Calibration Verification Summary (Form VII PEST-1)				
Calibration Verification Summary (Form VII PEST-2)				
Calibration Verification Summary (Form VII PEST-3)			NA	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 40275 SDG NO. F3JJ4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
Calibration Verification Summary (Form VII PEST-4)			NA	NA
Analytical Sequence (Form VIII PEST)				
Florisil Cartridge Check (Form IX PEST-1)				
Pesticide GPC Calibration (Form IX PEST-2)				
Identification Summary for Single Component Analytes (Form X PEST-1)				
Identification Summary for Toxaphene (Form X PEST-2)				
Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights				
d. Raw QC Data				
Blank Data	N/A	N/A		
Matrix Spike/Matrix Spike Duplicate Data				
Laboratory Control Sample Data				
e. Raw GPC Data				
f. Raw Florisil Data	N/A	N/A	NA	NA
8. **Aroclor Data**				
a. QC Summary				
Surrogate Recovery Summary (Form II ARO-1 and ARO-2)	N/A	N/A	NA	NA
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)				
Laboratory Control Sample Recovery (Form III ARO-3 and ARO-4)				
Method Blank Summary (Form IV ARO)				
b. Sample Data	N/A	N/A		
TCL Results - Organics Analysis Data Sheet (Form I ARO)				
Chromatograms (Primary Column)				
Chromatograms from second GC column confirmation				
GC Integration report or data system printout				
Manual work sheets				
For Aroclors by GC/MS				
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			NA	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 40275 SDG NO. F3JJ4 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
c. Standards Data	NA	NA		
Aroclors Initial Calibration (Form VI ARO-1, ARO-2, and ARO-3)			NA	NA
Calibration Verification Summary (Form VII ARO-1)			↓	↓
Analytical Sequence (Form VIII ARO)			↓	↓
Identification Summary for Multicomponent Analytes (Form X ARO)			↓	↓
Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights			↓	↓
d. Raw QC Data				
Blank Data	NA	NA	↓	↓
Matrix Spike/Matrix Spike Duplicate Data	↓	↓	↓	↓
Laboratory Control Sample (LCS) Data	↓	↓	↓	↓
e. Raw GPC Data (if performed)	NA	NA	NA	↓
9. **Miscellaneous Data**				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	0229	0231	✓	✓
Internal sample and sample extract transfer chain-of-custody records	0232	0234	✓	✓
Screening records	NA	NA	NA	NA
All instrument output, including strip charts from screening activities (describe or list)				
Primary, Intermediate and Working Standard Logbook Pages	0235	0244	✓	✓
—	NA	NA	NA	—
10. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments 3)	0245	0247	✓	✓
Chain of Custody Records	0248	0251	✓	✓
Sample Tags (in a plastic bag, if present)			✓	✓
Sample Log-in Sheet (Lab & DC-1)	0252	0256	✓	✓
Miscellaneous Shipping/Receiving Records (describe or list)				
PE Instructions	NA	NA	NA	NA
—	NA	NA	NA	—

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. 40275 SDG NO. F3J04 SDG NOS. TO FOLLOW —

— — MOD. REF. NO. —

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK USEPA
11. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
/	N/A	N/A	NA	—
/	N/A	N/A	NA	—
12. **Other Records** (describe or list)				
Telephone Communication Log	N/A	N/A	NA	—
E-mail(s)	0257	0260	✓	✓
—	N/A	N/A	NA	NA

13. **Comments**

/

Completed by: Jennifer Emerson (Signature) | Jennifer Emerson/Data Reporting Specialist (Printed Name/Title) | JE 7/1/10 7/1/10 (Date)

Verified by: Agnes R Huntley (Signature) | Agnes Huntley/CLP Project Manager (Printed Name/Title) | 7/1/10 (Date)

Audited by: J. Wallace Doong (Signature) | J. WALLACE DOONG (Printed Name/Title) | 7-13-10 (Date)
(~~USEPA~~) ESAT | DATA REVIEWER

Report Date:
01-Jul-10 15:56

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

MITKEM LABORATORIES

A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

Laboratory Report

Computer Science Corporation
15000 Conference Center Drive
Chantilly, VA 20151-3808

Attn: Nazy Abousaeedi

Work Order: J1288
SDG No: F3JJ4
Case No: 40275

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
J1288-01	F3JJ4	Aqueous	22-Jun-10 10:15	23-Jun-10 09:10
J1288-02	F3JJ5	Aqueous	22-Jun-10 10:58	23-Jun-10 09:10
J1288-03	F3JJ6	Aqueous	22-Jun-10 11:10	23-Jun-10 09:10
J1288-04	F3JJ7	Aqueous	22-Jun-10 09:22	23-Jun-10 09:10
J1288-05	F3JJ8	Aqueous	22-Jun-10 15:35	23-Jun-10 09:10
J1288-06	F3JK2	Aqueous	22-Jun-10 12:12	23-Jun-10 09:10
J1288-07	F3JL1	Aqueous	22-Jun-10 14:16	23-Jun-10 09:10
J1288-08	F3JL2	Aqueous	22-Jun-10 11:05	23-Jun-10 09:10
J1288-09	F3JJ2	Aqueous	23-Jun-10 11:00	24-Jun-10 08:45
J1288-10	F3JJ3	Aqueous	23-Jun-10 09:55	24-Jun-10 08:45
J1288-11	F3JJ9	Aqueous	23-Jun-10 08:48	24-Jun-10 08:45
J1288-12	F3JK0	Aqueous	23-Jun-10 08:30	24-Jun-10 08:45
J1288-13	F3JK3	Aqueous	23-Jun-10 12:20	24-Jun-10 08:45
J1288-14	F3JK4	Aqueous	23-Jun-10 14:44	24-Jun-10 08:45
J1288-15	F3JK5	Aqueous	23-Jun-10 15:35	24-Jun-10 08:45
J1288-16	F3JL3	Aqueous	23-Jun-10 08:55	24-Jun-10 08:45
J1288-17	F3JK1	Aqueous	24-Jun-10 10:00	25-Jun-10 08:56
J1288-18	F3JK6	Aqueous	24-Jun-10 08:58	25-Jun-10 08:56
J1288-19	F3JK7	Aqueous	24-Jun-10 08:45	25-Jun-10 08:56
J1288-20	F3JK8	Aqueous	24-Jun-10 10:32	25-Jun-10 08:56

I attest that the information contained within the report has been reviewed for accuracy and checked against the quaility control requirements for each method. The results relate only to the samples(s) as recevied.

All applicable NELAC or USEPA CLP requirments have been meet.

Mitkem Laboratories is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
Texas	T104704422-08-TX
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-05-030

Authorized by:

Yihai Ding
Laboratory Director

Technical Reviewer's Initials:

SDG Narrative

Mitkem Laboratories, a Division of Spectrum Analytical, Inc. submits the enclosed data package in response to USEPA Case # 40275 and SDG# F3JJ4. Analyses were performed for twenty aqueous samples that were received from June 23 to June 25, 2010. The analyses were performed under USEPA Contract # EP-W-05-030. Please note that the sample-shipping cooler received on June 23 was measured at 7.5°C. The cooler received on June 24 was measured at 3.5°C. The cooler received on June 25 was measured at 3.0°C.

The TR/COC lists the analysis as VOA. This case was scheduled for TVOA. Per the Region, the laboratory will note and perform the analysis as indicated on the Scheduling notification form.

Tags 6-345237, 6-345238 and 6-345239 for sample F3JJ9 have collection date and time of 6/23/10 at 8:48. The date and time on the TR/COC is 6/23/10 at 8:44. The labels on the vials just have a collection date, no time. Per the Region, the correct sample time for J3JJ9 is 8:48.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis	VOA pH
F3JJ4	J1288-01A	TV	7
F3JJ5	J1288-02A	TV	7
F3JJ5MS	J1288-02AMS	TV	7
F3JJ5MSD	J1288-02AMSD	TV	7
F3JJ6	J1288-03A	TV	7
F3JJ7	J1288-04A	TV	7
F3JJ8	J1288-05A	TV	7
F3JK2	J1288-06A	TV	7
F3JK2DL	J1288-06ADL	TV	7
F3JL1	J1288-07A	TV	7
F3JL2	J1288-08A	TV	7
F3JJ2	J1288-09A	TV	7
F3JJ3	J1288-10A	TV	7
F3JJ9	J1288-11A	TV	7
F3JK0	J1288-12A	TV	7
F3JK3	J1288-13A	TV	7
F3JK4	J1288-14A	TV	7
F3JK5	J1288-15A	TV	7
F3JL3	J1288-16A	TV	7
F3JK1	J1288-17A	TV	7
F3JK6	J1288-18A	TV	7
F3JK7	J1288-19A	TV	7

TV = Trace Volatiles

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration (SOM01.2) protocols. The analyses were performed with strict adherence to the SOW with the following exceptions and observations:

1. Overall Observation:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting.
- M2 peak co-elution.
- M3 rising or falling baseline.
- M4 retention time shift.
- M5 miscellaneous – under this category, the justification is explained.
- M6 software did not integrate peak
- M7 partial peak integration

2. Trace Volatile Analysis:

Trap used for instrument V5: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

cis-1,3-Dichloropropene-d4 was detected in method blanks and in samples. The volatile organic deuterated monitoring compound spike solution contains both the cis- and trans-1,3-dichloropropene isomers. cis-1,3-Dichloropropene-d4 is not a dueterated monitoring compound for SOM01.2, while the trans isomer is. The cis isomer is considered a laboratory artifact, and is not reported as a tentatively identified compound.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

The following equation was used to calculate the concentration of target analytes for aqueous samples:

$$\text{Concentration } (\mu g/L) = \frac{(\text{Amt})(\text{DF})(\text{UF})(25)}{V_o}$$

where: Amt = on-column amount on raw data
DF = Dilution factor
UF = ng unit correction factor
V_o = Sample volume purged (mL)

The following equation was used to calculate the Amt in the previous equation:

$$Amt = \frac{(A_x)(IS)}{(A_{is})(RRF)}$$

where: A_x = area of the characteristic ion for the compound to be measured
A_{is} = area of the characteristic ion for the associated internal standard
IS = concentration of internal standard in ug/L
RRF = relative response factor

Secondary ion 65 was used in the quantitation of 1,1-dichloroethene-d2 instead of primary ion 63 due to the interference with target compound 1,1-dichloroethene in the calibration standards.

DMC recoveries were within the QC limits with the exception of low recovery of vinyl chloride-d3 in sample F3JJ4, low recovery of vinyl chloride-d3 and 1,2-dichloropropane-d6 in sample F3JJ7 and low recovery of 1,2-dichloropropane-d6 in samples F3JJ5MSD and F3JK2.

Matrix spike and matrix spike duplicate were performed on sample F3JJ5. Spike recoveries and replicate RPDs were within the advisory QC limits.

To ensure that all target analytes were determined within the instrument calibration range, sample F3JK2 was re-analyzed at 4x dilution.

Due to laboratory oversight, sample F3JJ5 and its associated matrix spike and matrix spike duplicate, F3JJ6, F3JJ7, F3JJ8, F3JK2, F3JL1, F3JL2 and F3JK2DL were done with analysis on June 29 by 4am. These samples were analyzed outside of 5-days from VTSR.

No manual integrations were performed for any sample or standard.

No other unusual observation was made for the analysis.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Agnes R Huntley

Agnes Huntley
CLP Project Manager
07/01/10

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number F3JJ4

Laboratory Name	Mitkem Laboratories	Lab Code	MITKEM
Contract No.	EP-W-05-030	Case No.	40275
Analysis Price	$437	SDG Turnaround	7 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) F3JJ2	08) F3JJ7	15) F3JK4	22) F3JL3
02) F3JJ3	09) F3JJ8	16) F3JK5	
03) F3JJ4	10) F3JJ9	17) F3JK6	
04) F3JJ5	11) F3JK0	18) F3JK7	
05) F3JJ5MS	12) F3JK1	19) F3JK8	
06) F3JJ5MSD	13) F3JK2	20) F3JL1	
07) F3JJ6	14) F3JK3	21) F3JL2	

First Sample in SDG	Last Sample in SDG
F3JJ4	F3JK8

First Sample Receipt Date	Last Sample Receipt Date
06/23/2010	06/25/2010

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature Agnes R Huntley Date 06/25/2010

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

EPA

Case No:	40275
DAS No:	
SDG No:	F3JJ4

L

Date Shipped:	6/22/2010
Carrier Name:	FedEx
Airbill:	870536935506
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: Shelley Stratmann

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Gary Hazlewood	(6-22-10/1800hrs)	Veronica Gonzalez	6/23/10 10:45
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$437
Transfer To:	–
Lab Contract No:	–
Unit Price:	–

	ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J12888 01	F3JJ4	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345210 (Ice Only), 6-345211 (Ice Only), 6-345212 (Ice Only) (3)	GW-33	S: 6/22/2010	10:15	MF3JJ4	Good
02	F3JJ5	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345215 (Ice Only), 6-345216 (Ice Only), 6-345217 (Ice Only), 6-345218 (Ice Only), 6-345219 (Ice Only), 6-345220 (Ice Only), 6-345221 (Ice Only), 6-345222 (Ice Only), 6-345223 (Ice Only) (9)	GW-34	S: 6/22/2010	10:58	MF3JJ5	
03	F3JJ6	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345225 (Ice Only), 6-345226 (Ice Only), 6-345227 (Ice Only) (3)	GW-35	S: 6/22/2010	11:10	MF3JJ6	
04	F3JJ7	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345229 (Ice Only), 6-345230 (Ice Only), 6-345231 (Ice Only) (3)	GW-36	S: 6/22/2010	9:22	MF3JJ7	
05	F3JJ8	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345233 (Ice Only), 6-345234 (Ice Only), 6-345235 (Ice Only) (3)	GW-37	S: 6/22/2010	15:35	MF3JJ8	
06	F3JK2	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345249 (Ice Only), 6-345250 (Ice Only), 6-345251 (Ice Only) (3)	GW-41	S: 6/22/2010	12:12	MF3JK2	
07	F3JL1	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345285 (Ice Only), 6-345286 (Ice Only), 6-345287 (Ice Only) (3)	GW-50	S: 6/22/2010	14:16	MF3JL1	
08	F3JL2	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345288 (Ice Only), 6-345289 (Ice Only), 6-345290 (Ice Only) (3)	FB-01	S: 6/22/2010	11:05		Good

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	F3JJ5		7.5°C	

Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact?	Shipment Iced?
VOA = CLP TCL Volatiles			Y	Y

TR Number: 6-043013577-062210-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

F2V5.1.047

0009

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	40275
DAS No:	
SDG No:	F3JJ4

L

1

Date Shipped:	6/23/2010
Carrier Name:	FedEx
Airbill:	871762562254
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: Dean Perkins

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [illegible]	(6-23-10/1900Hrs)	Shirley Ng	6/24/10 8:45
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$437
Transfer To:	—
Lab Contract No:	—
Unit Price:	—

J1288	ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
9	F3JJ2	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345202 (Ice Only), 6-345203 (Ice Only), 6-345204 (Ice Only) (3)	GW-31	S: 6/23/2010	11:00	MF3JJ2	Good
10	F3JJ3	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345206 (Ice Only), 6-345207 (Ice Only), 6-345208 (Ice Only) (3)	GW-32	S: 6/23/2010	9:55	MF3JJ3	
11	F3JJ9	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345237 (Ice Only), 6-345238 (Ice Only), 6-345239 (Ice Only) (3)	GW-38	S: 6/23/2010	8:44	MF3JJ9	
12	F3JK0	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345241 (Ice Only), 6-345242 (Ice Only), 6-345243 (Ice Only) (3)	GW-39	S: 6/23/2010	8:30	MF3JK0	
13	F3JK3	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345253 (Ice Only), 6-345254 (Ice Only), 6-345255 (Ice Only) (3)	GW-42	S: 6/23/2010	12:20	MF3JK3	
14	F3JK4	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345257 (Ice Only), 6-345258 (Ice Only), 6-345259 (Ice Only) (3)	GW-43	S: 6/23/2010	14:44	MF3JK4	
15	F3JK5	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345261 (Ice Only), 6-345262 (Ice Only), 6-345263 (Ice Only) (3)	GW-44	S: 6/23/2010	15:35	MF3JK5	
16	F3JL3	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345291 (Ice Only), 6-345292 (Ice Only), 6-345293 (Ice Only) (3)	FB-02	S: 6/23/2010	8:55		Good

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3.5°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y
VOA = CLP TCL Volatiles				

6667

TR Number: 6-043013577-062310-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

F2V5.1.047

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	40275
DAS No:	
SDG No:	F3JJ4

L

1

Date Shipped:	6/24/2010
Carrier Name:	FedEx
Airbill:	870536933856
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: Shelley Stratmann

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Gary Hazlewood	(6-24-10/1330 Hrs)	Shirley Ng	6/25/10 8:56
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$437
Transfer To:	—
Lab Contract No:	—
Unit Price:	—

J1288

	ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
17	F3JK1	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345245 (Ice Only), 6-345246 (Ice Only), 6-345247 (Ice Only) (3)	GW-40	S: 6/24/2010	10:00	MF3JK1	Good
18	F3JK6	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345265 (Ice Only), 6-345266 (Ice Only), 6-345267 (Ice Only) (3)	GW-45	S: 6/24/2010	8:58	MF3JK6	↓
19	F3JK7	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345269 (Ice Only), 6-345270 (Ice Only), 6-345271 (Ice Only) (3)	GW-46	S: 6/24/2010	8:45	MF3JK7	
20	F3JK8	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345273 (Ice Only), 6-345274 (Ice Only), 6-345275 (Ice Only) (3)	GW-47	S: 6/24/2010	10:32	MF3JK8	Good
01	F3JK9	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345277 (Ice Only), 6-345278 (Ice Only), 6-345279 (Ice Only) (3)	GW-48	S: 6/24/2010	11:20	MF3JK9	
02	F3JL0	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345281 (Ice Only), 6-345282 (Ice Only), 6-345283 (Ice Only) (3)	GW-49	S: 6/24/2010	8:18	MF3JL0	
03	F3JL4	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345294 (Ice Only), 6-345295 (Ice Only), 6-345296 (Ice Only) (3)	FB-03	S: 6/24/2010	9:02		

SDG-Final Sample

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3° C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y
VOA = CLP TCL Volatiles				

TR Number: 6-043013577-062410-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

2A - FORM II VOA-1

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL)	#	VDMC2 (CLA)	#	VDMC3 (DCE)	#	VDMC4 (BUT)	#	VDMC5 (CLF)	#	VDMC6 (DCA)	#	VDMC7 (BEN)	#
01	VBLK5V	82		90		86		82		92		92		95	
02	F3JJ4	63	*	81		82		72		86		85		87	
03	F3JJ5	67		85		84		71		81		83		87	
04	F3JJ5MS	66		83		87		69		86		85		90	
05	F3JJ5MSD	70		84		81		71		87		85		88	
06	F3JJ6	67		86		83		69		86		82		88	
07	F3JJ7	65	*	82		81		60		86		89		88	
08	F3JJ8	71		89		82		70		86		90		88	
09	F3JK2	67		83		85		73		89		87		89	
10	F3JL1	76		87		95		73		89		97		91	
11	F3JL2	90		97		91		75		85		93		91	
12	F3JJ2	70		87		86		71		88		93		88	
13	F3JJ3	74		86		91		72		89		91		91	
14	F3JJ9	74		92		86		75		86		91		93	
15	F3JK0	72		92		100		81		90		98		91	
16	F3JK3	69		89		95		72		89		91		91	
17	F3JK4	69		91		91		69		87		92		92	
18	F3JK5	67		88		84		74		89		91		91	
19	F3JL3	90		98		90		81		92		94		93	
20	F3JK1	69		84		91		73		88		93		96	
21	F3JK6	71		86		92		75		93		97		90	
22	VBLK5W	90		99		85		79		88		92		93	
23	F3JK2DL	80		96		87		74		91		88		90	
24	F3JK7	70		87		87		70		92		87		93	
25	F3JK8	75		89		91		71		91		90		92	
26	VHBLK5W	90		97		82		74		90		90		92	

			QC LIMITS
VDMC1	(VCL)	= Vinyl chloride-d3	(65-131)
VDMC2	(CLA)	= Chloroethane-d5	(71-131)
VDMC3	(DCE)	= 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT)	= 2-Butanone-d5	(49-155)
VDMC5	(CLF)	= Chloroform-d	(78-121)
VDMC6	(DCA)	= 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN)	= Benzene-d6	(77-124)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Level: (TRACE or LOW) TRACE

	SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	VDMC14 #	TOT OUT
01	VBLK5V	87	101	93	103	101	104		0
02	F3JJ4	80	90	90	85	91	96		1
03	F3JJ5	81	90	85	86	93	96		0
04	F3JJ5MS	80	94	88	89	90	98		0
05	F3JJ5MSD	76 *	93	82	84	92	96		1
06	F3JJ6	81	90	82	84	90	100		0
07	F3JJ7	78 *	91	85	81	87	96		2
08	F3JJ8	80	92	84	85	87	101		0
09	F3JK2	76 *	88	83	81	90	100		1
10	F3JL1	81	94	85	84	94	96		0
11	F3JL2	82	94	84	88	89	94		0
12	F3JJ2	82	92	86	81	90	94		0
13	F3JJ3	82	94	90	86	94	95		0
14	F3JJ9	81	94	87	86	84	99		0
15	F3JK0	83	94	86	90	90	100		0
16	F3JK3	82	96	87	84	86	96		0
17	F3JK4	81	94	86	82	90	94		0
18	F3JK5	84	94	89	87	91	100		0
19	F3JL3	85	97	92	92	93	98		0
20	F3JK1	85	98	92	88	102	96		0
21	F3JK6	83	94	86	83	97	94		0
22	VBLK5W	87	100	82	96	85	104		0
23	F3JK2DL	81	93	91	86	87	93		0
24	F3JK7	83	96	83	83	93	100		0
25	F3JK8	83	95	80	78	86	97		0
26	VHBLK5W	81	95	86	84	87	99		0

		QC LIMITS
VDMC8	(DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9	(TOL) = Toluene-d8	(77-121)
VDMC10	(TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11	(HEX) = 2-Hexanone-d5	(28-135)
VDMC12	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values

* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix Spike - EPA Sample No.: F3JJ5 Level: (TRACE or LOW) TRACE

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	5.0000	0.0000	4.3588	87		61-145
Benzene	5.0000	0.0000	4.3301	87		76-127
Trichloroethene	5.0000	0.0000	4.7615	95		71-120
Toluene	5.0000	0.0000	4.7964	96		76-125
Chlorobenzene	5.0000	0.0000	4.7946	96		75-130

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	5.0000	4.3273	87		1		0-14	61-145
Benzene	5.0000	4.3519	87		1		0-11	76-127
Trichloroethene	5.0000	4.7762	96		0		0-14	71-120
Toluene	5.0000	4.7137	94		2		0-13	76-125
Chlorobenzene	5.0000	4.8629	97		1		0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Lab File ID: V5M0182.D Lab Sample ID: MB-52603

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/28/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 23:11

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	F3JJ4	J1288-01A	V5M0183.D	23:40
02	F3JJ5	J1288-02A	V5M0184.D	0:08
03	F3JJ5MS	J1288-02AMS	V5M0185.D	0:37
04	F3JJ5MSD	J1288-02AMSD	V5M0186.D	1:06
05	F3JJ6	J1288-03A	V5M0187.D	1:35
06	F3JJ7	J1288-04A	V5M0188.D	2:05
07	F3JJ8	J1288-05A	V5M0189.D	2:34
08	F3JK2	J1288-06A	V5M0190.D	3:03
09	F3JL1	J1288-07A	V5M0191.D	3:31
10	F3JL2	J1288-08A	V5M0192.D	4:00
11	F3JJ2	J1288-09A	V5M0193.D	4:29
12	F3JJ3	J1288-10A	V5M0194.D	4:58
13	F3JJ9	J1288-11A	V5M0195.D	5:27
14	F3JK0	J1288-12A	V5M0196.D	5:56
15	F3JK3	J1288-13A	V5M0197.D	6:25
16	F3JK4	J1288-14A	V5M0198.D	6:54
17	F3JK5	J1288-15A	V5M0199.D	7:23
18	F3JL3	J1288-16A	V5M0200.D	7:52
19	F3JK1	J1288-17A	V5M0201.D	8:21
20	F3JK6	J1288-18A	V5M0202.D	8:50

COMMENTS:

SOM01.2 (6/2007)

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Lab File ID: V5M0204.D Lab Sample ID: MB-52637

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/29/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 10:11

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	F3JK2DL	J1288-06ADL	V5M0205.D	10:39
02	F3JK7	J1288-19A	V5M0206.D	11:08
03	F3JK8	J1288-20A	V5M0207.D	13:37
04	VHBLK5W	VHBLK5W	V5M0211.D	15:33

COMMENTS:

SOM01.2 (6/2007)

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFBL5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Lab File ID: V5L9660.D BFB Injection Date: 06/07/2010

Instrument ID: V5 BFB Injection Time: 11:26

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	31.1
75	30.0 - 80.0% of mass 95	48.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	71.8
175	5.0 - 9.0% of mass 174	5.4 (7.6)1
176	95.0 - 101% of mass 174	70.9 (98.8)1
177	5.0 - 9.0% of mass 176	4.6 (6.5)2

1 - Value is % mass 174 2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005L5	VSTD005L5	V5L9661.D	06/07/2010	11:56
02	VSTD0.5L5	VSTD0.5L5	V5L9662.D	06/07/2010	12:25
03	VSTD020L5	VSTD020L5	V5L9663.D	06/07/2010	12:53
04	VSTD010L5	VSTD010L5	V5L9664.D	06/07/2010	13:22
05	VSTD001L5	VSTD001L5	V5L9665.D	06/07/2010	13:51

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Lab File ID: V5M0180.D BFB Injection Date: 06/28/2010

Instrument ID: V5 BFB Injection Time: 22:13

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.4
75	30.0 - 80.0% of mass 95	46.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	82.8
175	5.0 - 9.0% of mass 174	6.5 (7.9)1
176	95.0 - 101% of mass 174	82.6 (99.7)1
177	5.0 - 9.0% of mass 176	5.6 (6.8)2

1 - Value is % mass 174 2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0055V	VSTD0055V	V5M0181.D	06/28/2010	22:42
02	VBLK5V	MB-52603	V5M0182.D	06/28/2010	23:11
03	F3JJ4	J1288-01A	V5M0183.D	06/28/2010	23:40
04	F3JJ5	J1288-02A	V5M0184.D	06/29/2010	0:08
05	F3JJ5MS	J1288-02AMS	V5M0185.D	06/29/2010	0:37
06	F3JJ5MSD	J1288-02AMSD	V5M0186.D	06/29/2010	1:06
07	F3JJ6	J1288-03A	V5M0187.D	06/29/2010	1:35
08	F3JJ7	J1288-04A	V5M0188.D	06/29/2010	2:05
09	F3JJ8	J1288-05A	V5M0189.D	06/29/2010	2:34
10	F3JK2	J1288-06A	V5M0190.D	06/29/2010	3:03
11	F3JL1	J1288-07A	V5M0191.D	06/29/2010	3:31
12	F3JL2	J1288-08A	V5M0192.D	06/29/2010	4:00
13	F3JJ2	J1288-09A	V5M0193.D	06/29/2010	4:29
14	F3JJ3	J1288-10A	V5M0194.D	06/29/2010	4:58
15	F3JJ9	J1288-11A	V5M0195.D	06/29/2010	5:27
16	F3JK0	J1288-12A	V5M0196.D	06/29/2010	5:56
17	F3JK3	J1288-13A	V5M0197.D	06/29/2010	6:25
18	F3JK4	J1288-14A	V5M0198.D	06/29/2010	6:54
19	F3JK5	J1288-15A	V5M0199.D	06/29/2010	7:23
20	F3JL3	J1288-16A	V5M0200.D	06/29/2010	7:52
21	F3JK1	J1288-17A	V5M0201.D	06/29/2010	8:21
22	F3JK6	J1288-18A	V5M0202.D	06/29/2010	8:50

SOM01.2 (6/2007)

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Lab File ID: V5M0180.D BFB Injection Date: 06/28/2010

Instrument ID: V5 BFB Injection Time: 22:13

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.4
75	30.0 - 80.0% of mass 95	46.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	82.8
175	5.0 - 9.0% of mass 174	6.5 (7.9)1
176	95.0 - 101% of mass 174	82.6 (99.7)1
177	5.0 - 9.0% of mass 176	5.6 (6.8)2

1 - Value is % mass 174 2 - Value is % mass 176

23	VSTD0055W	VSTD0055W	V5M0203.D	06/29/2010	9:42
24	VBLK5W	MB-52637	V5M0204.D	06/29/2010	10:11
25	F3JK2DL	J1288-06ADL	V5M0205.D	06/29/2010	10:39
26	F3JK7	J1288-19A	V5M0206.D	06/29/2010	11:08
27	F3JK8	J1288-20A	V5M0207.D	06/29/2010	13:37
28	VHBLK5W	VHBLK5W	V5M0211.D	06/29/2010	15:33
29	VSTD0055X	VSTD0055X	V5M0212.D	06/29/2010	16:02

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055V Date Analyzed: 06/28/2010

Lab File ID (Standard): V5M0181.D Time Analyzed: 22:42

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	298036	9.568	386330	6.42	121989	12.333
	UPPER LIMIT	417250	9.898	540862	6.75	170785	12.663
	LOWER LIMIT	178822	9.238	231798	6.09	73193	12.003
	EPA SAMPLE NO.						
01	VBLK5V	294888	9.561	382751	6.425	130535	12.326
02	F3JJ4	274700	9.564	347420	6.416	118878	12.329
03	F3JJ5	264422	9.567	333987	6.419	113846	12.331
04	F3JJ5MS	252247	9.566	328787	6.418	111582	12.331
05	F3JJ5MSD	257156	9.561	326338	6.425	111009	12.326
06	F3JJ6	248898	9.567	319263	6.419	108918	12.332
07	F3JJ7	253001	9.561	323642	6.413	107583	12.326
08	F3JJ8	259133	9.562	328705	6.414	108513	12.326
09	F3JK2	248217	9.563	317334	6.414	106574	12.327
10	F3JL1	239916	9.562	305762	6.414	105053	12.327
11	F3JL2	233488	9.568	292226	6.420	99639	12.332
12	F3JJ2	235873	9.563	297338	6.415	101831	12.328
13	F3JJ3	229081	9.568	297110	6.420	98827	12.333
14	F3JJ9	229479	9.568	298702	6.420	98396	12.333
15	F3JK0	230708	9.561	284521	6.413	97263	12.326

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055V Date Analyzed: 06/28/2010

Lab File ID (Standard): V5M0181.D Time Analyzed: 22:42

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	298036	9.568	386330	6.42	121989	12.333
	UPPER LIMIT	417250	9.898	540862	6.75	170785	12.663
	LOWER LIMIT	178822	9.238	231798	6.09	73193	12.003
	EPA SAMPLE NO.						
16	F3JK3	222040	9.561	286223	6.425	95030	12.326
17	F3JK4	220328	9.562	284077	6.425	95557	12.327
18	F3JK5	213743	9.567	274703	6.419	89575	12.332
19	F3JL3	210623	9.567	269314	6.419	90585	12.332
20	F3JK1	208619	9.568	280880	6.420	91214	12.333
21	F3JK6	222329	9.561	281049	6.425	94360	12.326

IS1 (CBZ) = Chlorobenzene-d5

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055W Date Analyzed: 06/29/2010

Lab File ID (Standard): V5M0203.D Time Analyzed: 9:42

Instrument ID: V5 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	245699	9.562	322283	6.414	106091	12.327
	UPPER LIMIT	343979	9.892	451196	6.744	148527	12.657
	LOWER LIMIT	147419	9.232	193370	6.084	63655	11.997
	EPA SAMPLE NO.						
01	VBLK5W	257624	9.556	335373	6.420	104660	12.333
02	F3JK2DL	221689	9.568	285352	6.420	97225	12.333
03	F3JK7	211515	9.566	279199	6.418	88346	12.331
04	F3JK8	210687	9.563	269267	6.415	85620	12.328
05	VHBLK5W	245859	9.563	325126	6.414	98681	12.327

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0193.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0193.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0193.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

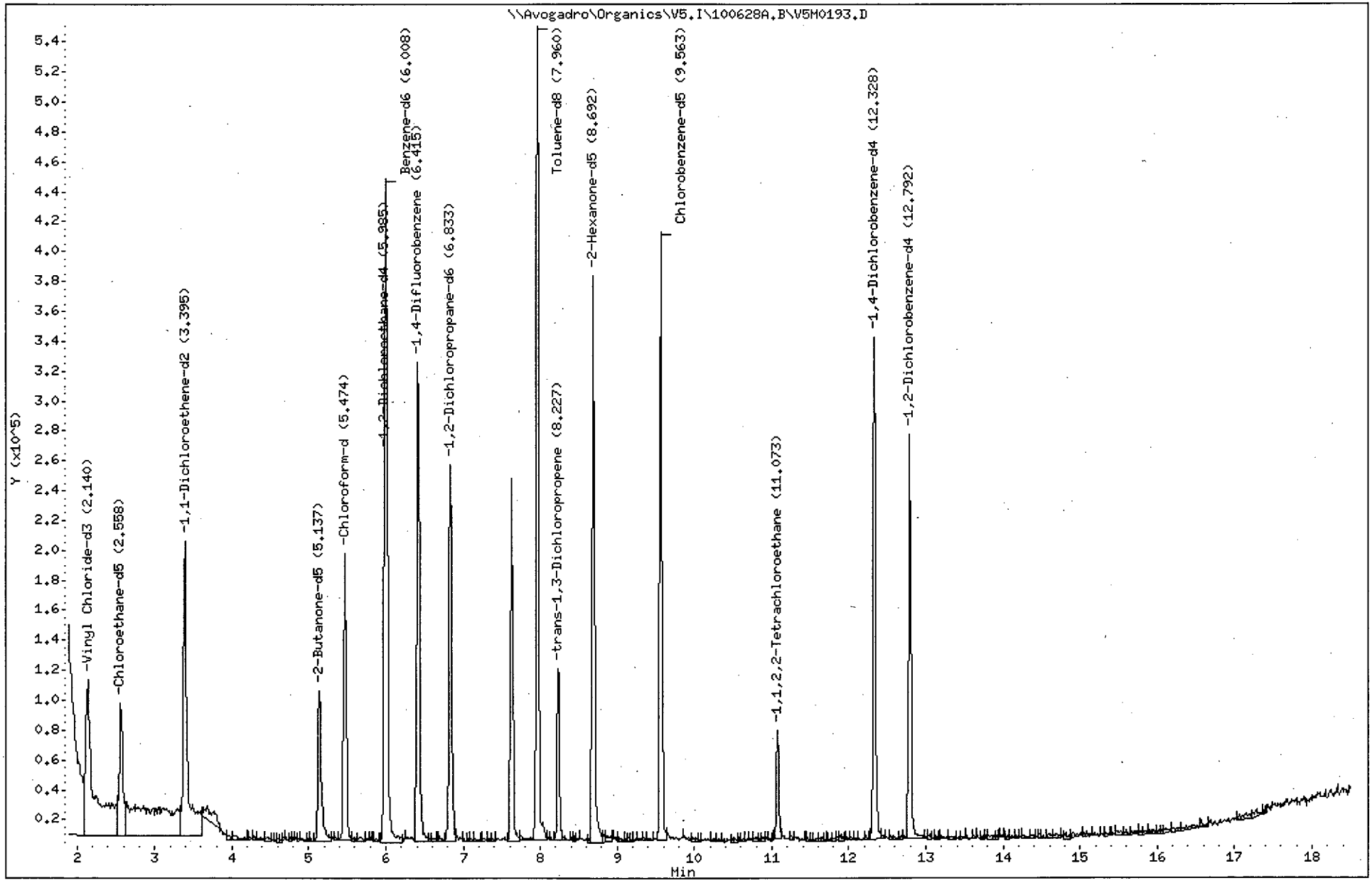
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0193.D
Date : 29-JUN-2010 04:29
Client ID: F3JJ2
Sample Info: 25ML,J1288-09A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0023

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0193.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0193.D
Lab Smp Id: J1288-09A Client Smp ID: F3JJ2
Inj Date : 29-JUN-2010 04:29
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-09A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.139	2.127	(0.334)	157619	3.50496	3.5
$ 80 Chloroethane-d5	69	2.558	2.556	(0.399)	92128	4.33507	4.3
$ 81 1,1-Dichloroethene-d2	65	3.394	3.381	(0.529)	49602	4.32281	4.3(Q)
$ 82 2-Butanone-d5	46	5.137	5.135	(0.801)	211353	35.2732	35(A)
$ 83 Chloroform-d	84	5.462	5.461	(0.852)	164294	4.40064	4.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.985	5.983	(0.933)	72656	4.65349	4.7
$ 84 Benzene-d6	84	6.008	6.007	(0.628)	420462	4.38842	4.4
* 26 1,4-Difluorobenzene	114	6.414	6.413	(1.000)	297338	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.833	6.831	(0.715)	132685	4.07649	4.1
$ 33 Toluene-d8	98	7.959	7.958	(0.832)	381036	4.59183	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.227	8.225	(0.860)	67073	4.31501	4.3
$ 87 2-Hexanone-d5	63	8.691	8.690	(0.909)	150885	40.5899	41(A)
* 42 Chlorobenzene-d5	117	9.562	9.561	(1.000)	235873	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.073	11.071	(1.158)	49956	4.50347	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.326	(1.000)	101831	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.792	12.791	(1.038)	75501	4.68703	4.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0193.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0193.D
Lab Smp Id: J1288-09A Client Smp ID: F3JJ2
Inj Date : 29-JUN-2010 04:29
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-09A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0194.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0194.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0194.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

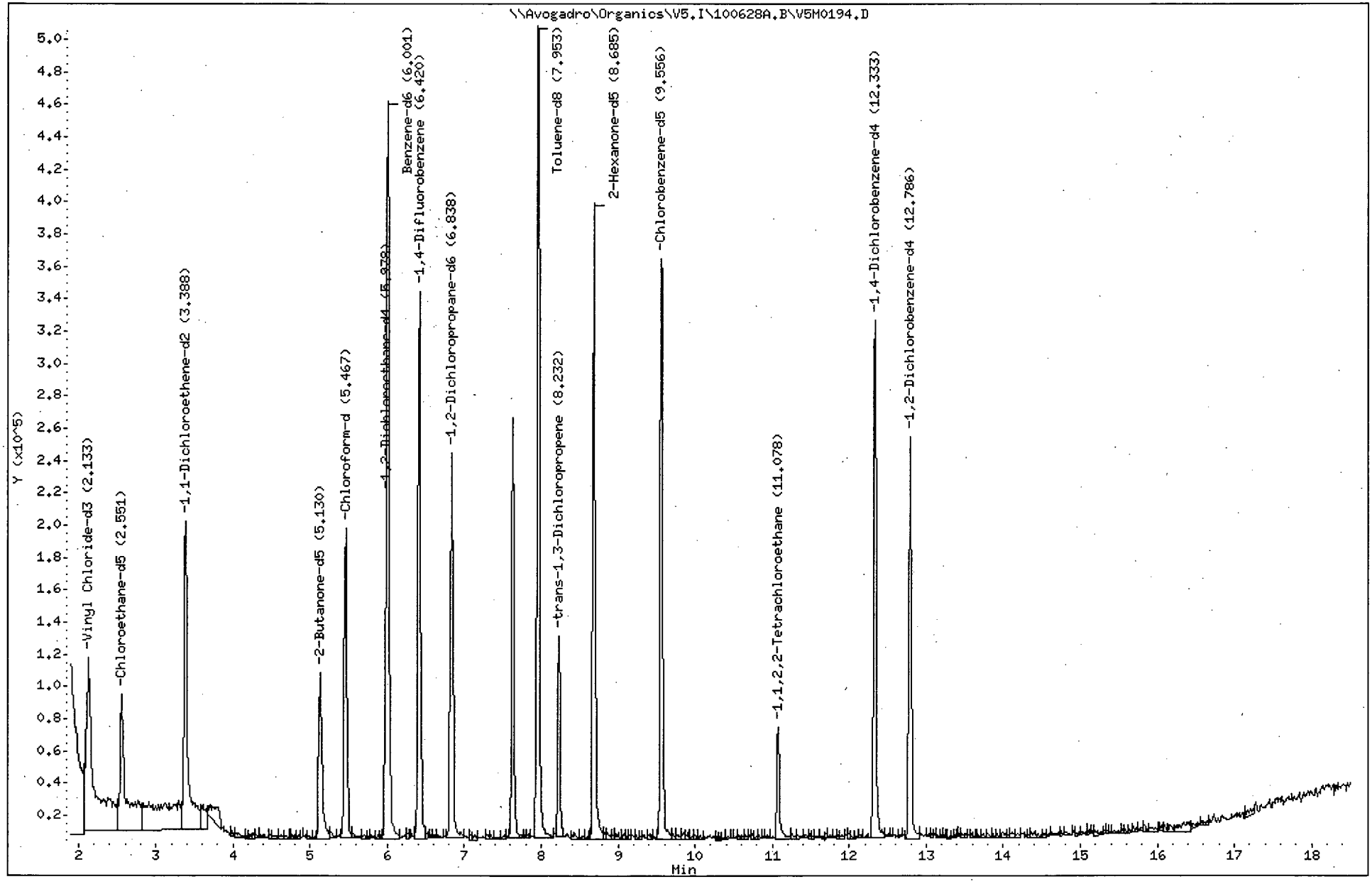
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0194.D
Date : 29-JUN-2010 04:58
Client ID: F3JJ3
Sample Info: 25ML,J1288-10A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0029

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0194.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0194.D
Lab Smp Id: J1288-10A Client Smp ID: F3JJ3
Inj Date : 29-JUN-2010 04:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-10A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.133	2.127	(0.332)	165884	3.69158	3.7
$ 80 Chloroethane-d5	69	2.551	2.556	(0.397)	90996	4.28509	4.3
$ 81 1,1-Dichloroethene-d2	65	3.387	3.381	(0.528)	52396	4.56981	4.6(Q)
$ 82 2-Butanone-d5	46	5.130	5.135	(0.799)	216150	36.1015	36(A)
$ 83 Chloroform-d	84	5.467	5.461	(0.852)	165810	4.44466	4.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.978	5.983	(0.931)	70907	4.54496	4.5
$ 84 Benzene-d6	84	6.001	6.007	(0.627)	424816	4.56533	4.6
* 26 1,4-Difluorobenzene	114	6.419	6.413	(1.000)	297110	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.837	6.831	(0.715)	129003	4.08088	4.1
$ 33 Toluene-d8	98	7.964	7.958	(0.832)	379896	4.71383	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.225	(0.860)	67818	4.49229	4.5
$ 87 2-Hexanone-d5	63	8.684	8.690	(0.908)	155290	43.0135	43(A)
* 42 Chlorobenzene-d5	117	9.567	9.561	(1.000)	229081	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.071	(1.158)	50519	4.68925	4.7
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.326	(1.000)	98827	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.797	12.791	(1.038)	74612	4.77264	4.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0194.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0194.D
Lab Smp Id: J1288-10A Client Smp ID: F3JJ3
Inj Date : 29-JUN-2010 04:58
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-10A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ4

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0183.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/28/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ4

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0183.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/28/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	3.8	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ4

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0183.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/28/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

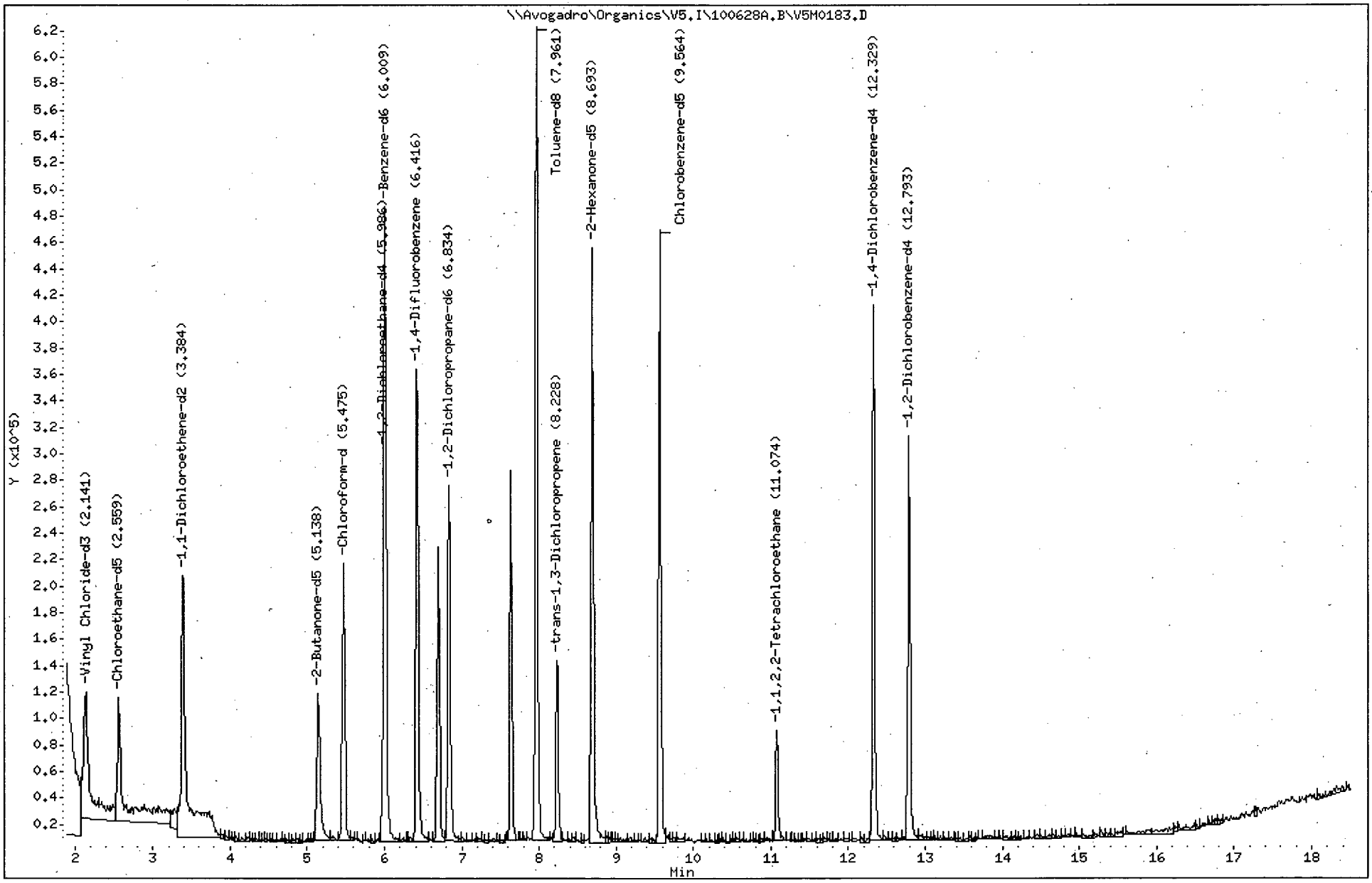
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

SOM01.2 (6/2007)

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D
Date : 28-JUN-2010 23:40
Client ID: F3JJ4
Sample Info: 25ML,J1288-01A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D
Lab Smp Id: J1288-01A Client Smp ID: F3JJ4
Inj Date : 28-JUN-2010 23:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-01A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	%
$ 79 Vinyl Chloride-d3	65	2.140	2.127	(0.334)	165376	3.14733	3.1(R)	63%
$ 80 Chloroethane-d5	69	2.559	2.556	(0.399)	100435	4.04469	4.0	81%
$ 81 1,1-Dichloroethene-d2	65	3.383	3.381	(0.527)	54734	4.08244	4.1(Q)	82
$ 82 2-Butanone-d5	46	5.138	5.135	(0.801)	253545	36.2149	36(A)	72
$ 83 Chloroform-d	84	5.474	5.461	(0.853)	187630	4.30123	4.3(Q)	86
$ 23 1,2-Dichloroethane-d4	65	5.986	5.983	(0.933)	77171	4.23016	4.2	85
$ 84 Benzene-d6	84	6.009	6.007	(0.628)	484466	4.34175	4.3	87
* 26 1,4-Difluorobenzene	114	6.415	6.413	(1.000)	347420	5.00000		
27 Trichloroethene	95	6.694	6.680	(0.700)	92883	3.81154 3.828	3.8(H)	
$ 85 1,2-Dichloropropane-d6	67	6.834	6.831	(0.715)	151305	3.99151	4.0	80
$ 33 Toluene-d8	98	7.960	7.958	(0.832)	435621	4.50763	4.5	90
$ 86 trans-1,3-Dichloropropene-d4	79	8.228	8.225	(0.860)	81843	4.52100	4.5	90
$ 87 2-Hexanone-d5	63	8.692	8.690	(0.909)	185052	42.7450	43(A)	85
* 42 Chlorobenzene-d5	117	9.563	9.561	(1.000)	274700	5.00000		
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.074	11.071	(1.158)	58844	4.55493	4.6	91
* 78 1,4-Dichlorobenzene-d4	152	12.328	12.326	(1.000)	118878	5.00000	(Q)	
$ 90 1,2-Dichlorobenzene-d4	152	12.793	12.791	(1.038)	90631	4.81949	4.8	96

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D
Report Date: 30-Jun-2010 12:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D
Lab Smp Id: J1288-01A Client Smp ID: F3JJ4
Inj Date : 28-JUN-2010 23:40
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-01A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0183.D

Date : 28-JUN-2010 23:40

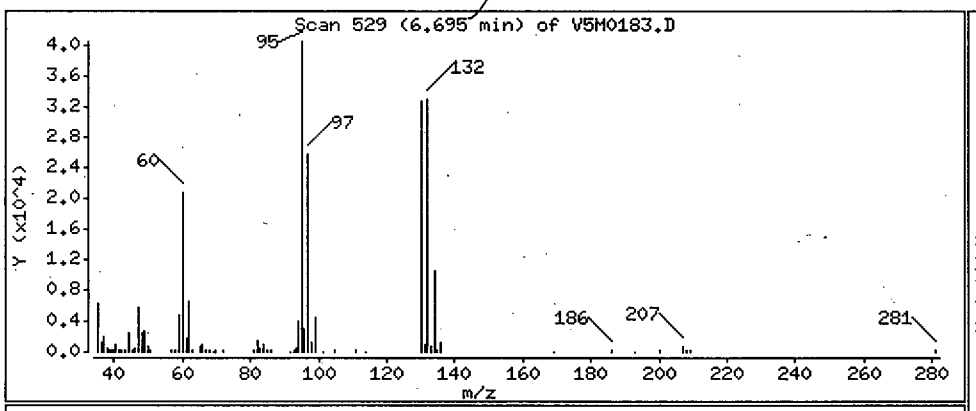
Client ID: F3JJ4 | Instrument: V5.i

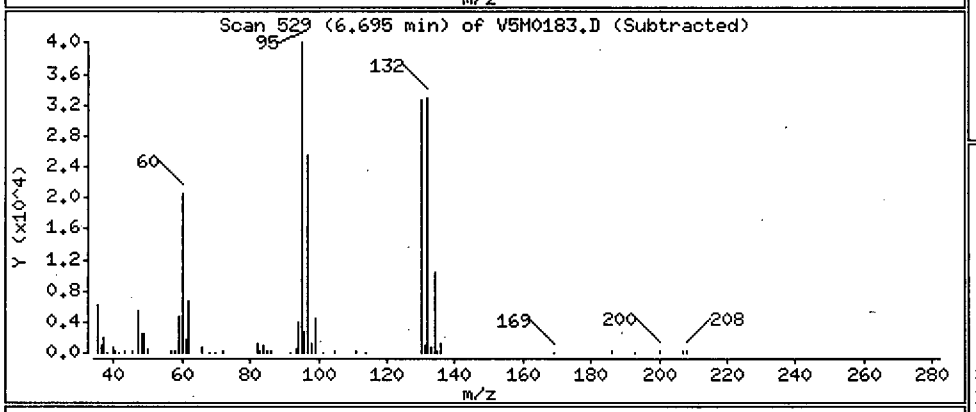
Sample Info: 25ML,J1288-01A,,52603

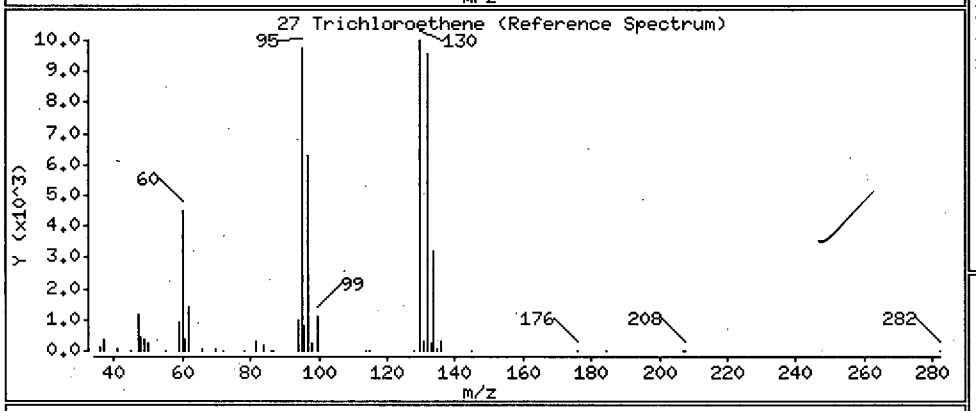
Purge Volume: 25.0 | Operator: SRC: LIMS

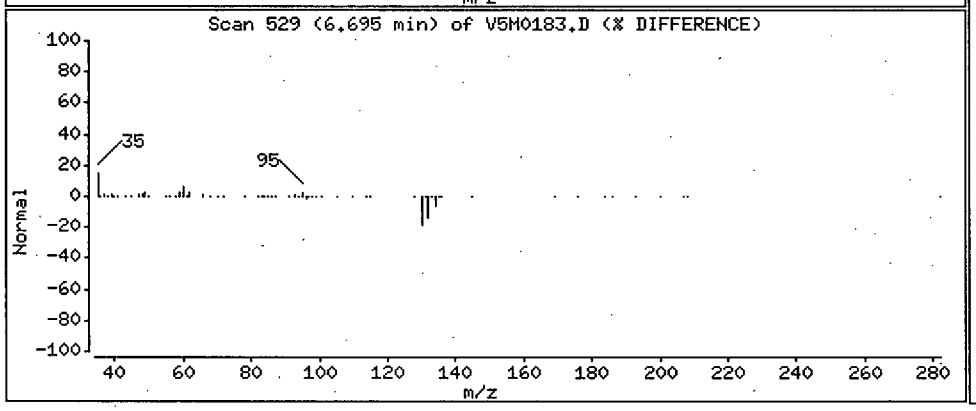
Column phase: DB-624 | Column diameter: 0.25

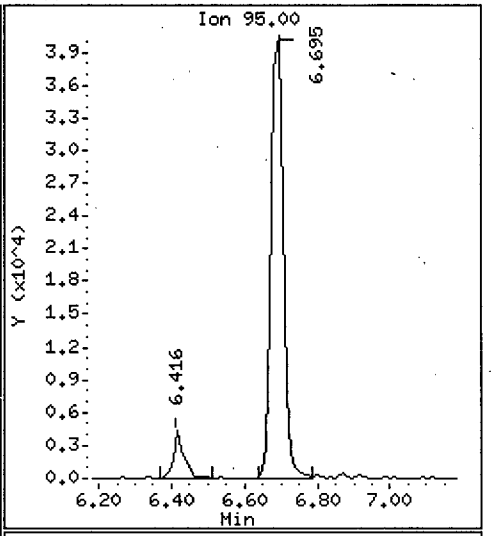
27 Trichloroethene | Concentration: 3.8 ug/L

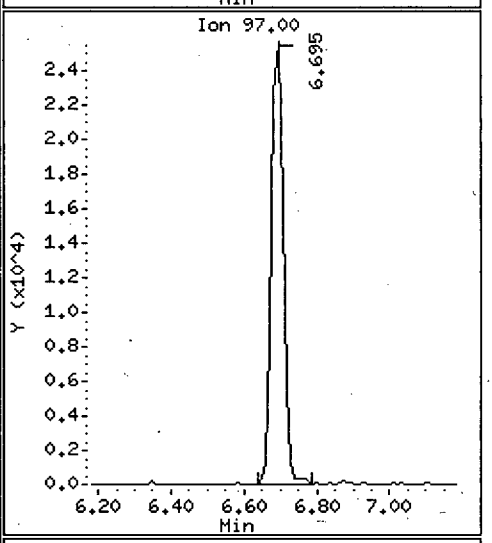


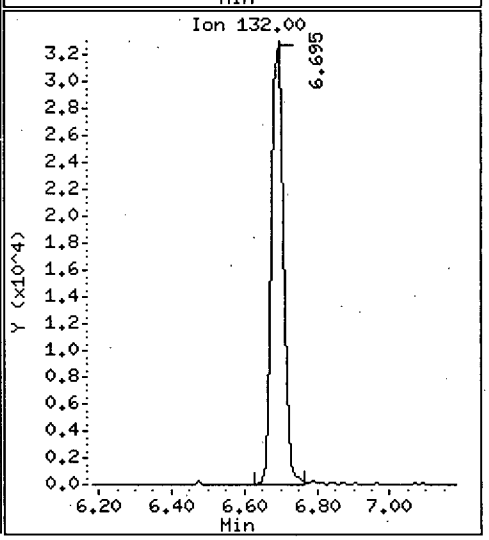












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0184.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0184.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0184.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

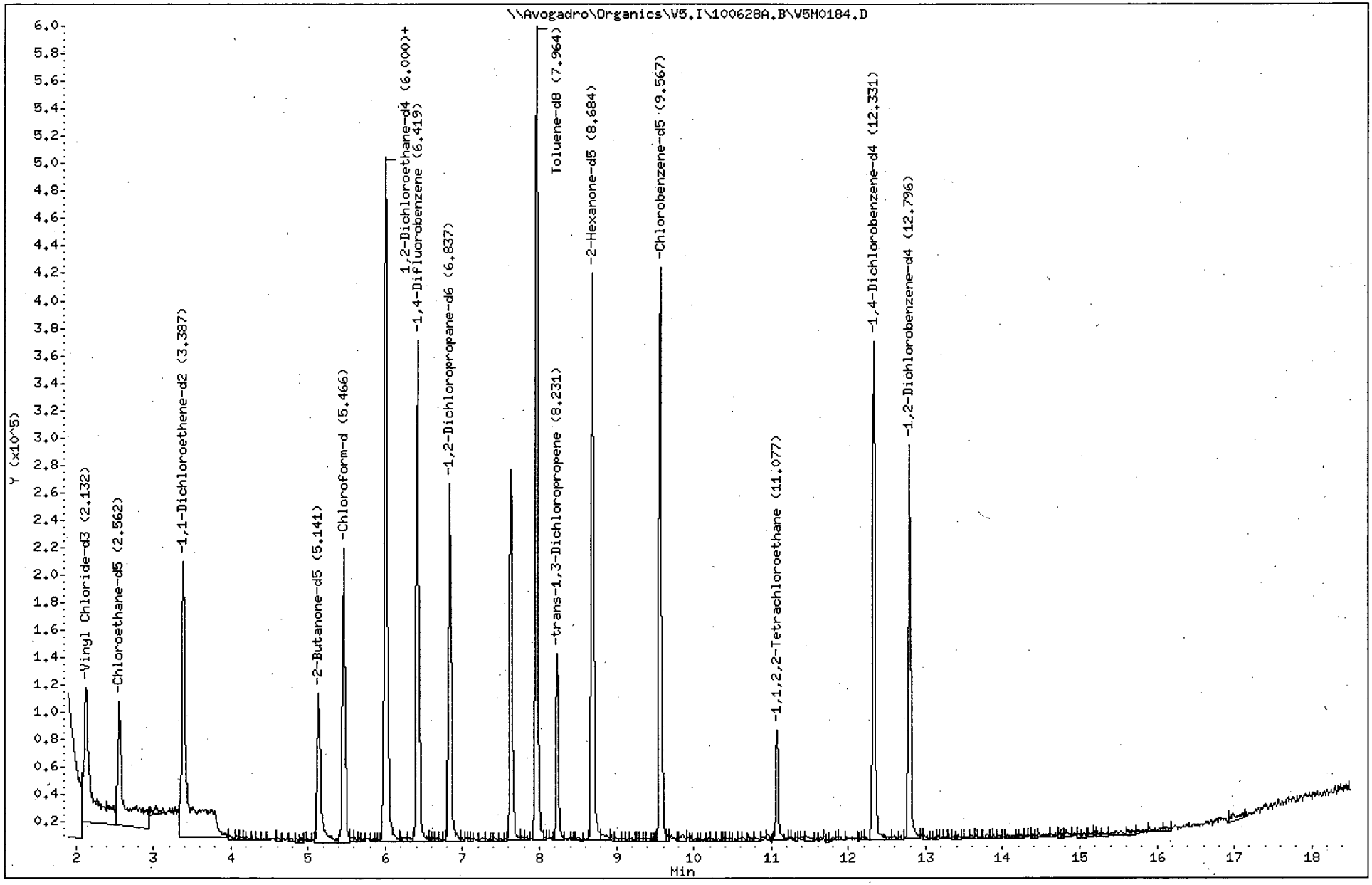
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0184.D
Date : 29-JUN-2010 00:08
Client ID: F3JJ5
Sample Info: 25ML,J1288-02A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Ch09

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0184.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0184.D
Lab Smp Id: J1288-02A Client Smp ID: F3JJ5
Inj Date : 29-JUN-2010 00:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-02A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.132	2.127	(0.332)	168477	3.33531	3.3
$ 80 Chloroethane-d5	69	2.561	2.556	(0.399)	101376	4.24679	4.2
$ 81 1,1-Dichloroethene-d2	65	3.386	3.381	(0.528)	54024	4.19155	4.2(Q)
$ 82 2-Butanone-d5	46	5.140	5.135	(0.801)	239401	35.5700	36(A)
$ 83 Chloroform-d	84	5.465	5.461	(0.852)	170787	4.07258	4.1(Q)
$ 23 1,2-Dichloroethane-d4	65	5.988	5.983	(0.933)	73089	4.16755	4.2
$ 84 Benzene-d6	84	6.000	6.007	(0.627)	468257	4.35960	4.4
* 26 1,4-Difluorobenzene	114	6.418	6.413	(1.000)	333987	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.836	6.831	(0.715)	148574	4.07182	4.1
$ 33 Toluene-d8	98	7.963	7.958	(0.832)	419181	4.50612	4.5
$ 86 trans-1,3-Dichloropropene-d4	79	8.230	8.225	(0.860)	74407	4.27000	4.3
$ 87 2-Hexanone-d5	63	8.683	8.690	(0.908)	180051	43.2064	43(A)
* 42 Chlorobenzene-d5	117	9.566	9.561	(1.000)	264422	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.076	11.071	(1.158)	57715	4.64119	4.6
* 78 1,4-Dichlorobenzene-d4	152	12.331	12.326	(1.000)	113846	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.796	12.791	(1.038)	86046	4.77791	4.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0184.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0184.D
Lab Smp Id: J1288-02A Client Smp ID: F3JJ5
Inj Date : 29-JUN-2010 00:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-02A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ6

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0187.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ6

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0187.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F3JJ6

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0187.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

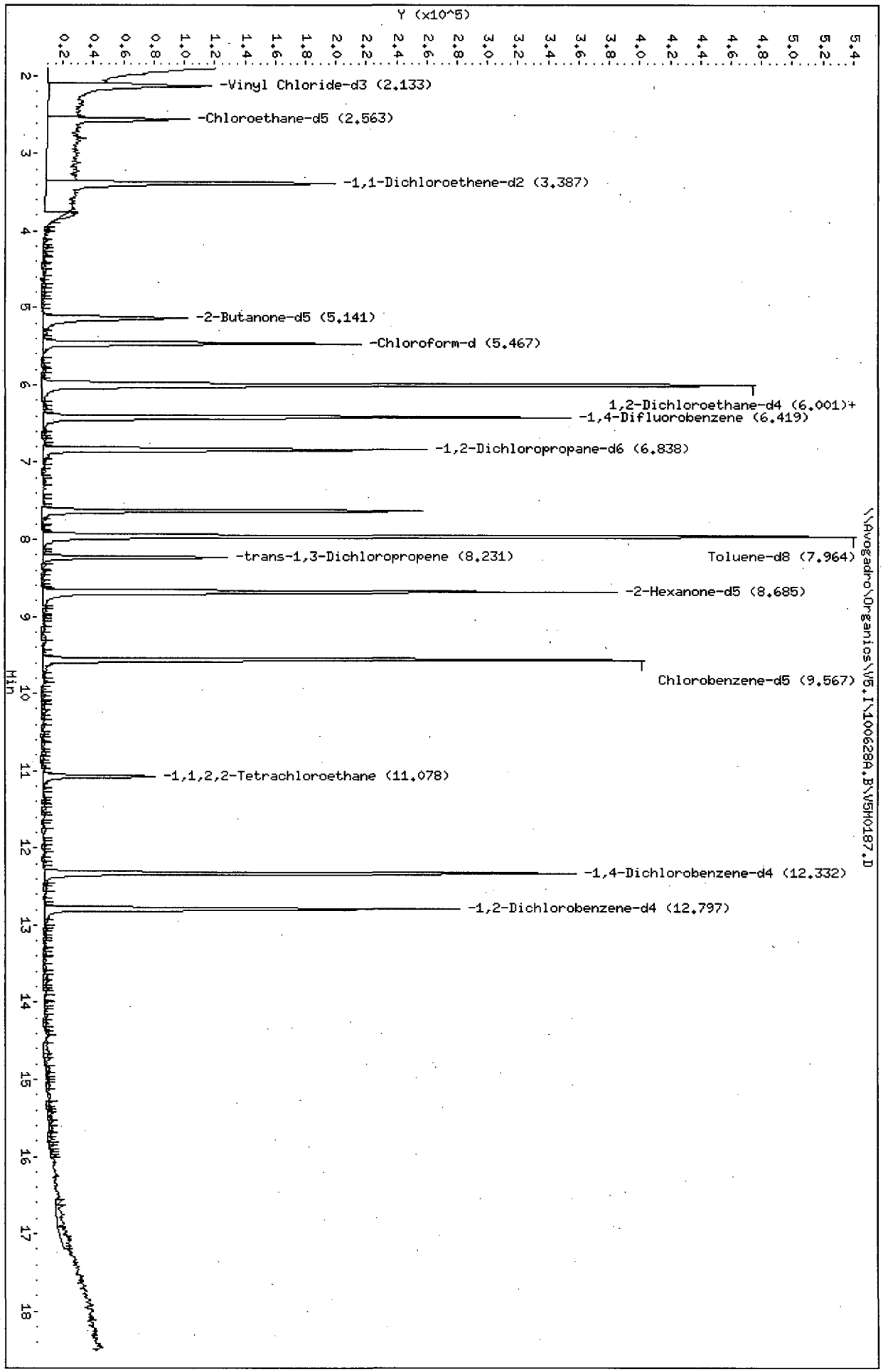
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

6h00


Data File: \\Avogadro\Organics\V5.I\100628A.B\V5H0187.D
Date : 29-JUN-2010 01:35
Client ID: F3JJ6
Sample Info: 25ML,J1288-03A,,52603
Purge Volume: 25.0
Column phase: DB-624
Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25
Y (x10^5)
Min
-Vinyl Chloride-d3 (2.133)
-Chloroethane-d5 (2.563)
-1,1-Dichloroethene-d2 (3.387)
-2-Butanone-d5 (5.141)
-Chloroform-d (5.467)
1,2-Dichloroethane-d4 (6.001)+
-1,4-Difluorobenzene (6.419)
-1,2-Dichloropropane-d6 (6.838)
\\Avogadro\Organics\V5.I\100628A.B\V5H0187.D
Toluene-d8 (7.964)
-trans-1,3-Dichloropropene (8.231)
-2-Hexanone-d5 (8.685)
Chlorobenzene-d5 (9.567)
-1,1,2,2-Tetrachloroethane (11.078)
-1,4-Dichlorobenzene-d4 (12.332)
-1,2-Dichlorobenzene-d4 (12.797)

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0187.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0187.D
Lab Smp Id: J1288-03A Client Smp ID: F3JJ6
Inj Date : 29-JUN-2010 01:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-03A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.132	2.127	(0.332)	162811	3.37178	3.4
$ 80 Chloroethane-d5	69	2.562	2.556	(0.399)	98294	4.30758	4.3
$ 81 1,1-Dichloroethene-d2	65	3.387	3.381	(0.528)	50923	4.13317	4.1(Q)
$ 82 2-Butanone-d5	46	5.129	5.135	(0.799)	223023	34.6647	35(A)
$ 83 Chloroform-d	84	5.466	5.461	(0.852)	171965	4.28979	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.989	5.983	(0.933)	68738	4.10021	4.1
$ 84 Benzene-d6	84	6.001	6.007	(0.627)	447303	4.42426	4.4
* 26 1,4-Difluorobenzene	114	6.419	6.413	(1.000)	319263	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.837	6.831	(0.715)	138608	4.03562	4.0
$ 33 Toluene-d8	98	7.964	7.958	(0.832)	394407	4.50424	4.5
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.225	(0.860)	67169	4.09505	4.1
$ 87 2-Hexanone-d5	63	8.684	8.690	(0.908)	165149	42.1022	42(A)
* 42 Chlorobenzene-d5	117	9.567	9.561	(1.000)	248898	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.071	(1.158)	52469	4.48249	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.326	(1.000)	108918	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.796	12.791	(1.038)	85718	4.97505	5.0(Q)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0187.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0187.D
Lab Smp Id: J1288-03A Client Smp ID: F3JJ6
Inj Date : 29-JUN-2010 01:35
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-03A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ7

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0188.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ7

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0188.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ7

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0188.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

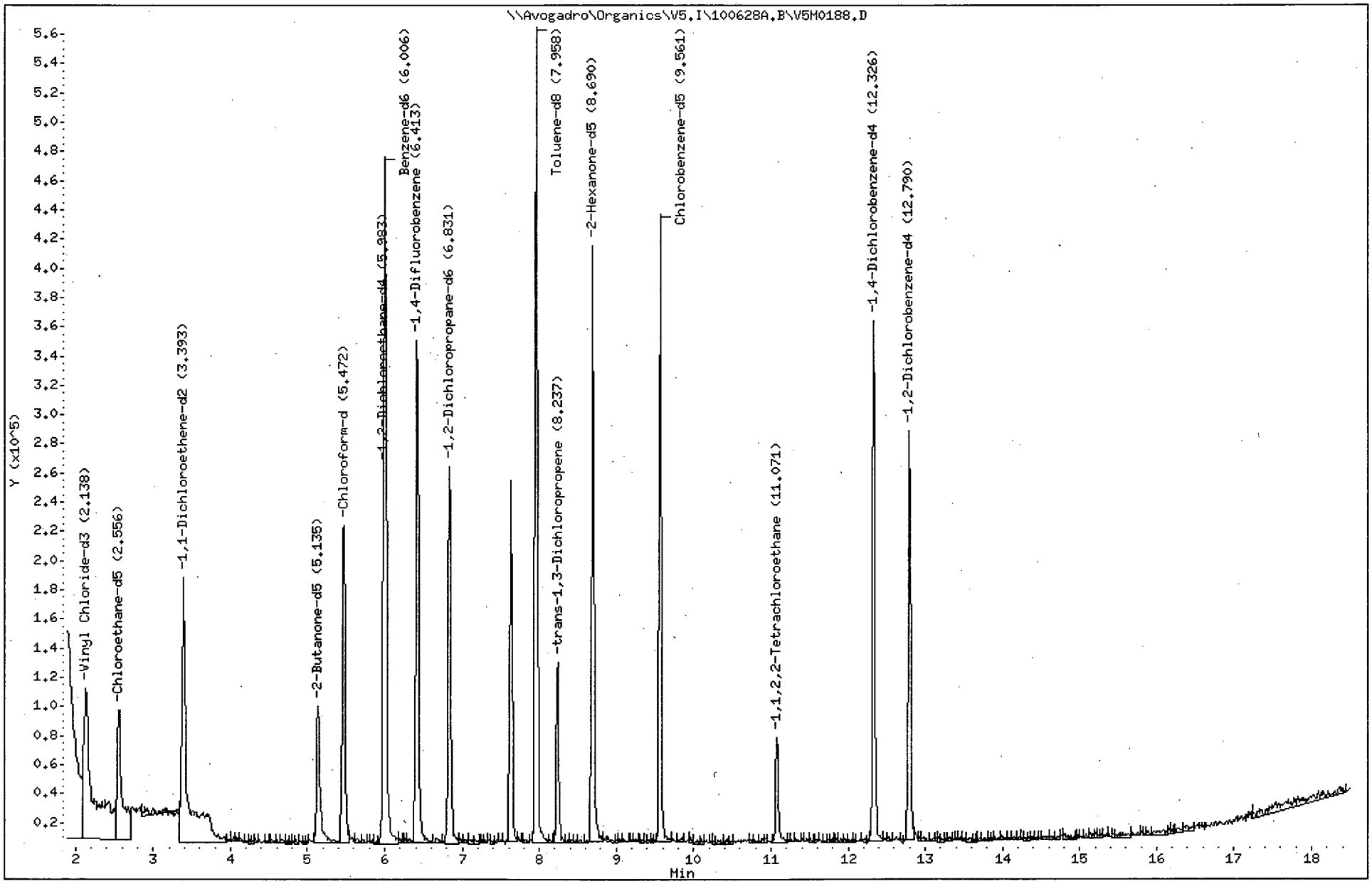
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0188.D
Date : 29-JUN-2010 02:05
Client ID: F3JJ7
Sample Info: 25ML,J1288-04A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0188.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0188.D
Lab Smp Id: J1288-04A Client Smp ID: F3JJ7
Inj Date : 29-JUN-2010 02:05
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-04A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.138	2.127	(0.333)	157960	3.22706	3.2(R)
$ 80 Chloroethane-d5	69	2.567	2.556	(0.400)	95109	4.11161	4.1
$ 81 1,1-Dichloroethene-d2	65	3.392	3.381	(0.529)	50706	4.05987	4.1(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.801)	195847	30.0289	30(A)
$ 83 Chloroform-d	84	5.471	5.461	(0.853)	173960	4.28084	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.933)	75789	4.45963	4.5
$ 84 Benzene-d6	84	6.006	6.007	(0.628)	452797	4.40597	4.4
* 26 1,4-Difluorobenzene	114	6.412	6.413	(1.000)	323642	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	137022	3.92474	3.9(R)
$ 33 Toluene-d8	98	7.957	7.958	(0.832)	403451	4.53280	4.5
$ 86 trans-1,3-Dichloropropene-d4	79	8.236	8.225	(0.861)	71249	4.27335	4.3
$ 87 2-Hexanone-d5	63	8.689	8.690	(0.909)	161163	40.4198	40(AQ)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	253001	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	51630	4.33928	4.3
* 78 1,4-Dichlorobenzene-d4	152	12.325	12.326	(1.000)	107583	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.790	12.791	(1.038)	81742	4.80316	4.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0188.D
Report Date: 30-Jun-2010 12:54

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0188.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0188.D
Lab Smp Id: J1288-04A Client Smp ID: F3JJ7
Inj Date : 29-JUN-2010 02:05
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-04A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ8

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0189.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ8

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0189.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ8

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0189.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

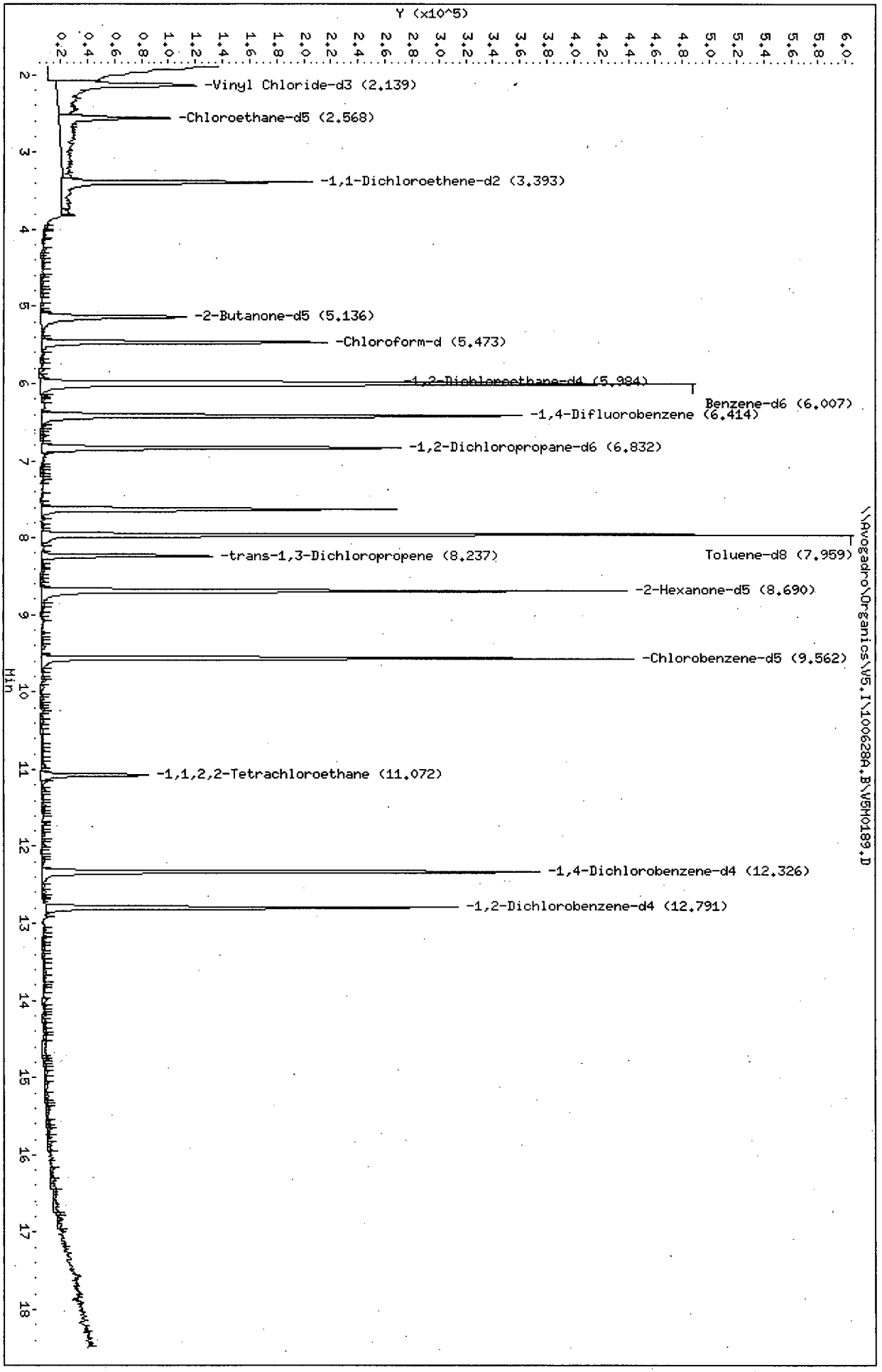
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

2900

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0189.D
Date : 29-JUN-2010 02:34
Client ID: F3JJ8
Sample Info: 25ML,J1288-05A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0189.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0189.D
Lab Smp Id: J1288-05A Client Smp ID: F3JJ8
Inj Date : 29-JUN-2010 02:34
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-05A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.138	2.127	(0.333)	176004	3.54031	3.5
$ 80 Chloroethane-d5	69	2.568	2.556	(0.400)	104885	4.46439	4.5
$ 81 1,1-Dichloroethene-d2	65	3.393	3.381	(0.529)	52231	4.11756	4.1(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.801)	233103	35.1907	35(A)
$ 83 Chloroform-d	84	5.472	5.461	(0.853)	177464	4.29980	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.933)	77583	4.49488	4.5
$ 84 Benzene-d6	84	6.007	6.007	(0.628)	465053	4.41814	4.4
* 26 1,4-Difluorobenzene	114	6.413	6.413	(1.000)	328705	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	143020	3.99961	4.0
$ 33 Toluene-d8	98	7.958	7.958	(0.832)	421287	4.62119	4.6
$ 86 trans-1,3-Dichloropropene-d4	79	8.237	8.225	(0.862)	72016	4.21714	4.2
$ 87 2-Hexanone-d5	63	8.690	8.690	(0.909)	174125	42.6372	43(A)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	259133	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	53272	4.37134	4.4
* 78 1,4-Dichlorobenzene-d4	152	12.326	12.326	(1.000)	108513	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	86411	5.03399	5.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0189.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0189.D
Lab Smp Id: J1288-05A Client Smp ID: F3JJ8
Inj Date : 29-JUN-2010 02:34
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-05A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ9

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0195.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ9

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0195.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JJ9

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0195.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

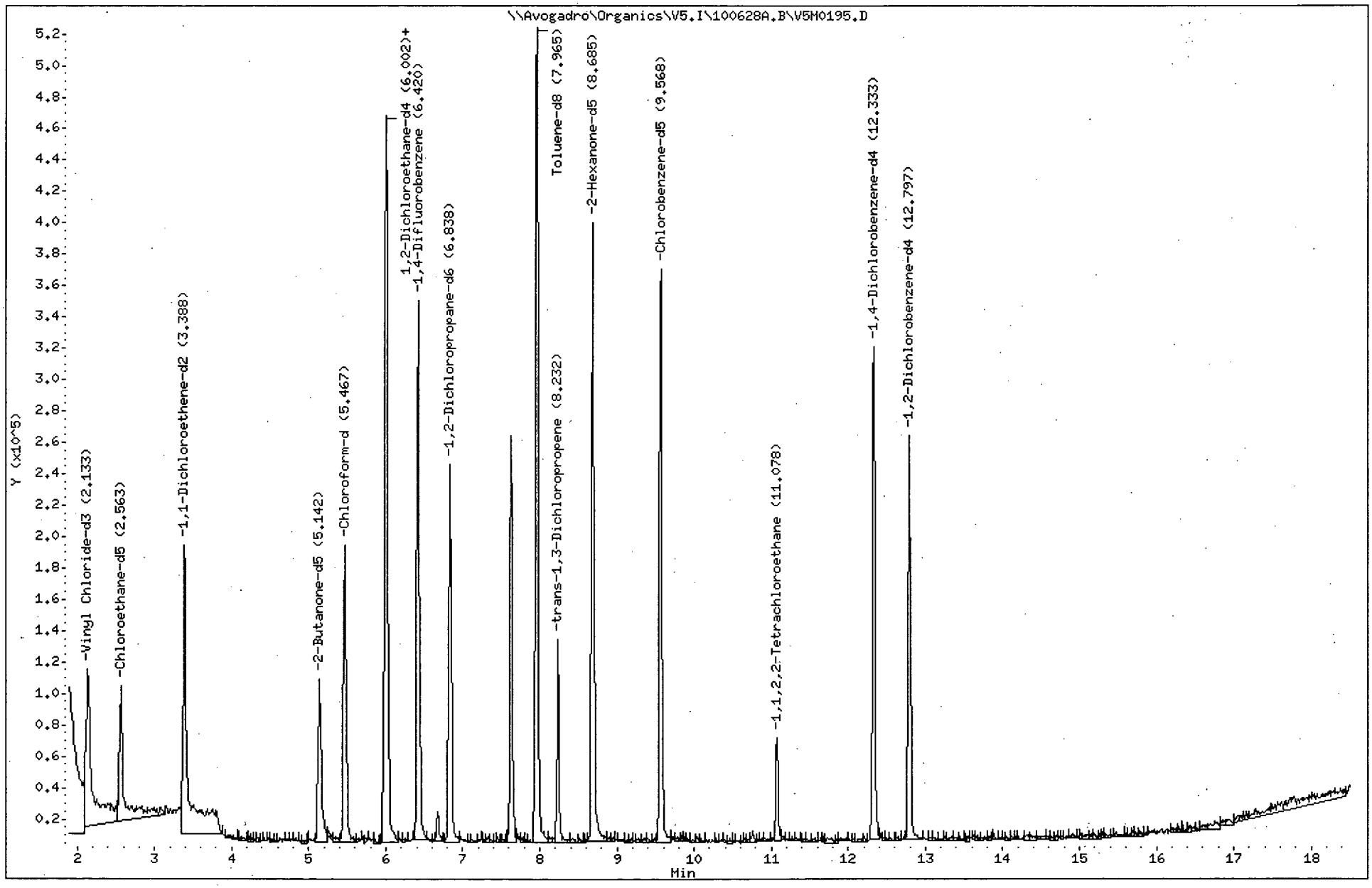
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0195.D
Date : 29-JUN-2010 05:27
Client ID: F3JJ9
Sample Info: 25ML,J1288-11A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



0068

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0195.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0195.D
Lab Smp Id: J1288-11A Client Smp ID: F3JJ9
Inj Date : 29-JUN-2010 05:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-11A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.133	2.127	(0.332)	168026	3.71932	3.7
$ 80 Chloroethane-d5	69	2.563	2.556	(0.399)	97764	4.57926	4.6
$ 81 1,1-Dichloroethene-d2	65	3.388	3.381	(0.528)	49684	4.31018	4.3(Q)
$ 82 2-Butanone-d5	46	5.142	5.135	(0.801)	226626	37.6494	38(A)
$ 83 Chloroform-d	84	5.467	5.461	(0.852)	161330	4.30152	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.990	5.983	(0.933)	70974	4.52500	4.5
$ 84 Benzene-d6	84	6.001	6.007	(0.627)	434388	4.66010	4.7
* 26 1,4-Difluorobenzene	114	6.419	6.413	(1.000)	298702	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.838	6.831	(0.715)	127778	4.03512	4.0
$ 33 Toluene-d8	98	7.964	7.958	(0.832)	379510	4.70087	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.232	8.225	(0.860)	65695	4.34411	4.3
$ 87 2-Hexanone-d5	63	8.685	8.690	(0.908)	156208	43.1928	43(A)
* 42 Chlorobenzene-d5	117	9.568	9.561	(1.000)	229479	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.078	11.071	(1.158)	45137	4.18242	4.2
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.326	(1.000)	98396	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.797	12.791	(1.038)	76712	4.92846	4.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0195.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0195.D
Lab Smp Id: J1288-11A Client Smp ID: F3JJ9
Inj Date : 29-JUN-2010 05:27
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-11A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK0

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0196.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK0

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0196.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JK0

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0196.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

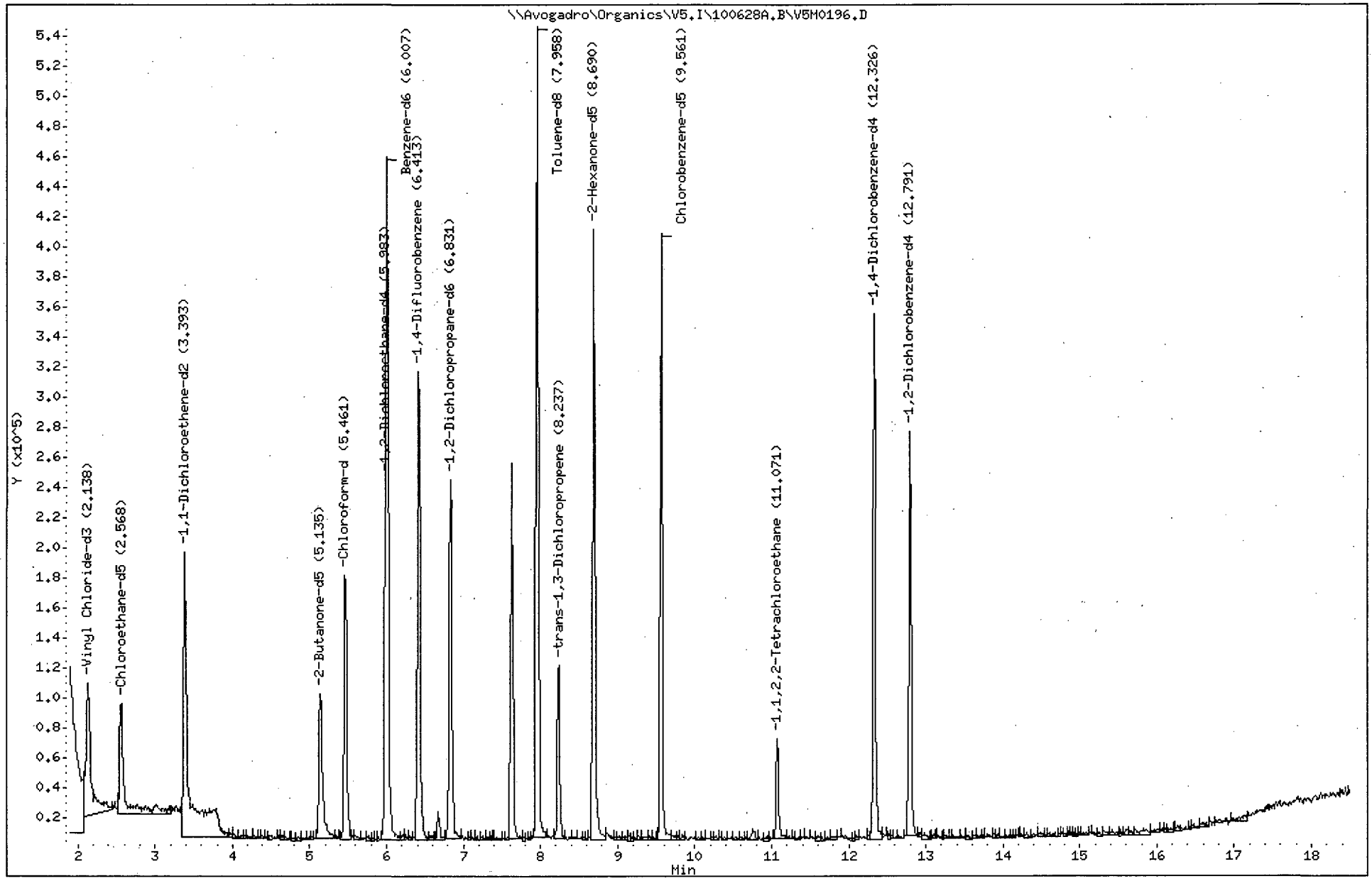
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0196.D
Date : 29-JUN-2010 05:56
Client ID: F3JK0
Sample Info: 25ML,J1288-12A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0196.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0196.D
Lab Smp Id: J1288-12A Client Smp ID: F3JK0
Inj Date : 29-JUN-2010 05:56
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-12A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.126	2.127	(0.332)	154195	3.58328	3.6
$ 80 Chloroethane-d5	69	2.568	2.556	(0.400)	93954	4.62015	4.6
$ 81 1,1-Dichloroethene-d2	65	3.392	3.381	(0.529)	55137	5.02165	5.0(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.801)	233599	40.7421	41(A)
$ 83 Chloroform-d	84	5.460	5.461	(0.851)	160876	4.50320	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.933)	73055	4.88983	4.9
$ 84 Benzene-d6	84	6.006	6.007	(0.628)	424142	4.52594	4.5
* 26 1,4-Difluorobenzene	114	6.413	6.413	(1.000)	284521	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	131647	4.13515	4.1
$ 33 Toluene-d8	98	7.958	7.958	(0.832)	381399	4.69911	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.236	8.225	(0.861)	65154	4.28539	4.3
$ 87 2-Hexanone-d5	63	8.690	8.690	(0.909)	163895	45.0769	45(A)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	230708	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	48838	4.50125	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.326	12.326	(1.000)	97263	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.790	12.791	(1.038)	77005	5.00491	5.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0196.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0196.D
Lab Smp Id: J1288-12A Client Smp ID: F3JK0
Inj Date : 29-JUN-2010 05:56
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-12A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK1

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0201.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK1

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0201.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F3JK1

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0201.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

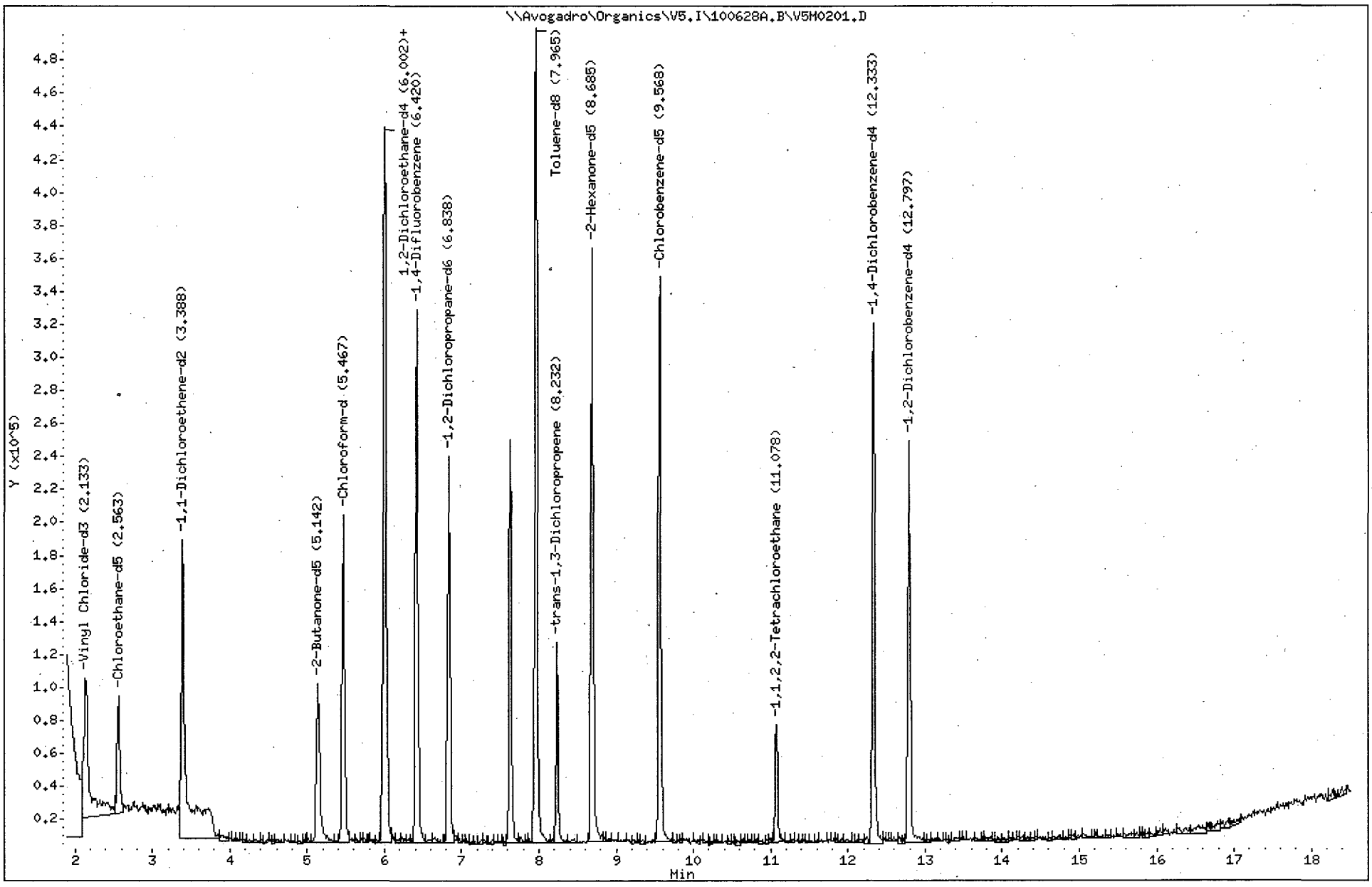
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0201.D
Date : 29-JUN-2010 08:21
Client ID: F3JK1
Sample Info: 25ML,J1288-17A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0000

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0201.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0201.D
Lab Smp Id: J1288-17A Client Smp ID: F3JK1
Inj Date : 29-JUN-2010 08:21
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-17A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.145	2.127	(0.334)	146589	3.45068	3.5
$ 80 Chloroethane-d5	69	2.563	2.556	(0.399)	84120	4.19019	4.2
$ 81 1,1-Dichloroethene-d2	65	3.388	3.381	(0.528)	49476	4.56448	4.6(Q)
$ 82 2-Butanone-d5	46	5.130	5.135	(0.799)	206242	36.4371	36(A)
$ 83 Chloroform-d	84	5.467	5.461	(0.852)	154649	4.38501	4.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.990	5.983	(0.933)	68409	4.63821	4.6
$ 84 Benzene-d6	84	6.001	6.007	(0.627)	404925	4.77838	4.8
* 26 1,4-Difluorobenzene	114	6.419	6.413	(1.000)	280880	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.838	6.831	(0.715)	122142	4.24282	4.2
$ 33 Toluene-d8	98	7.964	7.958	(0.832)	359941	4.90429	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	8.232	8.225	(0.860)	63560	4.62319	4.6
$ 87 2-Hexanone-d5	63	8.685	8.690	(0.908)	145295	44.1924	44(A)
* 42 Chlorobenzene-d5	117	9.568	9.561	(1.000)	208619	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.078	11.071	(1.158)	50034	5.09975	5.1
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.326	(1.000)	91214	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.797	12.791	(1.038)	69522	4.81821	4.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0201.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0201.D
Lab Smp Id: J1288-17A Client Smp ID: F3JK1
Inj Date : 29-JUN-2010 08:21
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-17A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0190.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0190.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	41	E
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JK2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0190.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

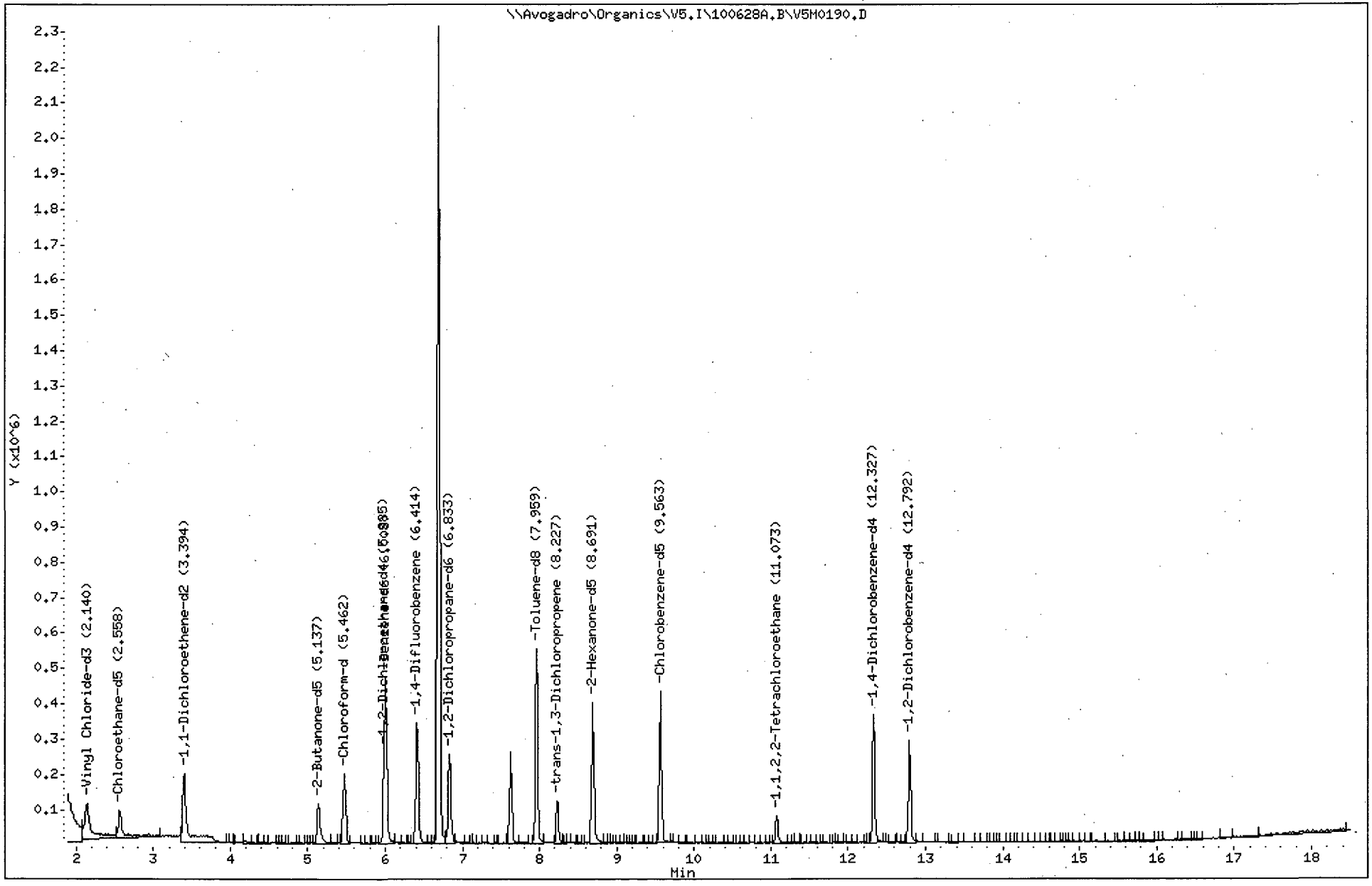
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D
Date : 29-JUN-2010 03:03
Client ID: F3JK2
Sample Info: 25ML,J1288-06A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0086

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D
Lab Smp Id: J1288-06A Client Smp ID: F3JK2
Inj Date : 29-JUN-2010 03:03
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-06A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	%
$ 79 Vinyl Chloride-d3	65	2.139	2.127	(0.334)	160808	3.35055	3.4	67
$ 80 Chloroethane-d5	69	2.557	2.556	(0.399)	94343	4.15956	4.2	83
$ 81 1,1-Dichloroethene-d2	65	3.394	3.381	(0.529)	52016	4.24754	4.2(Q)	85
$ 82 2-Butanone-d5	46	5.136	5.135	(0.801)	234080	36.6045	37(A)	73
$ 83 Chloroform-d	84	5.473	5.461	(0.853)	177602	4.45734	4.5(Q)	89
$ 23 1,2-Dichloroethane-d4	65	5.984	5.983	(0.933)	72745	4.36560	4.4	87
$ 84 Benzene-d6	84	6.007	6.007	(0.628)	450822	4.47130	4.5	89
* 26 1,4-Difluorobenzene	114	6.414	6.413	(1.000)	317334	5.00000		
→ 27 Trichloroethene	95	6.693	6.680	(0.700)	910546	41.3517	41(A)	E
$ 85 1,2-Dichloropropane-d6	67	6.832	6.831	(0.715)	130115	3.79873	3.8(R)	76
$ 33 Toluene-d8	98	7.959	7.958	(0.832)	385983	4.42013	4.4	88
$ 86 trans-1,3-Dichloropropene-d4	79	8.238	8.225	(0.862)	67871	4.14920	4.1	83
$ 87 2-Hexanone-d5	63	8.691	8.690	(0.909)	159251	40.7100	41(A)	81
* 42 Chlorobenzene-d5	117	9.562	9.561	(1.000)	248217	5.00000		
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.072	11.071	(1.158)	52387	4.48776	4.5	90
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.326	(1.000)	106574	5.00000	(Q)	
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	84611	5.01881	5.0	100

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D
Report Date: 30-Jun-2010 12:54

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D
Lab Smp Id: J1288-06A Client Smp ID: F3JK2
Inj Date : 29-JUN-2010 03:03
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-06A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0190.D

Date : 29-JUN-2010 03:03

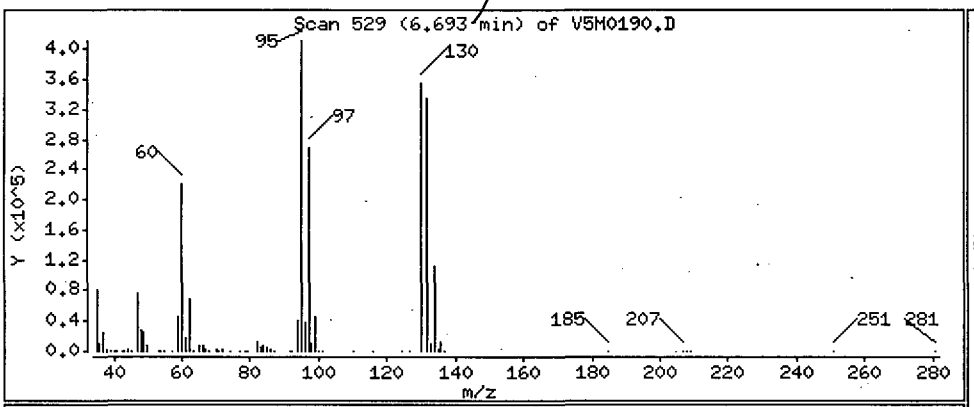
Client ID: F3JK2 Instrument: V5.i

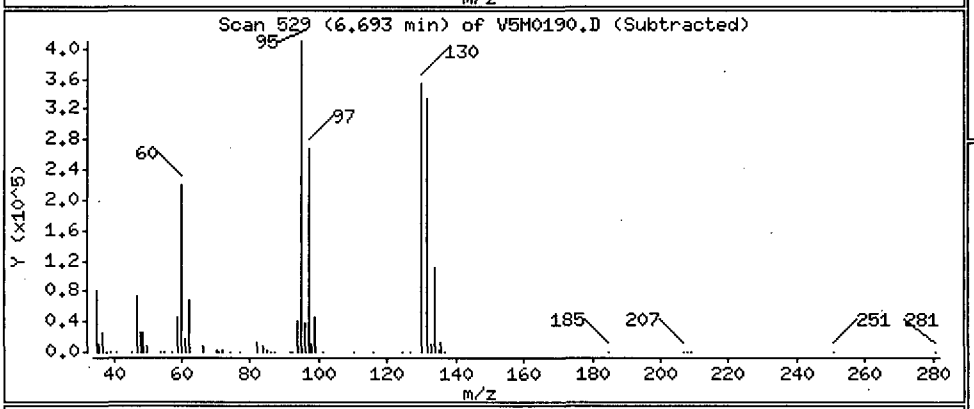
Sample Info: 25ML,J1288-06A,,52603

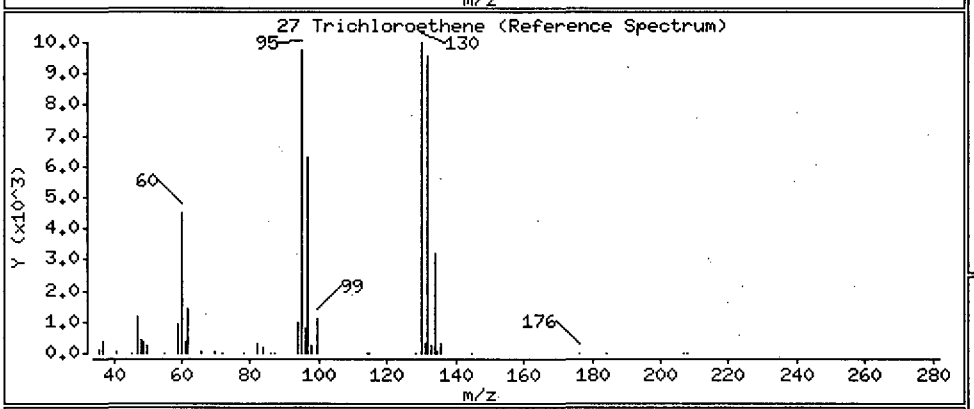
Purge Volume: 25.0 Operator: SRC: LIMS

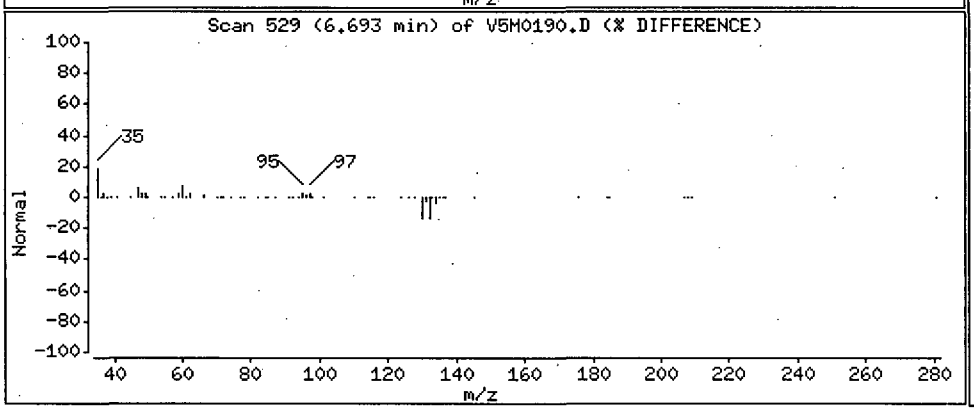
Column phase: DB-624 Column diameter: 0.25

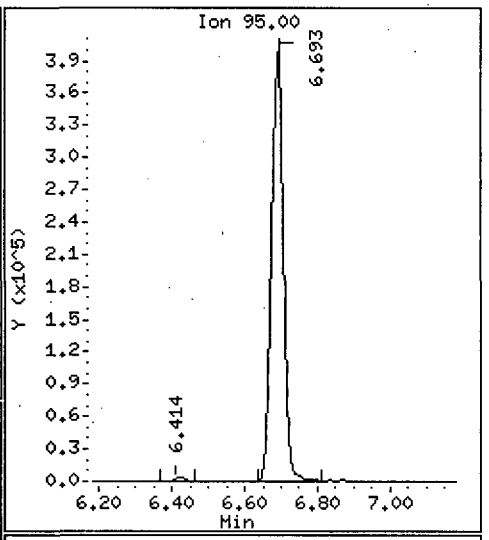
27 Trichloroethene Concentration: 41 ug/L

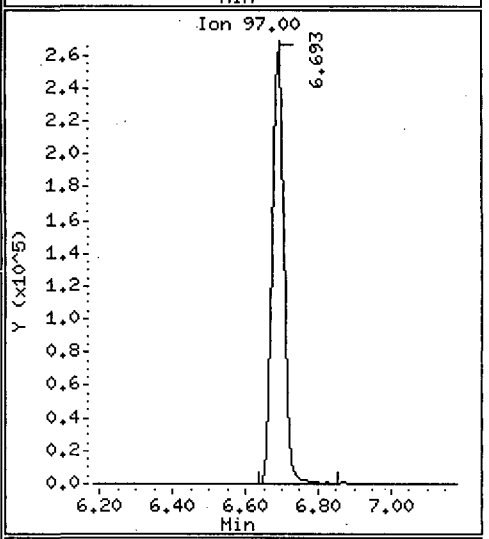


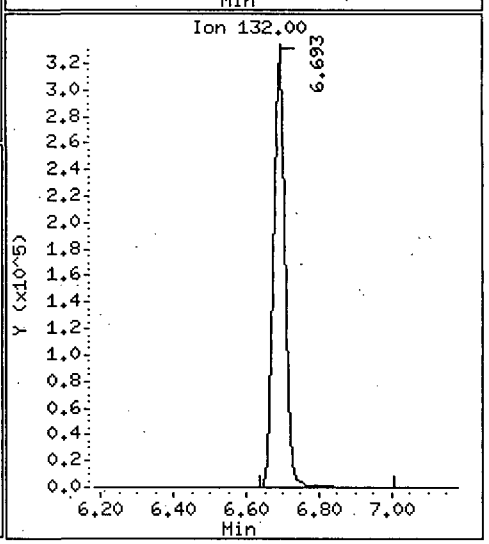












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK2DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-06ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0205.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U
67-64-1	Acetone	20	U
75-15-0	Carbon disulfide	2.0	U
79-20-9	Methyl acetate	2.0	U
75-09-2	Methylene chloride	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
1634-04-4	Methyl tert-butyl ether	2.0	U
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
78-93-3	2-Butanone	20	U
74-97-5	Bromochloromethane	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
110-82-7	Cyclohexane	2.0	U
56-23-5	Carbon tetrachloride	2.0	U
71-43-2	Benzene	2.0	U
107-06-2	1,2-Dichloroethane	2.0	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK2DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-06ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0205.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	43	D
108-87-2	Methylcyclohexane	2.0	U
78-87-5	1,2-Dichloropropane	2.0	U
75-27-4	Bromodichloromethane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	2.0	U
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
179601-23-1	m,p-Xylene	2.0	U
95-47-6	o-Xylene	2.0	U
100-42-5	Styrene	2.0	U
75-25-2	Bromoform	2.0	U
98-82-8	Isopropylbenzene	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F3JK2DL

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-06ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0205.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

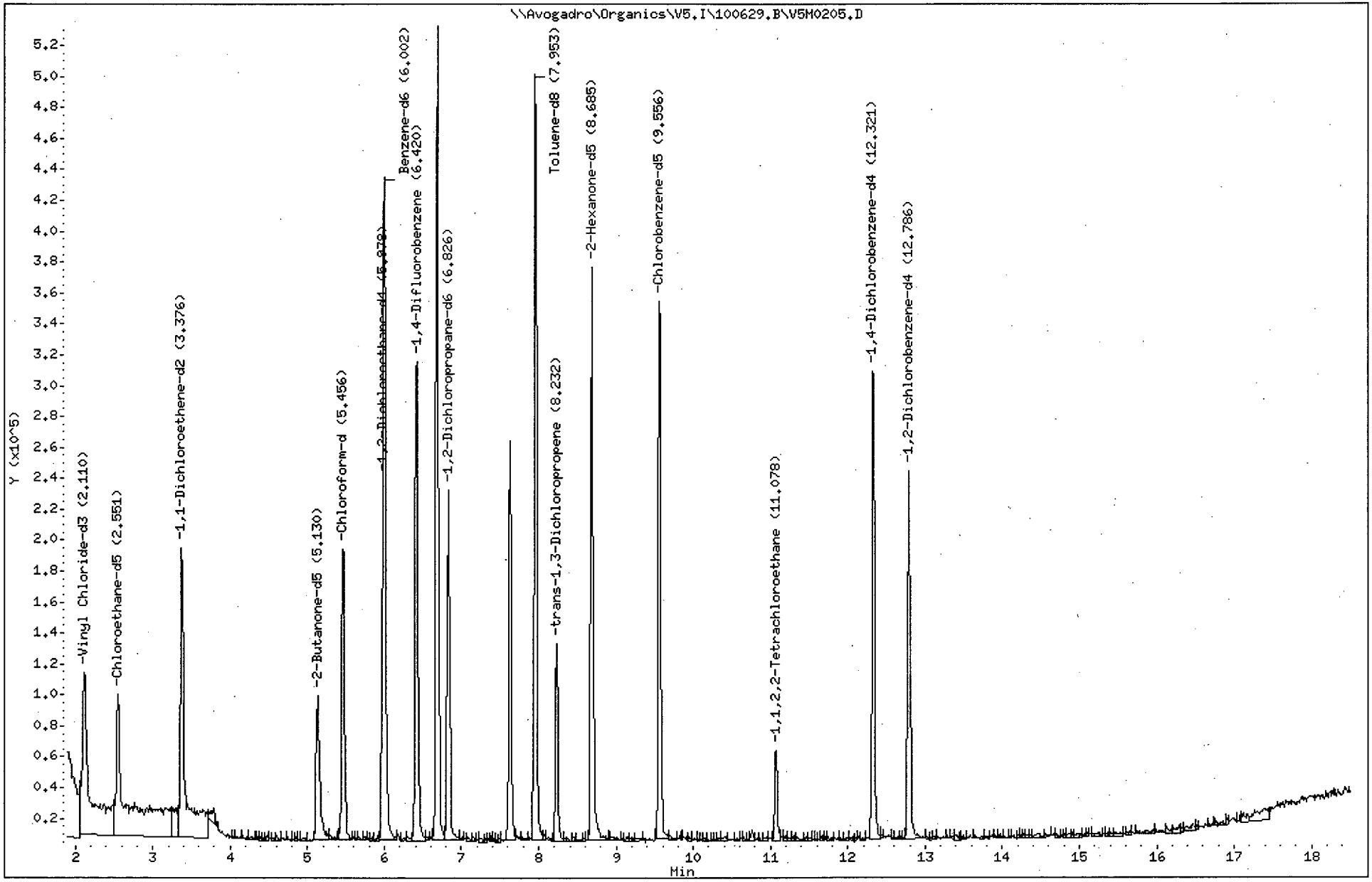
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

SOM01.2 (6/2007)

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0205.D
Date : 29-JUN-2010 10:39
Client ID: F3JK2DL
Sample Info: 25ML,J1288-06ADL,,52637,4
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0205.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0205.D
Lab Smp Id: J1288-06ADL Client Smp ID: F3JK2DL
Inj Date : 29-JUN-2010 10:39
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-06ADL,,52637,4
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 33
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	4.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.121	2.116	(0.330)	173578	4.02197	4.0
$ 80 Chloroethane-d5	69	2.551	2.557	(0.397)	97745	4.79257	4.8
$ 81 1,1-Dichloroethene-d2	65	3.376	3.382	(0.526)	48059	4.36427	4.4(Q)
$ 82 2-Butanone-d5	46	5.130	5.124	(0.799)	212502	36.9546	37(A)
$ 83 Chloroform-d	84	5.467	5.461	(0.852)	162376	4.53196	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.978	5.984	(0.931)	66043	4.40762	4.4
$ 84 Benzene-d6	84	6.001	5.996	(0.627)	406684	4.51620	4.5
* 26 1,4-Difluorobenzene	114	6.419	6.414	(1.000)	285352	5.00000	
27 Trichloroethene	95	6.686	6.681	(0.699)	213189	10.8404 43.3	43
$ 85 1,2-Dichloropropane-d6	67	6.826	6.832	(0.713)	124428	4.06740	4.1
$ 33 Toluene-d8	98	7.953	7.959	(0.831)	363470	4.66039	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.226	(0.860)	66507	4.55234	4.6
$ 87 2-Hexanone-d5	63	8.684	8.691	(0.908)	149436	42.7722	43(A)
* 42 Chlorobenzene-d5	117	9.567	9.562	(1.000)	221689	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.072	(1.158)	45497	4.36392	4.4
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.327	(1.000)	97225	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.785	12.791	(1.037)	71590	4.65479	4.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0205.D
Report Date: 30-Jun-2010 12:55

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0205.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0205.D
Lab Smp Id: J1288-06ADL Client Smp ID: F3JK2DL
Inj Date : 29-JUN-2010 10:39
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-06ADL,,52637,4
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 33
Dil Factor: 4.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0205.D

Date : 29-JUN-2010 10:39

Client ID: F3JK2DL

Instrument: V5.i

Sample Info: 25ML,J1288-06ADL,,52637,4

Purge Volume: 25.0

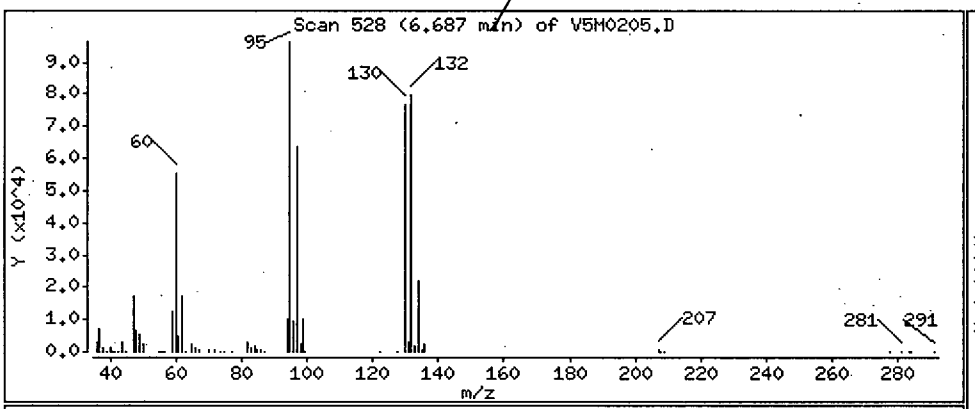
Operator: SRC: LIMS

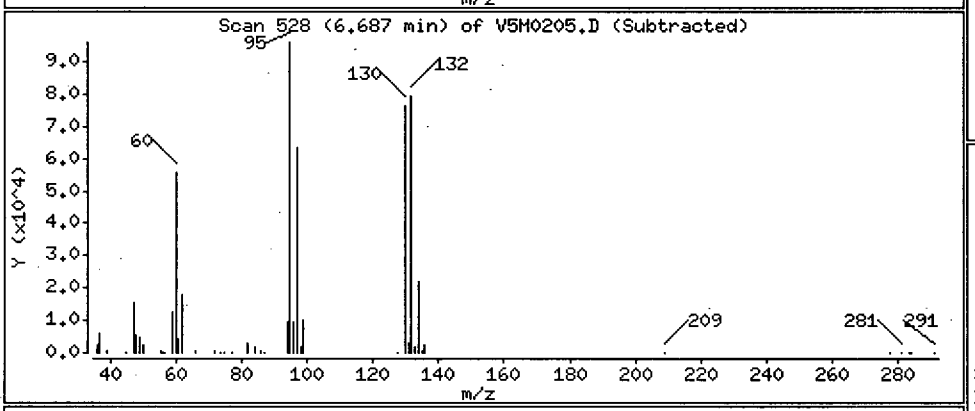
Column phase: DB-624

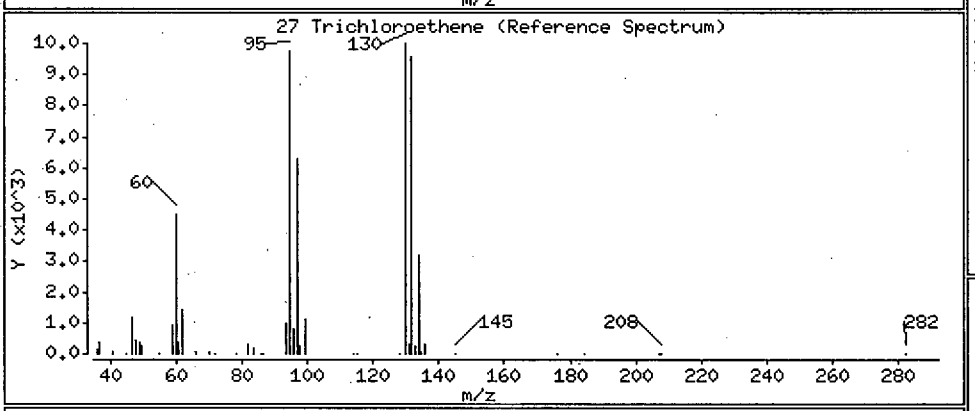
Column diameter: 0.25

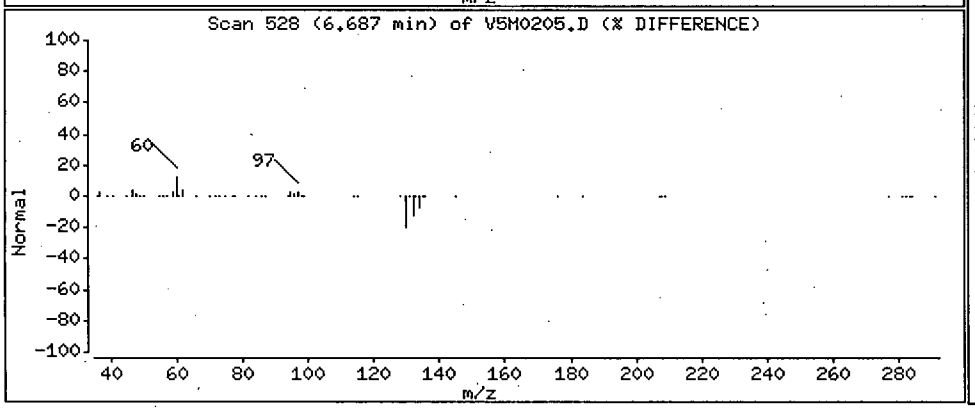
27 Trichloroethene

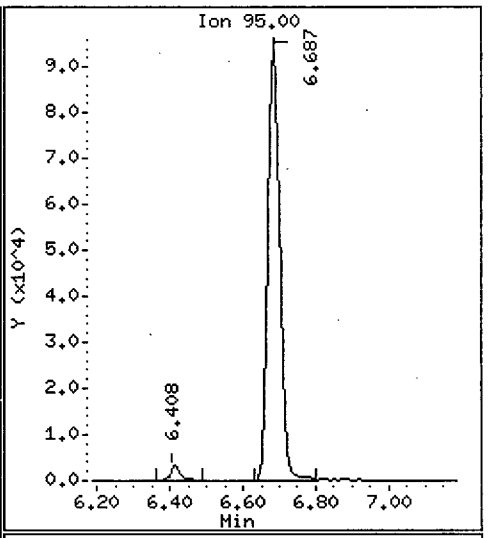
Concentration: 43 ug/L

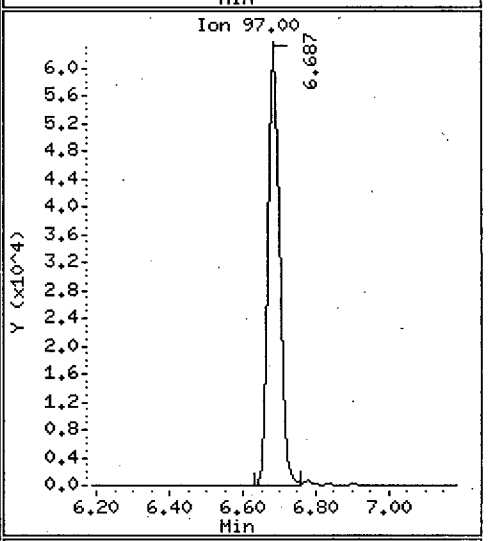


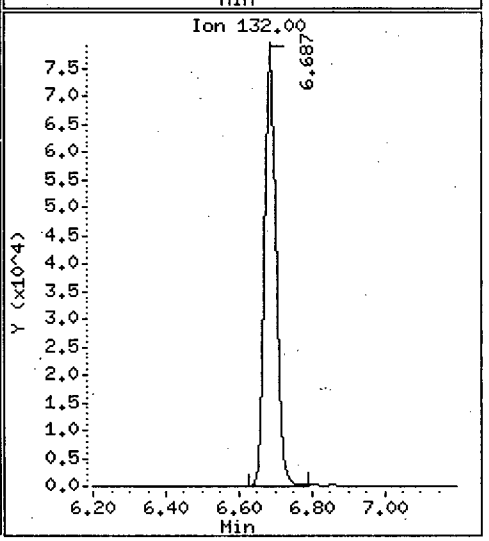












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0197.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0197.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JK3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0197.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

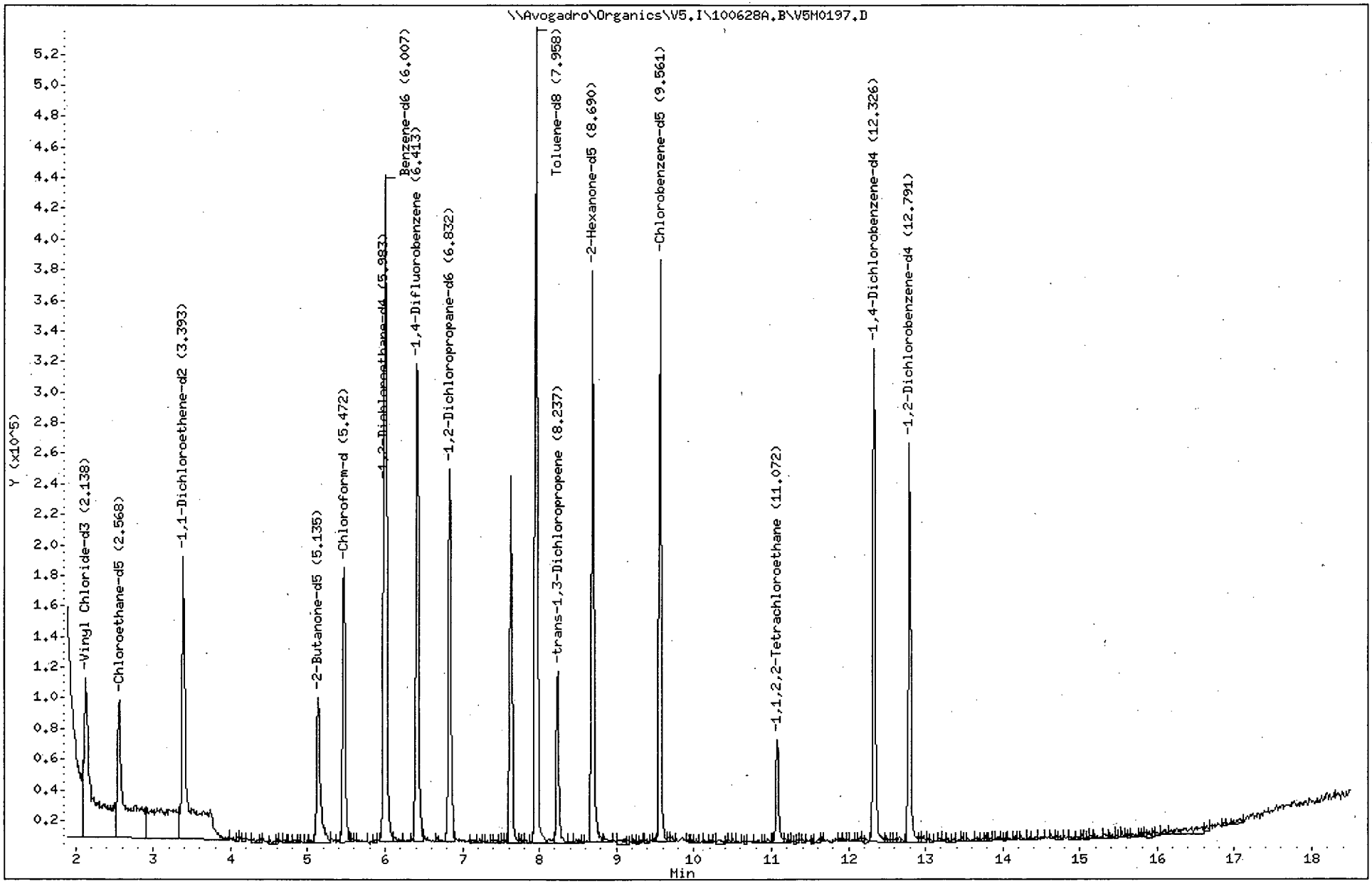
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0197.D
Date : 29-JUN-2010 06:25
Client ID: F3JK3
Sample Info: 25ML,J1288-13A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



0152

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0197.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0197.D
Lab Smp Id: J1288-13A Client Smp ID: F3JK3
Inj Date : 29-JUN-2010 06:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-13A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.138	2.127	(0.333)	149770	3.45975	3.5
$ 80 Chloroethane-d5	69	2.568	2.556	(0.400)	90673	4.43229	4.4
$ 81 1,1-Dichloroethene-d2	65	3.392	3.381	(0.528)	52419	4.74571	4.7(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.799)	207450	35.9663	36(A)
$ 83 Chloroform-d	84	5.472	5.461	(0.852)	159042	4.42540	4.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.931)	68028	4.52628	4.5
$ 84 Benzene-d6	84	6.006	6.007	(0.628)	411391	4.56125	4.6
* 26 1,4-Difluorobenzene	114	6.424	6.413	(1.000)	286223	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	125618	4.09981	4.1
$ 33 Toluene-d8	98	7.958	7.958	(0.832)	373318	4.77910	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.237	8.225	(0.861)	63980	4.37245	4.4
$ 87 2-Hexanone-d5	63	8.690	8.690	(0.909)	147230	42.0742	42(A)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	222040	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	45093	4.31833	4.3
* 78 1,4-Dichlorobenzene-d4	152	12.326	12.326	(1.000)	95030	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.790	12.791	(1.038)	71980	4.78825	4.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0197.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0197.D
Lab Smp Id: J1288-13A Client Smp ID: F3JK3
Inj Date : 29-JUN-2010 06:25
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-13A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK4

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0198.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK4

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0198.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F3JK4

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0198.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

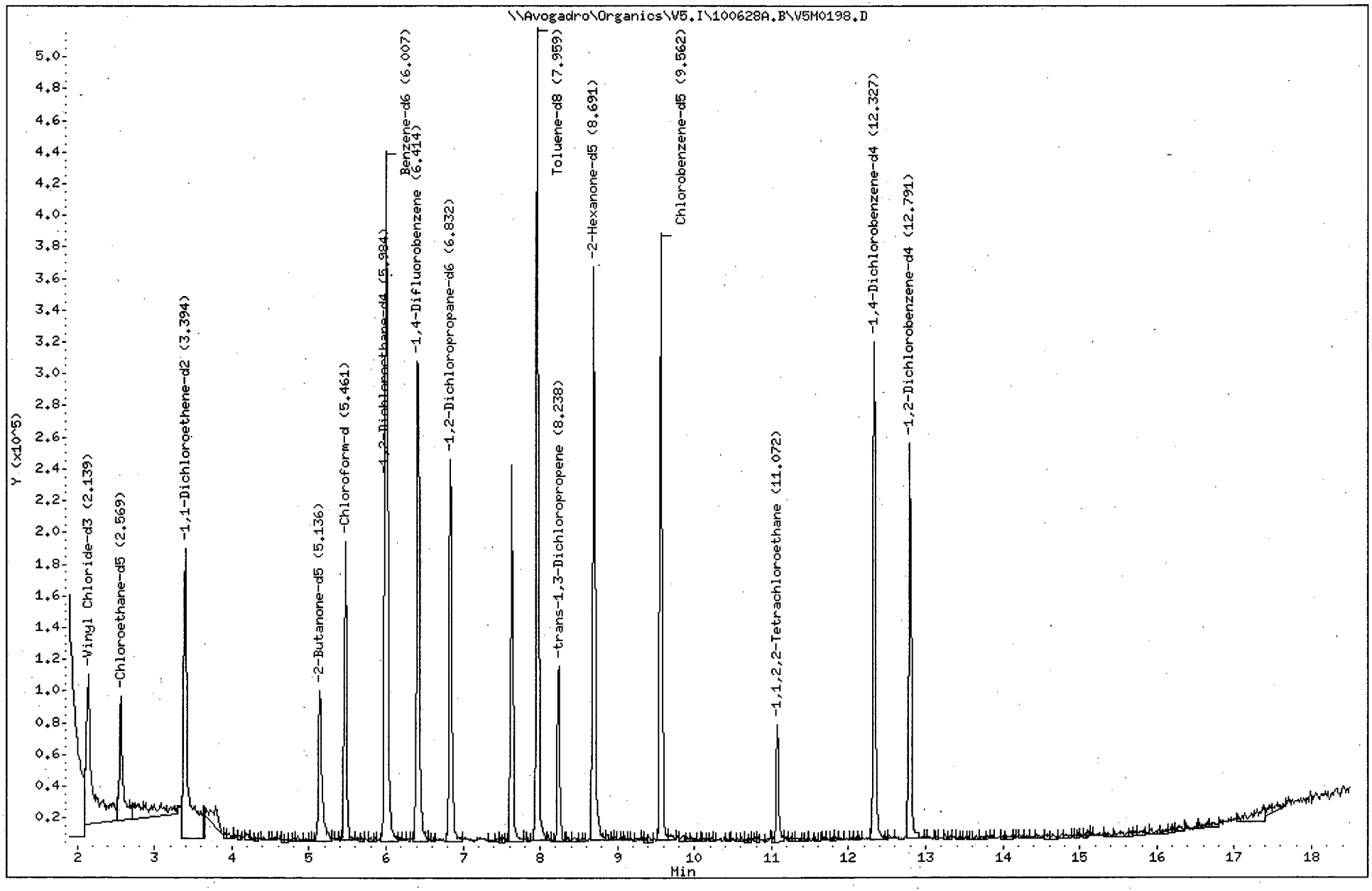
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0198.D
Date : 29-JUN-2010 06:54
Client ID: F3JK4
Sample Info: 25ML,J1288-14A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0198

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0198.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0198.D
Lab Smp Id: J1288-14A Client Smp ID: F3JK4
Inj Date : 29-JUN-2010 06:54
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-14A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.138	2.127	(0.333)	147887	3.44206	3.4
$ 80 Chloroethane-d5	69	2.568	2.556	(0.400)	92552	4.55832	4.6
$ 81 1,1-Dichloroethene-d2	65	3.393	3.381	(0.528)	49904	4.55215	4.6(Q)
$ 82 2-Butanone-d5	46	5.136	5.135	(0.799)	196715	34.3628	34(A)
$ 83 Chloroform-d	84	5.472	5.461	(0.852)	155311	4.35423	4.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.984	5.983	(0.931)	68885	4.61792	4.6
$ 84 Benzene-d6	84	6.007	6.007	(0.628)	412300	4.60685	4.6
* 26 1,4-Difluorobenzene	114	6.425	6.413	(1.000)	284077	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.832	6.831	(0.715)	123358	4.05733	4.1
$ 33 Toluene-d8	98	7.958	7.958	(0.832)	364303	4.69993	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.237	8.225	(0.862)	62343	4.29368	4.3
$ 87 2-Hexanone-d5	63	8.690	8.690	(0.909)	142439	41.0213	41(A)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	220328	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.072	11.071	(1.158)	46432	4.48111	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.326	12.326	(1.000)	95557	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	70832	4.68589	4.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0198.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0198.D
Lab Smp Id: J1288-14A Client Smp ID: F3JK4
Inj Date : 29-JUN-2010 06:54
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-14A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0199.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0199.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
F3JK5

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0199.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

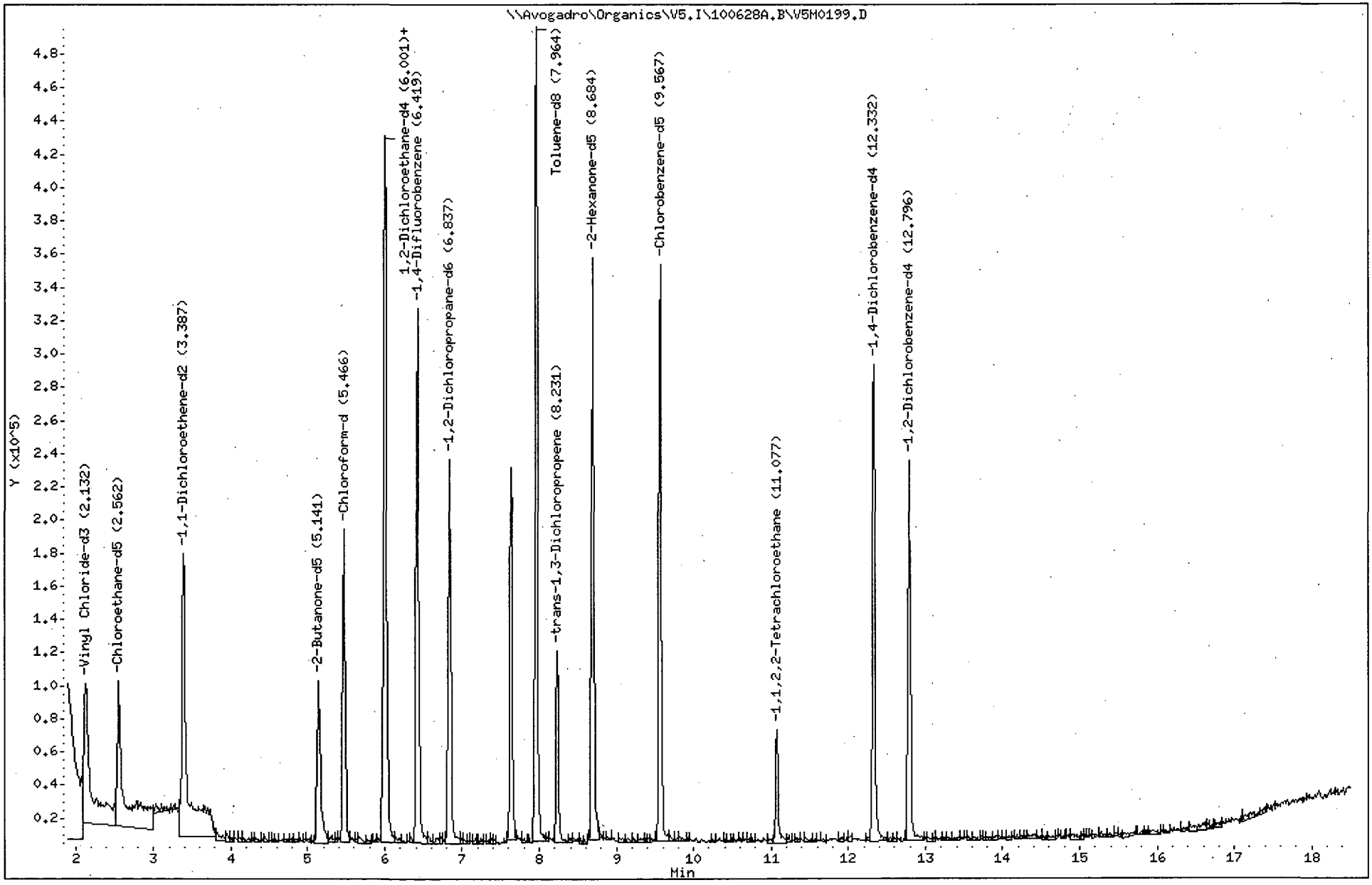
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0199.D
Date : 29-JUN-2010 07:23
Client ID: F3JK5
Sample Info: 25ML,J1288-15A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



014

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0199.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0199.D
Lab Smp Id: J1288-15A Client Smp ID: F3JK5
Inj Date : 29-JUN-2010 07:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-15A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.132	2.127	(0.332)	138336	3.32963	3.3
$ 80 Chloroethane-d5	69	2.562	2.556	(0.399)	86462	4.40369	4.4
$ 81 1,1-Dichloroethene-d2	65	3.398	3.381	(0.529)	44764	4.22263	4.2(Q)
$ 82 2-Butanone-d5	46	5.141	5.135	(0.801)	205833	37.1825	37(A)
$ 83 Chloroform-d	84	5.466	5.461	(0.852)	153598	4.45315	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.989	5.983	(0.933)	65766	4.55928	4.6
$ 84 Benzene-d6	84	6.000	6.007	(0.627)	394010	4.53811	4.5
* 26 1,4-Difluorobenzene	114	6.418	6.413	(1.000)	274703	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.837	6.831	(0.715)	123934	4.20186	4.2
$ 33 Toluene-d8	98	7.963	7.958	(0.832)	355151	4.72302	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.225	(0.860)	62872	4.46352	4.5
$ 87 2-Hexanone-d5	63	8.684	8.690	(0.908)	146575	43.5130	44(A)
* 42 Chlorobenzene-d5	117	9.566	9.561	(1.000)	213743	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.071	(1.158)	45732	4.54953	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.331	12.326	(1.000)	89575	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.796	12.791	(1.038)	71133	5.02007	5.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0199.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0199.D
Lab Smp Id: J1288-15A Client Smp ID: F3JK5
Inj Date : 29-JUN-2010 07:23
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-15A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK6

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0202.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK6

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0202.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JK6

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0202.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

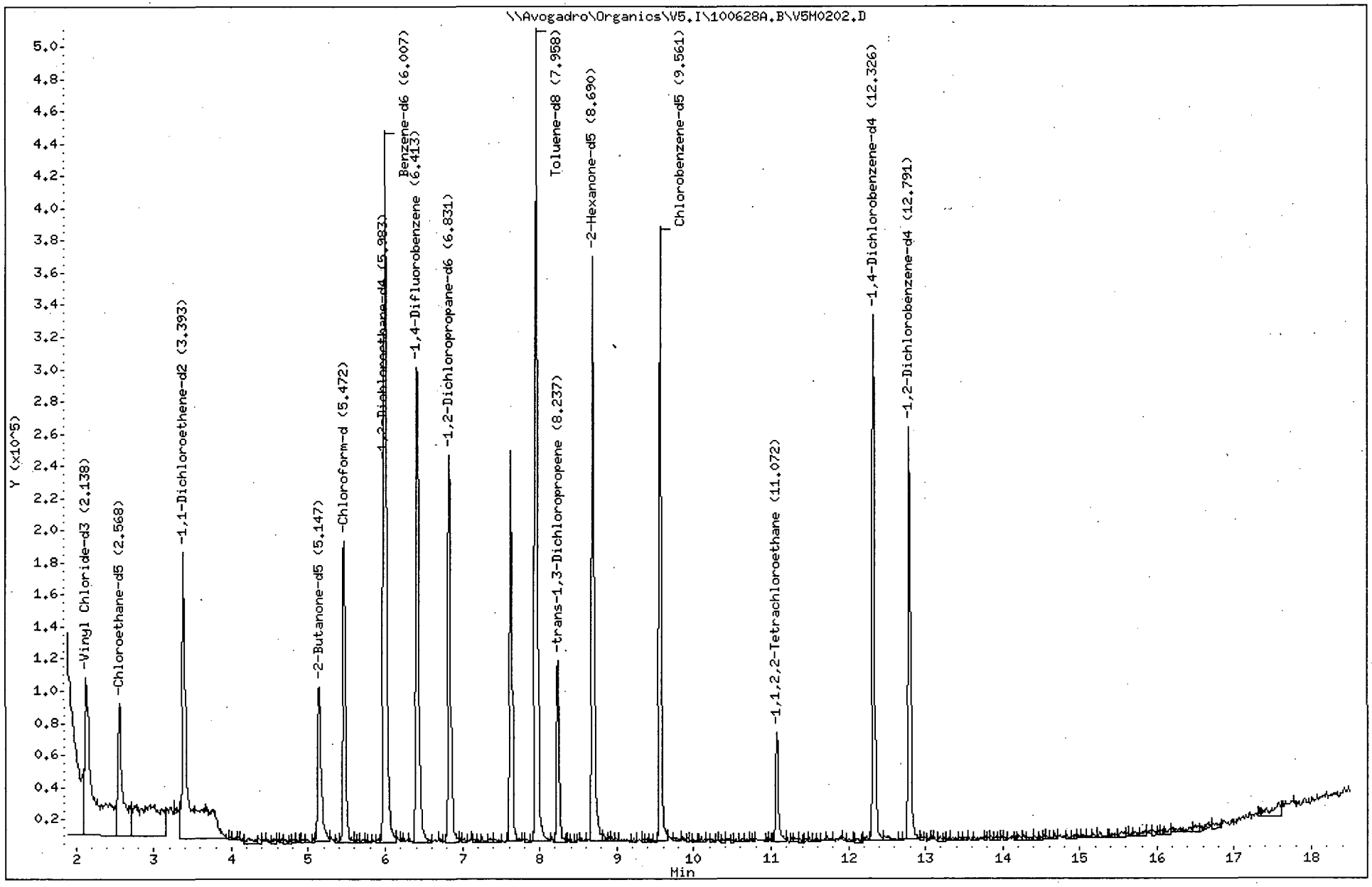
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0202.D
Date : 29-JUN-2010 08:50
Client ID: F3JK6
Sample Info: 25ML,J1288-18A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0202.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0202.D
Lab Smp Id: J1288-18A Client Smp ID: F3JK6
Inj Date : 29-JUN-2010 08:50
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-18A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.138	2.127	(0.333)	151480	3.56367	3.6
$ 80 Chloroethane-d5	69	2.568	2.556	(0.400)	86766	4.31939	4.3
$ 81 1,1-Dichloroethene-d2	65	3.392	3.381	(0.528)	50041	4.61383	4.6(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.799)	213077	37.6220	38(A)
$ 83 Chloroform-d	84	5.460	5.461	(0.850)	163804	4.64181	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.931)	71703	4.85862	4.9
$ 84 Benzene-d6	84	6.006	6.007	(0.628)	407954	4.51726	4.5
* 26 1,4-Difluorobenzene	114	6.424	6.413	(1.000)	281049	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	127074	4.14194	4.1
$ 33 Toluene-d8	98	7.958	7.958	(0.832)	369209	4.72035	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.237	8.225	(0.861)	63341	4.32315	4.3
$ 87 2-Hexanone-d5	63	8.690	8.690	(0.909)	145858	41.6279	42(A)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	222329	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	50792	4.85777	4.9
* 78 1,4-Dichlorobenzene-d4	152	12.326	12.326	(1.000)	94360	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.790	12.791	(1.038)	70231	4.70507	4.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0202.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0202.D
Lab Smp Id: J1288-18A Client Smp ID: F3JK6
Inj Date : 29-JUN-2010 08:50
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-18A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK7

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0206.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK7

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0206.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JK7

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0206.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

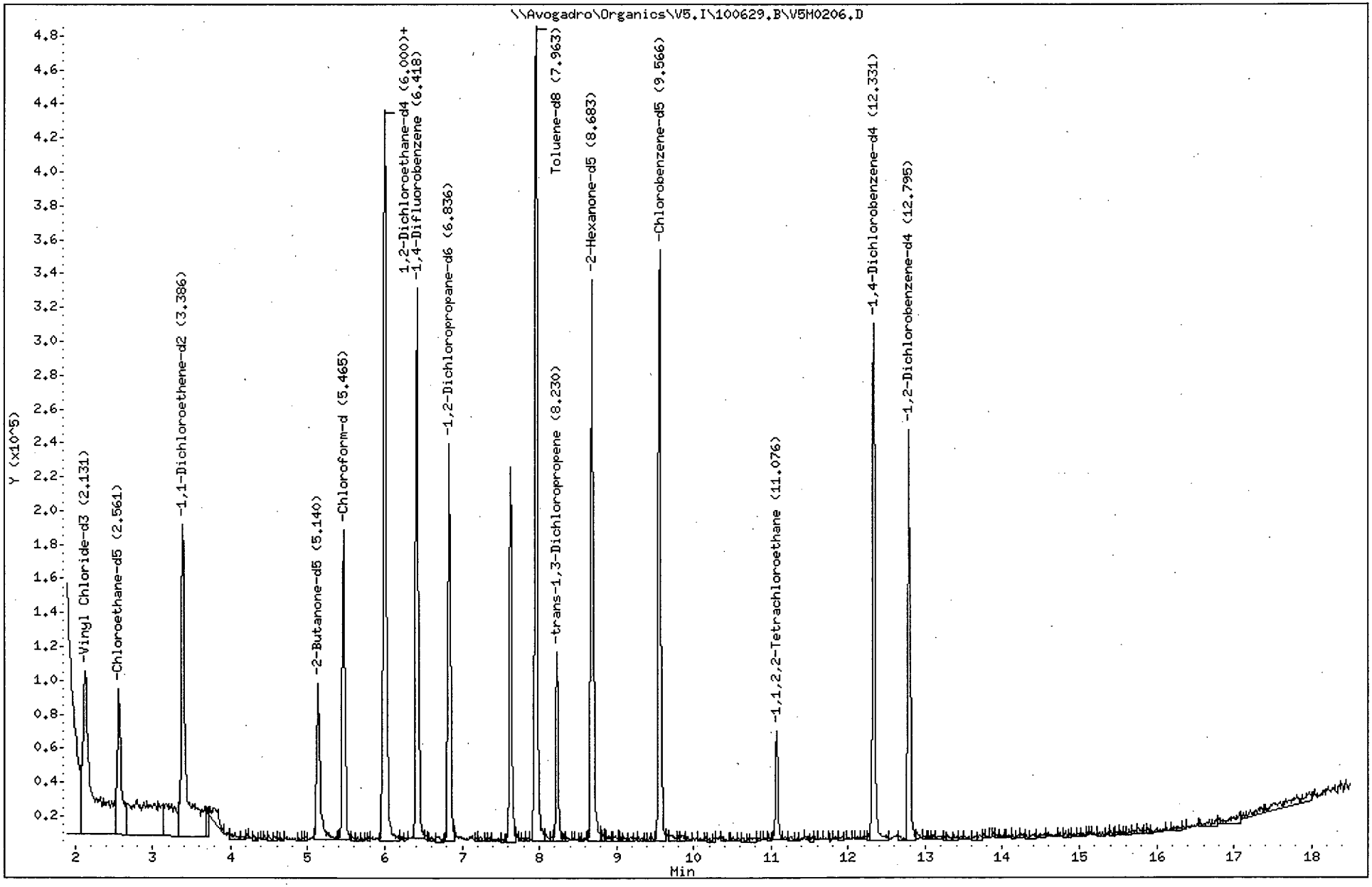
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0206.D
Date : 29-JUN-2010 11:08
Client ID: F3JK7
Sample Info: 25ML,J1288-19A,,52637,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0126

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0206.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0206.D
Lab Smp Id: J1288-19A Client Smp ID: F3JK7
Inj Date : 29-JUN-2010 11:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-19A,,52637,
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.131	2.116	(0.332)	147274	3.48768	3.5
$ 80 Chloroethane-d5	69	2.561	2.557	(0.399)	86719	4.34565	4.3
$ 81 1,1-Dichloroethene-d2	65	3.386	3.382	(0.528)	47131	4.37432	4.4(Q)
$ 82 2-Butanone-d5	46	5.140	5.124	(0.801)	197317	35.0701	35(A)
$ 83 Chloroform-d	84	5.465	5.461	(0.852)	162042	4.62230	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.988	5.984	(0.933)	63544	4.33430	4.3
$ 84 Benzene-d6	84	5.999	5.996	(0.627)	398924	4.64311	4.6
* 26 1,4-Difluorobenzene	114	6.417	6.414	(1.000)	279199	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.836	6.832	(0.715)	120472	4.12751	4.1
$ 33 Toluene-d8	98	7.962	7.959	(0.832)	356369	4.78913	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.230	8.226	(0.860)	57649	4.13583	4.1
$ 87 2-Hexanone-d5	63	8.683	8.691	(0.908)	137536	41.2597	41(A)
* 42 Chlorobenzene-d5	117	9.566	9.562	(1.000)	211515	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.076	11.072	(1.158)	46181	4.64259	4.6
* 78 1,4-Dichlorobenzene-d4	152	12.330	12.327	(1.000)	88346	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.795	12.791	(1.038)	69978	5.00726	5.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0206.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0206.D
Lab Smp Id: J1288-19A Client Smp ID: F3JK7
Inj Date : 29-JUN-2010 11:08
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-19A,,52637,
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK8

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0207.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JK8

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0207.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JK8

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0207.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/25/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

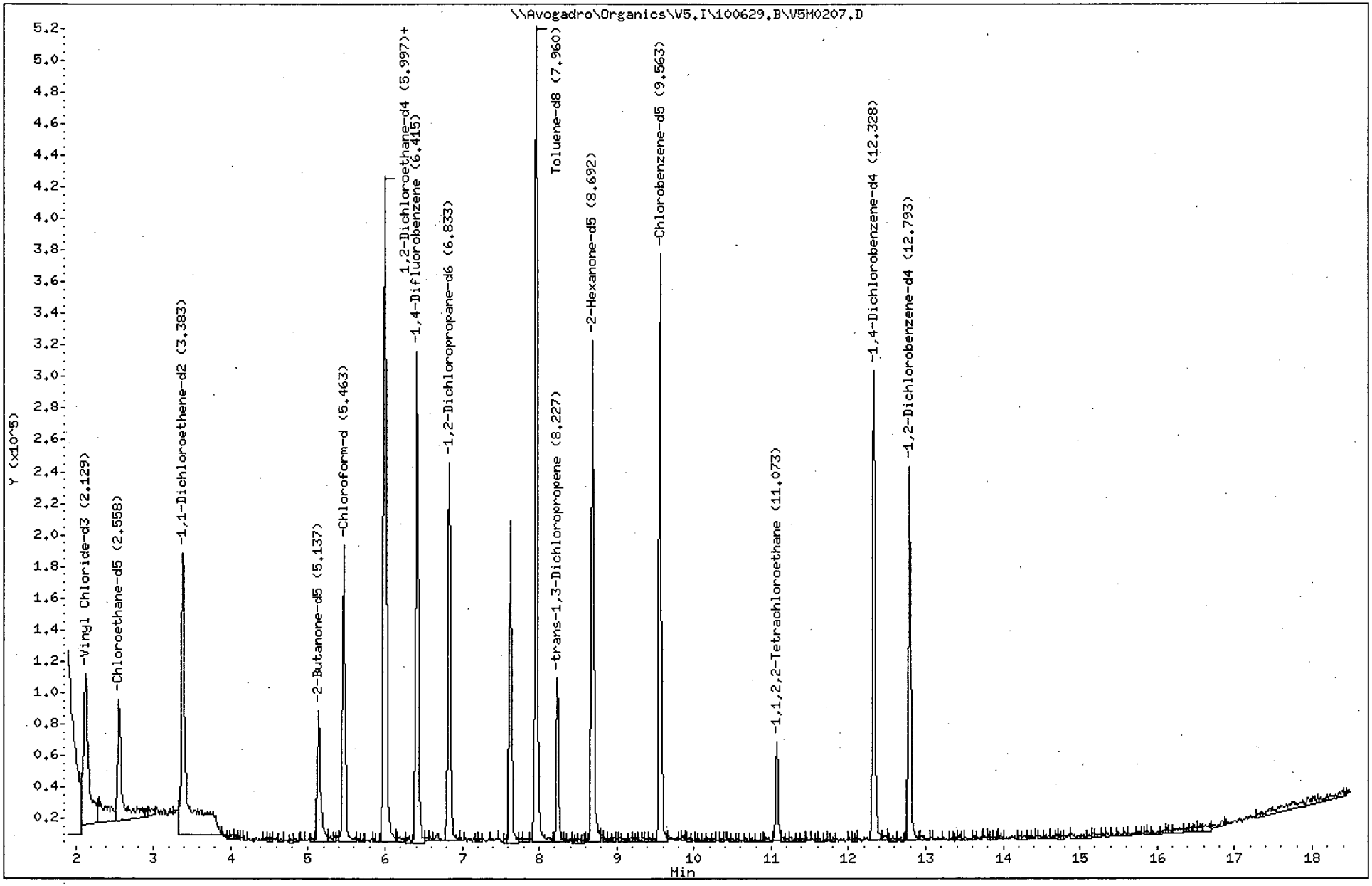
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0207.D
Date : 29-JUN-2010 13:37
Client ID: F3JK8
Sample Info: 25ML,J1288-20A,,52637,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0132

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0207.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0207.D
Lab Smp Id: J1288-20A Client Smp ID: F3JK8
Inj Date : 29-JUN-2010 13:37
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-20A,,52637,
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.128	2.116	(0.332)	153314	3.76464	3.8
$ 80 Chloroethane-d5	69	2.558	2.557	(0.399)	85721	4.45409	4.5
$ 81 1,1-Dichloroethene-d2	65	3.394	3.382	(0.529)	47194	4.54173	4.5(Q)
$ 82 2-Butanone-d5	46	5.137	5.124	(0.801)	191378	35.2692	35(A)
$ 83 Chloroform-d	84	5.462	5.461	(0.852)	154667	4.57466	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.985	5.984	(0.933)	63852	4.51595	4.5
$ 84 Benzene-d6	84	6.008	5.996	(0.628)	393473	4.59766	4.6
* 26 1,4-Difluorobenzene	114	6.415	6.414	(1.000)	269267	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.833	6.832	(0.715)	121348	4.17386	4.2
$ 33 Toluene-d8	98	7.960	7.959	(0.832)	353394	4.76782	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.227	8.226	(0.860)	55340	3.98578	4.0
$ 87 2-Hexanone-d5	63	8.691	8.691	(0.909)	129897	39.1212	39(A)
* 42 Chlorobenzene-d5	117	9.563	9.562	(1.000)	210687	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.073	11.072	(1.158)	42513	4.29064	4.3
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.327	(1.000)	85620	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.792	12.791	(1.038)	65946	4.86899	4.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0207.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0207.D
Lab Smp Id: J1288-20A Client Smp ID: F3JK8
Inj Date : 29-JUN-2010 13:37
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-20A,,52637,
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JL1

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0191.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JL1

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0191.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JL1

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0191.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

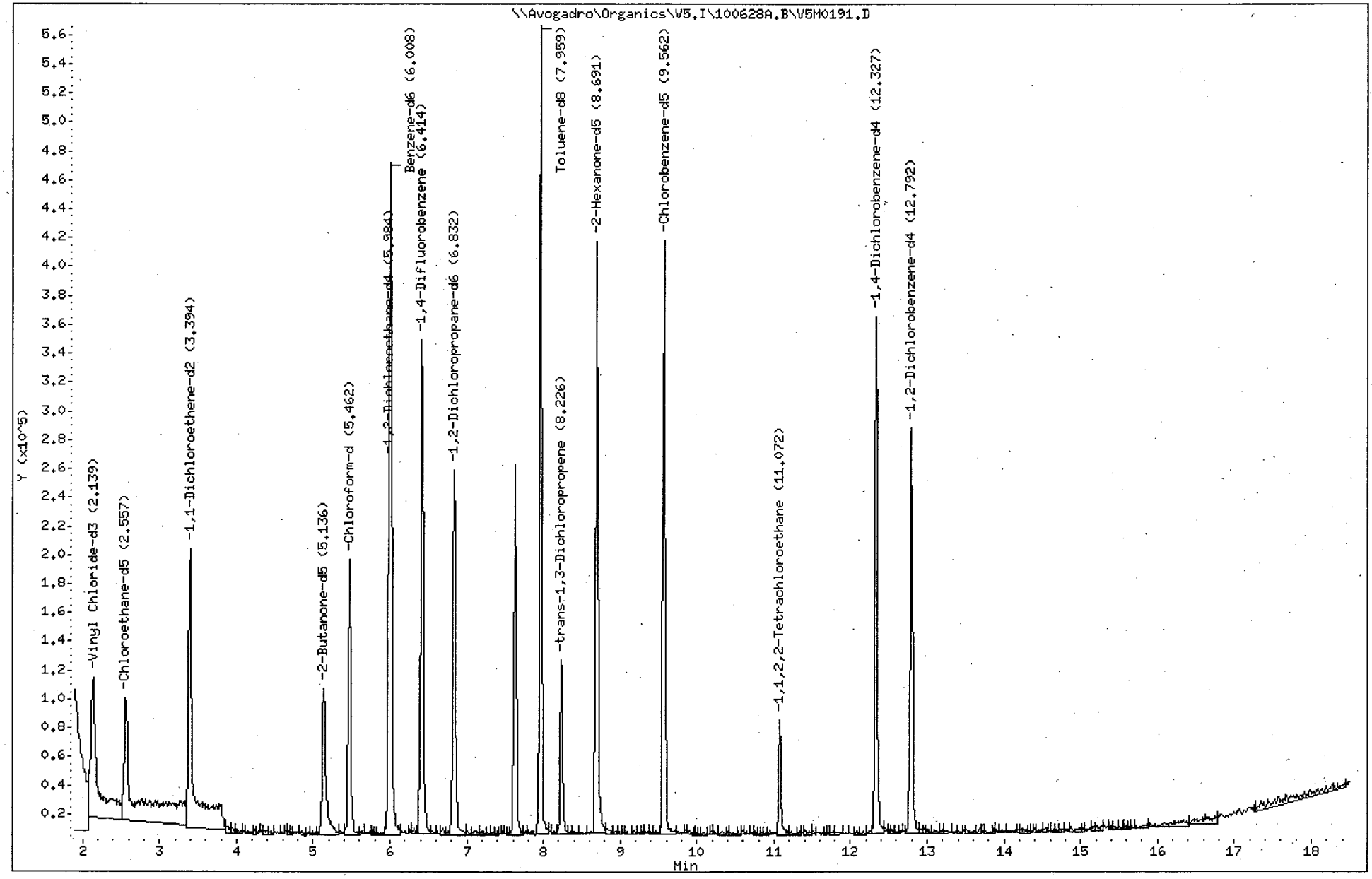
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0191.D
Date : 29-JUN-2010 03:31
Client ID: F3JL1
Sample Info: 25ML,J1288-07A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0191.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0191.D
Lab Smp Id: J1288-07A Client Smp ID: F3JL1
Inj Date : 29-JUN-2010 03:31
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-07A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.139	2.127	(0.334)	174825	3.78046	3.8
$ 80 Chloroethane-d5	69	2.557	2.556	(0.399)	94989	4.34655	4.3
$ 81 1,1-Dichloroethene-d2	65	3.393	3.381	(0.529)	55979	4.74416	4.7(Q)
$ 82 2-Butanone-d5	46	5.136	5.135	(0.801)	223649	36.2970	36(A)
$ 83 Chloroform-d	84	5.473	5.461	(0.853)	171420	4.46501	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.984	5.983	(0.933)	78194	4.87021	4.9
$ 84 Benzene-d6	84	6.007	6.007	(0.628)	444955	4.56580	4.6
* 26 1,4-Difluorobenzene	114	6.414	6.413	(1.000)	305762	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.832	6.831	(0.715)	134120	4.05114	4.1
$ 33 Toluene-d8	98	7.959	7.958	(0.832)	396104	4.69298	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.226	8.225	(0.860)	67468	4.26727	4.3
$ 87 2-Hexanone-d5	63	8.691	8.690	(0.909)	159084	42.0744	42(A)
* 42 Chlorobenzene-d5	117	9.562	9.561	(1.000)	239916	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.072	11.071	(1.158)	52882	4.68691	4.7
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.326	(1.000)	105053	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	79417	4.77893	4.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0191.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0191.D
Lab Smp Id: J1288-07A Client Smp ID: F3JL1
Inj Date : 29-JUN-2010 03:31
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-07A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JL2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0192.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	4.7	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JL2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0192.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JL2

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0192.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

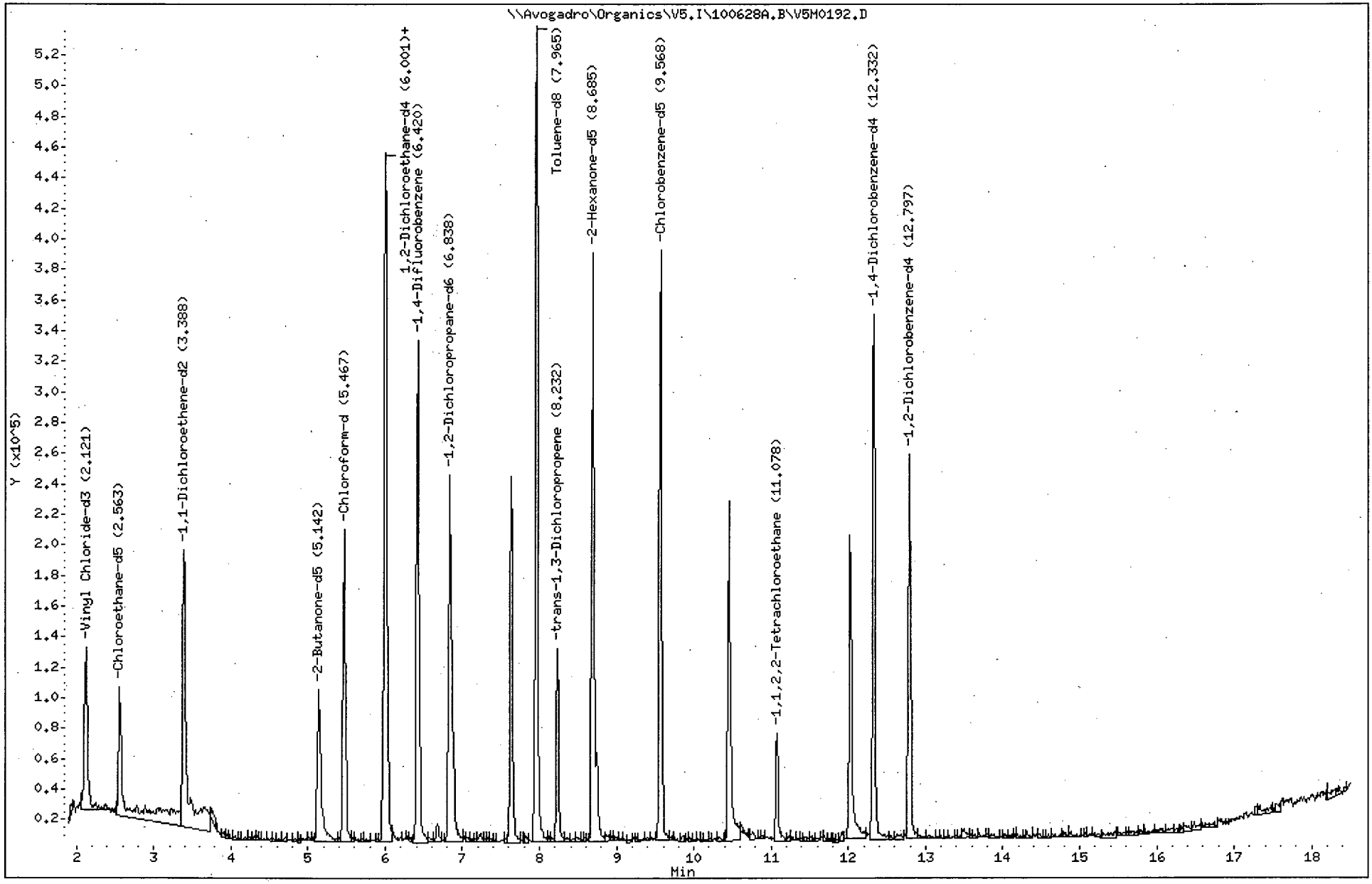
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	10.450	3.4	J
02		Unknown-02	12.019	3.3	J
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D
Date : 29-JUN-2010 04:00
Client ID: F3JL2
Sample Info: 25ML,J1288-08A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D
Lab Smp Id: J1288-08A Client Smp ID: F3JL2
Inj Date : 29-JUN-2010 04:00
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-08A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.121	2.127	(0.330)	199881	4.52249	4.5
$ 80 Chloroethane-d5	69	2.562	2.556	(0.399)	100979	4.83467	4.8
$ 81 1,1-Dichloroethene-d2	65	3.387	3.381	(0.528)	51521	4.56860	4.6(Q)
9 Acetone	43	3.480	3.474	(0.542)	15884	4.73970	4.7(a)
$ 82 2-Butanone-d5	46	5.141	5.135	(0.801)	219827	37.3292	37(A)
$ 83 Chloroform-d	84	5.466	5.461	(0.852)	156049	4.25292	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.989	5.983	(0.933)	70977	4.62548	4.6
$ 84 Benzene-d6	84	6.001	6.007	(0.627)	430604	4.54018	4.5
* 26 1,4-Difluorobenzene	114	6.419	6.413	(1.000)	292226	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.837	6.831	(0.715)	132527	4.11323	4.1
$ 33 Toluene-d8	98	7.964	7.958	(0.832)	386340	4.70331	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.225	(0.860)	65009	4.22494	4.2
$ 87 2-Hexanone-d5	63	8.684	8.690	(0.908)	161655	43.9314	44(A)
* 42 Chlorobenzene-d5	117	9.567	9.561	(1.000)	233488	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.071	(1.158)	48905	4.45376	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.326	(1.000)	99639	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.797	12.791	(1.038)	73895	4.68825	4.7

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D
Report Date: 30-Jun-2010 12:54

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D
Lab Smp Id: J1288-08A Client Smp ID: F3JL2
Inj Date : 29-JUN-2010 04:00
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-08A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 42 Chlorobenzene-d5	9.568	815853	5.000
* 78 1,4-Dichlorobenzene-d4	12.332	743438	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
10.450	549272	3.36624033	3.4	0		0	42
Unknown				CAS #:			
12.019	496381	3.33841478	3.3	0		0	78

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D

Date : 29-JUN-2010 04:00

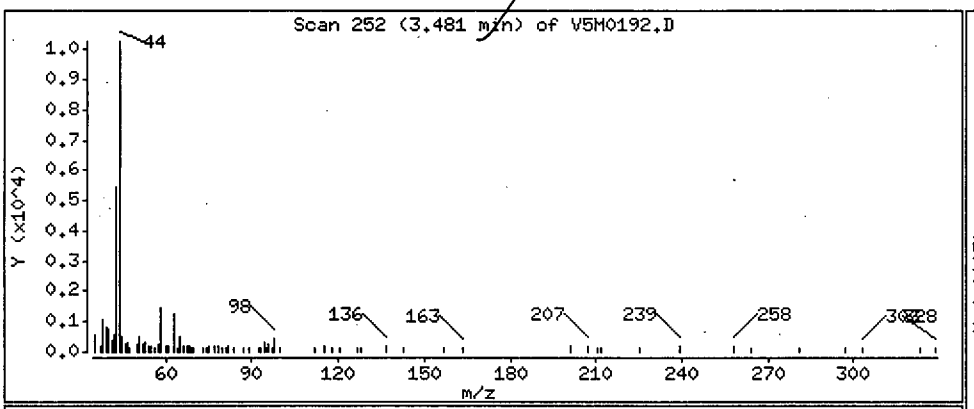
Client ID: F3JL2 | Instrument: V5.i

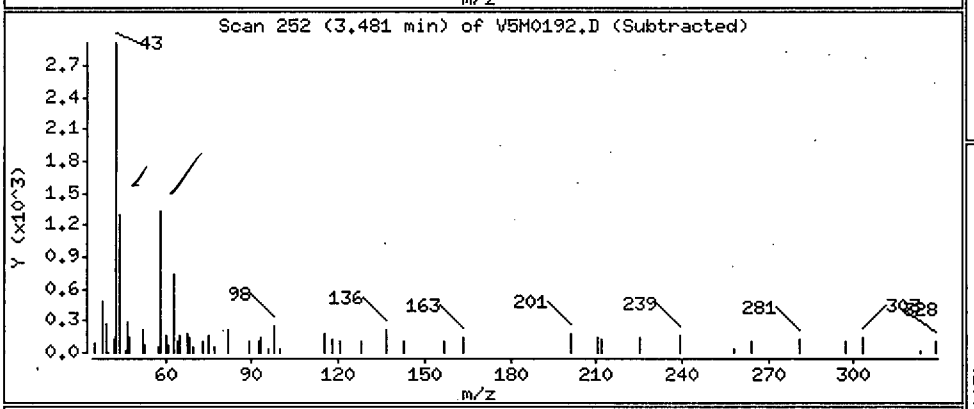
Sample Info: 25ML,J1288-08A,,52603

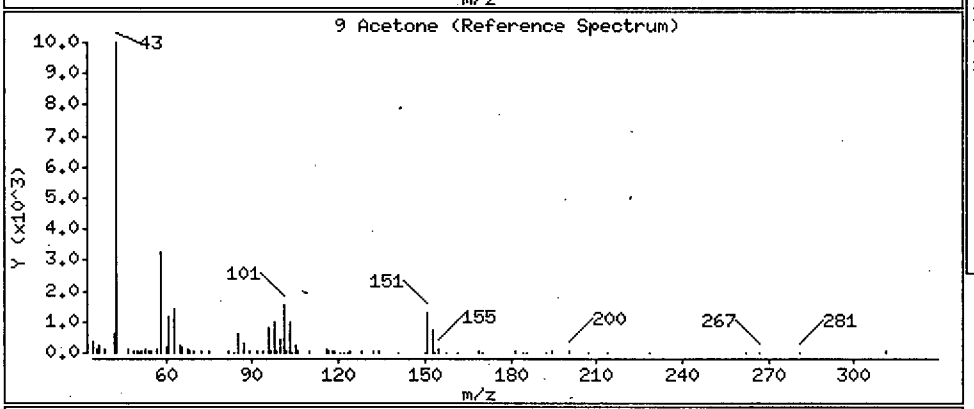
Purge Volume: 25.0 | Operator: SRC: LIMS

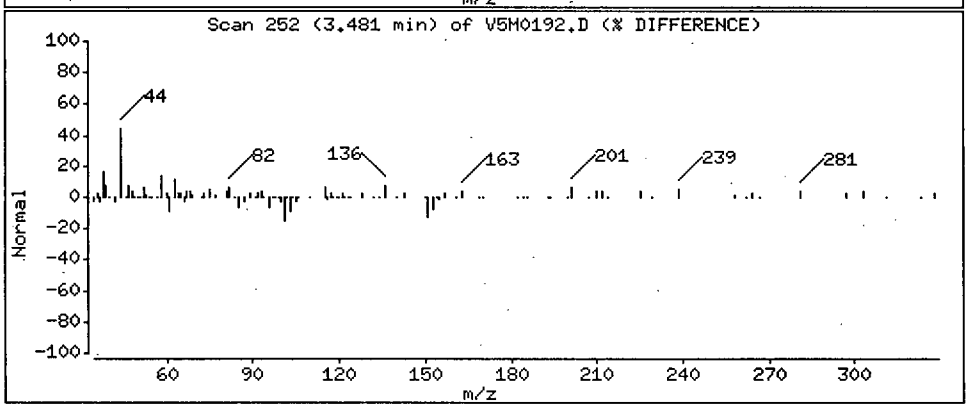
Column phase: DB-624 | Column diameter: 0.25

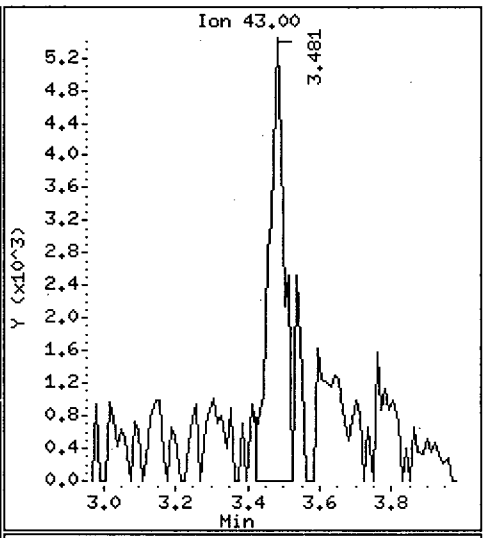
9 Acetone | Concentration: 4.7 ug/L

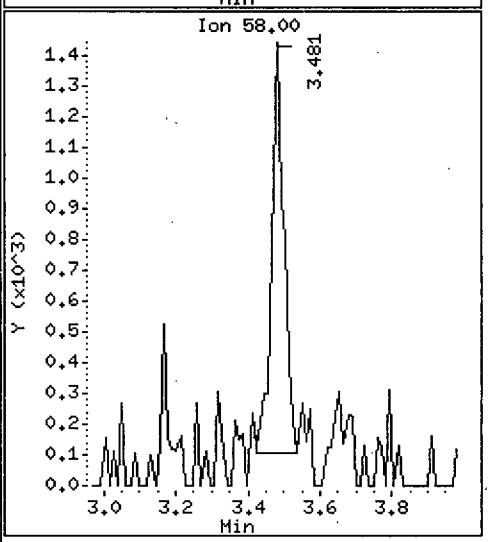












Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D

Date : 29-JUN-2010 04:00

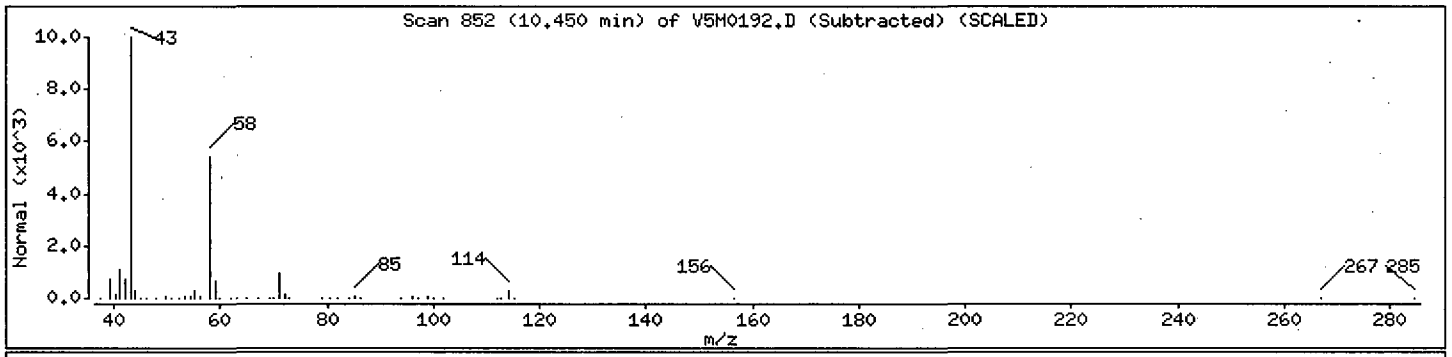
Client ID: F3JL2 Instrument: V5.i

Sample Info: 25ML,J1288-08A,,52603

Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0192.D

Date : 29-JUN-2010 04:00

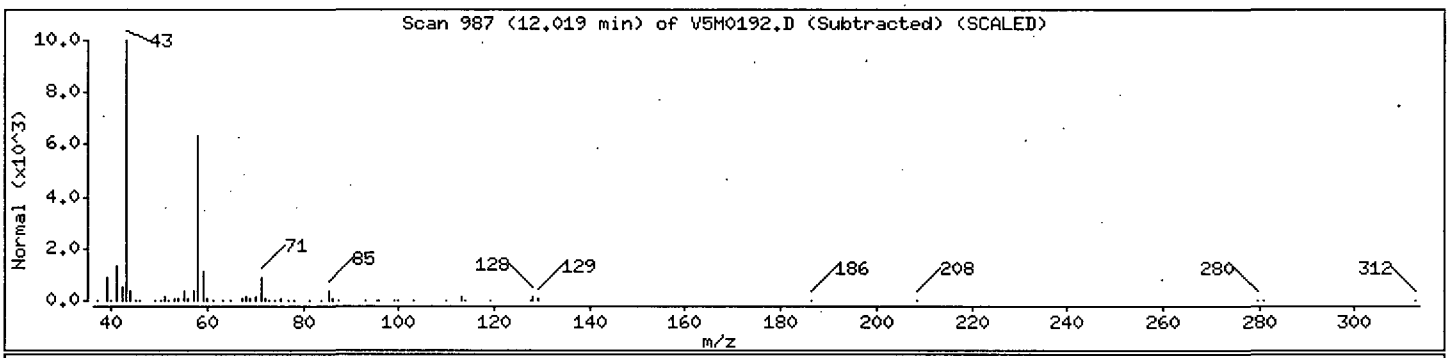
Client ID: F3JL2 Instrument: V5.i

Sample Info: 25ML,J1288-08A,,52603

Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JL3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0200.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JL3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0200.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

F3JL3

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0200.D

Level: (TRACE or LOW/MED) TRACE Date Received: 06/24/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

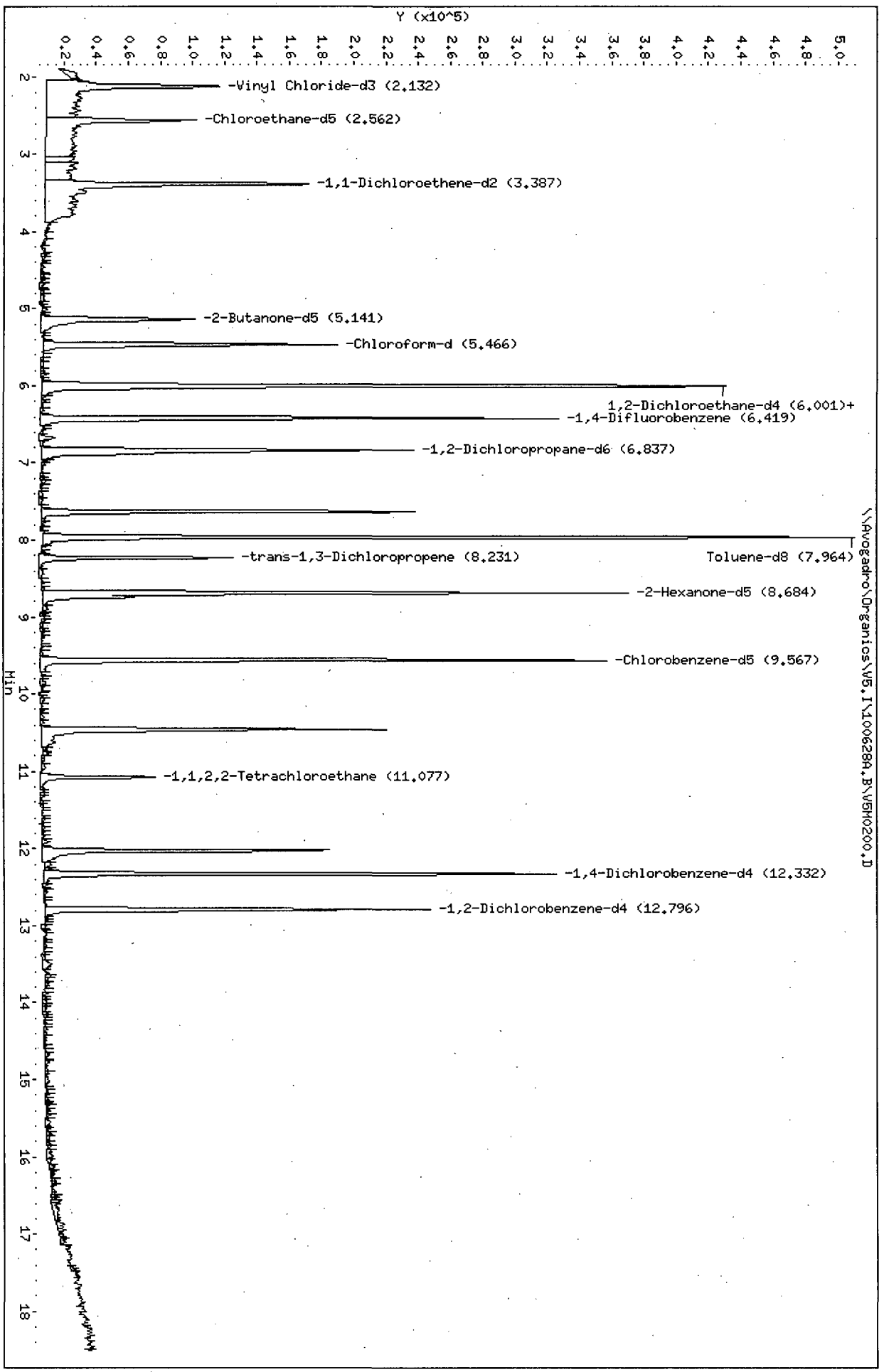
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	10.450	3.5	J
02		Unknown-02	12.018	3.3	J
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5H0200.D
Date : 29-JUN-2010 07:52
Client ID: F3JL3
Sample Info: 25ML,J1288-16A,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0200.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0200.D
Lab Smp Id: J1288-16A Client Smp ID: F3JL3
Inj Date : 29-JUN-2010 07:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-16A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.120	2.127	(0.330)	182502	4.48057	4.5
$ 80 Chloroethane-d5	69	2.562	2.556	(0.399)	94764	4.92311	4.9
$ 81 1,1-Dichloroethene-d2	65	3.387	3.381	(0.528)	46767	4.49985	4.5(Q)
$ 82 2-Butanone-d5	46	5.141	5.135	(0.801)	219840	40.5074	41(A)
$ 83 Chloroform-d	84	5.466	5.461	(0.852)	155758	4.60613	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.989	5.983	(0.933)	66392	4.69477	4.7
$ 84 Benzene-d6	84	6.012	6.007	(0.628)	399517	4.66971	4.7
* 26 1,4-Difluorobenzene	114	6.418	6.413	(1.000)	269314	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.837	6.831	(0.715)	124097	4.26971	4.3
$ 33 Toluene-d8	98	7.963	7.958	(0.832)	359293	4.84888	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.225	(0.860)	64160	4.62243	4.6
$ 87 2-Hexanone-d5	63	8.684	8.690	(0.908)	152625	45.9802	46(A)
* 42 Chlorobenzene-d5	117	9.567	9.561	(1.000)	210623	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.071	(1.158)	46066	4.65064	4.7
* 78 1,4-Dichlorobenzene-d4	152	12.331	12.326	(1.000)	90585	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.796	12.791	(1.038)	69878	4.87652	4.9

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0200.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0200.D
Lab Smp Id: J1288-16A Client Smp ID: F3JL3
Inj Date : 29-JUN-2010 07:52
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-16A,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 42 Chlorobenzene-d5	9.567	773745	5.000
* 78 1,4-Dichlorobenzene-d4	12.332	673904	5.000

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
10.450	538633	3.48068073	3.5	0		0	42
Unknown				CAS #:			
12.018	451122	3.34707745	3.3	0		0	78

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0200.D

Date : 29-JUN-2010 07:52

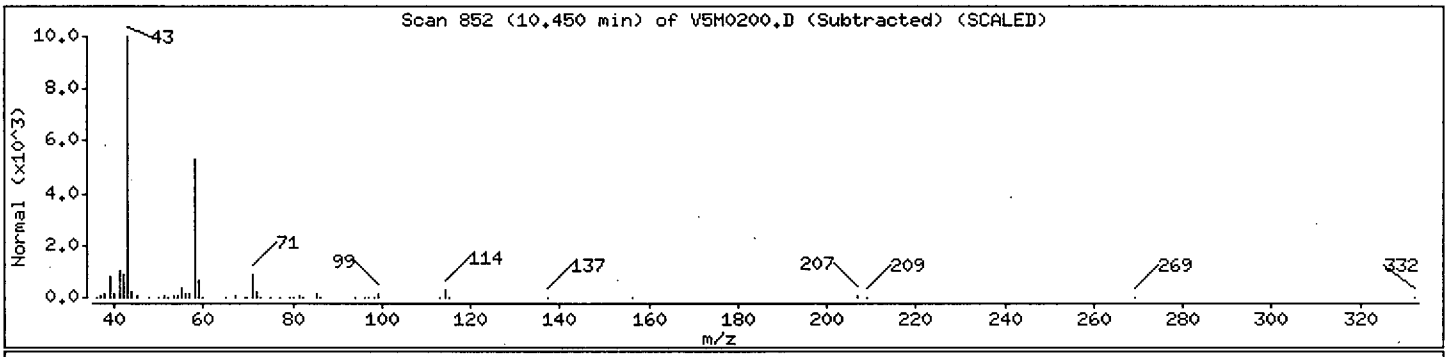
Client ID: F3JL3 Instrument: V5.i

Sample Info: 25ML,J1288-16A,,52603

Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0200.D

Date : 29-JUN-2010 07:52

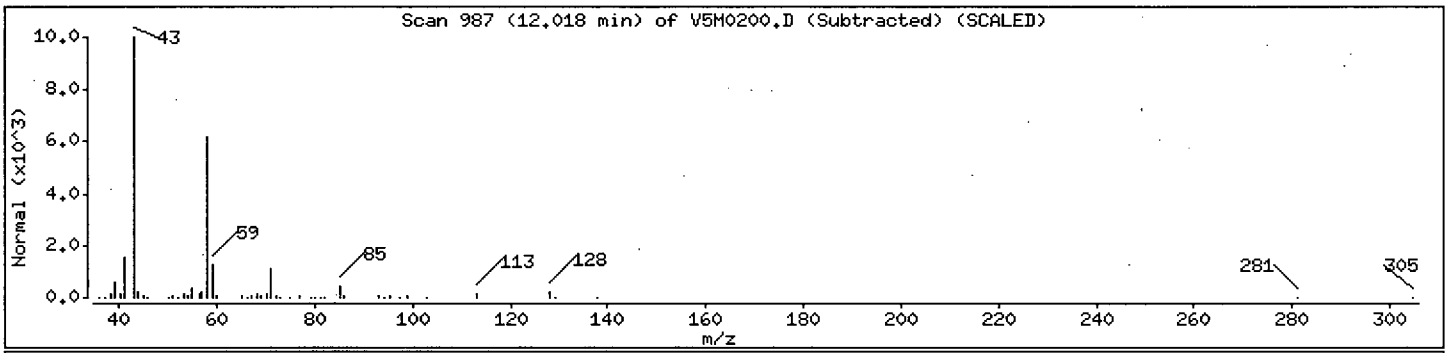
Client ID: F3JL3 Instrument: V5.i

Sample Info: 25ML,J1288-16A,,52603

Purge Volume: 25.0 Operator: SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date(s): 06/07/2010 06/07/2010

Heated Purge: (Y/N) N Calibration Time(s): 11:56 13:51

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5L9662.D RRF001 = V5L9665.D

RRF005 = V5L9661.D RRF010 = V5L9664.D RRF020 = V5L9663.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.506	0.440	0.553	0.599	0.604	0.540	12.7
Chloromethane	1.277	1.178	1.215	1.328	1.338	1.267	5.5
Vinyl chloride	0.743	0.762	0.791	0.866	0.861	0.804	7.0
Bromomethane	0.357	0.286	0.290	0.310	0.290	0.307	9.6
Chloroethane	0.306	0.307	0.292	0.296	0.291	0.299	2.5
Trichlorofluoromethane	0.289	0.319	0.305	0.339	0.324	0.315	6.1
1,1-Dichloroethene	0.242	0.243	0.256	0.266	0.261	0.254	4.2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.219	0.228	0.232	0.263	0.250	0.238	7.6
Acetone	0.076	0.069	0.047	0.046	0.048	0.057	24.4
Carbon disulfide	1.001	1.038	1.069	1.075	1.096	1.056	3.5
Methyl acetate	0.244	0.175	0.143	0.140	0.135	0.167	27.2
Methylene chloride	0.225	0.245	0.250	0.243	0.249	0.243	4.3
trans-1,2-Dichloroethene	0.282	0.284	0.299	0.317	0.311	0.299	5.3
Methyl tert-butyl ether	0.356	0.372	0.335	0.370	0.397	0.366	6.2
1,1-Dichloroethane	0.709	0.728	0.736	0.767	0.801	0.748	4.9
cis-1,2-Dichloroethene	0.344	0.316	0.342	0.360	0.360	0.344	5.2
2-Butanone	0.103	0.101	0.091	0.097	0.103	0.099	5.0
Bromochloromethane	0.099	0.084	0.086	0.089	0.090	0.089	6.2
Chloroform	0.497	0.546	0.512	0.542	0.566	0.533	5.2
1,1,1-Trichloroethane	0.517	0.520	0.540	0.542	0.528	0.529	2.1
Cyclohexane	1.183	1.159	1.201	1.178	1.119	1.168	2.7
Carbon tetrachloride	0.382	0.361	0.391	0.389	0.367	0.378	3.6
Benzene	2.163	1.927	2.039	1.949	1.814	1.979	6.6
1,2-Dichloroethane	0.300	0.316	0.296	0.327	0.314	0.311	4.1
Trichloroethene	0.387	0.473	0.469	0.451	0.438	0.444	7.9
Methylcyclohexane	0.813	0.815	0.880	0.829	0.743	0.816	6.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date(s): 06/07/2010 06/07/2010

Heated Purge: (Y/N) N Calibration Time(s): 11:56 13:51

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5L9662.D RRF001 = V5L9665.D

RRF005 = V5L9661.D RRF010 = V5L9664.D RRF020 = V5L9663.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.583	0.543	0.552	0.524	0.507	0.542	5.3
Bromodichloromethane	0.434	0.446	0.448	0.420	0.415	0.432	3.5
cis-1,3-Dichloropropene	0.628	0.624	0.601	0.601	0.610	0.613	2.1
4-Methyl-2-pentanone	0.350	0.365	0.287	0.292	0.289	0.317	11.9
Toluene	1.991	1.964	1.906	1.848	1.736	1.889	5.4
trans-1,3-Dichloropropene	0.420	0.422	0.423	0.411	0.406	0.416	1.8
1,1,2-Trichloroethane	0.201	0.182	0.199	0.187	0.180	0.190	5.1
Tetrachloroethene	0.303	0.316	0.322	0.298	0.263	0.300	7.7
2-Hexanone	0.261	0.284	0.192	0.202	0.190	0.226	19.3
Dibromochloromethane	0.195	0.190	0.188	0.171	0.172	0.183	6.1
1,2-Dibromoethane	0.123	0.196	0.185	0.174	0.164	0.168	16.6
Chlorobenzene	1.125	1.165	1.027	1.007	0.987	1.062	7.4
Ethylbenzene	2.201	2.137	2.128	2.082	2.000	2.110	3.5
m,p-Xylene	0.807	0.826	0.802	0.780	0.716	0.786	5.4
o-Xylene	0.656	0.745	0.740	0.691	0.680	0.702	5.5
Styrene	1.053	1.144	1.106	1.109	1.074	1.098	3.2
Bromoform	0.151	0.257	0.228	0.227	0.200	0.213	18.6
Isopropylbenzene	1.805	1.948	1.826	1.806	1.711	1.819	4.6
1,1,2,2-Tetrachloroethane	0.230	0.240	0.213	0.211	0.203	0.219	7.0
1,3-Dichlorobenzene	1.659	1.543	1.458	1.498	1.401	1.512	6.5
1,4-Dichlorobenzene	1.630	1.592	1.358	1.410	1.287	1.456	10.3
1,2-Dichlorobenzene	1.102	1.180	1.078	1.112	1.020	1.099	5.3
1,2-Dibromo-3-chloropropane	0.061	0.067	0.068	0.063	0.059	0.064	6.1
1,2,4-Trichlorobenzene	1.056	1.111	0.925	1.041	1.031	1.033	6.6
1,2,3-Trichlorobenzene	0.846	0.819	0.663	0.745	0.731	0.761	9.6

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date(s): 06/07/2010 06/07/2010

Heated Purge: (Y/N) N Calibration Time(s): 11:56 13:51

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5L9662.D RRF001 = V5L9665.D

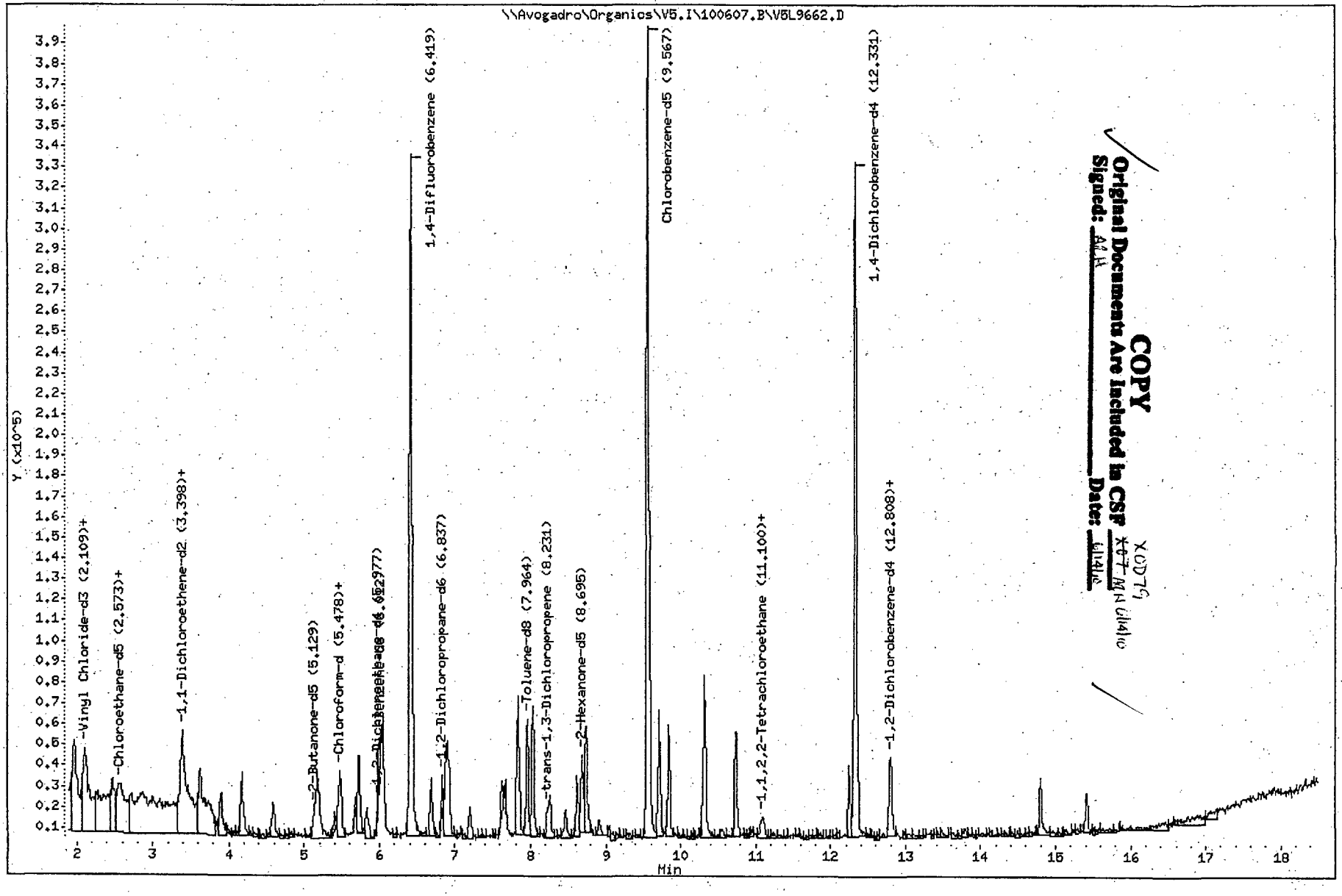
RRF005 = V5L9661.D RRF010 = V5L9664.D RRF020 = V5L9663.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.680	0.721	0.754	0.817	0.809	0.756	7.7
Chloroethane-d5	0.360	0.364	0.345	0.369	0.349	0.357	2.8
1,1-Dichloroethene-d2	0.238	0.194	0.169	0.180	0.184	0.193	13.9
2-Butanone-d5	0.095	0.098	0.094	0.104	0.113	0.101	7.8
Chloroform-d	0.583	0.593	0.640	0.655	0.668	0.628	6.0
1,2-Dichloroethane-d4	0.233	0.266	0.268	0.274	0.272	0.263	6.5
Benzene-d6	1.892	2.059	2.142	2.074	1.989	2.031	4.7
1,2-Dichloropropane-d6	0.575	0.702	0.744	0.727	0.701	0.690	9.7
Toluene-d8	1.767	1.810	1.815	1.749	1.655	1.759	3.7
trans-1,3-Dichloropropene-d4	0.353	0.320	0.334	0.323	0.316	0.330	4.5
2-Hexanone-d5	0.080	0.084	0.075	0.076	0.081	0.079	4.7
1,1,2,2-Tetrachloroethane-d2	0.212	0.243	0.247	0.234	0.239	0.235	5.9
1,2-Dichlorobenzene-d4	0.727	0.878	0.776	0.806	0.767	0.791	7.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only SOM01.2 (6/2007)

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9662.D
Date : 07-JUN-2010 12:25
Client ID: VSTD0.5L5
Sample Info: 25ML,VSTD0.5L5,VSTD0.5L5
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



COPY
Original Documents Are Included in CSF
Signed: AH **Date:** 6/14/10

0152

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9662.D
Report Date: 08-Jun-2010 10:42

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100607.B\V5L9662.D
Lab Smp Id: VSTD0.5L5 Client Smp ID: VSTD0.5L5
Inj Date : 07-JUN-2010 12:25
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0.5L5,VSTD0.5L5
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100607.B\V5_TVOA1359.m
Meth Date : 08-Jun-2010 10:25 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 12:25 Cal File: V5L9662.D
Als bottle: 28 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.830	1.816	(0.285)	14363	0.50000	0.47(a)
2 Chloromethane	50	1.969	1.990	(0.307)	36268	0.50000	0.50
$ 79 Vinyl Chloride-d3	65	2.108	2.130	(0.329)	19313	0.50000	0.45(a)
3 Vinyl Chloride	62	2.120	2.141	(0.330)	21099	0.50000	0.46(a) 0.743
4 Bromomethane	94	2.468	2.490	(0.385)	10132	0.50000	0.58
$ 80 Chloroethane-d5	69	2.561	2.560	(0.399)	10220	0.50000	0.50
5 Chloroethane	64	2.585	2.594	(0.403)	8700	0.50000	0.51
6 Trichlorofluoromethane	101	2.863	2.873	(0.446)	8207	0.50000	0.46(a)
$ 81 1,1-Dichloroethene-d2	65	3.386	3.384	(0.528)	6767	0.50000	0.62(Q)
7 1,1-Dichloroethene	96	3.398	3.408	(0.529)	6885	0.50000	0.48(a)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.409	3.419	(0.531)	6214	0.50000	0.46(a)
9 Acetone	43	3.479	3.477	(0.542)	21604	5.00000	6.6
10 Carbon Disulfide	76	3.630	3.628	(0.566)	28436	0.50000	0.47(a)
11 Methyl Acetate	43	3.804	3.814	(0.593)	6923	0.50000	0.73(T)
12 Methylene Chloride	84	3.897	3.907	(0.607)	6387	0.50000	0.46(aQ)
13 trans-1,2-Dichloroethene	96	4.164	4.174	(0.649)	8007	0.50000	0.47(a)
14 Methyl tert-Butyl Ether	73	4.176	4.186	(0.651)	10103	0.50000	0.49(aQ)
15 1,1-Dichloroethane	63	4.594	4.604	(0.716)	20150	0.50000	0.47(a)
$ 82 2-Butanone-d5	46	5.129	5.138	(0.799)	27070	5.00000	4.7
17 cis-1,2-Dichloroethene	96	5.175	5.173	(0.806)	9762	0.50000	0.50
16 2-Butanone	43	5.198	5.197	(0.810)	29183	5.00000	5.2
18 Bromochloromethane	128	5.419	5.417	(0.844)	2799	0.50000	0.55(Q)

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9662.D
Report Date: 08-Jun-2010 10:42

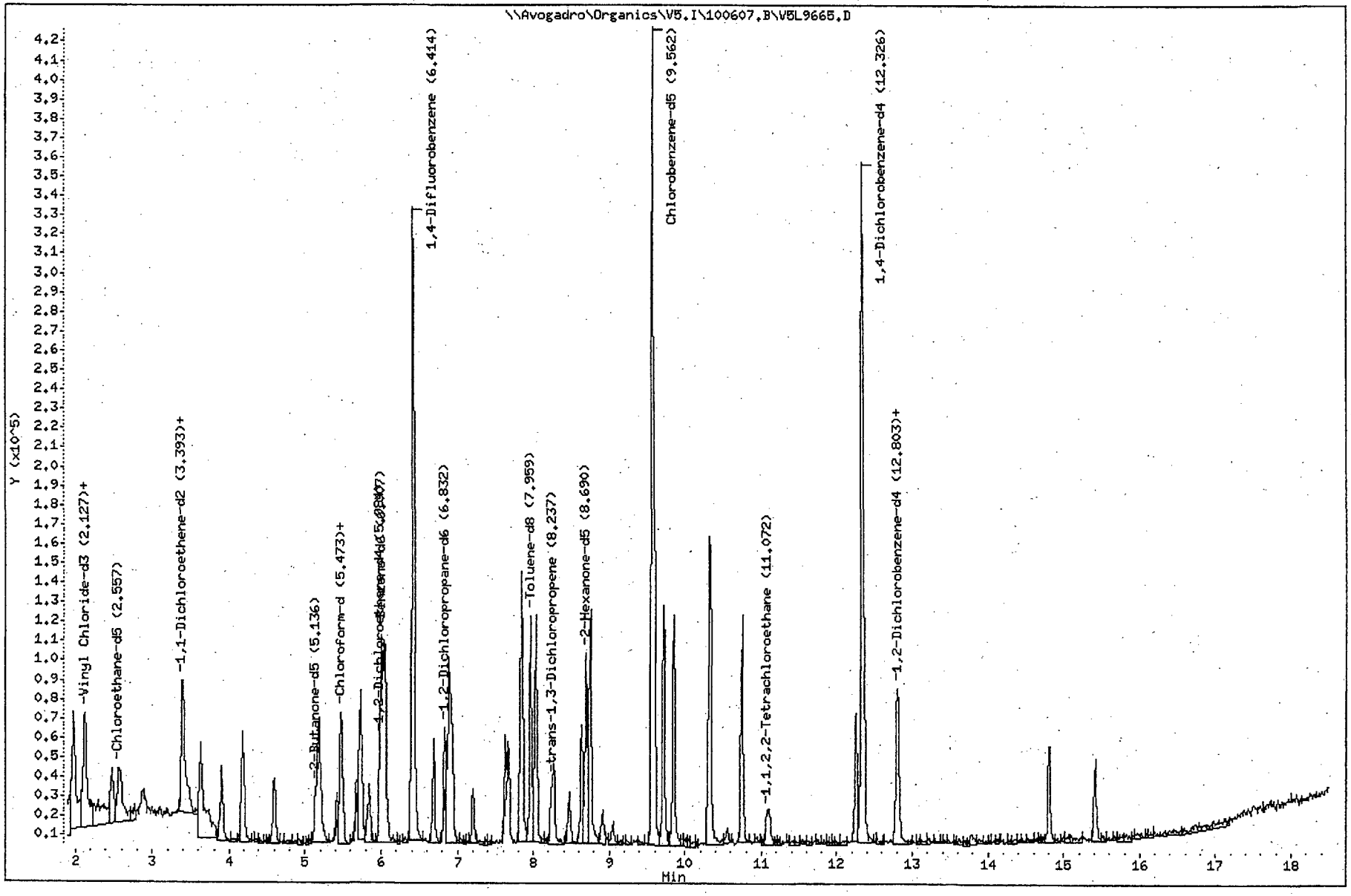
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83 Chloroform-d	84	5.466	5.464	(0.852)	16553	0.50000	0.46(a)
	19 Chloroform	83	5.477	5.487	(0.853)	14130	0.50000	0.47(a)
	20 1,1,1-Trichloroethane	97	5.675	5.673	(0.593)	11359	0.50000	0.49(a)
	21 Cyclohexane	56	5.733	5.731	(0.599)	25985	0.50000	0.51
	22 Carbon Tetrachloride	117	5.837	5.847	(0.610)	8385	0.50000	0.51
$	23 1,2-Dichloroethane-d4	65	5.977	5.986	(0.931)	6610	0.50000	0.44(aQ)
$	84 Benzene-d6	84	6.000	6.010	(0.627)	41545	0.50000	0.47(a)
	25 Benzene	78	6.046	6.045	(0.632)	47507	0.50000	0.55
	24 1,2-Dichloroethane	62	6.058	6.068	(0.944)	8534	0.50000	0.48(a)
*	26 1,4-Difluorobenzene	114	6.418	6.416	(1.000)	284078	5.00000	
	27 Trichloroethene	95	6.685	6.683	(0.699)	8490	0.50000	0.44(a) 0.387
$	85 1,2-Dichloropropane-d6	67	6.836	6.834	(0.715)	12635	0.50000	0.42(a)
	28 Methylcyclohexane	83	6.883	6.893	(0.720)	17855	0.50000	0.50
	29 1,2-Dichloropropane	63	6.929	6.927	(0.724)	12800	0.50000	0.54(T)
	30 Bromodichloromethane	83	7.208	7.206	(0.754)	9527	0.50000	0.50
	31 cis-1,3-Dichloropropene	75	7.673	7.671	(0.802)	13799	0.50000	0.51
	32 4-Methyl-2-Pentanone	43	7.835	7.834	(0.819)	76963	5.00000	5.5
$	33 Toluene-d8	98	7.963	7.961	(0.832)	38792	0.50000	0.50
	34 Toluene	91	8.033	8.031	(0.840)	43724	0.50000	0.53
$	86 trans-1,3-Dichloropropene-d4	79	8.230	8.228	(0.860)	7755	0.50000	0.54
	35 trans-1,3-Dichloropropene	75	8.253	8.263	(0.863)	9212	0.50000	0.50
	36 1,1,2-Trichloroethane	97	8.474	8.472	(0.886)	4423	0.50000	0.53
	37 Tetrachloroethene	164	8.625	8.635	(0.902)	6659	0.50000	0.50
$	87 2-Hexanone-d5	63	8.683	8.682	(0.908)	17461	5.00000	5.0
	38 2-Hexanone	43	8.741	8.740	(0.914)	57315	5.00000	5.8
	39 Dibromochloromethane	129	8.916	8.914	(0.932)	4278	0.50000	0.53
	40 1,2-Dibromoethane	107	9.043	9.053	(0.945)	2706	0.50000	0.37(TaQ)
*	42 Chlorobenzene-d5	117	9.566	9.564	(1.000)	219593	5.00000	
	43 Chlorobenzene	112	9.601	9.599	(1.004)	24702	0.50000	0.53
	44 Ethylbenzene	91	9.717	9.715	(1.016)	48329	0.50000	0.52
	45 m,p-Xylene	106	9.845	9.843	(1.029)	17716	0.50000	0.51
	46 o-Xylene	106	10.310	10.308	(1.078)	14404	0.50000	0.47(aQ)
	47 Styrene	104	10.333	10.331	(1.080)	23131	0.50000	0.48(a)
	48 Bromoform	173	10.554	10.563	(0.856)	1348	0.50000	0.36(aQ)
	49 Isopropylbenzene	105	10.751	10.749	(1.124)	39630	0.50000	0.50
$	89 1,1,2,2-Tetrachloroethane-d2	84	11.088	11.075	(1.159)	4653	0.50000	0.45(a)
	51 1,1,2,2-Tetrachloroethane	83	11.111	11.098	(1.161)	5051	0.50000	0.52(T)
	52 1,3-Dichlorobenzene	146	12.250	12.248	(0.993)	14766	0.50000	0.55
*	78 1,4-Dichlorobenzene-d4	152	12.331	12.329	(1.000)	88999	5.00000	
	53 1,4-Dichlorobenzene	146	12.354	12.352	(1.002)	14510	0.50000	0.56
$	90 1,2-Dichlorobenzene-d4	152	12.796	12.794	(1.038)	6470	0.50000	0.46(a)
	54 1,2-Dichlorobenzene	146	12.819	12.817	(1.040)	9812	0.50000	0.50
	55 1,2-Dibromo-3-chloropropane	75	13.771	13.781	(1.117)	546	0.50000	0.48(TaQ) 0.061
	56 1,2,4-Trichlorobenzene	180	14.805	14.803	(1.201)	9397	0.50000	0.51
	77 1,2,3-Trichlorobenzene	180	15.421	15.408	(1.251)	7533	0.50000	0.56(Q)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9665.D
Date : 07-JUN-2010 13:51
Client ID: VSTD001L5
Sample Info: 25ML,VSTD001L5,VSTD001L5
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



0165

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9665.D
Report Date: 08-Jun-2010 10:42

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100607.B\V5L9665.D
Lab Smp Id: VSTD001L5 Client Smp ID: VSTD001L5
Inj Date : 07-JUN-2010 13:51
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD001L5,VSTD001L5
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100607.B\V5_TVOA1359.m
Meth Date : 08-Jun-2010 10:25 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 31 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.825	1.816	(0.285)	25514	1.00000	0.81
2 Chloromethane	50	1.976	1.990	(0.308)	68254	1.00000	0.93
$ 79 Vinyl Chloride-d3	65	2.115	2.130	(0.330)	41798	1.00000	0.95
3 Vinyl Chloride	62	2.127	2.141	(0.332)	44134	1.00000	0.95
4 Bromomethane	94	2.475	2.490	(0.386)	16571	1.00000	0.93 (Q)
$ 80 Chloroethane-d5	69	2.556	2.560	(0.399)	21097	1.00000	1.0
5 Chloroethane	64	2.591	2.594	(0.404)	17781	1.00000	1.0
6 Trichlorofluoromethane	101	2.870	2.873	(0.448)	18469	1.00000	1.0
$ 81 1,1-Dichloroethene-d2	65	3.393	3.384	(0.529)	11230	1.00000	1.0 (Q)
7 1,1-Dichloroethene	96	3.404	3.408	(0.531)	14096	1.00000	0.96
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.404	3.419	(0.531)	13201	1.00000	0.96
9 Acetone	43	3.486	3.477	(0.544)	39810	10.0000	12
10 Carbon Disulfide	76	3.637	3.628	(0.567)	60135	1.00000	0.98
11 Methyl Acetate	43	3.811	3.814	(0.594)	10168	1.00000	1.0
12 Methylene Chloride	84	3.904	3.907	(0.609)	14219	1.00000	1.0
13 trans-1,2-Dichloroethene	96	4.183	4.174	(0.652)	16431	1.00000	0.95 0.284
14 Methyl tert-Butyl Ether	73	4.194	4.186	(0.654)	21572	1.00000	1.0
15 1,1-Dichloroethane	63	4.601	4.604	(0.717)	42163	1.00000	0.97
$ 82 2-Butanone-d5	46	5.135	5.138	(0.801)	56710	10.0000	9.7
17 cis-1,2-Dichloroethene	96	5.182	5.173	(0.808)	18335	1.00000	0.92
16 2-Butanone	43	5.193	5.197	(0.810)	58258	10.0000	10
18 Bromochloromethane	128	5.414	5.417	(0.844)	4874	1.00000	0.94 (Q)

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9665.D
Report Date: 08-Jun-2010 10:42

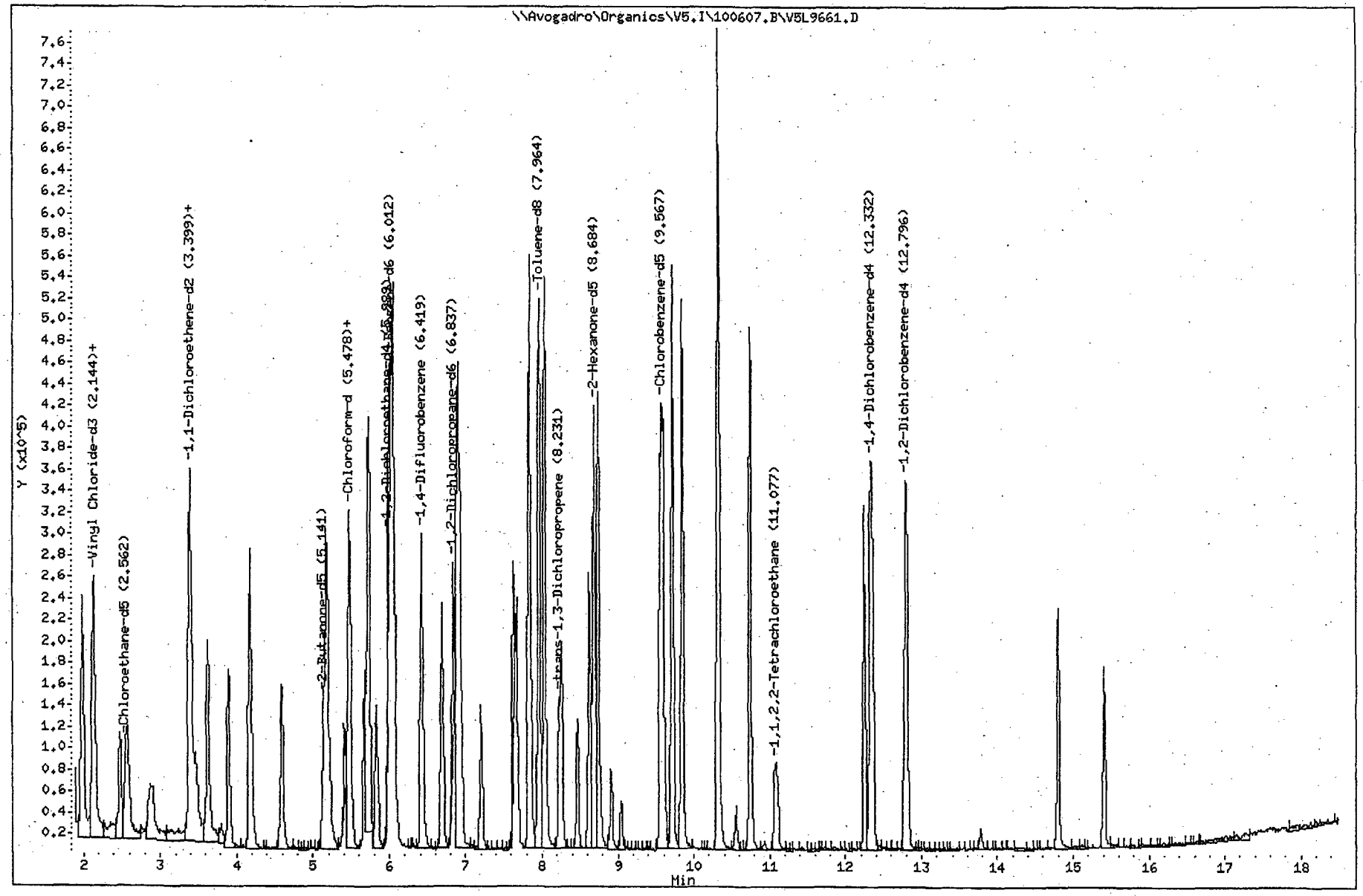
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	83 Chloroform-d	84	5.472	5.464	(0.853)	34371	1.00000	0.94
	19 Chloroform	83	5.484	5.487	(0.855)	31627	1.00000	1.0
	20 1,1,1-Trichloroethane	97	5.681	5.673	(0.594)	23398	1.00000	0.98
	21 Cyclohexane	56	5.728	5.731	(0.599)	52143	1.00000	0.99
	22 Carbon Tetrachloride	117	5.844	5.847	(0.611)	16244	1.00000	0.96
$	23 1,2-Dichloroethane-d4	65	5.983	5.986	(0.933)	15439	1.00000	1.0
$	84 Benzene-d6	84	6.007	6.010	(0.628)	92618	1.00000	1.0
	25 Benzene	78	6.041	6.045	(0.632)	86715	1.00000	0.97
	24 1,2-Dichloroethane	62	6.065	6.068	(0.946)	18315	1.00000	1.0
*	26 1,4-Difluorobenzene	114	6.413	6.416	(1.000)	289747	5.00000	
	27 Trichloroethene	95	6.692	6.683	(0.700)	21303	1.00000	1.1
$	85 1,2-Dichloropropane-d6	67	6.831	6.834	(0.714)	31589	1.00000	1.0
	28 Methylcyclohexane	83	6.889	6.893	(0.721)	36676	1.00000	1.00
	29 1,2-Dichloropropane	63	6.924	6.927	(0.724)	24439	1.00000	1.0
	30 Bromodichloromethane	83	7.203	7.206	(0.753)	20049	1.00000	1.0
	31 cis-1,3-Dichloropropene	75	7.668	7.671	(0.802)	28071	1.00000	1.0
	32 4-Methyl-2-Pentanone	43	7.842	7.834	(0.820)	164169	10.0000	12
$	33 Toluene-d8	98	7.958	7.961	(0.832)	81420	1.00000	1.0
	34 Toluene	91	8.028	8.031	(0.840)	88351	1.00000	1.0
$	86 trans-1,3-Dichloropropene-d4	79	8.237	8.228	(0.862)	14419	1.00000	0.97
	35 trans-1,3-Dichloropropene	75	8.260	8.263	(0.864)	18986	1.00000	1.0
	36 1,1,2-Trichloroethane	97	8.469	8.472	(0.886)	8205	1.00000	0.96
	37 Tetrachloroethene	164	8.632	8.635	(0.903)	14216	1.00000	1.1
$	87 2-Hexanone-d5	63	8.690	8.682	(0.909)	37622	10.0000	11
	38 2-Hexanone	43	8.748	8.740	(0.915)	127668	10.0000	13
	39 Dibromochloromethane	129	8.911	8.914	(0.932)	8561	1.00000	1.0
	40 1,2-Dibromoethane	107	9.050	9.053	(0.947)	8822	1.00000	1.2(T)
*	42 Chlorobenzene-d5	117	9.561	9.564	(1.000)	224953	5.00000	0.316
	43 Chlorobenzene	112	9.596	9.599	(1.004)	52420	1.00000	1.1
	44 Ethylbenzene	91	9.712	9.715	(1.016)	96144	1.00000	1.0
	45 m,p-Xylene	106	9.852	9.843	(1.030)	37157	1.00000	1.1
	46 o-Xylene	106	10.316	10.308	(1.079)	33516	1.00000	1.1
	47 Styrene	104	10.328	10.331	(1.080)	51485	1.00000	1.0
	48 Bromoform	173	10.560	10.563	(0.857)	4625	1.00000	1.2
	49 Isopropylbenzene	105	10.746	10.749	(1.124)	87632	1.00000	1.1
$	89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.075	(1.158)	10946	1.00000	1.0
	51 1,1,2,2-Tetrachloroethane	83	11.106	11.098	(1.162)	10796	1.00000	1.1(T)
	52 1,3-Dichlorobenzene	146	12.256	12.248	(0.994)	27821	1.00000	1.0
*	78 1,4-Dichlorobenzene-d4	152	12.326	12.329	(1.000)	90145	5.00000	(Q)
	53 1,4-Dichlorobenzene	146	12.361	12.352	(1.003)	28711	1.00000	1.1
$	90 1,2-Dichlorobenzene-d4	152	12.791	12.794	(1.038)	15821	1.00000	1.1
	54 1,2-Dichlorobenzene	146	12.814	12.817	(1.040)	21279	1.00000	1.1
	55 1,2-Dibromo-3-chloropropane	75	13.790	13.781	(1.119)	1205	1.00000	1.1(Q)
	56 1,2,4-Trichlorobenzene	180	14.812	14.803	(1.202)	20026	1.00000	1.1
	77 1,2,3-Trichlorobenzene	180	15.416	15.408	(1.251)	14763	1.00000	1.1 0.819

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9661.D
Date : 07-JUN-2010 11:56
Client ID: VSTD005L5
Sample Info: 25ML,VSTD005L5,VSTD005L5
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9661.D
Report Date: 08-Jun-2010 10:42

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100607.B\V5L9661.D
Lab Smp Id: VSTD005L5 Client Smp ID: VSTD005L5
Inj Date : 07-JUN-2010 11:56
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD005L5,VSTD005L5
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100607.B\V5_TVOA1359.m
Meth Date : 08-Jun-2010 10:25 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 11:56 Cal File: V5L9661.D
Als bottle: 27 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.830	1.816	(0.285)	157048	5.00000	5.1
2 Chloromethane	50	1.993	1.990	(0.310)	345296	5.00000	4.8
$ 79 Vinyl Chloride-d3	65	2.144	2.130	(0.334)	214416	5.00000	5.0
3 Vinyl Chloride	62	2.144	2.141	(0.334)	224695	5.00000	4.9
4 Bromomethane	94	2.480	2.490	(0.387)	82536	5.00000	4.7(Q)
$ 80 Chloroethane-d5	69	2.562	2.560	(0.399)	98155	5.00000	4.8
5 Chloroethane	64	2.585	2.594	(0.403)	83096	5.00000	4.9
6 Trichlorofluoromethane	101	2.875	2.873	(0.448)	86621	5.00000	4.8
$ 81 1,1-Dichloroethene-d2	65	3.387	3.384	(0.528)	47963	5.00000	4.4(Q) 0.256
7 1,1-Dichloroethene	96	3.410	3.408	(0.531)	72804	5.00000	5.0
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.433	3.419	(0.535)	65912	5.00000	4.9
9 Acetone	43	3.479	3.477	(0.542)	134659	50.0000	41
10 Carbon Disulfide	76	3.630	3.628	(0.566)	303861	5.00000	5.1
11 Methyl Acetate	43	3.805	3.814	(0.593)	40767	5.00000	4.3
12 Methylene Chloride	84	3.898	3.907	(0.607)	71157	5.00000	5.2
13 trans-1,2-Dichloroethene	96	4.176	4.174	(0.651)	85020	5.00000	5.0
14 Methyl tert-Butyl Ether	73	4.200	4.186	(0.654)	95231	5.00000	4.6
15 1,1-Dichloroethane	63	4.595	4.604	(0.716)	209035	5.00000	4.9
$ 82 2-Butanone-d5	46	5.141	5.138	(0.801)	266665	50.0000	47(A)
17 cis-1,2-Dichloroethene	96	5.175	5.173	(0.806)	97198	5.00000	5.0
16 2-Butanone	43	5.199	5.197	(0.810)	259953	50.0000	46
18 Bromochloromethane	128	5.408	5.417	(0.843)	24390	5.00000	4.8(Q)

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9661.D
Report Date: 08-Jun-2010 10:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 83 Chloroform-d	84	5.466	5.464	(0.852)	181909	5.00000	5.1
19 Chloroform	83	5.489	5.487	(0.855)	145607	5.00000	4.8
20 1,1,1-Trichloroethane	97	5.675	5.673	(0.593)	114623	5.00000	5.1
21 Cyclohexane	56	5.733	5.731	(0.599)	255154	5.00000	5.1
22 Carbon Tetrachloride	117	5.838	5.847	(0.610)	82985	5.00000	5.2
$ 23 1,2-Dichloroethane-d4	65	5.989	5.986	(0.933)	76122	5.00000	5.1
$ 84 Benzene-d6	84	6.012	6.010	(0.628)	454877	5.00000	5.3
25 Benzene	78	6.047	6.045	(0.632)	433102	5.00000	5.2
24 1,2-Dichloroethane	62	6.070	6.068	(0.946)	84068	5.00000	4.8
* 26 1,4-Difluorobenzene	114	6.418	6.416	(1.000)	284189	5.00000	
27 Trichloroethene	95	6.686	6.683	(0.699)	99525	5.00000	5.3
$ 85 1,2-Dichloropropane-d6	67	6.837	6.834	(0.715)	158082	5.00000	5.4
28 Methylcyclohexane	83	6.895	6.893	(0.721)	186875	5.00000	5.4
29 1,2-Dichloropropane	63	6.930	6.927	(0.724)	117191	5.00000	5.1
30 Bromodichloromethane	83	7.208	7.206	(0.754)	95250	5.00000	5.2
31 cis-1,3-Dichloropropene	75	7.673	7.671	(0.802)	127579	5.00000	4.9
32 4-Methyl-2-Pentanone	43	7.836	7.834	(0.819)	610249	50.0000	45
$ 33 Toluene-d8	98	7.963	7.961	(0.832)	385395	5.00000	5.2
34 Toluene	91	8.033	8.031	(0.840)	404897	5.00000	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.228	(0.860)	70956	5.00000	5.1
35 trans-1,3-Dichloropropene	75	8.266	8.263	(0.864)	89811	5.00000	5.1
36 1,1,2-Trichloroethane	97	8.475	8.472	(0.886)	42273	5.00000	5.2(Q)
37 Tetrachloroethene	164	8.626	8.635	(0.902)	68391	5.00000	5.4
$ 87 2-Hexanone-d5	63	8.684	8.682	(0.908)	158357	50.0000	47(A)
38 2-Hexanone	43	8.742	8.740	(0.914)	408417	50.0000	43
39 Dibromochloromethane	129	8.916	8.914	(0.932)	39867	5.00000	5.1
40 1,2-Dibromoethane	107	9.044	9.053	(0.945)	39276	5.00000	5.5
* 42 Chlorobenzene-d5	117	9.567	9.564	(1.000)	212385	5.00000	
43 Chlorobenzene	112	9.601	9.599	(1.004)	218053	5.00000	4.8
44 Ethylbenzene	91	9.718	9.715	(1.016)	451923	5.00000	5.0
45 m,p-Xylene	106	9.845	9.843	(1.029)	170315	5.00000	5.1
46 o-Xylene	106	10.310	10.308	(1.078)	157257	5.00000	5.3
47 Styrene	104	10.333	10.331	(1.080)	234993	5.00000	5.0
48 Bromoform	173	10.554	10.563	(0.856)	20809	5.00000	5.4
49 Isopropylbenzene	105	10.740	10.749	(1.123)	387709	5.00000	5.0
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.075	(1.158)	52479	5.00000	5.3
51 1,1,2,2-Tetrachloroethane	83	11.100	11.098	(1.160)	45247	5.00000	4.9
52 1,3-Dichlorobenzene	146	12.250	12.248	(0.993)	133324	5.00000	4.8
* 78 1,4-Dichlorobenzene-d4	152	12.331	12.329	(1.000)	91457	5.00000	
53 1,4-Dichlorobenzene	146	12.355	12.352	(1.002)	124243	5.00000	4.7
$ 90 1,2-Dichlorobenzene-d4	152	12.796	12.794	(1.038)	71010	5.00000	4.9
54 1,2-Dichlorobenzene	146	12.819	12.817	(1.040)	98585	5.00000	4.9
55 1,2-Dibromo-3-chloropropane	75	13.783	13.781	(1.118)	6219	5.00000	5.3(Q)
56 1,2,4-Trichlorobenzene	180	14.806	14.803	(1.201)	84563	5.00000	4.5
77 1,2,3-Trichlorobenzene	180	15.410	15.408	(1.250)	60620	5.00000	4.4

1.027

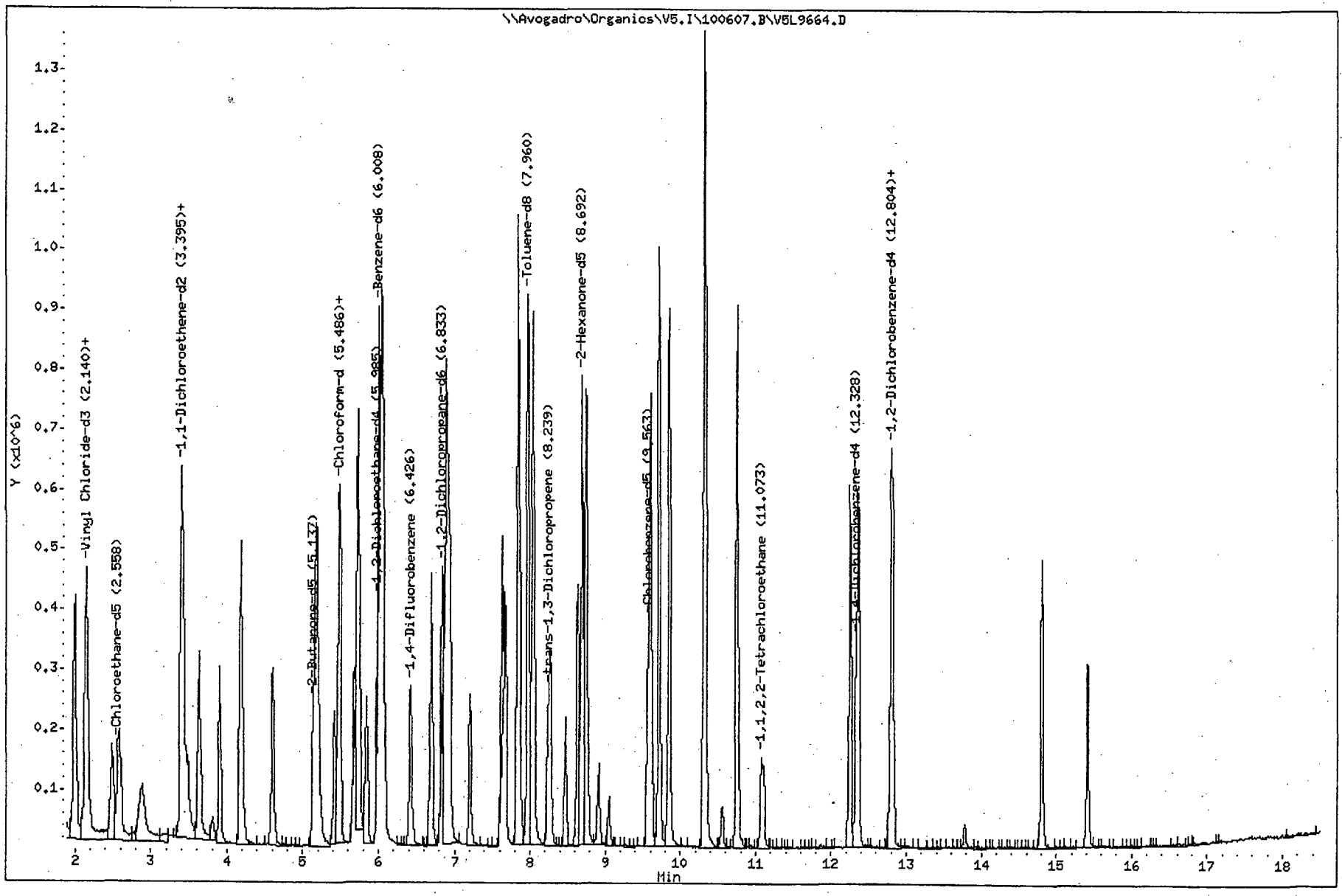
1.458

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9664.D
Date : 07-JUN-2010 13:22
Client ID: VSTD010L5
Sample Info: 25ML,VSTD010L5,VSTD010L5
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9664.D
Report Date: 08-Jun-2010 10:42

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100607.B\V5L9664.D
Lab Smp Id: VSTD010L5 Client Smp ID: VSTD010L5
Inj Date : 07-JUN-2010 13:22
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD010L5,VSTD010L5
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100607.B\V5_TVOA1359.m
Meth Date : 08-Jun-2010 10:25 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:22 Cal File: V5L9664.D
Als bottle: 30 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.826	1.816	(0.284)	298072	10.0000	11
2 Chloromethane	50	2.000	1.990	(0.311)	660627	10.0000	10
$ 79 Vinyl Chloride-d3	65	2.139	2.130	(0.333)	406376	10.0000	11
3 Vinyl Chloride	62	2.151	2.141	(0.335)	431016	10.0000	11
4 Bromomethane	94	2.488	2.490	(0.387)	154365	10.0000	10
$ 80 Chloroethane-d5	69	2.558	2.560	(0.398)	183665	10.0000	10
5 Chloroethane	64	2.593	2.594	(0.403)	147461	10.0000	9.9
6 Trichlorofluoromethane	101	2.883	2.873	(0.449)	168894	10.0000	11
$ 81 1,1-Dichloroethene-d2	65	3.382	3.384	(0.526)	89360	10.0000	9.3
7 1,1-Dichloroethene	96	3.406	3.408	(0.530)	132545	10.0000	10
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.417	3.419	(0.532)	130978	10.0000	11
9 Acetone	43	3.475	3.477	(0.541)	231138	100.000	81
10 Carbon Disulfide	76	3.626	3.628	(0.564)	534739	10.0000	10
11 Methyl Acetate	43	3.812	3.814	(0.593)	69487	10.0000	8.3
12 Methylene Chloride	84	3.905	3.907	(0.608)	121079	10.0000	10
13 trans-1,2-Dichloroethene	96	4.172	4.174	(0.649)	157607	10.0000	11
14 Methyl tert-Butyl Ether	73	4.196	4.186	(0.653)	184085	10.0000	10
15 1,1-Dichloroethane	63	4.602	4.604	(0.716)	381737	10.0000	10
$ 82 2-Butanone-d5	46	5.137	5.138	(0.799)	515390	100.000	100(A)
17 cis-1,2-Dichloroethene	96	5.171	5.173	(0.805)	179034	10.0000	10
16 2-Butanone	43	5.206	5.197	(0.810)	480545	100.000	98
18 Bromochloromethane	128	5.415	5.417	(0.843)	44141	10.0000	9.9

0.360

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9664.D
Report Date: 08-Jun-2010 10:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
$ 83 Chloroform-d	84	5.473	5.464	(0.852)	325887	10.0000	10	
19 Chloroform	83	5.485	5.487	(0.854)	269739	10.0000	10	
20 1,1,1-Trichloroethane	97	5.683	5.673	(0.594)	213661	10.0000	10	
21 Cyclohexane	56	5.729	5.731	(0.599)	464870	10.0000	10	
22 Carbon Tetrachloride	117	5.845	5.847	(0.611)	153663	10.0000	10	
$ 23 1,2-Dichloroethane-d4	65	5.985	5.986	(0.931)	136457	10.0000	10	
$ 84 Benzene-d6	84	6.008	6.010	(0.628)	818123	10.0000	10	
25 Benzene	78	6.043	6.045	(0.632)	768790	10.0000	9.8	
24 1,2-Dichloroethane	62	6.066	6.068	(0.944)	162742	10.0000	11	
* 26 1,4-Difluorobenzene	114	6.426	6.416	(1.000)	248802	5.00000		(Q)
27 Trichloroethene	95	6.693	6.683	(0.700)	178088	10.0000	10	
$ 85 1,2-Dichloropropane-d6	67	6.833	6.834	(0.715)	286908	10.0000	11	
28 Methylcyclohexane	83	6.891	6.893	(0.721)	327139	10.0000	10	
29 1,2-Dichloropropane	63	6.925	6.927	(0.724)	206901	10.0000	9.7	
30 Bromodichloromethane	83	7.204	7.206	(0.753)	165557	10.0000	9.7	
31 cis-1,3-Dichloropropene	75	7.669	7.671	(0.802)	236974	10.0000	9.8	0.601
32 4-Methyl-2-Pentanone	43	7.843	7.834	(0.820)	1153923	100.000	92	
$ 33 Toluene-d8	98	7.959	7.961	(0.832)	689960	10.0000	9.9	
34 Toluene	91	8.041	8.031	(0.841)	728912	10.0000	9.8	
$ 86 trans-1,3-Dichloropropene-d4	79	8.238	8.228	(0.862)	127603	10.0000	9.8	
35 trans-1,3-Dichloropropene	75	8.261	8.263	(0.864)	162092	10.0000	9.9	
36 1,1,2-Trichloroethane	97	8.470	8.472	(0.886)	73882	10.0000	9.9	
37 Tetrachloroethene	164	8.633	8.635	(0.903)	117460	10.0000	9.9	
$ 87 2-Hexanone-d5	63	8.691	8.682	(0.909)	298097	100.000	96	(A)
38 2-Hexanone	43	8.749	8.740	(0.915)	795771	100.000	89	
39 Dibromochloromethane	129	8.912	8.914	(0.932)	67310	10.0000	9.3	
40 1,2-Dibromoethane	107	9.051	9.053	(0.947)	68611	10.0000	10	
* 42 Chlorobenzene-d5	117	9.562	9.564	(1.000)	197259	5.00000		
43 Chlorobenzene	112	9.597	9.599	(1.004)	397269	10.0000	9.5	
44 Ethylbenzene	91	9.713	9.715	(1.016)	821519	10.0000	9.9	
45 m,p-Xylene	106	9.853	9.843	(1.030)	307675	10.0000	9.9	
46 o-Xylene	106	10.318	10.308	(1.079)	272695	10.0000	9.8	
47 Styrene	104	10.329	10.331	(1.080)	437571	10.0000	10	0.227
48 Bromoform	173	10.561	10.563	(0.857)	37803	10.0000	11	
49 Isopropylbenzene	105	10.747	10.749	(1.124)	712317	10.0000	9.9	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.073	11.075	(1.158)	92403	10.0000	10	
51 1,1,2,2-Tetrachloroethane	83	11.107	11.098	(1.162)	83117	10.0000	9.6	
52 1,3-Dichlorobenzene	146	12.246	12.248	(0.993)	249615	10.0000	9.9	
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.329	(1.000)	83330	5.00000		
53 1,4-Dichlorobenzene	146	12.362	12.352	(1.003)	235035	10.0000	9.7	
$ 90 1,2-Dichlorobenzene-d4	152	12.792	12.794	(1.038)	134385	10.0000	10	
54 1,2-Dichlorobenzene	146	12.815	12.817	(1.040)	185253	10.0000	10	
55 1,2-Dibromo-3-chloropropane	75	13.779	13.781	(1.118)	10512	10.0000	9.9	
56 1,2,4-Trichlorobenzene	180	14.802	14.803	(1.201)	173454	10.0000	10	
77 1,2,3-Trichlorobenzene	180	15.417	15.408	(1.251)	124100	10.0000	9.8	

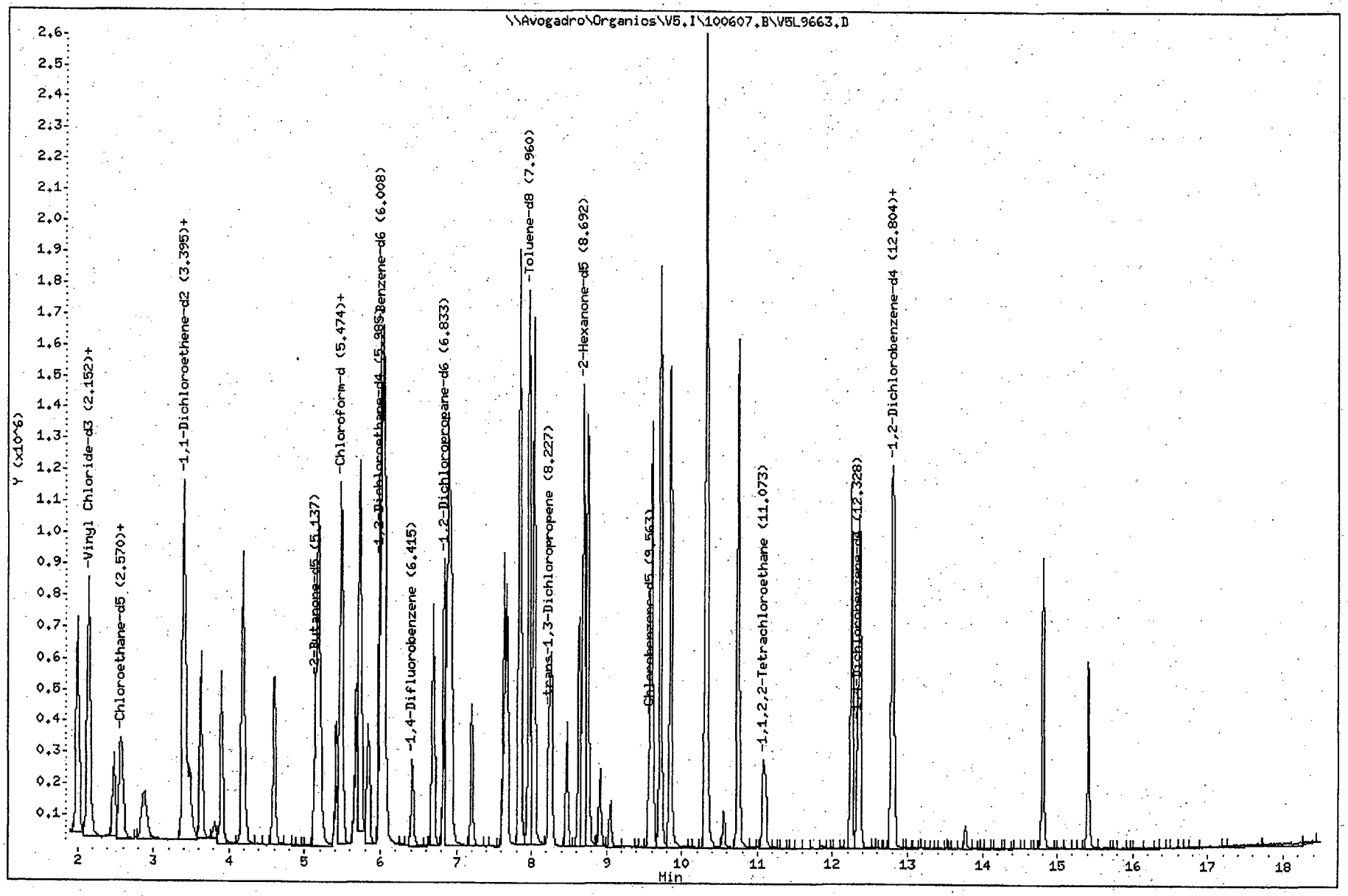
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9663.D
Date : 07-JUN-2010 12:53
Client ID: VSTD020L5
Sample Info: 25ML,VSTD020L5,VSTD020L5
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9663.D
Report Date: 08-Jun-2010 10:42

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100607.B\V5L9663.D
Lab Smp Id: VSTD020L5 Client Smp ID: VSTD020L5
Inj Date : 07-JUN-2010 12:53
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD020L5,VSTD020L5
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100607.B\V5_TVOA1359.m
Meth Date : 08-Jun-2010 10:25 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 12:53 Cal File: V5L9663.D
Als bottle: 29 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.826	1.816	(0.285)	543689	20.0000	22(A)
2 Chloromethane	50	2.000	1.990	(0.312)	1204534	20.0000	21(A)
$ 79 Vinyl Chloride-d3	65	2.140	2.130	(0.334)	728231	20.0000	21(A)
3 Vinyl Chloride	62	2.151	2.141	(0.335)	775029	20.0000	21(A)
4 Bromomethane	94	2.477	2.490	(0.386)	260877	20.0000	19
$ 80 Chloroethane-d5	69	2.558	2.560	(0.399)	313817	20.0000	20
5 Chloroethane	64	2.581	2.594	(0.402)	262301	20.0000	20
6 Trichlorofluoromethane	101	2.883	2.873	(0.450)	291812	20.0000	21(A)
$ 81 1,1-Dichloroethene-d2	65	3.383	3.384	(0.527)	166047	20.0000	19(Q)
7 1,1-Dichloroethene	96	3.406	3.408	(0.531)	235175	20.0000	21(A)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.417	3.419	(0.533)	225539	20.0000	21(A)
9 Acetone	43	3.476	3.477	(0.542)	433271	200.000	170
10 Carbon Disulfide	76	3.627	3.628	(0.565)	986637	20.0000	21(A)
11 Methyl Acetate	43	3.812	3.814	(0.594)	121627	20.0000	16
12 Methylene Chloride	84	3.894	3.907	(0.607)	224282	20.0000	21(AQ)
13 trans-1,2-Dichloroethene	96	4.173	4.174	(0.651)	280228	20.0000	21(A)
14 Methyl tert-Butyl Ether	73	4.196	4.186	(0.654)	357546	20.0000	22(AQ)
15 1,1-Dichloroethane	63	4.602	4.604	(0.718)	721663	20.0000	21(A)
$ 82 2-Butanone-d5	46	5.137	5.138	(0.801)	1019551	200.000	220(A)
17 cis-1,2-Dichloroethene	96	5.172	5.173	(0.806)	323979	20.0000	21(A)
16 2-Butanone	43	5.195	5.197	(0.810)	929017	200.000	210(A)
18 Bromochloromethane	128	5.416	5.417	(0.844)	80806	20.0000	20(AQ)

0.048

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9663.D
Report Date: 08-Jun-2010 10:42

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 83 Chloroform-d	84	5.474	5.464	(0.853)	601646	20.0000	21(A)
19 Chloroform	83	5.485	5.487	(0.855)	509890	20.0000	21(A)
20 1,1,1-Trichloroethane	97	5.683	5.673	(0.594)	380337	20.0000	20
21 Cyclohexane	56	5.729	5.731	(0.599)	805953	20.0000	19
22 Carbon Tetrachloride	117	5.845	5.847	(0.611)	264109	20.0000	19
$ 23 1,2-Dichloroethane-d4	65	5.985	5.986	(0.933)	244511	20.0000	21(AQ)
$ 84 Benzene-d6	84	6.008	6.010	(0.628)	1433194	20.0000	20
25 Benzene	78	6.043	6.045	(0.632)	1307142	20.0000	18
24 1,2-Dichloroethane	62	6.066	6.068	(0.946)	283163	20.0000	20(A)
* 26 1,4-Difluorobenzene	114	6.415	6.416	(1.000)	225098	5.00000	(Q)
27 Trichloroethene	95	6.693	6.683	(0.700)	315343	20.0000	20
$ 85 1,2-Dichloropropane-d6	67	6.833	6.834	(0.715)	504941	20.0000	20(A)
28 Methylcyclohexane	83	6.891	6.893	(0.721)	535709	20.0000	18
29 1,2-Dichloropropane	63	6.926	6.927	(0.724)	365034	20.0000	19
30 Bromodichloromethane	83	7.204	7.206	(0.753)	298906	20.0000	19
31 cis-1,3-Dichloropropene	75	7.669	7.671	(0.802)	439370	20.0000	20
32 4-Methyl-2-Pentanone	43	7.843	7.834	(0.820)	2081914	200.000	180
$ 33 Toluene-d8	98	7.960	7.961	(0.832)	1192810	20.0000	19
34 Toluene	91	8.029	8.031	(0.840)	1250740	20.0000	18
$ 86 trans-1,3-Dichloropropene-d4	79	8.227	8.228	(0.860)	227939	20.0000	19
35 trans-1,3-Dichloropropene	75	8.262	8.263	(0.864)	292528	20.0000	20
36 1,1,2-Trichloroethane	97	8.471	8.472	(0.886)	129533	20.0000	19
37 Tetrachloroethene	164	8.633	8.635	(0.903)	189574	20.0000	18
$ 87 2-Hexanone-d5	63	8.691	8.682	(0.909)	581748	200.000	200(A)
38 2-Hexanone	43	8.738	8.740	(0.914)	1368919	200.000	170
39 Dibromochloromethane	129	8.912	8.914	(0.932)	123779	20.0000	19
40 1,2-Dibromoethane	107	9.052	9.053	(0.947)	118252	20.0000	19(Q)
* 42 Chlorobenzene-d5	117	9.563	9.564	(1.000)	180140	5.00000	
43 Chlorobenzene	112	9.598	9.599	(1.004)	710984	20.0000	19
44 Ethylbenzene	91	9.714	9.715	(1.016)	1441440	20.0000	19
45 m,p-Xylene	106	9.853	9.843	(1.030)	516058	20.0000	18
46 o-Xylene	106	10.318	10.308	(1.079)	489813	20.0000	19
47 Styrene	104	10.329	10.331	(1.080)	774193	20.0000	20
48 Bromoform	173	10.562	10.563	(0.857)	65103	20.0000	19
49 Isopropylbenzene	105	10.748	10.749	(1.124)	1233104	20.0000	19
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.073	11.075	(1.158)	172370	20.0000	20(A)
51 1,1,2,2-Tetrachloroethane	83	11.096	11.098	(1.160)	145979	20.0000	18
52 1,3-Dichlorobenzene	146	12.246	12.248	(0.993)	455230	20.0000	19
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.329	(1.000)	81245	5.00000	(Q)
53 1,4-Dichlorobenzene	146	12.362	12.352	(1.003)	418361	20.0000	18
$ 90 1,2-Dichlorobenzene-d4	152	12.792	12.794	(1.038)	249400	20.0000	19
54 1,2-Dichlorobenzene	146	12.815	12.817	(1.040)	331601	20.0000	19
55 1,2-Dibromo-3-chloropropane	75	13.779	13.781	(1.118)	19069	20.0000	18(Q)
56 1,2,4-Trichlorobenzene	180	14.802	14.803	(1.201)	335006	20.0000	20
77 1,2,3-Trichlorobenzene	180	15.417	15.408	(1.251)	237712	20.0000	19(Q)

1.814

1

1.020

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/28/2010 Time: 22:42

Lab File ID: V5M0181.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055V Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.540	0.375	0.010	-30.7	40.0
Chloromethane	1.267	0.868	0.010	-31.5	40.0
Vinyl chloride	0.804	0.624	0.100	-22.5	30.0
Bromomethane	0.307	0.289	0.100	-5.7	30.0
Chloroethane	0.299	0.256	0.010	-14.4	40.0
Trichlorofluoromethane	0.315	0.300	0.010	-4.9	40.0
1,1-Dichloroethene	0.254	0.254	0.100	0.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.238	0.220	0.010	-7.9	40.0
Acetone	0.057	0.038	0.010	-33.8	40.0
Carbon disulfide	1.056	0.926	0.010	-12.3	40.0
Methyl acetate	0.167	0.106	0.010	-36.7	40.0
Methylene chloride	0.243	0.216	0.010	-10.8	40.0
trans-1,2-Dichloroethene	0.299	0.293	0.010	-1.9	40.0
Methyl tert-butyl ether	0.366	0.348	0.010	-4.8	40.0
1,1-Dichloroethane	0.748	0.604	0.200	-19.3	30.0
cis-1,2-Dichloroethene	0.344	0.315	0.010	-8.7	40.0
2-Butanone	0.099	0.078	0.010	-20.6	40.0
Bromochloromethane	0.089	0.092	0.050	3.4	40.0
Chloroform	0.533	0.472	0.200	-11.4	30.0
1,1,1-Trichloroethane	0.529	0.512	0.100	-3.3	30.0
Cyclohexane	1.168	0.886	0.010	-24.2	40.0
Carbon tetrachloride	0.378	0.386	0.100	2.1	30.0
Benzene	1.979	1.669	0.400	-15.7	30.0
1,2-Dichloroethane	0.311	0.256	0.100	-17.6	30.0
Trichloroethene	0.444	0.445	0.300	0.4	30.0
Methylcyclohexane	0.816	0.652	0.010	-20.1	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/28/2010 Time: 22:42

Lab File ID: V5M0181.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055V Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.542	0.440	0.010	-18.8	40.0
Bromodichloromethane	0.432	0.382	0.200	-11.7	30.0
cis-1,3-Dichloropropene	0.613	0.508	0.200	-17.0	30.0
4-Methyl-2-pentanone	0.317	0.241	0.010	-23.8	40.0
Toluene	1.889	1.777	0.400	-5.9	30.0
trans-1,3-Dichloropropene	0.416	0.367	0.100	-11.9	30.0
1,1,2-Trichloroethane	0.190	0.189	0.100	-0.5	30.0
Tetrachloroethene	0.300	0.320	0.100	6.4	30.0
2-Hexanone	0.226	0.164	0.010	-27.5	40.0
Dibromochloromethane	0.183	0.187	0.100	2.3	30.0
1,2-Dibromoethane	0.168	0.171	0.010	1.6	40.0
Chlorobenzene	1.062	0.983	0.500	-7.4	30.0
Ethylbenzene	2.110	1.943	0.100	-7.9	30.0
m,p-Xylene	0.786	0.726	0.300	-7.6	30.0
o-Xylene	0.702	0.666	0.300	-5.2	30.0
Styrene	1.098	1.089	0.300	-0.8	30.0
Bromoform	0.213	0.262	0.050	23.3	30.0
Isopropylbenzene	1.819	1.799	0.010	-1.1	40.0
1,1,2,2-Tetrachloroethane	0.219	0.185	0.100	-15.8	30.0
1,3-Dichlorobenzene	1.512	1.497	0.400	-1.0	30.0
1,4-Dichlorobenzene	1.456	1.449	0.400	-0.5	30.0
1,2-Dichlorobenzene	1.099	1.146	0.400	4.3	30.0
1,2-Dibromo-3-chloropropane	0.064	0.058	0.010	-9.5	40.0
1,2,4-Trichlorobenzene	1.033	1.077	0.200	4.3	30.0
1,2,3-Trichlorobenzene	0.761	0.773	0.200	1.7	30.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/28/2010 Time: 22:42

Lab File ID: V5M0181.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055V Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.756	0.592	0.010	-21.7	30.0
Chloroethane-d5	0.357	0.320	0.010	-10.4	40.0
1,1-Dichloroethene-d2	0.193	0.166	0.010	-14.0	30.0
2-Butanone-d5	0.101	0.081	0.010	-19.9	40.0
Chloroform-d	0.628	0.550	0.010	-12.4	30.0
1,2-Dichloroethane-d4	0.263	0.226	0.010	-14.0	30.0
Benzene-d6	2.031	1.815	0.010	-10.6	30.0
1,2-Dichloropropane-d6	0.690	0.613	0.010	-11.1	40.0
Toluene-d8	1.759	1.668	0.010	-5.2	30.0
trans-1,3-Dichloropropene-d4	0.330	0.287	0.010	-12.8	30.0
2-Hexanone-d5	0.079	0.075	0.010	-5.0	40.0
1,1,2,2-Tetrachloroethane-d2	0.235	0.222	0.010	-5.7	30.0
1,2-Dichlorobenzene-d4	0.791	0.833	0.010	5.3	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/29/2010 Time: 9:42

Lab File ID: V5M0203.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055W Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.540	0.383	0.010	-29.2	40.0
Chloromethane	1.267	1.042	0.010	-17.8	40.0
Vinyl chloride	0.804	0.726	0.100	-9.7	30.0
Bromomethane	0.307	0.317	0.100	3.4	30.0
Chloroethane	0.299	0.289	0.010	-3.1	40.0
Trichlorofluoromethane	0.315	0.344	0.010	9.0	40.0
1,1-Dichloroethene	0.254	0.265	0.100	4.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.238	0.229	0.010	-3.8	40.0
Acetone	0.057	0.037	0.010	-35.0	40.0
Carbon disulfide	1.056	0.973	0.010	-7.9	40.0
Methyl acetate	0.167	0.101	0.010	-39.5	40.0
Methylene chloride	0.243	0.224	0.010	-7.8	40.0
trans-1,2-Dichloroethene	0.299	0.282	0.010	-5.5	40.0
Methyl tert-butyl ether	0.366	0.352	0.010	-3.8	40.0
1,1-Dichloroethane	0.748	0.643	0.200	-14.1	30.0
cis-1,2-Dichloroethene	0.344	0.308	0.010	-10.5	40.0
2-Butanone	0.099	0.078	0.010	-20.8	40.0
Bromochloromethane	0.089	0.082	0.050	-8.3	40.0
Chloroform	0.533	0.512	0.200	-3.9	30.0
1,1,1-Trichloroethane	0.529	0.550	0.100	3.9	30.0
Cyclohexane	1.168	0.976	0.010	-16.4	40.0
Carbon tetrachloride	0.378	0.405	0.100	7.2	30.0
Benzene	1.979	1.781	0.400	-10.0	30.0
1,2-Dichloroethane	0.311	0.283	0.100	-8.9	30.0
Trichloroethene	0.444	0.473	0.300	6.7	30.0
Methylcyclohexane	0.816	0.653	0.010	-20.0	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/29/2010 Time: 9:42

Lab File ID: V5M0203.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055W Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.542	0.472	0.010	-12.8	40.0
Bromodichloromethane	0.432	0.395	0.200	-8.7	30.0
cis-1,3-Dichloropropene	0.613	0.483	0.200	-21.2	30.0
4-Methyl-2-pentanone	0.317	0.246	0.010	-22.5	40.0
Toluene	1.889	1.813	0.400	-4.0	30.0
trans-1,3-Dichloropropene	0.416	0.348	0.100	-16.4	30.0
1,1,2-Trichloroethane	0.190	0.184	0.100	-3.1	30.0
Tetrachloroethene	0.300	0.319	0.100	6.2	30.0
2-Hexanone	0.226	0.171	0.010	-24.4	40.0
Dibromochloromethane	0.183	0.181	0.100	-1.0	30.0
1,2-Dibromoethane	0.168	0.184	0.010	9.2	40.0
Chlorobenzene	1.062	0.980	0.500	-7.8	30.0
Ethylbenzene	2.110	2.038	0.100	-3.4	30.0
m,p-Xylene	0.786	0.778	0.300	-1.1	30.0
o-Xylene	0.702	0.688	0.300	-2.0	30.0
Styrene	1.098	1.143	0.300	4.1	30.0
Bromoform	0.213	0.239	0.050	12.6	30.0
Isopropylbenzene	1.819	1.899	0.010	4.4	40.0
1,1,2,2-Tetrachloroethane	0.219	0.195	0.100	-11.2	30.0
1,3-Dichlorobenzene	1.512	1.412	0.400	-6.6	30.0
1,4-Dichlorobenzene	1.456	1.383	0.400	-5.0	30.0
1,2-Dichlorobenzene	1.099	1.058	0.400	-3.7	30.0
1,2-Dibromo-3-chloropropane	0.064	0.049	0.010	-22.9	40.0
1,2,4-Trichlorobenzene	1.033	1.001	0.200	-3.0	30.0
1,2,3-Trichlorobenzene	0.761	0.694	0.200	-8.8	30.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/29/2010 Time: 9:42

Lab File ID: V5M0203.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055W Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.756	0.687	0.010	-9.2	30.0
Chloroethane-d5	0.357	0.373	0.010	4.3	40.0
1,1-Dichloroethene-d2	0.193	0.171	0.010	-11.4	30.0
2-Butanone-d5	0.101	0.078	0.010	-22.5	40.0
Chloroform-d	0.628	0.585	0.010	-6.8	30.0
1,2-Dichloroethane-d4	0.263	0.255	0.010	-2.8	30.0
Benzene-d6	2.031	1.912	0.010	-5.8	30.0
1,2-Dichloropropane-d6	0.690	0.648	0.010	-6.1	40.0
Toluene-d8	1.759	1.736	0.010	-1.3	30.0
trans-1,3-Dichloropropene-d4	0.330	0.268	0.010	-18.8	30.0
2-Hexanone-d5	0.079	0.074	0.010	-5.8	40.0
1,1,2,2-Tetrachloroethane-d2	0.235	0.224	0.010	-4.6	30.0
1,2-Dichlorobenzene-d4	0.791	0.790	0.010	-0.1	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/29/2010 Time: 16:02

Lab File ID: V5M0212.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055X Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.540	0.551	0.010	1.9	50.0
Chloromethane	1.267	1.313	0.010	3.6	50.0
Vinyl chloride	0.804	0.877	0.010	9.0	50.0
Bromomethane	0.307	0.398	0.010	29.9	50.0
Chloroethane	0.299	0.353	0.010	18.2	50.0
Trichlorofluoromethane	0.315	0.455	0.010	44.3	50.0
1,1-Dichloroethene	0.254	0.315	0.010	24.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.238	0.292	0.010	22.7	50.0
Acetone	0.057	0.049	0.010	-14.4	50.0
Carbon disulfide	1.056	1.192	0.010	12.9	50.0
Methyl acetate	0.167	0.130	0.010	-22.3	50.0
Methylene chloride	0.243	0.259	0.010	6.6	50.0
trans-1,2-Dichloroethene	0.299	0.358	0.010	20.1	50.0
Methyl tert-butyl ether	0.366	0.392	0.010	7.0	50.0
1,1-Dichloroethane	0.748	0.777	0.010	3.9	50.0
cis-1,2-Dichloroethene	0.344	0.372	0.010	8.0	50.0
2-Butanone	0.099	0.088	0.010	-10.5	50.0
Bromochloromethane	0.089	0.096	0.010	7.6	50.0
Chloroform	0.533	0.610	0.010	14.5	50.0
1,1,1-Trichloroethane	0.529	0.643	0.010	21.5	50.0
Cyclohexane	1.168	1.124	0.010	-3.8	50.0
Carbon tetrachloride	0.378	0.465	0.010	23.1	50.0
Benzene	1.979	1.970	0.010	-0.4	50.0
1,2-Dichloroethane	0.311	0.335	0.010	7.8	50.0
Trichloroethene	0.444	0.508	0.010	14.6	50.0
Methylcyclohexane	0.816	0.810	0.010	-0.8	50.0

Report 1,4-Dioxane for Low-Medium VOA analysis only SOM01.2 (6/2007)

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/29/2010 Time: 16:02

Lab File ID: V5M0212.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055X Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.542	0.508	0.010	-6.2	50.0
Bromodichloromethane	0.432	0.443	0.010	2.4	50.0
cis-1,3-Dichloropropene	0.613	0.586	0.010	-4.3	50.0
4-Methyl-2-pentanone	0.317	0.265	0.010	-16.4	50.0
Toluene	1.889	2.019	0.010	6.9	50.0
trans-1,3-Dichloropropene	0.416	0.407	0.010	-2.3	50.0
1,1,2-Trichloroethane	0.190	0.197	0.010	3.5	50.0
Tetrachloroethene	0.300	0.364	0.010	21.3	50.0
2-Hexanone	0.226	0.183	0.010	-18.7	50.0
Dibromochloromethane	0.183	0.196	0.010	7.0	50.0
1,2-Dibromoethane	0.168	0.189	0.010	12.0	50.0
Chlorobenzene	1.062	1.085	0.010	2.2	50.0
Ethylbenzene	2.110	2.290	0.010	8.5	50.0
m,p-Xylene	0.786	0.830	0.010	5.5	50.0
o-Xylene	0.702	0.778	0.010	10.8	50.0
Styrene	1.098	1.229	0.010	12.0	50.0
Bromoform	0.213	0.259	0.010	21.6	50.0
Isopropylbenzene	1.819	2.160	0.010	18.7	50.0
1,1,2,2-Tetrachloroethane	0.219	0.212	0.010	-3.1	50.0
1,3-Dichlorobenzene	1.512	1.632	0.010	8.0	50.0
1,4-Dichlorobenzene	1.456	1.614	0.010	10.8	50.0
1,2-Dichlorobenzene	1.099	1.247	0.010	13.5	50.0
1,2-Dibromo-3-chloropropane	0.064	0.063	0.010	-1.3	50.0
1,2,4-Trichlorobenzene	1.033	1.108	0.010	7.4	50.0
1,2,3-Trichlorobenzene	0.761	0.764	0.010	0.4	50.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Instrument ID: V5 Calibration Date: 06/29/2010 Time: 16:02

Lab File ID: V5M0212.D Init. Calib. Date(s): 06/07/2010 06/07/2010

EPA Sample No.(VSTD#####): VSTD0055X Init. Calib. Time(s): 11:56 13:51

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

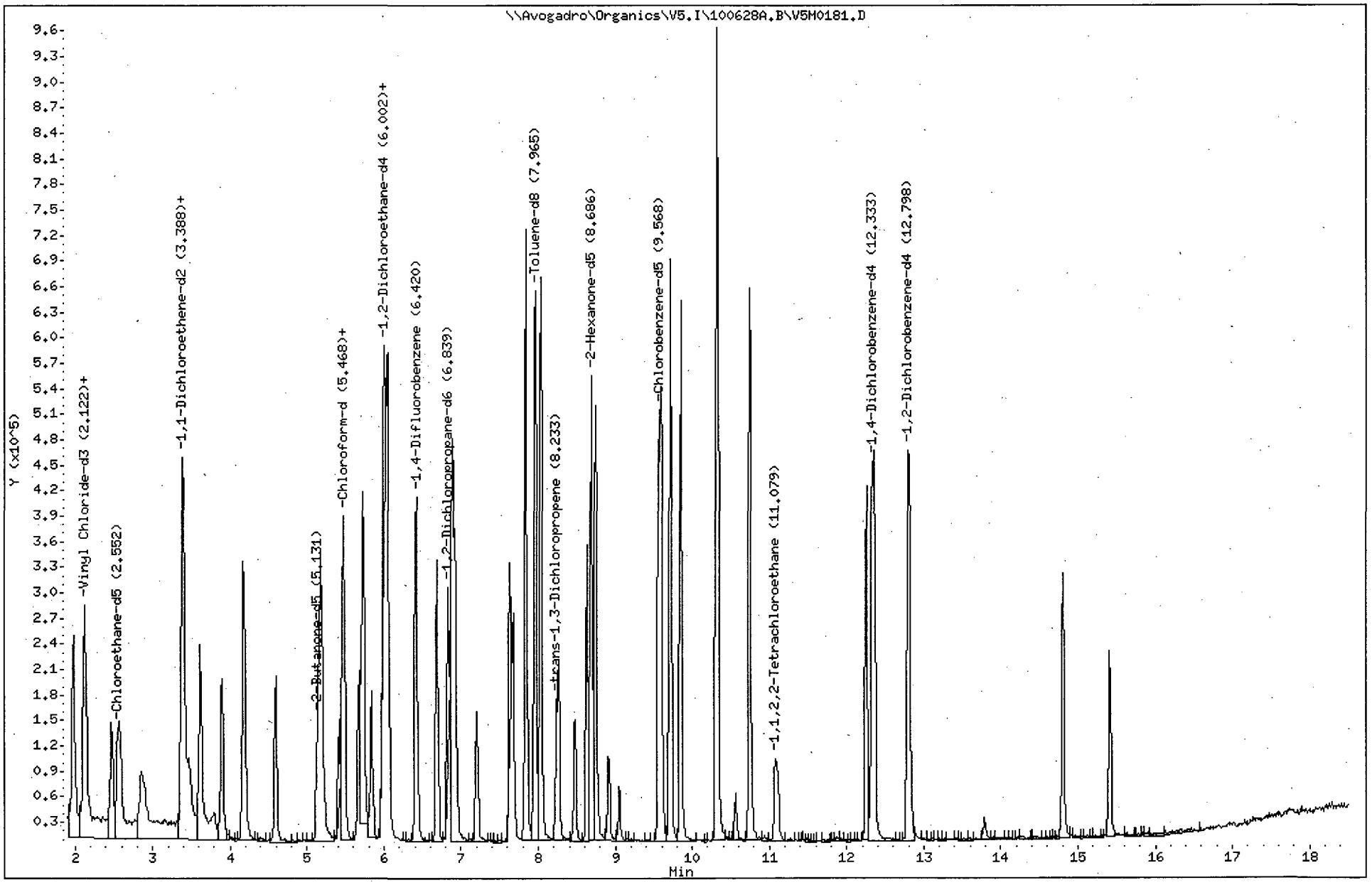
Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.756	0.767	0.010	1.5	50.0
Chloroethane-d5	0.357	0.382	0.010	6.8	50.0
1,1-Dichloroethene-d2	0.193	0.187	0.010	-3.3	50.0
2-Butanone-d5	0.101	0.076	0.010	-24.2	50.0
Chloroform-d	0.628	0.618	0.010	-1.5	50.0
1,2-Dichloroethane-d4	0.263	0.240	0.010	-8.7	50.0
Benzene-d6	2.031	1.793	0.010	-11.7	50.0
1,2-Dichloropropane-d6	0.690	0.623	0.010	-9.7	50.0
Toluene-d8	1.759	1.603	0.010	-8.8	50.0
trans-1,3-Dichloropropene-d4	0.330	0.271	0.010	-17.8	50.0
2-Hexanone-d5	0.079	0.062	0.010	-20.9	50.0
1,1,2,2-Tetrachloroethane-d2	0.235	0.220	0.010	-6.6	50.0
1,2-Dichlorobenzene-d4	0.791	0.739	0.010	-6.6	50.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0181.D
Date : 28-JUN-2010 22:42
Client ID: VSTD0055V
Sample Info: 25ML,VSTD0055V,VSTD0055V
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



0186

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0181.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0181.D
Lab Smp Id: VSTD0055V Client Smp ID: VSTD0055V
Inj Date : 28-JUN-2010 22:42
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055V,VSTD0055V
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.808	1.813	(0.282)	144740	5.00000	3.5
2 Chloromethane	50	1.982	1.976	(0.309)	335520	5.00000	3.4
$ 79 Vinyl Chloride-d3	65	2.122	2.127	(0.331)	228873	5.00000	3.9
3 Vinyl Chloride	62	2.133	2.127	(0.332)	240957	5.00000	3.9
4 Bromomethane	94	2.470	2.475	(0.385)	111750	5.00000	4.7(Q)
$ 80 Chloroethane-d5	69	2.552	2.556	(0.397)	123766	5.00000	4.5
5 Chloroethane	64	2.586	2.580	(0.403)	98714	5.00000	4.3
6 Trichlorofluoromethane	101	2.854	2.858	(0.445)	115751	5.00000	4.8
$ 81 1,1-Dichloroethene-d2	65	3.376	3.381	(0.526)	64091	5.00000	4.3(Q)
7 1,1-Dichloroethene	96	3.400	3.393	(0.530)	98253	5.00000	5.0(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.423	3.416	(0.533)	84810	5.00000	4.6
9 Acetone	43	3.481	3.474	(0.542)	146706	50.0000	33
10 Carbon Disulfide	76	3.620	3.625	(0.564)	357853	5.00000	4.4
11 Methyl Acetate	43	3.806	3.799	(0.593)	40978	5.00000	3.2
12 Methylene Chloride	84	3.899	3.892	(0.607)	83636	5.00000	4.5(Q)
13 trans-1,2-Dichloroethene	96	4.166	4.171	(0.649)	113113	5.00000	4.9(Q)
14 Methyl tert-Butyl Ether	73	4.178	4.183	(0.651)	134627	5.00000	4.8
15 1,1-Dichloroethane	63	4.596	4.589	(0.716)	233170	5.00000	4.0
$ 82 2-Butanone-d5	46	5.130	5.135	(0.799)	311922	50.0000	40(A)
17 cis-1,2-Dichloroethene	96	5.165	5.170	(0.805)	121508	5.00000	4.6(Q)
16 2-Butanone	43	5.200	5.193	(0.810)	303179	50.0000	40
18 Bromochloromethane	128	5.409	5.403	(0.843)	35719	5.00000	5.2(Q)

0.868

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0181.D
Report Date: 30-Jun-2010 12:54

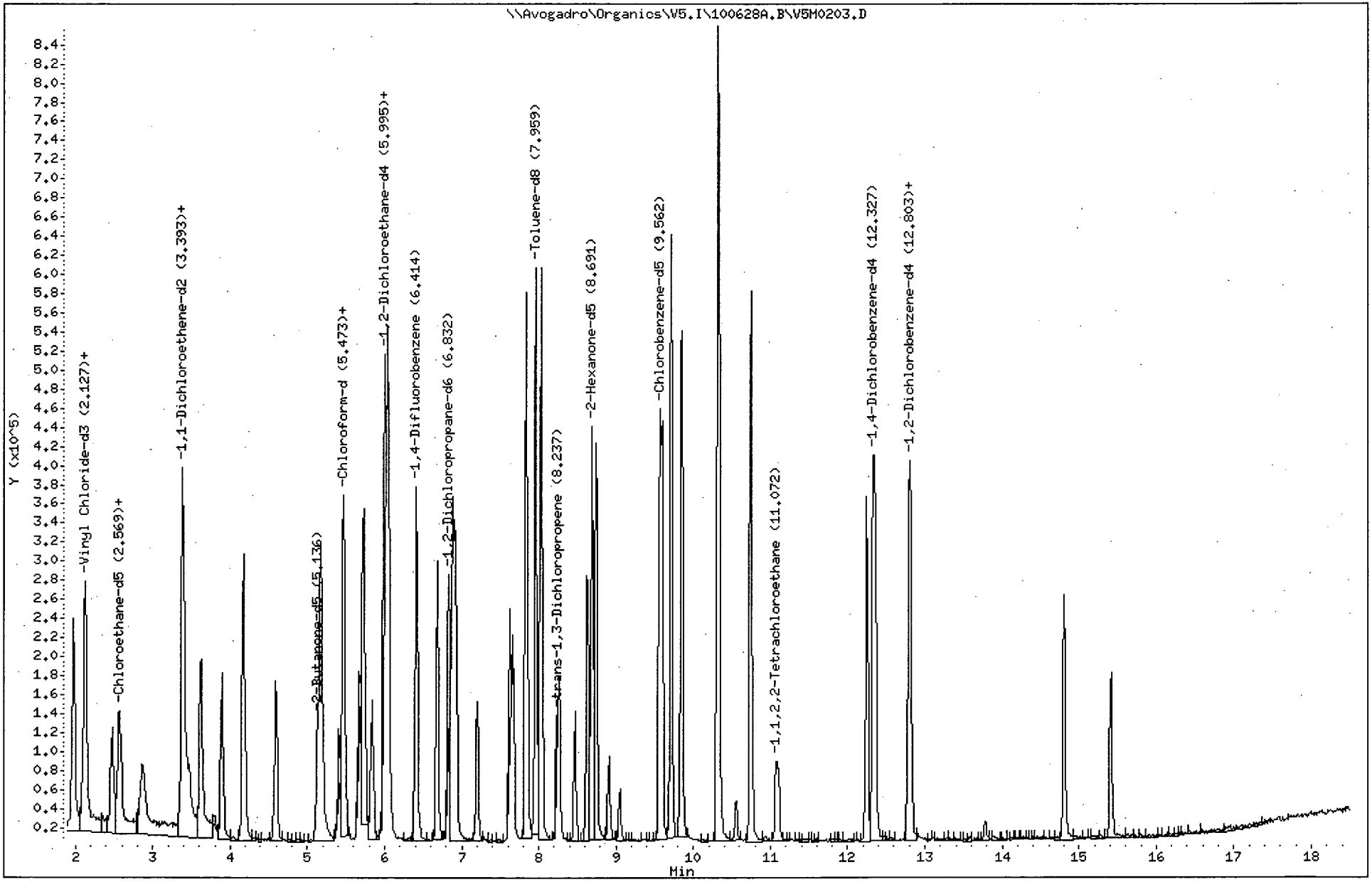
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 83 Chloroform-d	84	5.467	5.461	(0.852)	212536	5.00000	4.4
19 Chloroform	83	5.479	5.484	(0.853)	182273	5.00000	4.4
20 1,1,1-Trichloroethane	97	5.676	5.670	(0.593)	152544	5.00000	4.8
21 Cyclohexane	56	5.723	5.728	(0.598)	263966	5.00000	3.8
22 Carbon Tetrachloride	117	5.839	5.832	(0.610)	114994	5.00000	5.1
$ 23 1,2-Dichloroethane-d4	65	5.990	5.983	(0.933)	87269	5.00000	4.3
$ 84 Benzene-d6	84	6.002	6.007	(0.627)	540869	5.00000	4.5
25 Benzene	78	6.048	6.041	(0.632)	497391	5.00000	4.2
24 1,2-Dichloroethane	62	6.060	6.053	(0.944)	98953	5.00000	4.1
* 26 1,4-Difluorobenzene	114	6.420	6.413	(1.000)	386330	5.00000	0.886
27 Trichloroethene	95	6.687	6.680	(0.699)	132747	5.00000	5.0
$ 85 1,2-Dichloropropane-d6	67	6.838	6.831	(0.715)	182822	5.00000	4.4
28 Methylcyclohexane	83	6.885	6.889	(0.720)	194252	5.00000	4.0
29 1,2-Dichloropropane	63	6.919	6.924	(0.723)	131137	5.00000	4.1
30 Bromodichloromethane	83	7.198	7.203	(0.752)	113821	5.00000	4.4
31 cis-1,3-Dichloropropene	75	7.674	7.668	(0.802)	151542	5.00000	4.1
32 4-Methyl-2-Pentanone	43	7.837	7.830	(0.819)	719110	50.0000	38
$ 33 Toluene-d8	98	7.965	7.958	(0.832)	497210	5.00000	4.7
34 Toluene	91	8.035	8.028	(0.840)	529669	5.00000	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.232	8.225	(0.860)	85606	5.00000	4.4
35 trans-1,3-Dichloropropene	75	8.267	8.260	(0.864)	109288	5.00000	4.4
36 1,1,2-Trichloroethane	97	8.464	8.469	(0.885)	56311	5.00000	5.0(Q)
37 Tetrachloroethene	164	8.627	8.632	(0.902)	95238	5.00000	5.3
$ 87 2-Hexanone-d5	63	8.685	8.690	(0.908)	223111	50.0000	48(A)
38 2-Hexanone	43	8.743	8.736	(0.914)	487560	50.0000	36
39 Dibromochloromethane	129	8.917	8.911	(0.932)	55804	5.00000	5.1
40 1,2-Dibromoethane	107	9.045	9.050	(0.945)	51033	5.00000	5.1
* 42 Chlorobenzene-d5	117	9.568	9.561	(1.000)	298036	5.00000	
43 Chlorobenzene	112	9.603	9.596	(1.004)	293040	5.00000	4.6
44 Ethylbenzene	91	9.719	9.712	(1.016)	578945	5.00000	4.6
45 m,p-Xylene	106	9.847	9.852	(1.029)	216459	5.00000	4.6
46 o-Xylene	106	10.311	10.316	(1.078)	198478	5.00000	4.7
47 Styrene	104	10.335	10.328	(1.080)	324516	5.00000	5.0
48 Bromoform	173	10.555	10.560	(0.856)	31964	5.00000	6.2 0.262
49 Isopropylbenzene	105	10.741	10.746	(1.123)	536179	5.00000	4.9
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.078	11.071	(1.158)	66062	5.00000	4.7
51 1,1,2,2-Tetrachloroethane	83	11.101	11.106	(1.160)	54990	5.00000	4.2
52 1,3-Dichlorobenzene	146	12.251	12.245	(0.993)	182597	5.00000	5.0
* 78 1,4-Dichlorobenzene-d4	152	12.333	12.326	(1.000)	121989	5.00000	
53 1,4-Dichlorobenzene	146	12.356	12.349	(1.002)	176721	5.00000	5.0
$ 90 1,2-Dichlorobenzene-d4	152	12.797	12.791	(1.038)	101628	5.00000	5.3
54 1,2-Dichlorobenzene	146	12.821	12.814	(1.040)	139825	5.00000	5.2
55 1,2-Dibromo-3-chloropropane	75	13.785	13.778	(1.118)	7020	5.00000	4.5(Q)
56 1,2,4-Trichlorobenzene	180	14.807	14.800	(1.201)	131331	5.00000	5.2
77 1,2,3-Trichlorobenzene	180	15.411	15.416	(1.250)	94355	5.00000	5.1

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0203.D
Date : 29-JUN-2010 09:42
Client ID: VSTD0055W
Sample Info: 25ML,VSTD0055W,VSTD0055W
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



0189

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0203.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0203.D
Lab Smp Id: VSTD0055W Client Smp ID: VSTD0055W
Inj Date : 29-JUN-2010 09:42
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055W,VSTD0055W
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.813	1.813	(0.283)	123319	5.00000	3.5
2 Chloromethane	50	1.976	1.976	(0.308)	335738	5.00000	4.1
$ 79 Vinyl Chloride-d3	65	2.127	2.127	(0.332)	221300	5.00000	4.5
3 Vinyl Chloride	62	2.127	2.127	(0.332)	234053	5.00000	4.5
4 Bromomethane	94	2.475	2.475	(0.386)	102137	5.00000	5.2(Q)
$ 80 Chloroethane-d5	69	2.556	2.556	(0.399)	120080	5.00000	5.2
5 Chloroethane	64	2.580	2.580	(0.402)	93257	5.00000	4.8
6 Trichlorofluoromethane	101	2.858	2.858	(0.446)	110767	5.00000	5.5
$ 81 1,1-Dichloroethene-d2	65	3.381	3.381	(0.527)	55095	5.00000	4.4(Q)
7 1,1-Dichloroethene	96	3.393	3.393	(0.529)	85286	5.00000	5.2
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.416	3.416	(0.533)	73953	5.00000	4.8
9 Acetone	43	3.474	3.474	(0.542)	120088	50.0000	32 0.037
10 Carbon Disulfide	76	3.625	3.625	(0.565)	313421	5.00000	4.6
11 Methyl Acetate	43	3.799	3.799	(0.592)	32634	5.00000	3.0
12 Methylene Chloride	84	3.892	3.892	(0.607)	72103	5.00000	4.6
13 trans-1,2-Dichloroethene	96	4.171	4.171	(0.650)	90874	5.00000	4.7
14 Methyl tert-Butyl Ether	73	4.183	4.183	(0.652)	113468	5.00000	4.8
15 1,1-Dichloroethane	63	4.589	4.589	(0.716)	207216	5.00000	4.3
$ 82 2-Butanone-d5	46	5.135	5.135	(0.801)	251711	50.0000	39(A)
17 cis-1,2-Dichloroethene	96	5.170	5.170	(0.806)	99278	5.00000	4.5
16 2-Butanone	43	5.193	5.193	(0.810)	252387	50.0000	40
18 Bromochloromethane	128	5.403	5.403	(0.842)	26419	5.00000	4.6(Q)

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0203.D
Report Date: 30-Jun-2010 12:54

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 83 Chloroform-d	84	5.461	5.461	(0.851)	188654	5.00000	4.7
19 Chloroform	83	5.484	5.484	(0.855)	164973	5.00000	4.8
20 1,1,1-Trichloroethane	97	5.670	5.670	(0.593)	135077	5.00000	5.2
21 Cyclohexane	56	5.728	5.728	(0.599)	239917	5.00000	4.2
22 Carbon Tetrachloride	117	5.832	5.832	(0.610)	99543	5.00000	5.4
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.933)	82219	5.00000	4.9
$ 84 Benzene-d6	84	6.007	6.007	(0.628)	469896	5.00000	4.7
25 Benzene	78	6.041	6.041	(0.632)	437655	5.00000	4.5
24 1,2-Dichloroethane	62	6.053	6.053	(0.944)	91243	5.00000	4.6
* 26 1,4-Difluorobenzene	114	6.413	6.413	(1.000)	322283	5.00000	
27 Trichloroethene	95	6.680	6.680	(0.699)	116230	5.00000	5.3
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	159137	5.00000	4.7
28 Methylcyclohexane	83	6.889	6.889	(0.721)	160379	5.00000	4.0
29 1,2-Dichloropropane	63	6.924	6.924	(0.724)	116024	5.00000	4.4
30 Bromodichloromethane	83	7.203	7.203	(0.753)	97064	5.00000	4.6
31 cis-1,3-Dichloropropene	75	7.668	7.668	(0.802)	118650	5.00000	3.9
32 4-Methyl-2-Pentanone	43	7.830	7.830	(0.819)	603634	50.0000	39
$ 33 Toluene-d8	98	7.958	7.958	(0.832)	426550	5.00000	4.9
34 Toluene	91	8.028	8.028	(0.840)	445558	5.00000	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.225	8.225	(0.860)	65771	5.00000	4.1
35 trans-1,3-Dichloropropene	75	8.260	8.260	(0.864)	85524	5.00000	4.2
36 1,1,2-Trichloroethane	97	8.469	8.469	(0.886)	45217	5.00000	4.8(Q)
37 Tetrachloroethene	164	8.632	8.632	(0.903)	78375	5.00000	5.3
$ 87 2-Hexanone-d5	63	8.690	8.690	(0.909)	182386	50.0000	47(A)
38 2-Hexanone	43	8.736	8.736	(0.914)	419132	50.0000	38
39 Dibromochloromethane	129	8.911	8.911	(0.932)	44543	5.00000	5.0
40 1,2-Dibromoethane	107	9.050	9.050	(0.947)	45206	5.00000	5.5
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	245699	5.00000	
43 Chlorobenzene	112	9.596	9.596	(1.004)	240663	5.00000	4.6
44 Ethylbenzene	91	9.712	9.712	(1.016)	500843	5.00000	4.8
45 m,p-Xylene	106	9.852	9.852	(1.030)	191111	5.00000	4.9
46 o-Xylene	106	10.316	10.316	(1.079)	169120	5.00000	4.9
47 Styrene	104	10.328	10.328	(1.080)	280723	5.00000	5.2
48 Bromoform	173	10.560	10.560	(0.857)	25392	5.00000	5.6
49 Isopropylbenzene	105	10.746	10.746	(1.124)	466562	5.00000	5.2
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	55130	5.00000	4.8
51 1,1,2,2-Tetrachloroethane	83	11.106	11.106	(1.162)	47828	5.00000	4.4
52 1,3-Dichlorobenzene	146	12.245	12.245	(0.993)	149848	5.00000	4.7
* 78 1,4-Dichlorobenzene-d4	152	12.326	12.326	(1.000)	106091	5.00000	
53 1,4-Dichlorobenzene	146	12.349	12.349	(1.002)	146719	5.00000	4.7
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	83860	5.00000	5.0
54 1,2-Dichlorobenzene	146	12.814	12.814	(1.040)	112258	5.00000	4.8
55 1,2-Dibromo-3-chloropropane	75	13.778	13.778	(1.118)	5201	5.00000	3.9(Q)
56 1,2,4-Trichlorobenzene	180	14.800	14.800	(1.201)	106248	5.00000	4.8
77 1,2,3-Trichlorobenzene	180	15.416	15.416	(1.251)	73585	5.00000	4.6

0.483

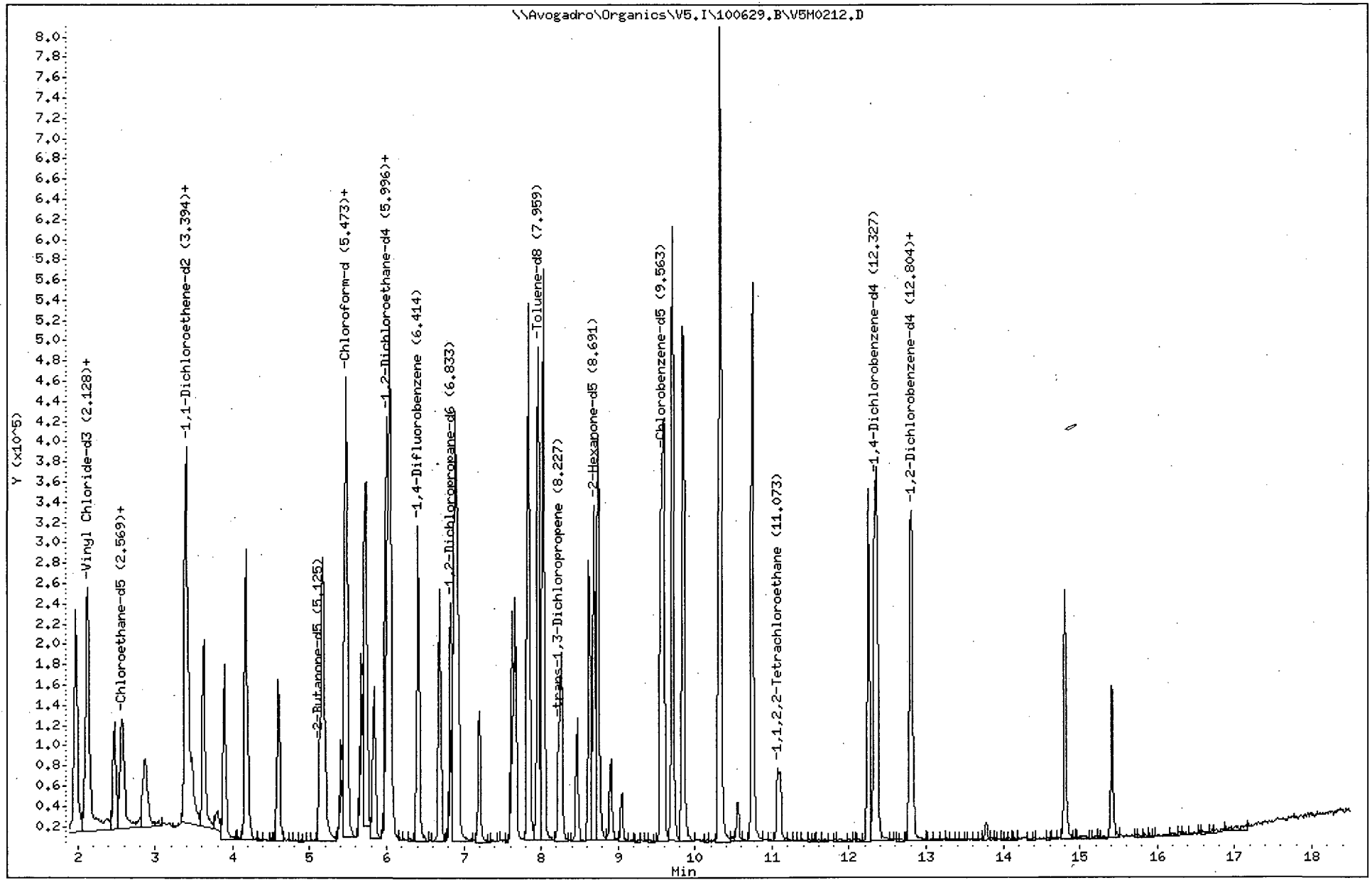
0.049

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0212.D
Date : 29-JUN-2010 16:02
Client ID: VSTD0055X
Sample Info: 25ML,VSTD0055X,VSTD0055X
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



6192

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0212.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0212.D
Lab Smp Id: VSTD0055X Client Smp ID: VSTD0055X
Inj Date : 29-JUN-2010 16:02
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VSTD0055X,VSTD0055X
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 40 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.814	1.814	(0.283)	140907	5.00000	5.1
2 Chloromethane	50	1.976	1.976	(0.308)	335925	5.00000	5.2
$ 79 Vinyl Chloride-d3	65	2.116	2.116	(0.330)	196365	5.00000	5.1
3 Vinyl Chloride	62	2.127	2.127	(0.332)	224457	5.00000	5.5
4 Bromomethane	94	2.476	2.476	(0.386)	101887	5.00000	6.5(Q)
$ 80 Chloroethane-d5	69	2.557	2.557	(0.399)	97645	5.00000	5.3
5 Chloroethane	64	2.580	2.580	(0.402)	90358	5.00000	5.9
6 Trichlorofluoromethane	101	2.859	2.859	(0.446)	116387	5.00000	7.2
$ 81 1,1-Dichloroethene-d2	65	3.382	3.382	(0.527)	47758	5.00000	4.8(Q)
7 1,1-Dichloroethene	96	3.394	3.394	(0.529)	80651	5.00000	6.2
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.417	3.417	(0.533)	74850	5.00000	6.1
9 Acetone	43	3.475	3.475	(0.542)	125567	50.0000	43
10 Carbon Disulfide	76	3.626	3.626	(0.565)	304939	5.00000	5.6
11 Methyl Acetate	43	3.800	3.800	(0.593)	33320	5.00000	3.9
12 Methylene Chloride	84	3.893	3.893	(0.607)	66178	5.00000	5.3
13 trans-1,2-Dichloroethene	96	4.172	4.172	(0.650)	91714	5.00000	6.0(Q)
14 Methyl tert-Butyl Ether	73	4.172	4.172	(0.650)	100206	5.00000	5.3
15 1,1-Dichloroethane	63	4.590	4.590	(0.716)	198954	5.00000	5.2
$ 82 2-Butanone-d5	46	5.124	5.124	(0.799)	195322	50.0000	38(A)
17 cis-1,2-Dichloroethene	96	5.171	5.171	(0.806)	95189	5.00000	5.4(Q)
16 2-Butanone	43	5.194	5.194	(0.810)	226422	50.0000	45
18 Bromochloromethane	128	5.415	5.415	(0.844)	24622	5.00000	5.4(Q)

0.455

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0212.D
Report Date: 30-Jun-2010 12:55

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 83 Chloroform-d	84	5.461	5.461	(0.851)	158255	5.00000	4.9
19 Chloroform	83	5.485	5.485	(0.855)	156054	5.00000	5.7
20 1,1,1-Trichloroethane	97	5.670	5.670	(0.593)	133444	5.00000	6.1
21 Cyclohexane	56	5.729	5.729	(0.599)	233303	5.00000	4.8
22 Carbon Tetrachloride	117	5.833	5.833	(0.610)	96586	5.00000	6.2
$ 23 1,2-Dichloroethane-d4	65	5.984	5.984	(0.933)	61340	5.00000	4.6
$ 84 Benzene-d6	84	5.996	5.996	(0.627)	372221	5.00000	4.4
25 Benzene	78	6.042	6.042	(0.632)	408831	5.00000	5.0
24 1,2-Dichloroethane	62	6.054	6.054	(0.944)	85713	5.00000	5.4
* 26 1,4-Difluorobenzene	114	6.414	6.414	(1.000)	255904	5.00000	
27 Trichloroethene	95	6.681	6.681	(0.699)	105489	5.00000	5.7
$ 85 1,2-Dichloropropane-d6	67	6.832	6.832	(0.715)	129290	5.00000	4.5
28 Methylcyclohexane	83	6.890	6.890	(0.721)	168053	5.00000	5.0
29 1,2-Dichloropropane	63	6.925	6.925	(0.724)	105499	5.00000	4.7
30 Bromodichloromethane	83	7.204	7.204	(0.753)	91951	5.00000	5.1
31 cis-1,3-Dichloropropene	75	7.669	7.669	(0.802)	121638	5.00000	4.8
32 4-Methyl-2-Pentanone	43	7.831	7.831	(0.819)	549985	50.0000	42
$ 33 Toluene-d8	98	7.959	7.959	(0.832)	332798	5.00000	4.6
34 Toluene	91	8.029	8.029	(0.840)	419000	5.00000	5.3
$ 86 trans-1,3-Dichloropropene-d4	79	8.226	8.226	(0.860)	56206	5.00000	4.1
35 trans-1,3-Dichloropropene	75	8.261	8.261	(0.864)	84385	5.00000	4.9
36 1,1,2-Trichloroethane	97	8.470	8.470	(0.886)	40805	5.00000	5.2(Q)
37 Tetrachloroethene	164	8.621	8.621	(0.902)	75615	5.00000	6.1
$ 87 2-Hexanone-d5	63	8.691	8.691	(0.909)	129295	50.0000	40(A)
38 2-Hexanone	43	8.737	8.737	(0.914)	380851	50.0000	41
39 Dibromochloromethane	129	8.912	8.912	(0.932)	40639	5.00000	5.3
40 1,2-Dibromoethane	107	9.051	9.051	(0.947)	39153	5.00000	5.6
* 42 Chlorobenzene-d5	117	9.562	9.562	(1.000)	207551	5.00000	
43 Chlorobenzene	112	9.597	9.597	(1.004)	225193	5.00000	5.1
44 Ethylbenzene	91	9.713	9.713	(1.016)	475213	5.00000	5.4
45 m,p-Xylene	106	9.852	9.852	(1.030)	172164	5.00000	5.3
46 o-Xylene	106	10.317	10.317	(1.079)	161554	5.00000	5.5
47 Styrene	104	10.329	10.329	(1.080)	255111	5.00000	5.6
48 Bromoform	173	10.549	10.549	(0.856)	22076	5.00000	6.1
49 Isopropylbenzene	105	10.747	10.747	(1.124)	448292	5.00000	5.9
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.072	11.072	(1.158)	45573	5.00000	4.7
51 1,1,2,2-Tetrachloroethane	83	11.107	11.107	(1.162)	44100	5.00000	4.8
52 1,3-Dichlorobenzene	146	12.245	12.245	(0.993)	139361	5.00000	5.4
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.327	(1.000)	85387	5.00000	
53 1,4-Dichlorobenzene	146	12.350	12.350	(1.002)	137782	5.00000	5.5
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	63093	5.00000	4.7
54 1,2-Dichlorobenzene	146	12.815	12.815	(1.040)	106484	5.00000	5.7
55 1,2-Dibromo-3-chloropropane	75	13.779	13.779	(1.118)	5359	5.00000	4.9(Q)
56 1,2,4-Trichlorobenzene	180	14.801	14.801	(1.201)	94651	5.00000	5.4
77 1,2,3-Trichlorobenzene	180	15.417	15.417	(1.251)	65220	5.00000	5.0

0.508

0.259

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9660.D

Date : 07-JUN-2010 11:26

Client ID: BFBL5

Instrument: V5.i

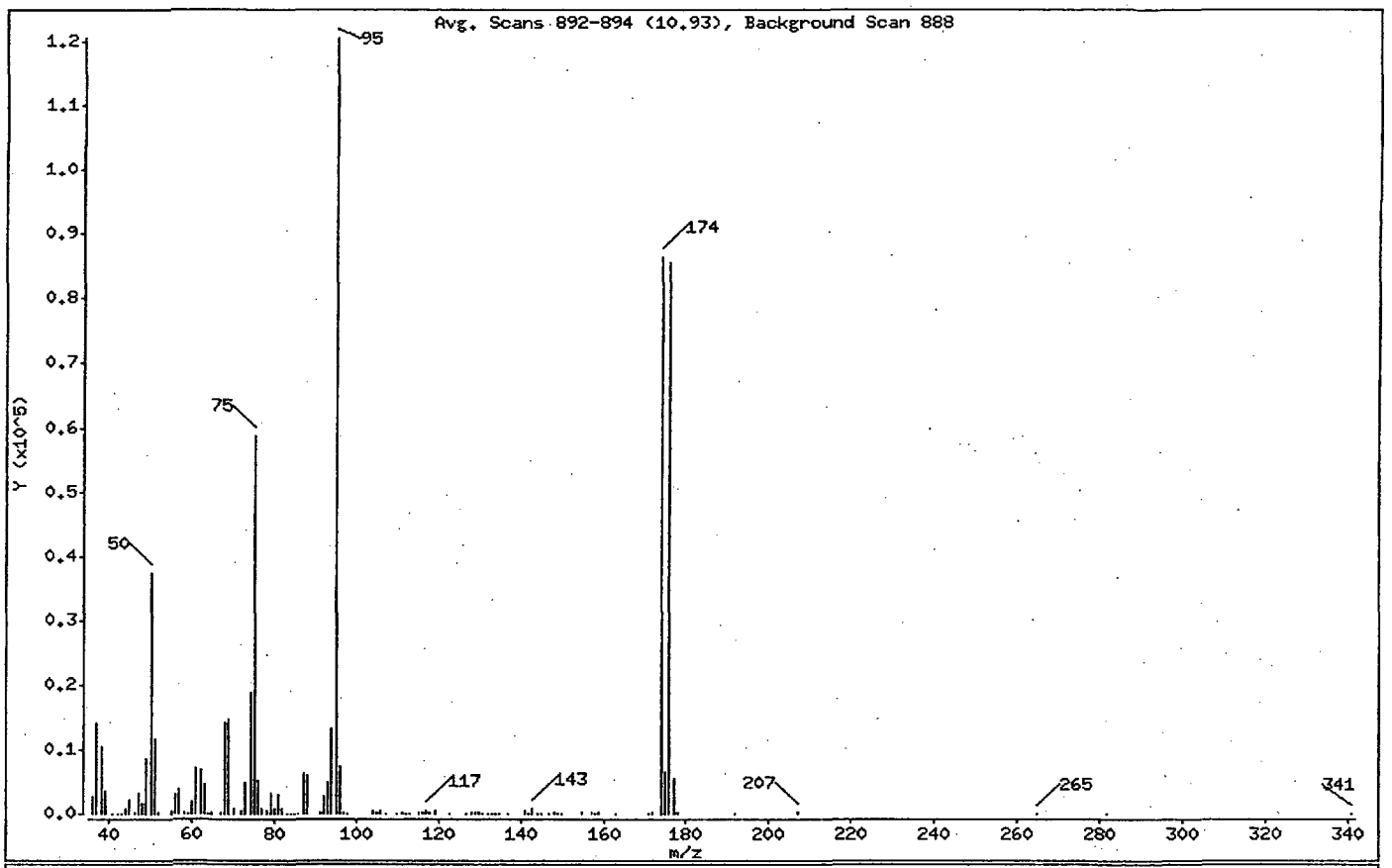
Sample Info: 2UL,BFBL5,BFBL5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	31.08
75	30.00 - 80.00% of mass 95	48.79
96	5.00 - 9.00% of mass 95	6.11
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	71.78
175	5.00 - 9.00% of mass 174	5.42 (7.55)
176	95.00 - 101.00% of mass 174	70.95 (98.84)
177	5.00 - 9.00% of mass 176	4.61 (6.49)

COPY
Original Documents Are Included in CSF XOD79
Signed: AH **Date:** 6/14/10

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9660.D

Date : 07-JUN-2010 11:26

Client ID: BFBL5

Instrument: V5.i

Sample Info: 2UL,BFBL5,BFBL5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

Data File: V5L9660.D
Spectrum: Avg. Scans 892-894 (10.93), Background Scan 888
Location of Maximum: 95.00
Number of points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2697	67.00	159	97.00	147	142.00	53
37.00	14047	68.00	14252	98.00	37	143.00	729
38.00	10603	69.00	14674	104.00	456	144.00	110
39.00	3656	70.00	823	105.00	180	145.00	45
41.00	42	72.00	658	106.00	429	147.00	33
42.00	91	73.00	5114	107.00	79	148.00	145
43.00	45	74.00	18960	110.00	39	149.00	79
44.00	698	75.00	58832	111.00	197	150.00	46
45.00	2293	76.00	5213	112.00	48	155.00	147
46.00	220	77.00	736	113.00	39	157.00	179
47.00	3256	78.00	447	115.00	202	158.00	67
48.00	1577	79.00	3319	116.00	292	159.00	160
49.00	8512	80.00	865	117.00	498	163.00	39
50.00	37480	81.00	2978	118.00	325	171.00	71
51.00	11710	82.00	817	119.00	472	172.00	273
52.00	214	83.00	52	123.00	35	174.00	86552
55.00	692	84.00	49	127.00	41	175.00	6535
56.00	2934	85.00	92	128.00	296	176.00	85552
57.00	3976	86.00	123	129.00	186	177.00	5554
58.00	414	87.00	6391	130.00	272	178.00	157
59.00	41	88.00	6184	131.00	116	192.00	49
60.00	1898	91.00	334	132.00	35	207.00	242
61.00	7181	92.00	2789	133.00	40	265.00	36
62.00	6814	93.00	4969	134.00	53	282.00	36
63.00	4803	94.00	13177	135.00	56	341.00	53
64.00	123	95.00	120584	137.00	98		
65.00	155	96.00	7372	141.00	628		

Data File: \\Avogadro\Organics\V5.I\100607.B\V5L9660.D

Date : 07-JUN-2010 11:26

Client ID: BFBL5

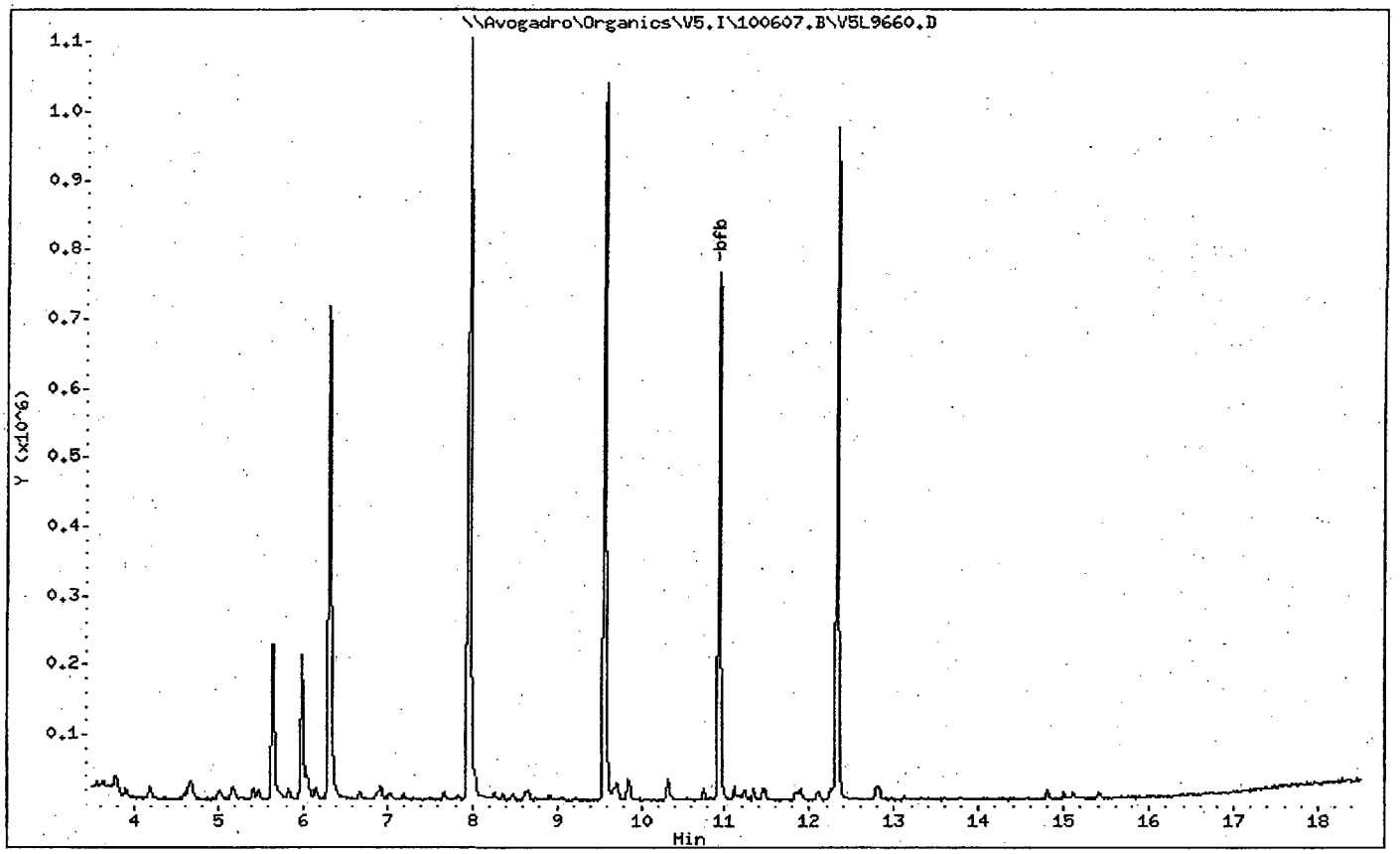
Instrument: V5.i

Sample Info: 2UL,BFBL5,BFBL5

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0180.D

Date : 28-JUN-2010 22:13

Client ID: BFB5V

Instrument: V5.i

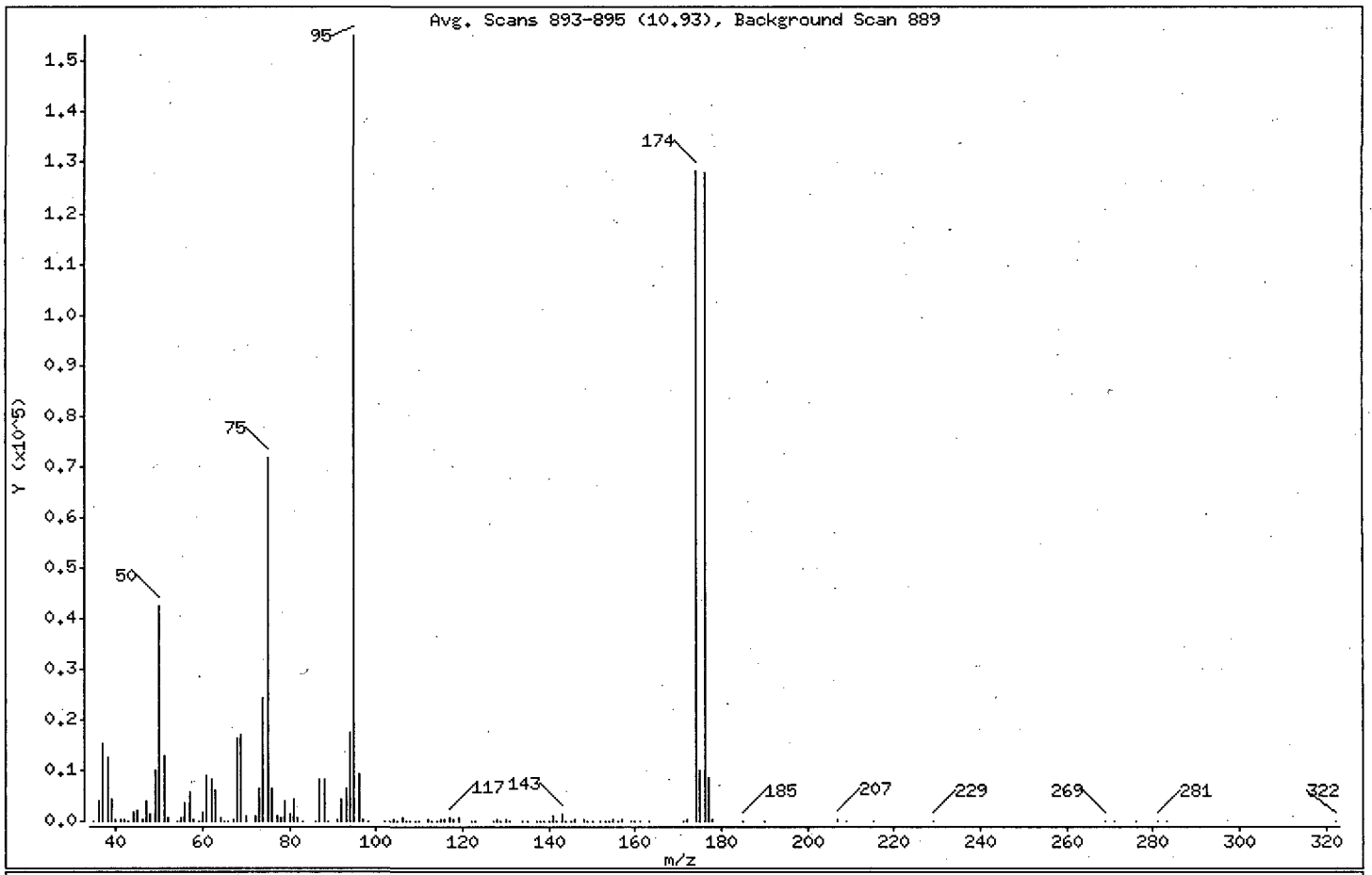
Sample Info: 2UL,BFB5V,BFB5V

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.39
75	30.00 - 80.00% of mass 95	46.26
96	5.00 - 9.00% of mass 95	6.08
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	82.79
175	5.00 - 9.00% of mass 174	6.51 (7.87)
176	95.00 - 101.00% of mass 174	82.56 (99.72)
177	5.00 - 9.00% of mass 176	5.59 (6.77)

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0180.D

Date : 28-JUN-2010 22:13

Client ID: BFB5V

Instrument: V5.i

Sample Info: 2UL,BFB5V,BFB5V

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25

Data File: V5M0180.D

Spectrum: Avg. Scans 893-895 (10.93), Background Scan 889

Location of Maximum: 95.00

Number of points: 127

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	52	68.00	16416	107.00	35	149.00	37
36.00	3801	69.00	17296	108.00	34	150.00	50
37.00	15416	70.00	1086	109.00	33	152.00	44
38.00	12631	72.00	1023	110.00	106	153.00	118
39.00	4441	73.00	6558	112.00	186	154.00	39
40.00	183	74.00	24416	113.00	62	155.00	477
41.00	247	75.00	71760	114.00	46	156.00	56
42.00	182	76.00	6261	115.00	224	157.00	245
43.00	173	77.00	1155	116.00	455	159.00	51
44.00	1760	78.00	569	117.00	713	160.00	72
45.00	2286	79.00	3933	118.00	298	161.00	172
46.00	230	80.00	1448	119.00	626	163.00	41
47.00	3851	81.00	4153	122.00	39	171.00	51
48.00	1547	82.00	791	123.00	64	172.00	352
49.00	10096	83.00	61	127.00	35	174.00	128440
50.00	42496	86.00	88	128.00	424	175.00	10107
51.00	12952	87.00	8139	129.00	153	176.00	128080
52.00	566	88.00	8208	130.00	350	177.00	8677
54.00	40	89.00	49	131.00	111	178.00	277
55.00	660	91.00	497	134.00	33	185.00	49
56.00	3389	92.00	4126	135.00	139	190.00	35
57.00	5615	93.00	6422	137.00	49	207.00	261
58.00	291	94.00	17496	138.00	53	209.00	41
59.00	80	95.00	155136	139.00	57	215.00	45
60.00	1947	96.00	9432	140.00	91	229.00	34
61.00	8987	97.00	265	141.00	1176	269.00	37
62.00	8195	98.00	78	142.00	70	271.00	35
63.00	6011	102.00	40	143.00	1258	276.00	45
64.00	558	103.00	173	144.00	52	281.00	67
65.00	164	104.00	519	145.00	77	283.00	43
66.00	42	105.00	175	146.00	185	322.00	46
67.00	517	106.00	570	148.00	247		

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0180.D

Date : 28-JUN-2010 22:13

Client ID: BFB5V

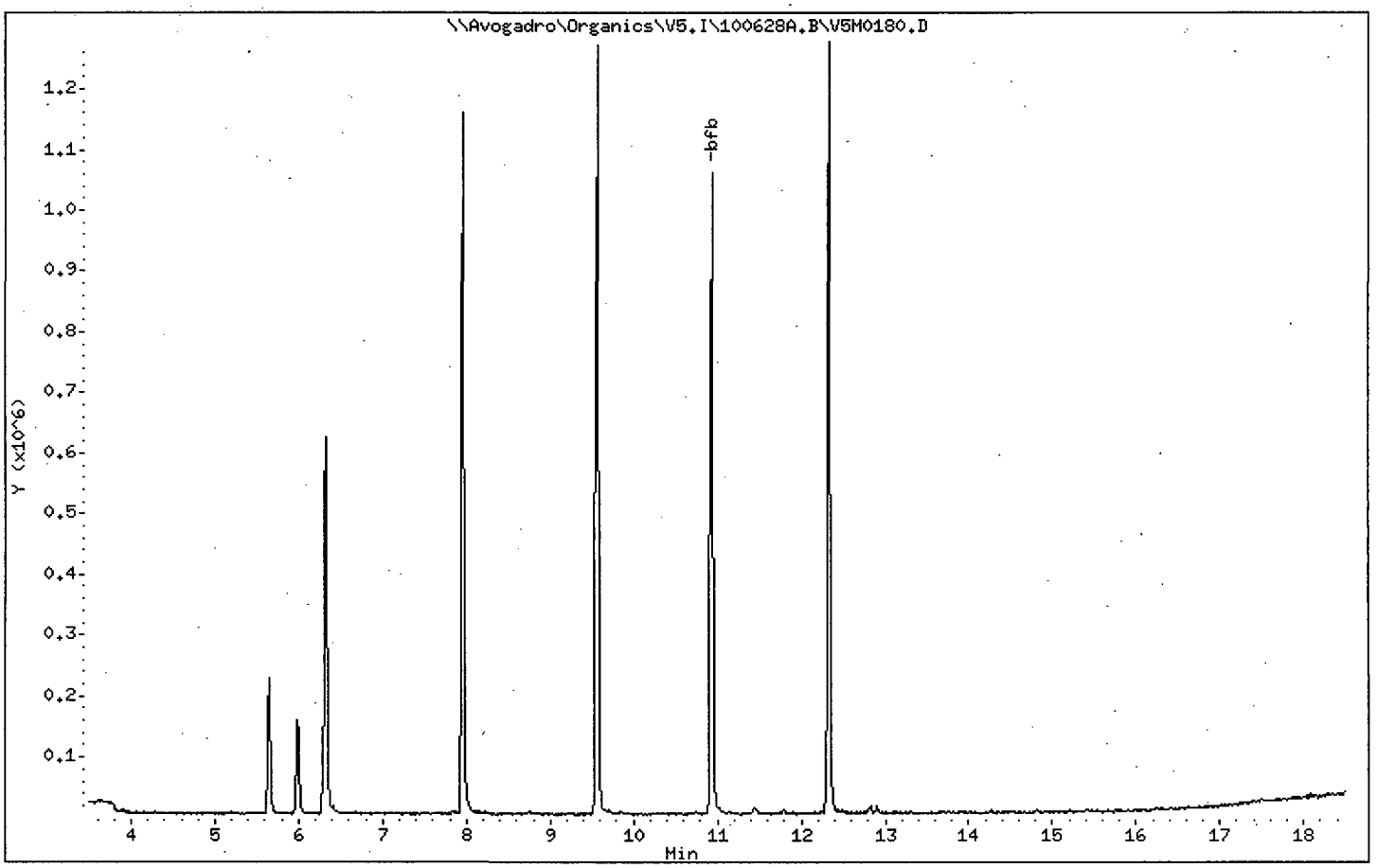
Instrument: V5.i

Sample Info: 2UL,BFB5V,BFB5V

Operator: SRC:

Column phase: DB-624

Column diameter: 0.25



0200

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-52603

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0182.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/28/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-52603

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0182.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/28/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5V

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-52603

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0182.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/28/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

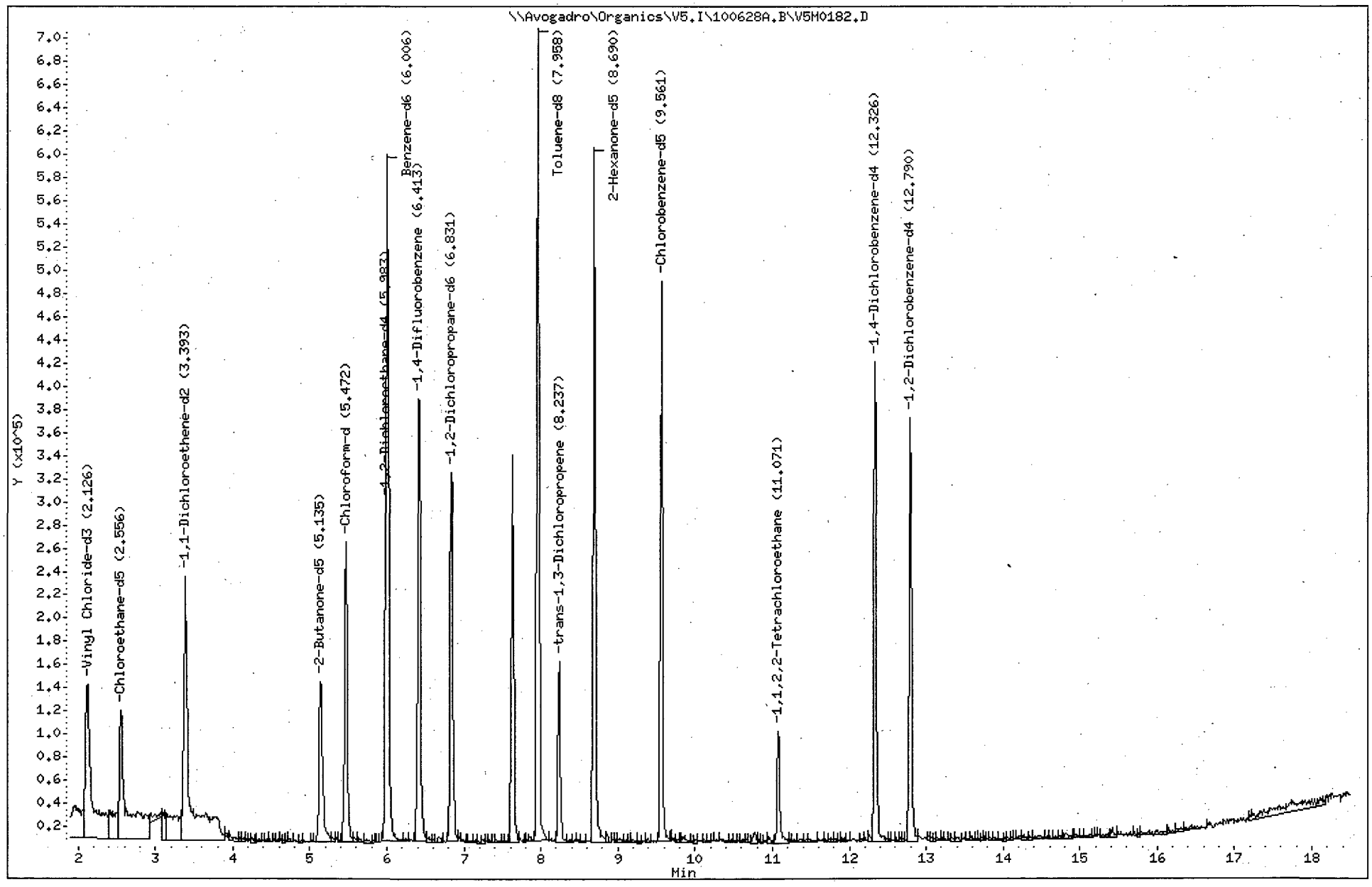
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0182.D
Date : 28-JUN-2010 23:11
Client ID: VBLK5V
Sample Info: 25ML,MB-52603,VBLK5V,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0204

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0182.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0182.D
Lab Smp Id: MB-52603 Client Smp ID: VBLK5V
Inj Date : 28-JUN-2010 23:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-52603,VBLK5V,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.126	2.127	(0.331)	238373	4.11780	4.1
$ 80 Chloroethane-d5	69	2.556	2.556	(0.398)	122727	4.48620	4.5
$ 81 1,1-Dichloroethene-d2	65	3.392	3.381	(0.528)	63341	4.28831	4.3(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.799)	317659	41.1843	41(A)
$ 83 Chloroform-d	84	5.472	5.461	(0.852)	219911	4.57589	4.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.931)	92281	4.59149	4.6
$ 84 Benzene-d6	84	6.006	6.007	(0.628)	567359	4.73654	4.7
* 26 1,4-Difluorobenzene	114	6.424	6.413	(1.000)	382751	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	176247	4.33119	4.3
$ 33 Toluene-d8	98	7.957	7.958	(0.832)	524577	5.05650	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	8.236	8.225	(0.861)	90069	4.63479	4.6
$ 87 2-Hexanone-d5	63	8.689	8.690	(0.909)	238846	51.3939	51(AQ)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	294888	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	69944	5.04349	5.0
* 78 1,4-Dichlorobenzene-d4	152	12.325	12.326	(1.000)	130535	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.790	12.791	(1.038)	107553	5.20860	5.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0182.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0182.D
Lab Smp Id: MB-52603 Client Smp ID: VBLK5V
Inj Date : 28-JUN-2010 23:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-52603,VBLK5V,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-52637

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0204.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-52637

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0204.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-52637

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0204.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

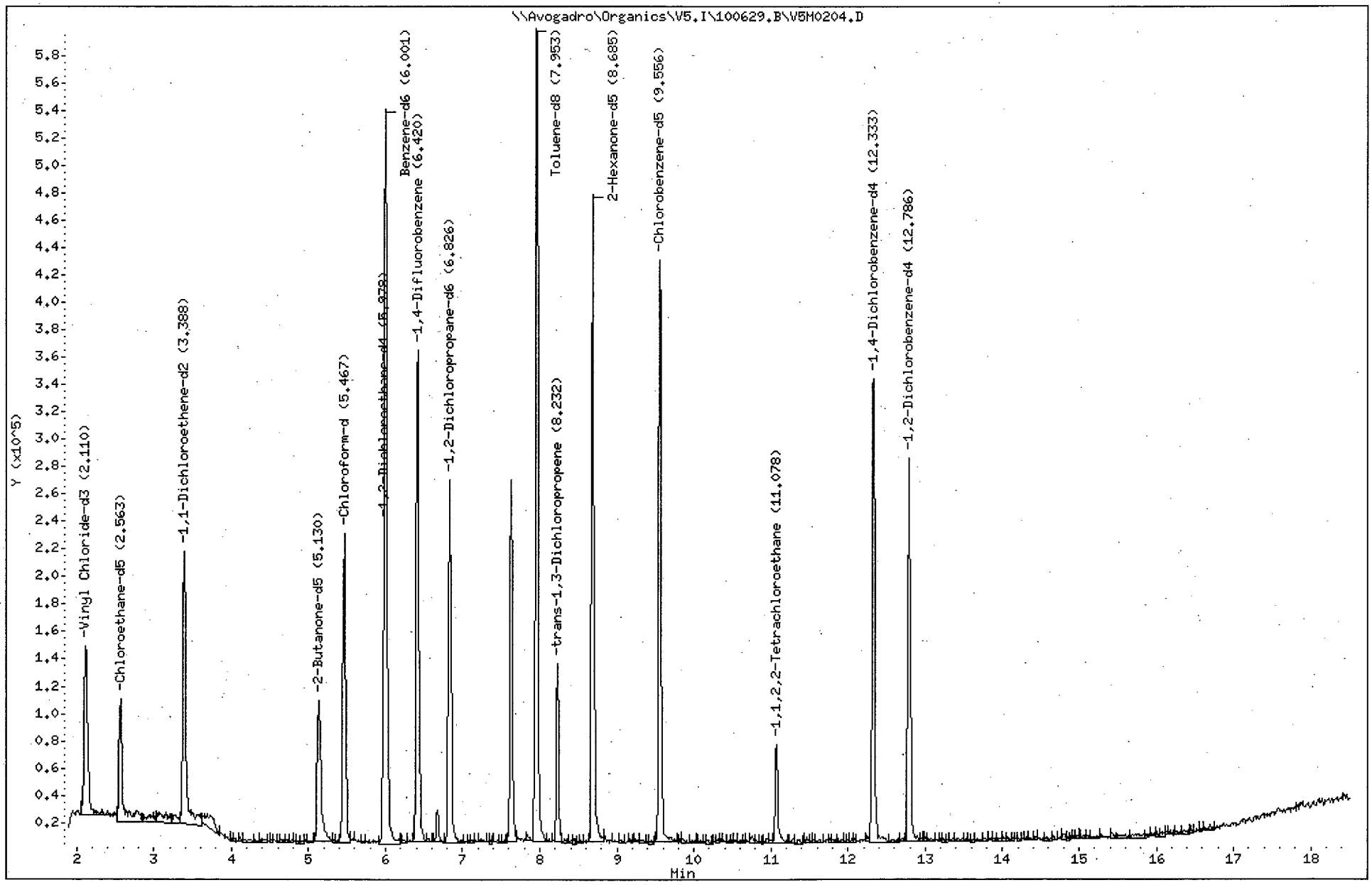
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0204.D
Date : 29-JUN-2010 10:11
Client ID: VBLK5W
Sample Info: 25ML,MB-52637,VBLK5W,52637
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: SRC: LIMS
Column diameter: 0.25



0210

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0204.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0204.D
Lab Smp Id: MB-52637 Client Smp ID: VBLK5W
Inj Date : 29-JUN-2010 10:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-52637,VBLK5W,52637
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.109	2.116	(0.329)	227934	4.49372	4.5
$ 80 Chloroethane-d5	69	2.562	2.557	(0.399)	118886	4.95972	5.0
$ 81 1,1-Dichloroethene-d2	65	3.387	3.382	(0.528)	54987	4.24863	4.2(Q)
$ 82 2-Butanone-d5	46	5.130	5.124	(0.799)	267406	39.5667	40(A)
$ 83 Chloroform-d	84	5.467	5.461	(0.852)	184815	4.38888	4.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.978	5.984	(0.931)	81207	4.61130	4.6
$ 84 Benzene-d6	84	6.001	5.996	(0.628)	487627	4.65974	4.7
* 26 1,4-Difluorobenzene	114	6.419	6.414	(1.000)	335373	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.837	6.832	(0.716)	155173	4.36489	4.4
$ 33 Toluene-d8	98	7.964	7.959	(0.833)	451037	4.97650	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	8.231	8.226	(0.861)	69384	4.08681	4.1
$ 87 2-Hexanone-d5	63	8.684	8.691	(0.909)	195742	48.2112	48(AQ)
* 42 Chlorobenzene-d5	117	9.556	9.562	(1.000)	257624	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.077	11.072	(1.159)	51335	4.23707	4.2
* 78 1,4-Dichlorobenzene-d4	152	12.332	12.327	(1.000)	104660	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.785	12.791	(1.037)	85815	5.18332	5.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0204.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0204.D
Lab Smp Id: MB-52637 Client Smp ID: VBLK5W
Inj Date : 29-JUN-2010 10:11
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-52637,VBLK5W,52637
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 32 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0211.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0211.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	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
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VHBLK5W

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5W

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0211.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

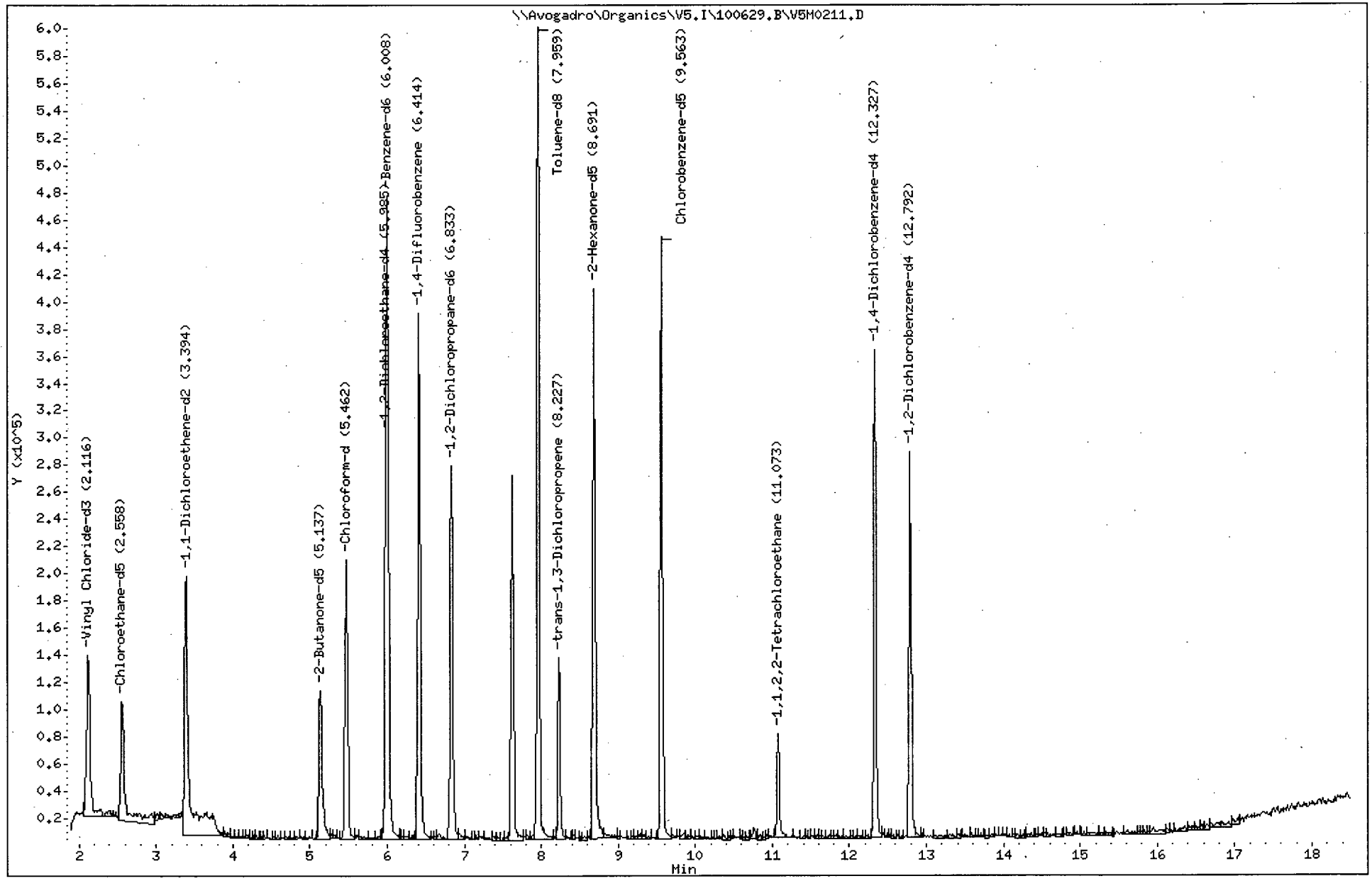
CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0211.D
Date : 29-JUN-2010 15:33
Client ID: VHBLK5W
Sample Info: 25ML,VHBLK5W,VHBLK5W,52637,
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC:
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0211.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0211.D
Lab Smp Id: VHBLK5W Client Smp ID: VHBLK5W
Inj Date : 29-JUN-2010 15:33
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLK5W,VHBLK5W,52637,
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 39 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.116	2.116	(0.330)	221334	4.50113	4.5
$ 80 Chloroethane-d5	69	2.569	2.557	(0.401)	112401	4.83697	4.8
$ 81 1,1-Dichloroethene-d2	65	3.394	3.382	(0.529)	51572	4.11036	4.1(Q)
$ 82 2-Butanone-d5	46	5.136	5.124	(0.801)	242394	36.9962	37(A)
$ 83 Chloroform-d	84	5.461	5.461	(0.851)	184204	4.51224	4.5(Q)
$ 23 1,2-Dichloroethane-d4	65	5.984	5.984	(0.933)	76501	4.48098	4.5
$ 84 Benzene-d6	84	6.007	5.996	(0.628)	460505	4.61114	4.6
* 26 1,4-Difluorobenzene	114	6.414	6.414	(1.000)	325126	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.832	6.832	(0.715)	136680	4.02867	4.0
$ 33 Toluene-d8	98	7.959	7.959	(0.832)	411174	4.75377	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.226	8.226	(0.860)	69331	4.27911	4.3
$ 87 2-Hexanone-d5	63	8.691	8.691	(0.909)	162957	42.0569	42(A)
* 42 Chlorobenzene-d5	117	9.562	9.562	(1.000)	245859	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.072	11.072	(1.158)	50413	4.36008	4.4
* 78 1,4-Dichlorobenzene-d4	152	12.327	12.327	(1.000)	98681	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.791	12.791	(1.038)	77581	4.96990	5.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\V5.I\100629.B\V5M0211.D
Report Date: 30-Jun-2010 12:55

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100629.B\V5M0211.D
Lab Smp Id: VHBLK5W Client Smp ID: VHBLK5W
Inj Date : 29-JUN-2010 15:33
Operator : SRC: Inst ID: V5.i
Smp Info : 25ML,VHBLK5W,VHBLK5W,52637,
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100629.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:34 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 39 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ5MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02AMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0185.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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	4.4	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	4.3	
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ5MS

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02AMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0185.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

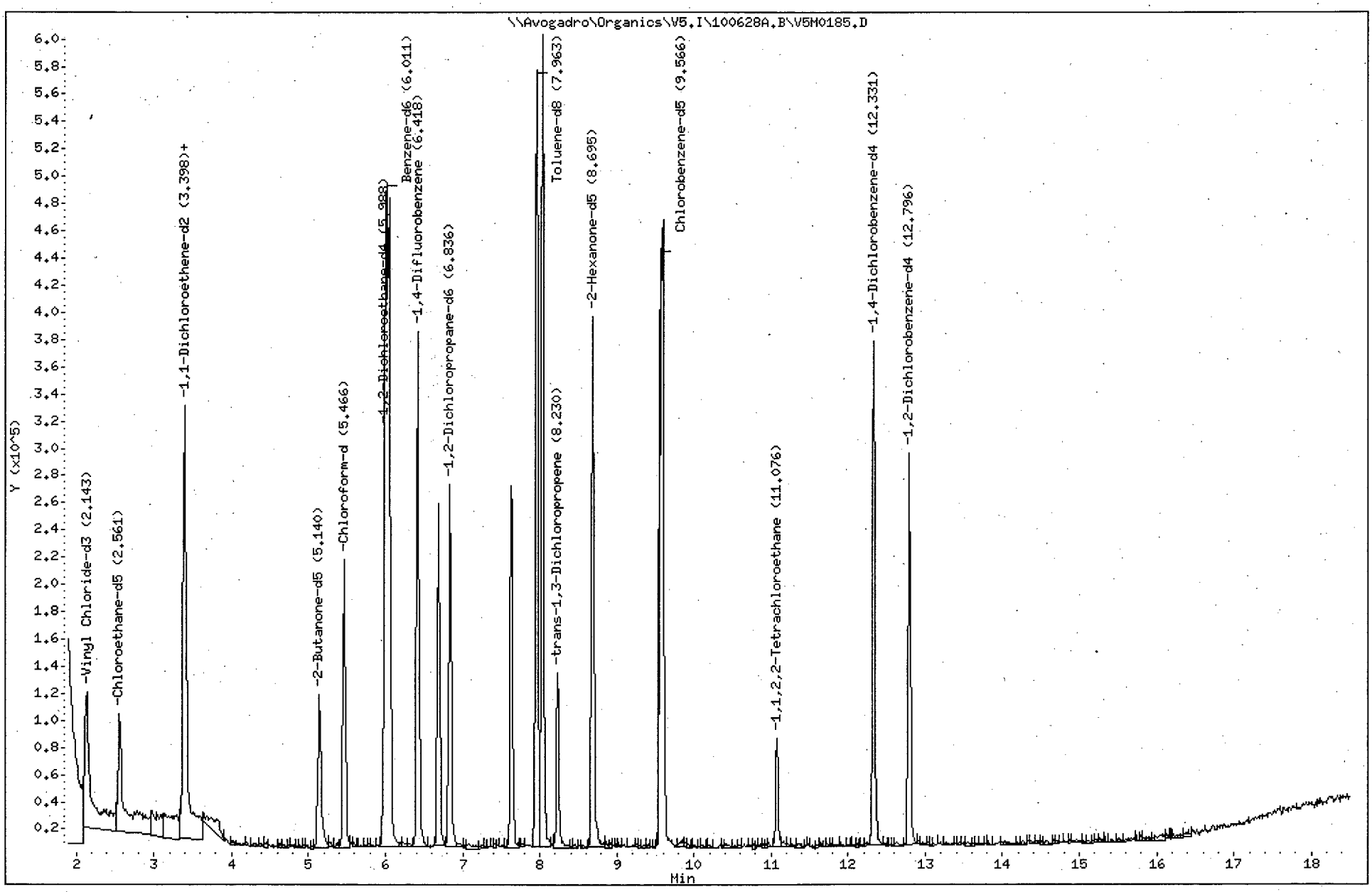
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	4.8	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.8	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	4.8	
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0185.D
Date : 29-JUN-2010 00:37
Client ID: F3JJ5MS
Sample Info: 25ML,J1288-02AMS,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



0221

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0185.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0185.D
Lab Smp Id: J1288-02AMS Client Smp ID: F3JJ5MS
Inj Date : 29-JUN-2010 00:37
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-02AMS,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.143	2.127	(0.334)	163743	3.29286	3.3
$ 80 Chloroethane-d5	69	2.561	2.556	(0.399)	97923	4.16701	4.2
$ 81 1,1-Dichloroethene-d2	65	3.397	3.381	(0.529)	55138	4.34564	4.3(Q) 87.1%
7 1,1-Dichloroethene	96	3.409	3.393	(0.531)	72765	4.35880	4.4
$ 82 2-Butanone-d5	46	5.140	5.135	(0.801)	230131	34.7334	35(A)
$ 83 Chloroform-d	84	5.465	5.461	(0.852)	177017	4.28790	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.988	5.983	(0.933)	73691	4.26833	4.3
$ 84 Benzene-d6	84	6.011	6.007	(0.628)	461178	4.50093	4.5
25 Benzene	78	6.046	6.041	(0.632)	432219	4.33011	4.3
* 26 1,4-Difluorobenzene	114	6.418	6.413	(1.000)	328787	5.00000	
27 Trichloroethene	95	6.685	6.680	(0.699)	106549	4.76153	4.8
$ 85 1,2-Dichloropropane-d6	67	6.836	6.831	(0.715)	139485	4.00723	4.0
$ 33 Toluene-d8	98	7.963	7.958	(0.832)	414894	4.67530	4.7
34 Toluene	91	8.032	8.028	(0.840)	457083	4.79645	4.8
$ 86 trans-1,3-Dichloropropene-d4	79	8.230	8.225	(0.860)	72933	4.38743	4.4
$ 87 2-Hexanone-d5	63	8.683	8.690	(0.908)	177157	44.5639	45(AQ)
* 42 Chlorobenzene-d5	117	9.566	9.561	(1.000)	252247	5.00000	
43 Chlorobenzene	112	9.601	9.596	(1.004)	256899	4.79456	4.8
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.076	11.071	(1.158)	53632	4.52101	4.5
* 78 1,4-Dichlorobenzene-d4	152	12.330	12.326	(1.000)	111582	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.795	12.791	(1.038)	86296	4.88902	4.9

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0185.D
Report Date: 30-Jun-2010 12:54

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ5MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02AMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0186.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/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	4.3	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	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
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	4.4	
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

F3JJ5MSD

Lab Name: MITKEM LABORATORIES Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 40275 Mod. Ref No.: SDG No.: F3JJ4

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: J1288-02AMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5M0186.D

Level: (TRACE/LOW/MED) TRACE Date Received: 06/23/2010

% Moisture: not dec. Date Analyzed: 06/29/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

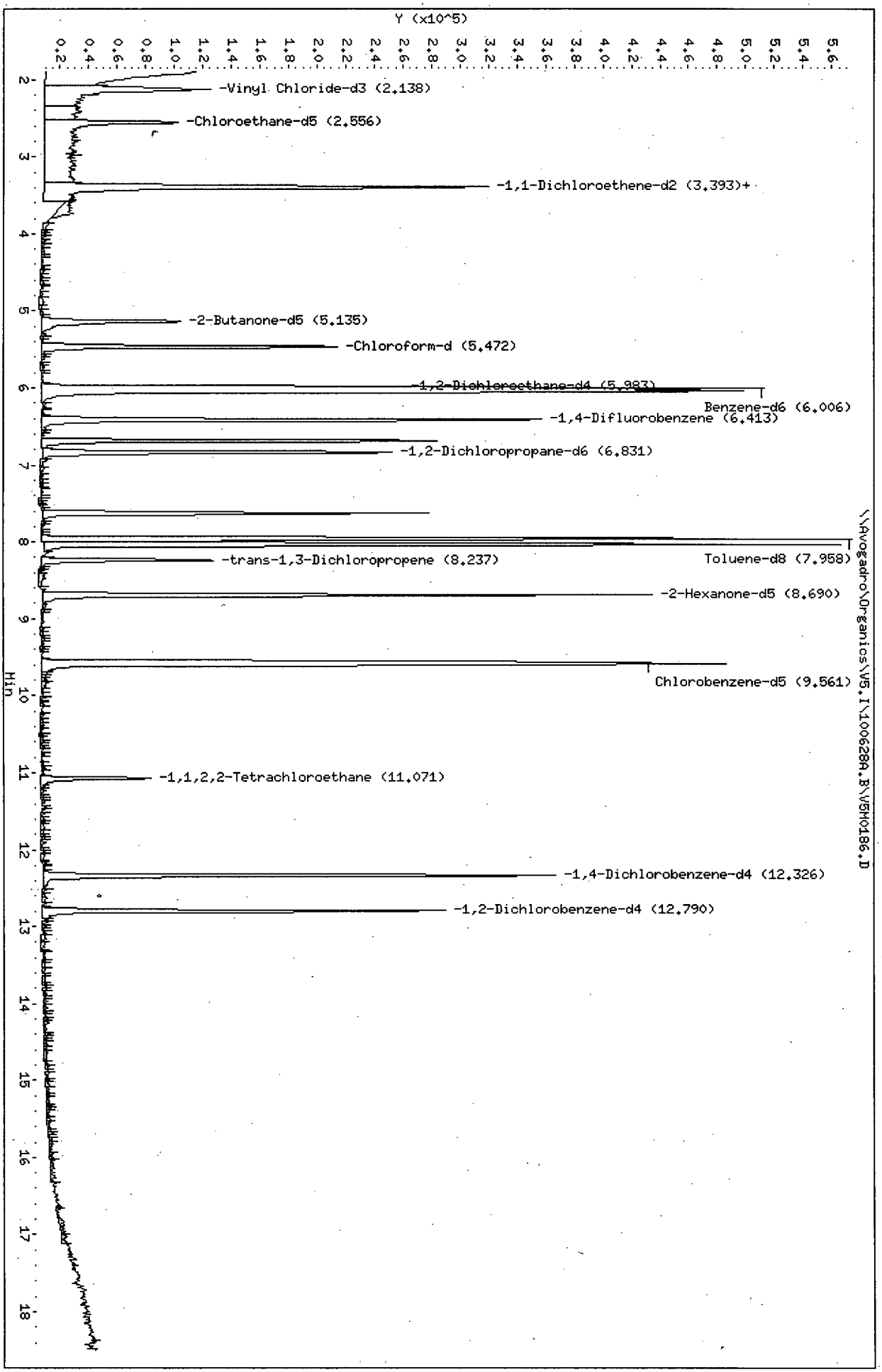
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) µG/L	Q
79-01-6	Trichloroethene	4.8	
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	4.7	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	4.9	
100-41-4	Ethylbenzene	0.50	U
179601-23-1	m,p-Xylene	0.50	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
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	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
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5H0186.D
Date : 29-JUN-2010 01:06
Client ID: F3JJ5HSD
Sample Info: 25ML,J1288-02HHSD,,52603
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i
Operator: SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0186.D
Report Date: 30-Jun-2010 12:54

Mitkem Laboratories

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\V5.I\100628A.B\V5M0186.D
Lab Smp Id: J1288-02AMSD Client Smp ID: F3JJ5MSD
Inj Date : 29-JUN-2010 01:06
Operator : SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,J1288-02AMSD,,52603
Misc Info :
Comment :
Method : \\Avogadro\Organics\V5.I\100628A.B\V5_TVOA1359.m
Meth Date : 30-Jun-2010 12:33 V5.i Quant Type: ISTD
Cal Date : 07-JUN-2010 13:51 Cal File: V5L9665.D
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM01.2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	25.000	Sample volume purged (mL)
Va	10.000	LCS Aliquot volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 79 Vinyl Chloride-d3	65	2.138	2.127	(0.333)	171555	3.47584	3.5
$ 80 Chloroethane-d5	69	2.556	2.556	(0.398)	98013	4.20214	4.2
$ 81 1,1-Dichloroethene-d2	65	3.380	3.381	(0.526)	51293	4.07294	4.1(Q)
7 1,1-Dichloroethene	96	3.404	3.393	(0.530)	71701	4.32729	4.3(Q)
$ 82 2-Butanone-d5	46	5.135	5.135	(0.799)	234270	35.6234	36(A)
$ 83 Chloroform-d	84	5.471	5.461	(0.852)	177273	4.32633	4.3(Q)
$ 23 1,2-Dichloroethane-d4	65	5.983	5.983	(0.931)	72621	4.23792	4.2
$ 84 Benzene-d6	84	6.006	6.007	(0.628)	461184	4.41507	4.4
25 Benzene	78	6.041	6.041	(0.632)	442843	4.35185	4.4
* 26 1,4-Difluorobenzene	114	6.424	6.413	(1.000)	326338	5.00000	
27 Trichloroethene	95	6.691	6.680	(0.700)	108958	4.77623	4.7714 95.4%
$ 85 1,2-Dichloropropane-d6	67	6.831	6.831	(0.714)	134527	3.79102	3.8(R)
$ 33 Toluene-d8	98	7.957	7.958	(0.832)	420096	4.64355	4.6
34 Toluene	91	8.027	8.028	(0.840)	457935	4.71366	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	8.236	8.225	(0.861)	69355	4.09254	4.1
$ 87 2-Hexanone-d5	63	8.689	8.690	(0.909)	170933	42.1774	42(A)
* 42 Chlorobenzene-d5	117	9.561	9.561	(1.000)	257156	5.00000	
43 Chlorobenzene	112	9.595	9.596	(1.004)	265632	4.86291	4.9
$ 89 1,1,2,2-Tetrachloroethane-d2	84	11.071	11.071	(1.158)	55765	4.61108	4.6
* 78 1,4-Dichlorobenzene-d4	152	12.325	12.326	(1.000)	111009	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.790	12.791	(1.038)	83887	4.77707	4.8

Data File: \\Avogadro\Organics\V5.I\100628A.B\V5M0186.D
Report Date: 30-Jun-2010 12:54

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

METHOD: CAL ID: ANALYST:

#5413

Mitkem Laboratories
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TVOA ANALYST: WL BATCH: 100607.B Start: 07-JUN-10 11:26
ICAL DATE: 6/7/10 End: 07-JUN-10 19:37

Comments:

Standards: IS-VW100601A uL
DMC-VW100601B uL
STD-VW100601C uL
uL

Reviewed By: SZ 6/08/10

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5L9660	11:26	BFBL5	BFBL5		AQ																			1		ok	
V5L9661	11:56	VSTD005L5	VSTD005L5		AQ		100	100	100															1		ok	
V5L9662	12:25	VSTD0.5L5	VSTD0.5L5		AQ		100	103	97															1		ok	
V5L9663	12:53	VSTD020L5	VSTD020L5		AQ		79	85	89															1		ok	
V5L9664	13:22	VSTD010L5	VSTD010L5		AQ		88	93	91															1		ok	
V5L9665	13:51	VSTD001L5	VSTD001L5		AQ		102	106	99															1		ok	
V5L9666	14:19	BLK			AQ		97	103	108															1		ok, not used	
V5L9667	14:48	MB-52124	VBLKL5	52124	AQ		102	105	102															1		ok	
V5L9668	15:16	J0002-01A	MDL-1	52124	AQ	1	94	102	106															1		ok	
V5L9669	15:44	J0002-02A	MDL-2	52124	AQ	1	94	104	105															1		ok	
V5L9670	16:13	J0002-03A	MDL-3	52124	AQ	1	93	102	105															1		ok (chart used)	
V5L9671	16:42	J0002-04A	MDL-4	52124	AQ	1	91	101	102															1		ok	
V5L9672	17:11	J0002-05A	MDL-5	52124	AQ	1	94	104	104															1		ok	
V5L9673	17:40	J0002-06A	MDL-6	52124	AQ	1	93	102	103			*												1		ok	
V5L9674	18:09	J0002-07A	MDL-7	52124	AQ	1	92	103	99															1		ok	
V5L9675	18:38	J0002-08A	MDL-8	52124	AQ	1	94	106	103															1		ok	
V5L9676	19:07	J1116-02A	X0D80	52124	AQ	1	94	95	91															1		ok, PER V05113, 10mL/25mL	7
V5L9677	19:37	VSTD005M5	VSTD005M5		AQ		100	100	100															1		ok	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 6/8/10

9226

Mitkem Laboratories
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TVOA
ICAL DATE: 6/7/10

ANALYST: WL

BATCH: 100628A.B

Start: 28-JUN-10 22:13
End: 29-JUN-10 09:42

Comments:

Standards: IT-VW100601A ___ uL
PMC-VW100601B ___ uL
STD-VW100601C ___ uL
___ uL

Reviewed By: [illegible]

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5M0180	22:13	BFB5V	BFB5V		AQ																			1		OK	
V5M0181	22:42	VSTD0055V	VSTD0055V		AQ		100	100	100															1		ok	
V5M0182	23:11	MB-52603	VBLK5V	52603	AQ		99	99	107															1		ok	
V5M0183	23:40	J1288-01A	F3JJ4	52603	AQ	1	90	92	97	*														1		ok	7
V5M0184	00:08	J1288-02A	F3JJ5	52603	AQ	1	86	89	93															1		ok	7
V5M0185	00:37	J1288-02AMS	F3JJ5MS	52603	AQ	2	85	85	91															1		ok	7
V5M0186	01:06	J1288-02AMSD	F3JJ5MSD	52603	AQ	3	84	86	91								*							1		ok	7
V5M0187	01:35	J1288-03A	F3JJ6	52603	AQ	1	83	84	89															1		ok	7
V5M0188	02:05	J1288-04A	F3JJ7	52603	AQ	1	84	85	88	*							*							1		ok	7
V5M0189	02:34	J1288-05A	F3JJ8	52603	AQ	1	85	87	89															1		ok	7
V5M0190	03:03	J1288-06A	F3JK2	52603	AQ	1	82	83	87								*							1	E	TCE=41, RRX4	7
V5M0191	03:31	J1288-07A	F3JL1	52603	AQ	1	79	80	86															1		OK, clean	7
V5M0192	04:00	J1288-08A	F3JL2	52603	AQ	1	76	78	82															1		ok	7
V5M0193	04:29	J1288-09A	F3JJ2	52603	AQ	1	77	79	83															1		ok	7
V5M0194	04:58	J1288-10A	F3JJ3	52603	AQ	1	77	77	81															1		ok	7
V5M0195	05:27	J1288-11A	F3JJ9	52603	AQ	1	77	77	81															1		ok	7
V5M0196	05:56	J1288-12A	F3JK0	52603	AQ	1	74	77	80															1		ok	7
V5M0197	06:25	J1288-13A	F3JK3	52603	AQ	1	74	75	78															1		ok	7
V5M0198	06:54	J1288-14A	F3JK4	52603	AQ	1	74	74	78															1		ok	7
V5M0199	07:23	J1288-15A	F3JK5	52603	AQ	1	71	72	73															1		ok	7
V5M0200	07:52	J1288-16A	F3JL3	52603	AQ	1	70	71	74															1		ok	7
V5M0201	08:21	J1288-17A	F3JK1	52603	AQ	1	73	70	75															1		ok	7
V5M0202	08:50	J1288-18A	F3JK6	52603	AQ	1	73	75	77															1		ok	7
V5M0203	09:42	VSTD0055W	VSTD0055W		AQ		100	100	100															1		ok	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

WL 6/30/10

0230

Logbook ID 90.0199-06/10

METHOD: CAL ID: ANALYST:
INITIAL CAL: IS/SS ID: ARCHIVE:
COMMENTS: ICV ID:

Mitkem Laboratories
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TVOA
ICAL DATE: 6/7/10

ANALYST: ML

BATCH: 100629.B

Start: 29-JUN-10 09:42
End: 29-JUN-10 16:02

Comments:

Standards: IS-VW100601A ___ uL
DMC-VW100601B ___ uL
STD-VW100601C ___ uL
___ uL

Reviewed By: 6-30-10

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS DFB	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5M0203	09:42	VSTD0055W	VSTD0055W		AQ		100	100	100															1		OK	
V5M0204	10:11	MB-52637	VBLK5W	52637	AQ		104	105	99															1		OK	
V5M0205	10:39	J1288-06ADL	F3JK2DL	52637	AQ	2	89	90	92															4		OK, TCE=11	7
V5M0206	11:08	J1288-19A	F3JK7	52637	AQ	1	87	86	83															1		OK	7
V5M0207	13:37	J1288-20A	F3JK8	52637	AQ	1	84	86	81															1		OK	7
V5M0208	14:06	J1312-01A	F3JK9	52637	AQ	1	89	93	86															1		OK	7
V5M0209	14:35	J1312-02A	F3JL0	52637	AQ	1	88	87	87															1		OK	7
V5M0210	15:04	J1312-03A	F3JL4	52637	AQ	1	83	86	85															1		OK	7
V5M0211	15:33	VHBLK5W	VHBLK5W	52637	AQ		101	100	93															1		OK (J1288) (J1312)	
V5M0212	16:02	VSTD0055X	VSTD0055X		AQ		100	100	100															1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
D - Surrogates are diluted

VVC 6/30/10

0231

MITKEM LABORATORIES: VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
6/21/10	J1277	Kabella	01 - ~~03~~ 10 *6-24-10	CAW	[illegible]	US JN ~~H~~ 6/21	RW	04A, 07A used for ICP_S-IPR 6/24/10 AED
6-22-10	J1283	SEVEN	01,02	[illegible]	SZ	E	RW	
6/22/10	J1270	EPA	01-04	CN	SZ	T	R4	
6-23-10	J1283	SEVEN	03	[illegible]	SN	E	R10	
6/23/10	J1288	EPA	01-08	CAW		T	R4	
	J1289	EArth	01,02,04-07			H	R10	
	J1290	EPA	01,03,05,06,08,10-12			T	R4	
	J1290	EPA	02,04,07,09 + 13			H	R10	
	J1291	EPA	01,02		T	~~H~~	R4	
	J1296	EPA	04-12			H	R10	
	J1287	Seveson	01			OS	R10	
6/23/10	J1297	Kabella	01-08	CAW	[illegible]	H	R10	
6-24-10	J1283	SEVEN	04,05	[illegible]	[illegible]	E	R10	
6/24/10	J1306	EPA	02,04,06,08,10,12,14	CAW		—	F9	

Logbook ID 90.0191-04/10

Reviewed By: KC 6/25/10

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

02232

MITKEM LABORATORIES: VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
6/24/10	J1298	HDR	01 - 10	SN	CAN	H	R10	
	J1288	EPA	09 - 16			T	R4	
	J1299	Lu	01-06			H	R10	
	J1290	EPA	15,16,19,20,21			T	R4	
	J1290	EPA	17,18 SN 6/24/10			H	R10	
	J1301	Labella	01,02,14,~~15~~,13			H	R9	
	J1301	Labella	04,~~05~~ SN 6/24/10, 07 - ~~13~~ 12 SN 6/24/10			US	R9	
	J1302	Labella	14 - 16			H	R9	
	J1302	Labella	01 - 13			US	R9	
	J1304	EPA	01 - 12			T	F10	
	J1305	EPA	01-03, 05,06			T	R4	
	J1307	EPA	04			H	R10	PE
	J1310	EPA	01			H	R9	PE
6/24/10	J1310	EPA	02 - 10	SN	CAN	H	R9	

Logbook ID 90.0191-04/10

Reviewed By: KC 6/25/10

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

0233

MITKEM LABORATORIES: VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
6/24/10	J1308	VenTEK	01	SN	CAW	H	R10	
			02			01 UA	R14	
			03		SN 6/24	F ~~F10~~	F10	
	J1308	VenTEK	03			M	R10	
6/24/10	J1296	EPA	13-20	SN		H	R9	
6/24/10	J1306	EPA	02,04,06,08,10,12,14	SN	CAW	US	R9	
6-25-10	J1314	SENTEN	01-10	[illegible]		E	RW	
	J1283	SENTEN	06	[illegible]		E	RW	
	J1318	EPA	01,04		~~C~~ CAW	~~E~~		
	J1288	EPA	~~0~~ 17-20	SN	CAW	Tun	R4	
	J1312	EPA	01-03			Tun	R4	
	J1290	EPA	22,23			T	R4	
	J1300	EPA	02,09-12,15,16			T	R4	
6/25/10	J1300	EPA	03-08,13,14,17	SN	CAW	H	R9	

Logbook ID 90.0191-04/10

Reviewed By:

"Preservative Used" Key

UA = Unpreserved Aqueous	**H** = HCL	**A** = Air	**M** = MeOH	**E** = Encore
US = Unpreserved Soil	**N** = $NaHSO_4$		**F** = Freeze	**T** = Trace, HCL

0234

Mitkem Corporation

VOA Primary Standard Receipt Logbook

Date	Description, Vendor Name	Catalog #, Lot #	Concentration	Mitkem ID	*Exp. Date	**Date Opened	Analyst
11/10/09	Ozri 5oM - DMCA - Na-GAS	Ozri Cat # 122072-01 Lot # 146997	2000 ppm	VP091110C	5/23/2011	12/15/09	WL
				VP091110D	5/23/2012		WL
5/22/09	GRO_LCS	Restek Cat # 30081 Lot # A062078	2500 PPM	VP090522D	5/5/2010	9/24/09	WL
8/20/09	GRO_STD	ULTRA_SCIEN Lot # CC-2681A	1000 PPM	VP090820C	08/2010	9/29/09	WL
12/8/09	PIANO Custom Mix A Supelco	21204180G LB71929	2000 ug/mL	VP091208A	12/8/11		[illegible]
12/8/09	PIANO Custom Mix B Supelco	21210586P LB7220	2000 ug/mL	VP091208B	12/8/11		[illegible]
12/8/09	PIANO Custom Mix C	21210588 LB7221	2000 ug/mL	VP091208C	12/8/11		[illegible]
2/8/10	Restek 5oM (Ketones)	Restek Cat # 30106 Lot # A068500	5000 ug/mL	VP100208A	04/2012	2/14/10	WL
				B			
				C			
				D			
				E			
2/8/10	Restek 5oM (Ketones)	Restek Cat # 30106 Lot # A068500	5000 ug/mL	VP100208 F	04/2012		WL

* Expiration dates are 2 years for unopened stock solutions and 5 years for neat materials, unless noted otherwise by manufacturer.

** Expiration dates for opened stock solutions are 6 months.

S235

Logbook ID 90.0151-01/07

Reviewed by: NZA 3/8/10

Mitkem Corporation

VOA Primary Standard Receipt Logbook

Date	Description, Vendor Name	Catalog #, Lot #	Concentration	Mitkem ID	*Exp. Date	**Date Opened	Analyst
9/21/09	Restek Ketones Mix	Cat 30006 Lot A064679	5000 ppm	VP090921 A	03/2012	9/23/09	SZ
				-B	03/2012	12/24/09	
				-C	03/2012		
9/21/09	Restek Ketones Mix	Cat 30006 Lot A064679	5000 ppm	VP090921 D	03/2012		SZ
11/05/09	Custom 9716 Ultra	Cus 9716 Lot CF3257	400-2000 ppm	VP091105A-D	12/2009		SZ
11/05/09	4-Bromofluorobenzene Ultra	STS-110N Lot CC 1085A	2000 ppm	VP091105E-	06/2012		SZ
				-F			
				-G			
				-H			
				-I			
				-J			
				-K			
11/05/09	4-Bromofluorobenzene	STS-110N Lot CC 1085A	2000 ppm	VP091105 L	06/2012		SZ
11/10/09	50% - DMCA - GAS	OLSI Cat # 122001-03 Lot # 134383	2000 µM	VP091110 A	4/21/2011	12/15/09	ML
				VP091110 B	4/21/2011		ML

* Expiration dates are 2 years for unopened stock solutions and 5 years for neat materials, unless noted otherwise by manufacturer.

** Expiration dates for opened stock solutions are 6 months.

0236

Logbook ID 90.0151-01/07

Reviewed by: NZA 3/8/10

Mitkem Corporation

VOA Primary Standard Receipt Logbook

Date	Description, Vendor Name	Catalog #, Lot #	Concentration	Mitkem ID	*Exp. Date	**Date Opened	Analyst
8/07/09	Ultra Custom Standard	CUS 9716	400 - 2000	VP090807A (SE 8/17/09)	Dec 09		SZ
8/07/09	Quote 072009 - 773	Lot CF - 3257	various	-B	Dec 09		
				-C			
8/17/09	Ultra Custom Standard Quote 072009 - 773	CUS 9716	400 - 2000	VP090817D	Dec 09		SZ
9/01/09	Ultra 2-Chlorobenzotrifluoride	CUS 11178 Lot CF-3643	2000 ug/mL	VP090901A	Sep 2010	9/01/09	SZ
9/01/09	Ultra 4-Chlorobenzotrifluoride	CUS 11179 Lot CF-3642	2000 ug/mL	VP090901B	Sep 2011	9/01/09	SZ
9/08/09	Ultra 4-Bromofluorobenzene (BFB)	STS - 110N	2000 ug/mL	VP090908A	06/30/12		SZ
				-B			
				-C			
				-D			
				-E			
				-F			
				-G			
9/08/09	Ultra 4-BFB	STS - 110N	2000 ug/mL	VP090908H	06/30/12		SZ

* Expiration dates are 2 years for unopened stock solutions and 5 years for neat materials, unless noted otherwise by manufacturer.

** Expiration dates for opened stock solutions are 6 months.

6237

Logbook ID 90.0151-01/07

Reviewed by: HZA 3/8/10

Mitkem Corporation

VOA Primary Standard Receipt Logbook

Date	Description, Vendor Name	Catalog #, Lot #	Concentration	Mitkem ID	*Exp. Date	**Date Opened	Analyst
3/17/09	VOC Gas Mixture	Ultra DWM-544 Lot# CF-0524	2000 ug/mL	VP090317 E	Feb-2012	9/23/09	SZ
3/17/09	VOC Gas Mixture	Ultra DWM-544 Lot# CF-0524	2000 ug/mL	VP090317 F	Feb-2012		SZ
5/05/09	OLC 03.2 VOA Mega-MIX	Restek Cat# 30492 Lot A053750	2000 ug/mL	VP090505 A	Jul-2010	9/23/09	SZ
5/05/09	OLC 03.2 VOA Mega MIX	Restek Cat# 30492 Lot # A053750	2000 ug/mL	VP090505 B	Jul-2010	7/19/10	SZ
~~11/23/09~~	~~OLM Cat2000~~	Restek Cat# 30456 Lot # A058174	~~2000 ug/ml~~	~~VP091122A~~	~~Feb-2011~~	~~11/24/09~~	~~[illegible]~~
~~5/20/09~~	~~Vol system Monitoring Spike solution~~	~~CR-2710~~ 5/09	WL 5/11/09	primary standard gas cylinders		not needed here	
5/20/09	Vol system Monitoring Spiking sol	Lot CR-2710 Cat# 30005	2500 ng/ml	VP090520 A	Aug-2011	9/23/09	XD
	CLP SOM 01.1 DMC MIX	Lot 146857	2000 ng/ml	VP090520 B1	~~Nov-2011~~ ~~5/05/2010~~	5/05/10 9/23/09	XD
5/21/09	↓	Lot 146857 ~~Lot 134362~~	↓	VP090520 B1	5/23/2010	8/15/10	↓
5/21/09	CLP OLC 03.2 Surr.	Lot# 134387 ~~134387~~ 5/5/09	2000 ng/ml	VP090522 C1	4/21/2011	9/23/09	↓
5/22/09	CLP OLC 03.2 Surr.	Lot# 134387	2000 ng/ml	VP090522 C2	4/21/2011	8/15/10	XD
6/13/09	SOM - IS	Restek Cat# 30091 Lot# A067184	2500 ng/ml	VP090613 A	3/2014	9/23/09	WL
↓ 6/13/09	↓ SOM-IS	Restek Cat# 30091 Lot # A067184	2500 ng/ml	VP090613B	3/2014	1/17/10	WL

* Expiration dates are 2 years for unopened stock solutions and 5 years for neat materials, unless noted otherwise by manufacturer.

** Expiration dates for opened stock solutions are 6 months.

0238

Logbook ID 90.0151-01/07

Reviewed by: SZ 9/01/09

Mitkem Corporation

VOA Primary Standard Receipt Logbook

Date	Description, Vendor Name	Catalog #, Lot #	Concentration	Mitkem ID	*Exp. Date	**Date Opened	Analyst
1/19/09	VOC gas mix	Ultra DWM-544 lot# CE-3325	2000ppm	VP090119A	10/31/2011	4/8/09	HZA
1/19/09	VOC gas mix	Ultra DWM-544 lot# CE-3325	2000 ppm	VP090119B HZA 1/19/09	10/31/2011		HZA
1/26/09	3-chlorobenzotrifluoride	Ultra CUS-10445 lot# CF-0415	2000 ppm	VP090127A	~~1/31/2009~~ 2/28/2011 HZA 1/26/09	2/12/09	
↓	↓	↓	↓	B		5-1-09	↓
				C			
↓	↓	↓	↓	D	↓		↓
1/27/09	3-chlorobenzotrifluoride	Ultra CUS-10445 lot# CF-0415	2000 ppm	VP090127E	2/28/2011		HZA
2/3/09	GRO-ICV (unleaded gasoline)	Ultra AGO-605 lot# CB-1590A	2500 ppm	VP090203A	9/31/2012		↓
2/3/09	VPH STD	Ultra SMA-101 lot# CC-1018A	1000 ppm	VP090203B	6/30/2010		
↓	VPH Matrix spike	Ultra SMA-111 lot# CE-3537	50 ppm	VP090203C	11/30/2011		↓
2/3/09	2-chloroethanol	Ultra EPA-1207 CB-0120A	1000 ppm	VP090203D HZA 2/6/09	3/31/2011		HZA
			HZA 3/11/09				

* Expiration dates are 2 years for unopened stock solutions and 5 years for neat materials, unless noted otherwise by manufacturer.

** Expiration dates for opened stock solutions are 6 months.

S236

Logbook ID 90.0151-01/07

Reviewed by: HZA 3/11/09

Mitkem Laboratories, A Division of Spectrum Analytical, Inc.

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INITIAL VOL	FINAL VOL	METHANOL LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
3/19/10	50M-IS	VP090613B	2500ppm	160ml	4ml	4916L	100ppm	VW100319A	4/19/10	WL
	GAS	VP091110A	2000ppm	200ml						
3/19/10	50M-DMC Non-gas	VP091110C	2000ppm	200ml	4ml	4916L	100ppm	VW100319B	4/19/10	WL
	DMCB	VW100126D	5000ppm	160ml						
	DMCC	VW100126E	20000ppm	400ml						
	GAS	VP090317E	2000ppm	200ml						
3/19/10	50M-STD JTD	VP090507B	2000ppm	200ml	4ml	4916L	100ppm	VW100319C	4/19/10	WL
	Kerosene	VP090921B	5000ppm	160ml						
	1,4D10X	VW100126F	20000ppm	400ml						
3/19/10	1,3,5-TCB	VP030612A	Neat	0.4mg	SZ 3/26/10		partial complete		SZ 3/26/10	

Logbook ID 90.0152-10/08

Reviewed by : _____

0210

Mitkem Laboratories, A Division of Spectrum Analytical, Inc.

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INITIAL VOL	FINAL VOL	METHANOL LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
2/24/10	TVOA - LCS	VP090522A	2500ppm	40ml	1ml	CY840	100ppm	VW100224D	3/24/10	ML
3/8/10	SOM - IS	VP090613B	2500ppm	160ml	4ml	49162	100ppm	VW100308A	4/8/10	ML
	GAS	VP091110A	2000ppm	200ml						
3/8/10	SOM-DMC NonGAS	VP091110C	2000ppm	200ml	4ml	49162	100ppm	VW100308B	4/8/10	ML
	DMCB	VW100126D	5000ppm	160ml						
	DMCC	VW100126E	20000ppm	400ml						
	GAS	VP090317E	2000ppm	200ml						
3/8/10	SOM-STD STD	VP090507B	2000ppm	200ml	4ml	49162	100ppm	VW100308C	4/8/10	ML
	Ketone	VP090921B	5000ppm	160ml						
	1,4-Dioxane	VW100126F 7/8/10	20000ppm	400ml						
3/8/10	TVOA - IDP	VP060913B	Neat	4mg	4ml	49162	20ppm	VW100308P	4/8/10	ML
	Hex	VP060913A	Neat	8mg						
←		Partial Complete		3/8/10						→
3/11/10	SOM PM IS	VW100219A	100ppm	80ml	4ml	49162	2ppm	VW100311A	4/11/10	ML
3/11/10	SOM PM DMC	VW100219B	100ppm	80ml	4ml	49162	2ppm	VW100311B	4/11/10	ML
3/11/10	SOM PM STD	VW100219C	100ppm	80ml	4ml	49162	2ppm	VW100311C	4/11/10	ML
3/12/10	TVOA - ADP	VP081003A	250ppm	32ml	4ml	49162	20ppm	VW100312A	4/12/10	ML

Logbook ID 90.0152-10/08

Reviewed by : SAL 3/26/10

0214

Mitkem Laboratories, A Division of Spectrum Analytical, Inc.

VOA Working Standard Logbook

DATE	DESCRIPTION		STOCK ID	STOCK CONC	INITIAL VOL	FINAL VOL	METHANOL LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
2/19/10	SOM-IS		VP090613B	2500 PPM	160 ul ~~250 ml~~ 3/19/10	4ml	CY840	100 PPM	VW100219A	3/19/10	ML
		GAS	VP091110A	2000 PPM	200 ul						
2/19/10	SOM-DMC	Non-GAS	VP091110B C ML 3/19/	2000 PPM	200 ul	4ml	CY840	100 PPM	VW100219B	3/19/10	ML
		DMCB	VW100126D	5000 PPM	160 ul						
		DMCC	VW100126E	20000 PPM	400 ul						
		GAS	VP090317E	2000 PPM	200 ul						
2/19/10	SOM-STD	STD	VP090505B	2000 PPM	200 ul	4ml	CY840	100 PPM	VW100219C	3/19/10	ML
		Ketone	VP090921B	5000 PPM	160 ul						
		1,4-Dox.	VW100126F	20000 PPM	400 ul						
		Hexane	VP060917A	Neat	0.4 mg						
2/19/10	SOM-APP	Isop-propanol	VP060913B	Neat	20 mg	4ml	CY840	100 PPM	VW100219D	3/19/10	ML
		1,3,5-TCB	VP080612A	Neat	0.4 mg						
2/24/10	TVOA-IS		VP090613B	2500 PPM	32 ul	4ml	CY840	20 PPM	VW100224A	3/24/10	ML
		GAS	VP091110A	2000 PPM	40 ul						
2/24/10	TVOA-DMC	Non-GAS	VP091110B C ML 3/19/	2000 PPM	40 ul	4ml	CY840	20 PPM	VW100224B	3/24/10	ML
		DMCB	VW100126D	5000 PPM	160 ul						
		GAS	VP090317E	2000 PPM	40 ul						
2/24/10	TVOA-STD	STD	VP090505B	2000 PPM	40 ul	4ml	CY840	20 PPM	VW100224C	3/24/10	ML
		Ketone	VP090921B	5000 PPM	160 ul						

Logbook ID 90.0152-10/08

Reviewed by : HZA 3/8/10

0242

Mitkem Laboratories, A Division of Spectrum Analytical, Inc.

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INITIAL VOL	FINAL VOL	METHANOL LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
1/26/10	50M-PMCB (STOCK)	VP060310B	Neat	20mg	4ml	CY640	5000ppm	VW100126D	7/26/10	WL
	WL 1/26/10	VP060710D	Neat	20mg			WL 1/26/10			
1/26/10	50M-~~PMCB~~ 1,4-DIOX (STOCK)	VP060608B	Neat	80mg	4ml	CY640	20000 ~~2000~~ ppm	VW100126E	7/26/10	WL
	WL 1/26/10 ~~PMC~~ GAS	VP090317E	2000ppm	200ml						
1/26/10	50M-STD NON-GAS	VP090505A	2000ppm	200ml	4ml	CY640	100ppm	VW100126C	2/26/10	WL
	STD	VP090921A	5000ppm	160ml						
	1,4-DIOX	VW100126E	20000ppm	400ml						
1/27/10	TVOA-APP	VP081114A	2500ppm	32ml	4ml	CY640	20ppm	VW100127A	2/27/10	WL
1/31/10	50M STM ZP	VW100126A	100ppm	80ml	4ml	CY640	2ppm	VW100131A	3/1/10	WL
1/31/10	50M STM PMC	VW100126B	100ppm	80ml	4ml	CY640	2ppm	VW100131B	3/1/10	WL
1/31/10	50M STM STD	VW100126C	100ppm	80ml	4ml	CY640	2ppm	VW100131C	3/1/10	WL
2/3/10	TVOA-Irp	VP060913B	Neat	4mg	4ml	CY640	20ppm	VW100203A	3/3/10	WL
	Hex	VP060913A	Neat	0.08mg						
2/3/10	50M-Hex	VP060913A	Neat	0.4mg	4ml	CY640	100ppm	VW100203B	3/3/10	WL
	Irp	VP060913B	Neat	20mg						
2/10/10	OCM-IS	VP080915A	2500ppm	40ml	1ml	CY840	100ppm	VW100210A	3/10/10	WL
	GAS	VP090317E	2000ppm	50ml						
2/10/10	OCM-STD Cl2000	VP081011B	2000ppm	5ml	1ml	CY840	10ppm	VW100210C	3/10/10	WL
	Kalyne	VP090921A	5000ppm	20ml						

Logbook ID 90.0152-10/08

Reviewed by: HZA 3/8/10

0213

Mitkem Corporation

/OA Primary Standard Receipt Logbook

Date	Description, Vendor Name	Catalog #, Lot #	Concentration	Mitkem ID	*Exp. Date	**Date Opened	Analyst
11/10/09	Ozri SUM - DNCA - Mn-GAJ	Ozri Cat # 122032-01 Lot # 146997	2000 ppm	VP091110C	5/23/2011	12/15/09	WL
				VP091110D	5/23/2012		WL
5/22/09	GRO_LCS	Restek Cat # 30081 Lot # A062078	2500 PPM	VP090522D	5/5/2010	9/29/09	WL
8/20/09	GRO_STD	ULTRA_SCIEN Lot # CC-2681A	1000 PPM	VP090820C	08/2010	9/29/09	WL
2/8/09	PIANO Custom Mix A SUPELCO	21204806 LB71929	2000 ug/mL	VP091208A	12/8/11		[illegible]
12/8/09	PIANO Custom Mix B SUPELCO	21210586 LB7220	2000 ug/mL	VP091208B	12/8/11		[illegible]
12/8/09	PIANO Custom Mix C	21210588 LB7221	2000 ug/mL	VP091208C	12/8/11		[illegible]
2/8/10	Restek SUM (Ketones)	Restek Cat # 30066 Lot # A068500	5000 ug/mL	VP100208A	09/2012	2/14/10	WL
				B			
				C			
				D			
				E			
2/8/10	Restek SUM (Ketones)	Restek Cat # 30066 Lot # A068500	5000 ug/mL	VP100208F	09/2012		WL

* Expiration dates are 2 years for unopened stock solutions and 5 years for neat materials, unless noted otherwise by manufacturer.

** Expiration dates for opened stock solutions are 6 months.

024

Logbook ID 90.0151-01/07

Reviewed by: NZA 3/8/10

FedEx Express *US Airbill*

8705 3693 5506

0200

Form ID No.

FedEx Retrieval Copy

1 From

Date 06-22-10 Sender's FedEx Account Number 3529 7878 7

Sender's Name April Palmie Ph: 512-239-4152

Company TCEQ

Address 12100 Park 35 Circle MC-136

Austin, TX 78753

Fex Ex Acct: 3529 7878 7

Dept./Floor/Suite/Room

City State ZIP

2 Your Internal Billing Reference 70848

3 To

Recipient's Name Dawne Smarte Phone: 401-732-3400

Company Mitkem Corp. - MITKEM

Address 175 Metro Center Blvd.

Warwick, RI 02886

We cannot deliver to P.O. boxes or

Dept./Floor/Suite/Room

Address

Print FedEx location address here if a HOLD option is selected.

City State ZIP

D Saturday
edEx location address below.
ble ONLY for FedEx Priority Overnight
dEx 2Day to select locations.

4a Express Package Service * To most locations. *Packages up to 150 lbs.*

1 [X] FedEx Priority Overnight — *Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

5 [ ] FedEx Standard Overnight — *Next business afternoon.* Saturday Delivery NOT available.

6 [ ] FedEx First Overnight — *Earliest next business morning* delivery to select locations. Saturday Delivery NOT available.

3 [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. *Packages over 150 lbs.*

7 [ ] FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 1Day Freight Booking No.

8 [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

6 [ ] FedEx Envelope*

2 [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.

3 [ ] FedEx Box 4 [ ] FedEx Tube 1 [X] Other

6 Special Handling and Delivery Signature Options

3 [ ] **SATURDAY DELIVERY**

[X] No Signature Required — Package may be left without obtaining a signature for delivery.

10 [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

[X] No

4 [ ] Yes — As per attached Shipper's Declaration.

[ ] Yes — Shipper's Declaration not required.

6 [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (includ... cannot be shipped in FedEx packaging or placed in a FedEx Expr... box.

[ ] Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No. [ ]

[X] Sender — Acct. No. in Section 2 will be billed.

1 [ ] Recipient 3 [ ] Third Party 4 [ ] Credit Card 5 [ ] Cash/Check

Total Packages 1 Total Weight 57 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

554

Rev. Date 2/08•Part #158281•©1994–2008 FedEx•PRINTED IN U.S.A. SRY

8705 3693 5506

Agnus Rodriguez 6/23/10

Case 40275

SDG F3J4

9215

FedEx Express US Airbill

8717 6256 2254

0200

Form ID No. (CM)

FedEx Retrieval Copy

1 From

Date 6/23

Sender's FedEx Account Number

Sender's Name April Palmie Ph: 512-239-4152

Company TCEQ

Address 12100 Park 35 Circle MC-136
Austin, TX 78753
Fex Ex Acct: 3529 7878 7

Dept./Floor/Suite/Room

City State ZIP

2 Your Internal Billing Reference 708448

3 To

Recipient's Name Phone

Company Dawne Smarte Phone: 401-732-3400
Mitkem Corp. - MITKEM

Address 175 Metro Center Blvd.
We cannot deliver to P.O. box. Warwick, RI 02886

Dept./Floor/Suite/Room

HOLD Saturday
Print FedEx location address below. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address
Print FedEx location address here if a HOLD option is selected.

City State ZIP

Agent Hunting 6/24/10

8717 6256 2254

4a Express Package Service * To most locations. *Packages up to 150 lbs.*

1 [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

5 [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

6 [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

3 [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. *Packages over 150 lbs.*

7 [ ] FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 1Day Freight Booking No.

8 [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

6 [ ] FedEx Envelope* 2 [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. 3 [ ] FedEx Box 4 [ ] FedEx Tube 1 [X] Other

6 Special Handling and Delivery Signature Options

3 [ ] **SATURDAY DELIVERY**

[X] No Signature Required — Package may be left without obtaining a signature for delivery.

10 [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

34 [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

[X] No 4 [ ] Yes — As per attached Shipper's Declaration. [ ] Yes — Shipper's Declaration not required. 6 [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

[ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No. [ ]

1 [X] Sender — Acct. No. in Section 1 will be billed. 2 [ ] Recipient 3 [ ] Third Party 4 [ ] Credit Card 5 [ ] Cash/Check

Total Packages 1 Total Weight 154 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

554

Rev. Date 2/08•Part #158281•©1994-2008 FedEx•PRINTED IN U.S.A. SRY

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

Case 40275
SDG F3J54

0246

FedEx Express US Airbill 8705 3693 3856 0200 Form ID No. FedEx Retrieval Copy

Cow DM

1 From Date 6/24 Sender's FedEx Account Number 352978787

Sender's Name: April Palmie Ph: 512-239-4152
Company: TCEQ
Address: 12100 Park 35 Circle MC-136
Austin, TX 78753
Fex Ex Acct: 3529 7878 7
Dept./Floor/Suite/Room
City State ZIP

2 Your Internal Billing Reference 70848

3 To Recipient's Name: Dawne Smarte Phone: 401-732-3400
Company: Mitkem Corp. - MITKEM
Address: 175 Metro Center Blvd.
Warwick, RI 02886
We cannot deliver to P.O. boxes
HOLD Saturday at FedEx location address below. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.
Dept./Floor/Suite/Room
Address
Print FedEx location address here if a HOLD option is selected.
City State ZIP

Gynor Hunter 6/25/10

8705 3693 3856

4a Express Package Service * To most locations. Packages up to 150 lbs.

1 [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
5 [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
6 [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
3 [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
20 [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. Packages over 150 lbs.

7 [ ] FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
FedEx 1Day Freight Booking No.
8 [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
93 [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

6 [ ] FedEx Envelope*
2 [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
3 [ ] FedEx Box
4 [ ] FedEx Tube
1 [X] Other

6 Special Handling and Delivery Signature Options

3 [ ] **SATURDAY DELIVERY**

[X] No Signature Required — Package may be left without obtaining a signature for delivery.
10 [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
34 [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?
One box must be checked.
[X] No
4 [ ] Yes — As per attached Shipper's Declaration.
[ ] Yes — Shipper's Declaration not required.
6 [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.
[ ] Cargo Aircraft Only

7 Payment *Bill to:*
Enter FedEx Acct. No. or Credit Card No. below.
Obtain Recip. Acct. No. [ ]
1 [X] Sender — Acct. No. in Section 1 will be billed.
2 [ ] Recipient
3 [ ] Third Party
4 [ ] Credit Card
5 [ ] Cash/Check

Total Packages 1 Total Weight 59 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

554

Rev. Date 2/08•Part #158281•©1994–2008 FedEx•PRINTED IN U.S.A. SRY

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

Case 40275
SDG F3JJ4

0217

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number F3JJ4

Laboratory Name	Mitkem Laboratories	Lab Code	MITKEM
Contract No.	EP-W-05-030	Case No.	40275
Analysis Price	$437	SDG Turnaround	7 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) F3JJ2	08) F3JJ7	15) F3JK4	22) F3JL3
02) F3JJ3	09) F3JJ8	16) F3JK5	
03) F3JJ4	10) F3JJ9	17) F3JK6	
04) F3JJ5	11) F3JK0	18) F3JK7	
05) F3JJ5MS	12) F3JK1	19) F3JK8	
06) F3JJ5MSD	13) F3JK2	20) F3JL1	
07) F3JJ6	14) F3JK3	21) F3JL2	

First Sample in SDG	Last Sample in SDG
F3JJ4	F3JK8

First Sample Receipt Date	Last Sample Receipt Date
06/23/2010	06/25/2010

Note: There are a maximum of 20 field samples [excluding Performance Evaluation (PE) samples in an SDG. Attach the TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature Agnes R Huntley Date 06/25/2010

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 40275
DAS No:
SDG No: F3JJ4

L

2

Date Shipped:	6/22/2010
Carrier Name:	FedEx
Airbill:	870536935506
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: Shelley Stratmann

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Gary Hazlewood	(6-22-10/1800hrs)	Veronica Garcia	6/23/10 10:45
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$437
Transfer To:	–
Lab Contract No:	–
Unit Price:	–

	ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J1288 01	F3JJ4	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345210 (Ice Only), 6-345211 (Ice Only), 6-345212 (Ice Only) (3)	GW-33	S: 6/22/2010	10:15	MF3JJ4	Good
02	F3JJ5	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345215 (Ice Only), 6-345216 (Ice Only), 6-345217 (Ice Only), 6-345218 (Ice Only), 6-345219 (Ice Only), 6-345220 (Ice Only), 6-345221 (Ice Only), 6-345222 (Ice Only), 6-345223 (Ice Only) (9)	GW-34	S: 6/22/2010	10:58	MF3JJ5	
03	F3JJ6	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345225 (Ice Only), 6-345226 (Ice Only), 6-345227 (Ice Only) (3)	GW-35	S: 6/22/2010	11:10	MF3JJ6	
04	F3JJ7	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345229 (Ice Only), 6-345230 (Ice Only), 6-345231 (Ice Only) (3)	GW-36	S: 6/22/2010	9:22	MF3JJ7	
05	F3JJ8	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345233 (Ice Only), 6-345234 (Ice Only), 6-345235 (Ice Only) (3)	GW-37	S: 6/22/2010	15:35	MF3JJ8	
06	F3JK2	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345249 (Ice Only), 6-345250 (Ice Only), 6-345251 (Ice Only) (3)	GW-41	S: 6/22/2010	12:12	MF3JK2	
07	F3JL1	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345285 (Ice Only), 6-345286 (Ice Only), 6-345287 (Ice Only) (3)	GW-50	S: 6/22/2010	14:16	MF3JL1	
08	F3JL2	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345288 (Ice Only), 6-345289 (Ice Only), 6-345290 (Ice Only) (3)	FB-01	S: 6/22/2010	11:05		Good

Shipment for Case Complete?	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
N	F3JJ5		7.5°C	

Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact?	Shipment Iced?
VOA = CLP TCL Volatiles			Y	Y

9219

TR Number: 6-043013577-062210-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

1

Case No:	40275
DAS No:	
SDG No:	F3JJ4

L

Date Shipped:	6/23/2010
Carrier Name:	FedEx
Airbill:	871762562254
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: Dean Perkins

Relinquished By	(Date / Time)	Received By	(Date / Time)
[illegible]	(6-23-10/1800Hrs)	Shirley Ng	6/24/10 8:45
2			
3			
4			

For Lab Use Only

Lab Contract No:	ERW-05-03D
Unit Price:	$437
Transfer To:	–
Lab Contract No:	–
Unit Price:	–

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
J1288 09 F3JJ2	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345202 (Ice Only), 6-345203 (Ice Only), 6-345204 (Ice Only) (3)	GW-31	S: 6/23/2010 11:00	MF3JJ2	Good
10 F3JJ3	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345206 (Ice Only), 6-345207 (Ice Only), 6-345208 (Ice Only) (3)	GW-32	S: 6/23/2010 9:55	MF3JJ3	
11 F3JJ9	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345237 (Ice Only), 6-345238 (Ice Only), 6-345239 (Ice Only) (3)	GW-38	S: 6/23/2010 8:44	MF3JJ9	
12 F3JK0	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345241 (Ice Only), 6-345242 (Ice Only), 6-345243 (Ice Only) (3)	GW-39	S: 6/23/2010 8:30	MF3JK0	
13 F3JK3	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345253 (Ice Only), 6-345254 (Ice Only), 6-345255 (Ice Only) (3)	GW-42	S: 6/23/2010 12:20	MF3JK3	
14 F3JK4	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345257 (Ice Only), 6-345258 (Ice Only), 6-345259 (Ice Only) (3)	GW-43	S: 6/23/2010 14:44	MF3JK4	
15 F3JK5	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345261 (Ice Only), 6-345262 (Ice Only), 6-345263 (Ice Only) (3)	GW-44	S: 6/23/2010 15:35	MF3JK5	
16 F3JL3	Ground Water/ Dean Perkins	L/G	VOA (5/7)	6-345291 (Ice Only), 6-345292 (Ice Only), 6-345293 (Ice Only) (3)	FB-02	S: 6/23/2010 8:55		Good

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3.5°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

VOA = CLP TCL Volatiles

6259

TR Number: 6-043013577-062310-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

F2V5.1.047

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	40275
DAS No:	
SDG No:	F3JJ4

L

1

Date Shipped:	6/24/2010
Carrier Name:	FedEx
Airbill:	870536933856
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: Shelley Stratmann

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Gary Hazlewood	(6-24-10/1330 Hrs)	Shirley Ng	6/25/10 8:56
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$437
Transfer To:	—
Lab Contract No:	—
Unit Price:	—

J1288

	ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
17	F3JK1	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345245 (Ice Only), 6-345246 (Ice Only), 6-345247 (Ice Only) (3)	GW-40	S: 6/24/2010	10:00	MF3JK1	Good
18	F3JK6	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345265 (Ice Only), 6-345266 (Ice Only), 6-345267 (Ice Only) (3)	GW-45	S: 6/24/2010	8:58	MF3JK6	↓
19	F3JK7	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345269 (Ice Only), 6-345270 (Ice Only), 6-345271 (Ice Only) (3)	GW-46	S: 6/24/2010	8:45	MF3JK7	↓
20	F3JK8	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345273 (Ice Only), 6-345274 (Ice Only), 6-345275 (Ice Only) (3)	GW-47	S: 6/24/2010	10:32	MF3JK8	Good
01	F3JK9	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345277 (Ice Only), 6-345278 (Ice Only), 6-345279 (Ice Only) (3)	GW-48	S: 6/24/2010	11:20	MF3JK9	
02	F3JL0	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345281 (Ice Only), 6-345282 (Ice Only), 6-345283 (Ice Only) (3)	GW-49	S: 6/24/2010	8:18	MF3JL0	
03	F3JL4	Ground Water/ Shelley Stratmann	L/G	VOA (5/7)	6-345294 (Ice Only), 6-345295 (Ice Only), 6-345296 (Ice Only) (3)	FB-03	S: 6/24/2010	9:02		

→ SDG-Final Sample

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3° C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

VOA = CLP TCL Volatiles

0255

TR Number: 6-043013577-062410-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4602

F2V5.1.047

WorkOrder: J1288

07/01/2010 14:04

Mitkem Laboratories

Client ID: EPAINV
Project: SOM Region VI 7day TAT
WO Name: SOM Region VI 7day TAT
Location: SOM_VI_7,
Comments: PDF Required

Case: 40275
SDG: F3JJ4
PO: EP-W-05-030

HC Due: 07/01/10
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
J1288-01A	F3JJ4	06/22/2010 10:15	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-02A	F3JJ5	06/22/2010 10:58	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/			Y		VOA
J1288-03A	F3JJ6	06/22/2010 11:10	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-04A	F3JJ7	06/22/2010 09:22	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-05A	F3JJ8	06/22/2010 15:35	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-06A	F3JK2	06/22/2010 12:12	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-07A	F3JL1	06/22/2010 14:16	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-08A	F3JL2	06/22/2010 11:05	06/23/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-09A	F3JJ2	06/23/2010 11:00	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-10A	F3JJ3	06/23/2010 09:55	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-11A	F3JJ9	06/23/2010 08:48	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-12A	F3JK0	06/23/2010 08:30	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-13A	F3JK3	06/23/2010 12:20	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-14A	F3JK4	06/23/2010 14:44	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-15A	F3JK5	06/23/2010 15:35	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-16A	F3JL3	06/23/2010 08:55	06/24/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-17A	F3JK1	06/24/2010 10:00	06/25/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA

9252

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Ng

WorkOrder: J1288

07/01/2010 14:04

Mitkem Laboratories

Client ID: EPAINV
Project: SOM Region VI 7day TAT
WO Name: SOM Region VI 7day TAT
Location: SOM_VI_7,
Comments: PDF Required

Case: 40275
SDG: F3JJ4
PO: EP-W-05-030

HC Due: 07/01/10
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: SOM_SEDD

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
J1288-18A	F3JK6	06/24/2010 08:58	06/25/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-19A	F3JK7	06/24/2010 08:45	06/25/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA
J1288-20A	F3JK8	06/24/2010 10:32	06/25/2010	Aqueous	SOM1.2_VOA_TRACE_W	/					VOA

0253

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Lab Client Rep: Agnes R Ng

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Mitkem Laboratories	Page 1 of 1
Received By (Print Name) Veronica Gaudreau	Log-in Date 6/23/10
Received By (Signature) Veronica Gaudreau	SN 6/24/10
Case Number 40275	Sample Delivery Group No. F3JJ ~~K~~ 4 / Mod. Ref. No. —

Remarks: (1) Please see associated sample/extract transfer logbook pages submitted with this data package.

		EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1. Custody Seal(s)	Present/Absent* Intact/Broken	F3JJ4	6-345210 → 6-345212 ✓	J7288-01	Good
2. Custody Seal Nos.	NA	F3JJ5	6-345215 → 6-345223 ✓	J7288-02	
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present/Absent*	F3JJ6	6-345225 → 6-345227 ✓	J7288-03 ~~J720~~ ARH 6/23/10	
4. Airbill	Airbill/Sticker Present/Absent*	F3JJ7	6-345229 → 6-345231 ✓	J7288-04	
5. Airbill No.	FedEx 8705 3693 5506	F3JJ8	6-345233 → 6-345235 ✓	J7288-05	
6. Sample Tags	Present/Absent*	F3JK2	6-345249 → 6-345251 ✓	J7288-06	
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody	F3JL1	6-345285 → 6-345287 ✓	J7288-07	
7. Sample Condition	Intact/Broken*/ Leaking	F3JL2	6-345288 → 6345290 ✓	J7288-08	Good
8. Cooler Temperature Indicator Bottle	Present/Absent				
9. Cooler Temperature	7.5°C				
10. Does information on TR/COCs and sample tags agree?	Yes/No*				
11. Date Received at Laboratory	6/23/10				
12. Time Received	9:10				
Sample Transfer					
Fraction (1) TVOA / VOA	Fraction (1) SVOA/Pest/Aroc				
Area # VOA Lab	Area #				
By VEG	By				
On 6/23/10	On				

YLS 6/23/10

* Contact SMO and attach record of resolution.

Reviewed By ARH	Logbook No.
Date 6/23/10	Logbook Page No.

SOM01.2 (4/2007)

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Mitkem Laboratories	Page 1 of 1
Received By (Print Name) Shirley Ng	Log-in Date 6/24/10
Received By (Signature) Shirley Ng	
Case Number 40275	Sample Delivery Group No. F3JJ4 ~~F3 JJ 2~~ ARH 6/24/10
Remarks: (1) Please see associated sample/extract transfer logbook pages submitted with this data package.	Mod. Ref. No.

		EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1. Custody Seal(s)	~~Present~~/Absent* ~~Intact~~/Broken	F3JJ2	6-345202 → 6-345204	J1288 - 09	Good
2. Custody Seal Nos.	NA / -	F3JJ3	6-345206 → 6-345208	10	
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	~~Present~~/Absent*	F3JJ9	6-345237 → 6-345239	11	
4. Airbill	~~Airbill~~/Sticker ~~Present~~/Absent*	F3JK0	6-345241 → 6-345243	12	
5. Airbill No.	FedEx 8717 6216 2254	F3JK3	6-345253 → 6-345255	13	
6. Sample Tags	~~Present~~/Absent*	F3JK4	6-345257 → 6-345259	14	
Sample Tag Numbers	~~Listed~~/Not Listed on Chain-of-Custody	F3JK5	6-345261 → 6-345263	15	
7. Sample Condition	~~Intact~~/Broken*/ Leaking	F3JL3	6-345291 → 6-345293	J1288 - 16	Good
8. Cooler Temperature Indicator Bottle	~~Present~~/Absent				
9. Cooler Temperature	3.5°C				
10. Does information on TR/COCs and sample tags agree?	~~Yes~~/~~No*~~ ARH 6/28/10				
11. Date Received at Laboratory	6/24/10			SN 6/24/10	
12. Time Received	8:45				
Sample Transfer					
Fraction (1) TVOA / VOA	Fraction (1) SVOA/Pest/Aroc				
Area # VOA Lab	Area #				
By SN	By				
On 6/24/10	On				

* Contact SMO and attach record of resolution.

Reviewed By ARH	Logbook No.
Date 6/24/10	Logbook Page No.

SOM01.2 (4/2007)

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Mitkem Laboratories		Page 1 of 1
Received By (Print Name)	Shirley Ng	Log-in Date 6/25/10
Received By (Signature)	Shirley Ng	
Case Number 40275	Sample Delivery Group No. F3JJ4	Mod. Ref. No.

Remarks: (1) Please see associated sample/extract transfer logbook pages submitted with this data package.

		EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1. Custody Seal(s)	~~Present~~/Absent* ~~Intact~~/Broken	F3JK1	6-345245 → 6-345247	J1288-17	Good
2. Custody Seal Nos.	NA —	F3JK6	6-345265 → 6-345267	18	↓
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	~~Present~~/Absent*	F3JK7	6-345269 → 6-345271	↓ 19	↓
4. Airbill	~~Airbill~~/Sticker ~~Present~~/Absent*	F3JKP	6-345273 → 6-345275	J1288-20	Good
5. Airbill No.	FedEx 8705 3693 3856				
6. Sample Tags	~~Present~~/Absent*				
Sample Tag Numbers	~~Listed~~/Not Listed on Chain-of-Custody				
7. Sample Condition	~~Intact~~/Broken*/ Leaking				
8. Cooler Temperature Indicator Bottle	~~Present~~/Absent			SN 6/25/10	
9. Cooler Temperature	3.0°C				
10. Does information on TR/COCs and sample tags agree?	~~Yes~~/No*				
11. Date Received at Laboratory	6/25/10				
12. Time Received	8:56				

Sample Transfer

Fraction (1) TVOA / VOA	Fraction (1) SVOA/Pest/Aroc
Area # VOA Lab	Area #
By SN	By
On 6/25/10	On

* Contact SMO and attach record of resolution.

Reviewed By ARH	Logbook No.
Date 6/25/10	Logbook Page No.

SOM01.2 (4/2007)

Agnes Huntley [Mitkem]

From: Blackmon, Jacqueline [jblackmon3@fedcsc.com]
Sent: Wednesday, June 23, 2010 1:41 PM
To: Agnes Huntley [Mitkem]; Dawne Smart [Mitkem]
Cc: Marvelyn Humphrey; Mahmoud Elfeky; Myra Perez; Ray Flores
Subject: Region 06 | Case 40275 | Lab MITKEM | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL

Agnes,

Summary Start
Issue: The TR/COC lists the analysis as VOA, however per scheduling the analysis is for TVOA. The laboratory has logged in the samples for TVOA analysis.
Resolution: In accordance with previous direction from Region 6, the laboratory will note the issue in the SDG Narrative, perform the analyses as indicated on the Scheduling Notification Form, and proceed with the analysis of the samples.
Summary End

Please let me know if you have any questions or problems. To waive any defect(s) associated with this issue, please contact your PO.
Thanks,
Jackie Blackmon
Environmental Coordinator- Regions 6 and 9
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

From: Agnes Huntley [Mitkem] [mailto:agnes_ng@mitkem.com]
Sent: Wednesday, June 23, 2010 1:28 PM
To: Blackmon, Jacqueline
Subject: Case 40275 SDG F3JJ4

Hi Jackie

The TR/COC lists VOA as the analysis. This case was scheduled for TVOA. The laboratory has logged in the samples for TVOA analysis. Is this acceptable to the Region?

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Mitkem Laboratories
A Division of Spectrum Analytical,
Featuring Hanibal Technology
(P) 401-732-3400
(F) 401-732-3499
****
This message is intended for the use of the individual to whom it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone at 401-732-3400.

Agnes Huntley [Mitkem]

From: Blackmon, Jacqueline [jblackmon3@fedcsc.com]
Sent: Thursday, July 01, 2010 10:46 AM
To: Agnes Huntley [Mitkem]; Dawne Smart [Mitkem]
Cc: Marvelyn Humphrey; Mahmoud Elfeky; Myra Perez; Ray Flores
Subject: Region 06 | Case 40275 | Lab MITKEM | SDG F3JJ4 | Issue Discrepancies with tags, jars, and/or TR/COC | FINAL
Attachments: J1288_SDG Coversheet & TRs.pdf

Agnes,

Summary Start
Issue: The collection date and time on the attached TR/COC for sample F3JJ9 is 6/23/10 at 8:44, however sample tags 6-345237, 6-345238 and 6-345239 have a collection date and time of 6/23/10 at 8:48. The labels on the vials do not list a collection time, just a date. Please advise which collection time is correct.
Resolution: Per Region 6, the correct sample time for sample F3JJ9 (GW-38) is 0848 hours. The laboratory will note the issue in the SDG/Case Narrative and proceed with the analysis of the samples.
Summary End

Please let me know if you have any questions or problems. To waive any defect(s) associated with this issue, please contact your PO.
Thanks,
Jackie Blackmon
Environmental Coordinator- Regions 6 and 9
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

From: Perez.Myra@epamail.epa.gov [mailto:Perez.Myra@epamail.epa.gov]
Sent: Thursday, July 01, 2010 10:20 AM
To: Blackmon, Jacqueline
Cc: Elfeky.Mahmoud@epamail.epa.gov; Flores.Raymond@epamail.epa.gov
Subject: Re: Region 06 | Case 40275 | Lab MITKEM | SDG F3JJ4 | Issue Discrepancies with tags, jars, and/or TR/COC I R6 response

Hi Jackie, please notify MITKEM that the correct sample time for F3JJ9 (GW-38) is 0848 Hours. The lab should note this in the case narrative and proceed with analysis. Thank you.

Myra Perez
R6 CLP RSCC
USEPA - ESB
10625 Fallstone Road
Houston, Tx. 77099
ph.: 281/983-2130
fax: 281/983-2124

Region 06 | Case 40275 | Lab MITKEM | SDG F3JJ4 | Issue Discrepancies with tags, jars, and/or TR/COC

Blackmon, Jacqueline to: Myra Perez 06/30/2010 03:51 PM

Cc: Mahmoud Elfeky

Myra,
MITKEM is reporting the following issue for Case 40275. Please advise on how the Region wishes the laboratory to proceed.

Issue: The collection date and time on the attached TR/COC for sample F3JJ9 is 6/23/10 at 8:44, however sample tags 6-345237, 6-345238 and 6-345239 have a collection date and time of 6/23/10 at 8:48. The labels on the vials do not list a collection time, just a date. Please advise which collection time is correct.

Please let me know if you have any questions or problems.
Thanks,
Jackie Blackmon
Environmental Coordinator- Regions 6 and 9
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

From: Agnes Huntley [Mitkem] [mailto:agnes_ng@mitkem.com]
Sent: Wednesday, June 30, 2010 4:37 PM
To: Blackmon, Jacqueline
Subject: RE: Case 40275 SDG F3JJ4

Hi Jackie,

TR/COC attached.

Agnes

From: Blackmon, Jacqueline [mailto:jblackmon3@fedcsc.com]
Sent: Wednesday, June 30, 2010 4:43 PM
To: Agnes Huntley [Mitkem]; Dawne Smart [Mitkem]
Subject: FW: Case 40275 SDG F3JJ4
Hi Agnes,

Can you please provide a copy of the TR/COC?

Thanks,
Jackie Blackmon

Environmental Coordinator- Regions 6 and 9
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

From: Agnes Huntley [Mitkem] [mailto:agnes_ng@mitkem.com]
Sent: Wednesday, June 30, 2010 3:59 PM
To: Blackmon, Jacqueline
Subject: Case 40275 SDG F3JJ4

Hi Jackie,

Sample tags 6-345237, 6-345238 and 6-345239 for sample F3JJ9 have collection date and time of 6/23/10 at 8:48. The collection date and time on the TR/COC is 6/23/10 at 8:44. The labels on the vials do not list a time, just a date.

Thank you,
Agnes

Agnes Huntley
CLP Project Manager
Mitkem Laboratories
A Division of Spectrum Analytical,
Featuring Hanibal Technology
(P) 401-732-3400
(F) 401-732-3499
****
This message is intended for the use of the individual to whom it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message in not the intended recipient, or the employee responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone at 401-732-3400.