SDG Narrative

Mitkem Corporation submits the enclosed data package in response to USEPA Case # 36359 and SDG# Y3AM1. Analyses were performed for twenty aqueous samples that were received on May 10 to May 12, 2007. The analyses were performed under USEPA Contract # EP-W-05-030. The sample-shipping cooler received on May 10 was measured at 4°C. The cooler received on May 11 was measured at 3°C. The cooler received on May 12 was measured at 2°C

The samples were analyzed under Modified Analysis 1391.0, to report tertiary butyl alcohol. A copy of the requirements for Modified Analysis 1391.0 is included following the SDG narrative.

The modified analysis was to include tertiary butly alcohol. The compound name 2-methyl-2-propanol was used in the lab LIMS system. Per the Region, the laboratory may use 2-methyl-2-propanol instead of tertiary butyl alcohol.

The analysis listed on the TR is VOA. The laboratory was scheduled for TVOA analysis with MA 1391.0. Per the Region, the laboratory should proceed with analysis of samples as scheduled.

Tag numbers were listed on the TR/COC, but no sample tags were received with the samples. Per the Region, proceed with analysis of the samples.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis	VOA pH
Y3AM1	F0595-01A	TV	<2
Y3AM2	F0595-02A	TV	<2
Y3AM3	F0595-03A	TV	<2
Y3AM4	F0595-04A	TV	<2
Y3AM5	F0595-05A	TV	<2
Y3AM6	F0595-06A	TV	<2
Y3AM7	F0595-07A	TV	<2
Y3AM8	F0595-08A	TV	<2
Y3AM9	F0595-09A	TV	<2
Y3AN0	F0595-10A	TV	<2
Y3AN1	F0595-11A	TV	<2
Y3AN2	F0595-12A	TV	<2
Y3AN3	F0595-13A	TV	<2
Y3AN4	F0595-14A	TV	<2
Y3AN4MS	F0595-14AMS	TV	<2
Y3AN4MSD	F0595-14AMSD	TV	<2
Y3AN5	F0595-15A	TV	<2

Client ID	Lab ID	Analysis	VOA pH
Y3AN6	F0595-16A	TV	<2
Y3AN7	F0595-17A	TV	<2
Y3AN7DL	F0595-17ADL	TV	<2
Y3AN8	F0595-18A	TV	<2
Y3AN8DL	F0595-18ADL	TV	<2
Y3AN9	F0595-19A	TV	<2
Y3AP0	F0595-20A	TV	<2

TV = Trace Volatiles

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration (SOM01.1) 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.

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

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 SOM01.1, while the trans isomer is. The cis isomer is considered a laboratory artifact, and is not reported as a tentatively identified compound.

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

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

where: Amt = CAL – AMT on raw data
DF = Dilution factor
UF = ng unit correction factor
V_o = Sample volume purged (mL)

DMC recoveries were within the QC limits with the exception of high recovery of chloroethane-d5 in samples Y3AM1, Y3AM2, Y3AM4, Y3AM5, Y3AM6, Y3AM7, Y3AM9, Y2AN5 and Y3AN6, low recovery of trans-1,3-dichloropropene-d4 in sample Y3AM3, high recovery of chloroethane-d5 and low recovery of trans-1,3-dichloropropene-d4 in samples Y3AN0 and Y3AN1, high recovery of chloroethane-d5 and 1,2-dichlorobenzene-d4 in samples Y3AN4 and Y3AP0, high recovery of 1,1-dichloroethene-d2 and 1,2-dichlorobenzene-d4 in sample Y3AN4MS, high recovery of 1,1-dichloroethene-d2 in sample Y3AN4MSD, high recovery of chloroethane-d5 and 1,2-dichlorobenzene-d4 in sample Y3AN7 and high recovery of 1,1-dichloroethene-d2 and chloroform-d in sample Y3AN8.

Matrix spike and matrix spike duplicate was performed on sample Y3AN4. Spike recoveries were within the advisory QC limits with the exception of high recovery of trichloroethene in both the matrix spike and matrix spike duplicate. Replicate RPDs were within the advisory QC limits.

To ensure that all target analytes were determined within the area response of the high standard, the following samples re-analyzed at dilution: Y3AN7 (8x) and Y3AN8 (20x).

An instrument blank is not required for sample Y3AN9. Trichloroethene was not detected in the sample.

No manual integrations were performed.

For 1,4-dioxane and 1,4-dioxane-d8, the laboratory was unable to achieve the minimum average RRF of 0.0050 for both the initial calibration as well as the opening and closing calibration verifications. In our experience, this compound will not reliably achieve the SOM method performance criteria due to its high water solubility. Please note that a better approach is to analyze this as an extractable semivolatile organic compound.

Request for Quote (RFQ) for Modified Analysis

Date: April 19, 2007

Subject: Modification Reference Number: 1391.0
Title: R9-TertButylAlcohol
Sample Matrix: Water
Fraction Affected: TVOA
Statement of Work: SOM01.1

Purpose:

The Contractor Laboratory is requested to perform the following modified analyses under the Organic Statement of Work (SOW) SOM01.1, based on the additional specifications listed below. Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in SOW SOM01.1 remain unchanged and in full force and effect. The number of samples requested in this modification is not guaranteed.

Please note that accepting a modified analysis request is voluntary, and that the Laboratory is not required to accept the modified analysis. There will be no adverse effect to the Laboratory for not accepting the modified analysis request. However, once the Laboratory accepts the request for modified analysis, it shall perform the analysis in accordance with this modification and as specified in SOW SOM01.1.

The Laboratory is requested to review the modification described herein, determine whether or not it shall accept the requested modified analyses, and complete the attached response form. The Laboratory shall provide comments in response to the required changes in the designated area, in order to ensure that the modified analysis can be completed in accordance with the specifications described herein.

The requirements in the RFQ are as stated and any defects will be assessed by SMO per the laboratory contract. The Laboratory should take this into account when submitting their quote.

Notice to Contractors: Acceptance of Modified Analysis samples will not count against the monthly capacity.

Modification to the SOW Specifications:

SOW SOM01.1 requires Laboratories to analyze water samples for volatile organic compounds through the protocol outlined in Exhibit D, Trace Volatile method. Specific Trace Volatile target analytes and their associated Contract Required Quantitation Limits (CRQLs) are listed in Exhibit C, Section 1.0 pages C-5 and C-6 of SOW SOM01.1. The proposed modification will require the Laboratory to analyze samples for the same target analytes listed in Section 1.0 on pages C-5 and C-6, with the following additional requirements.

One additional analyte shall be added to the target analyte list: tertiary butyl alcohol (CAS # 75-65-0). This additional analyte shall have a CRQL of 5 ug/L.

If tertiary butyl alcohol is undetected, the Laboratory shall report at the CRQL specified in this modified analysis, even if the Laboratory is able to achieve a lower limit.

For initial calibration, opening and closing continuing calibration purposes, the additional analyte may either be added to the original calibration standards or may be analyzed as a single analyte. Of the 5 initial calibration standards and the opening and closing continuing calibration standards, the lowest calibration standard shall have a concentration at or below the CRQL.

Reporting Requirements:

Hardcopy and electronic data reporting are required as specified per SOW SOM01.1. All hardcopy and electronic data shall be adjusted to incorporate modified specifications. This includes attaching a copy of the requirements for modified analysis to the SDG Narrative. If specific problems occur with incorporation of the modified analysis into the hardcopy and/or electronic deliverable, the Laboratory shall contact the DASS Manager within the Sample Management Office (SMO) at (703) 818-4233 or via e-mail at CCSSupport@fedcsc.com for resolution.

All samples and/or fractions assigned to an SDG shall be analyzed under the same Modified Analysis requirements as established in this memorandum. The Laboratory shall not include data from multiple Modified Analyses in one SDG.

The Laboratory shall include the Modification Reference Number 1391.0 on each hardcopy data form under the "Mod. Ref. No." header appearing on each form as well as the data element "ServicesID" under the "SamplePlusMethod" node of the EDD. This should be done for the fractions affected by the modified analysis only. The "ServicesID" field should remain blank for all other fractions reported in the SDG. The Laboratory shall also document the Modification Reference Number and the Solicitation Number on the SDG Coversheet.

Clarifications/Revisions to the RFQ for Modified Analysis:

Laboratory Name: MITKEM
Laboratory Comments:

Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number Y3AM1

Laboratory Name	Mitkem Coroporation	Lab Code	MITKEM
Contract No.	EP-W-05-030	Case No.	36359
Analysis Price	$ 0.00	SDG Turnaround	21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) Y3AM1	08) Y3AM8	15) Y3AN4MS	22) Y3AP0
02) Y3AM2	09) Y3AM9	16) Y3AN4MSD	
03) Y3AM3	10) Y3AN0	17) Y3AN5	
04) Y3AM4	11) Y3AN1	18) Y3AN6	
05) Y3AM5	12) Y3AN2	19) Y3AN7	
06) Y3AM6	13) Y3AN3	20) Y3AN8	
07) Y3AM7	14) Y3AN4	21) Y3AN9	

First Sample in SDG	Last Sample in SDG
Y3AM1	Y3AP0

First Sample Receipt Date	Last Sample Receipt Date
05/10/2007	05/12/2007

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 Kg Date 5/14/2007

Modified Analysis 1391.0

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

Case No:	36359
DAS No:	
SDG No:	Y3AM1

L

Date Shipped:	5/9/2007
Carrier Name:	FedEx
Airbill:	790242507795
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	5-9-07/1630	[signature]	5-10-07 0850
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$0
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
01	Y3AM1	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	1	S: 5/9/2007	9:20		OK
02	Y3AM2	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	2	S: 5/9/2007	12:00		
03	Y3AM3	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	3	S: 5/9/2007	12:40		
04	Y3AM4	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	4	S: 5/9/2007	13:20		
05	Y3AM5	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	5	S: 5/9/2007	14:00		
06	Y3AM6	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	6	S: 5/9/2007	14:35		
07	Y3AM7	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	7	S: 5/9/2007	14:50		
08	Y3AM8	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	8	S: 5/9/2007	15:15		
09	Y3AM9	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	9	S: 5/9/2007	15:45		OK

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4°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: 9-530112900-050907-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

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

Case No: 36359
DAS No:
SDG No: Y3AM1

L

Date Shipped:	5/10/2007
Carrier Name:	FedEx
Airbill:	799137826496
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[illegible]	5-10-07 / 1500	[illegible]	5-11-07 9:00
2				
3				
4				

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$0
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
10 Y3AN0	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	10	S: 5/10/2007	8:35		OK
11 Y3AN1	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	11	S: 5/10/2007	9:40		
12 Y3AN2	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	12	S: 5/10/2007	10:20		
3 Y3AN3	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	13	S: 5/10/2007	10:40		
4 Y3AN4	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (6)	14	S: 5/10/2007	11:25		
15 Y3AN5	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	15	S: 5/10/2007	12:05		
16 Y3AN6	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	16	S: 5/10/2007	12:30		OK

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: Y3AN4	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt 3°C	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

0009

TR Number: 9-530112900-051007-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

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

Case No:	36359
DAS No:	
SDG No:	Y3AM1

L

Date Shipped:	5/11/2007
Carrier Name:	FedEx
Airbill:	791686252947
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	5/11/07 1700		5/12/07 8:45
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$0
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
17	Y3AN7	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	17	S: 5/11/2007 11:05		OK
18	Y3AN8	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	18	S: 5/11/2007 12:10		
19	Y3AN9	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	19	S: 5/11/2007 13:00		
20	Y3AP0	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	20	S: 5/11/2007 15:30		OK

SDG - Final Sample

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2°C	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y Shipment Iced? Y

TR Number: 9-530112900-051107-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA, 20191-3400 Phone 703/264-9348 Fax 703/264-9222

2A - FORM II VOA-1

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL)	#	VDMC2 (CLA)	#	VDMC3 (DCE)	#	VDMC4 (BUT)	#	VDMC5 (CLF)	#	VDMC6 (DCA)	#	VDMC7 (BEN)	#
01	VBLK5J	100		118		81		89		96		94		100	
02	Y3AM1	88		137	*	82		76		101		95		102	
03	Y3AM2	93		137	*	85		84		102		103		103	
04	Y3AM3	92		130		86		88		107		100		102	
05	Y3AM4	98		140	*	92		98		115		111		110	
06	Y3AM5	100		145	*	85		91		112		110		113	
07	Y3AM6	99		142	*	93		94		112		113		113	
08	Y3AM7	98		151	*	92		90		113		110		112	
09	Y3AM8	99		131		91		97		114		115		109	
10	Y3AM9	98		136	*	90		94		112		110		113	
11	Y3AN0	97		147	*	93		94		114		118		113	
12	Y3AN1	99		142	*	90		97		115		116		110	
13	Y3AN2	82		120		93		79		118		122		108	
14	Y3AN3	100		96		91		98		117		114		114	
15	Y3AN4	98		170	*	96		96		118		118		107	
16	Y3AN4MS	103		129		118	*	94		116		113		112	
17	Y3AN4MSD	102		99		123	*	90		115		118		109	
18	Y3AN5	96		154	*	92		94		113		114		109	
19	Y3AN6	101		144	*	91		89		112		113		116	
20	VBLK5L	96		107		78		92		96		103		94	
21	Y3AN7	104		141	*	106	*	96		117		119		114	
22	Y3AN8	101		88		107	*	99		121	*	122		111	
23	Y3AN9	104		128		100		97		120		122		105	
24	Y3AP0	103		136	*	96		94		121		126		112	
25	VBLK5M	108		119		87		97		111		119		103	
26	Y3AN7DL	78		121		93		75		117		115		106	
27	Y3AN8DL	81		89		92		76		114		116		103	
28	VHBLK5M	86		87		92		85		117		120		107	

			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 CORPORATION Contract: EP-W-05-030

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT OUT
01	VBLK5J	96	98	102	95	87	99	105	0
02	Y3AM1	103	104	106	85	101	95	111	1
03	Y3AM2	104	102	80	101	86	101	127	1
04	Y3AM3	103	103	67 *	94	70	99	114	1
05	Y3AM4	110	115	102	99	86	116	129	1
06	Y3AM5	114	112	115	103	124	116	120	1
07	Y3AM6	118	115	113	105	109	114	124	1
08	Y3AM7	111	115	105	103	89	108	121	1
09	Y3AM8	114	111	106	100	128	108	125	0
10	Y3AM9	116	116	113	101	90	109	122	1
11	Y3AN0	116	114	62 *	110	122	118	127	2
12	Y3AN1	110	108	73 *	109	94	116	124	2
13	Y3AN2	110	107	110	78	80	113	125	0
14	Y3AN3	117	113	107	107	111	115	121	0
15	Y3AN4	111	112	108	104	131	113	133 *	2
16	Y3AN4MS	117	112	108	103	144	109	131 *	2
17	Y3AN4MSD	111	110	99	99	114	110	121	1
18	Y3AN5	118	112	102	97	105	109	128	1
19	Y3AN6	114	119	98	98	134	114	129	1
20	VBLK5L	95	94	92	97	77	96	106	0
21	Y3AN7	117	115	104	107	136	115	130	2
22	Y3AN8	111	112	105	105	128	117	124	2
23	Y3AN9	110	111	103	100	108	117	123	0
24	Y3AP0	113	111	105	100	121	113	134 *	2
25	VBLK5M	108	104	104	99	126	103	112	0
26	Y3AN7DL	111	108	114	84	87	113	127	0
27	Y3AN8DL	107	103	113	63	77	102	116	0
28	VHBLK5M	106	103	110	80	88	97	121	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	(DXE) = 1,4-Dioxane-d8	(50-150)
VDMC13	(TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC14	(DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix Spike - EPA Sample No.: Y3AN4 Level: (LOW/MED) 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	5.7165	114		61-145
Benzene	5.0000	0.0000	5.3691	107		76-127
Trichloroethene	5.0000	3.9911	11.0839	142	*	71-120
Toluene	5.0000	0.0000	5.2284	105		76-125
Chlorobenzene	5.0000	0.0000	5.3673	107		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	5.3451	107		6		0-14	61-145
Benzene	5.0000	4.9989	100		7		0-11	76-127
Trichloroethene	5.0000	10.2636	125	*	13		0-14	71-120
Toluene	5.0000	5.0276	101		4		0-13	76-125
Chlorobenzene	5.0000	4.9304	99		8		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: 2 out of 10 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5J

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Lab File ID: V5H7472A.D Lab Sample ID: MB-29901

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/15/2007

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 10:15

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	Y3AM1	F0595-01A	V5H7473.D	10:47
02	Y3AM2	F0595-02A	V5H7474.D	11:19
03	Y3AM3	F0595-03A	V5H7475.D	11:51
04	Y3AM4	F0595-04A	V5H7476.D	12:23
05	Y3AM5	F0595-05A	V5H7477.D	12:55
06	Y3AM6	F0595-06A	V5H7478.D	13:27
07	Y3AM7	F0595-07A	V5H7479.D	13:59
08	Y3AM8	F0595-08A	V5H7480.D	14:31
09	Y3AM9	F0595-09A	V5H7481.D	15:03
10	Y3AN0	F0595-10A	V5H7482.D	15:35
11	Y3AN1	F0595-11A	V5H7483.D	16:07
12	Y3AN2	F0595-12A	V5H7484.D	16:38
13	Y3AN3	F0595-13A	V5H7485.D	17:11
14	Y3AN4	F0595-14A	V5H7486.D	17:44
15	Y3AN4MS	F0595-14AMS	V5H7487.D	18:16
16	Y3AN4MSD	F0595-14AMSD	V5H7488.D	18:48
17	Y3AN5	F0595-15A	V5H7489.D	19:20
18	Y3AN6	F0595-16A	V5H7490.D	19:52

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5L

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Lab File ID: V5H7496.D Lab Sample ID: MB-29931

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/15/2007

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 23:03

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	Y3AN7	F0595-17A	V5H7498.D	23:35
02	Y3AN8	F0595-18A	V5H7499.D	0:07
03	Y3AN9	F0595-19A	V5H7500.D	0:39
04	Y3AP0	F0595-20A	V5H7501.D	1:10

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Lab File ID: V5H7514.D Lab Sample ID: MB-29944

Instrument ID: V5

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 05/16/2007

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 10:26

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	Y3AN7DL	F0595-17ADL	V5H7521.D	13:38
02	Y3AN8DL	F0595-18ADL	V5H7522.D	14:10
03	VHBLK5M	VHBLK5M	V5H7528.D	17:28

COMMENTS:

SOM01.1 (5/2005)

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

EPA SAMPLE NO.

BFB5H

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Lab File ID: V5H7451.D BFB Injection Date: 05/14/2007

Instrument ID: V5 BFB Injection Time: 9:15

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.2
75	30.0 - 80.0% of mass 95	50.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	69.2
175	5.0 - 9.0% of mass 174	4.9 (7.1)1
176	95.0 - 101% of mass 174	68.8 (99.3)1
177	5.0 - 9.0% of mass 176	5.0 (7.2)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	VSTD0.55H	VSTD0.55H	V5H7452.D	05/14/2007	9:47
02	VSTD0015H	VSTD0015H	V5H7453.D	05/14/2007	10:19
03	VSTD0055H	VSTD0055H	V5H7451A.D	05/14/2007	10:51
04	VSTD0105H	VSTD0105H	V5H7455.D	05/14/2007	11:23
05	VSTD0205H	VSTD0205H	V5H7456.D	05/14/2007	11:54

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

EPA SAMPLE NO.

BFB5J

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Lab File ID: V5H7470.D BFB Injection Date: 05/15/2007

Instrument ID: V5 BFB Injection Time: 8:44

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.8
75	30.0 - 80.0% of mass 95	50.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	68.5
175	5.0 - 9.0% of mass 174	5.4 (7.8)1
176	95.0 - 101% of mass 174	67.5 (98.6)1
177	5.0 - 9.0% of mass 176	4.6 (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	VSTD0055J	VSTD0055J	V5H7471.D	05/15/2007	9:11
02	VBLK5J	MB-29901	V5H7472A.D	05/15/2007	10:15
03	Y3AM1	F0595-01A	V5H7473.D	05/15/2007	10:47
04	Y3AM2	F0595-02A	V5H7474.D	05/15/2007	11:19
05	Y3AM3	F0595-03A	V5H7475.D	05/15/2007	11:51
06	Y3AM4	F0595-04A	V5H7476.D	05/15/2007	12:23
07	Y3AM5	F0595-05A	V5H7477.D	05/15/2007	12:55
08	Y3AM6	F0595-06A	V5H7478.D	05/15/2007	13:27
09	Y3AM7	F0595-07A	V5H7479.D	05/15/2007	13:59
10	Y3AM8	F0595-08A	V5H7480.D	05/15/2007	14:31
11	Y3AM9	F0595-09A	V5H7481.D	05/15/2007	15:03
12	Y3AN0	F0595-10A	V5H7482.D	05/15/2007	15:35
13	Y3AN1	F0595-11A	V5H7483.D	05/15/2007	16:07
14	Y3AN2	F0595-12A	V5H7484.D	05/15/2007	16:38
15	Y3AN3	F0595-13A	V5H7485.D	05/15/2007	17:11
16	Y3AN4	F0595-14A	V5H7486.D	05/15/2007	17:44
17	Y3AN4MS	F0595-14AMS	V5H7487.D	05/15/2007	18:16
18	Y3AN4MSD	F0595-14AMSD	V5H7488.D	05/15/2007	18:48
19	Y3AN5	F0595-15A	V5H7489.D	05/15/2007	19:20
20	Y3AN6	F0595-16A	V5H7490.D	05/15/2007	19:52
21	VSTD0055K	VSTD0055K	V5H7491.D	05/15/2007	20:24

SOM01.1 (5/2005)

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

EPA SAMPLE NO.

BFB5L

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

Lab File ID: V5H7493.D BFB Injection Date: 05/15/2007

Instrument ID: V5 BFB Injection Time: 21:27

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.2
75	30.0 - 80.0% of mass 95	53.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 -120% of mass 95	73.5
175	5.0 - 9.0% of mass 174	5.8 (7.9)1
176	95.0 - 101% of mass 174	72.7 (98.9)1
177	5.0 - 9.0% of mass 176	4.7 (6.4)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	VSTD0055L	VSTD0055L	V5H7494.D	05/15/2007	21:59
02	VBLK5L	MB-29931	V5H7496.D	05/15/2007	23:03
03	Y3AN7	F0595-17A	V5H7498.D	05/15/2007	23:35
04	Y3AN8	F0595-18A	V5H7499.D	05/16/2007	0:07
05	Y3AN9	F0595-19A	V5H7500.D	05/16/2007	0:39
06	Y3AP0	F0595-20A	V5H7501.D	05/16/2007	1:10
07	VSTD0055M	VSTD0055M	V5H7512.D	05/16/2007	9:22
08	VBLK5M	MB-29944	V5H7514.D	05/16/2007	10:26
09	Y3AN7DL	F0595-17ADL	V5H7521.D	05/16/2007	13:38
10	Y3AN8DL	F0595-18ADL	V5H7522.D	05/16/2007	14:10
11	VHBLK5M	VHBLK5M	V5H7528.D	05/16/2007	17:28
12	VSTD0055N	VSTD0055N	V5H7535.D	05/16/2007	21:11

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055J Date Analyzed: 05/15/2007

Lab File ID (Standard): V5H7471.D Time Analyzed: 9:11

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

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	202865	9.129	293508	6.028	99426	11.858
	UPPER LIMIT	284011	9.459	410911	6.358	139196	12.188
	LOWER LIMIT	121719	8.799	176105	5.698	59656	11.528
	EPA SAMPLE NO.						
01	VBLK5J	199367	9.123	284252	6.034	95989	11.863
02	Y3AM1	184394	9.131	269023	6.030	84290	11.860
03	Y3AM2	179852	9.122	257509	6.033	79195	11.863
04	Y3AM3	183560	9.128	255796	6.027	84477	11.857
05	Y3AM4	197426	9.127	277268	6.038	89145	11.856
06	Y3AM5	195231	9.129	285684	6.040	94494	11.858
07	Y3AM6	195745	9.129	282029	6.028	92328	11.858
08	Y3AM7	198277	9.128	282183	6.039	92412	11.857
09	Y3AM8	197199	9.128	272450	6.039	91617	11.858
10	Y3AM9	187865	9.122	273822	6.033	87509	11.863
11	Y3AN0	188846	9.122	272215	6.033	91075	11.863
12	Y3AN1	192008	9.128	268568	6.039	89881	11.857
13	Y3AN2	143172	9.131	200195	6.030	64692	11.860
14	Y3AN3	182606	9.122	257226	6.033	84786	11.862
15	Y3AN4	190123	9.130	259469	6.029	84471	11.859

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 QC limits with an ast

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055J Date Analyzed: 05/15/2007

Lab File ID (Standard): V5H7471.D Time Analyzed: 9:11

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	202865		9.129		293508		6.028		99426		11.858	
	UPPER LIMIT	284011		9.459		410911		6.358		139196		12.188	
	LOWER LIMIT	121719		8.799		176105		5.698		59656		11.528	
	EPA SAMPLE NO.												
16	Y3AN4MS	183537		9.128		261814		6.028		85771		11.857	
17	Y3AN4MSD	189117		9.122		258949		6.033		88036		11.863	
18	Y3AN5	186099		9.128		263877		6.038		83509		11.857	
19	Y3AN6	186055		9.128		278102		6.039		86083		11.857	
20	VSTD0055K	181560		9.122		242283		6.033		85779		11.851	

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 QC limits with an ast

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055L Date Analyzed: 05/15/2007

Lab File ID (Standard): V5H7494.D Time Analyzed: 21:59

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

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	177995	9.128	237933	6.039	88755	11.857
	UPPER LIMIT	249193	9.458	333106	6.369	124257	12.187
	LOWER LIMIT	106797	8.798	142760	5.709	53253	11.527
	EPA SAMPLE NO.						
01	VBLK5L	174598	9.129	251166	6.028	80766	11.858
02	Y3AN7	175229	9.131	250797	6.030	81501	11.860
03	Y3AN8	176712	9.128	245203	6.039	82079	11.857
04	Y3AN9	183474	9.129	248126	6.028	82044	11.858
05	Y3AP0	180020	9.122	248141	6.033	78036	11.863
06	VSTD0055M	157227	9.127	222363	6.038	83031	11.856

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 QC limits with an ast

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No. Y3AM1

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055M Date Analyzed: 05/16/2007

Lab File ID (Standard): V5H7512.D Time Analyzed: 9:22

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

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	157227		9.127		222363		6.038		83031		11.856	
	UPPER LIMIT	220118		9.457		311308		6.368		116243		12.186	
	LOWER LIMIT	94336		8.797		133418		5.708		49819		11.526	
	EPA SAMPLE NO.												
01	VBLK5M	162125		9.123		228456		6.034		74668		11.864	
02	Y3AN7DL	139415		9.129		202695		6.040		60758		11.858	
03	Y3AN8DL	138575		9.123		193387		6.034		59621		11.864	
04	VHBLK5M	140817		9.129		196821		6.040		61868		11.858	
05	VSTD0055N	145535		9.129		205725		6.028		71562		11.858	

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 QC limits with an ast

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM1

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7473.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. . Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM1

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7473.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.

Y3AM1

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-01A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7473.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

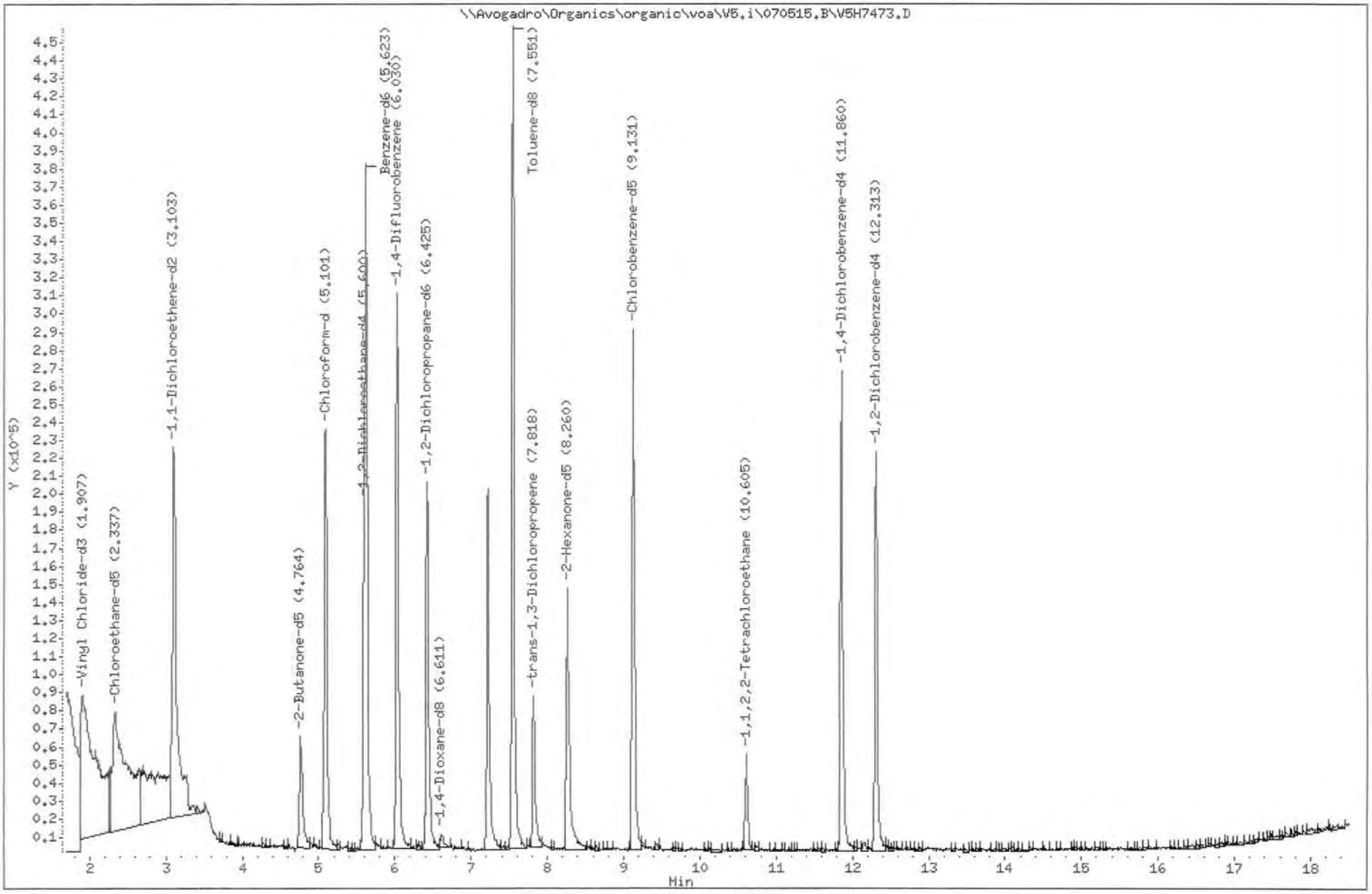
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7473.D
Date : 15-MAY-2007 10:47
Client ID: Y3AM1
Sample Info: 25ML,F0595-01A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0027

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7473.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7473.D
Lab Smp Id: F0595-01A Client Smp ID: Y3AM1
Inj Date : 15-MAY-2007 10:47
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-01A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.907	1.910	(0.316)	139854	4.41249	4.4
$ 80 Chloroethane-d5	69	2.336	2.316	(0.388)	88592	6.85403	6.9(R)
$ 81 1,1-Dichloroethene-d2	63	3.103	3.106	(0.515)	190691	4.08028	4.1
$ 82 2-Butanone-d5	46	4.764	4.755	(0.790)	124292	38.0995	38
$ 83 Chloroform-d	84	5.100	5.092	(0.846)	227433	5.06840	5.1(Q)
$ 23 1,2-Dichloroethane-d4	65	5.600	5.591	(0.929)	83895	4.75504	4.8
$ 84 Benzene-d6	84	5.623	5.626	(0.616)	375514	5.12105	5.1
* 26 1,4-Difluorobenzene	114	6.029	6.032	(1.000)	269023	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.424	6.427	(0.704)	96736	5.16490	5.2
$ 94 1,4-Dioxane-d8	96	6.622	6.613	(1.098)	9186	253.189	250(Q)
$ 33 Toluene-d8	98	7.551	7.542	(0.827)	333418	5.20296	5.2
$ 86 trans-1,3-Dichloropropene-d4	79	7.818	7.809	(0.856)	65220	5.31289	5.3
$ 87 2-Hexanone-d5	63	8.259	8.262	(0.905)	64551	42.3898	42
* 42 Chlorobenzene-d5	117	9.130	9.121	(1.000)	184394	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.605	10.608	(1.162)	34472	4.76100	4.8
* 78 1,4-Dichlorobenzene-d4	152	11.859	11.851	(1.000)	84290	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.312	12.303	(1.038)	65795	5.52588	5.5

WL
05/17/07

QC Flag Legend

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

HZA 5/21/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7473.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7473.D
Lab Smp Id: F0595-01A Client Smp ID: Y3AM1
Inj Date : 15-MAY-2007 10:47
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-01A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM2

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7474.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.1	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM2

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7474.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.
Y3AM2

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-02A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7474.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

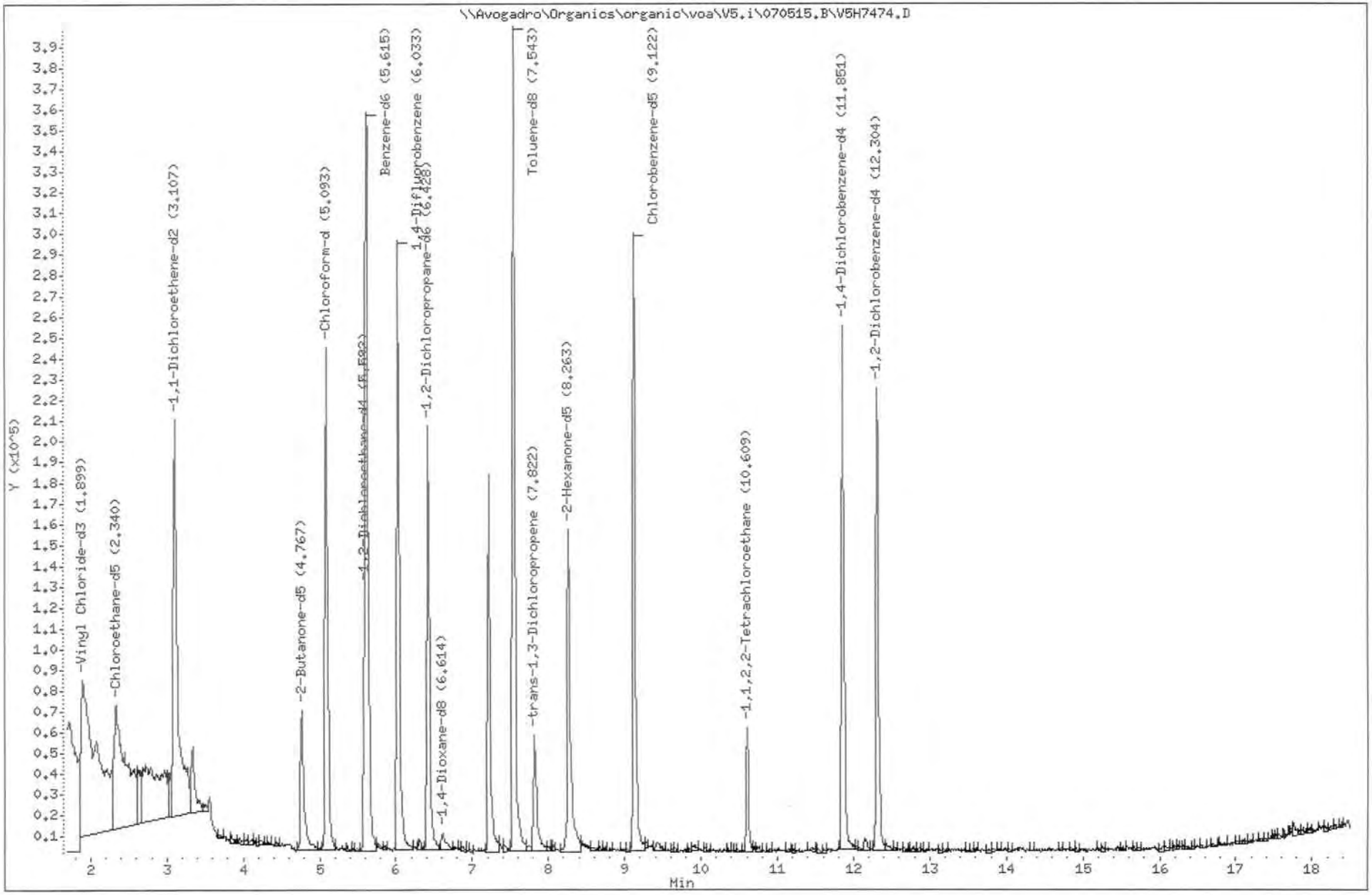
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 [1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D
Date : 15-MAY-2007 11:19
Client ID: Y3AM2
Sample Info: 25ML,F0595-02A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0033

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D
Lab Smp Id: F0595-02A Client Smp ID: Y3AM2
Inj Date : 15-MAY-2007 11:19
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-02A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.899	1.910	(0.315)	140881	4.64364	4.6
$ 80 Chloroethane-d5	69	2.340	2.316	(0.388)	84964	6.86726	6.9(R)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.106	(0.515)	190083	4.24913	4.2
10 Carbon Disulfide	76	3.339	3.338	(0.553)	53277	1.09597	1.1
$ 82 2-Butanone-d5	46	4.767	4.755	(0.790)	130383	41.7536	42
$ 83 Chloroform-d	84	5.092	5.092	(0.844)	218716	5.09208	5.1(Q)
$ 23 1,2-Dichloroethane-d4	65	5.592	5.591	(0.927)	87395	5.17490	5.2
$ 84 Benzene-d6	84	5.626	5.626	(0.617)	367628	5.14011	5.1
* 26 1,4-Difluorobenzene	114	6.033	6.032	(1.000)	257509	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.428	6.427	(0.705)	94840	5.19154	5.2
$ 94 1,4-Dioxane-d8	96	6.613	6.613	(1.096)	7500	215.962	220(Q)
$ 33 Toluene-d8	98	7.543	7.542	(0.827)	318627	5.09771	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	7.821	7.809	(0.857)	48088	4.01622	4.0
$ 87 2-Hexanone-d5	63	8.263	8.262	(0.906)	74875	50.4111	50
* 42 Chlorobenzene-d5	117	9.122	9.121	(1.000)	179852	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.608	(1.163)	35722	5.05823	5.1
* 78 1,4-Dichlorobenzene-d4	152	11.863	11.851	(1.000)	79195	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.304	12.303	(1.037)	70778	6.32681	6.3(Q)

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D
Report Date: 17-May-2007 11:26

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D
Lab Smp Id: F0595-02A Client Smp ID: Y3AM2
Inj Date : 15-MAY-2007 11:19
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-02A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7474.D

Date : 15-MAY-2007 11:19

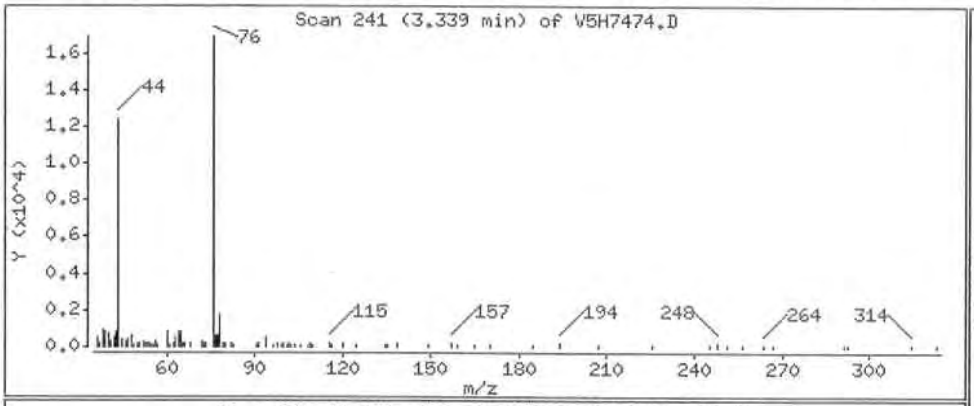
Client ID: Y3AM2 Instrument: V5.i

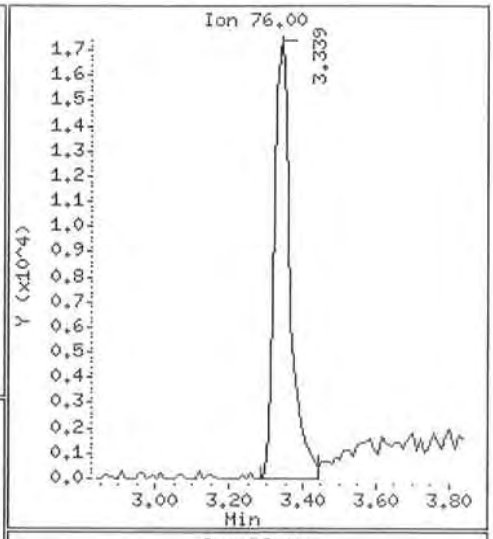
Sample Info: 25ML,F0595-02A,,29901

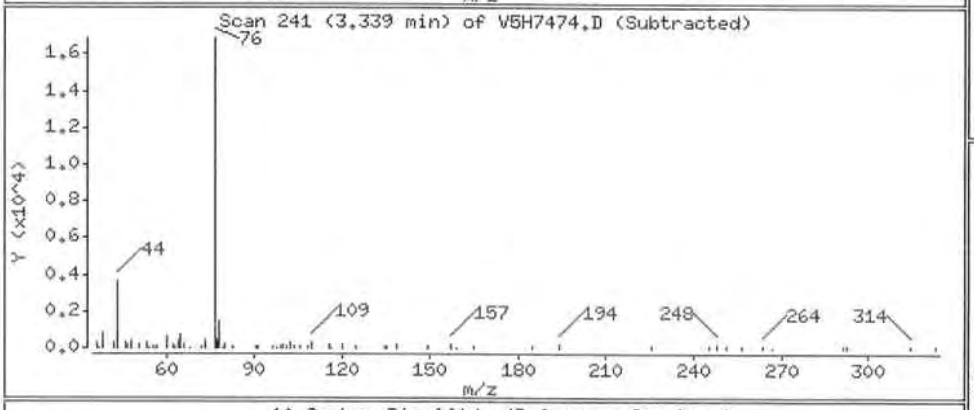
Purge Volume: 25.0 Operator: HZA SRC: LIMS

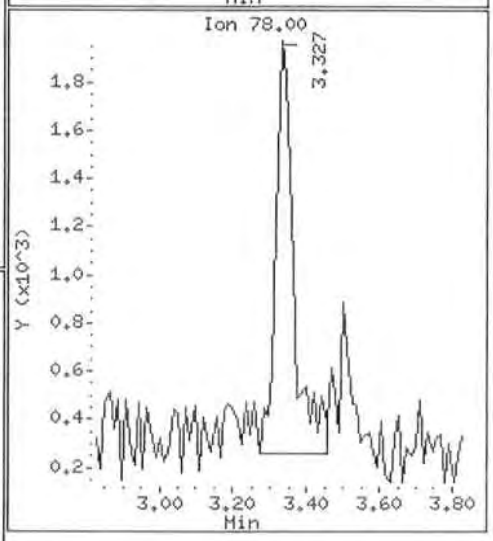
Column phase: DB-624 Column diameter: 0.25

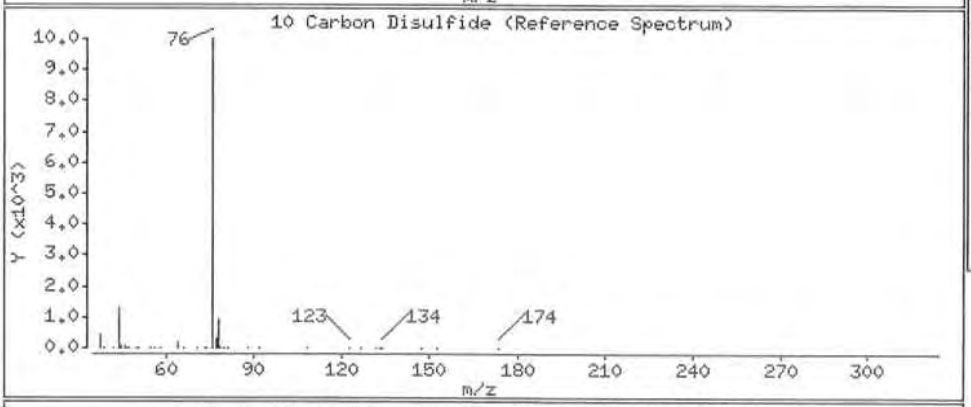
10 Carbon Disulfide Concentration: 1.1 ug/L

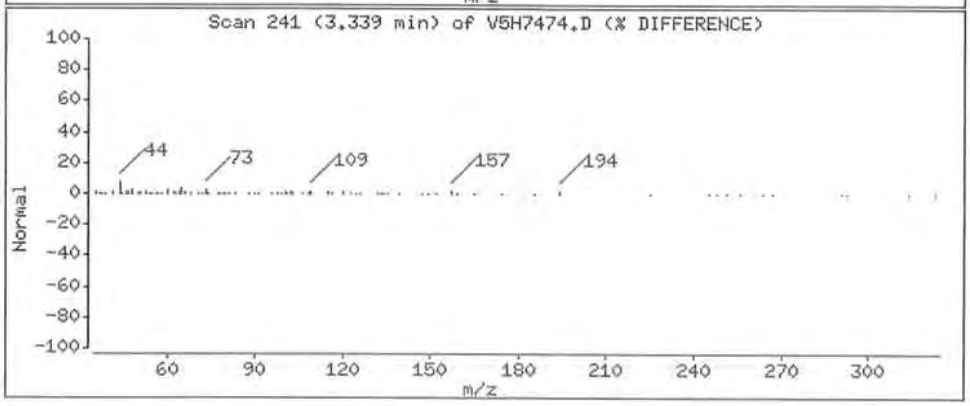












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM3

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7475.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.55	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM3

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7475.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.

Y3AM3

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-03A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7475.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

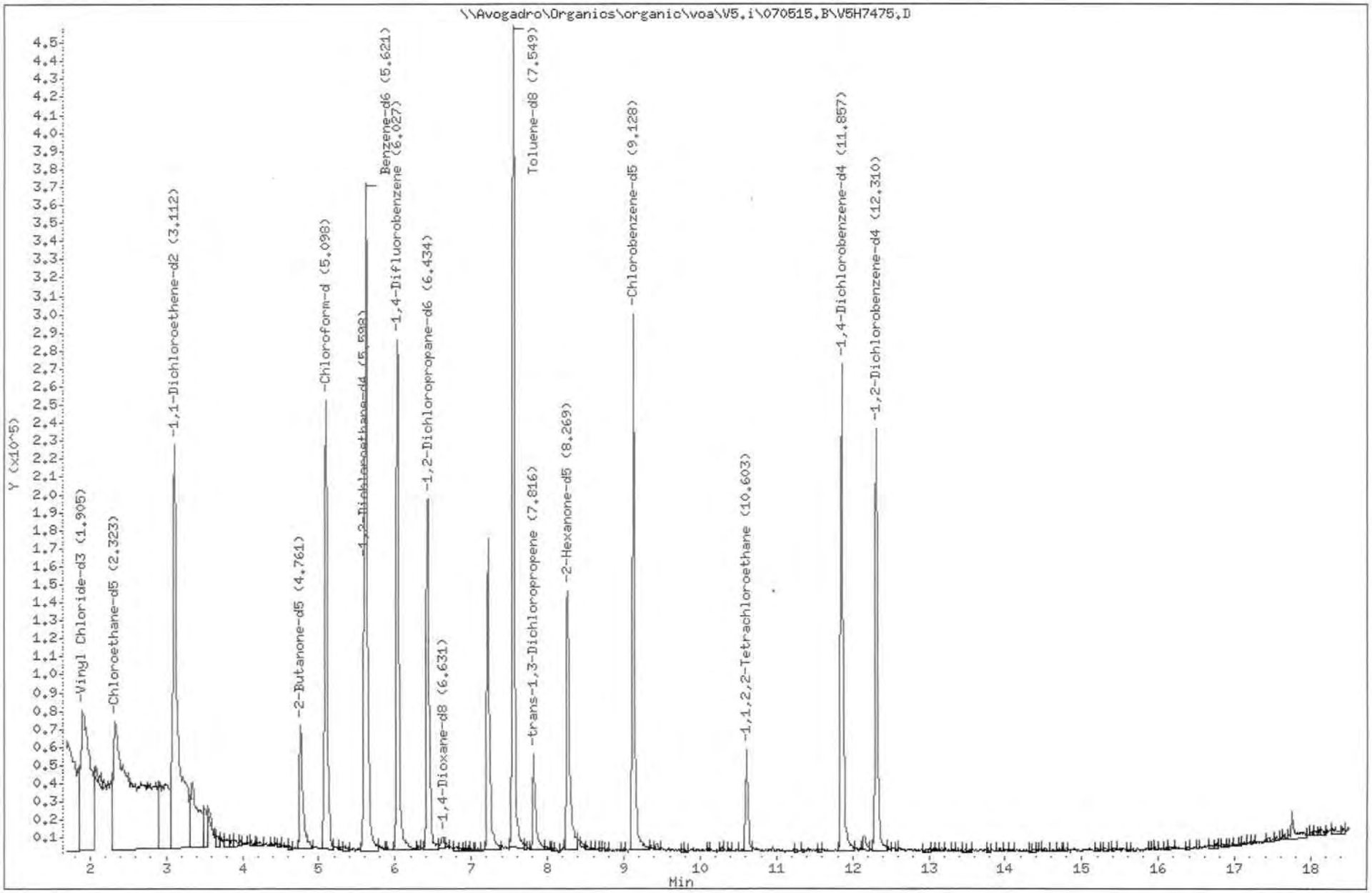
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D
Date : 15-MAY-2007 11:51
Client ID: Y3AM3
Sample Info: 25ML,F0595-03A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D
Lab Smp Id: F0595-03A Client Smp ID: Y3AM3
Inj Date : 15-MAY-2007 11:51
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-03A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.904	1.910	(0.316)	138560	4.59772	4.6
$ 80 Chloroethane-d5	69	2.322	2.316	(0.385)	80075	6.51545	6.5
$ 81 1,1-Dichloroethene-d2	63	3.112	3.106	(0.516)	190333	4.28321	4.3
10 Carbon Disulfide	76	3.333	3.338	(0.553)	26391	0.54653	0.55
$ 82 2-Butanone-d5	46	4.761	4.755	(0.790)	136601	44.0378	44
$ 83 Chloroform-d	84	5.098	5.092	(0.846)	229003	5.36728	5.4(Q)
$ 23 1,2-Dichloroethane-d4	65	5.597	5.591	(0.929)	83613	4.98411	5.0
$ 84 Benzene-d6	84	5.620	5.626	(0.616)	372942	5.10908	5.1
* 26 1,4-Difluorobenzene	114	6.027	6.032	(1.000)	255796	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.433	6.427	(0.705)	96189	5.15903	5.2
$ 94 1,4-Dioxane-d8	96	6.631	6.613	(1.100)	6056	175.550	180(Q)
$ 33 Toluene-d8	98	7.548	7.542	(0.827)	330034	5.17355	5.2
$ 86 trans-1,3-Dichloropropene-d4	79	7.815	7.809	(0.856)	41098	3.36310	3.4(R)
$ 87 2-Hexanone-d5	63	8.268	8.262	(0.906)	71419	47.1130	47
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	183560	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.602	10.608	(1.162)	35641	4.94482	4.9
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	84477	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	67979	5.69667	5.7

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D
Report Date: 17-May-2007 11:26

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D
Lab Smp Id: F0595-03A Client Smp ID: Y3AM3
Inj Date : 15-MAY-2007 11:51
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-03A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7475.D

Date : 15-MAY-2007 11:51

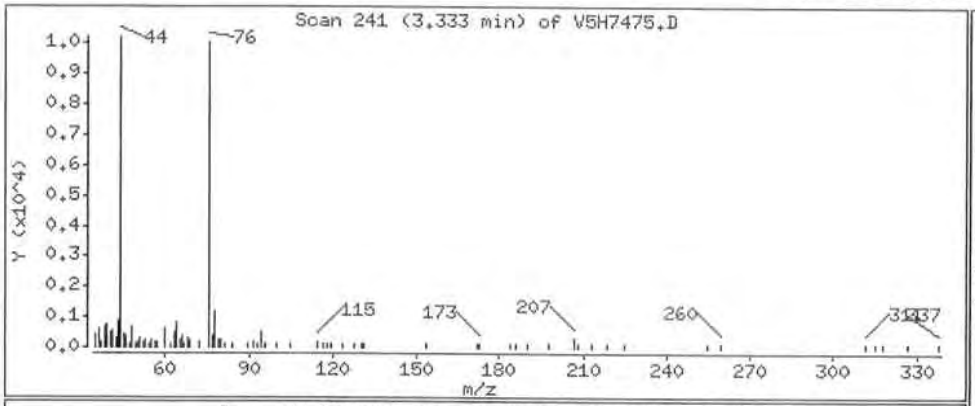
Client ID: Y3AM3 | Instrument: V5.i

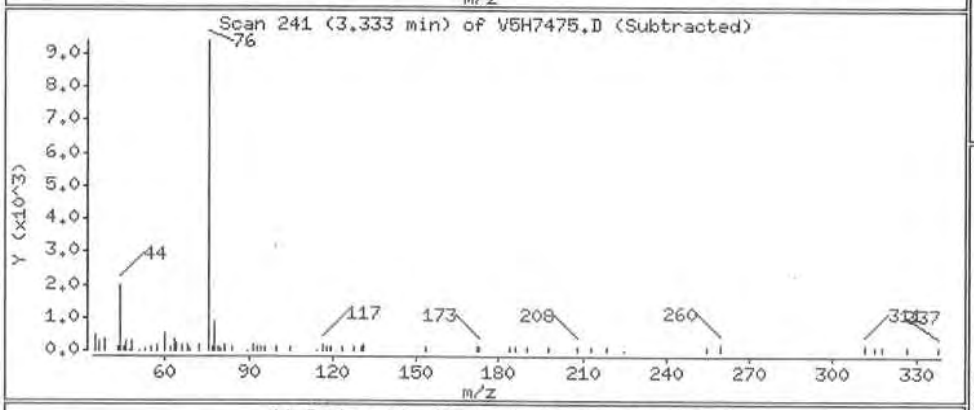
Sample Info: 25ML,F0595-03A,,29901

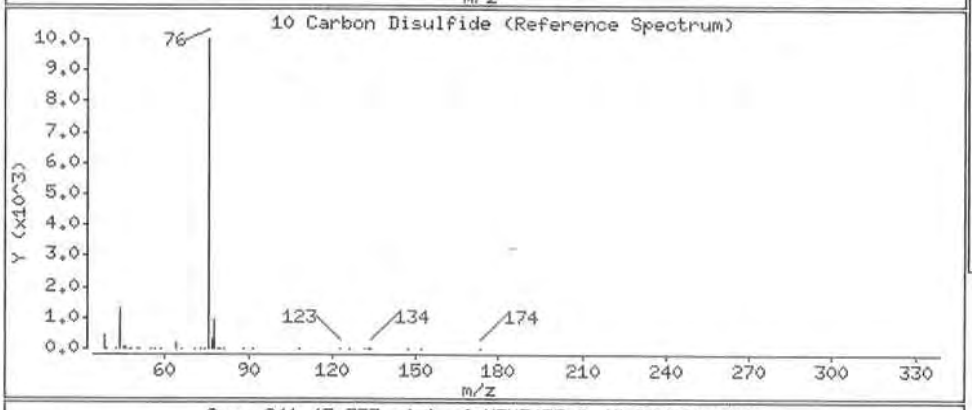
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

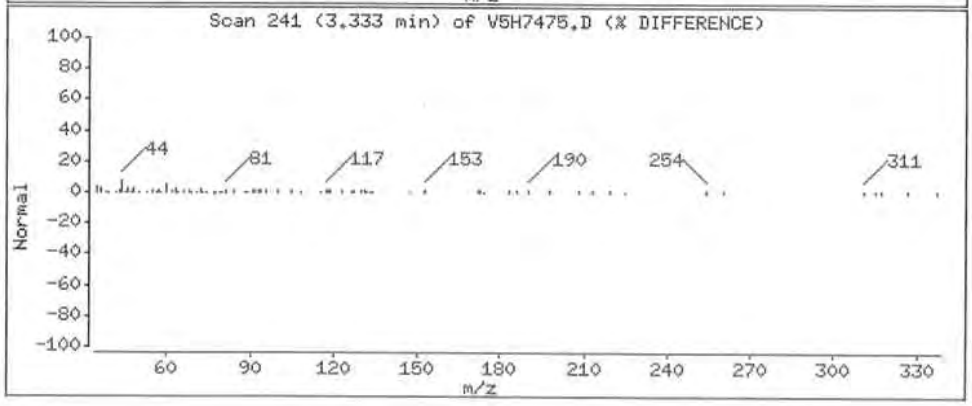
Column phase: DB-624 | Column diameter: 0.25

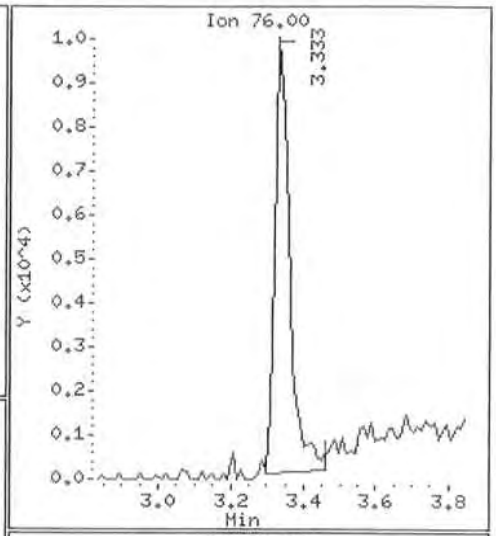
10 Carbon Disulfide | Concentration: 0.55 ug/L

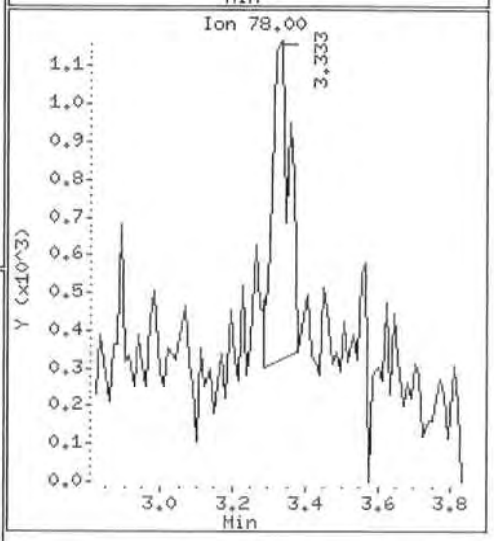












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM4

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7476.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM4

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7476.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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	0.91	
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.

Y3AM4

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-04A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7476.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

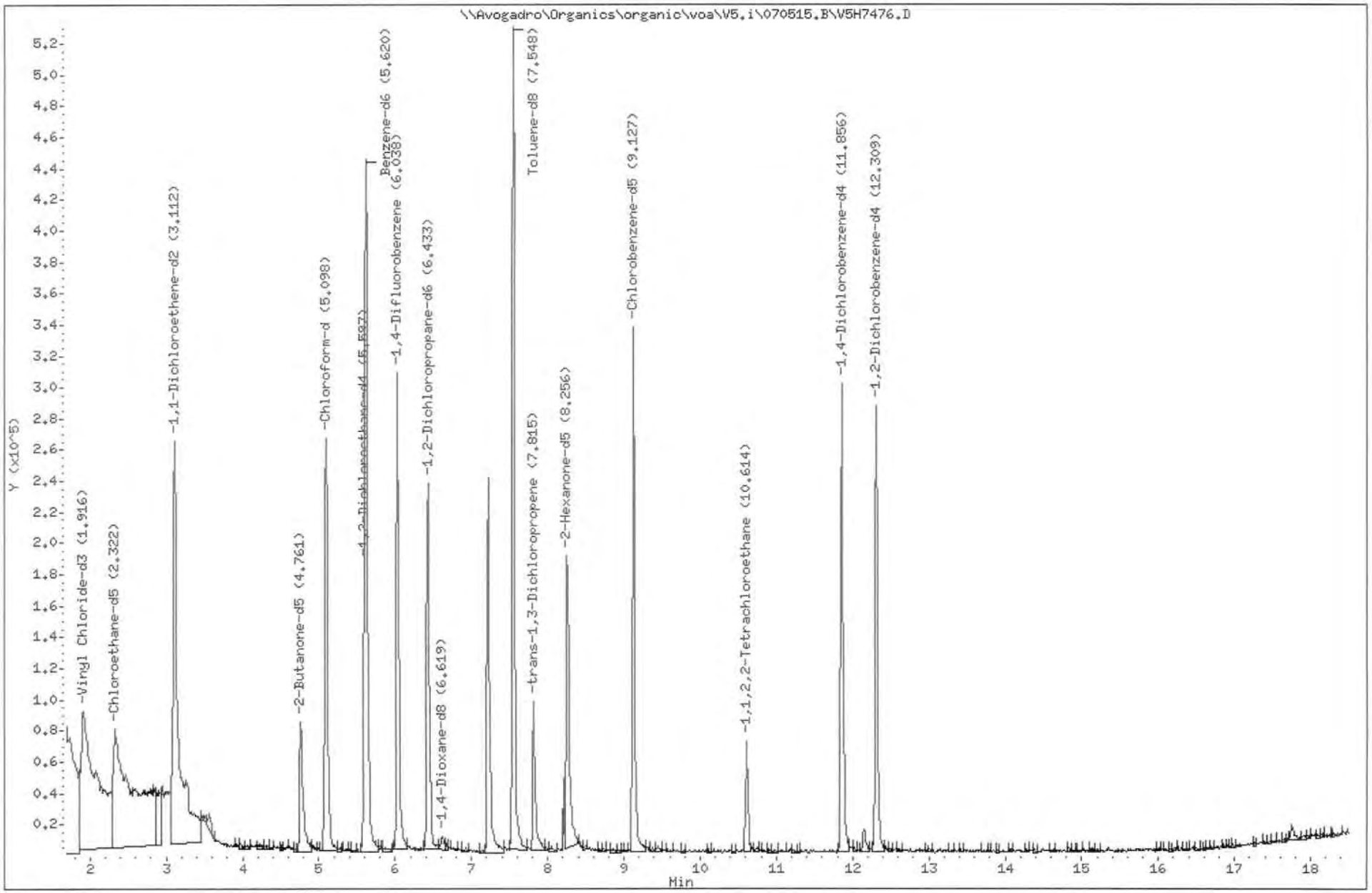
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 [1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D
Date : 15-MAY-2007 12:23
Client ID: Y3AM4
Sample Info: 25ML,F0595-04A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0019

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D
Lab Smp Id: F0595-04A Client Smp ID: Y3AM4
Inj Date : 15-MAY-2007 12:23
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-04A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.903	1.910	(0.315)	160138	4.90222	4.9
$ 80 Chloroethane-d5	69	2.333	2.316	(0.386)	93230	6.99837	7.0(R)
$ 81 1,1-Dichloroethene-d2	63	3.111	3.106	(0.515)	221903	4.60694	4.6
$ 82 2-Butanone-d5	46	4.760	4.755	(0.788)	164465	48.9147	49
$ 83 Chloroform-d	84	5.097	5.092	(0.844)	265155	5.73333	5.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.596	5.591	(0.927)	101139	5.56194	5.6
$ 84 Benzene-d6	84	5.620	5.626	(0.616)	432424	5.50788	5.5
* 26 1,4-Difluorobenzene	114	6.038	6.032	(1.000)	277268	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.433	6.427	(0.705)	110743	5.52246	5.5
$ 94 1,4-Dioxane-d8	96	6.618	6.613	(1.096)	8003	214.024	210(Q)
$ 33 Toluene-d8	98	7.547	7.542	(0.827)	393959	5.74189	5.7
$ 86 trans-1,3-Dichloropropene-d4	79	7.814	7.809	(0.856)	66938	5.09290	5.1
37 Tetrachloroethene	164	8.221	8.216	(0.901)	13792	0.90564	0.91
$ 87 2-Hexanone-d5	63	8.256	8.262	(0.905)	81080	49.7295	50(Q)
* 42 Chlorobenzene-d5	117	9.127	9.121	(1.000)	197426	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.613	10.608	(1.163)	44915	5.79382	5.8
* 78 1,4-Dichlorobenzene-d4	152	11.856	11.851	(1.000)	89145	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.309	12.303	(1.038)	81001	6.43247	6.4

WL
05/17/07

HA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D
Report Date: 17-May-2007 11:26

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D
Lab Smp Id: F0595-04A Client Smp ID: Y3AM4
Inj Date : 15-MAY-2007 12:23
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-04A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7476.D

Date : 15-MAY-2007 12:23

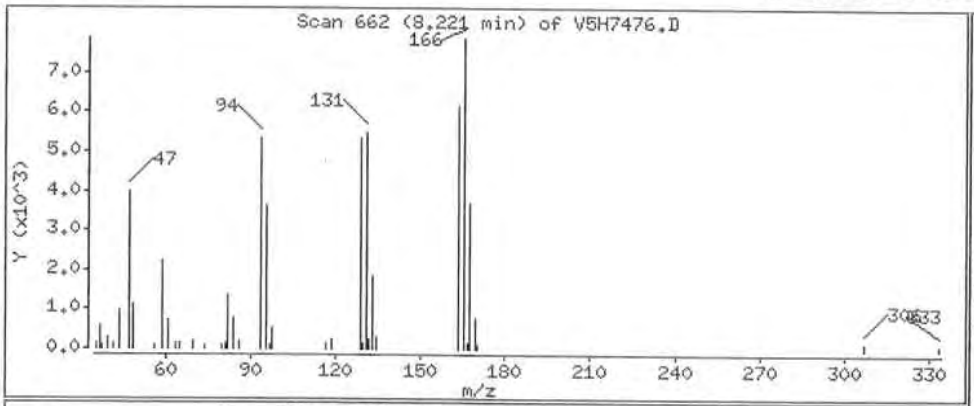
Client ID: Y3AM4 Instrument: V5.i

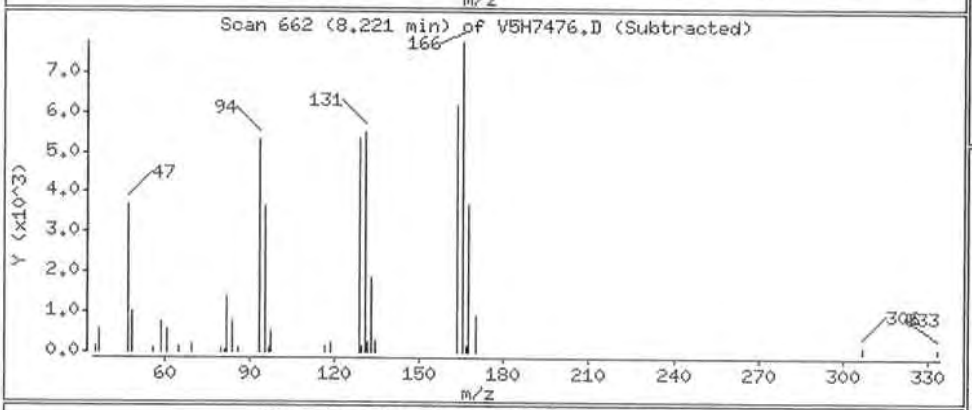
Sample Info: 25ML,F0595-04A,,29901

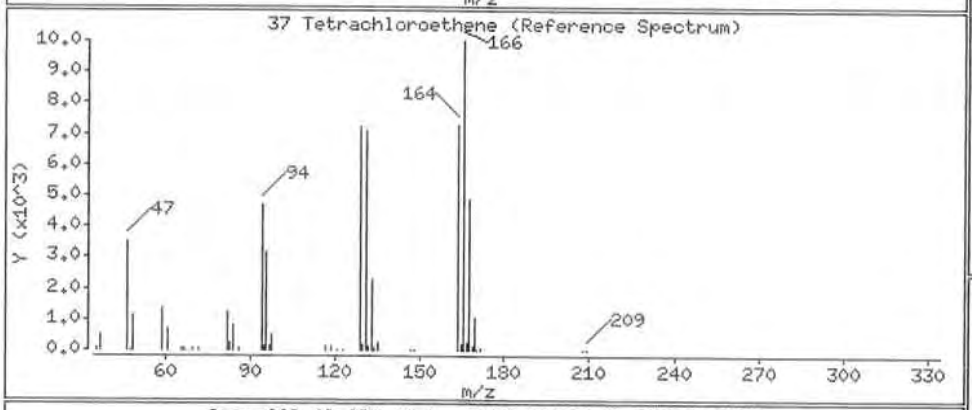
Purge Volume: 25.0 Operator: HZA SRC: LIMS

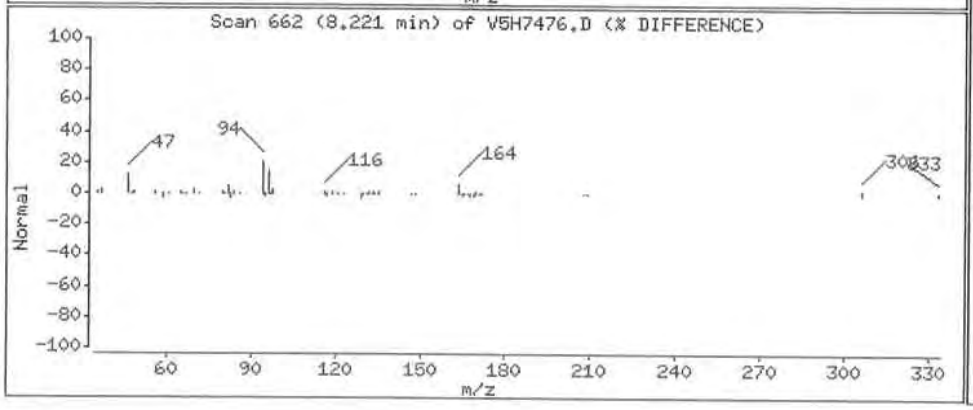
Column phase: DB-624 Column diameter: 0.25

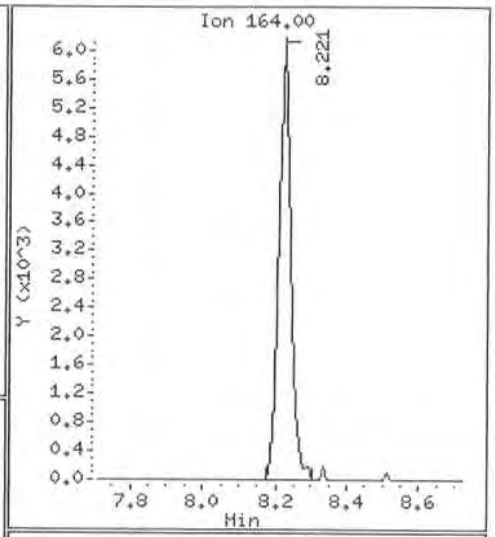
37 Tetrachloroethene Concentration: 0.91 ug/L

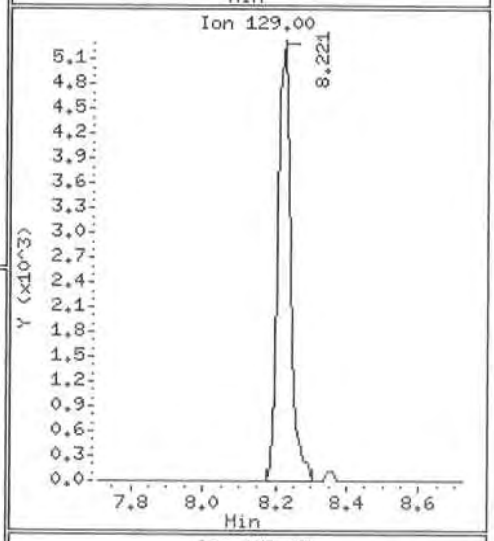


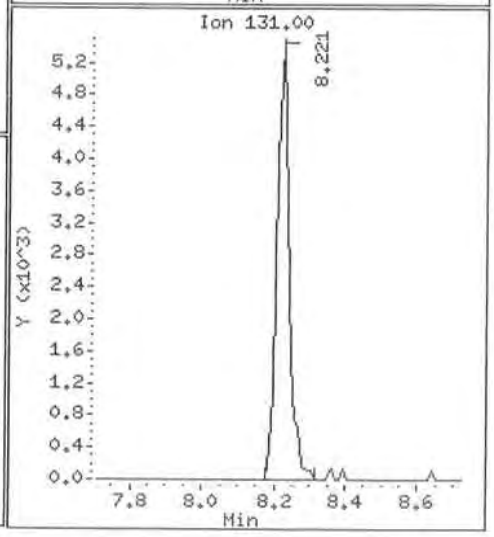












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM5

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7477.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM5

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7477.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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	0.71	
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.
Y3AM5

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-05A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7477.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

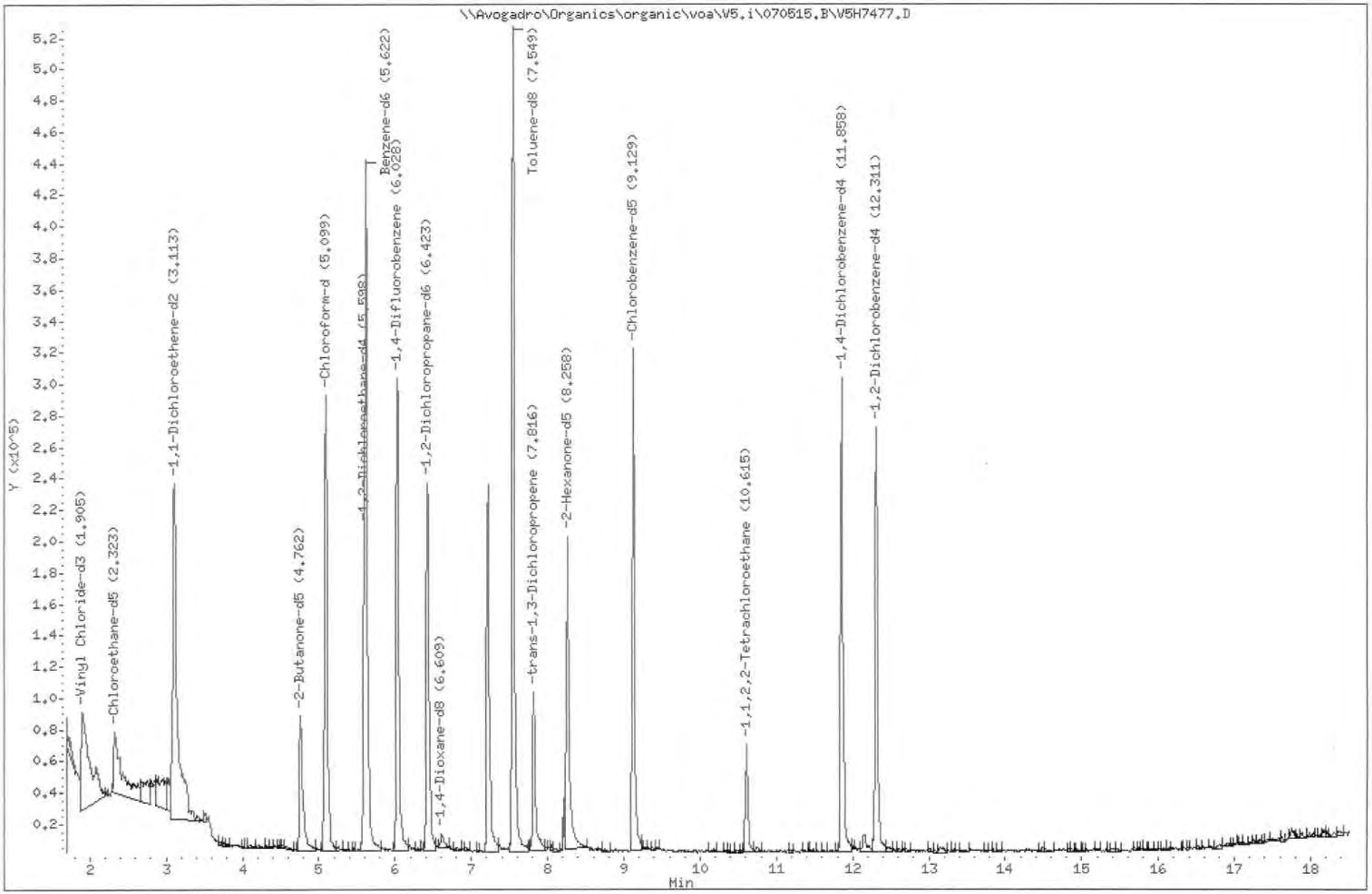
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D
Date : 15-MAY-2007 12:55
Client ID: Y3AM5
Sample Info: 25ML,F0595-05A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0057

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D
Lab Smp Id: F0595-05A Client Smp ID: Y3AM5
Inj Date : 15-MAY-2007 12:55
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-05A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.916	1.910	(0.317)	167462	4.97541	5.0
$ 80 Chloroethane-d5	69	2.323	2.316	(0.385)	99541	7.25199	7.3(QR)
$ 81 1,1-Dichloroethene-d2	63	3.113	3.106	(0.515)	211707	4.26578	4.3
$ 82 2-Butanone-d5	46	4.762	4.755	(0.788)	158168	45.6561	46
$ 83 Chloroform-d	84	5.098	5.092	(0.844)	267569	5.61509	5.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.591	(0.927)	103116	5.50361	5.5
$ 84 Benzene-d6	84	5.621	5.626	(0.616)	439355	5.65908	5.7
* 26 1,4-Difluorobenzene	114	6.039	6.032	(1.000)	285684	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.422	6.427	(0.704)	113051	5.70093	5.7
$ 94 1,4-Dioxane-d8	96	6.608	6.613	(1.094)	11973	310.760	310(Q)
$ 33 Toluene-d8	98	7.549	7.542	(0.827)	381323	5.62021	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.809	(0.856)	74777	5.75328	5.8
37 Tetrachloroethene	164	8.222	8.216	(0.901)	10733	0.71270	0.71
$ 87 2-Hexanone-d5	63	8.257	8.262	(0.905)	82999	51.4788	51
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	195231	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.608	(1.162)	44534	5.80926	5.8
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	94494	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	79924	5.98767	6.0

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D
Report Date: 17-May-2007 11:26

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D
Lab Smp Id: F0595-05A Client Smp ID: Y3AM5
Inj Date : 15-MAY-2007 12:55
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-05A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7477.D

Date : 15-MAY-2007 12:55

Client ID: Y3AM5

Instrument: V5.i

Sample Info: 25ML,F0595-05A,,29901

Purge Volume: 25.0

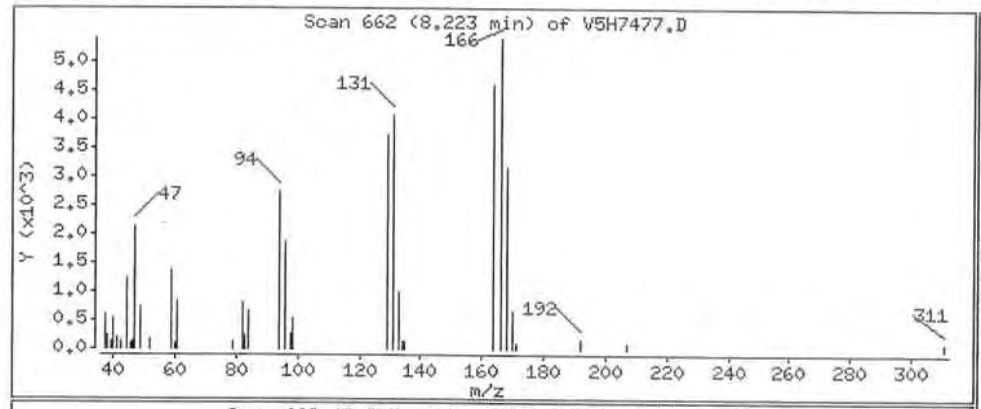
Operator: HZA SRC: LIMS

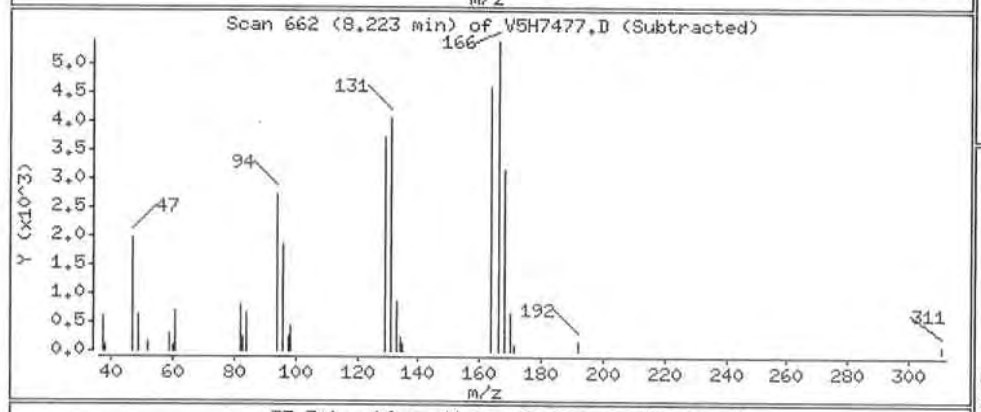
Column phase: DB-624

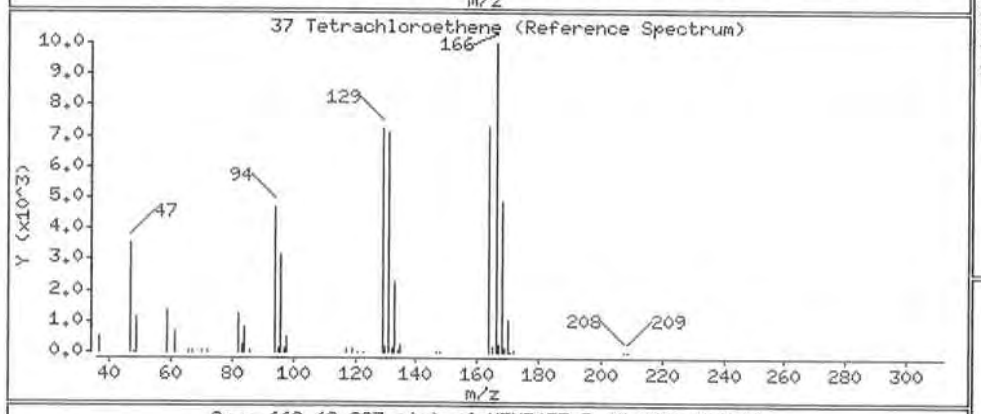
Column diameter: 0.25

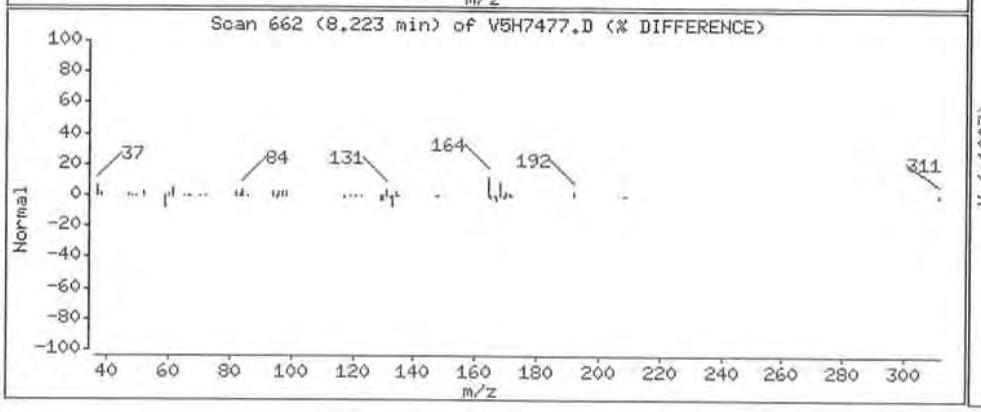
37 Tetrachloroethene

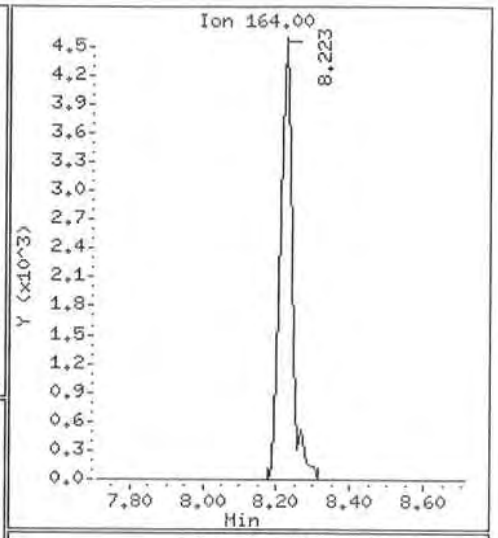
Concentration: 0.71 ug/L

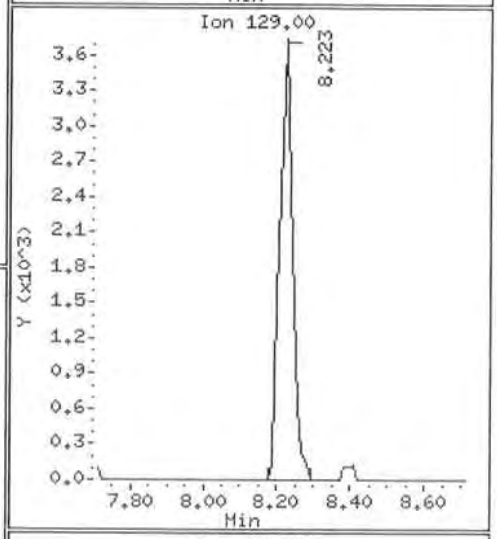


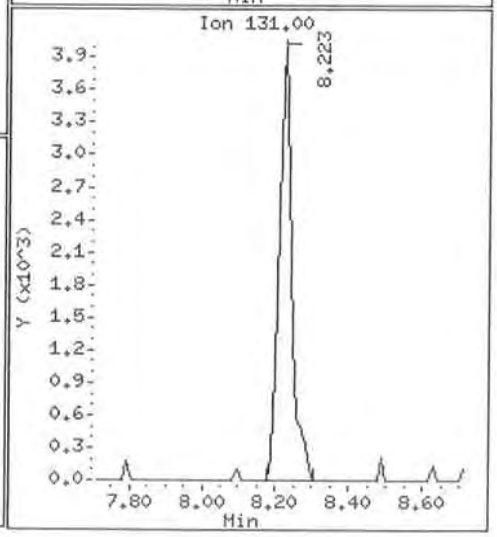












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM6

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7478.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM6

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7478.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	0.86	
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	8.0	
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.
Y3AM6

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-06A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7478.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

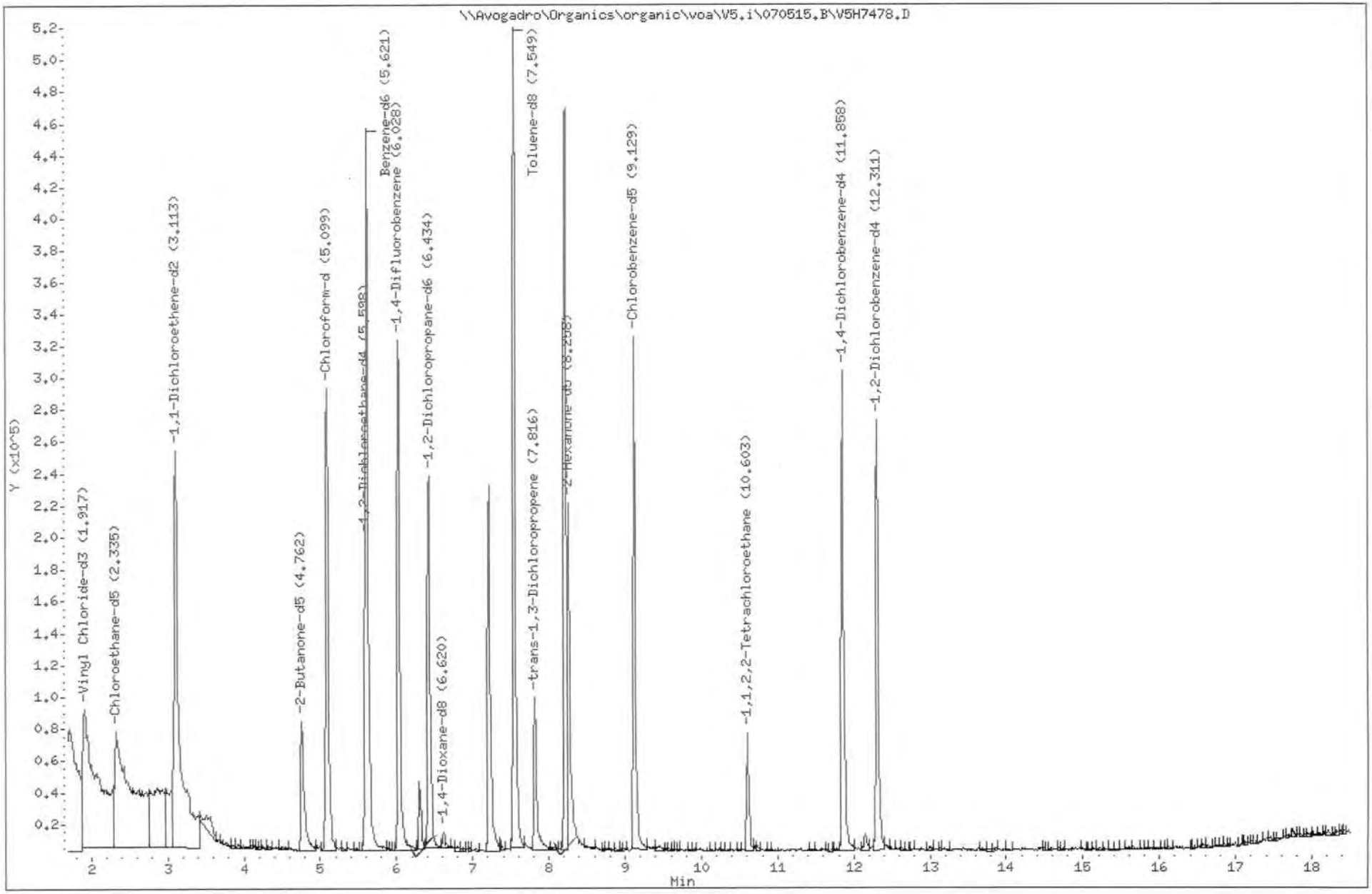
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D
Date : 15-MAY-2007 13:27
Client ID: Y3AM6
Sample Info: 25ML,F0595-06A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0065

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D
Lab Smp Id: F0595-06A Client Smp ID: Y3AM6
Inj Date : 15-MAY-2007 13:27
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-06A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.905	1.910	(0.316)	165025	4.96654	5.0
$ 80 Chloroethane-d5	69	2.334	2.316	(0.387)	96227	7.10141	7.1(R)
$ 81 1,1-Dichloroethene-d2	63	3.113	3.106	(0.516)	226693	4.62693	4.6
$ 82 2-Butanone-d5	46	4.762	4.755	(0.790)	161386	47.1887	47
$ 83 Chloroform-d	84	5.098	5.092	(0.846)	264244	5.61718	5.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.591	(0.929)	104872	5.66987	5.7
$ 84 Benzene-d6	84	5.621	5.626	(0.616)	440102	5.65382	5.7
* 26 1,4-Difluorobenzene	114	6.027	6.032	(1.000)	282029	5.00000	(Q)
27 Trichloroethene	95	6.306	6.299	(0.691)	18106	0.86489	0.86
$ 85 1,2-Dichloropropane-d6	67	6.434	6.427	(0.705)	117349	5.90213	5.9
$ 94 1,4-Dioxane-d8	96	6.620	6.613	(1.098)	10408	273.641	270(Q)
$ 33 Toluene-d8	98	7.549	7.542	(0.827)	390384	5.73865	5.7
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.809	(0.856)	73431	5.63489	5.6
37 Tetrachloroethene	164	8.222	8.216	(0.901)	121527	8.04848	8.0
$ 87 2-Hexanone-d5	63	8.257	8.262	(0.905)	84698	52.3947	52
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	195745	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.608	(1.162)	43853	5.70541	5.7
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	92328	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	80636	6.18273	6.2

WL
05/17/07

HZA

0066

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D
Report Date: 17-May-2007 11:26

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D
Lab Smp Id: F0595-06A Client Smp ID: Y3AM6
Inj Date : 15-MAY-2007 13:27
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-06A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D

Date : 15-MAY-2007 13:27

Client ID: Y3AM6

Instrument: V5.i

Sample Info: 25ML,F0595-06A,,29901

Purge Volume: 25.0

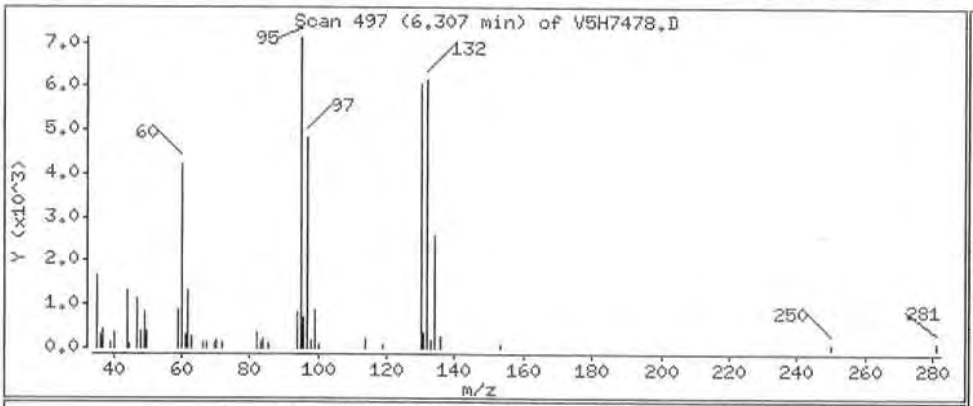
Operator: HZA SRC: LIMS

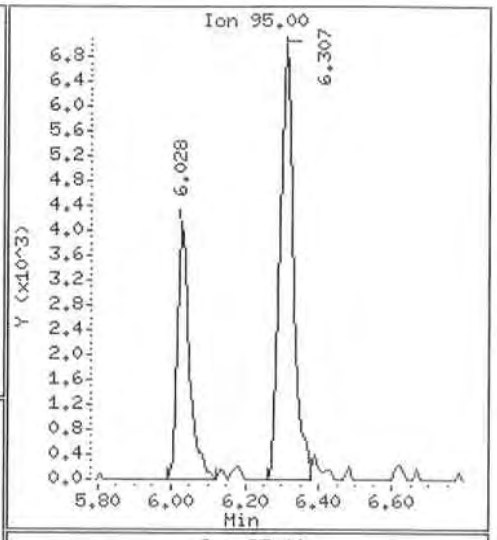
Column phase: DB-624

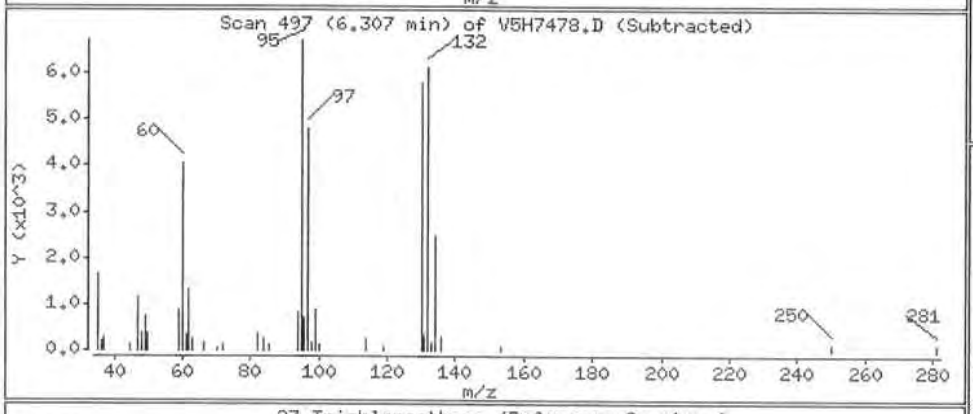
Column diameter: 0.25

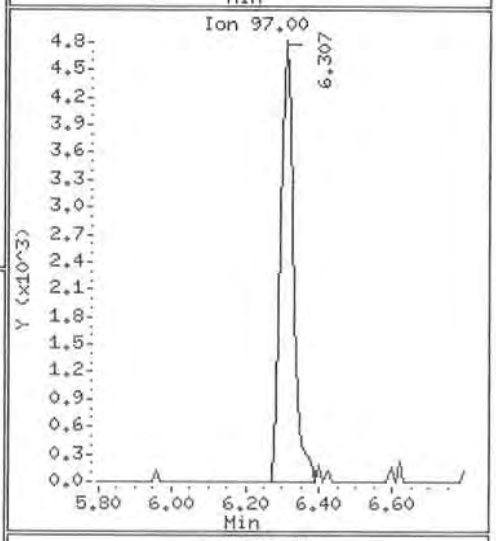
27 Trichloroethene

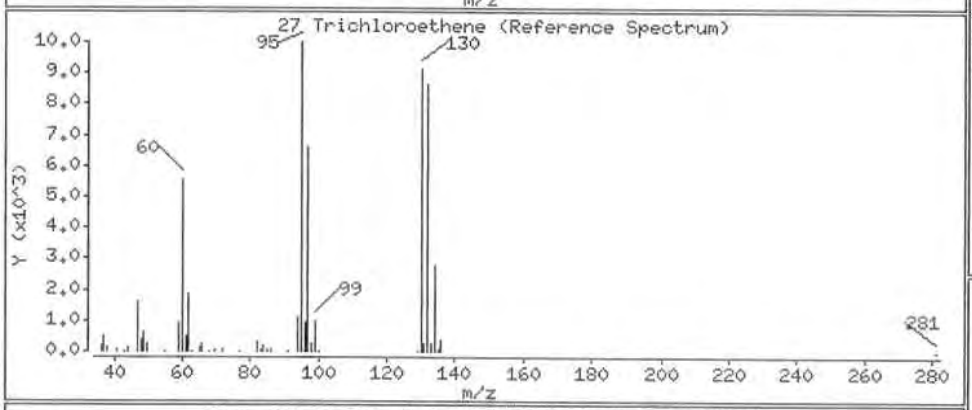
Concentration: 0.86 ug/L

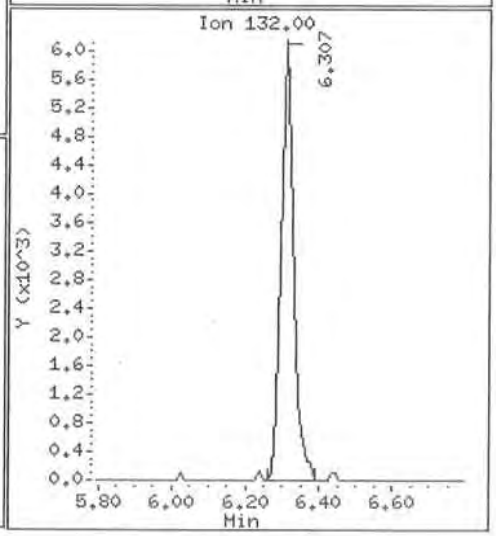


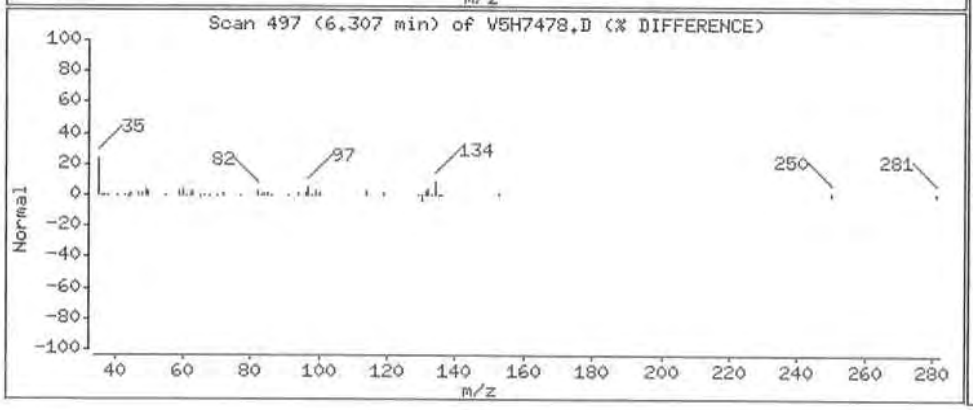












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7478.D

Date : 15-MAY-2007 13:27

Client ID: Y3AM6

Instrument: V5.i

Sample Info: 25ML,F0595-06A,,29901

Purge Volume: 25.0

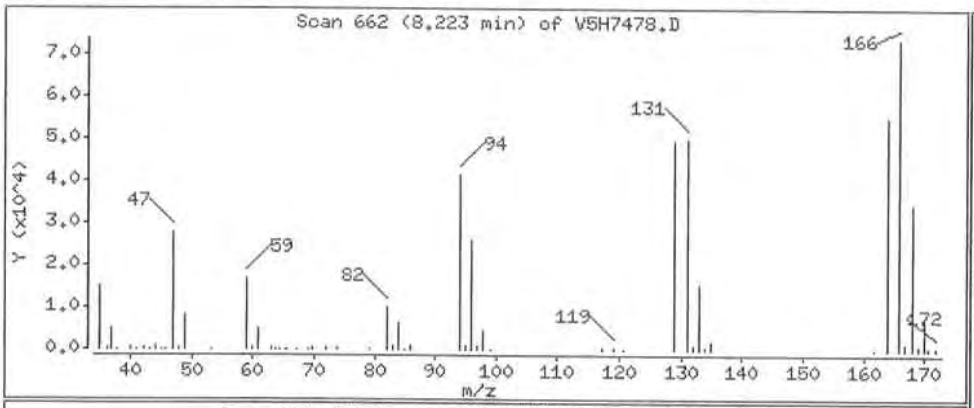
Operator: HZA SRC: LIMS

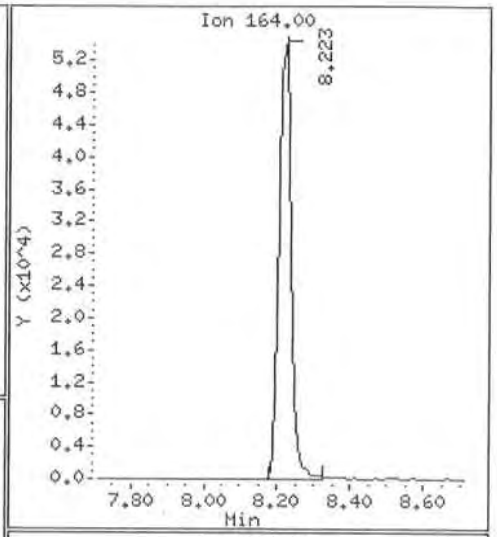
Column phase: DB-624

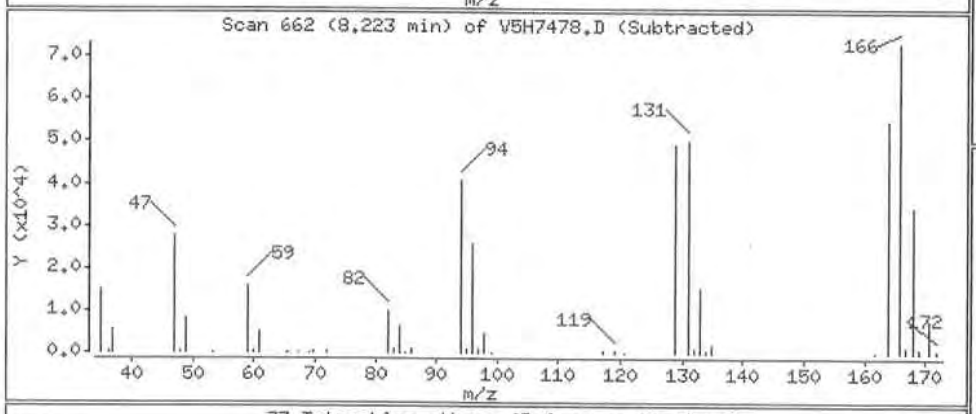
Column diameter: 0.25

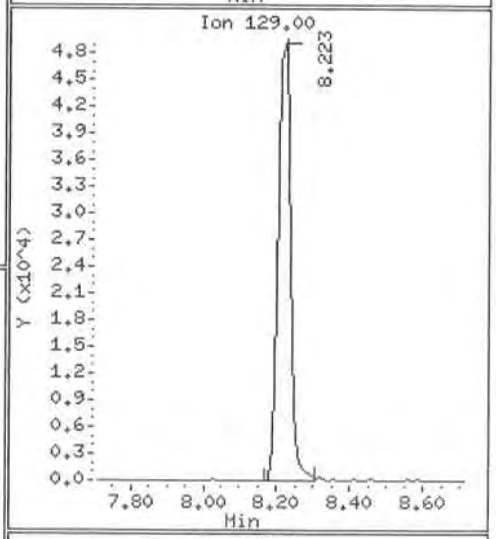
37 Tetrachloroethene

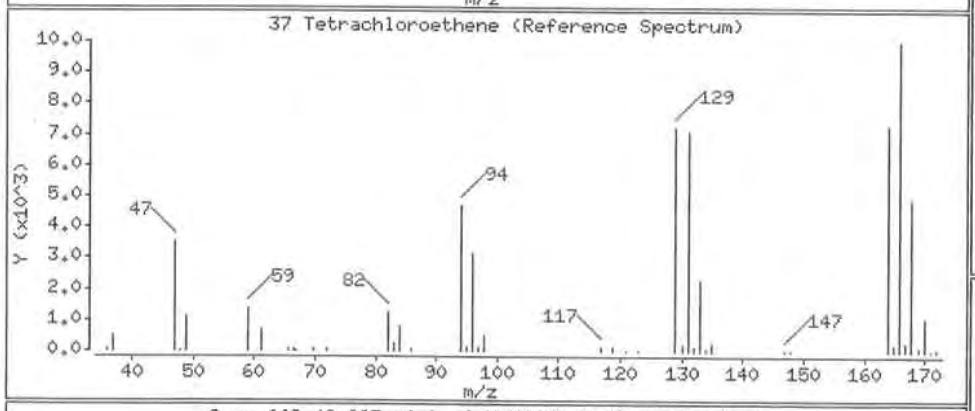
Concentration: 8.0 ug/L

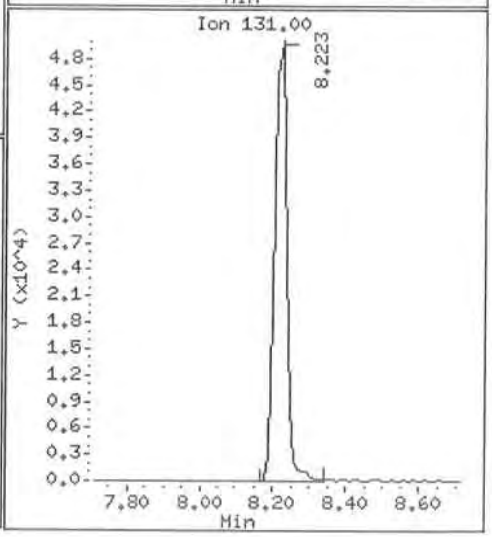


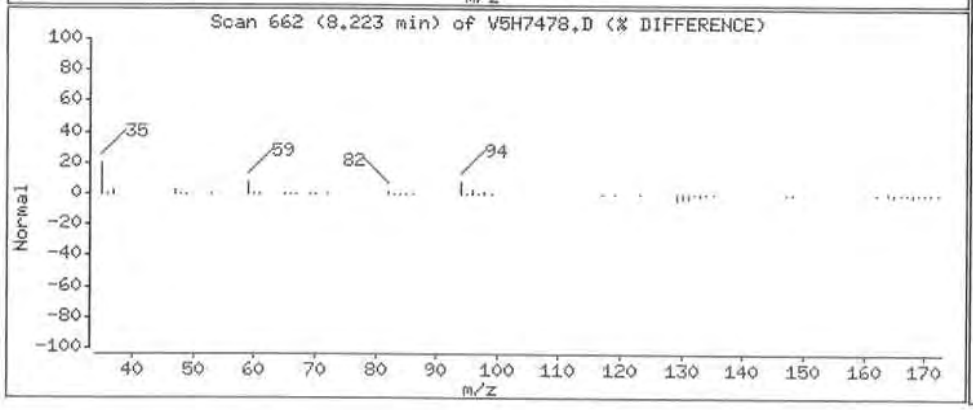












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM7

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7479.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM7

Lab Name: MITKEM CORPORATION

Contract: EP-W-05-030

Lab Code: MITKEM

Case No.: 36359

Mod. Ref No.: 1391.0

SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: F0595-07A

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: V5H7479.D

Level: (TRACE/LOW/MED) TRACE

Date Received: 05/10/2007

% Moisture: not dec.

Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	1.0	
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	9.4	
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.
Y3AM7

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-07A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7479.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

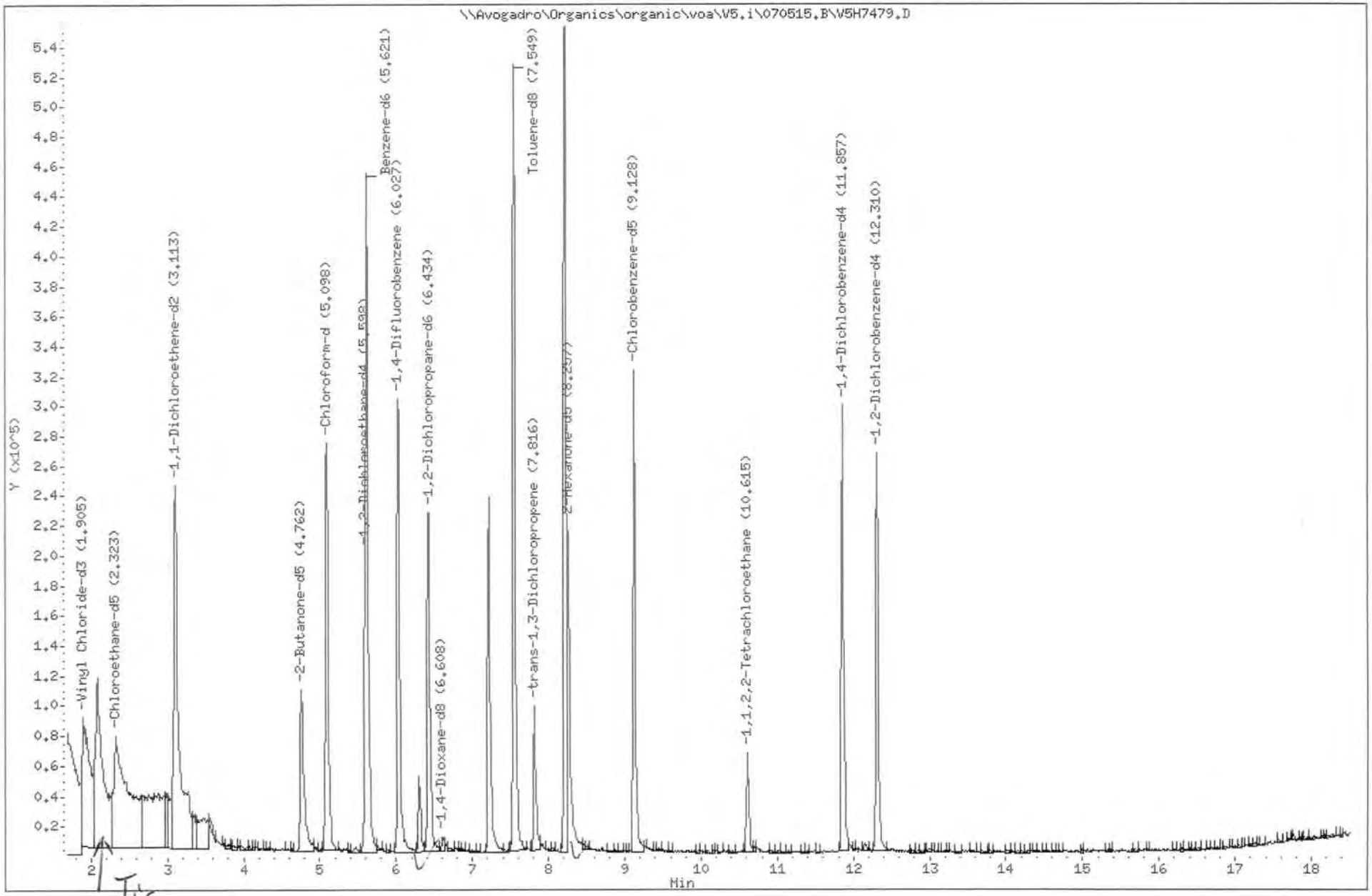
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	420-56-4	Trimethylsilyl fluoride	2.091	5.5	NJ
	E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D
Date : 15-MAY-2007 13:59
Client ID: Y3AM7
Sample Info: 25ML,F0595-07A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



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Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D
Lab Smp Id: F0595-07A Client Smp ID: Y3AM7
Inj Date : 15-MAY-2007 13:59
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-07A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.904	1.910	(0.315)	163440	4.91616	4.9
$ 80 Chloroethane-d5	69	2.322	2.316	(0.385)	102262	7.54266	7.5(R)
$ 81 1,1-Dichloroethene-d2	63	3.112	3.106	(0.515)	226458	4.61962	4.6
$ 82 2-Butanone-d5	46	4.761	4.755	(0.788)	154363	45.1106	45
$ 83 Chloroform-d	84	5.098	5.092	(0.844)	265367	5.63797	5.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.597	5.591	(0.927)	102225	5.52375	5.5
$ 84 Benzene-d6	84	5.621	5.626	(0.616)	441705	5.60195	5.6
* 26 1,4-Difluorobenzene	114	6.039	6.032	(1.000)	282183	5.00000	(Q)
27 Trichloroethene	95	6.306	6.299	(0.691)	22090	1.04172	1.0
$ 85 1,2-Dichloropropane-d6	67	6.422	6.427	(0.704)	112039	5.56310	5.6
$ 94 1,4-Dioxane-d8	96	6.608	6.613	(1.094)	8479	222.804	220(Q)
$ 33 Toluene-d8	98	7.548	7.542	(0.827)	396802	5.75850	5.8
$ 86 trans-1,3-Dichloropropene-d4	79	7.815	7.809	(0.856)	69314	5.25104	5.3
37 Tetrachloroethene	164	8.222	8.216	(0.901)	144148	9.42471	9.4(H)
$ 87 2-Hexanone-d5	63	8.257	8.262	(0.905)	84394	51.5399	52
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	198277	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.608	(1.162)	42237	5.42499	5.4
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	92412	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	78791	6.03577	6.0

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D
Report Date: 17-May-2007 11:26

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\organic\voa\V5.i\070515.B\V5H7479.D
Report Date: 21-May-2007 16:13

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D
Lab Smp Id: F0595-07A Client Smp ID: Y3AM7
Inj Date : 15-MAY-2007 13:59
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-07A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 21-May-2007 16:08 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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
* 26 1,4-Difluorobenzene	6.039	770371	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Trimethylsilyl fluoride				CAS #: 420-56-4			
2.091	844588	5.48169165	5.5	91	NIST2002.L	2378	26(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D

Date : 15-MAY-2007 13:59

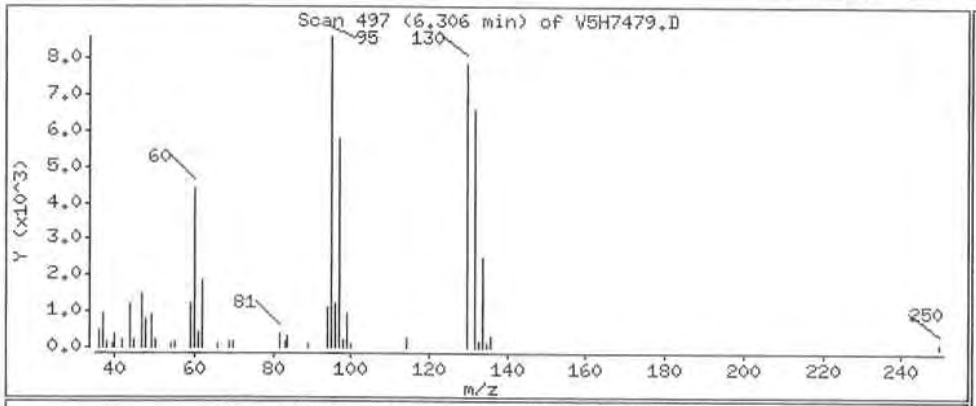
Client ID: Y3AM7 Instrument: V5.i

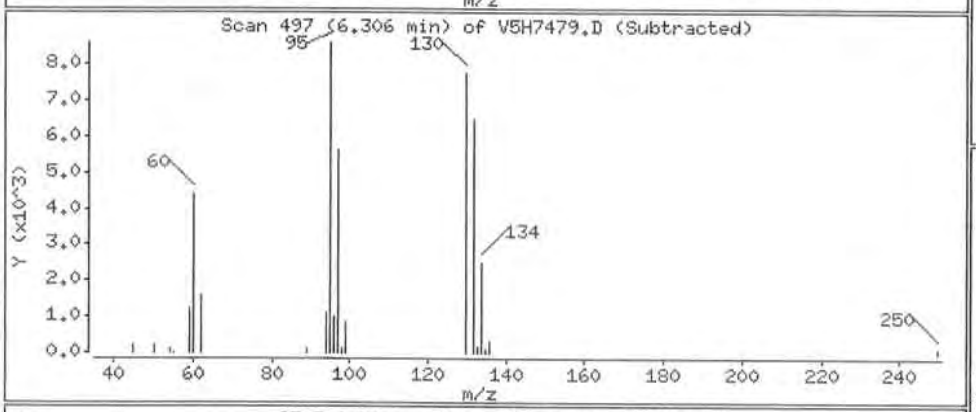
Sample Info: 25ML,F0595-07A,,29901

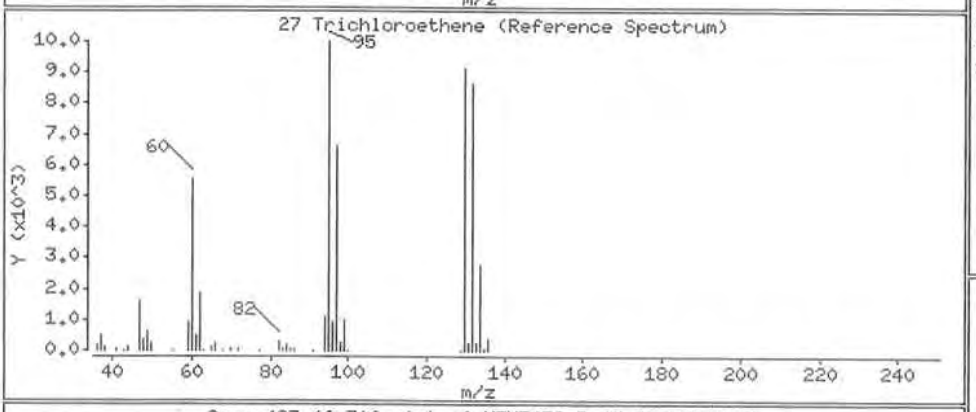
Purge Volume: 25.0 Operator: HZA SRC: LIMS

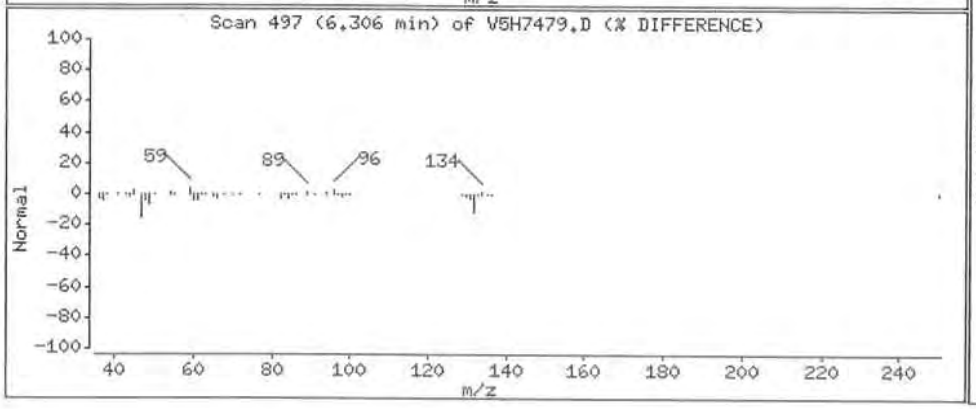
Column phase: DB-624 Column diameter: 0.25

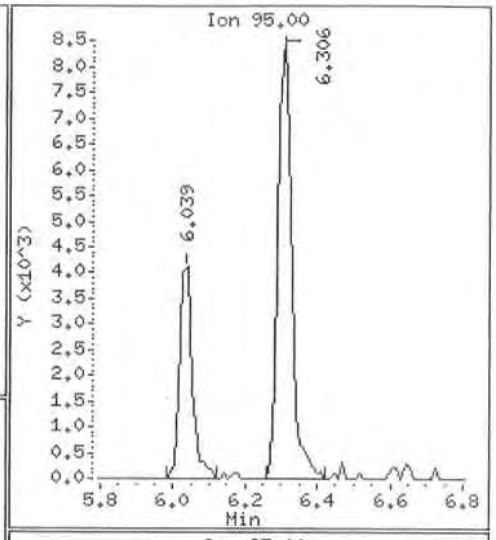
27 Trichloroethene Concentration: 1.0 ug/L

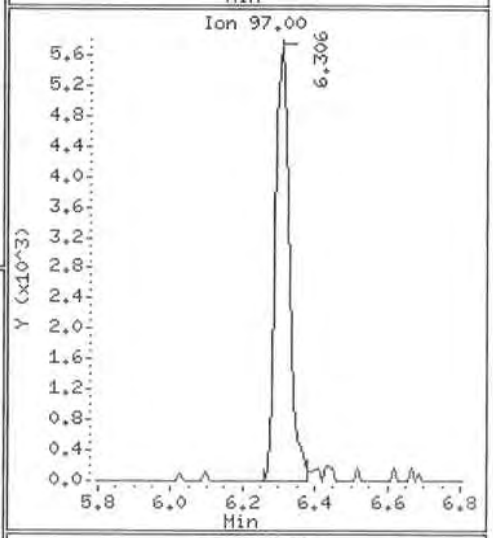


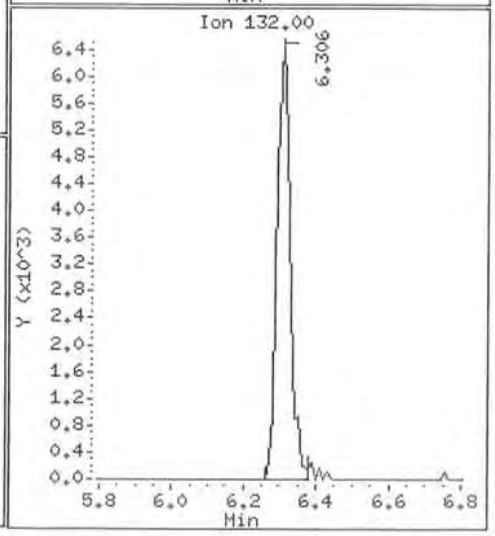












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D

Date : 15-MAY-2007 13:59

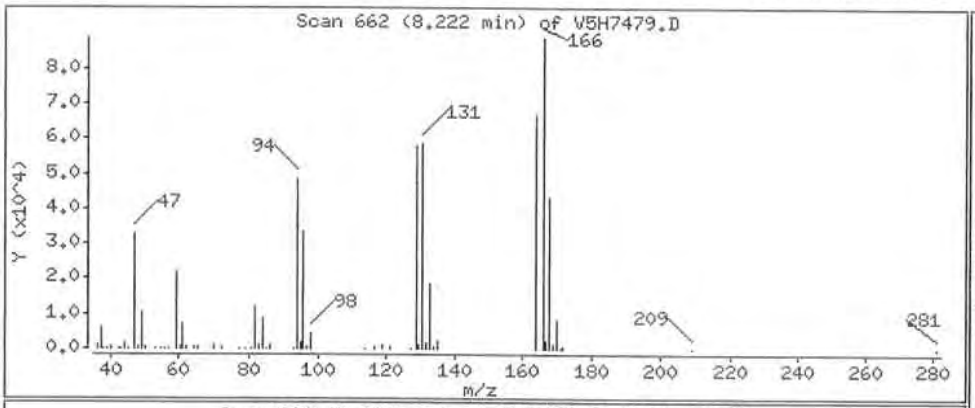
Client ID: Y3AM7 | Instrument: V5.i

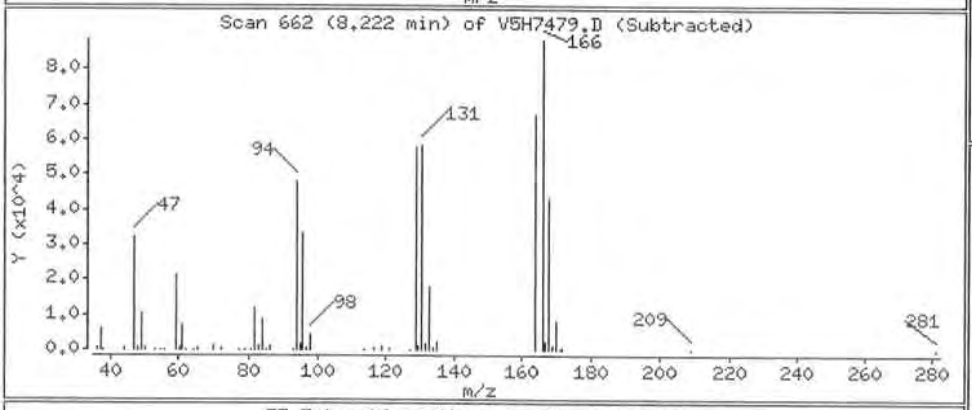
Sample Info: 25ML,F0595-07A,,29901

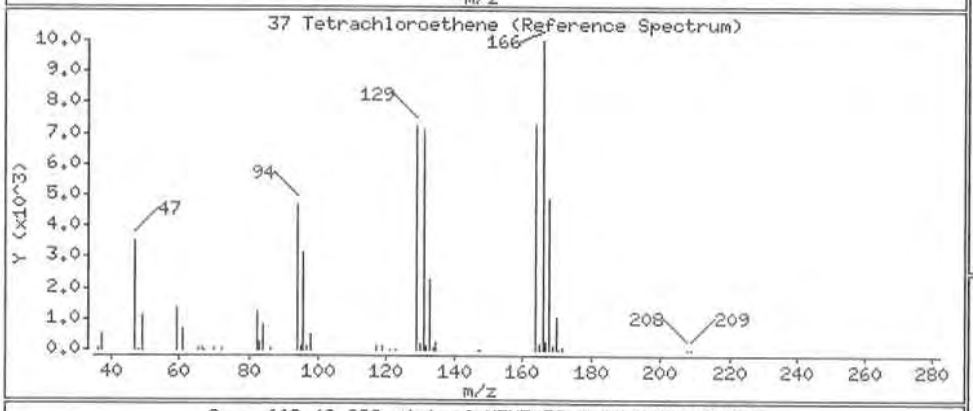
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

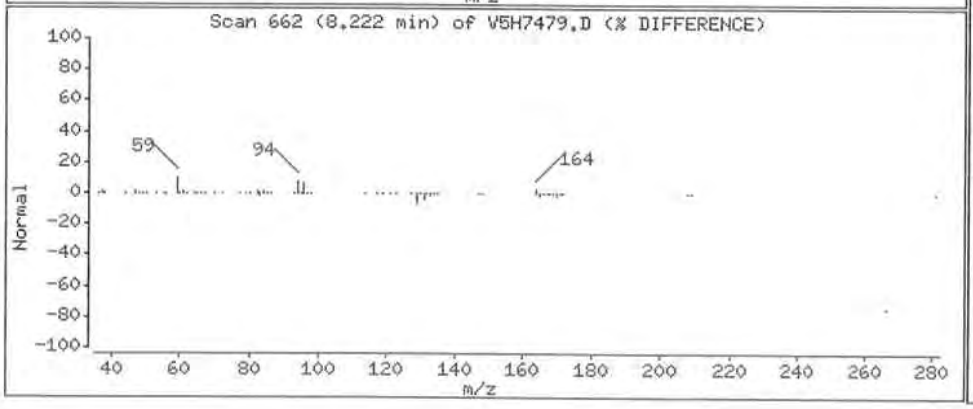
Column phase: DB-624 | Column diameter: 0.25

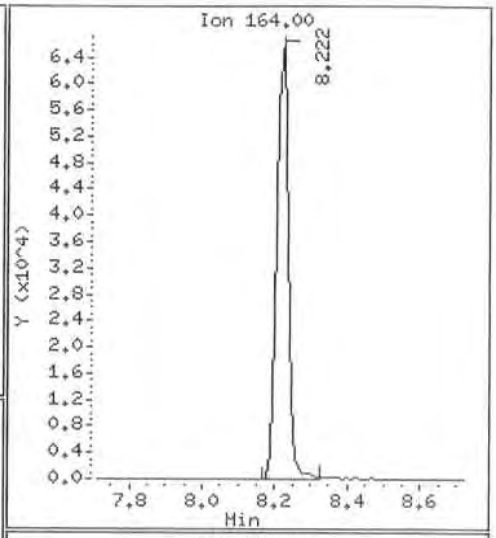
37 Tetrachloroethene | Concentration: 9.4 ug/L

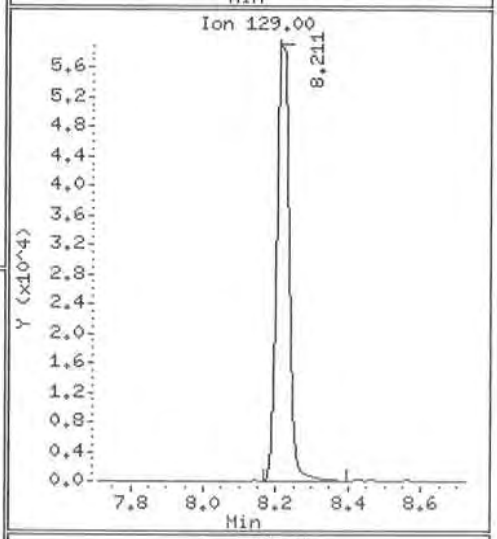


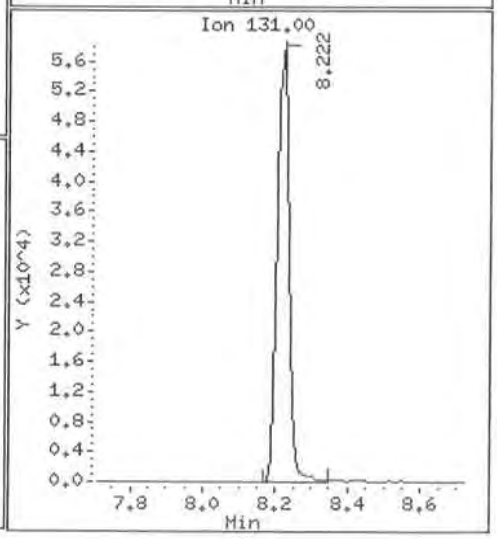












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7479.D

Date : 15-MAY-2007 13:59

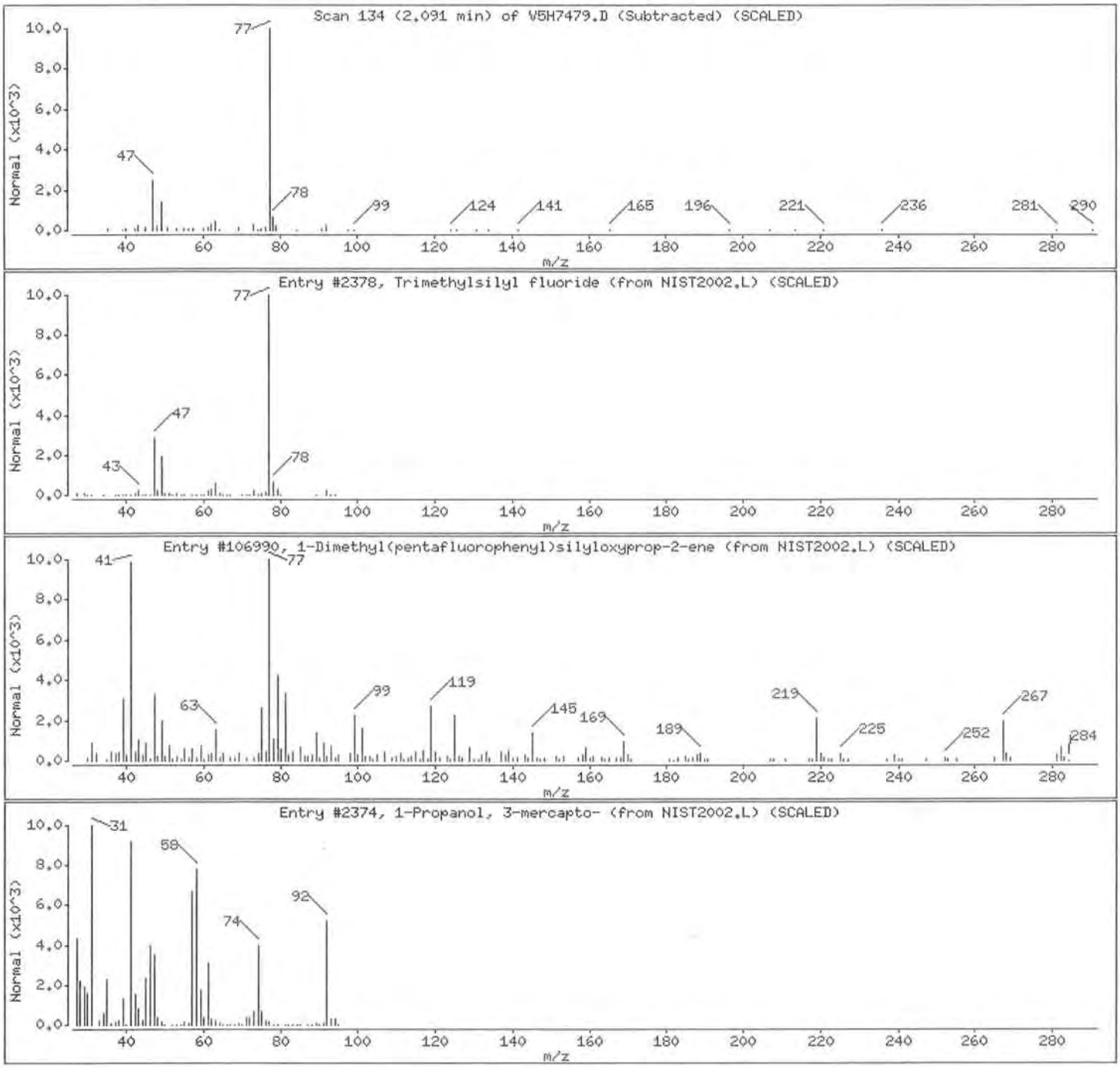
Client ID: Y3AM7 Instrument: V5.i

Sample Info: 25ML,F0595-07A,,29901

Purge Volume: 25.0 Operator: HZA SRC: LIMS

Column phase: DB-624 Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Trimethylsilyl fluoride	420-56-4	NIST2002.L	2378	91	C3H9FSi	92
1-Dimethyl(pentafluorophenyl)silyloxypro	1000216-73-4	NIST2002.L	106990	40	C11H11F5OSi	282
1-Propanol, 3-mercapto-	19721-22-3	NIST2002.L	2374	9	C3H8OS	92



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM8

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7480.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM8

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7480.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	2.2	
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	2.4	
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.

Y3AM8

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-08A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7480.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

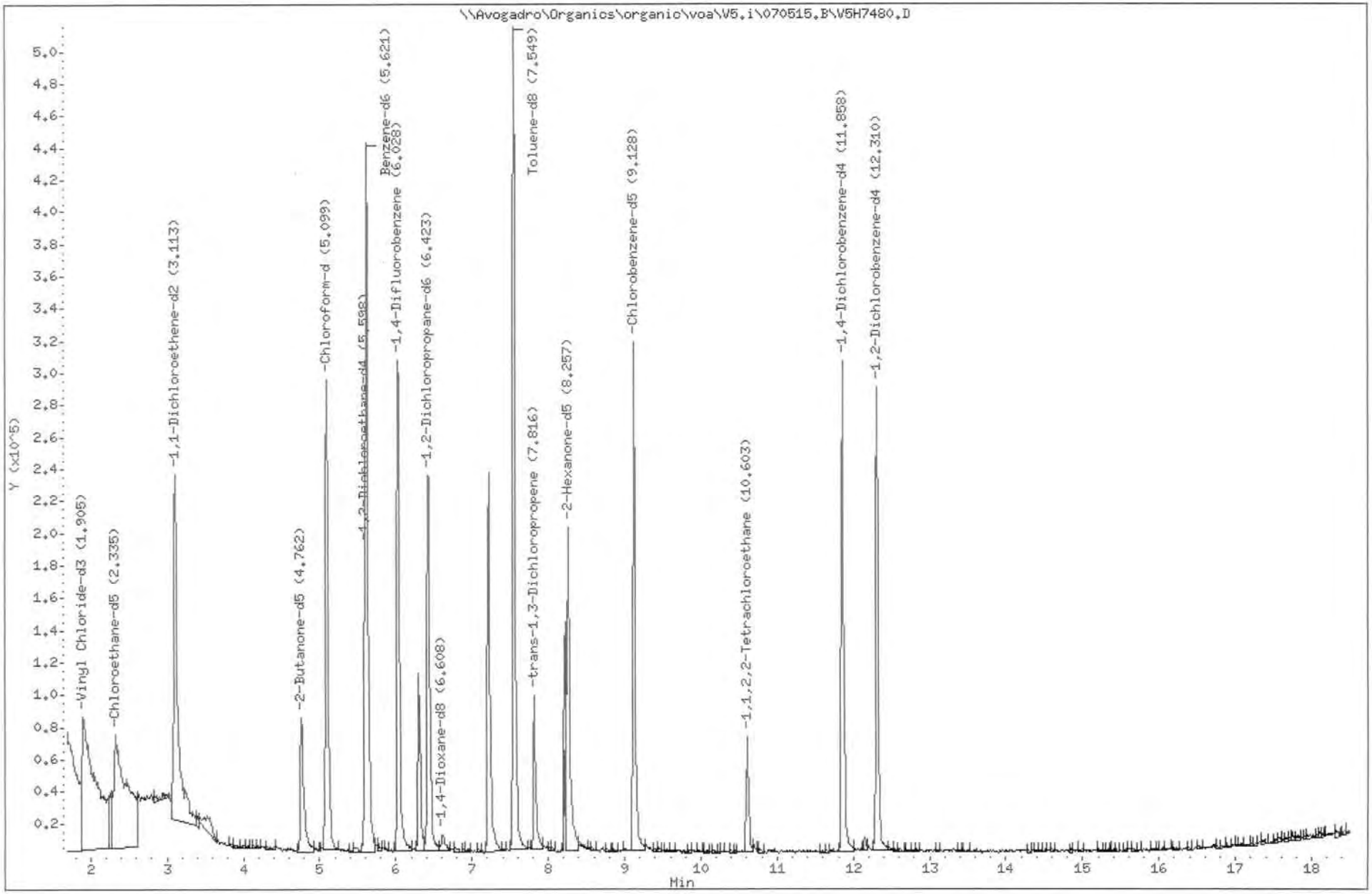
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D
Date : 15-MAY-2007 14:31
Client ID: Y3AM8
Sample Info: 25ML,F0595-08A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D
Lab Smp Id: F0595-08A Client Smp ID: Y3AM8
Inj Date : 15-MAY-2007 14:31
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-08A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.905	1.910	(0.315)	158344	4.93302	4.9
$ 80 Chloroethane-d5	69	2.334	2.316	(0.387)	85545	6.53505	6.5
$ 81 1,1-Dichloroethene-d2	63	3.112	3.106	(0.515)	216381	4.57174	4.6
$ 82 2-Butanone-d5	46	4.761	4.755	(0.788)	160313	48.5230	49
$ 83 Chloroform-d	84	5.098	5.092	(0.844)	259917	5.71946	5.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.591	(0.927)	102679	5.74649	5.7
$ 84 Benzene-d6	84	5.621	5.626	(0.616)	426411	5.43755	5.4
* 26 1,4-Difluorobenzene	114	6.039	6.032	(1.000)	272450	5.00000	(Q)
27 Trichloroethene	95	6.306	6.299	(0.691)	47314	2.24344	2.2(H)
$ 85 1,2-Dichloropropane-d6	67	6.434	6.427	(0.705)	114193	5.70105	5.7
$ 94 1,4-Dioxane-d8	96	6.620	6.613	(1.096)	11726	319.133	320(Q)
$ 33 Toluene-d8	98	7.549	7.542	(0.827)	381009	5.55954	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.809	(0.856)	69529	5.29612	5.3
37 Tetrachloroethene	164	8.222	8.216	(0.901)	36782	2.41803	2.4
$ 87 2-Hexanone-d5	63	8.257	8.262	(0.905)	81142	49.8248	50(Q)
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	197199	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.608	(1.162)	41678	5.38245	5.4
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	91617	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	81030	6.26115	6.3

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D
Report Date: 17-May-2007 11:26

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D
Lab Smp Id: F0595-08A Client Smp ID: Y3AM8
Inj Date : 15-MAY-2007 14:31
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-08A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D

Date : 15-MAY-2007 14:31

Client ID: Y3AM8

Instrument: V5.i

Sample Info: 25ML,F0595-08A,,29901

Purge Volume: 25.0

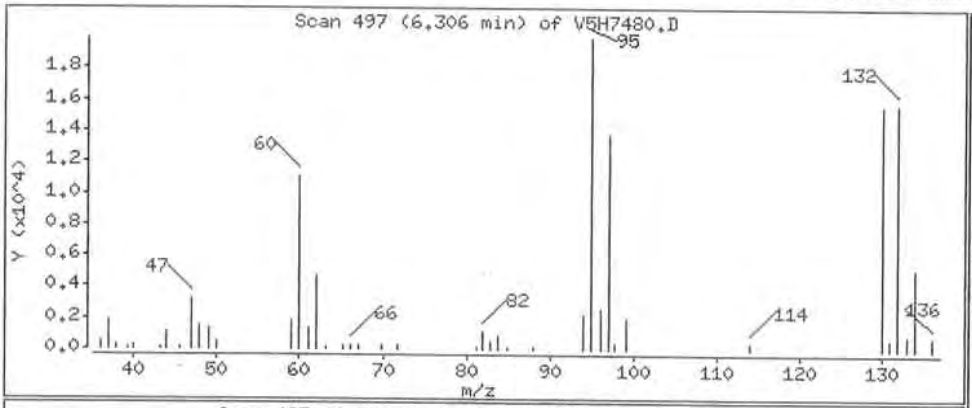
Operator: HZA SRC: LIMS

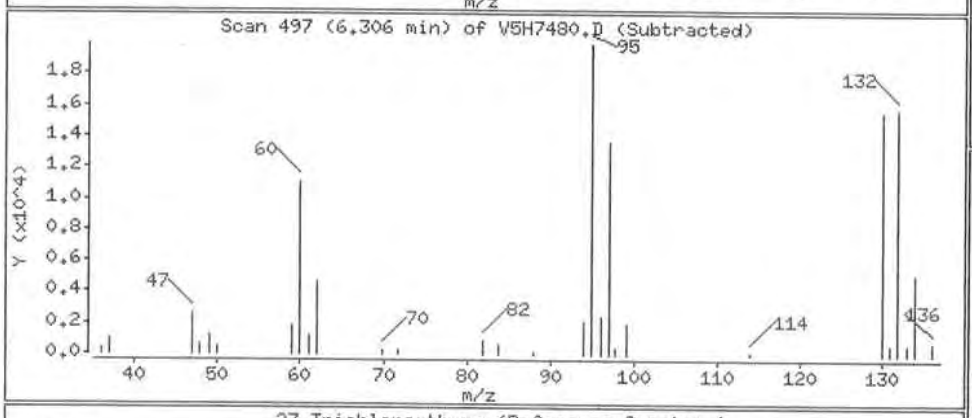
Column phase: DB-624

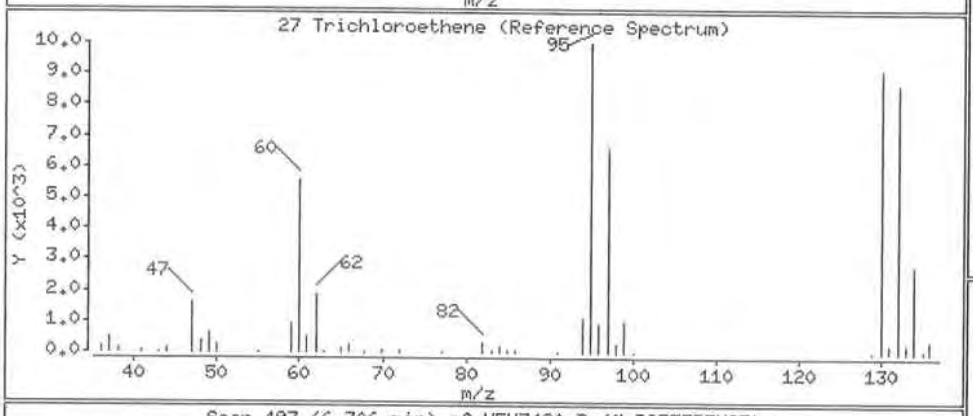
Column diameter: 0.25

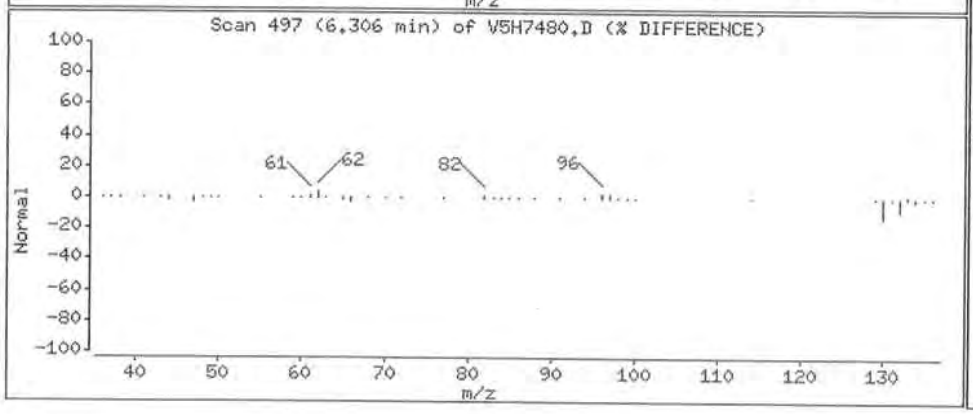
27 Trichloroethene

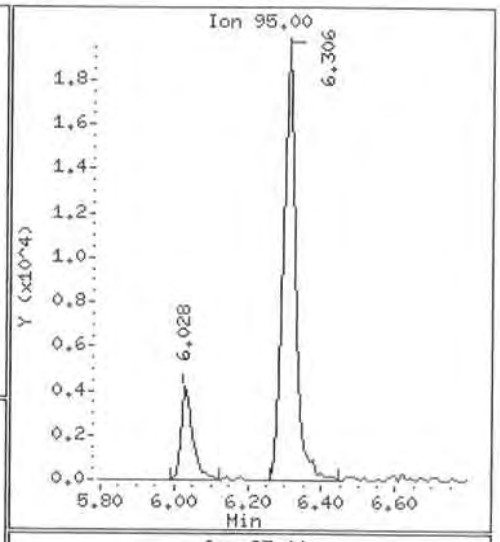
Concentration: 2.2 ug/L

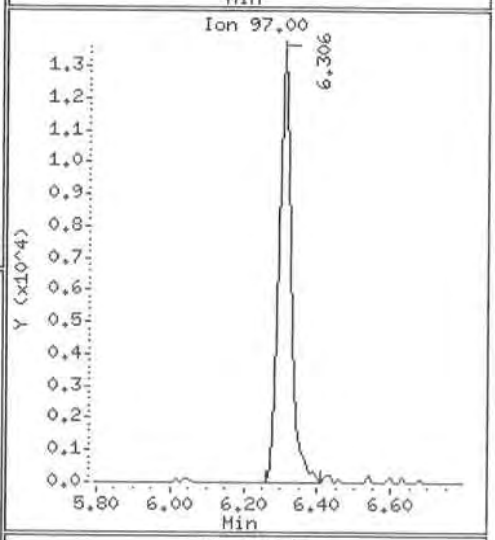


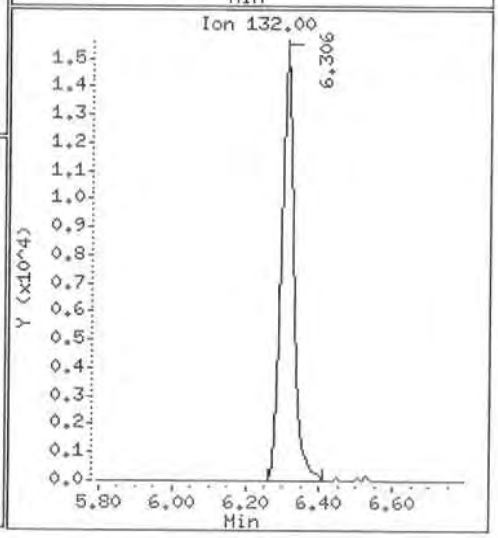












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7480.D

Date : 15-MAY-2007 14:31

Client ID: Y3AM8

Instrument: V5.i

Sample Info: 25ML,F0595-08A,,29901

Purge Volume: 25.0

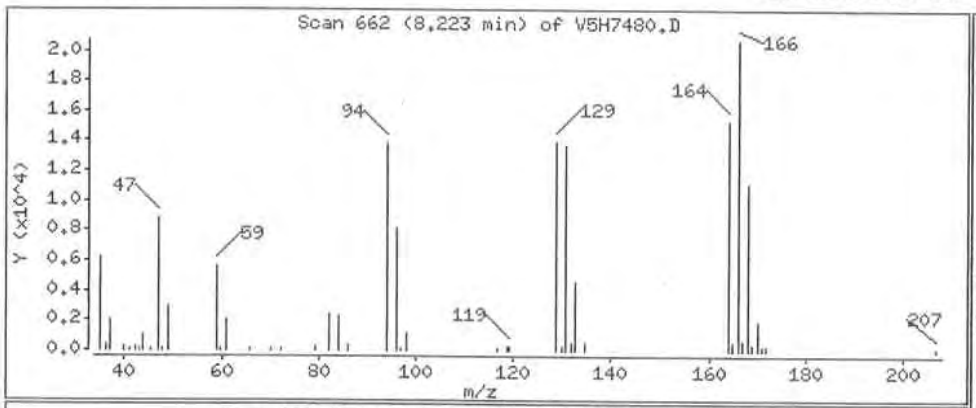
Operator: HZA SRC: LIMS

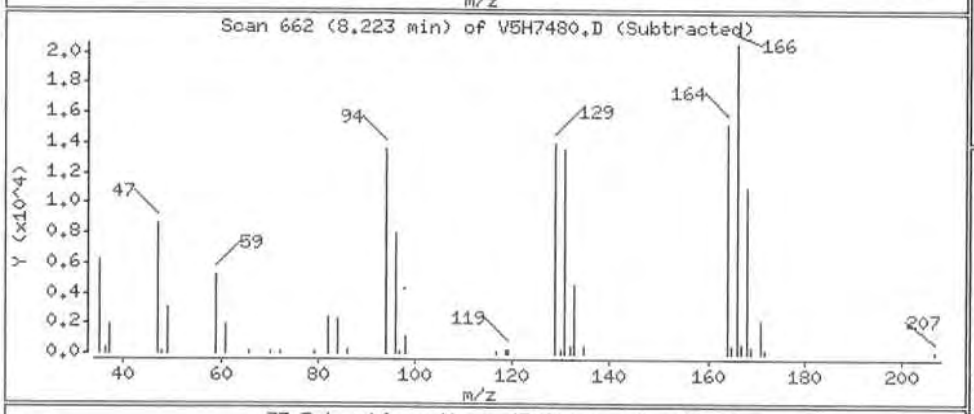
Column phase: DB-624

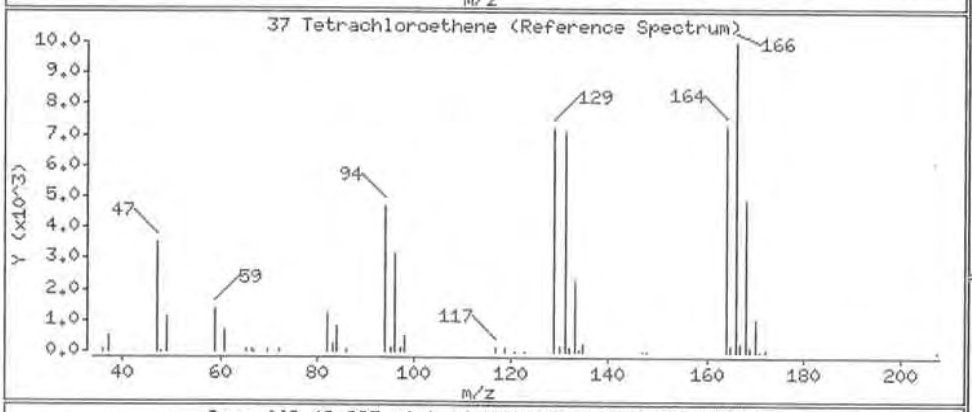
Column diameter: 0.25

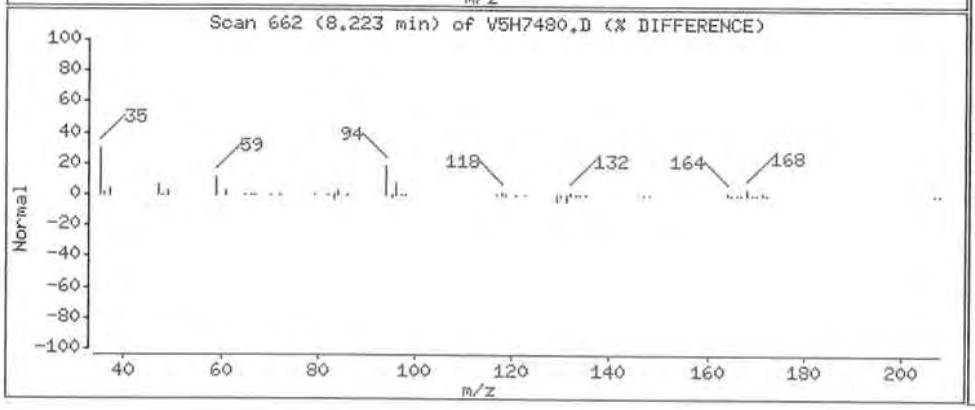
37 Tetrachloroethene

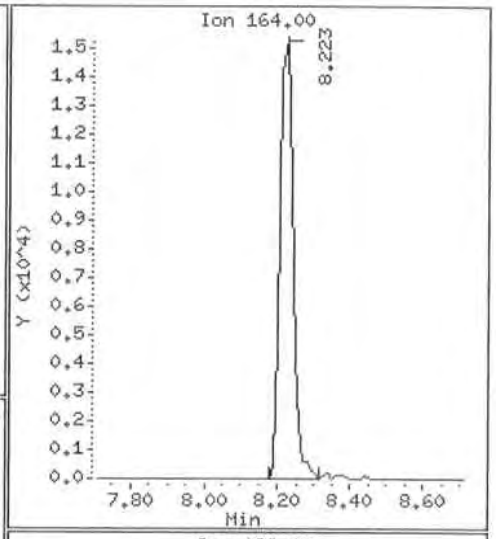
Concentration: 2.4 ug/L

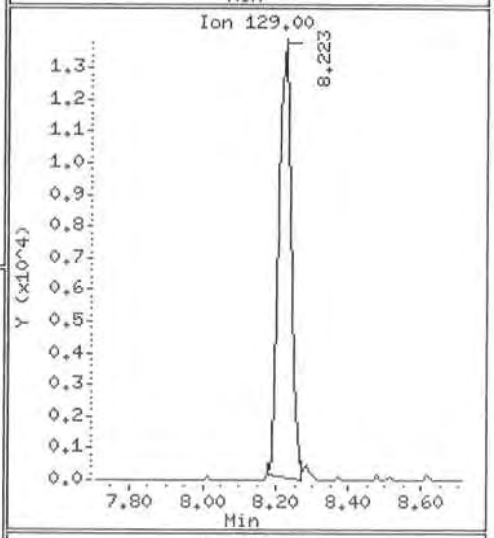


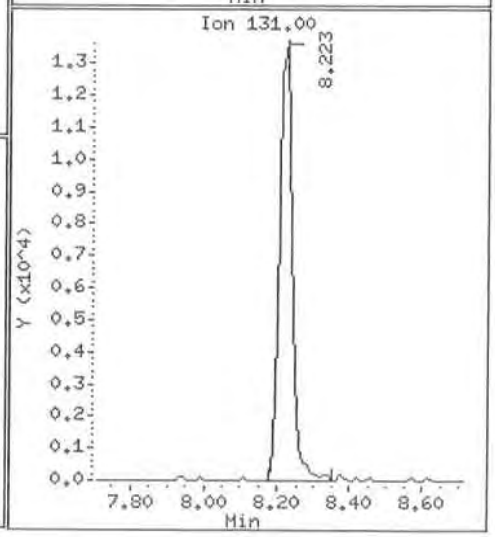












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM9

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7481.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	32	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AM9

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7481.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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	0.30	J
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.
Y3AM9

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-09A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7481.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

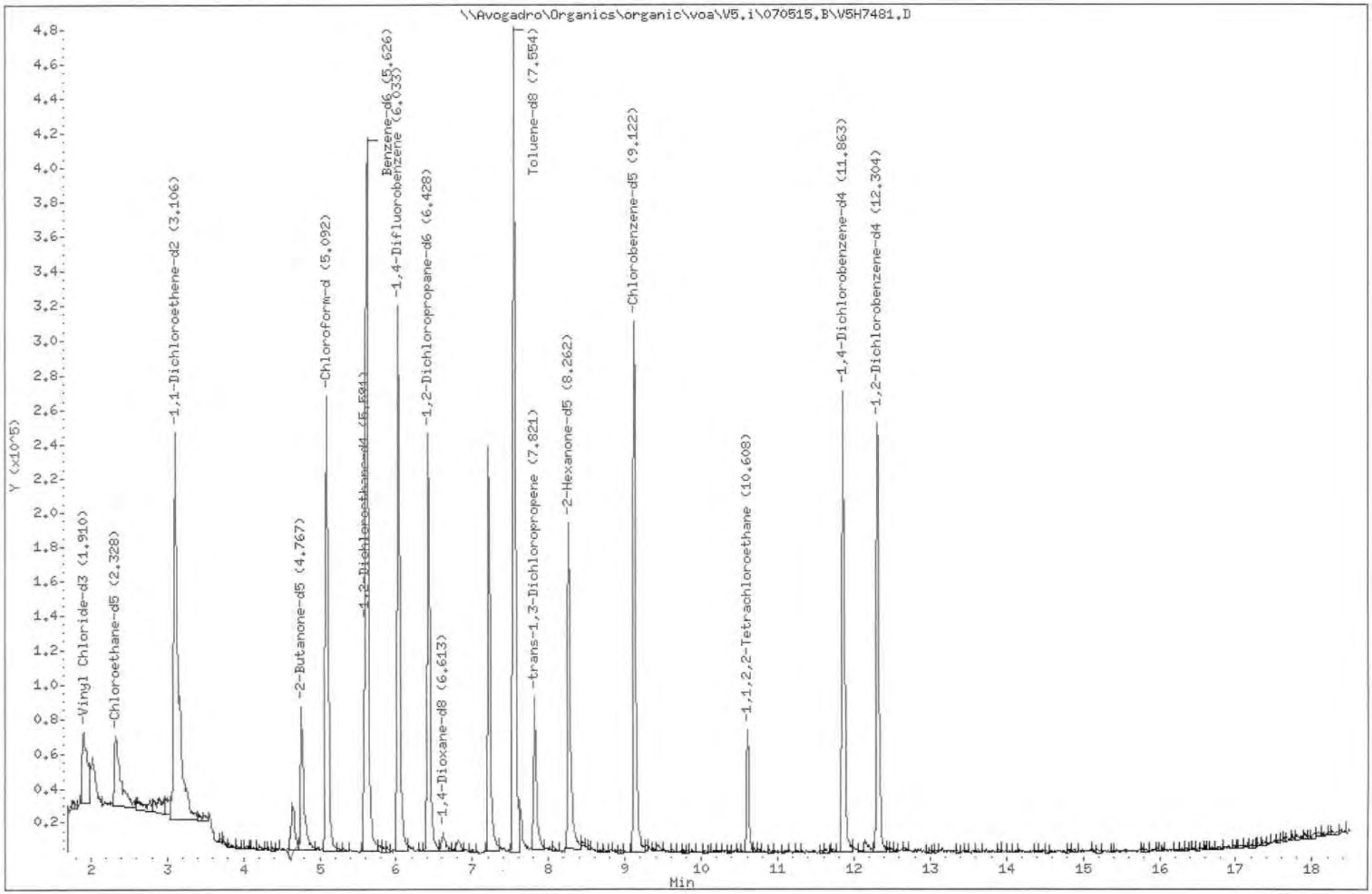
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.639	0.64	J
	E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D
Date : 15-MAY-2007 15:03
Client ID: Y3AM9
Sample Info: 25ML,F0595-09A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0093

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D
Lab Smp Id: F0595-09A Client Smp ID: Y3AM9
Inj Date : 15-MAY-2007 15:03
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-09A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.910	1.910	(0.317)	158304	4.90707	4.9
$ 80 Chloroethane-d5	69	2.328	2.316	(0.386)	89563	6.80772	6.8(R)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.106	(0.515)	214937	4.51847	4.5
9 Acetone	43	3.164	3.164	(0.525)	96896	32.2162	32
$ 82 2-Butanone-d5	46	4.766	4.755	(0.790)	156361	47.0897	47
$ 83 Chloroform-d	84	5.092	5.092	(0.844)	256479	5.61553	5.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.591	5.591	(0.927)	99175	5.52257	5.5
$ 84 Benzene-d6	84	5.626	5.626	(0.617)	420294	5.62583	5.6
* 26 1,4-Difluorobenzene	114	6.032	6.032	(1.000)	273822	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.427	6.427	(0.705)	110655	5.79890	5.8
$ 94 1,4-Dioxane-d8	96	6.613	6.613	(1.096)	8324	225.409	230(Q)
$ 33 Toluene-d8	98	7.554	7.542	(0.828)	378562	5.79828	5.8
34 Toluene	91	7.623	7.623	(0.836)	19405	0.30270	0.30(a)
$ 86 trans-1,3-Dichloropropene-d4	79	7.821	7.809	(0.857)	70837	5.66384	5.7
$ 87 2-Hexanone-d5	63	8.262	8.262	(0.906)	78114	50.3486	50
* 42 Chlorobenzene-d5	117	9.121	9.121	(1.000)	187865	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.608	(1.163)	40183	5.44722	5.4
* 78 1,4-Dichlorobenzene-d4	152	11.862	11.851	(1.000)	87509	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.315	12.303	(1.038)	75152	6.07956	6.1

WL
05/17/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D
Report Date: 17-May-2007 11:26

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D
Report Date: 17-May-2007 11:26

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D
Lab Smp Id: F0595-09A Client Smp ID: Y3AM9
Inj Date : 15-MAY-2007 15:03
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-09A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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
* 26 1,4-Difluorobenzene	6.033	739126	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.639	94857	0.64168429	0.64	0		0	26

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D

Date : 15-MAY-2007 15:03

Client ID: Y3AM9

Instrument: V5.i

Sample Info: 25ML,F0595-09A,,29901

Purge Volume: 25.0

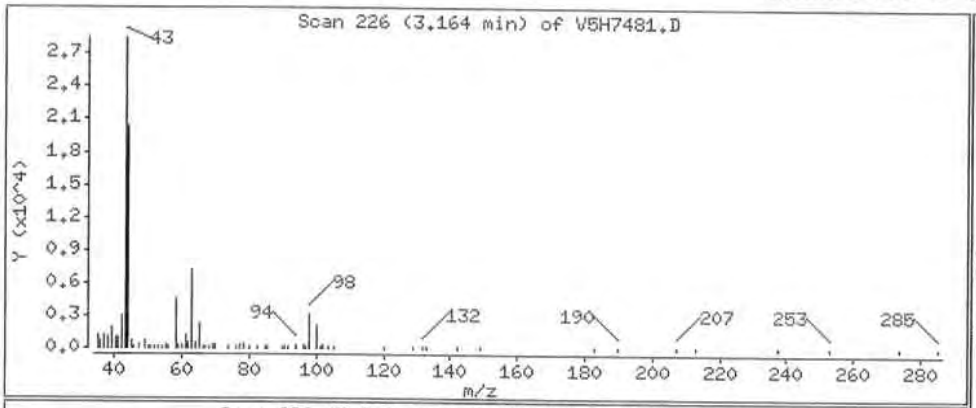
Operator: HZA SRC: LIMS

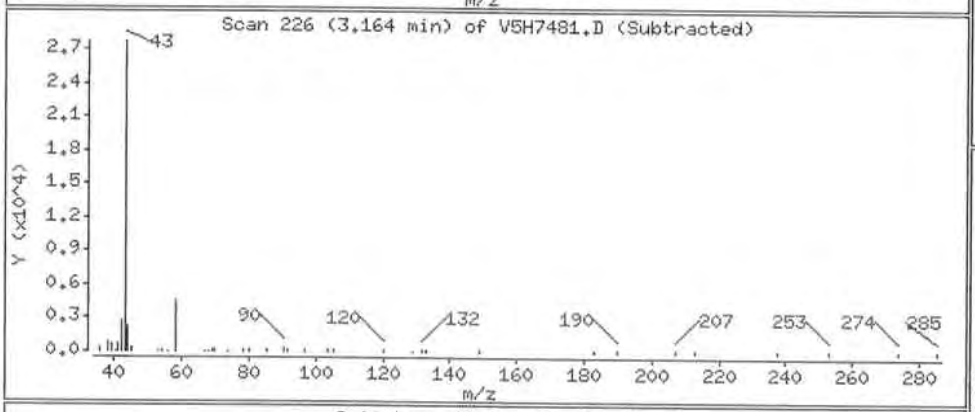
Column phase: DB-624

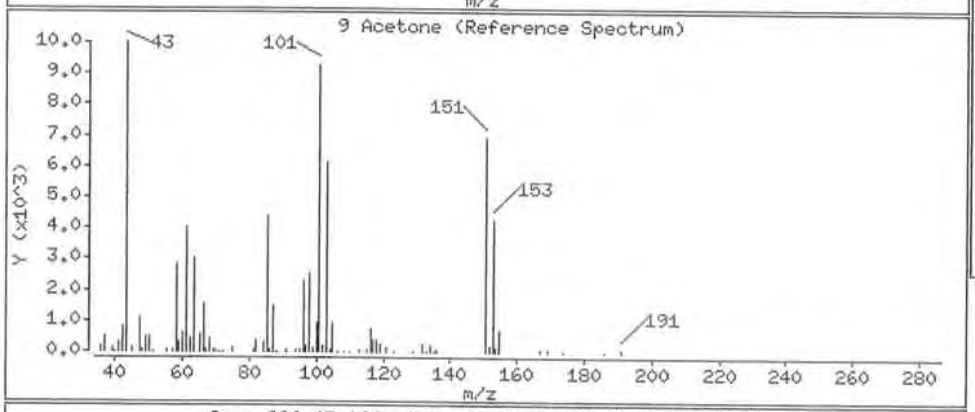
Column diameter: 0.25

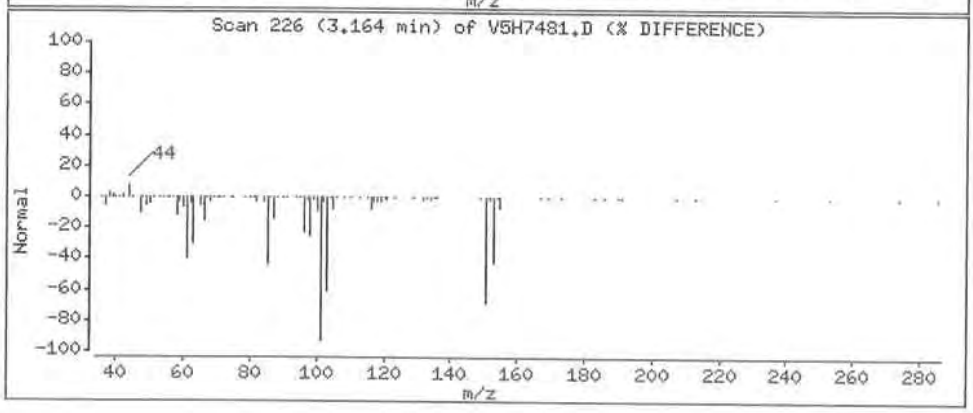
9 Acetone

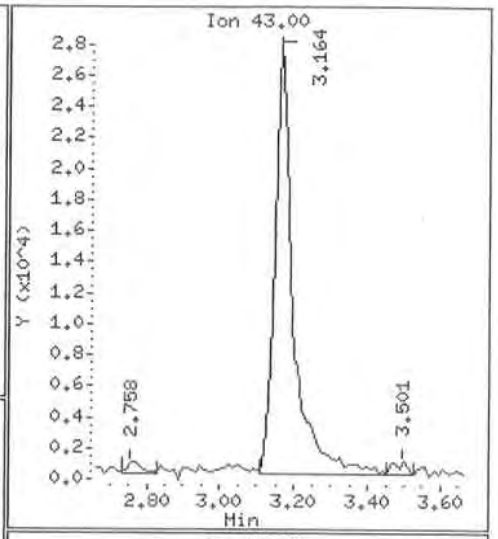
Concentration: 32 ug/L

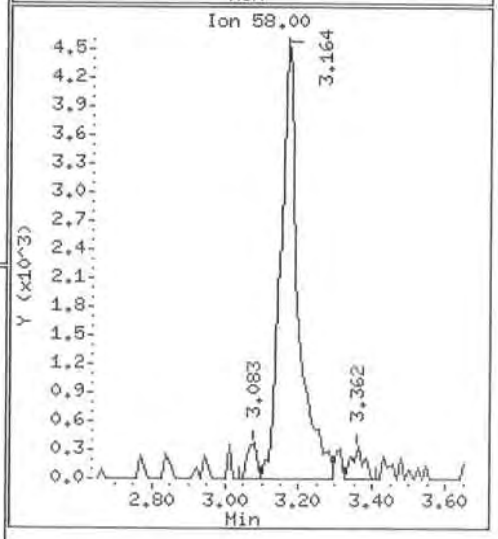












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D

Date : 15-MAY-2007 15:03

Client ID: Y3AM9

Instrument: V5.i

Sample Info: 25ML,F0595-09A,,29901

Purge Volume: 25.0

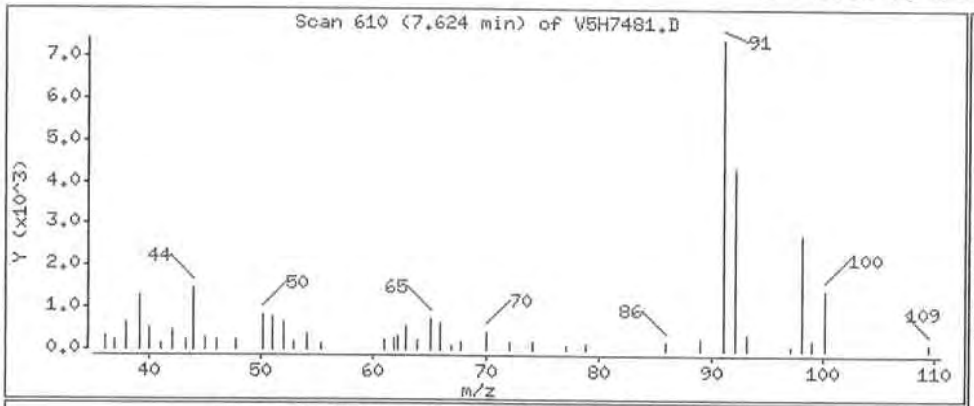
Operator: HZA SRC: LIMS

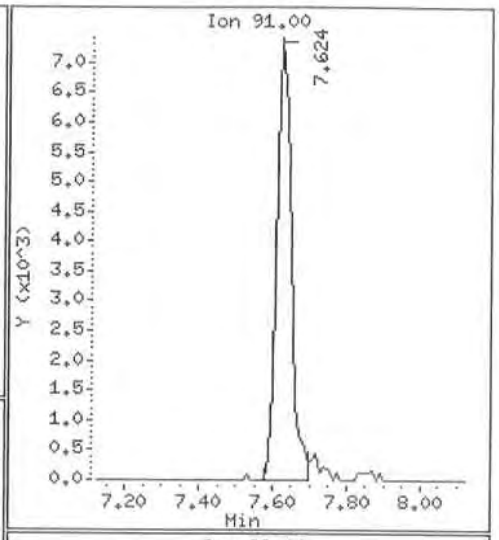
Column phase: DB-624

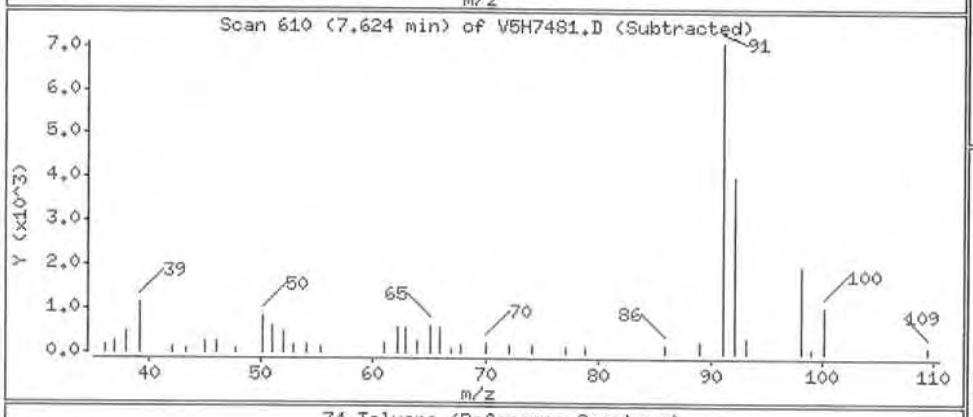
Column diameter: 0.25

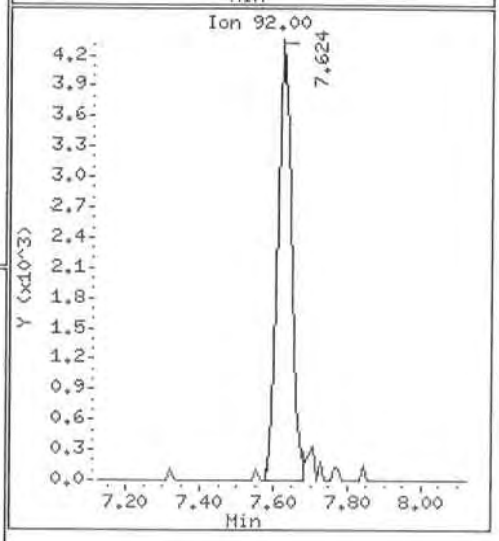
34 Toluene

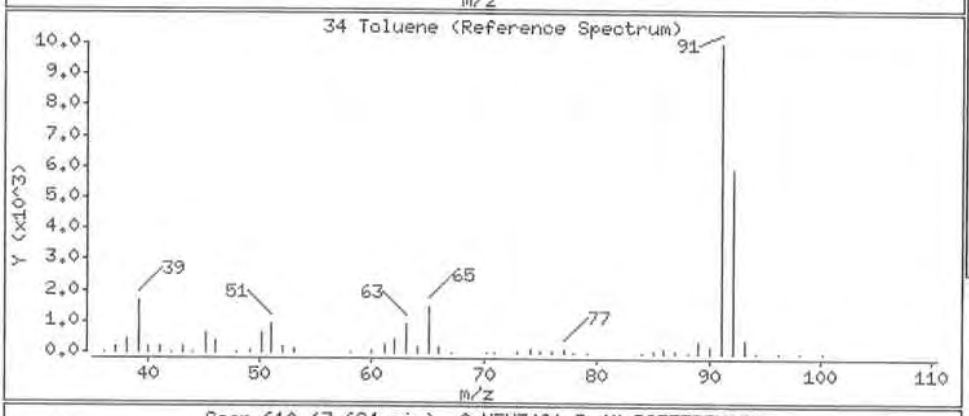
Concentration: 0.30 ug/L

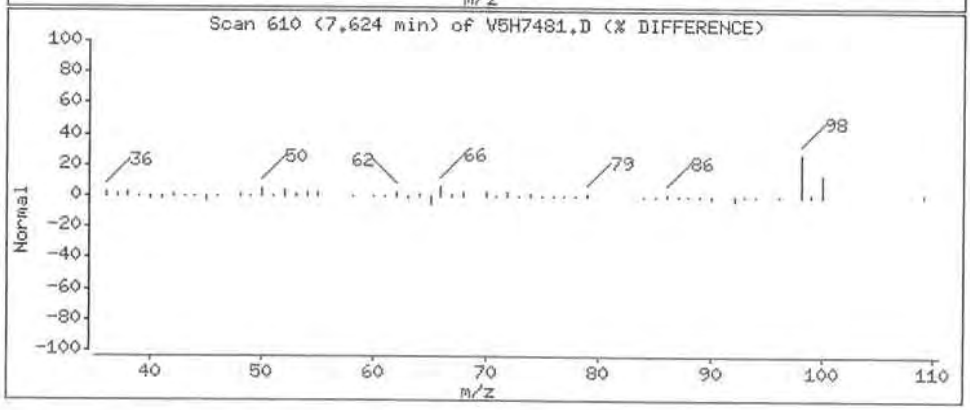












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7481.D

Date : 15-MAY-2007 15:03

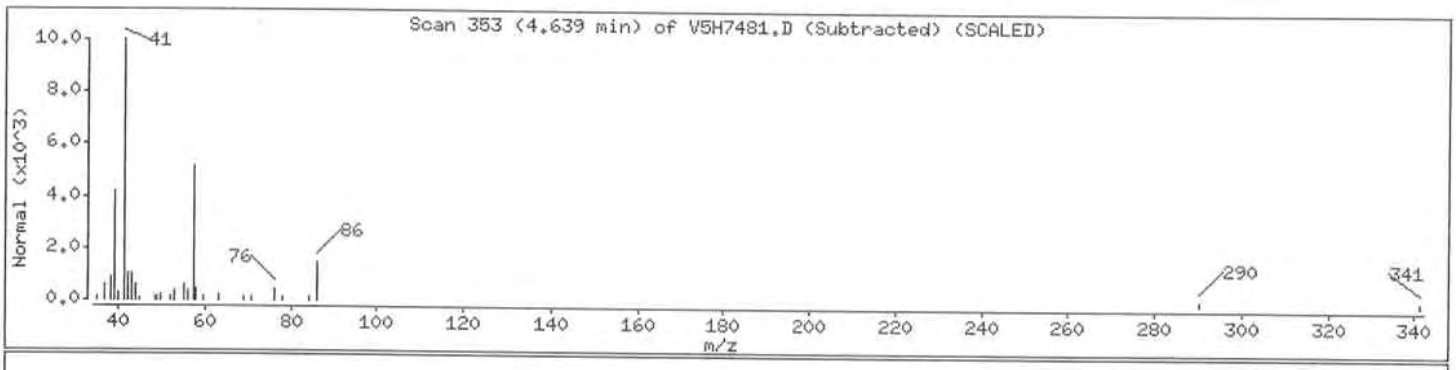
Client ID: Y3AM9 Instrument: V5.i

Sample Info: 25ML,F0595-09A,,29901

Purge Volume: 25.0 Operator: HZA 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.

Y3AN0

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7482.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.82	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN0

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7482.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.

Y3AN0

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-10A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7482.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

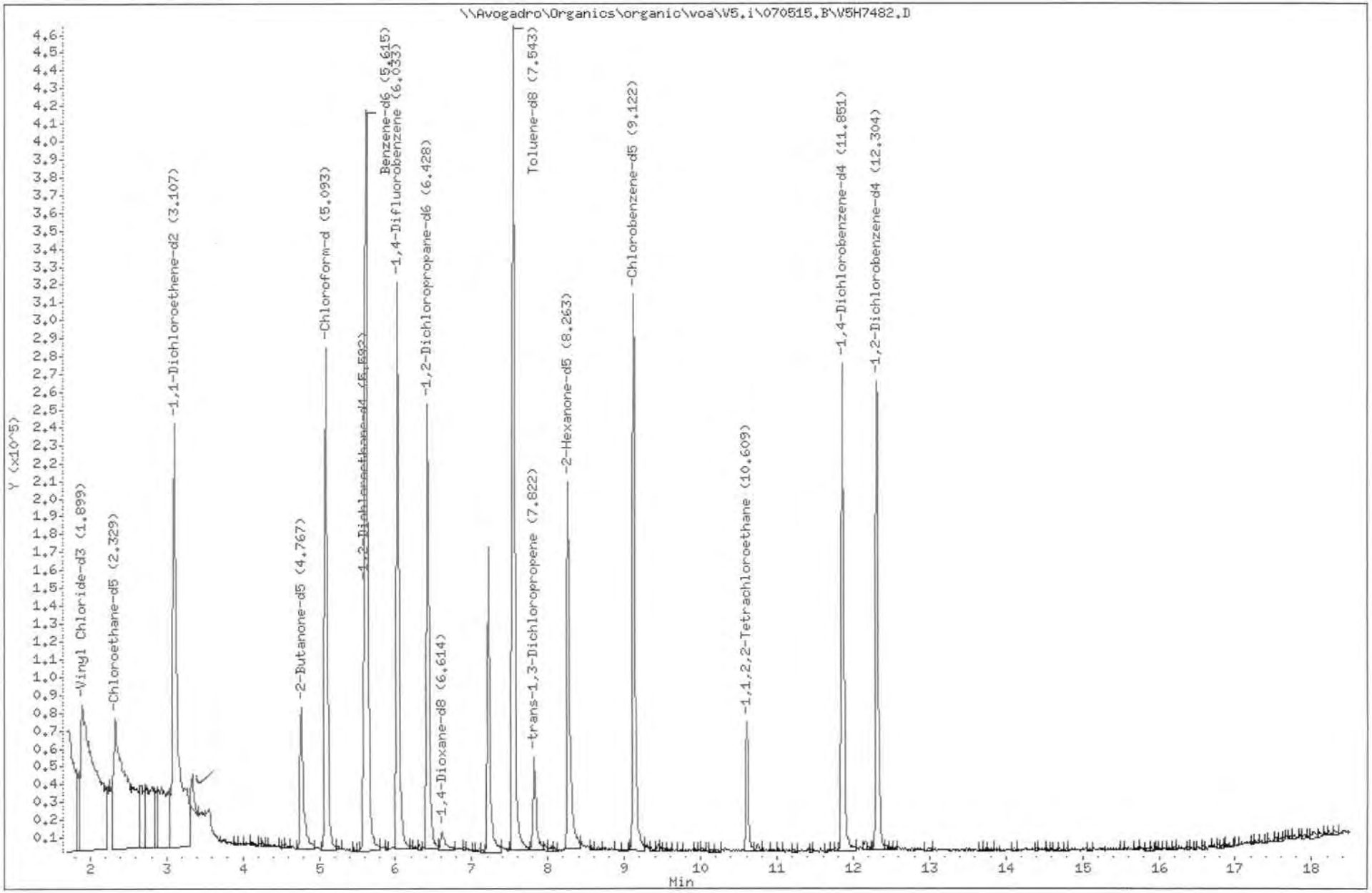
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7482.D
Date : 15-MAY-2007 15:35
Client ID: Y3AN0
Sample Info: 25ML,F0595-10A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0103

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7482.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7482.D
Lab Smp Id: F0595-10A Client Smp ID: Y3AN0
Inj Date : 15-MAY-2007 15:35
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-10A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.910	1.910	(0.317)	155908	4.86133	4.9
$ 80 Chloroethane-d5	69	2.328	2.316	(0.386)	95803	7.32501	7.3(R)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.106	(0.515)	219443	4.64043	4.6
10 Carbon Disulfide	76	3.339	3.338	(0.553)	42067	0.81862	0.82
$ 82 2-Butanone-d5	46	4.767	4.755	(0.790)	155577	47.1302	47
$ 83 Chloroform-d	84	5.092	5.092	(0.844)	258745	5.69858	5.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.592	5.591	(0.927)	105003	5.88162	5.9
$ 84 Benzene-d6	84	5.626	5.626	(0.617)	423683	5.64173	5.6
* 26 1,4-Difluorobenzene	114	6.033	6.032	(1.000)	272215	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.428	6.427	(0.705)	111287	5.80172	5.8
$ 94 1,4-Dioxane-d8	96	6.602	6.613	(1.094)	11215	305.489	310(Q)
$ 33 Toluene-d8	98	7.554	7.542	(0.828)	373649	5.69330	5.7
$ 86 trans-1,3-Dichloropropene-d4	79	7.821	7.809	(0.857)	39227	3.12014	3.1(R)
$ 87 2-Hexanone-d5	63	8.263	8.262	(0.906)	85663	54.9275	55
* 42 Chlorobenzene-d5	117	9.122	9.121	(1.000)	188846	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.608	(1.163)	43655	5.88714	5.9
* 78 1,4-Dichlorobenzene-d4	152	11.863	11.851	(1.000)	91075	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.315	12.303	(1.038)	81623	6.34451	6.3

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7482.D
Report Date: 17-May-2007 11:27

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7482.D

Date : 15-MAY-2007 15:35

Client ID: Y3AN0

Instrument: V5.i

Sample Info: 25ML,F0595-10A,,29901

Purge Volume: 25.0

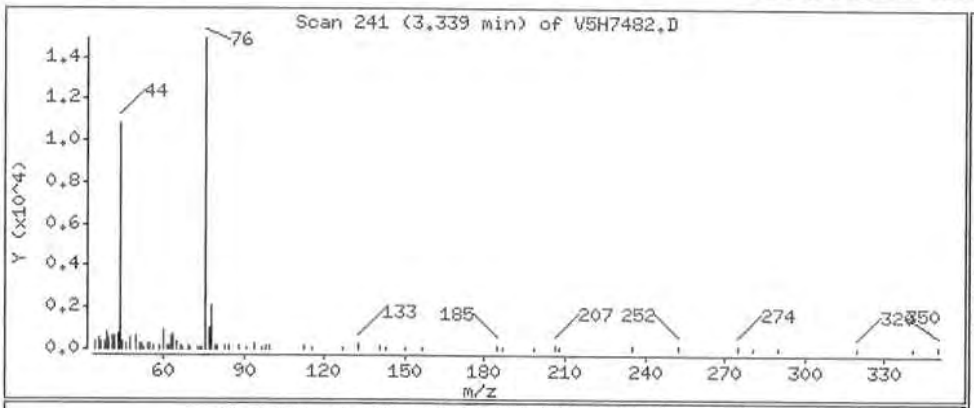
Operator: HZA SRC: LIMS

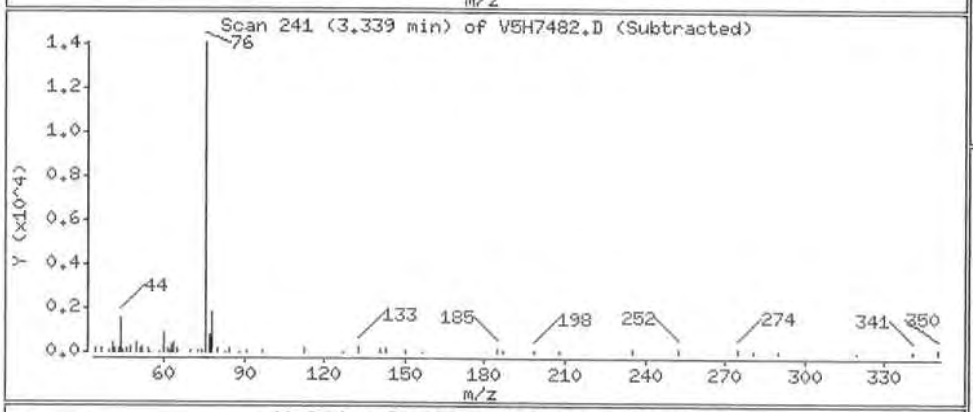
Column phase: DB-624

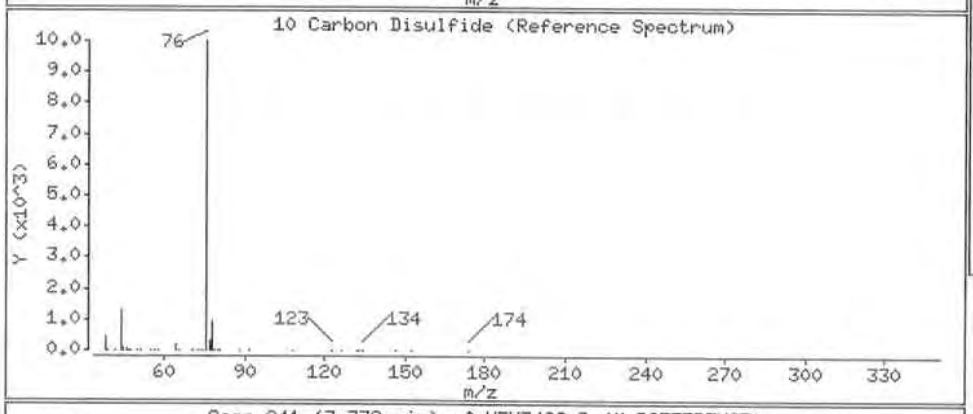
Column diameter: 0.25

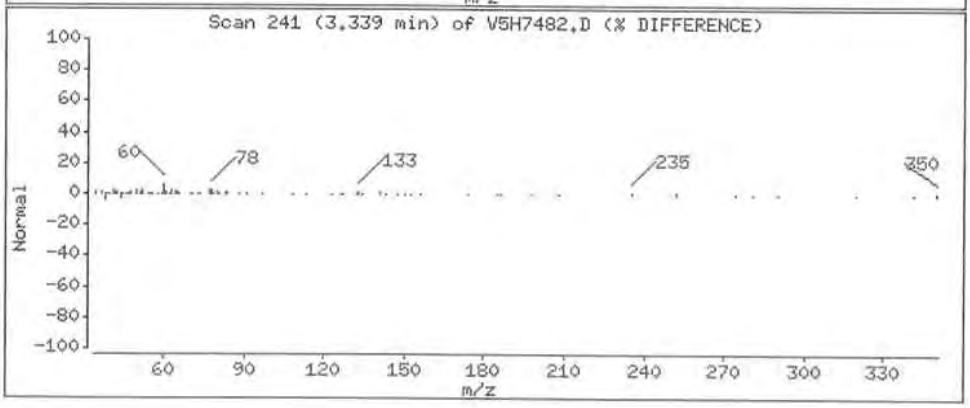
10 Carbon Disulfide

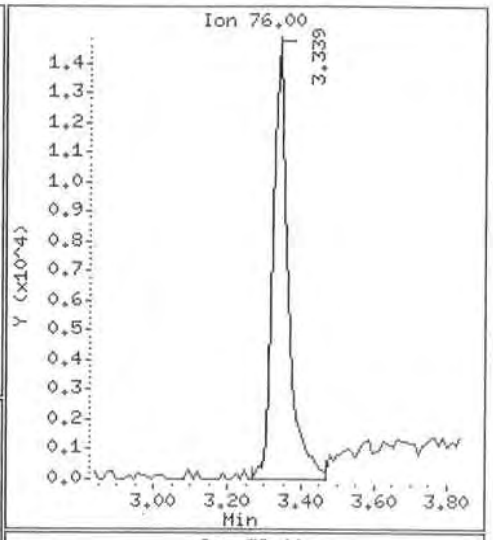
Concentration: 0.82 ug/L

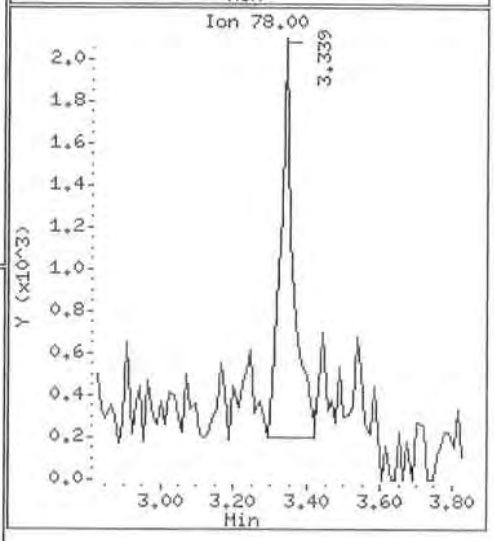












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN1

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7483.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.51	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN1

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7483.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.

Y3AN1

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-11A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7483.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

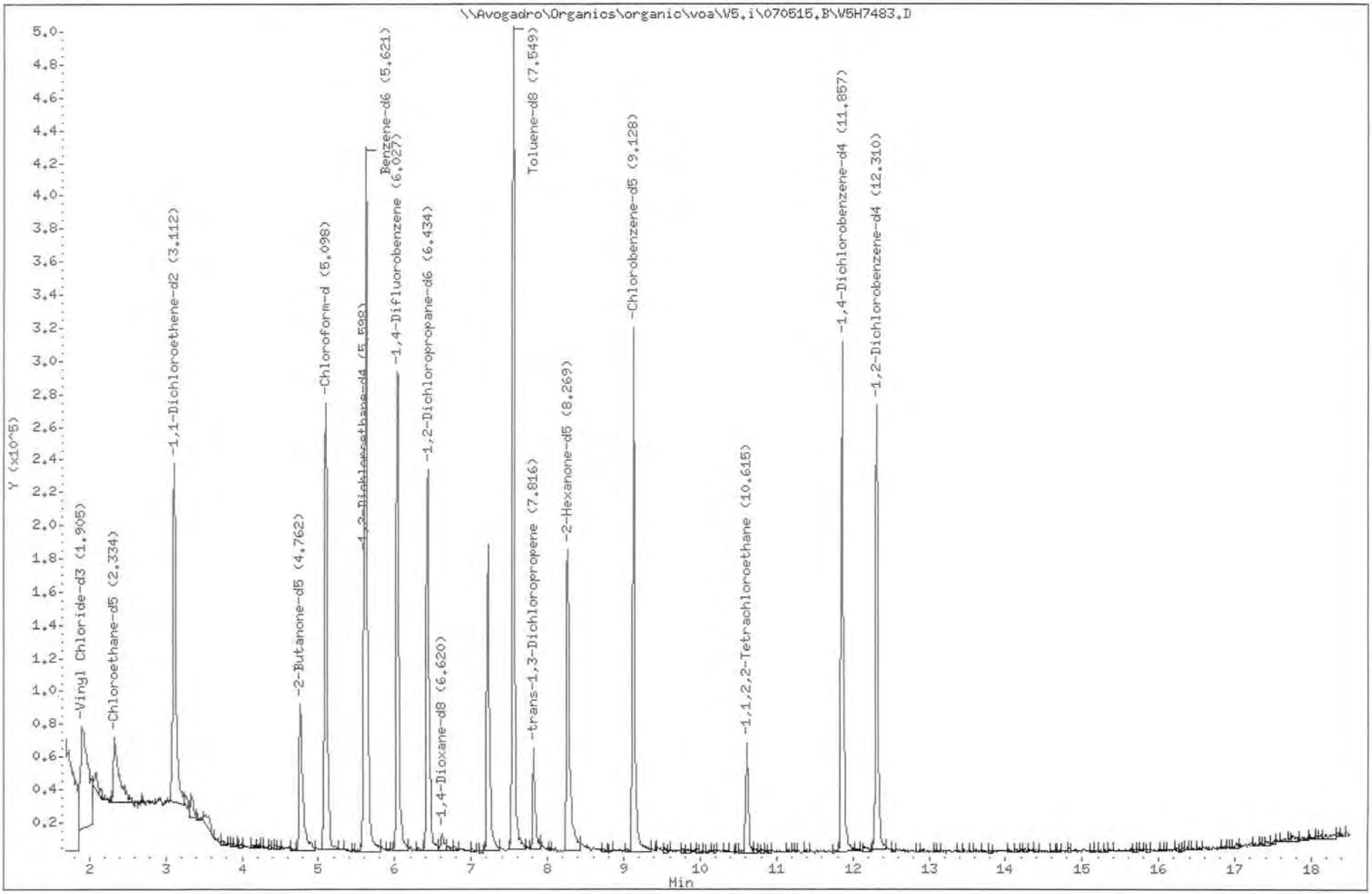
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D
Date : 15-MAY-2007 16:07
Client ID: Y3AN1
Sample Info: 25ML,F0595-11A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D
Lab Smp Id: F0595-11A Client Smp ID: Y3AN1
Inj Date : 15-MAY-2007 16:07
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-11A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.916	1.910	(0.317)	156357	4.94153	4.9
$ 80 Chloroethane-d5	69	2.334	2.316	(0.387)	91867	7.11945	7.1(R)
$ 81 1,1-Dichloroethene-d2	63	3.112	3.106	(0.515)	210823	4.51869	4.5
10 Carbon Disulfide	76	3.333	3.338	(0.552)	25642	0.50576	0.51
$ 82 2-Butanone-d5	46	4.761	4.755	(0.788)	158363	48.6256	49
$ 83 Chloroform-d	84	5.098	5.092	(0.844)	258484	5.77014	5.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.597	5.591	(0.927)	101924	5.78668	5.8
$ 84 Benzene-d6	84	5.620	5.626	(0.616)	421684	5.52264	5.5
* 26 1,4-Difluorobenzene	114	6.038	6.032	(1.000)	268568	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.433	6.427	(0.705)	107420	5.50790	5.5
$ 94 1,4-Dioxane-d8	96	6.619	6.613	(1.096)	8530	235.507	240(Q)
$ 33 Toluene-d8	98	7.548	7.542	(0.827)	358975	5.37964	5.4
$ 86 trans-1,3-Dichloropropene-d4	79	7.815	7.809	(0.856)	46510	3.63851	3.6(R)
$ 87 2-Hexanone-d5	63	8.268	8.262	(0.906)	86312	54.4323	54
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	192008	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.602	10.608	(1.162)	43678	5.79324	5.8
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	89881	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	78514	6.18392	6.2

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D
Report Date: 17-May-2007 11:27

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D
Lab Smp Id: F0595-11A Client Smp ID: Y3AN1
Inj Date : 15-MAY-2007 16:07
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-11A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7483.D

Date : 15-MAY-2007 16:07

Client ID: Y3AN1

Instrument: V5.i

Sample Info: 25ML,F0595-11A,,29901

Purge Volume: 25.0

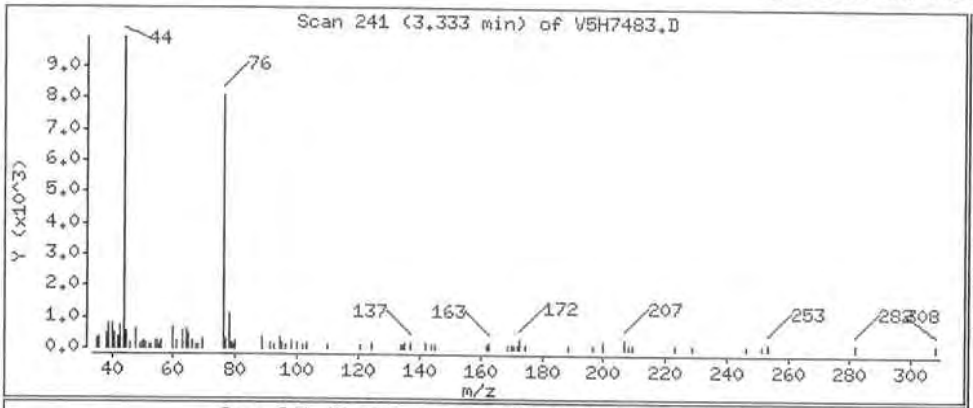
Operator: HZA SRC: LIMS

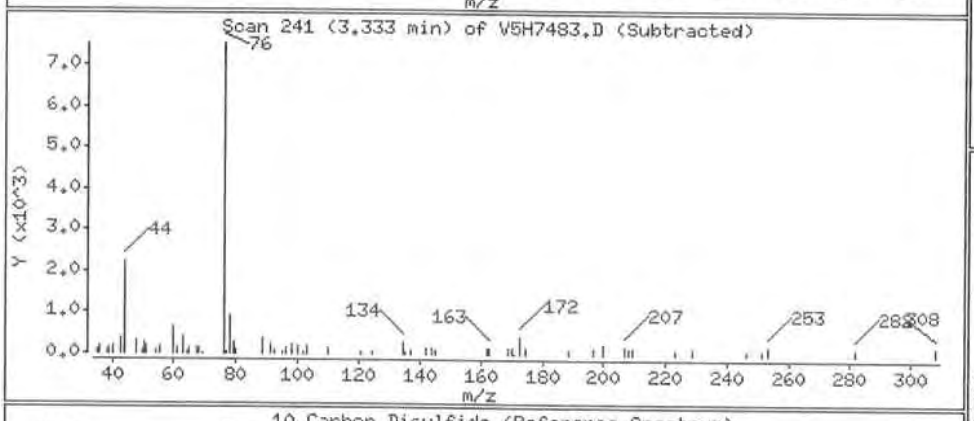
Column phase: DB-624

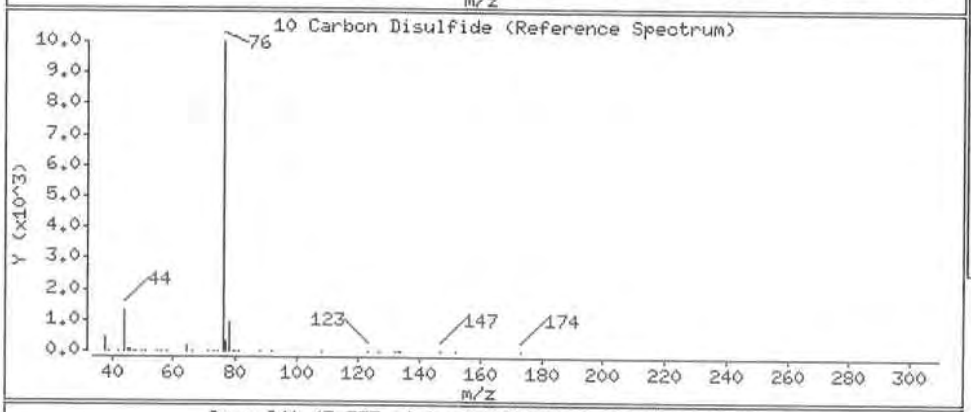
Column diameter: 0.25

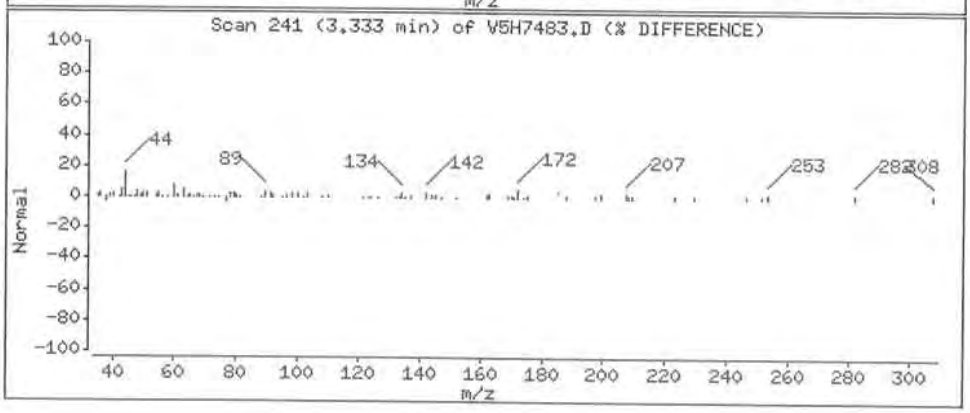
10 Carbon Disulfide

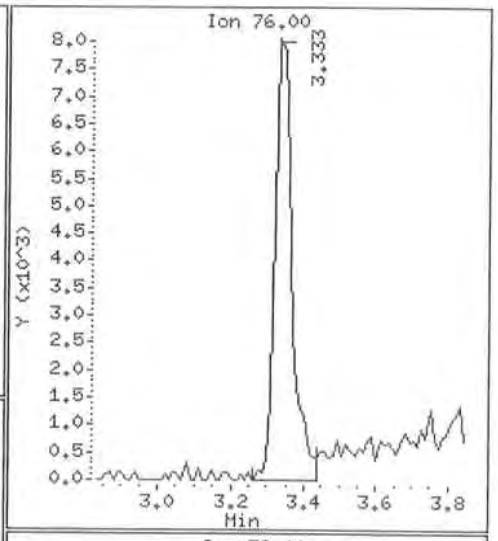
Concentration: 0.51 ug/L

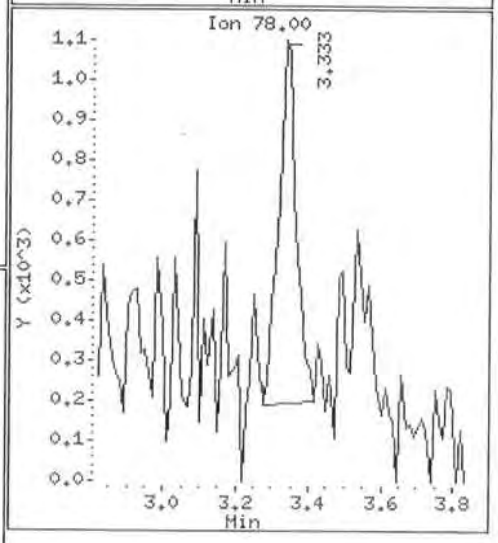












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN2

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7484.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.84	
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	2.0	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.73	
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
123-91-1	1,4-Dioxane	20	U
75-65-0	2-Methyl-2-Propanol	5.0	U

SL 7/18/07

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN2

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7484.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	29	
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.
Y3AN2

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-12A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7484.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

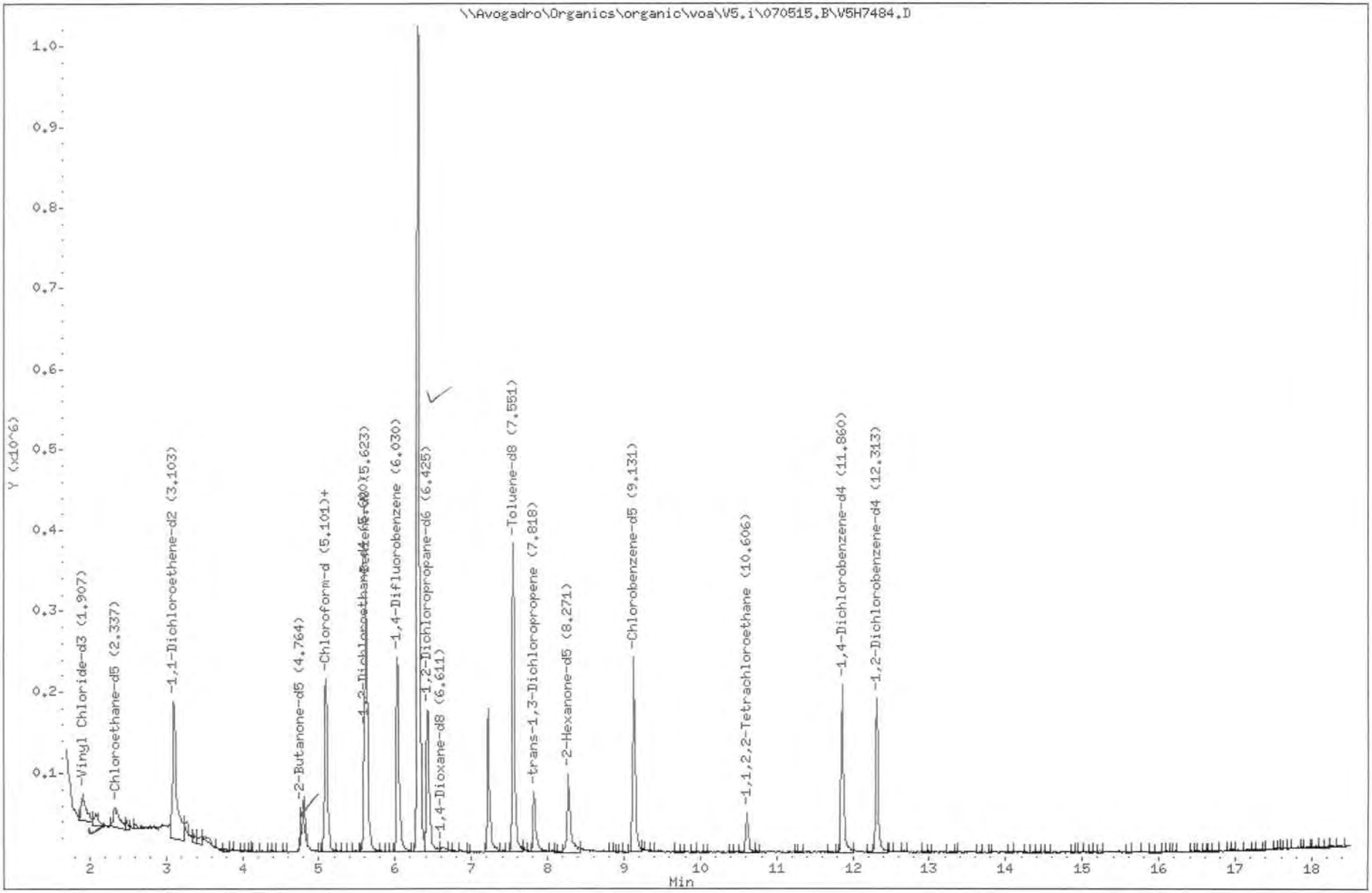
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.082	0.60	J
	E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D
Date : 15-MAY-2007 16:38
Client ID: Y3AN2
Sample Info: 25ML,F0595-12A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D
Report Date: 31-May-2007 09:03

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D
Lab Smp Id: F0595-12A Client Smp ID: Y3AN2
Inj Date : 15-MAY-2007 16:38
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-12A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 21-May-2007 16:08 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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)
1 Dichlorodifluoromethane	85	1.628	1.654	(0.270)	9085	0.83915	0.84
$ 79 Vinyl Chloride-d3	65	1.907	1.910	(0.316)	97086	4.11625	4.1
$ 80 Chloroethane-d5	69	2.337	2.316	(0.388)	57819	6.01116	6.0
$ 81 1,1-Dichloroethene-d2	63	3.103	3.106	(0.515)	162256	4.66548	4.7
$ 82 2-Butanone-d5	46	4.764	4.755	(0.790)	95479	39.3297	39
17 cis-1,2-Dichloroethene	96	4.810	4.813	(0.798)	25351	2.01913	2.0
$ 83 Chloroform-d	84	5.100	5.092	(0.846)	197283	5.90804	5.9(Q)
19 Chloroform	83	5.112	5.115	(0.848)	19359	0.72876	0.73
$ 23 1,2-Dichloroethane-d4	65	5.600	5.591	(0.929)	79831	6.08031	6.1
$ 84 Benzene-d6	84	5.623	5.626	(0.616)	306973	5.39165	5.4
* 26 1,4-Difluorobenzene	114	6.029	6.032	(1.000)	200195	5.00000	
27 Trichloroethene	95	6.297	6.299	(0.690)	438557	28.6416	29(A)
$ 85 1,2-Dichloropropane-d6	67	6.436	6.427	(0.705)	79830	5.48944	5.5
$ 94 1,4-Dioxane-d8	96	6.622	6.613	(1.098)	5374	199.046	200(Q)
$ 33 Toluene-d8	98	7.551	7.542	(0.827)	266807	5.36225	5.4
$ 86 trans-1,3-Dichloropropene-d4	79	7.818	7.809	(0.856)	52473	5.50522	5.5
$ 87 2-Hexanone-d5	63	8.271	8.262	(0.906)	45870	38.7950	39(Q)
* 42 Chlorobenzene-d5	117	9.130	9.121	(1.000)	143172	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.617	10.608	(1.163)	31673	5.63390	5.6
* 78 1,4-Dichlorobenzene-d4	152	11.859	11.851	(1.000)	64692	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.312	12.303	(1.038)	57283	6.26844	6.3(Q)

1/10
5/31/07
0120

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D
Report Date: 31-May-2007 09:03

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D
Lab Smp Id: F0595-12A Client Smp ID: Y3AN2
Inj Date : 15-MAY-2007 16:38
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-12A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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
* 26 1,4-Difluorobenzene	6.030	595945	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
2.082	71473	0.59966338	0.60	0		0	26

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D

Date : 15-MAY-2007 16:38

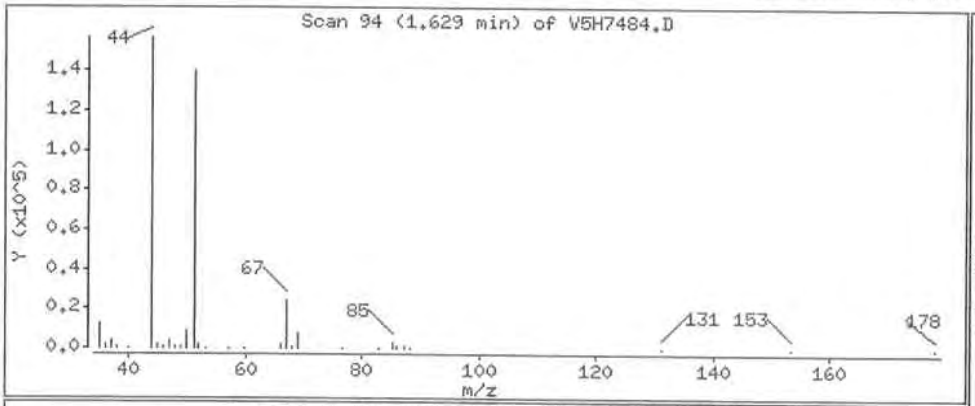
Client ID: Y3AN2 | Instrument: V5.i

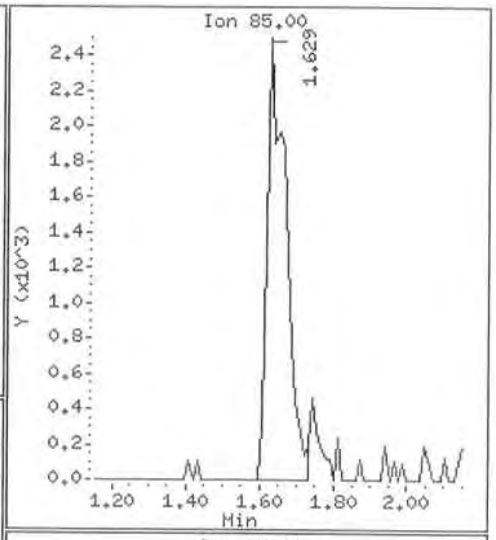
Sample Info: 25ML,F0595-12A,,29901

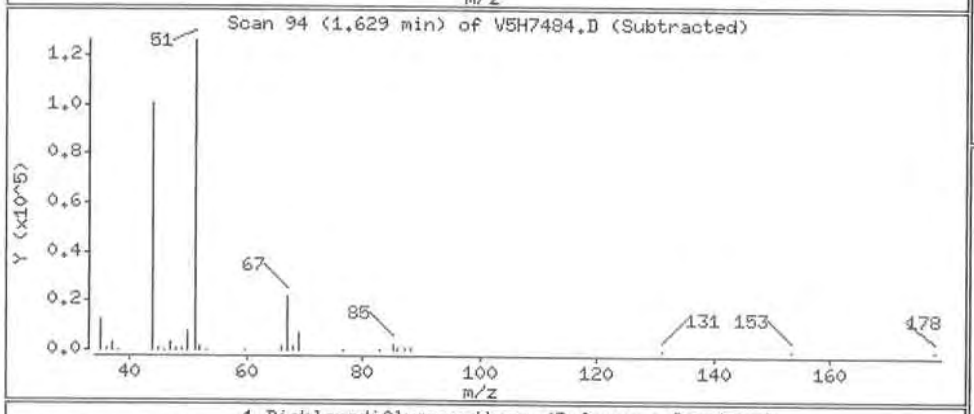
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

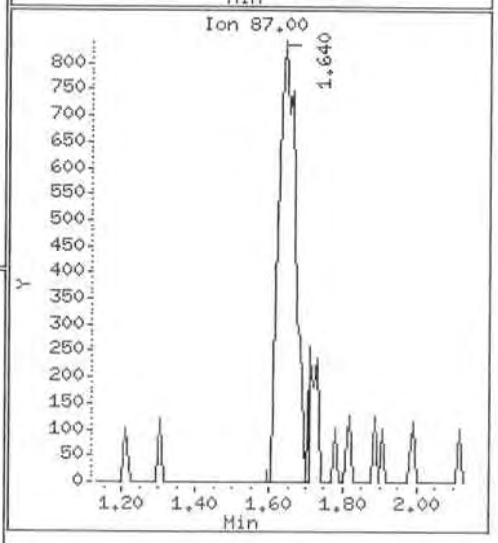
Column phase: DB-624 | Column diameter: 0.25

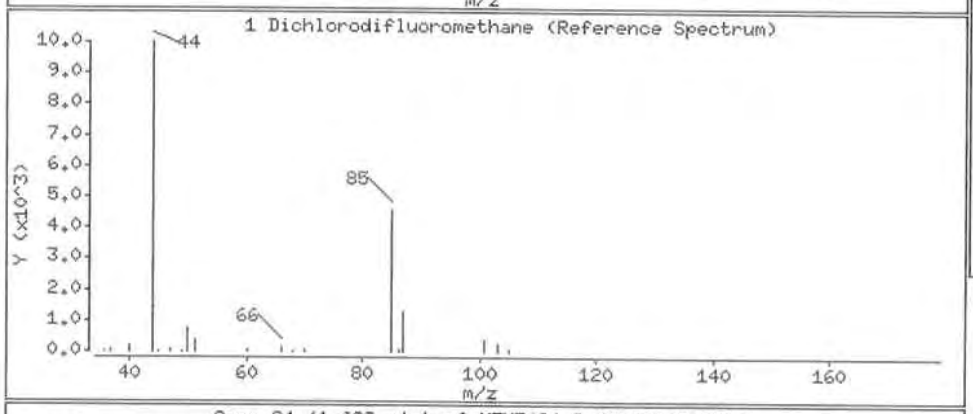
1 Dichlorodifluoromethane | Concentration: 0.84 ug/L

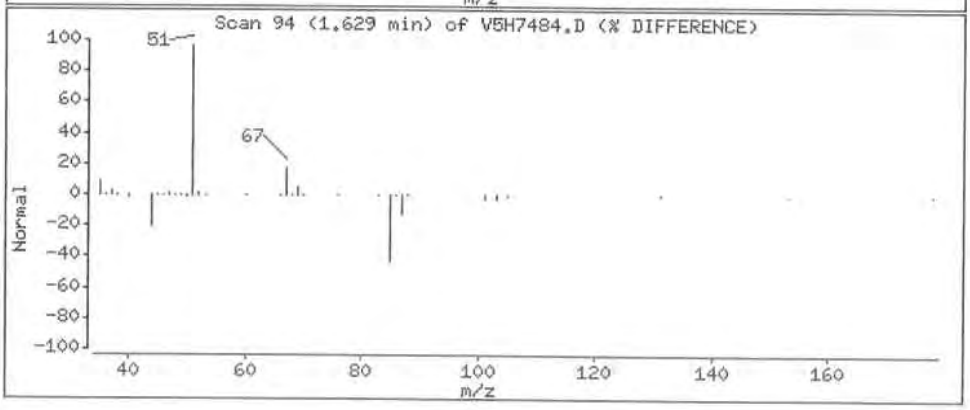












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Date : 15-MAY-2007 16:38

Client ID: Y3AN2

Instrument: V5.i

Sample Info: 25ML,F0595-12A,,29901

Purge Volume: 25.0

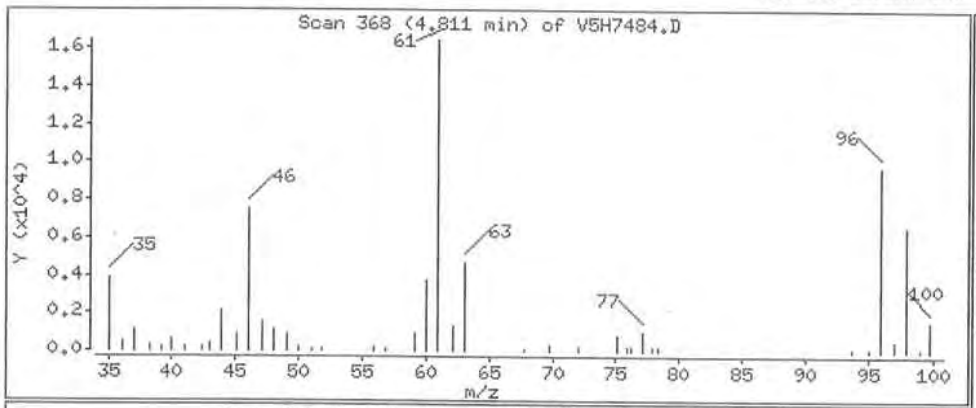
Operator: HZA SRC: LIMS

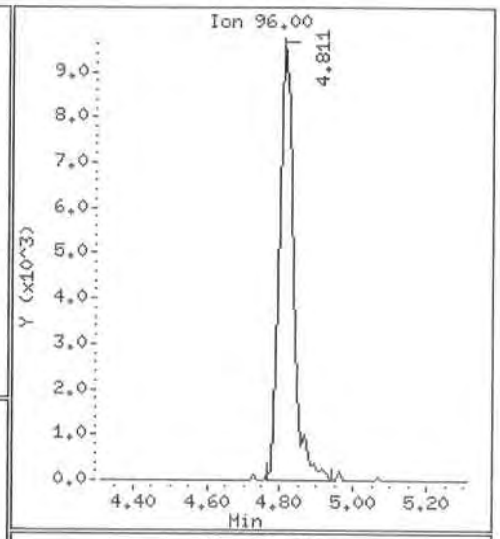
Column phase: DB-624

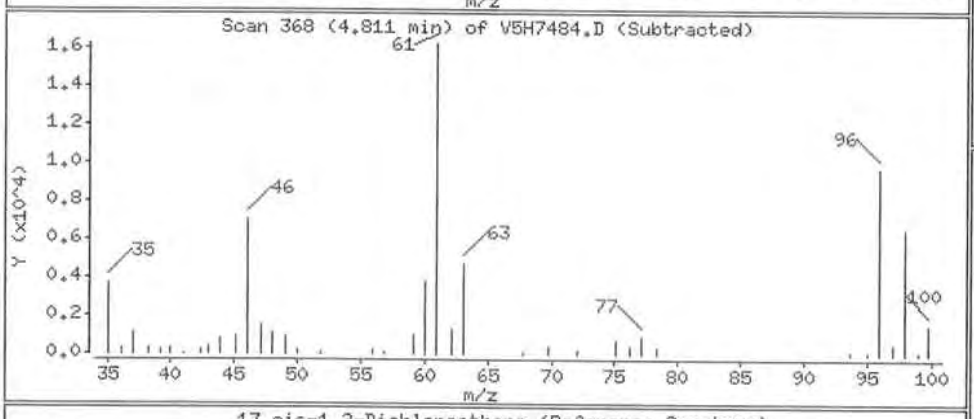
Column diameter: 0.25

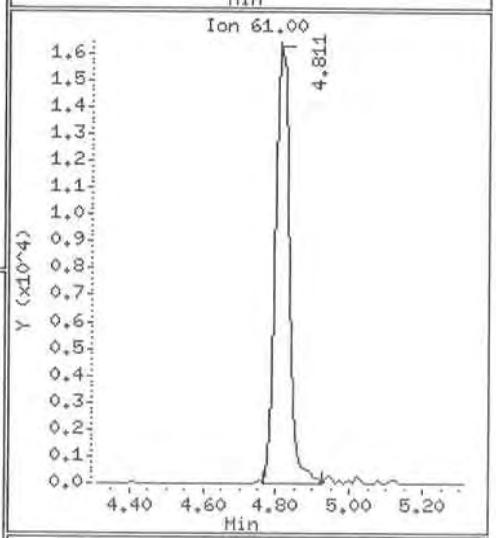
17 cis-1,2-Dichloroethene

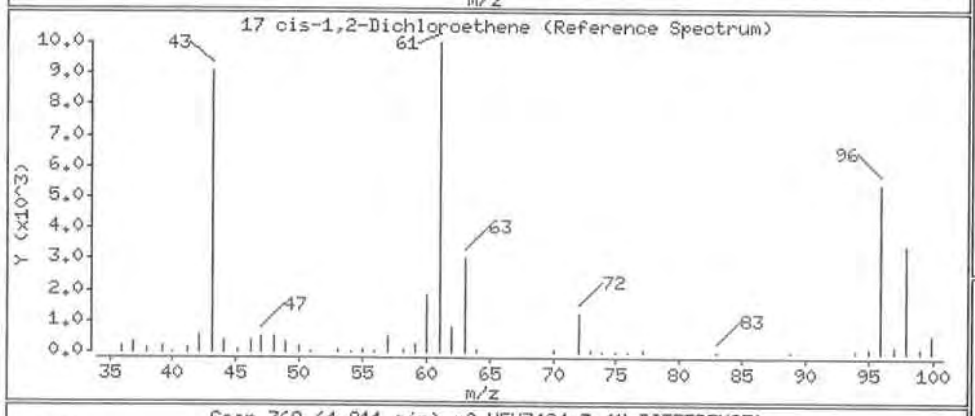
Concentration: 2.0 ug/L

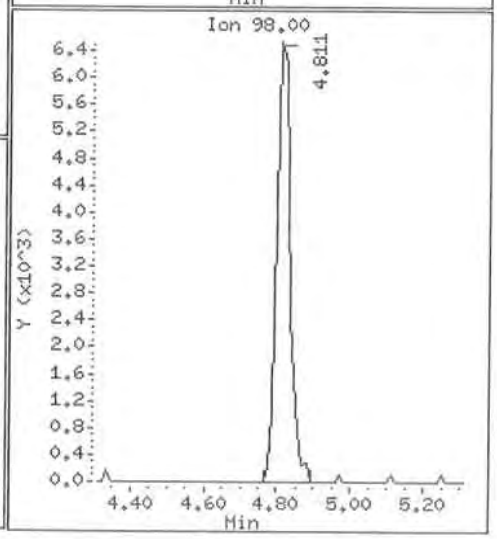


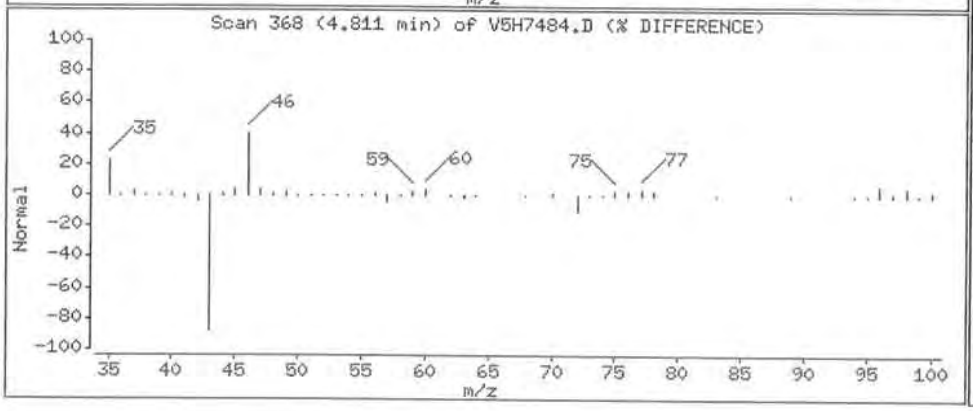












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D

Date : 15-MAY-2007 16:38

Client ID: Y3AN2

Instrument: V5.i

Sample Info: 25ML,F0595-12A,,29901

Purge Volume: 25.0

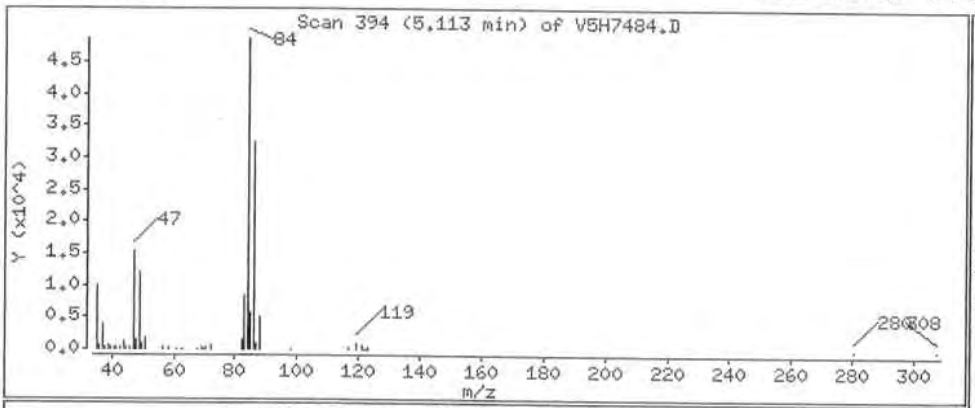
Operator: HZA SRC: LIMS

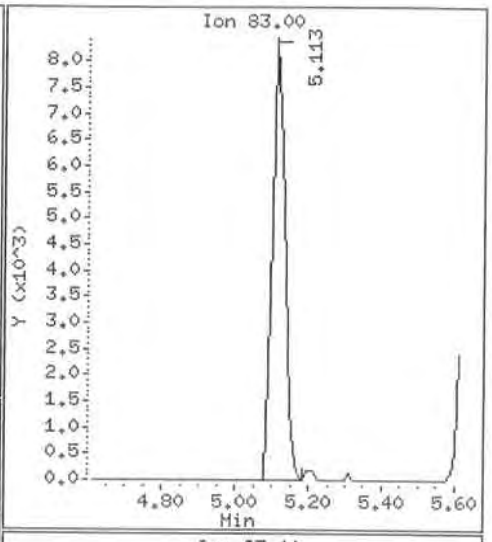
Column phase: DB-624

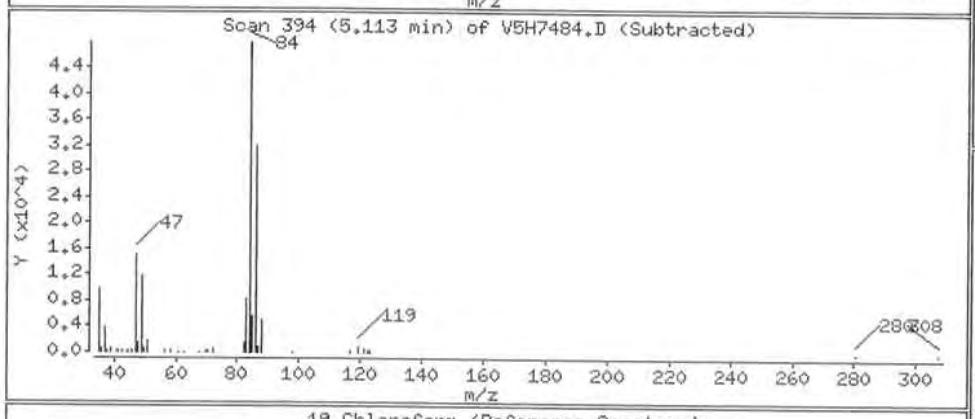
Column diameter: 0.25

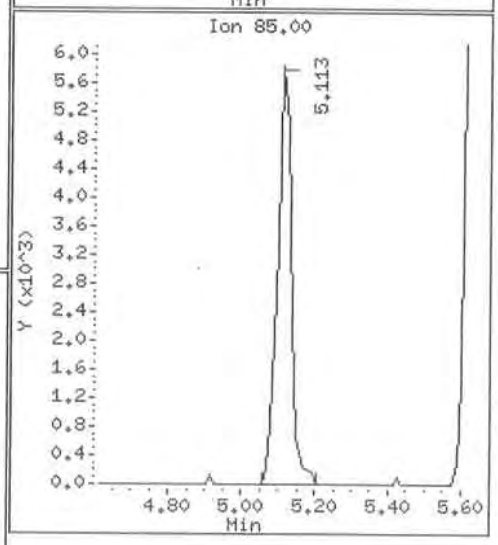
19 Chloroform

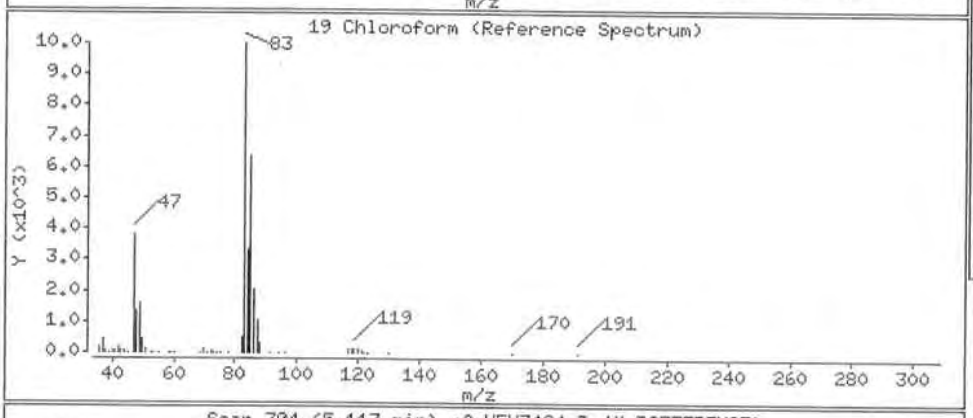
Concentration: 0.73 ug/L

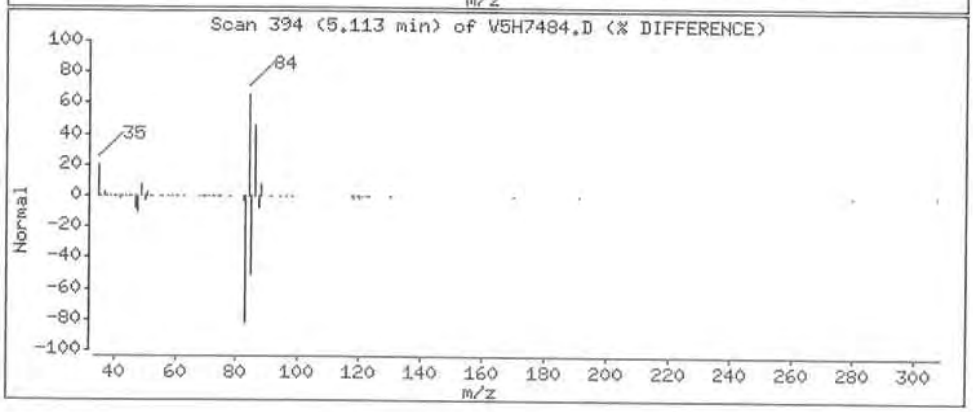












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D

Date : 15-MAY-2007 16:38

Client ID: Y3AN2

Instrument: V5.i

Sample Info: 25ML,F0595-12A,,29901

Purge Volume: 25.0

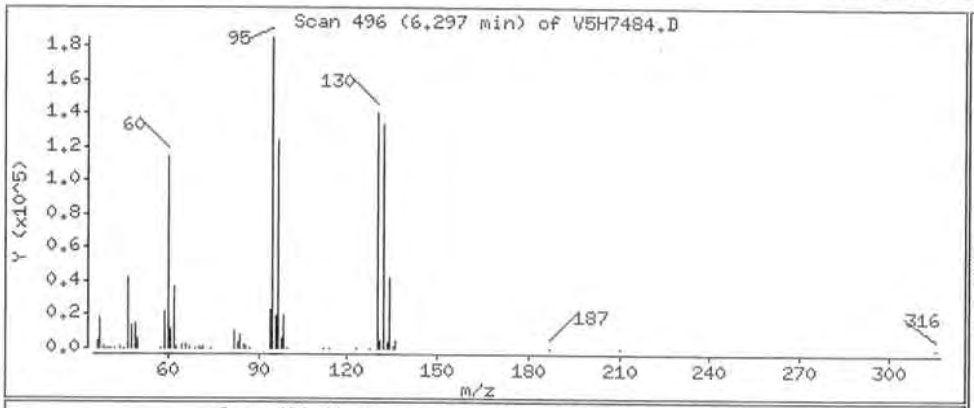
Operator: HZA SRC: LIMS

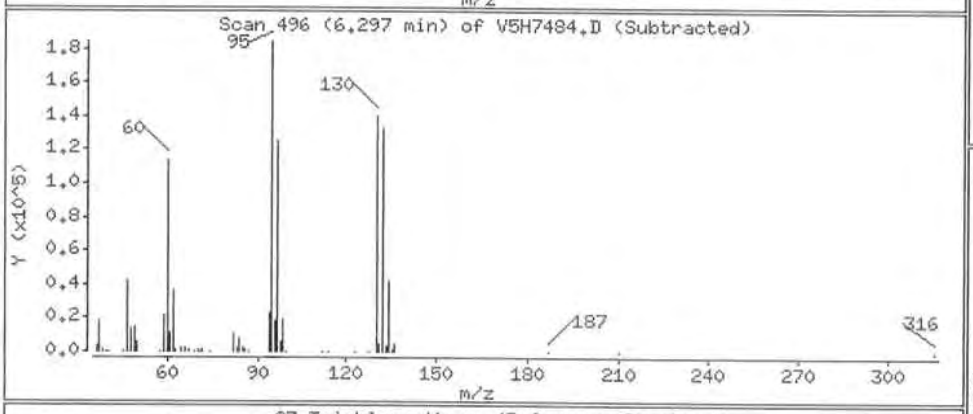
Column phase: DB-624

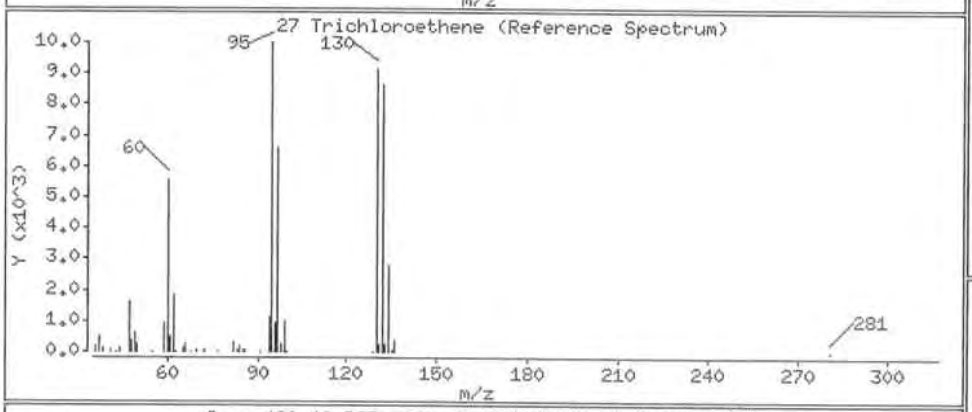
Column diameter: 0.25

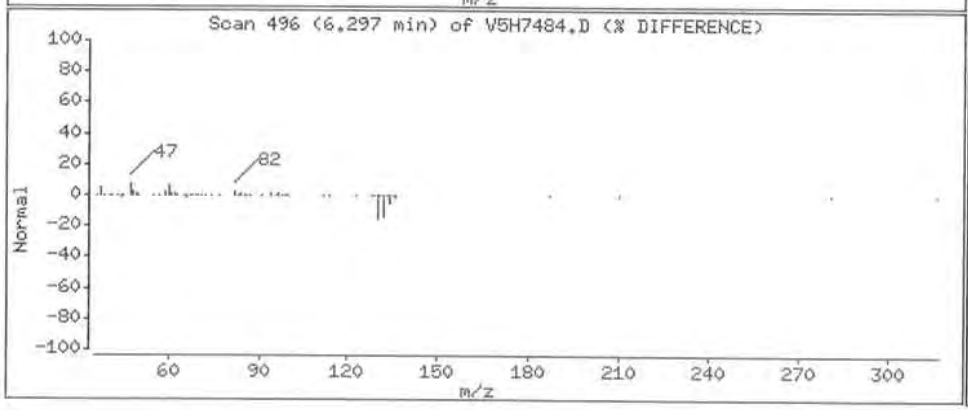
27 Trichloroethene

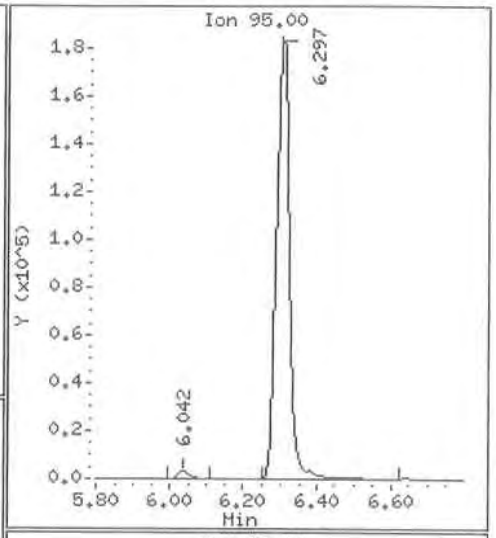
Concentration: 29 ug/L

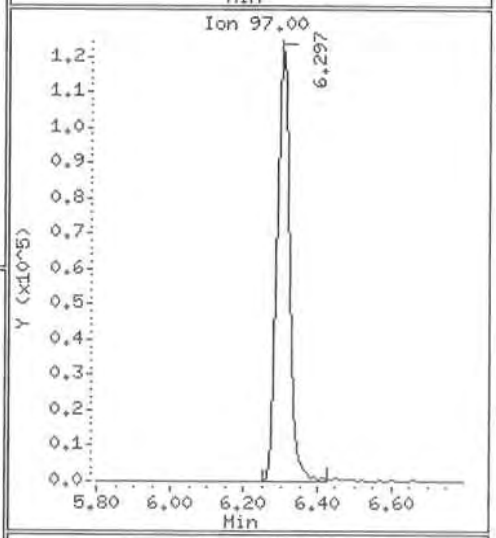


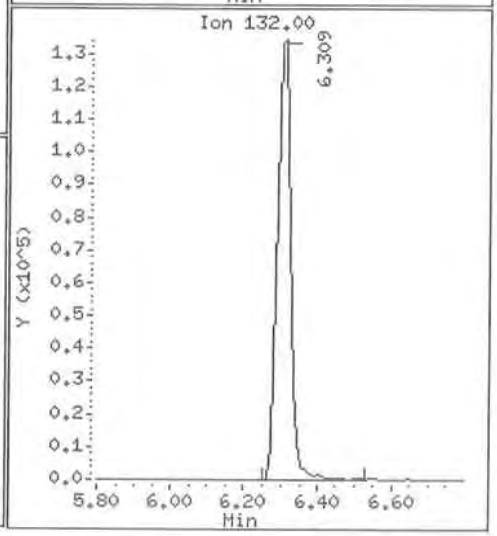












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7484.D

Date : 15-MAY-2007 16:38

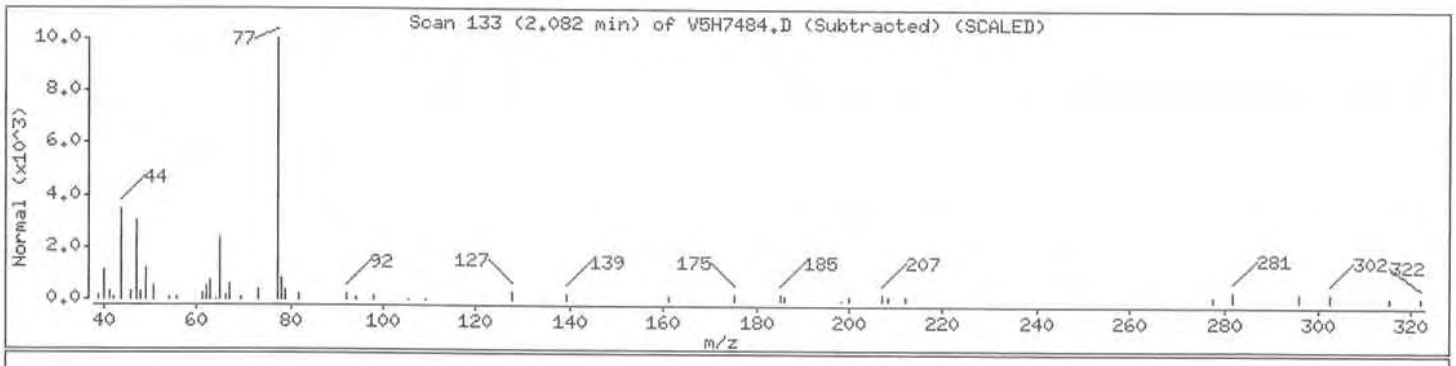
Client ID: Y3AN2 Instrument: V5.i

Sample Info: 25ML,F0595-12A,,29901

Purge Volume: 25.0 Operator: HZA 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.

Y3AN3

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7485.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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	1.5	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.51	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN3

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7485.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	20	
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.
Y3AN3

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-13A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7485.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

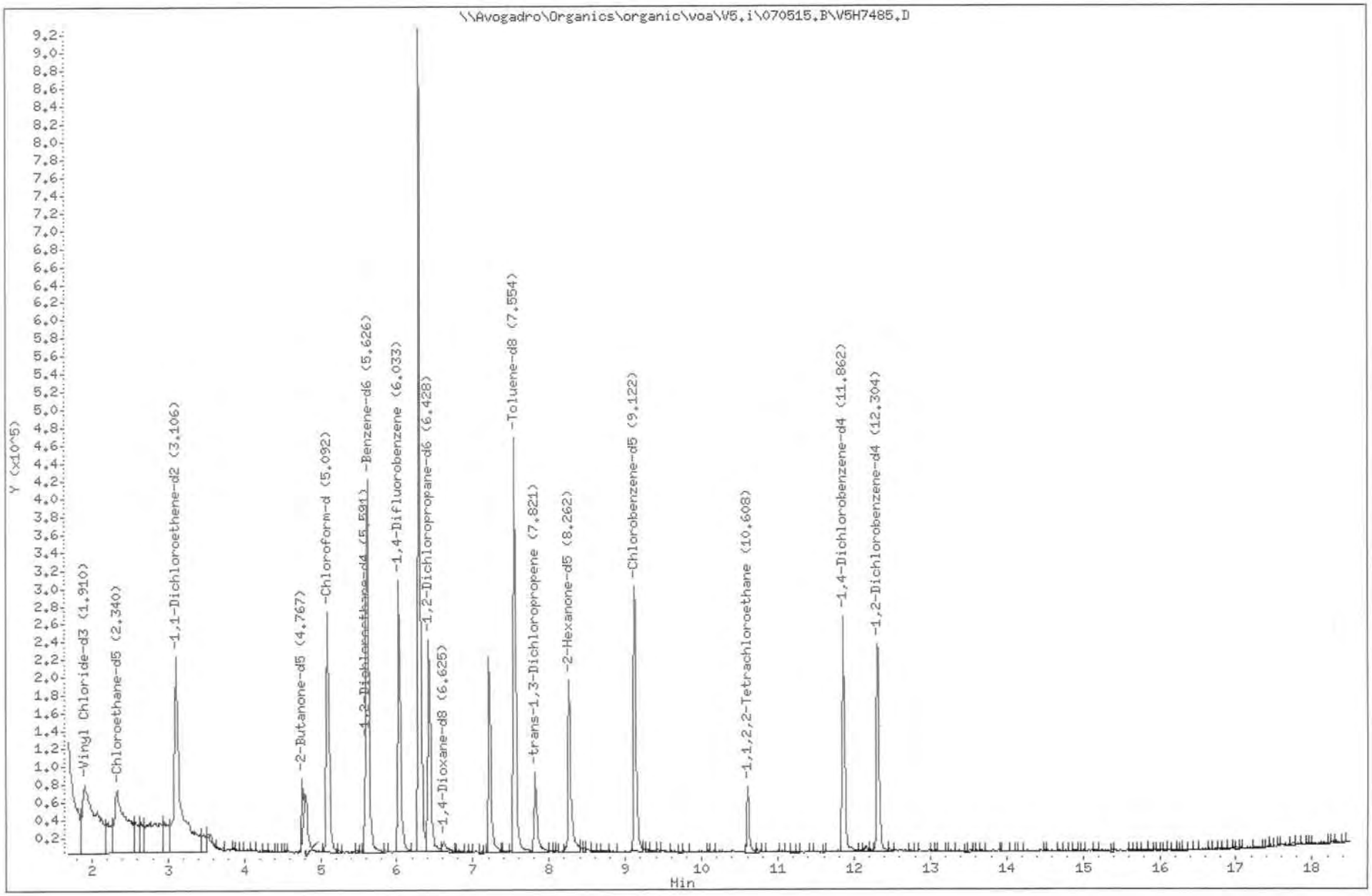
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D
Date : 15-MAY-2007 17:11
Client ID: Y3AN3
Sample Info: 25ML,F0595-13A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0131

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D
Lab Smp Id: F0595-13A Client Smp ID: Y3AN3
Inj Date : 15-MAY-2007 17:11
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-13A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.910	1.910	(0.317)	151373	4.99496	5.0
$ 80 Chloroethane-d5	69	2.328	2.316	(0.386)	59317	4.79960	4.8(Q)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.106	(0.515)	203454	4.55303	4.6
$ 82 2-Butanone-d5	46	4.766	4.755	(0.790)	152080	48.7554	49
17 cis-1,2-Dichloroethene ✓	96	4.813	4.813	(0.798)	24782	1.53619	1.5
$ 83 Chloroform-d	84	5.092	5.092	(0.844)	250943	5.84880	5.8(Q)
19 Chloroform	83	5.115	5.115	(0.848)	17556	0.51435	0.51
$ 23 1,2-Dichloroethane-d4	65	5.591	5.591	(0.927)	96002	5.69080	5.7
$ 84 Benzene-d6	84	5.626	5.626	(0.617)	412854	5.68540	5.7
* 26 1,4-Difluorobenzene	114	6.032	6.032	(1.000)	257226	5.00000	
27 Trichloroethene	95	6.299	6.299	(0.691)	384750	19.7012	20(H)
$ 85 1,2-Dichloropropane-d6	67	6.427	6.427	(0.705)	108084	5.82729	5.8
$ 94 1,4-Dioxane-d8	96	6.624	6.613	(1.098)	9646	278.061	280(Q)
$ 33 Toluene-d8	98	7.554	7.542	(0.828)	357184	5.62840	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.821	7.809	(0.857)	65009	5.34755	5.3
$ 87 2-Hexanone-d5	63	8.262	8.262	(0.906)	80949	53.6786	54
* 42 Chlorobenzene-d5	117	9.121	9.121	(1.000)	182606	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.608	(1.163)	41243	5.75193	5.8
* 78 1,4-Dichlorobenzene-d4	152	11.862	11.851	(1.000)	84786	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.315	12.303	(1.038)	72544	6.05706	6.1(Q)

WL
05/17/07

HZA
01132

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D
Report Date: 17-May-2007 11:27

QC Flag Legend

Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D
Lab Smp Id: F0595-13A Client Smp ID: Y3AN3
Inj Date : 15-MAY-2007 17:11
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-13A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D

Date : 15-MAY-2007 17:11

Client ID: Y3AN3

Instrument: V5.i

Sample Info: 25ML,F0595-13A,,29901

Purge Volume: 25.0

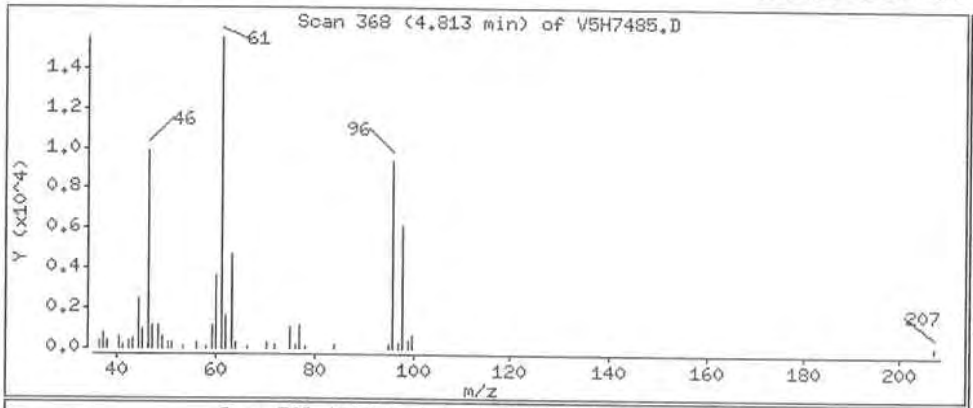
Operator: HZA SRC: LIMS

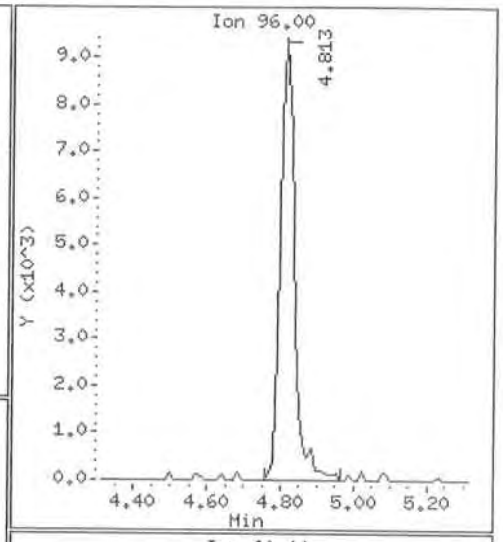
Column phase: DB-624

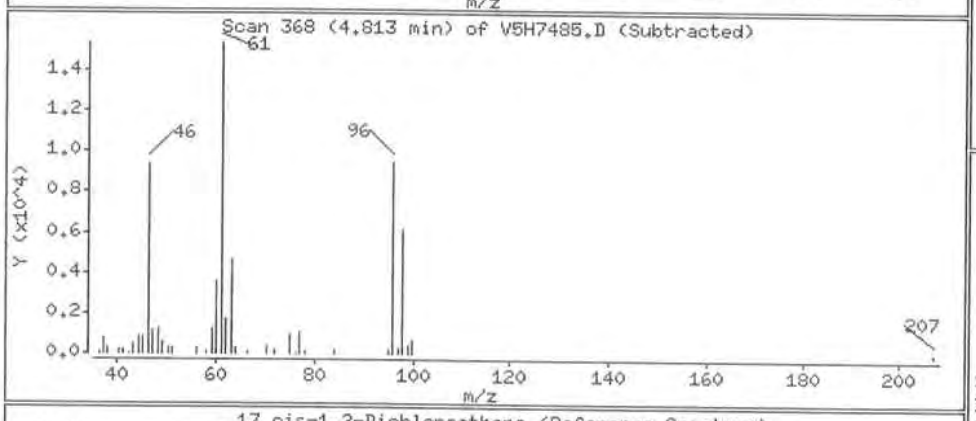
Column diameter: 0.25

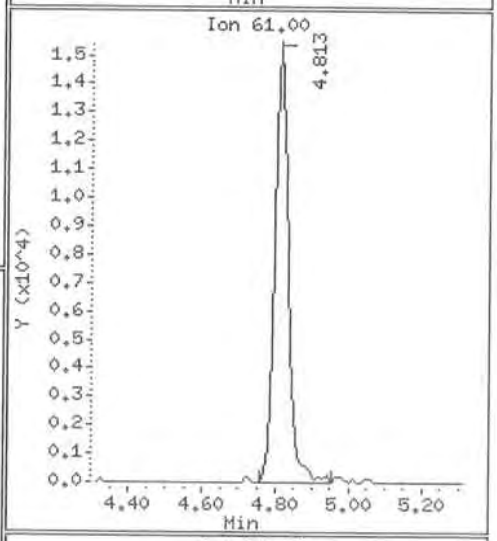
17 cis-1,2-Dichloroethene

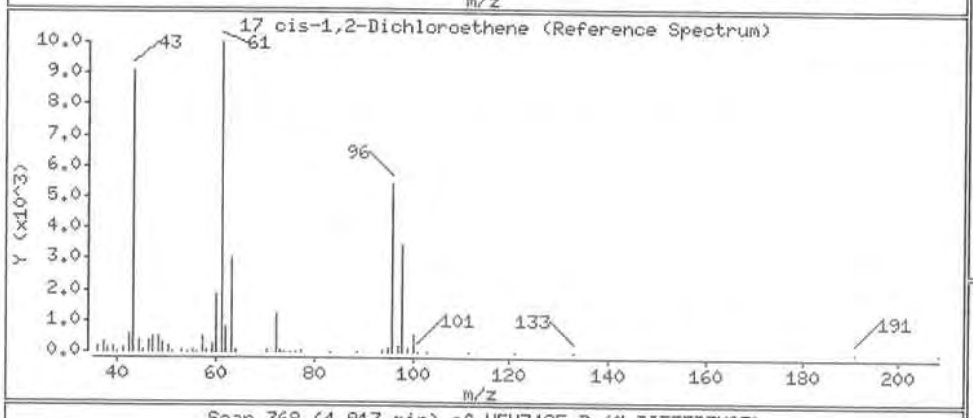
Concentration: 1.5 ug/L

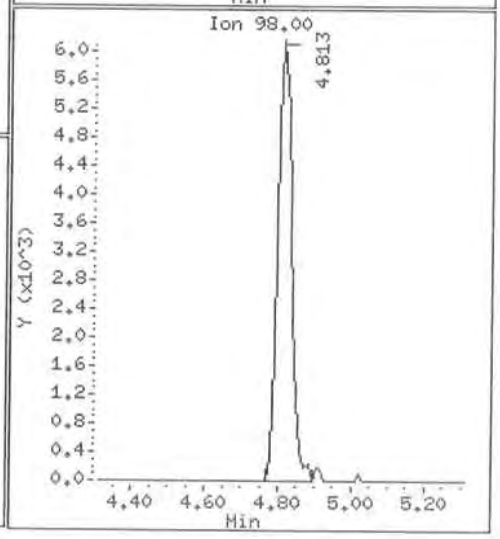


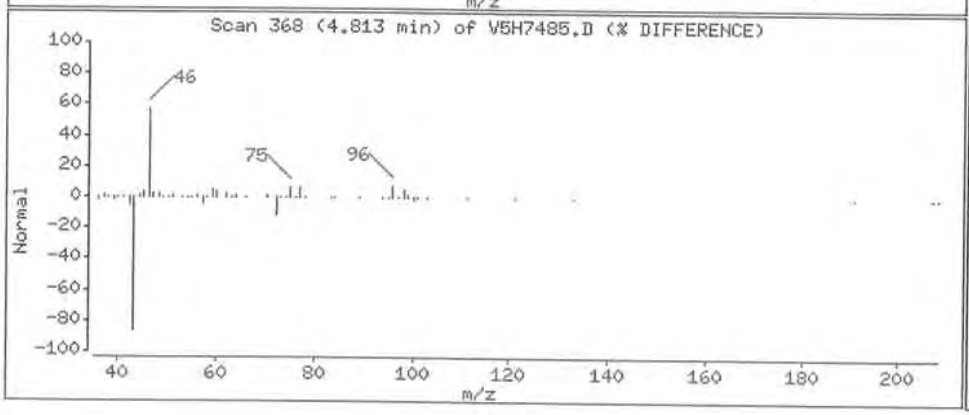












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D

Date : 15-MAY-2007 17:11

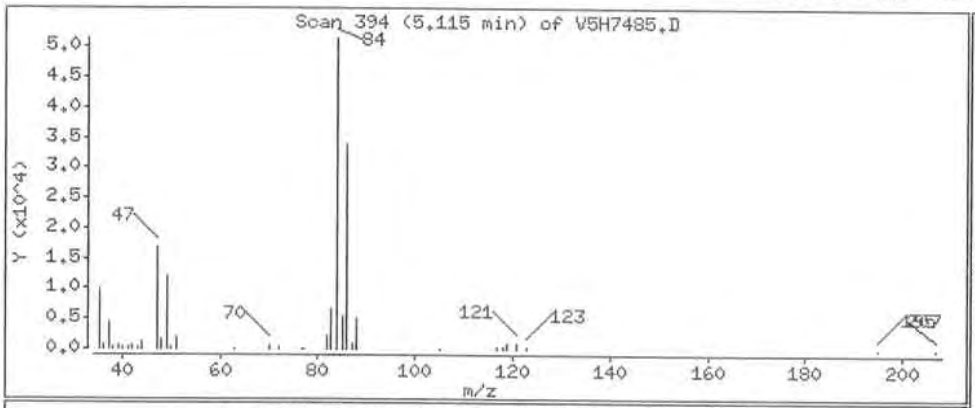
Client ID: Y3AN3 | Instrument: V5.i

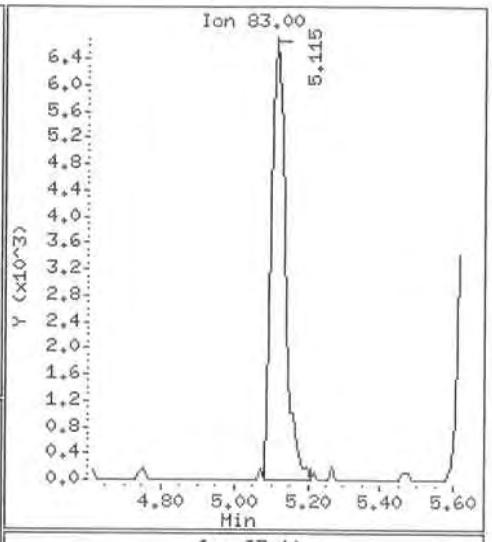
Sample Info: 25ML,F0595-13A,,29901

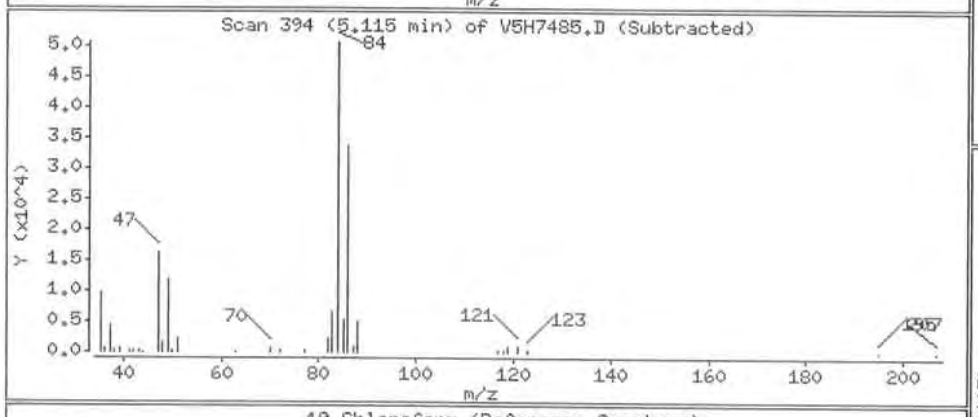
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

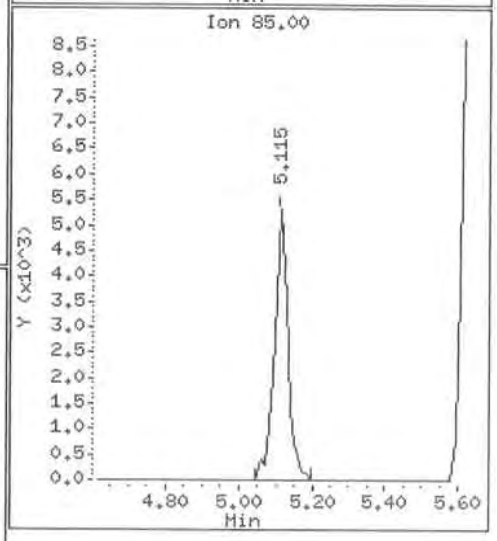
Column phase: DB-624 | Column diameter: 0.25

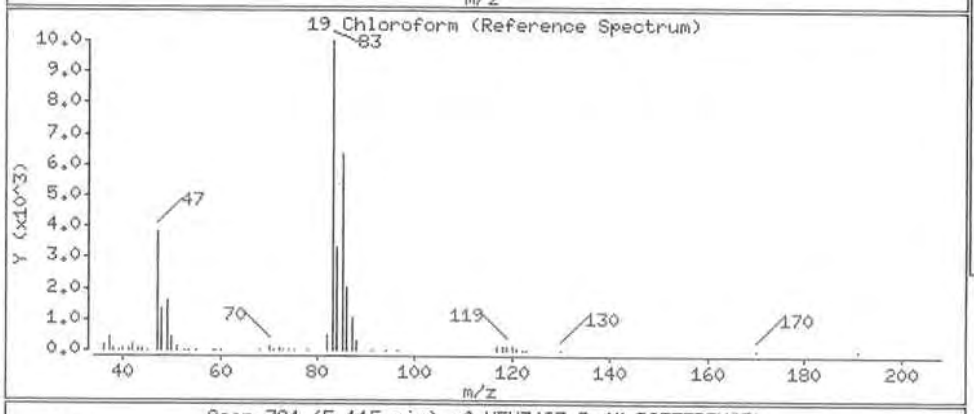
19 Chloroform | Concentration: 0.51 ug/L

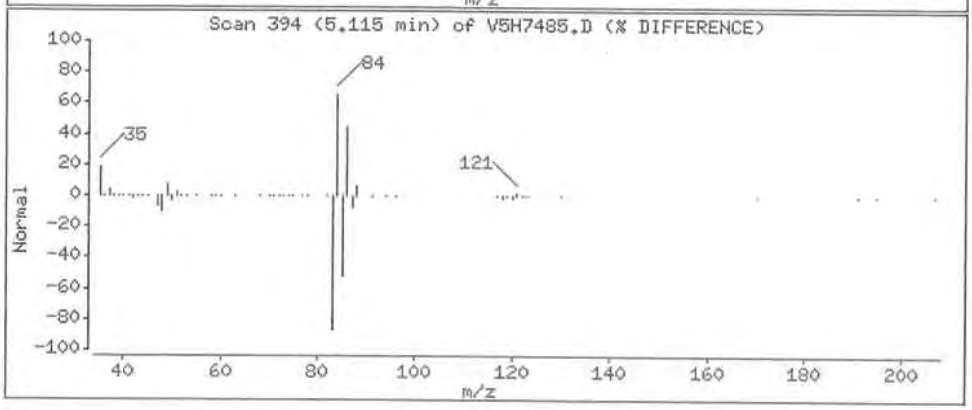












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7485.D

Date : 15-MAY-2007 17:11

Client ID: Y3AN3

Instrument: V5.i

Sample Info: 25ML,F0595-13A,,29901

Purge Volume: 25.0

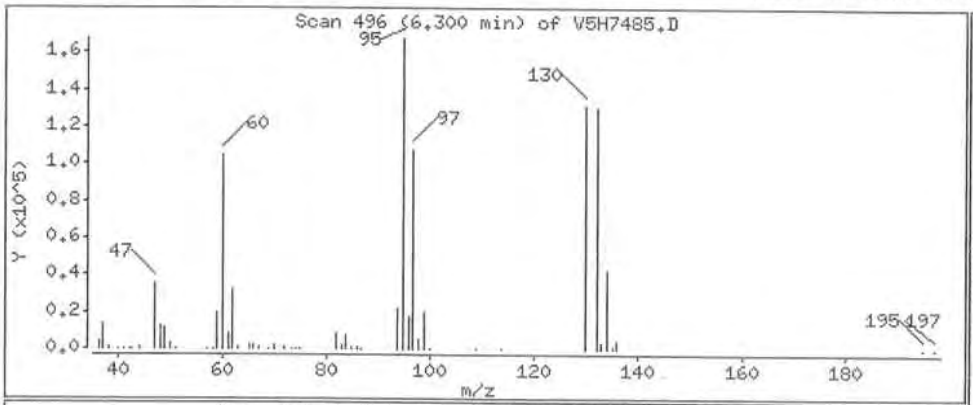
Operator: HZA SRC: LIMS

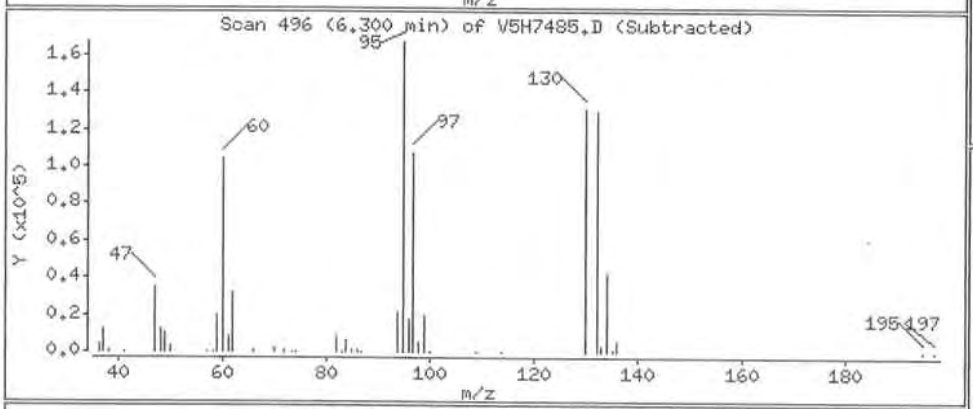
Column phase: DB-624

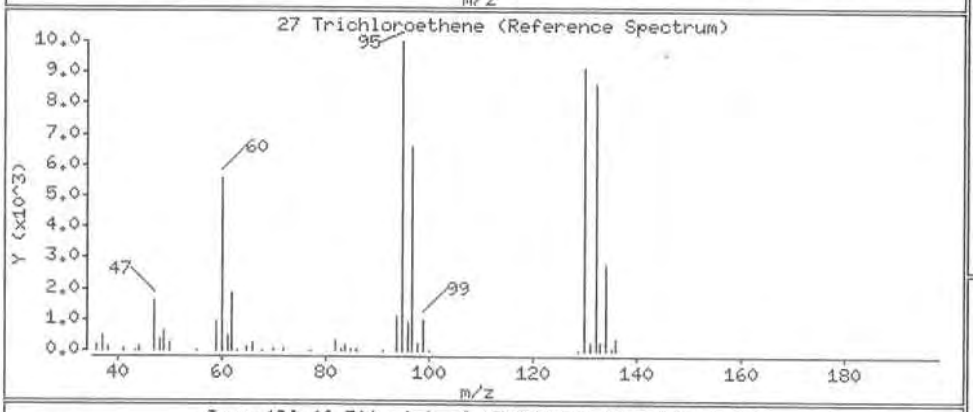
Column diameter: 0.25

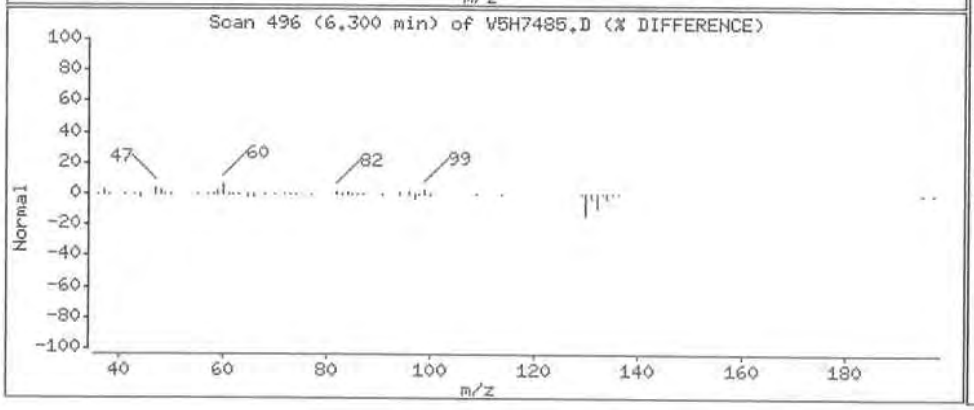
27 Trichloroethene

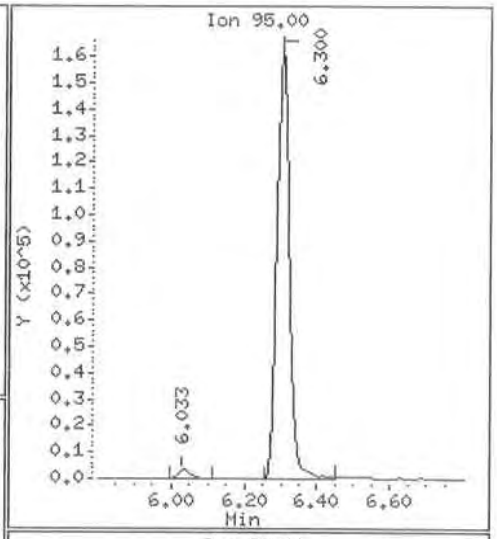
Concentration: 20 ug/L

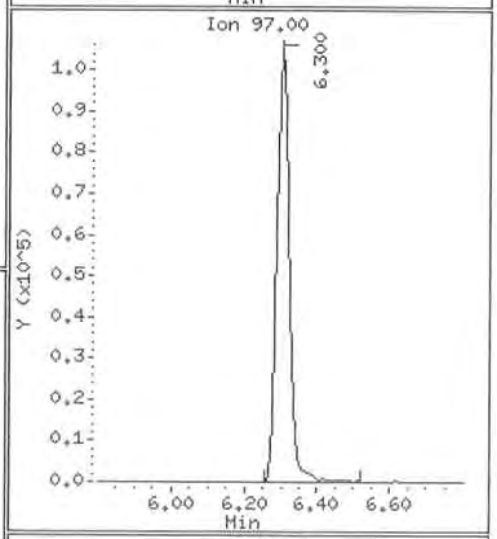


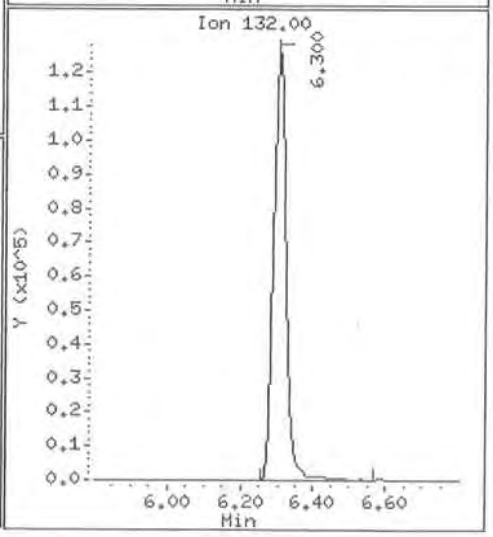












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN4

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7486.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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	3.2	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN4

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7486.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	4.0	
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.

Y3AN4

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7486.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

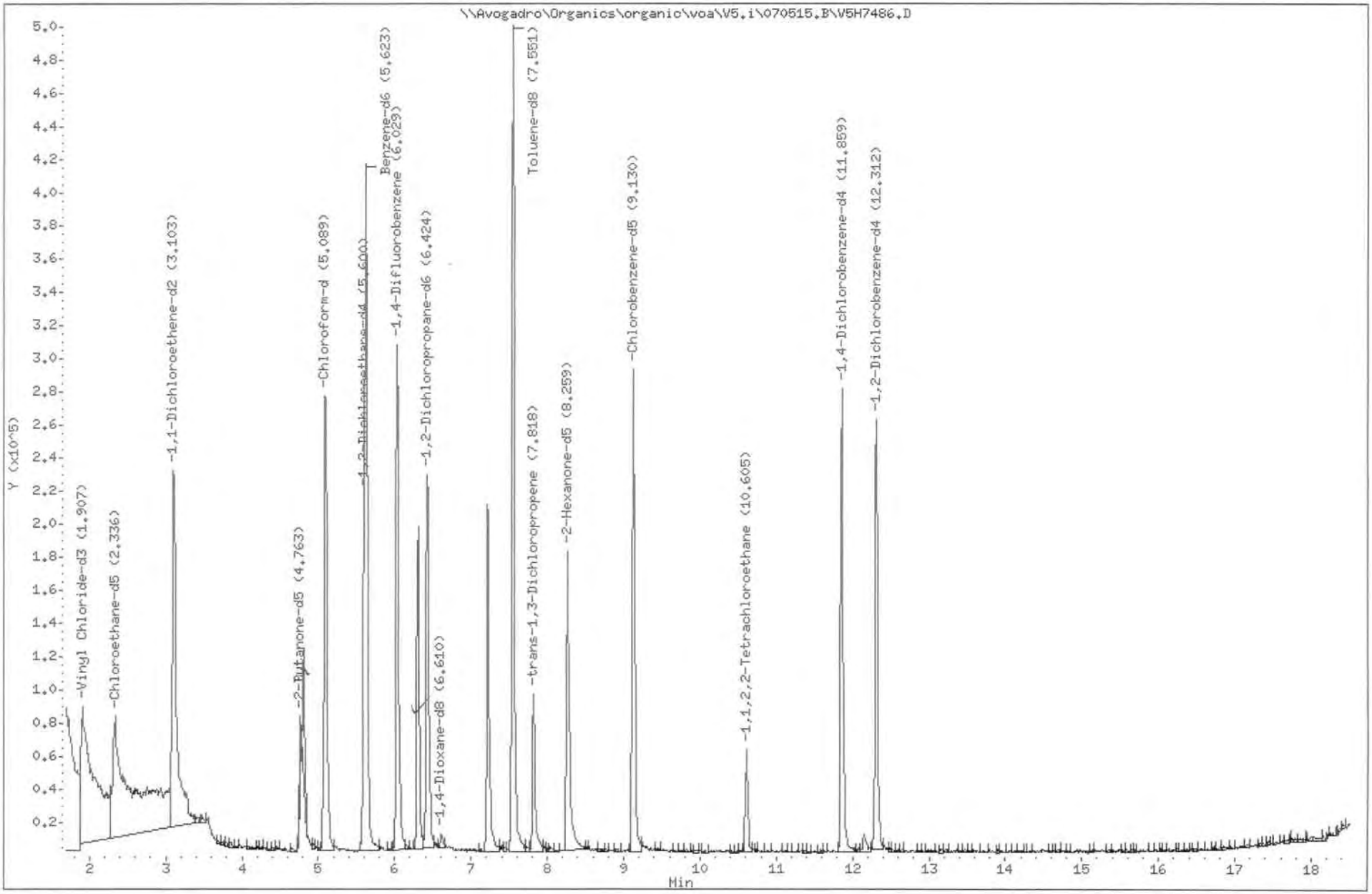
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 [1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D
Date : 15-MAY-2007 17:44
Client ID: Y3AN4
Sample Info: 25ML,F0595-14A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D
Lab Smp Id: F0595-14A Client Smp ID: Y3AN4
Inj Date : 15-MAY-2007 17:44
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-14A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.906	1.910	(0.316)	149904	4.90372	4.9
$ 80 Chloroethane-d5	69	2.336	2.316	(0.387)	106256	8.52333	8.5(R)
$ 81 1,1-Dichloroethene-d2	63	3.102	3.106	(0.515)	215313	4.77676	4.8
$ 82 2-Butanone-d5	46	4.763	4.755	(0.790)	150830	47.9367	48
17 cis-1,2-Dichloroethene	96	4.809	4.813	(0.798)	51925	3.19090	3.2
$ 83 Chloroform-d	84	5.088	5.092	(0.844)	254941	5.89062	5.9(Q)
$ 23 1,2-Dichloroethane-d4	65	5.599	5.591	(0.929)	100638	5.91404	5.9
$ 84 Benzene-d6	84	5.622	5.626	(0.616)	404792	5.35398	5.4
* 26 1,4-Difluorobenzene	114	6.029	6.032	(1.000)	259469	5.00000	
27 Trichloroethene	95	6.307	6.299	(0.691)	81151	3.99106	4.0
$ 85 1,2-Dichloropropane-d6	67	6.424	6.427	(0.704)	107547	5.56909	5.6
$ 94 1,4-Dioxane-d8	96	6.621	6.613	(1.098)	11486	328.240	330(Q)
$ 33 Toluene-d8	98	7.550	7.542	(0.827)	371489	5.62237	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.817	7.809	(0.856)	68279	5.39447	5.4
$ 87 2-Hexanone-d5	63	8.258	8.262	(0.905)	82031	52.2454	52
* 42 Chlorobenzene-d5	117	9.129	9.121	(1.000)	190123	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.604	10.608	(1.162)	42105	5.63998	5.6
* 78 1,4-Dichlorobenzene-d4	152	11.858	11.851	(1.000)	84471	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.311	12.303	(1.038)	79173	6.63520	6.6(QR)

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D
Report Date: 17-May-2007 11:27

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D
Lab Smp Id: F0595-14A Client Smp ID: Y3AN4
Inj Date : 15-MAY-2007 17:44
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-14A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D

Date : 15-MAY-2007 17:44

Client ID: Y3AN4

Instrument: V5.i

Sample Info: 25ML,F0595-14A,,29901

Purge Volume: 25.0

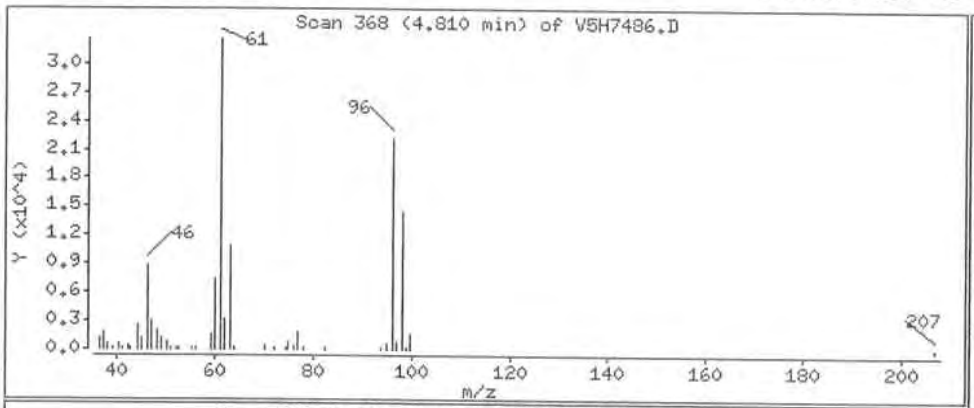
Operator: HZA SRC: LIMS

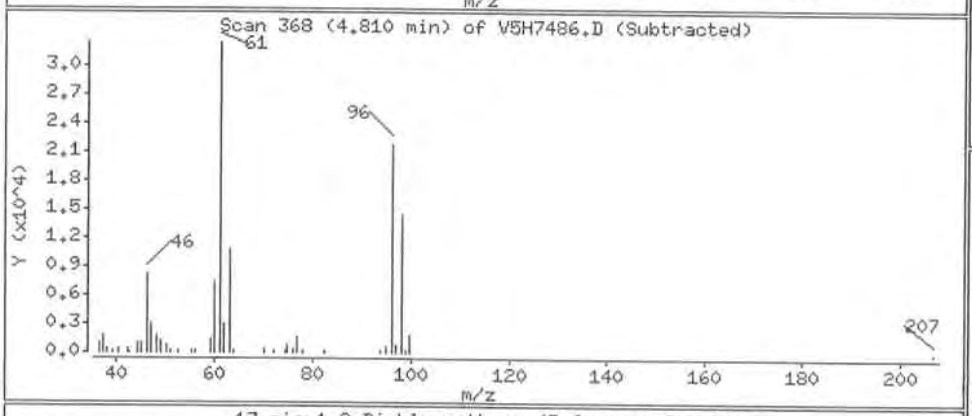
Column phase: DB-624

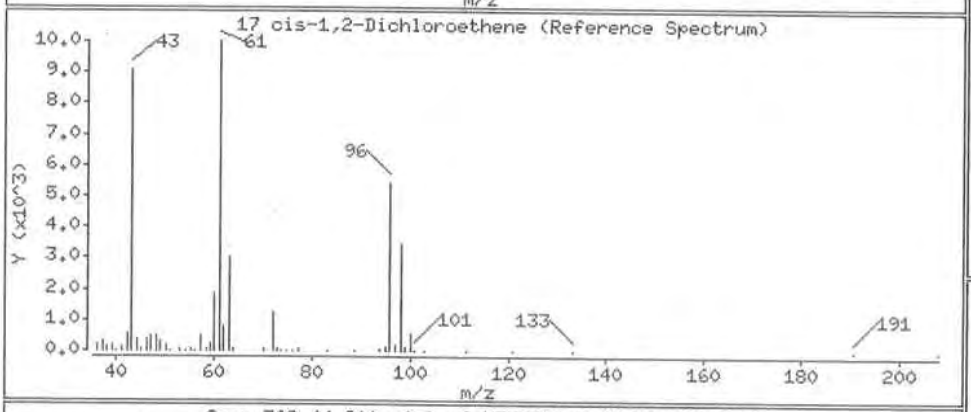
Column diameter: 0.25

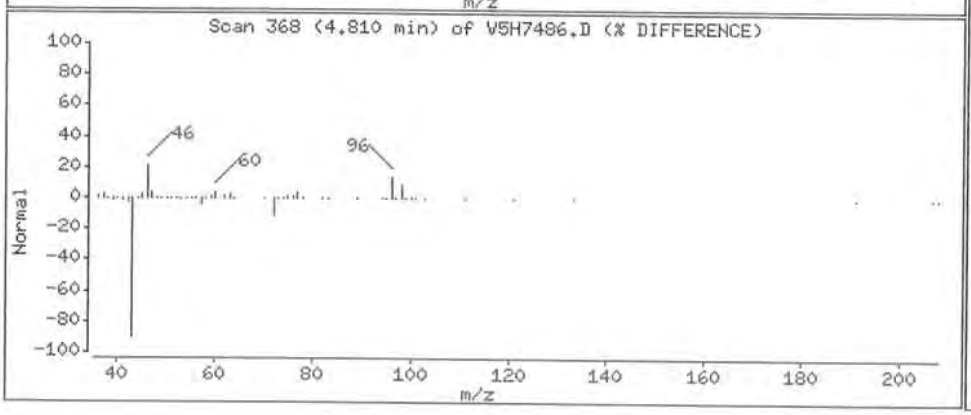
17 cis-1,2-Dichloroethene

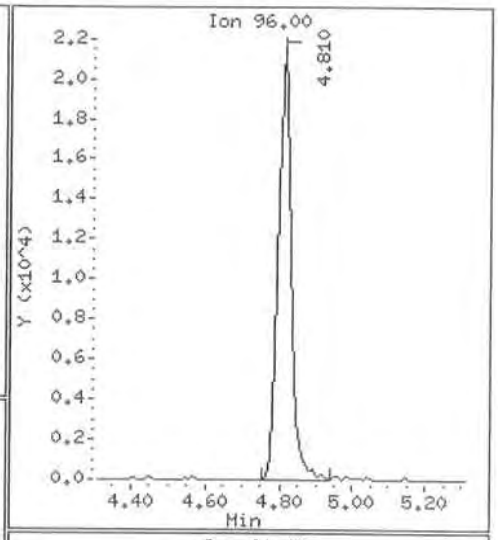
Concentration: 3.2 ug/L

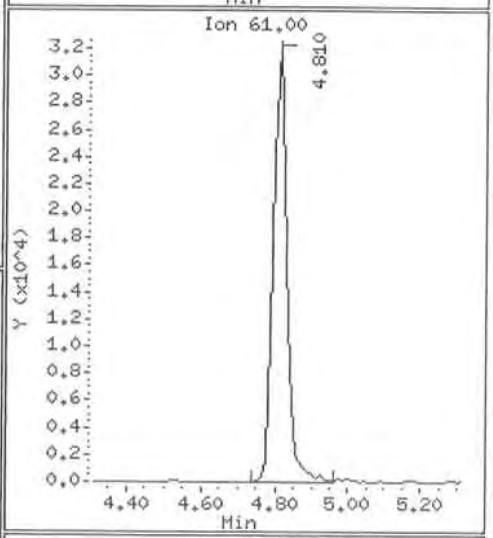


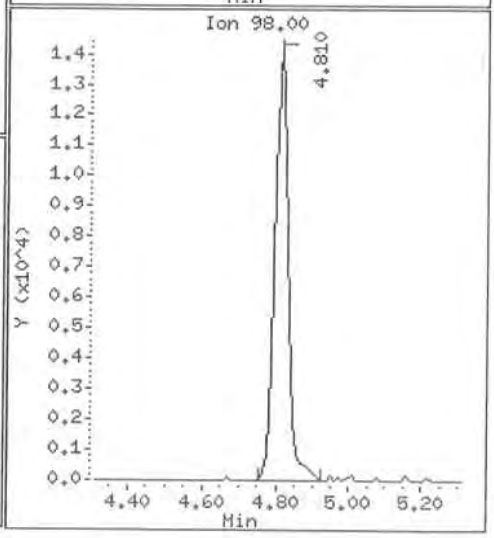












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7486.D

Date : 15-MAY-2007 17:44

Client ID: Y3AN4

Instrument: V5.i

Sample Info: 25ML,F0595-14A,,29901

Purge Volume: 25.0

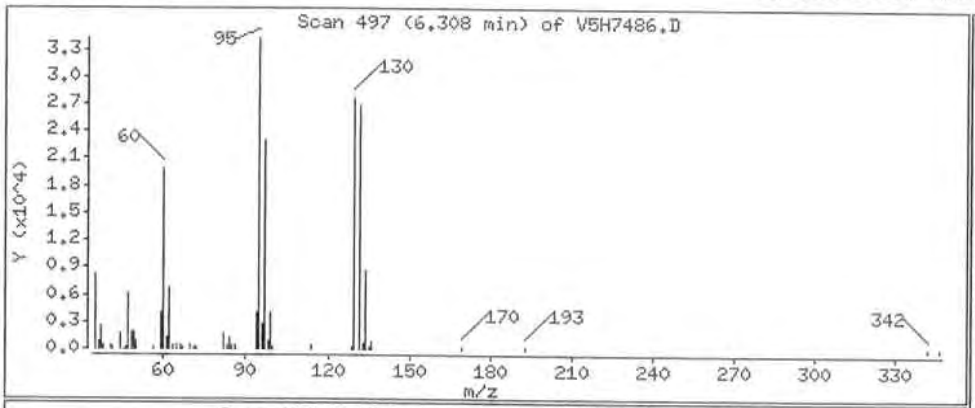
Operator: HZA SRC: LIMS

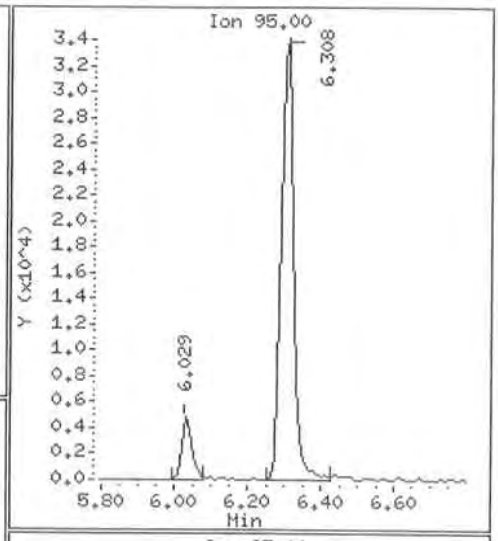
Column phase: DB-624

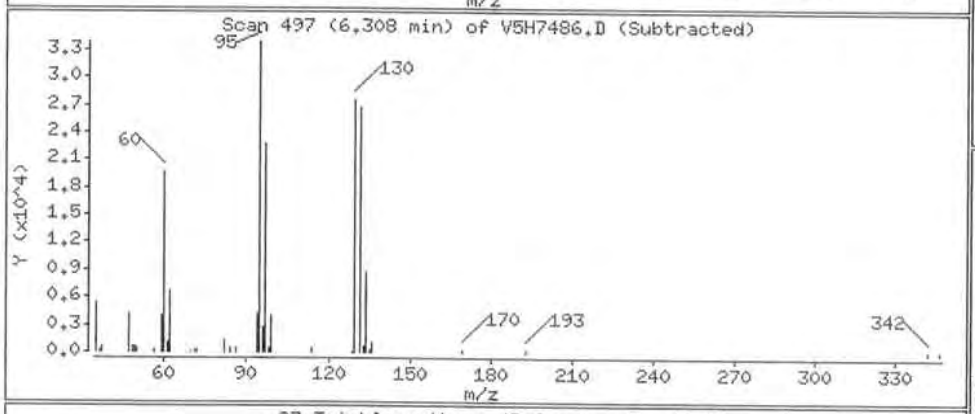
Column diameter: 0.25

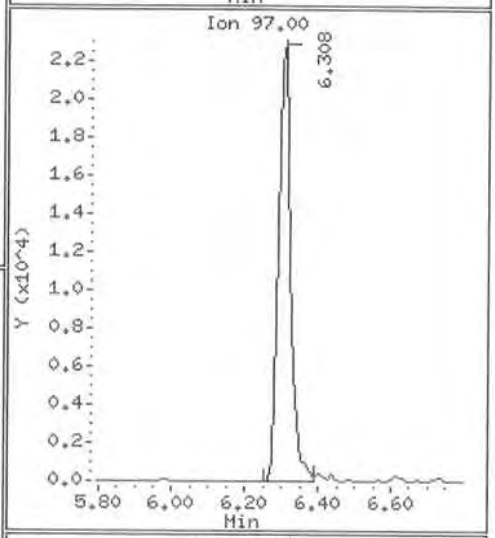
27 Trichloroethene

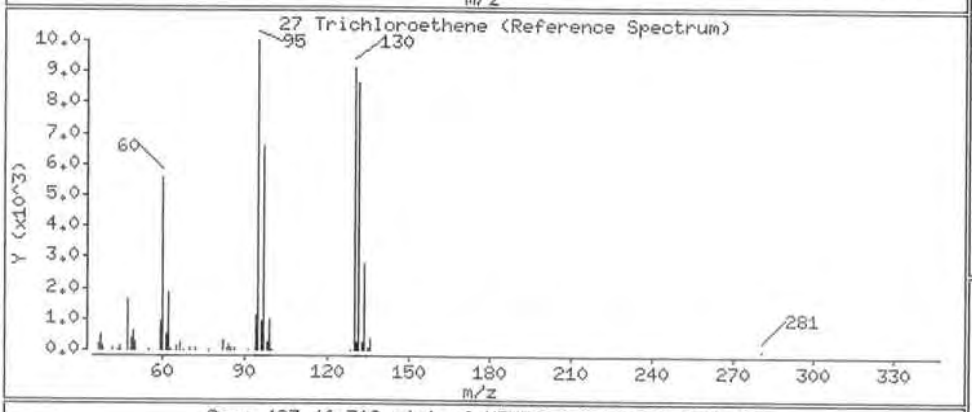
Concentration: 4.0 ug/L

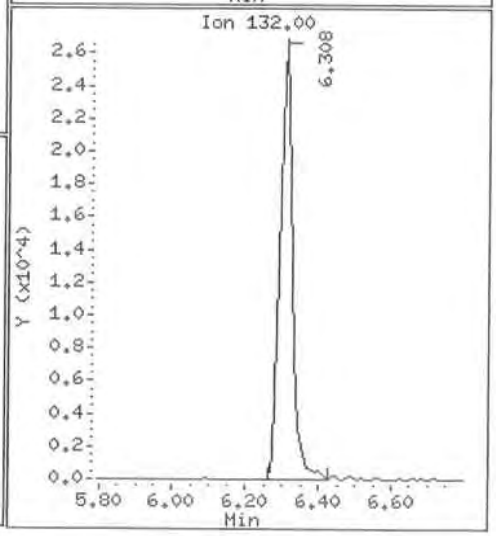


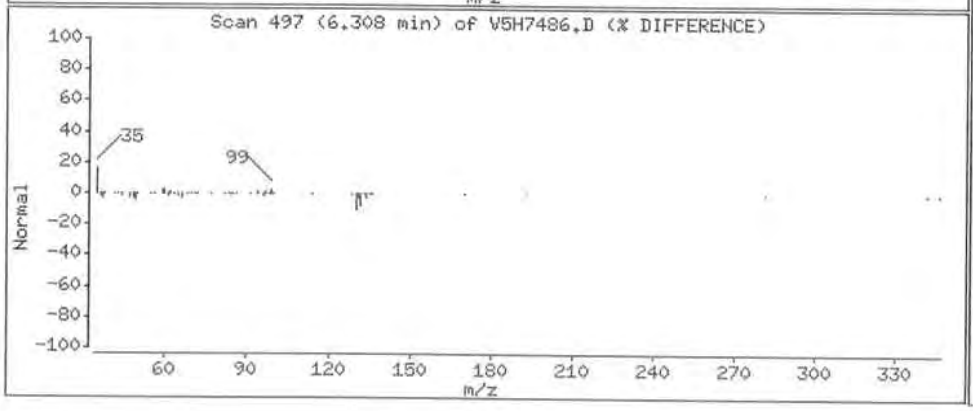












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN5

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7489.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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	1.0	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.58	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN5

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7489.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	3.2	
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.

Y3AN5

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-15A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7489.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

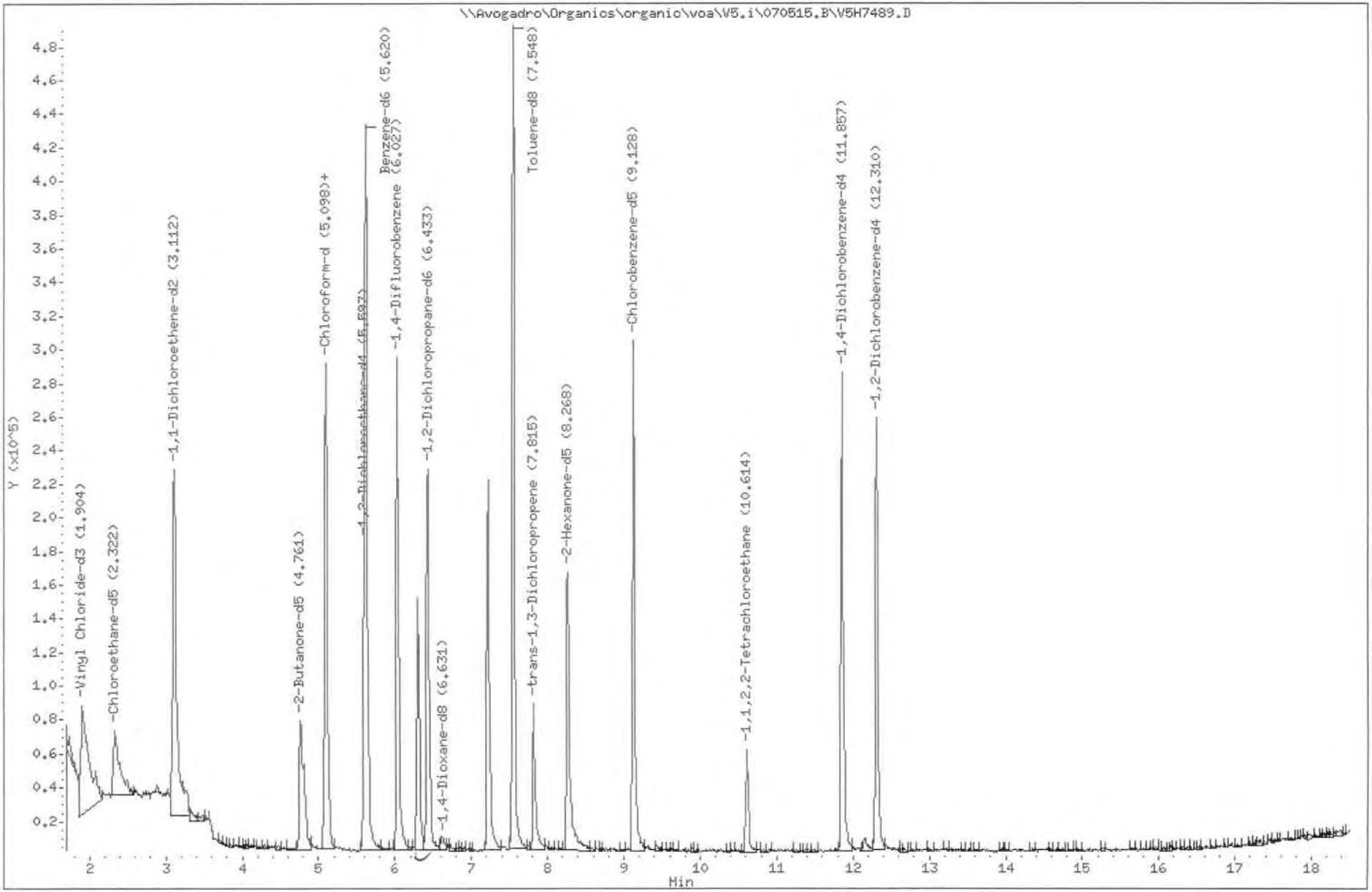
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D
Date : 15-MAY-2007 19:20
Client ID: Y3AN5
Sample Info: 25ML,F0595-15A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0150

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D
Lab Smp Id: F0595-15A Client Smp ID: Y3AN5
Inj Date : 15-MAY-2007 19:20
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-15A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.904	1.910	(0.315)	149917	4.82223	4.8
$ 80 Chloroethane-d5	69	2.333	2.316	(0.387)	97684	7.70483	7.7(R)
$ 81 1,1-Dichloroethene-d2	63	3.111	3.106	(0.515)	210478	4.59150	4.6
$ 82 2-Butanone-d5	46	4.761	4.755	(0.788)	149826	46.8222	47
17 cis-1,2-Dichloroethene	96	4.807	4.813	(0.796)	16821	1.01642	1.0
$ 83 Chloroform-d	84	5.097	5.092	(0.844)	248978	5.65674	5.7(Q)
19 Chloroform	83	5.109	5.115	(0.846)	20221	0.57750	0.58
$ 23 1,2-Dichloroethane-d4	65	5.597	5.591	(0.927)	98255	5.67755	5.7
$ 84 Benzene-d6	84	5.620	5.626	(0.616)	402248	5.43537	5.4
* 26 1,4-Difluorobenzene	114	6.038	6.032	(1.000)	263877	5.00000	
27 Trichloroethene	95	6.305	6.299	(0.691)	63229	3.17688	3.2
$ 85 1,2-Dichloropropane-d6	67	6.433	6.427	(0.705)	111444	5.89567	5.9
$ 94 1,4-Dioxane-d8	96	6.630	6.613	(1.098)	9324	262.005	260(Q)
$ 33 Toluene-d8	98	7.548	7.542	(0.827)	360728	5.57755	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.815	7.809	(0.856)	63149	5.09705	5.1
$ 87 2-Hexanone-d5	63	8.268	8.262	(0.906)	74304	48.3474	48
* 42 Chlorobenzene-d5	117	9.127	9.121	(1.000)	186099	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.614	10.608	(1.163)	39944	5.46620	5.5(Q)
* 78 1,4-Dichlorobenzene-d4	152	11.856	11.851	(1.000)	83509	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.309	12.303	(1.038)	75705	6.41765	6.4(Q)

WL
05/17/07

0151 HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D
Report Date: 17-May-2007 11:27

QC Flag Legend

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

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D
Lab Smp Id: F0595-15A Client Smp ID: Y3AN5
Inj Date : 15-MAY-2007 19:20
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-15A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D

Date : 15-MAY-2007 19:20

Client ID: Y3AN5

Instrument: V5.i

Sample Info: 25ML,F0595-15A,,29901

Purge Volume: 25.0

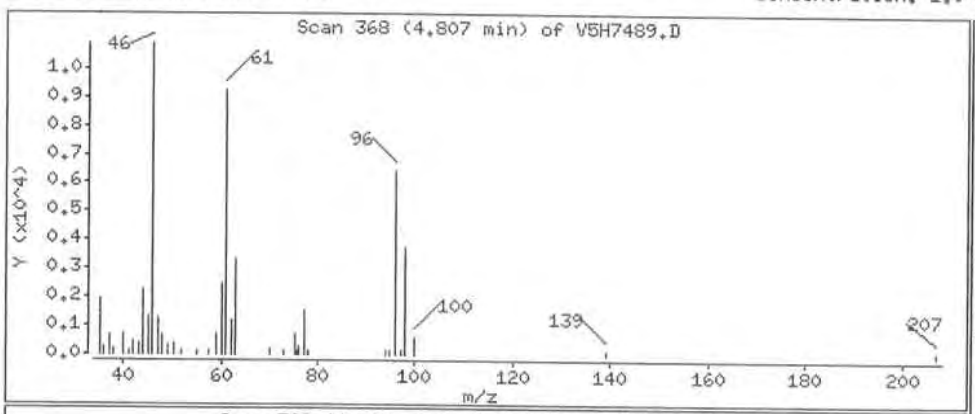
Operator: HZA SRC: LIMS

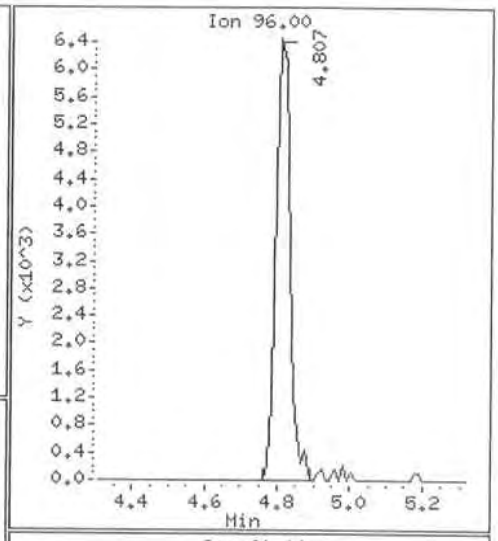
Column phase: DB-624

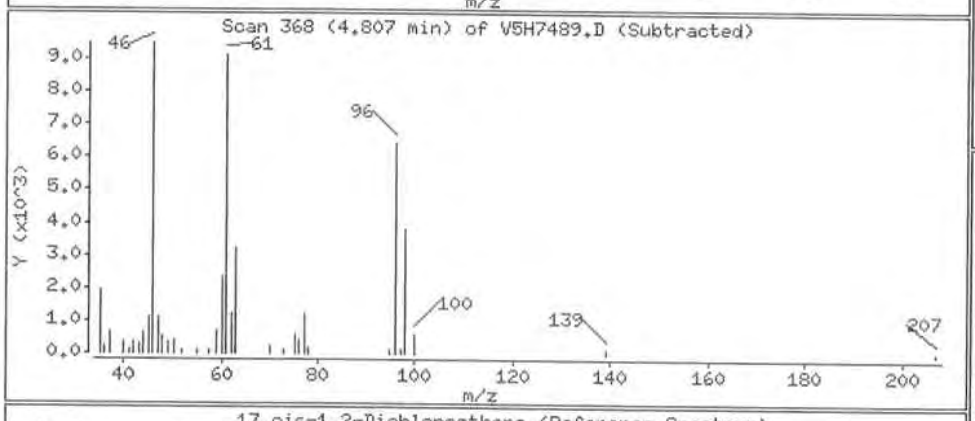
Column diameter: 0.25

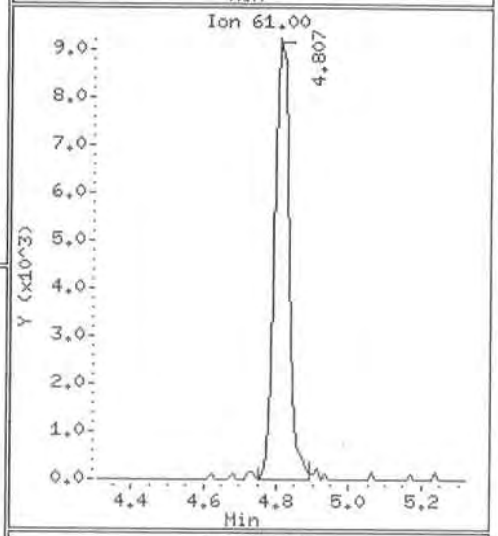
17 cis-1,2-Dichloroethene

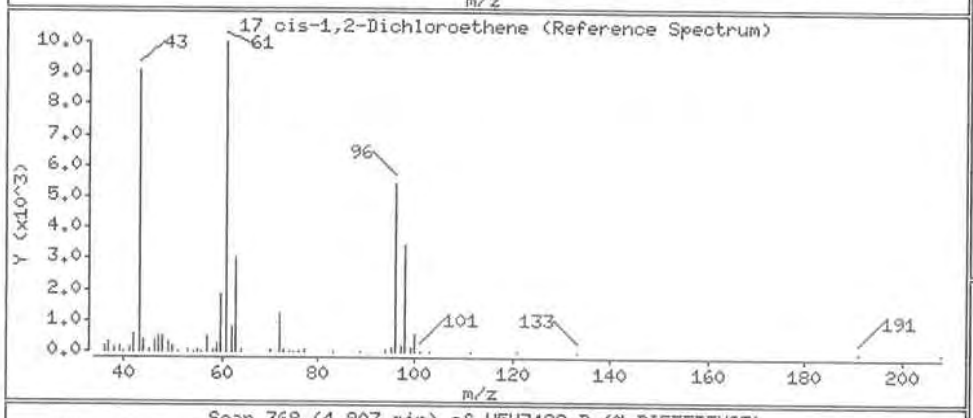
Concentration: 1.0 ug/L

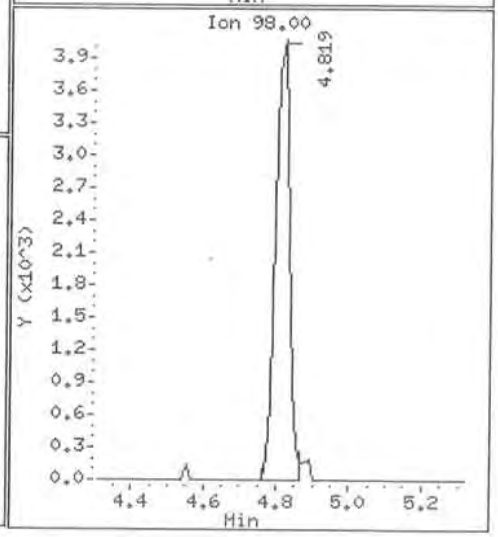


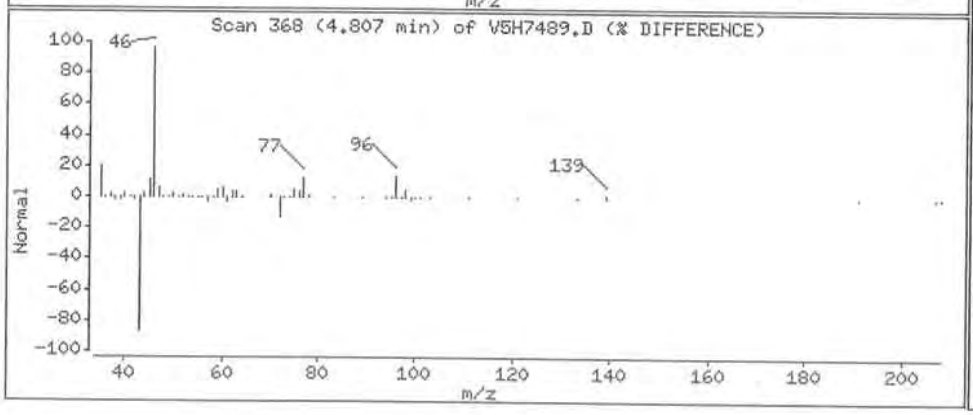












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D

Date : 15-MAY-2007 19:20

Client ID: Y3AN5

Instrument: V5.i

Sample Info: 25ML,F0595-15A,,29901

Purge Volume: 25.0

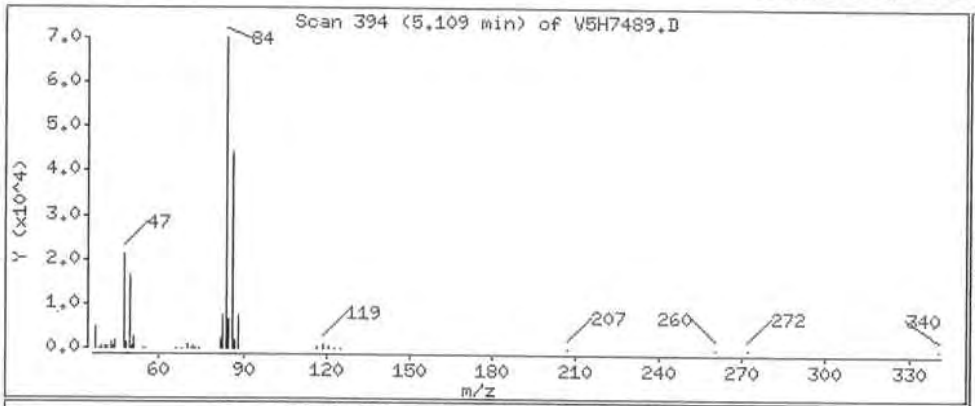
Operator: HZA SRC: LIMS

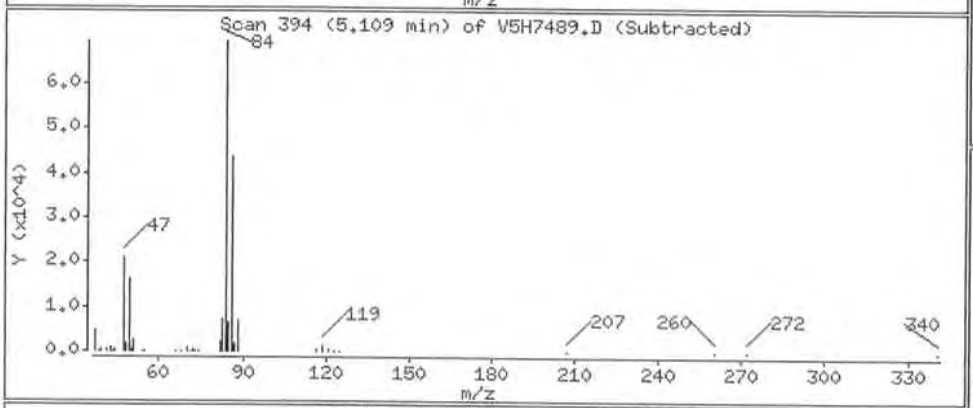
Column phase: DB-624

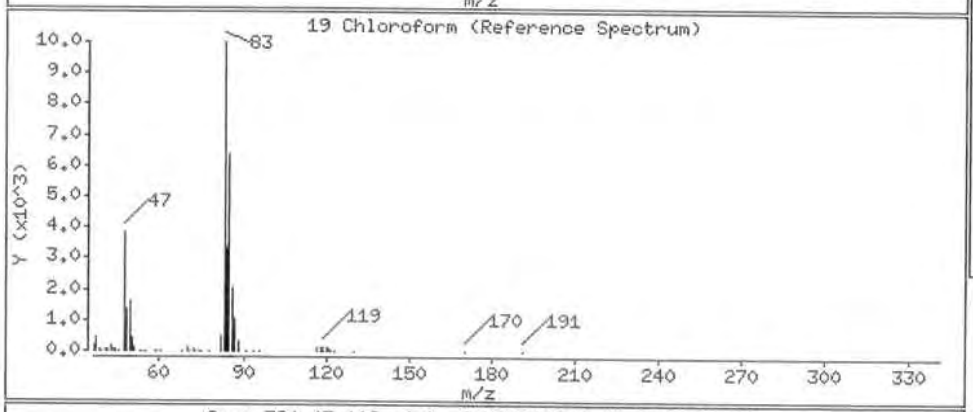
Column diameter: 0.25

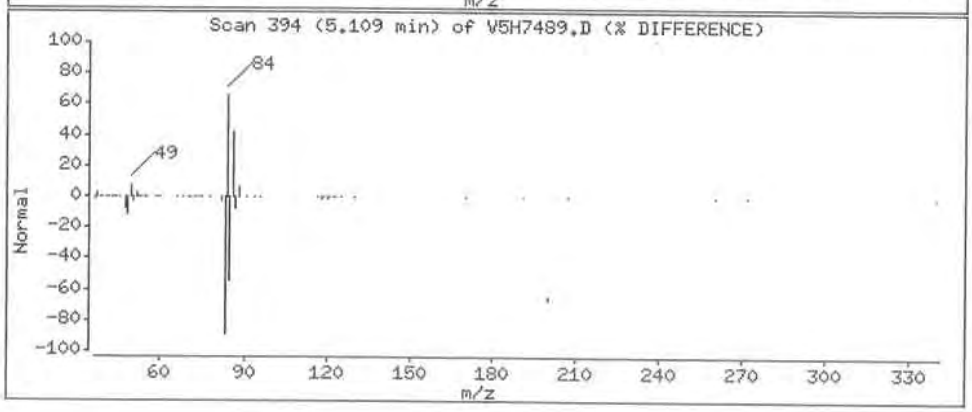
19 Chloroform

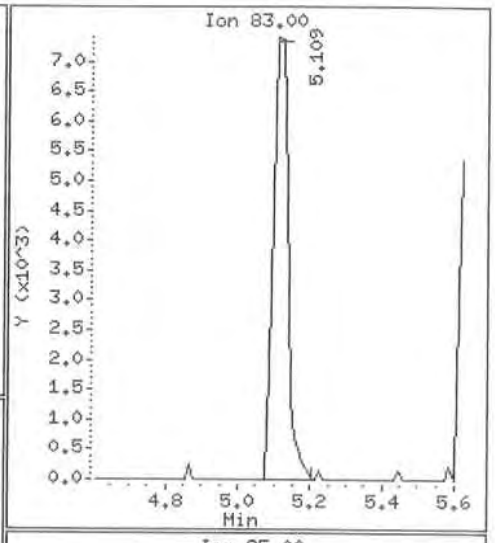
Concentration: 0.58 ug/L

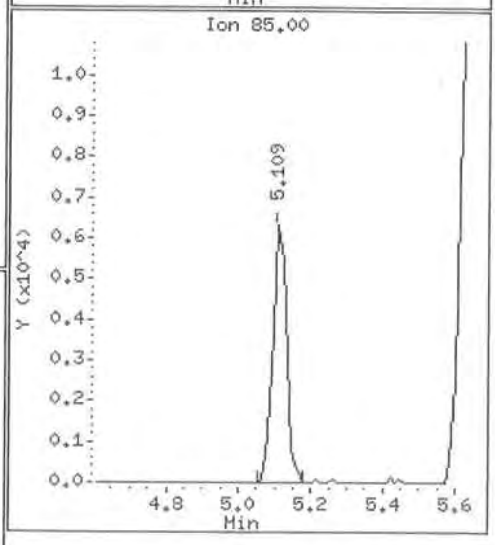












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7489.D

Date : 15-MAY-2007 19:20

Client ID: Y3AN5

Instrument: V5.i

Sample Info: 25ML,F0595-15A,,29901

Purge Volume: 25.0

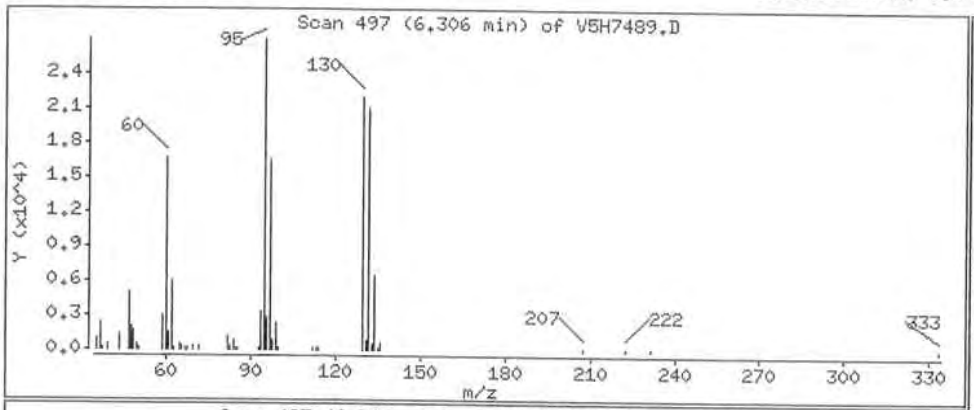
Operator: HZA SRC: LIMS

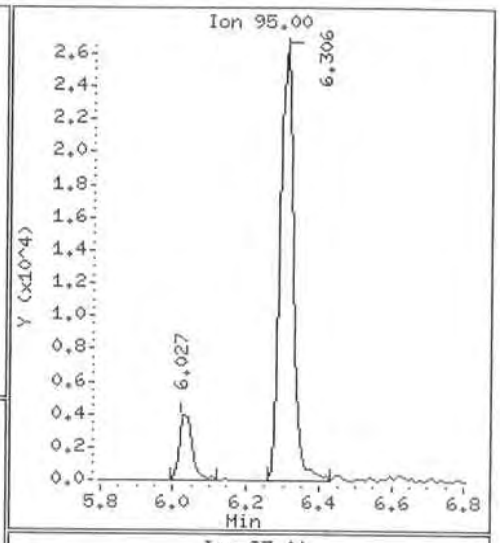
Column phase: DB-624

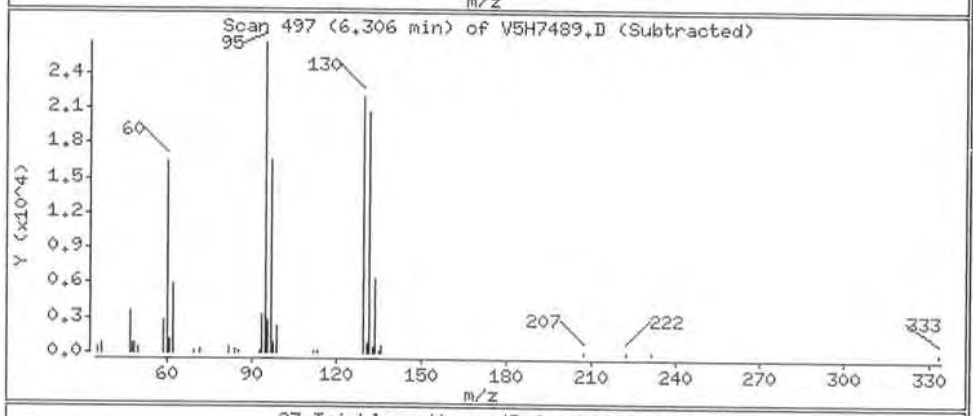
Column diameter: 0.25

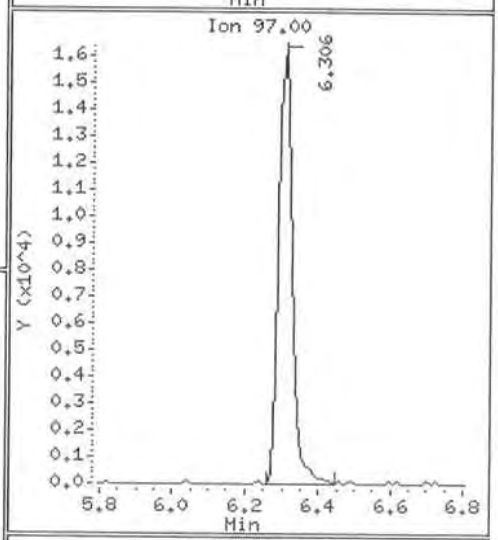
27 Trichloroethene

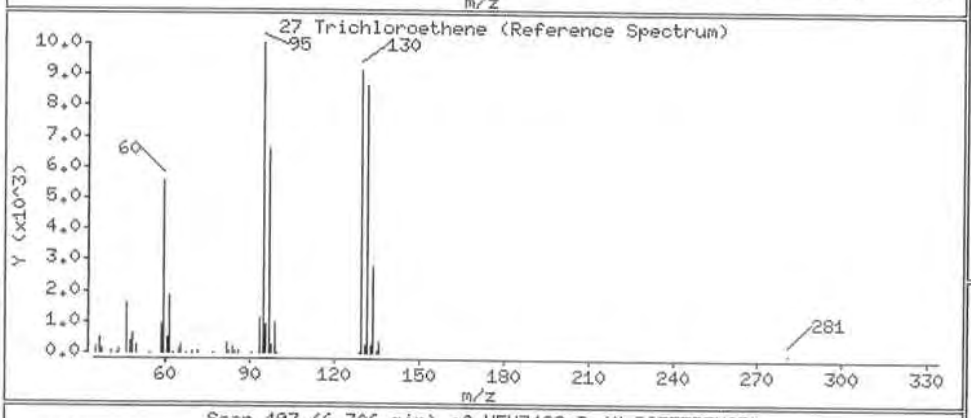
Concentration: 3.2 ug/L

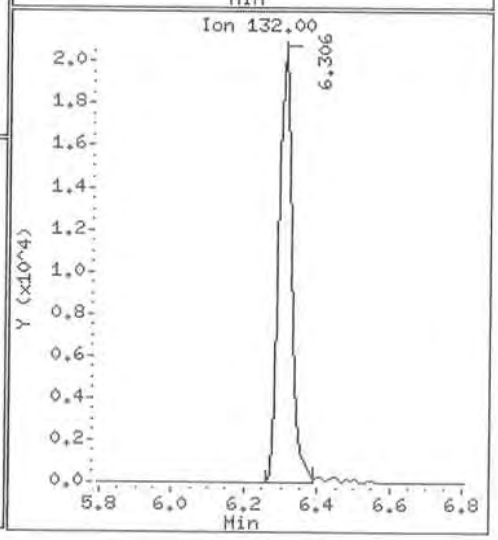


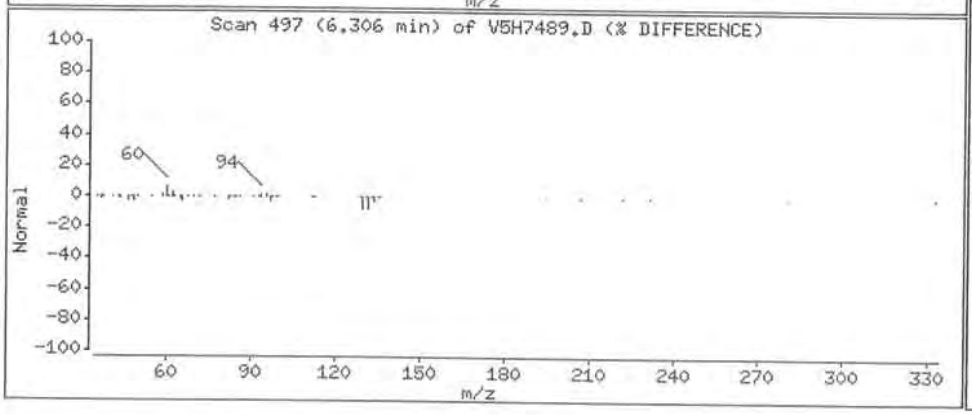












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN6

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7490.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	37	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN6

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-16A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7490.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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	0.27	J
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.
Y3AN6

Lab Name: MITKEM CORPORATION
Contract: EP-W-05-030
Lab Code: MITKEM Case No.: 36359
Mod. Ref No.: 1391.0 SDG No.: Y3AM1
Matrix: (SOIL/SED/WATER) WATER
Lab Sample ID: F0595-16A
Sample wt/vol: 25.0 (g/mL) ML
Lab File ID: V5H7490.D
Level: (TRACE or LOW/MED) TRACE
Date Received: 05/11/2007
% Moisture: not dec.
Date Analyzed: 05/15/2007
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) UG/L
Purge Volume: 25.0 (mL)

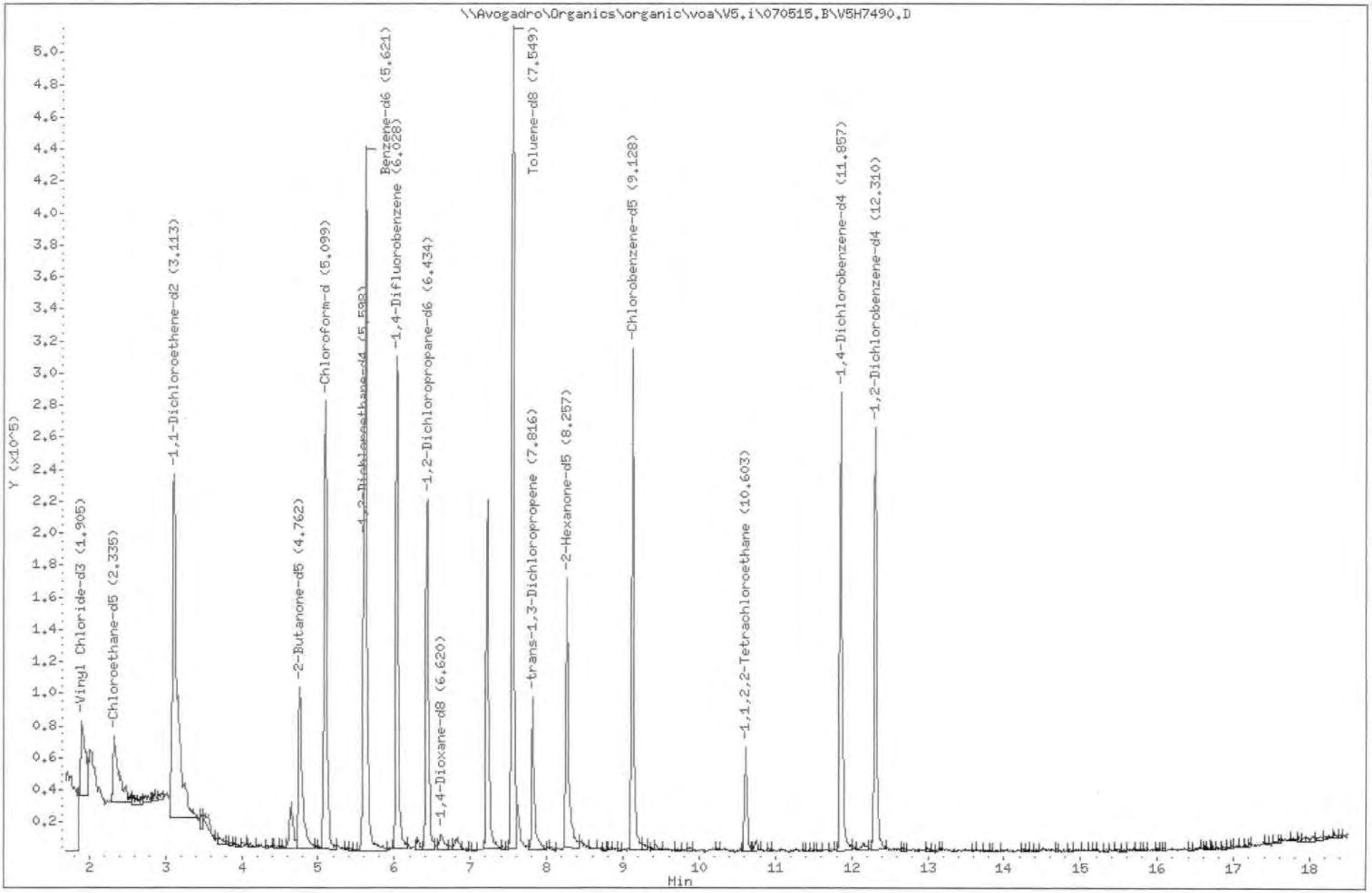
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.646	0.65	J
	E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D
Date : 15-MAY-2007 19:52
Client ID: Y3AN6
Sample Info: 25ML,F0595-16A,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



6156

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D
Lab Smp Id: F0595-16A Client Smp ID: Y3AN6
Inj Date : 15-MAY-2007 19:52
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-16A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.904	1.910	(0.315)	164787	5.02941	5.0
$ 80 Chloroethane-d5	69	2.334	2.316	(0.387)	95947	7.18073	7.2(R)
$ 81 1,1-Dichloroethene-d2	63	3.112	3.106	(0.515)	220177	4.55740	4.6
9 Acetone	43	3.159	3.164	(0.523)	111740	36.5798	37
$ 82 2-Butanone-d5	46	4.761	4.755	(0.788)	150012	44.4823	44
$ 83 Chloroform-d	84	5.098	5.092	(0.844)	260492	5.61561	5.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.597	5.591	(0.927)	102767	5.63452	5.6
$ 84 Benzene-d6	84	5.621	5.626	(0.616)	427289	5.77510	5.8
* 26 1,4-Difluorobenzene	114	6.039	6.032	(1.000)	278102	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.434	6.427	(0.705)	107702	5.69905	5.7
$ 94 1,4-Dioxane-d8	96	6.619	6.613	(1.096)	12529	334.057	330(Q)
$ 33 Toluene-d8	98	7.548	7.542	(0.827)	384211	5.94205	5.9
34 Toluene	91	7.618	7.623	(0.835)	17059	0.26869	0.27(a)
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.809	(0.856)	60715	4.90175	4.9
$ 87 2-Hexanone-d5	63	8.257	8.262	(0.905)	75168	48.9211	49
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	186055	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.608	(1.162)	41498	5.68021	5.7
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	86083	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	78376	6.44541	6.4(Q)

WL
05/17/07

HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D
Report Date: 17-May-2007 11:27

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D
Report Date: 17-May-2007 11:27

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D
Lab Smp Id: F0595-16A Client Smp ID: Y3AN6
Inj Date : 15-MAY-2007 19:52
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-16A,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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
* 26 1,4-Difluorobenzene	6.039	753605	5.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
4.646	98351	0.65253643	0.65	0		0	26

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7490.D

Date : 15-MAY-2007 19:52

Client ID: Y3AN6

Instrument: V5.i

Sample Info: 25ML,F0595-16A,,29901

Purge Volume: 25.0

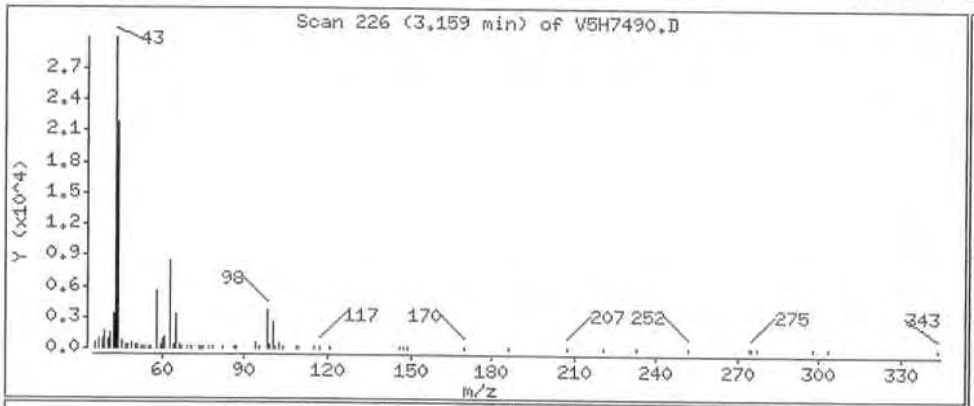
Operator: HZA SRC: LIMS

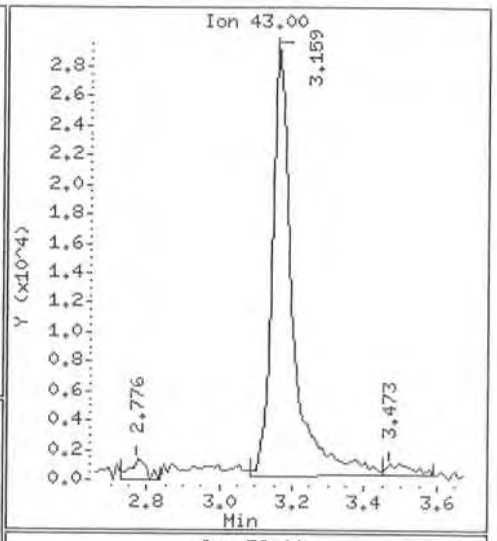
Column phase: DB-624

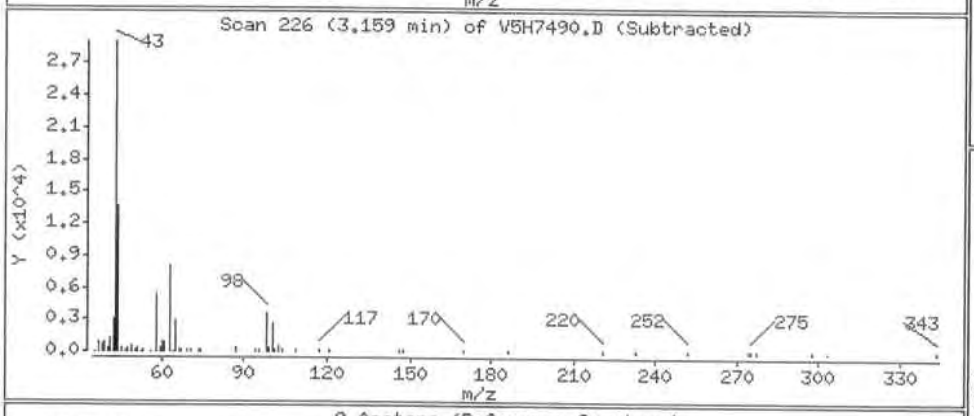
Column diameter: 0.25

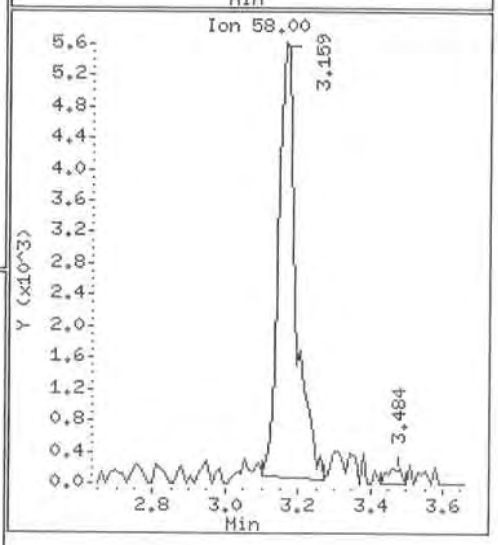
9 Acetone

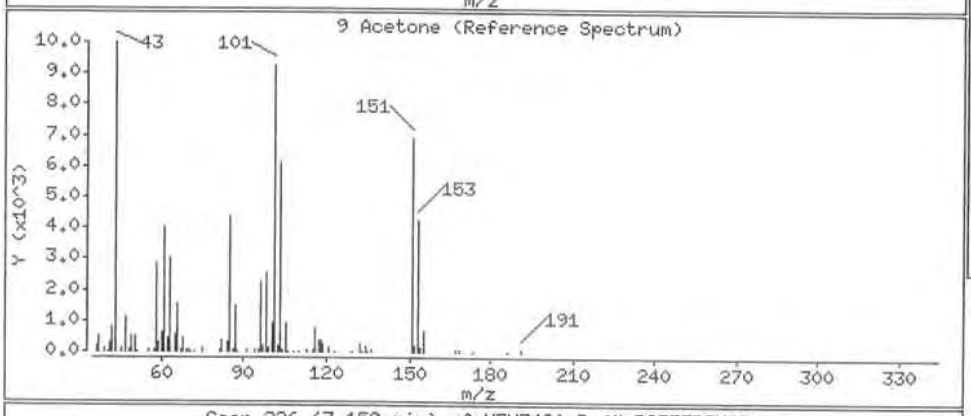
Concentration: 37 ug/L

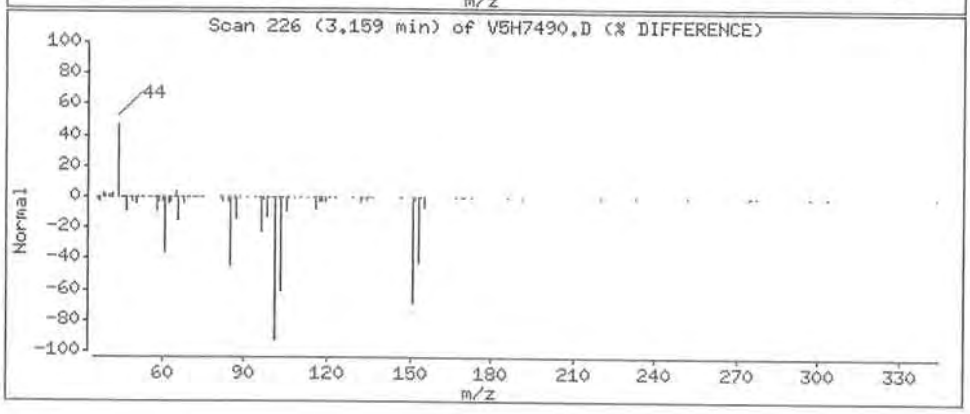












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Date : 15-MAY-2007 19:52

Client ID: Y3AN6

Instrument: V5.i

Sample Info: 25ML,F0595-16A,,29901

Purge Volume: 25.0

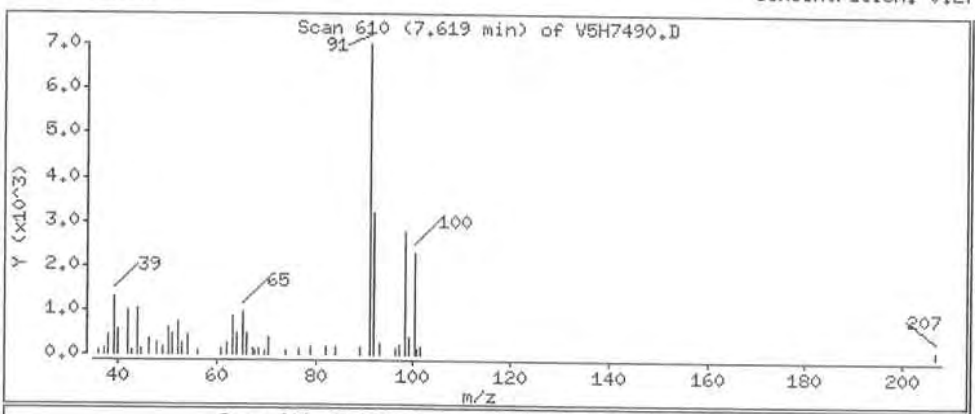
Operator: HZA SRC: LIMS

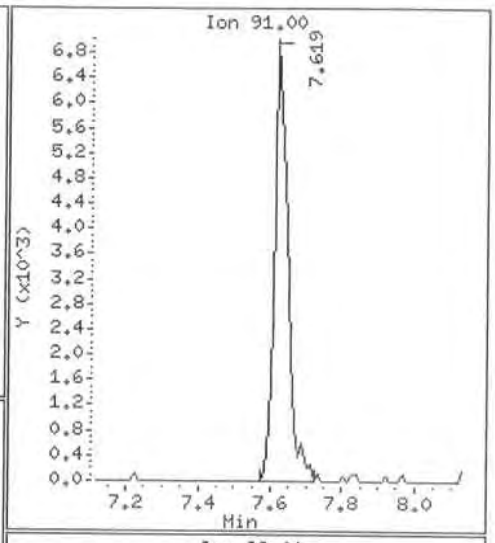
Column phase: DB-624

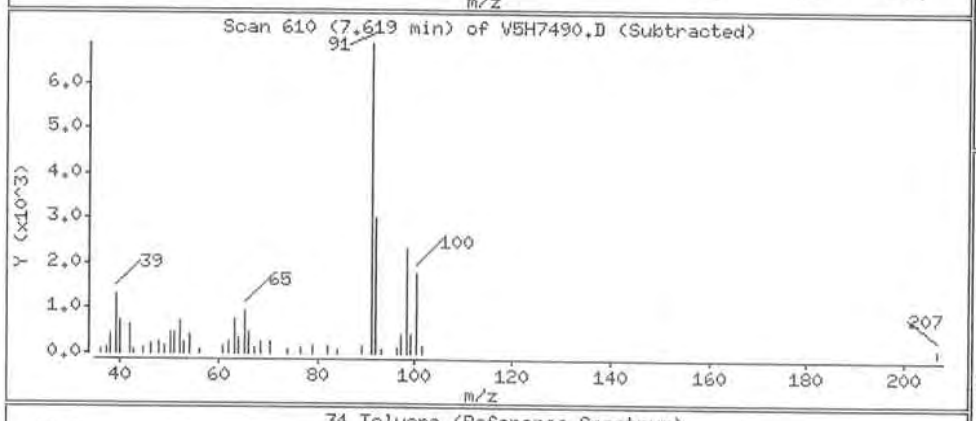
Column diameter: 0.25

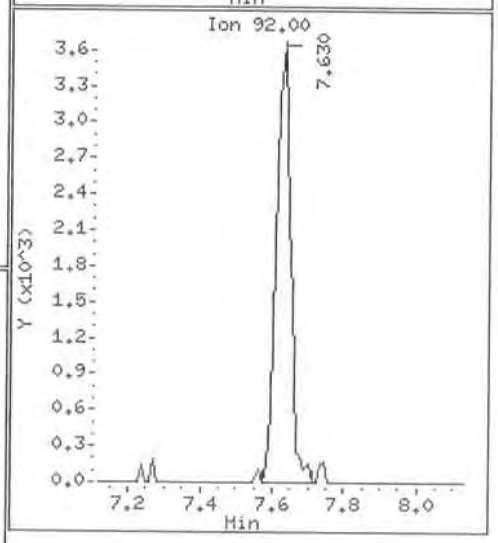
34 Toluene

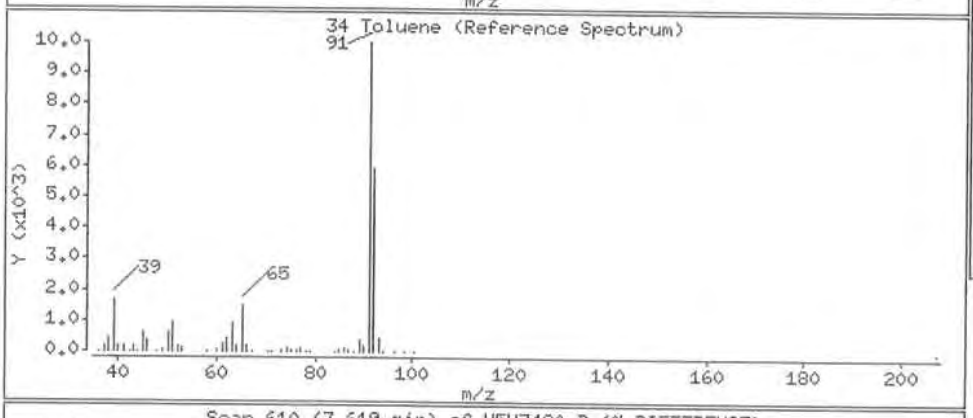
Concentration: 0.27 ug/L

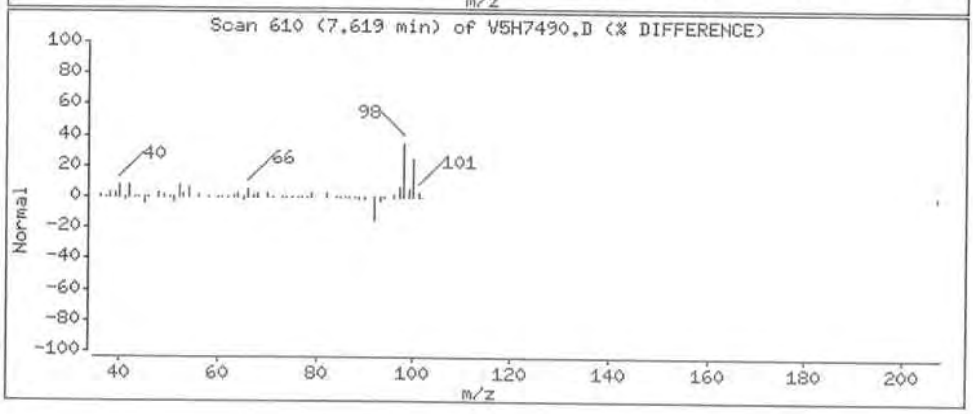












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Date : 15-MAY-2007 19:52

Client ID: Y3AN6

Instrument: V5.i

Sample Info: 25ML,F0595-16A,,29901

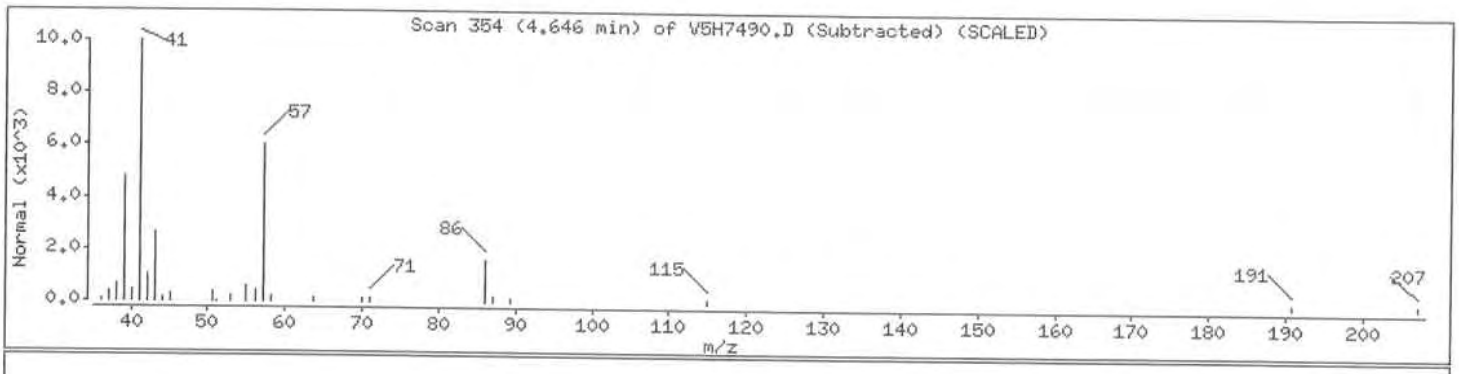
Purge Volume: 25.0

Operator: HZA 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.

Y3AN7

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7498.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	2.0	
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	0.22	J
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	14	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.47	J
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN7

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7498.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
79-01-6	Trichloroethene	73	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	0.64	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	3.0	
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.

Y3AN7

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-17A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7498.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

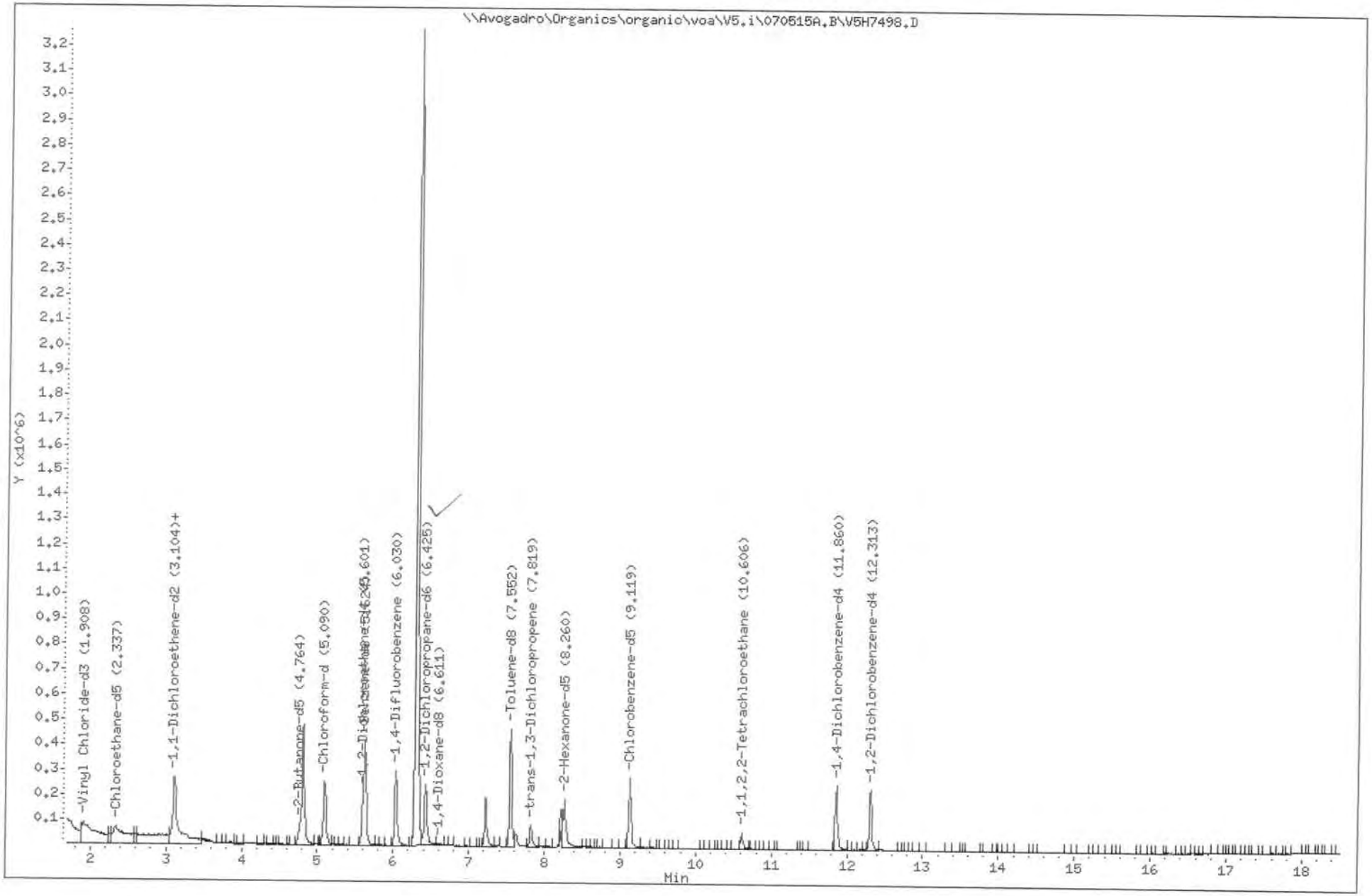
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D
Date : 15-MAY-2007 23:35
Client ID: Y3AN7
Sample Info: 25ML,F0595-17A,,29931
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0170

Data File: V5H7498.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D
Lab Smp Id: F0595-17A Client Smp ID: Y3AN7
Inj Date : 15-MAY-2007 23:35
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-17A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.907	1.916	(0.316)	153709	5.20206	5.2
$ 80 Chloroethane-d5	69	2.337	2.322	(0.388)	84845	7.04117	7.0(R)
$ 81 1,1-Dichloroethene-d2	63	3.103	3.112	(0.515)	231085	5.30394	5.3(R)
7 1,1-Dichloroethene	96	3.115	3.123	(0.517)	29988	1.98919	2.0(Q)
13 trans-1,2-Dichloroethene	96	3.846	3.855	(0.638)	3904	0.21532	0.22(a)
$ 82 2-Butanone-d5	46	4.764	4.761	(0.790)	145991	48.0031	48
17 cis-1,2-Dichloroethene	96	4.810	4.807	(0.798)	224959	14.3022	14
$ 83 Chloroform-d	84	5.089	5.098	(0.844)	244313	5.84025	5.8(Q)
19 Chloroform	83	5.112	5.109	(0.848)	15546	0.46714	0.47(aQ)
$ 23 1,2-Dichloroethane-d4	65	5.600	5.597	(0.929)	97592	5.93334	5.9
$ 84 Benzene-d6	84	5.623	5.620	(0.616)	398851	5.72379	5.7
* 26 1,4-Difluorobenzene	114	6.030	6.038	(1.000)	250797	5.00000	
27 Trichloroethene ✓	95	6.297	6.305	(0.690)	1359705	72.5550	73(A)
$ 85 1,2-Dichloropropane-d6	67	6.425	6.433	(0.704)	103854	5.83496	5.8
$ 94 1,4-Dioxane-d8	96	6.622	6.619	(1.098)	11502	340.063	340(Q)
$ 33 Toluene-d8	98	7.551	7.548	(0.827)	349837	5.74471	5.7
34 Toluene	91	7.621	7.618	(0.835)	38419	0.64252	0.64
$ 86 trans-1,3-Dichloropropene-d4	79	7.818	7.815	(0.856)	60496	5.18582	5.2
37 Tetrachloroethene ✓	164	8.225	8.221	(0.901)	40732	3.01343	3.0
$ 87 2-Hexanone-d5	63	8.259	8.256	(0.905)	77534	53.5785	54
* 42 Chlorobenzene-d5	117	9.130	9.127	(1.000)	175229	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.605	10.614	(1.162)	39612	5.75704	5.8(Q)

WL
05/17/07

Data File: V5H7498.D
Report Date: 17-May-2007 11:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	11.860	11.856	(1.000)	81501	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.312	12.309	(1.038)	74892	6.50515	6.5(Q)

QC Flag Legend

VFZA

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: V5H7498.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D
Lab Smp Id: F0595-17A Client Smp ID: Y3AN7
Inj Date : 15-MAY-2007 23:35
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-17A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

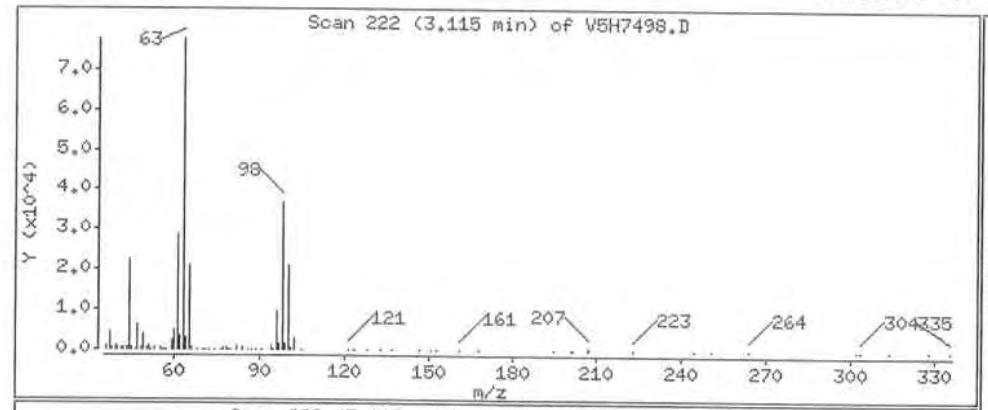
Operator: HZA SRC: LIMS

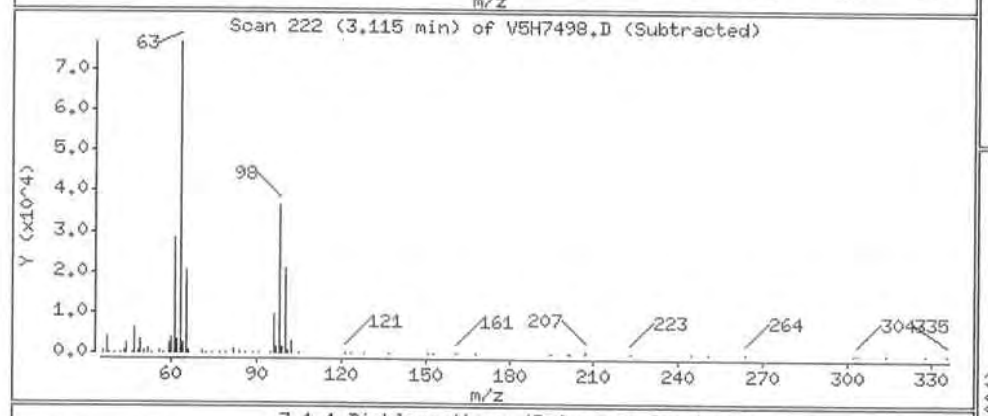
Column phase: DB-624

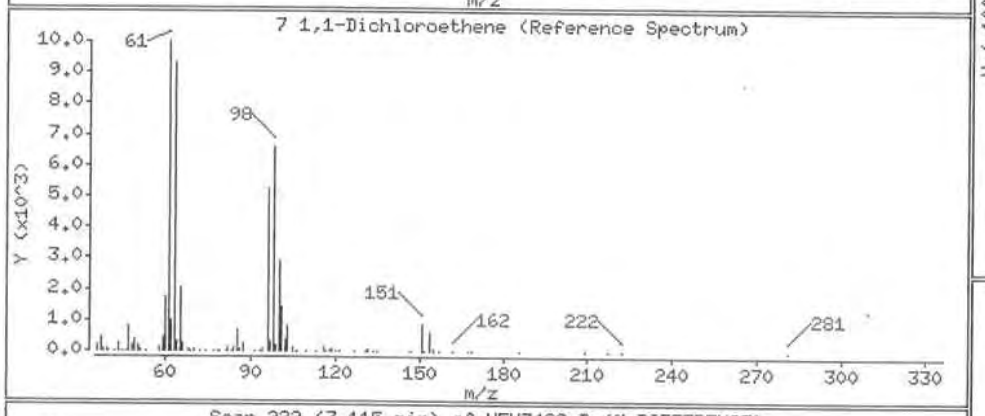
Column diameter: 0.25

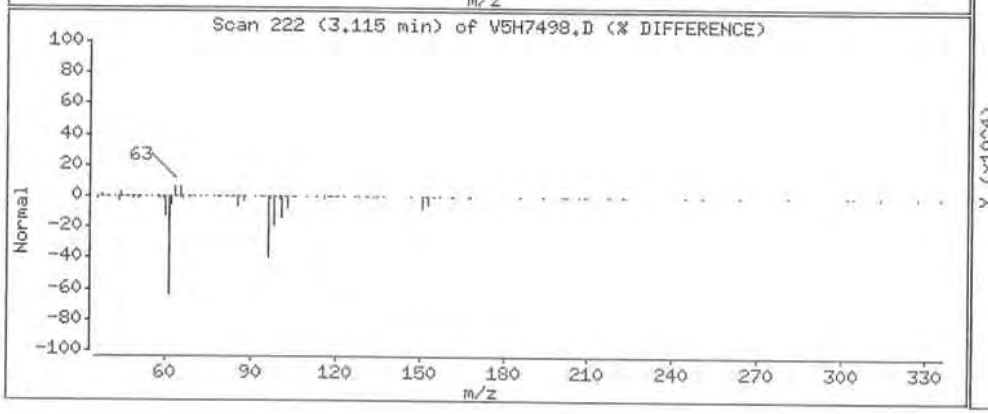
7 1,1-Dichloroethene

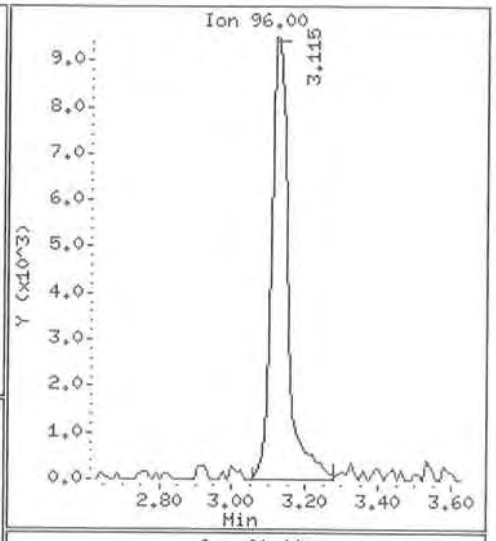
Concentration: 2.0 ug/L

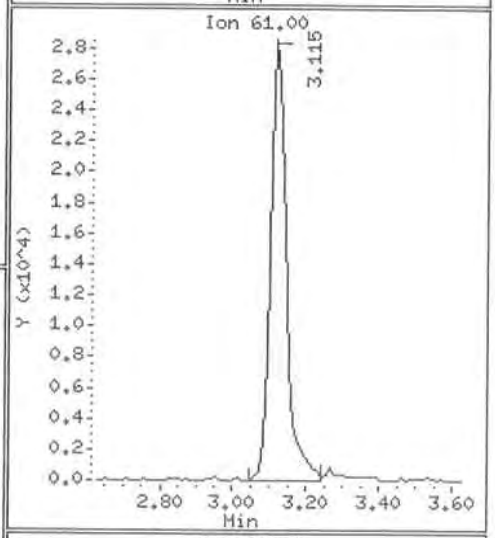


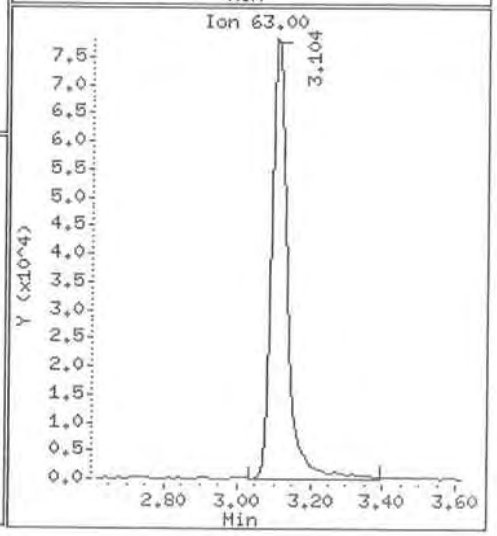












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

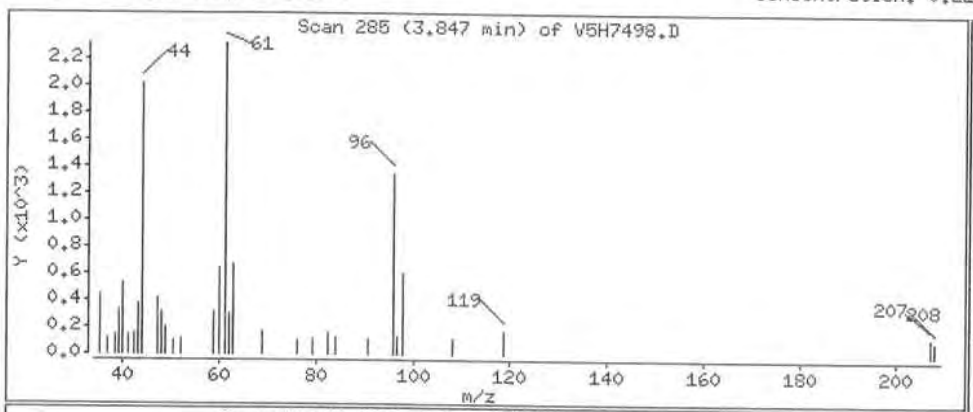
Operator: HZA SRC: LIMS

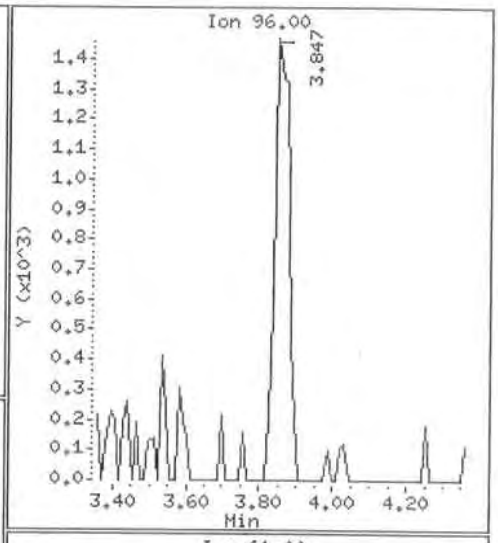
Column phase: DB-624

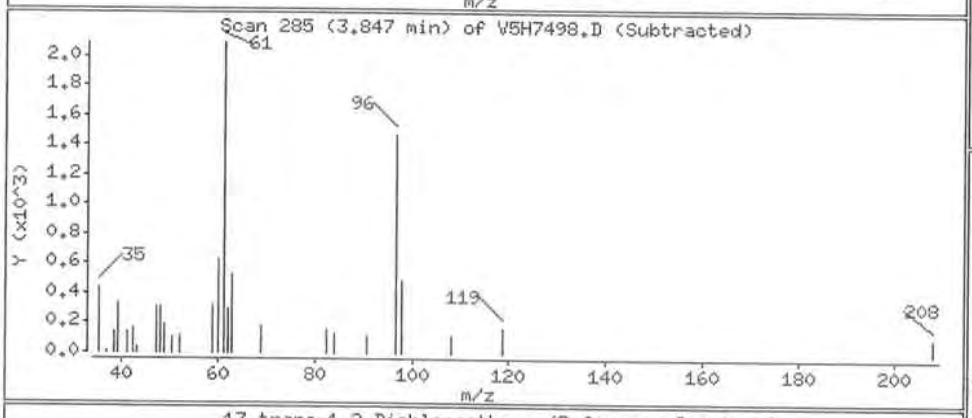
Column diameter: 0.25

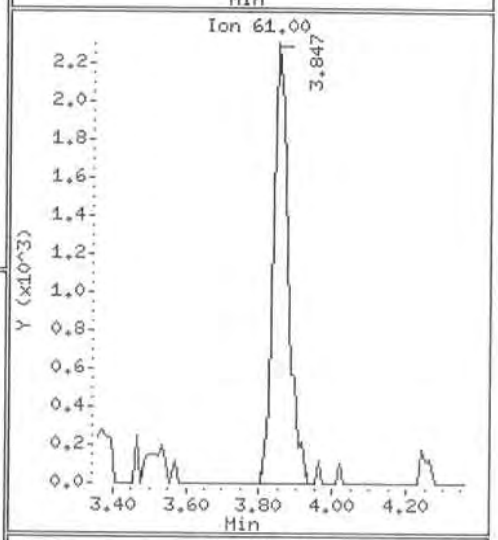
13 trans-1,2-Dichloroethene

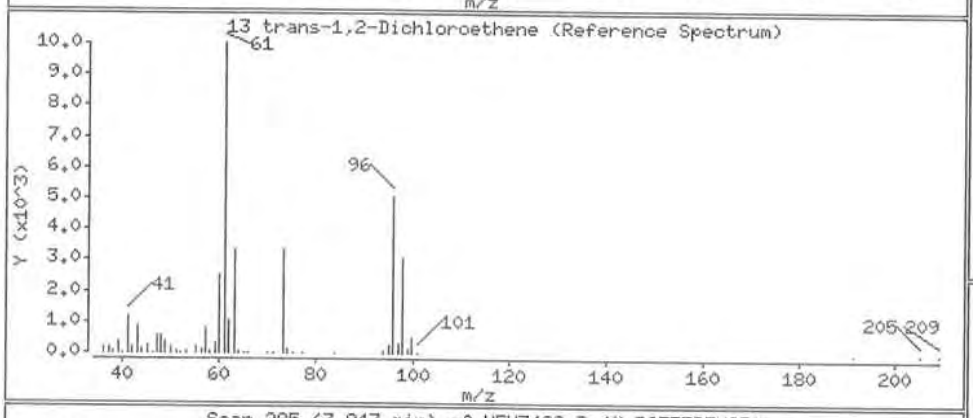
Concentration: 0.22 ug/L

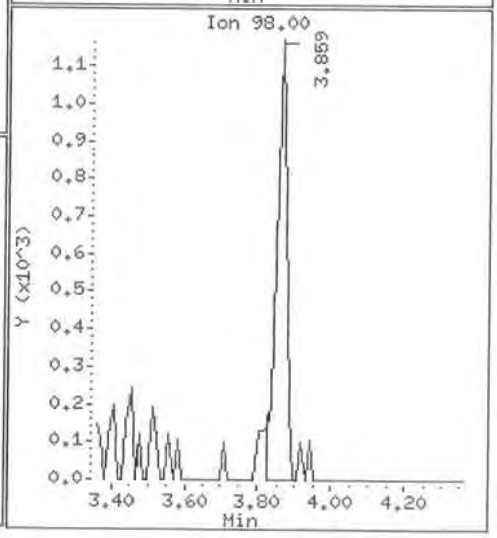


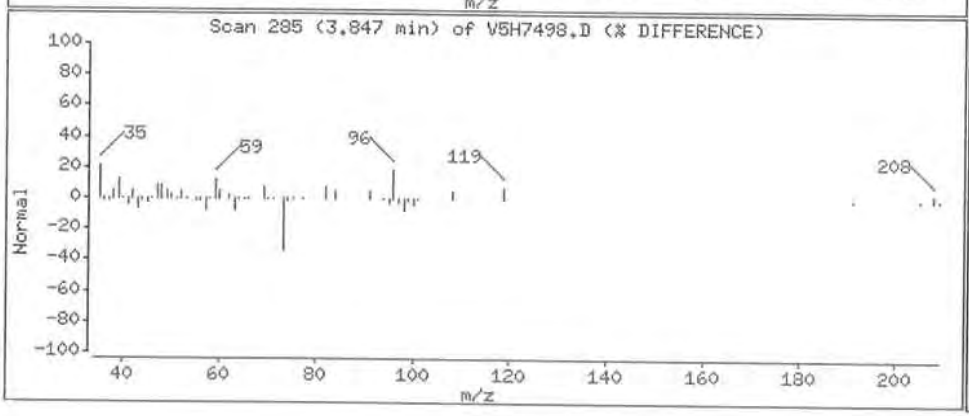












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

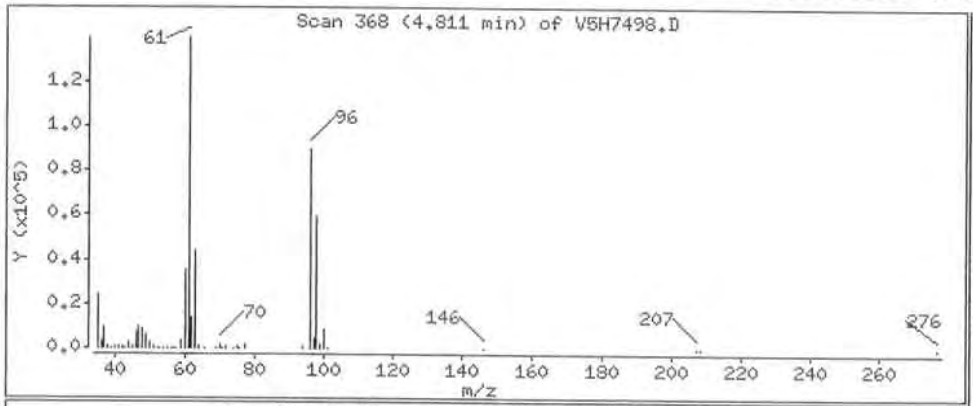
Operator: HZA SRC: LIMS

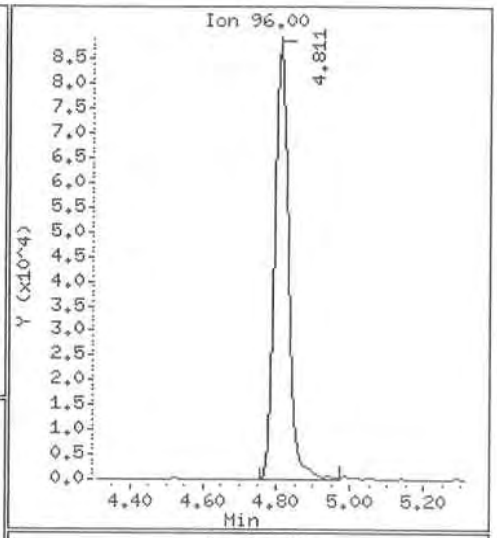
Column phase: DB-624

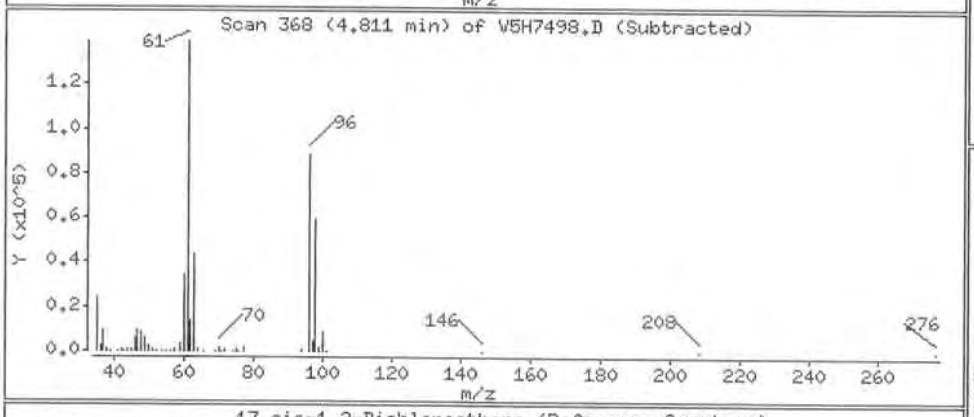
Column diameter: 0.25

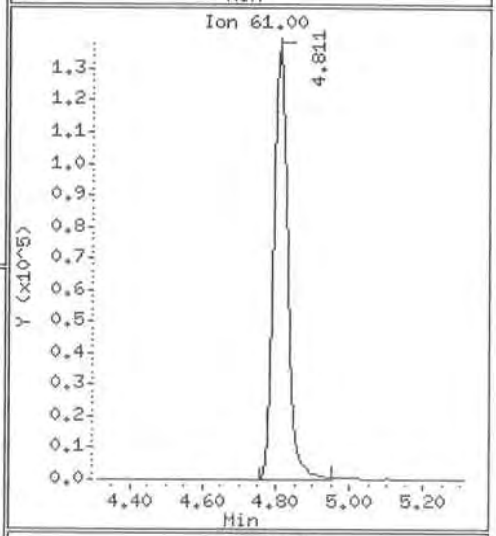
17 cis-1,2-Dichloroethene

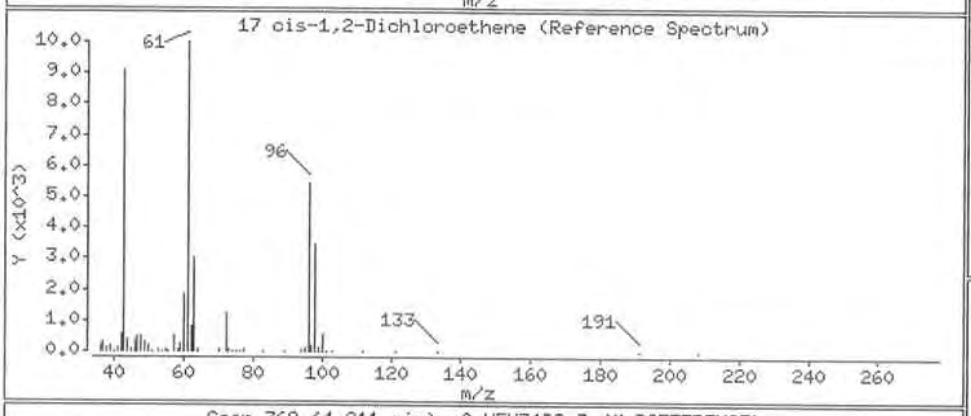
Concentration: 14 ug/L

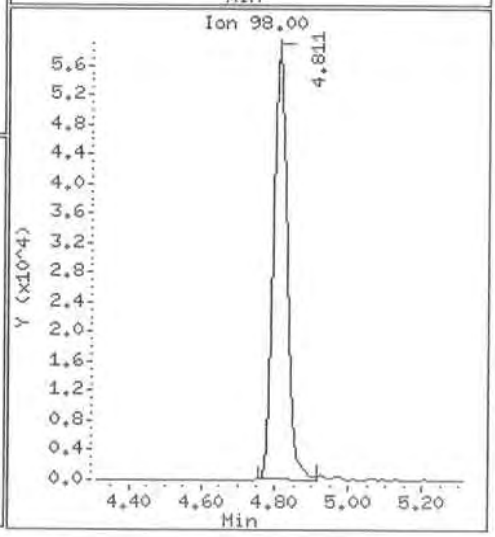


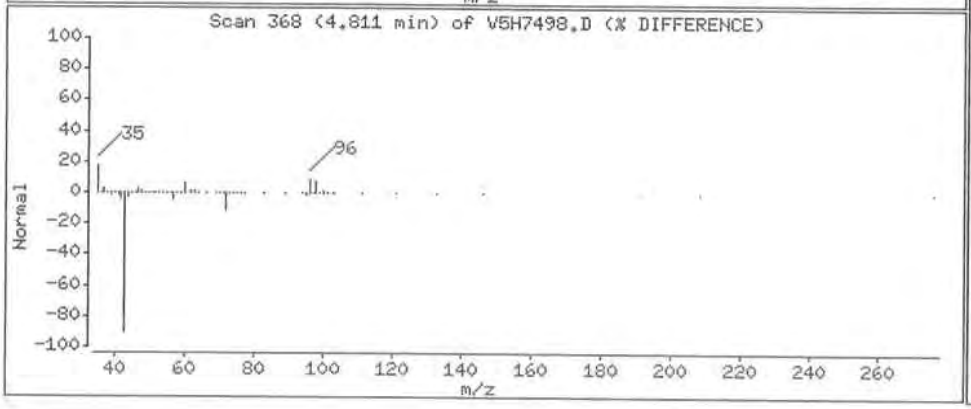












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

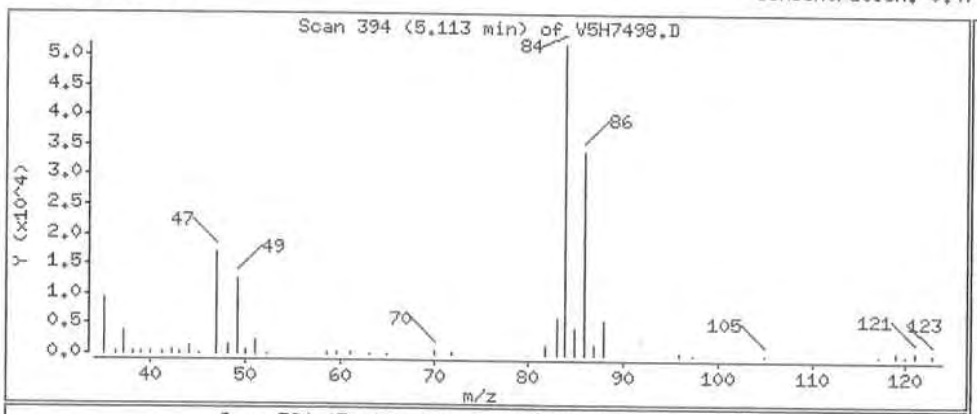
Operator: HZA SRC: LIMS

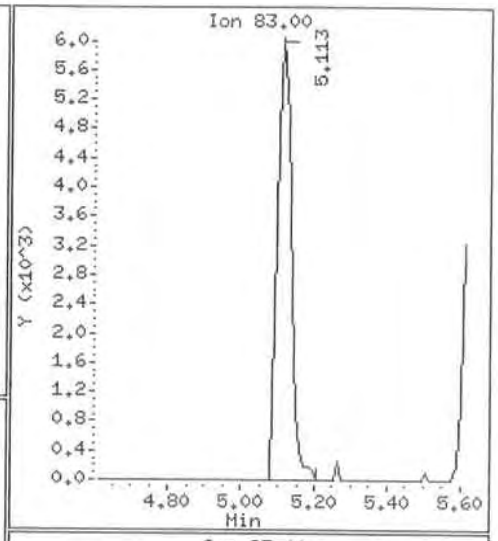
Column phase: DB-624

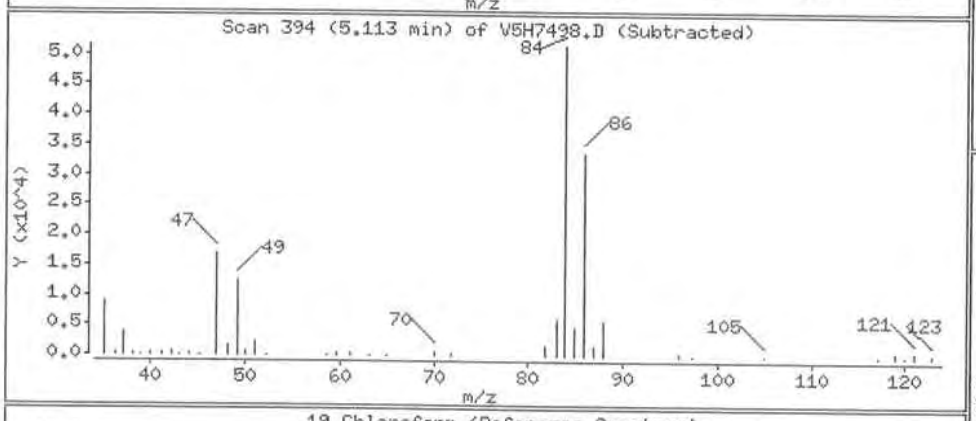
Column diameter: 0.25

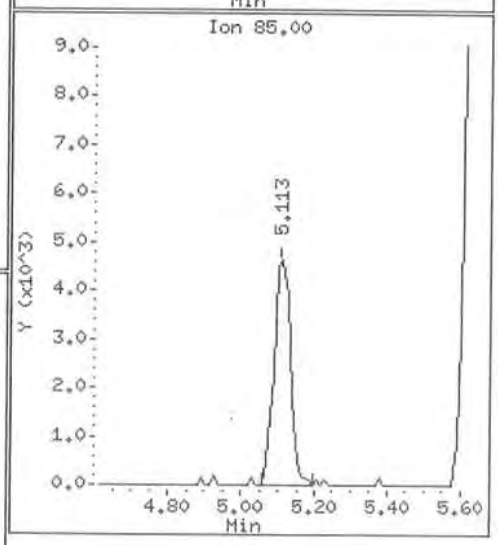
19 Chloroform

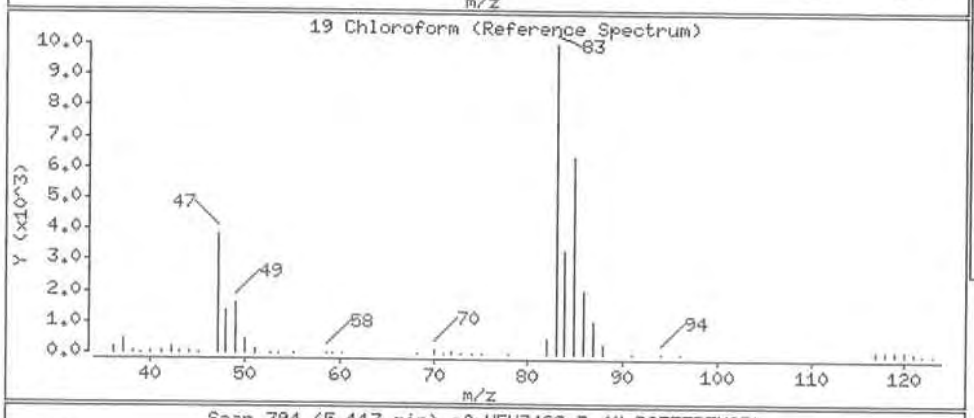
Concentration: 0.47 ug/L

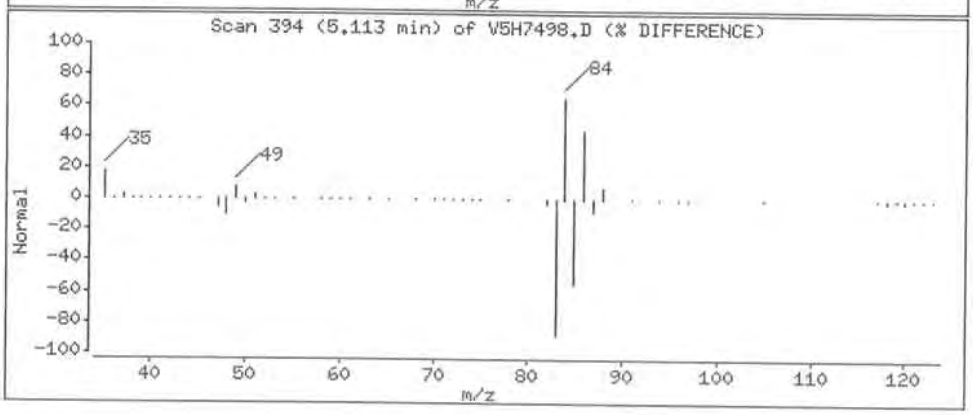












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

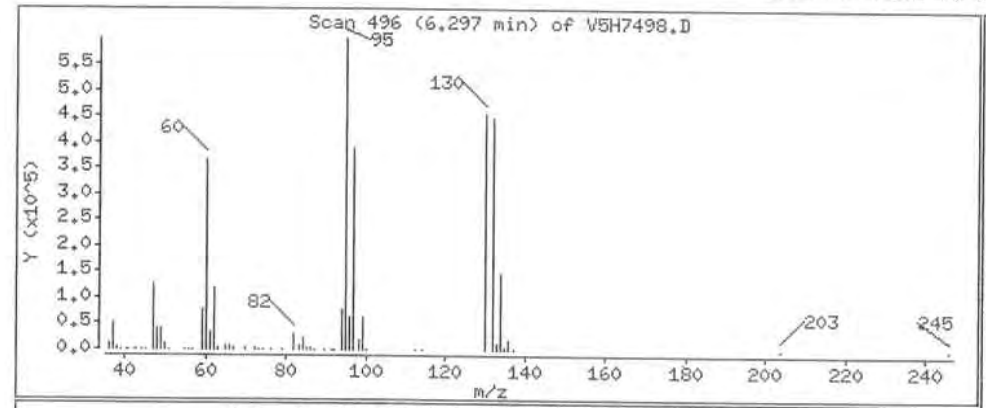
Operator: HZA SRC: LIMS

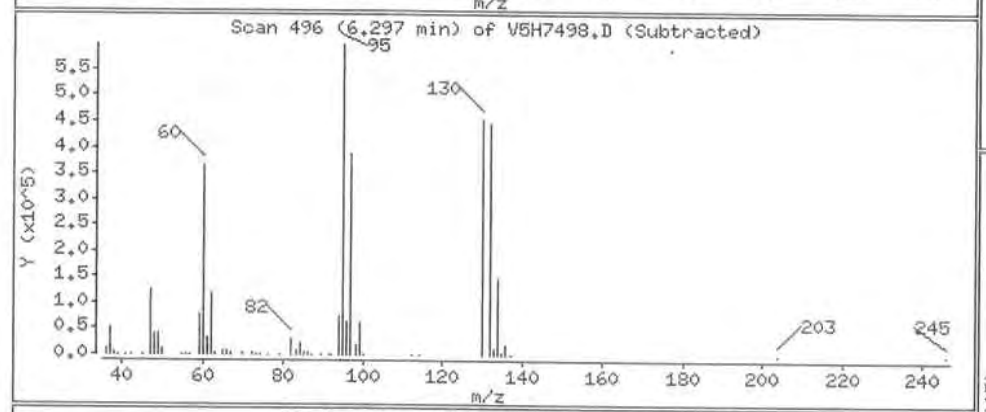
Column phase: DB-624

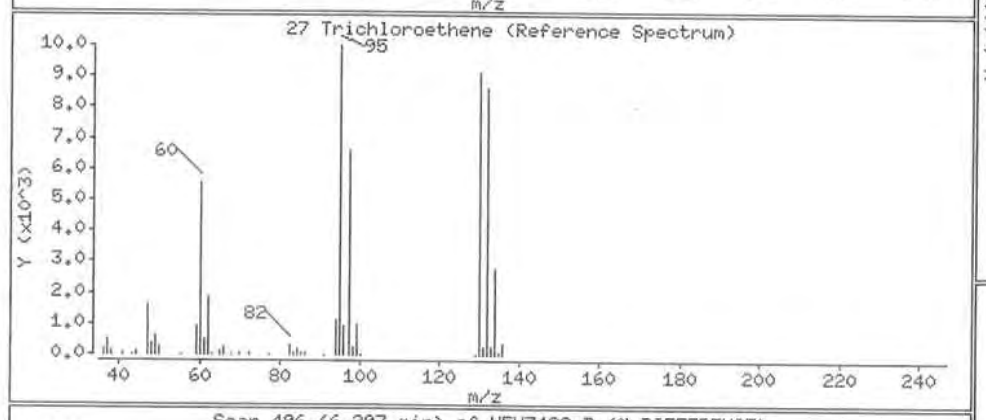
Column diameter: 0.25

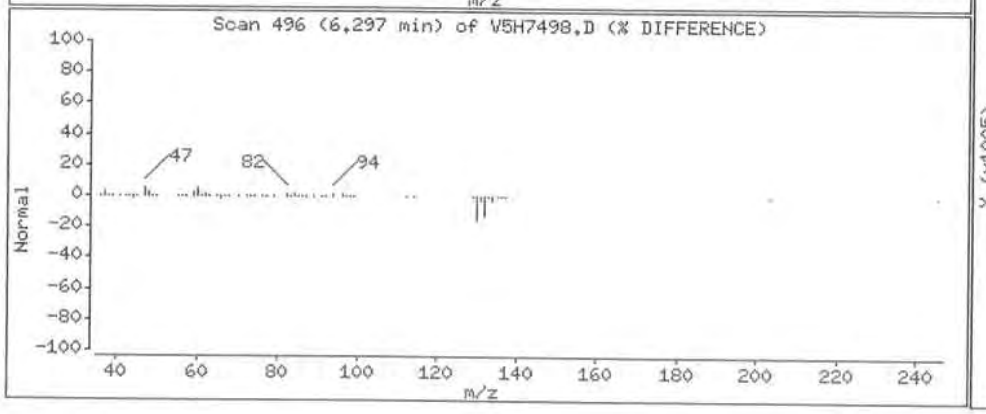
27 Trichloroethene

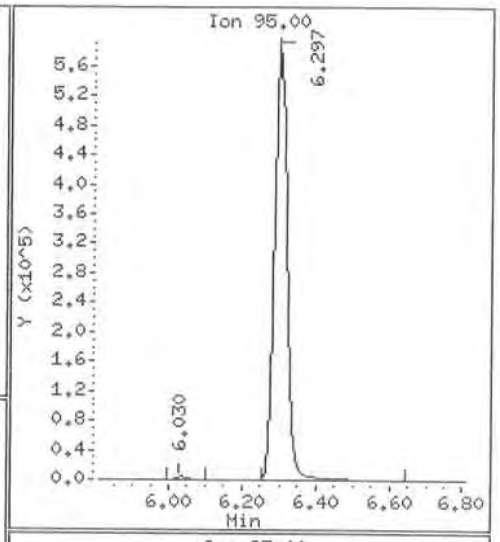
Concentration: 73 ug/L

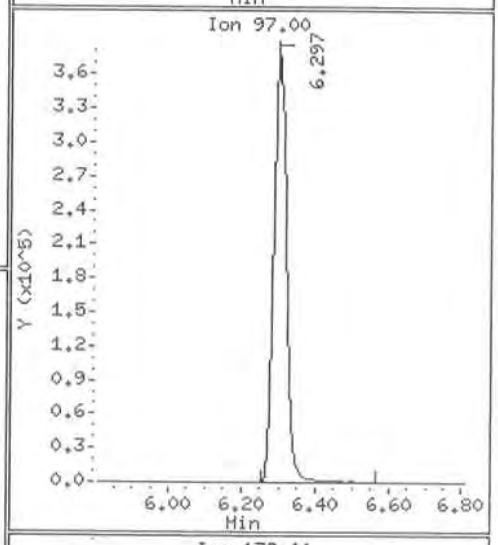


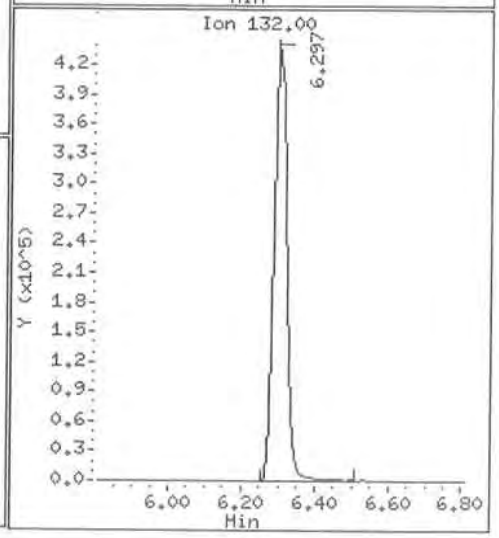












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

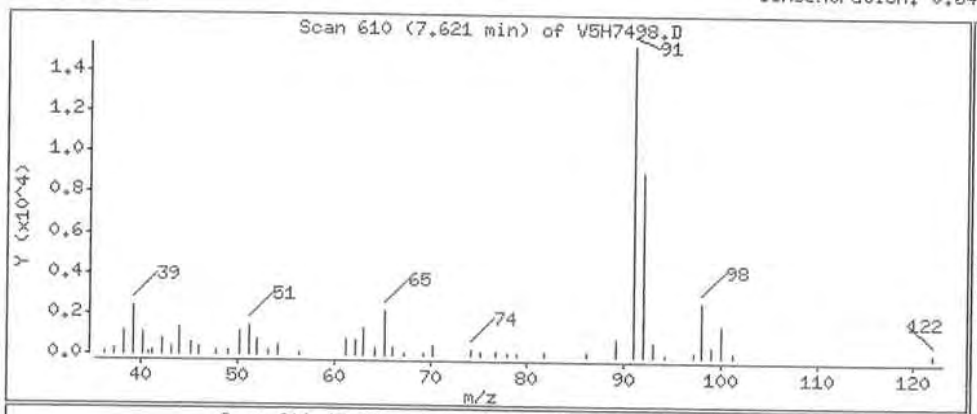
Operator: HZA SRC: LIMS

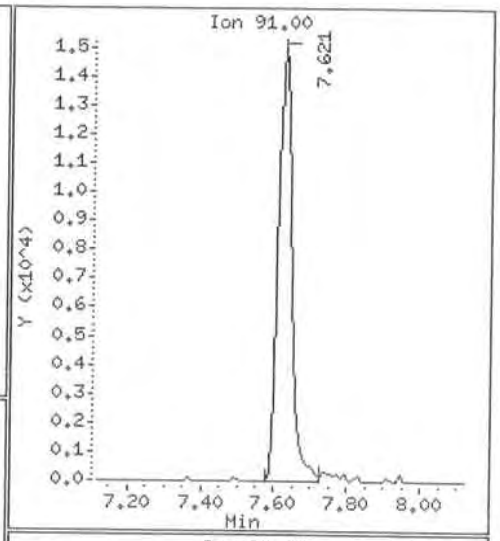
Column phase: DB-624

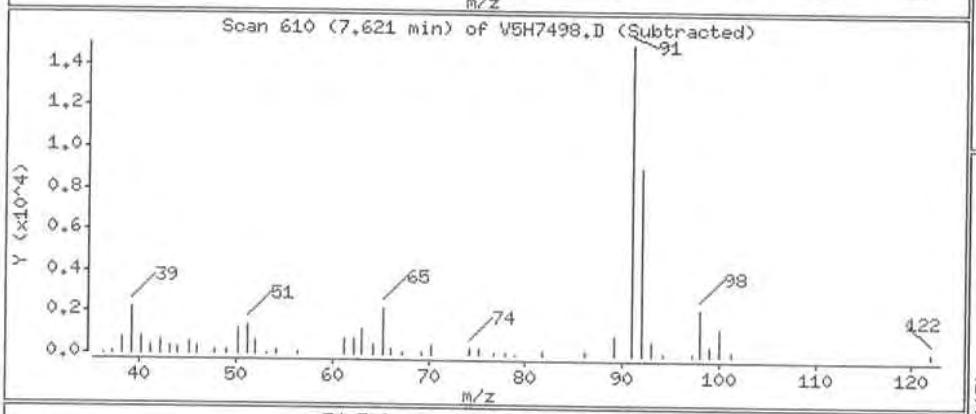
Column diameter: 0.25

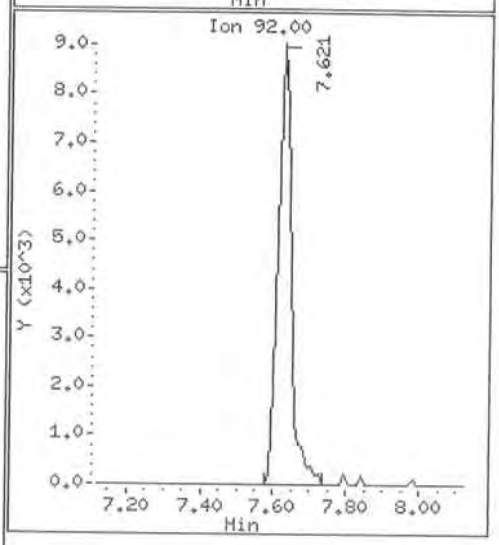
34 Toluene

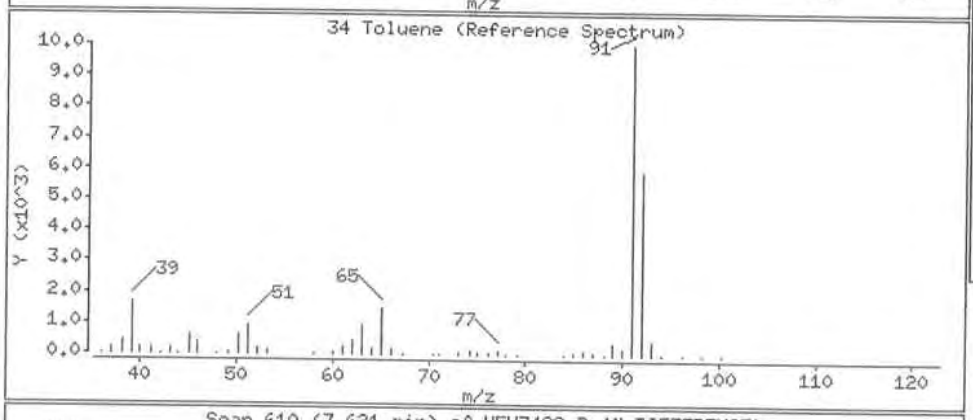
Concentration: 0.64 ug/L

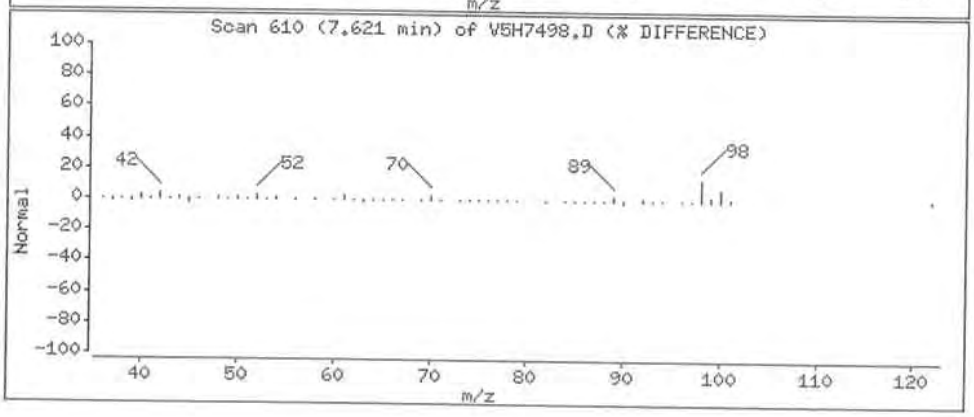












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7498.D

Date : 15-MAY-2007 23:35

Client ID: Y3AN7

Instrument: V5.i

Sample Info: 25ML,F0595-17A,,29931

Purge Volume: 25.0

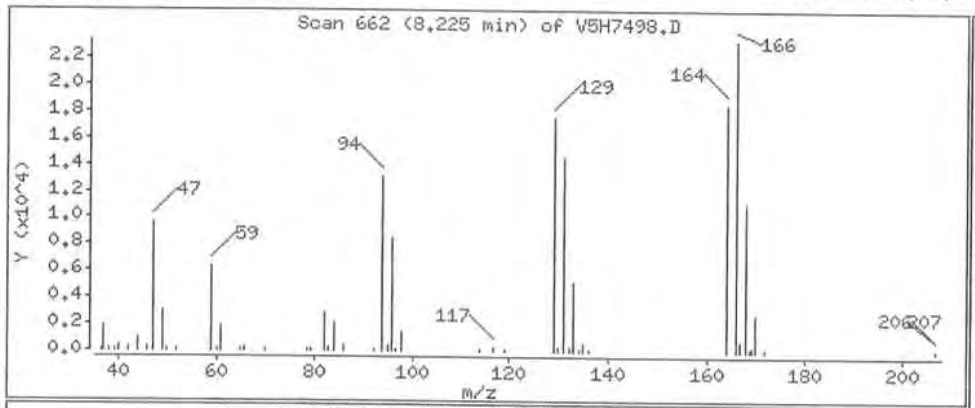
Operator: HZA SRC: LIMS

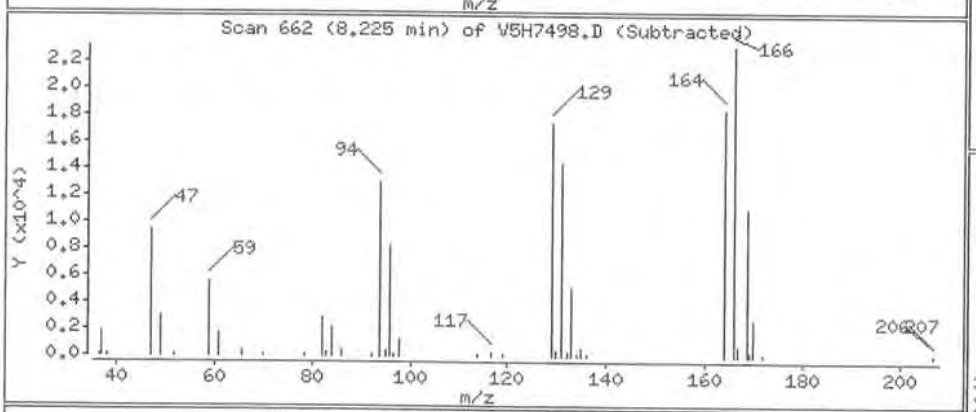
Column phase: DB-624

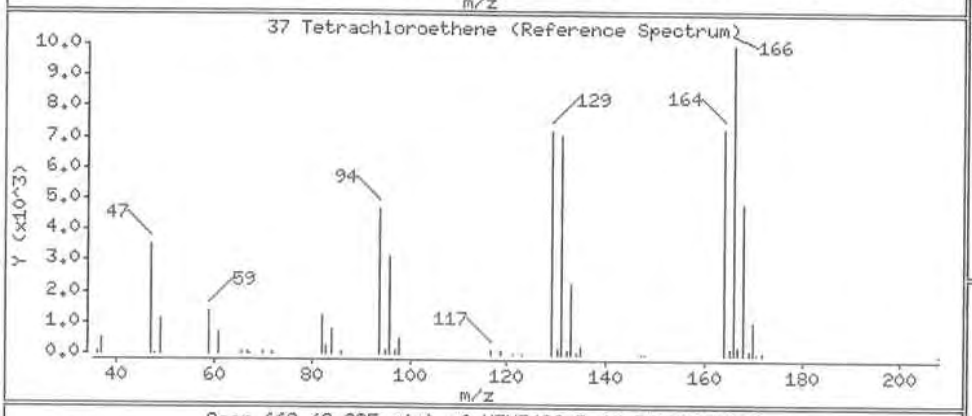
Column diameter: 0.25

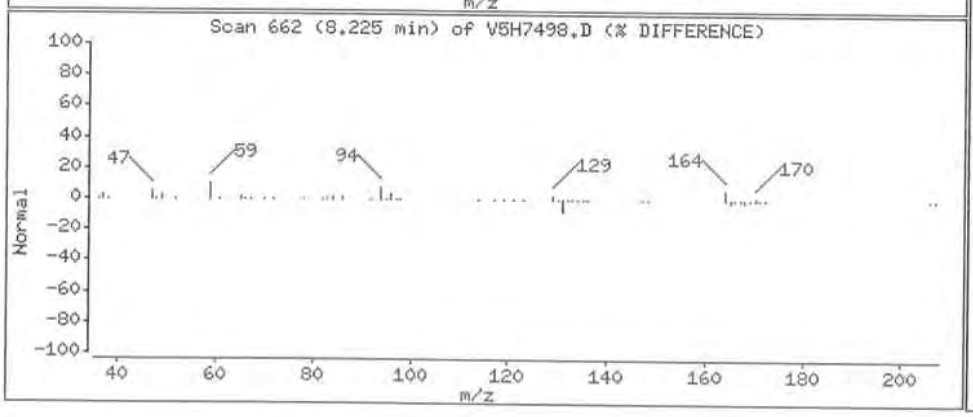
37 Tetrachloroethene

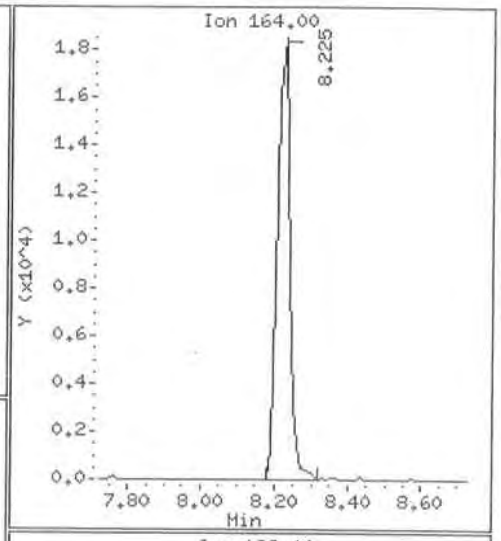
Concentration: 3.0 ug/L

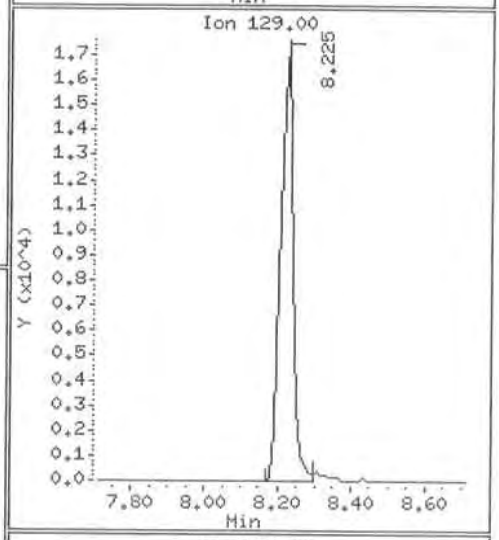


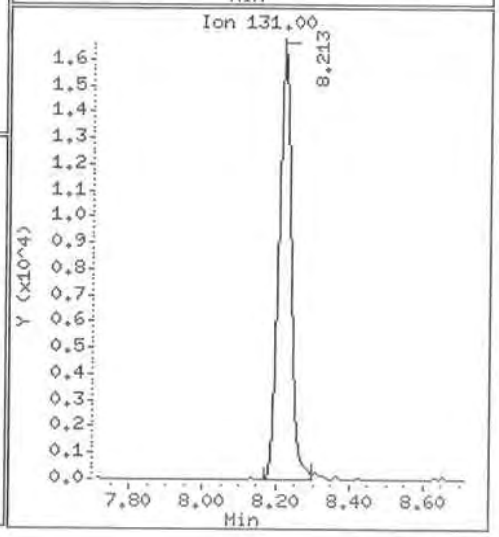












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN7DL

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-17ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7521.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	4.0	U
74-87-3	Chloromethane	4.0	U
75-01-4	Vinyl chloride	4.0	U
74-83-9	Bromomethane	4.0	U
75-00-3	Chloroethane	4.0	U
75-69-4	Trichlorofluoromethane	4.0	U
75-35-4	1,1-Dichloroethene	2.8	DJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U
67-64-1	Acetone	40	U
75-15-0	Carbon disulfide	4.0	U
79-20-9	Methyl acetate	4.0	U
75-09-2	Methylene chloride	4.0	U
156-60-5	trans-1,2-Dichloroethene	4.0	U
1634-04-4	Methyl tert-butyl ether	4.0	U
75-34-3	1,1-Dichloroethane	4.0	U
156-59-2	cis-1,2-Dichloroethene	16	D
78-93-3	2-Butanone	40	U
74-97-5	Bromochloromethane	4.0	U
67-66-3	Chloroform	4.0	U
71-55-6	1,1,1-Trichloroethane	4.0	U
110-82-7	Cyclohexane	4.0	U
56-23-5	Carbon tetrachloride	4.0	U
71-43-2	Benzene	4.0	U
107-06-2	1,2-Dichloroethane	4.0	U
123-91-1	1,4-Dioxane	160	U
75-65-0	2-Methyl-2-Propanol	40	U

SL, 7/18/07.

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN7DL

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-17ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7521.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	79	D
108-87-2	Methylcyclohexane	4.0	U
78-87-5	1,2-Dichloropropane	4.0	U
75-27-4	Bromodichloromethane	4.0	U
10061-01-5	cis-1,3-Dichloropropene	4.0	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	4.0	U
10061-02-6	trans-1,3-Dichloropropene	4.0	U
79-00-5	1,1,2-Trichloroethane	4.0	U
127-18-4	Tetrachloroethene	3.4	DJ
591-78-6	2-Hexanone	40	U
124-48-1	Dibromochloromethane	4.0	U
106-93-4	1,2-Dibromoethane	4.0	U
108-90-7	Chlorobenzene	4.0	U
100-41-4	Ethylbenzene	4.0	U
179601-23-1	m,p-Xylene	4.0	U
95-47-6	o-Xylene	4.0	U
100-42-5	Styrene	4.0	U
75-25-2	Bromoform	4.0	U
98-82-8	Isopropylbenzene	4.0	U
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U
541-73-1	1,3-Dichlorobenzene	4.0	U
106-46-7	1,4-Dichlorobenzene	4.0	U
95-50-1	1,2-Dichlorobenzene	4.0	U
96-12-8	1,2-Dibromo-3-chloropropane	4.0	U
120-82-1	1,2,4-Trichlorobenzene	4.0	U
87-61-6	1,2,3-Trichlorobenzene	4.0	U

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

EPA SAMPLE NO.

Y3AN7DL

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-17ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7521.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 8.0

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

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

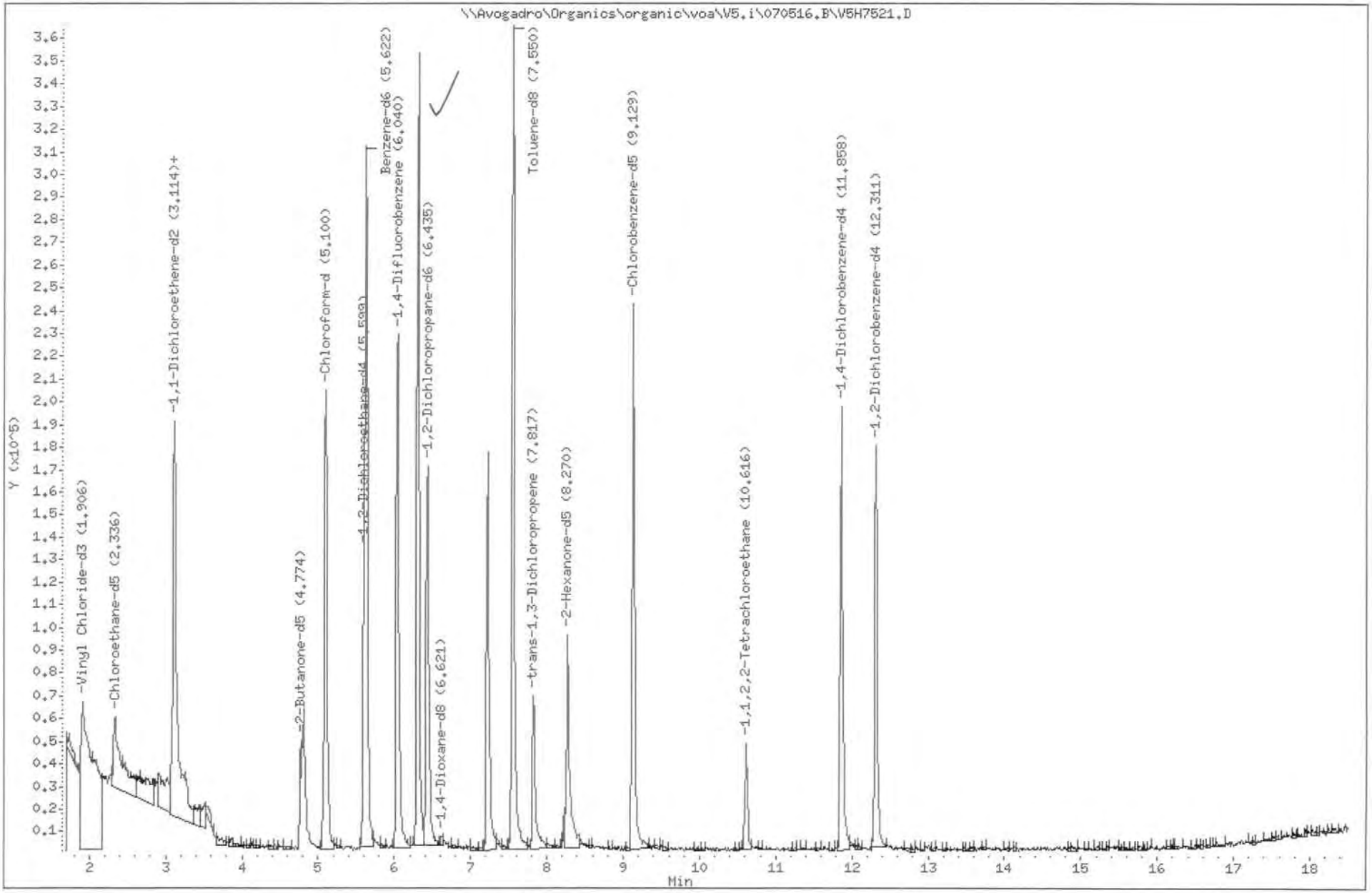
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D
Date : 16-MAY-2007 13:38
Client ID: Y3AN7DL
Sample Info: 25ML,F0595-17ADL,,29944,8
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D
Lab Smp Id: F0595-17ADL Client Smp ID: Y3AN7DL
Inj Date : 16-MAY-2007 13:38
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-17ADL,,29944,8
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 8.00000
Integrator: HP RTE Compound Sublist: SOM01.0.sub
Target Version: 4.14

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

Name	Value	Description
DF	8.000	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	1.917	1.905	(0.317)	92689	3.88136	3.9
$ 80 Chloroethane-d5	69	2.335	2.323	(0.387)	59067	6.06517	6.1
$ 81 1,1-Dichloroethene-d2	63	3.113	3.101	(0.515)	164078	4.65968	4.7
7 1,1-Dichloroethene	96	3.125	3.124	(0.517)	4302	0.35308	2.8(aQ)
$ 82 2-Butanone-d5	46	4.774	4.762	(0.790)	92149	37.4898	37
17 cis-1,2-Dichloroethene	96	4.809	4.808	(0.796)	25078	1.97275	16
$ 83 Chloroform-d	84	5.099	5.099	(0.844)	197010	5.82710	5.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.598	(0.927)	76252	5.73609	5.7
$ 84 Benzene-d6	84	5.622	5.621	(0.616)	294421	5.31054	5.3
* 26 1,4-Difluorobenzene	114	6.040	6.028	(1.000)	202695	5.00000	
27 Trichloroethene	95	6.307	6.306	(0.691)	147468	9.89047	79
$ 85 1,2-Dichloropropane-d6	67	6.435	6.423	(0.705)	78750	5.56111	5.6
$ 94 1,4-Dioxane-d8	96	6.632	6.608	(1.098)	5945	217.479	220(Q)
$ 33 Toluene-d8	98	7.549	7.549	(0.827)	261205	5.39113	5.4
$ 86 trans-1,3-Dichloropropene-d4	79	7.828	7.816	(0.858)	52804	5.68923	5.7
37 Tetrachloroethene	164	8.223	8.223	(0.901)	4594	0.42718	3.4(a)
$ 87 2-Hexanone-d5	63	8.269	8.257	(0.906)	48218	41.8798	42
* 42 Chlorobenzene-d5	117	9.129	9.128	(1.000)	139415	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.615	10.603	(1.163)	31046	5.67119	5.7
* 78 1,4-Dichlorobenzene-d4	152	11.858	11.857	(1.000)	60758	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.311	12.310	(1.038)	54523	6.35274	6.4(Q)

WL 05/17/07 KC

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D
Report Date: 17-May-2007 14:14

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D
Lab Smp Id: F0595-17ADL Client Smp ID: Y3AN7DL
Inj Date : 16-MAY-2007 13:38
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-17ADL,,29944,8
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 8.00000
Integrator: HP RTE Compound Sublist: SOM01.0.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D

Date : 16-MAY-2007 13:38

Client ID: Y3AN7DL

Instrument: V5.i

Sample Info: 25ML,F0595-17ADL,,29944,8

Purge Volume: 25.0

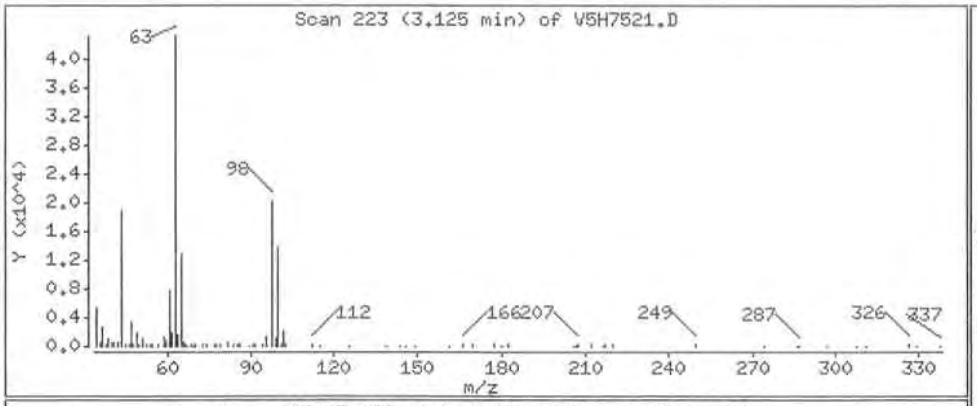
Operator: HZA SRC: LIMS

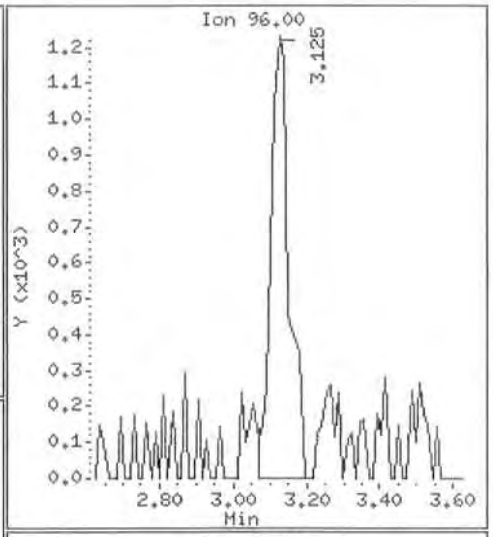
Column phase: DB-624

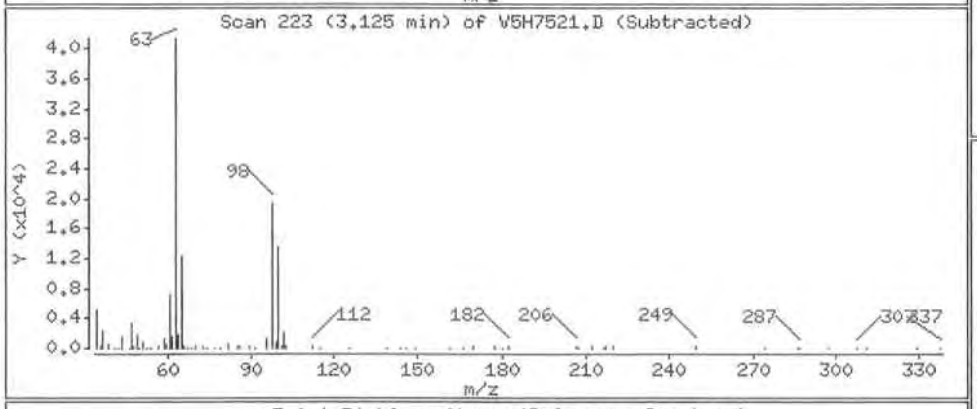
Column diameter: 0.25

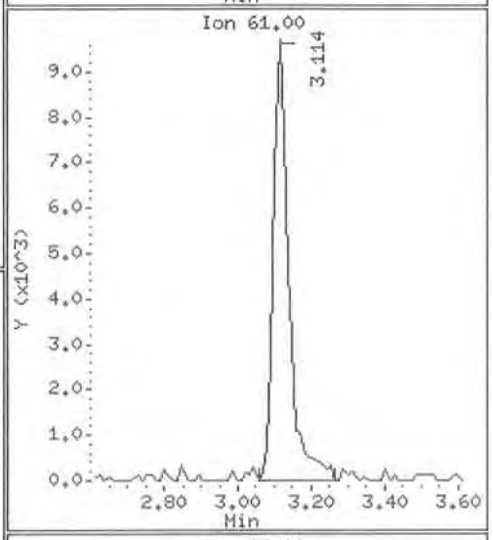
7 1,1-Dichloroethene

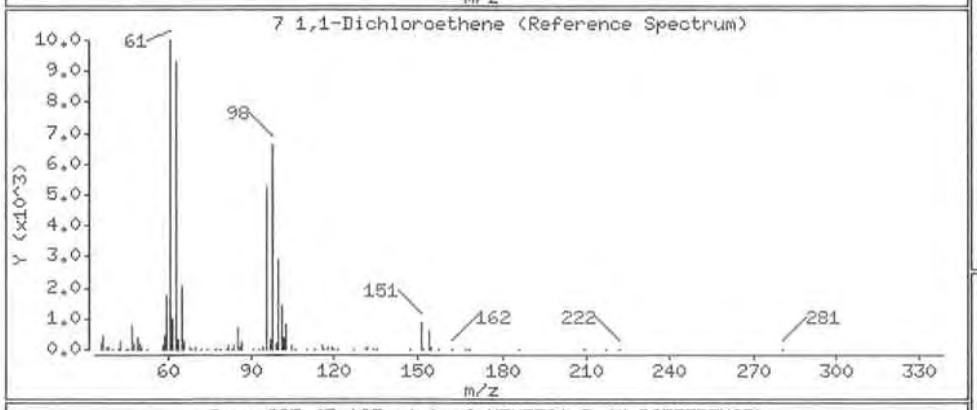
Concentration: 2.8 ug/L

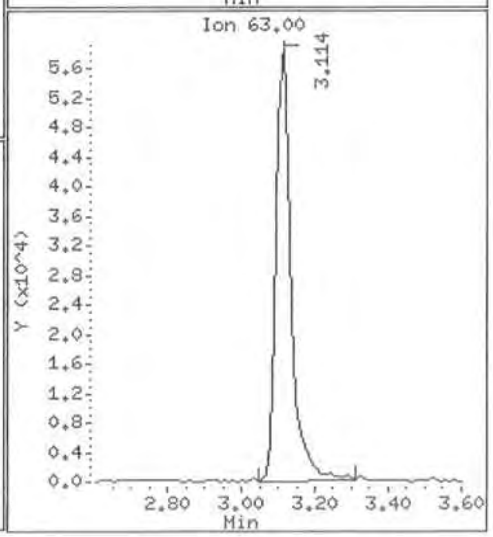


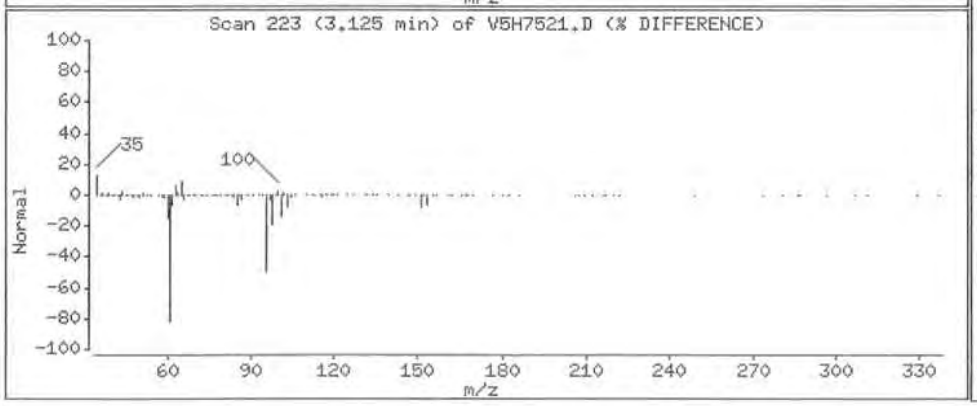












Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D

Date : 16-MAY-2007 13:38

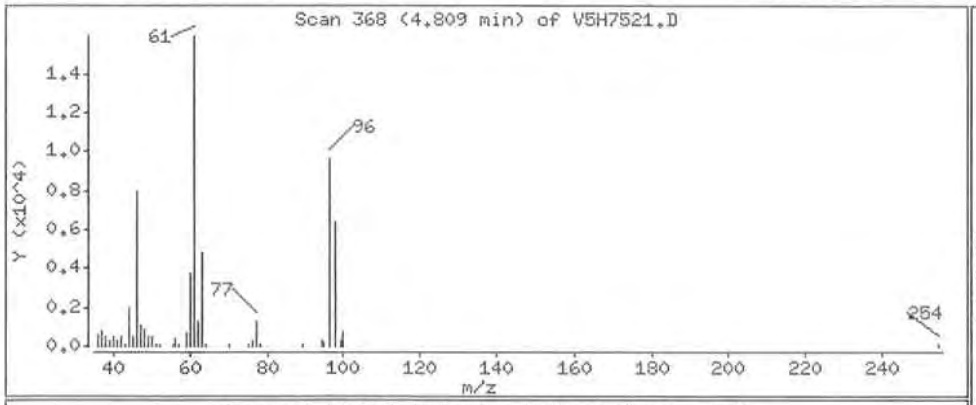
Client ID: Y3AN7DL | Instrument: V5.i

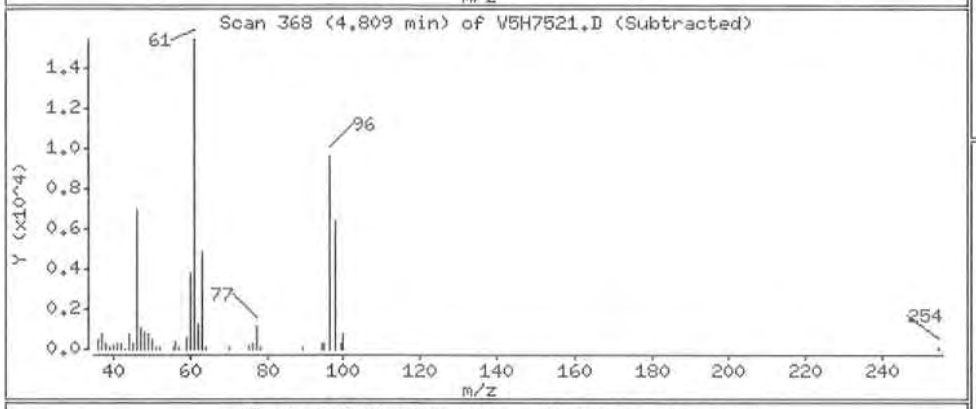
Sample Info: 25ML,F0595-17ADL,,29944,8

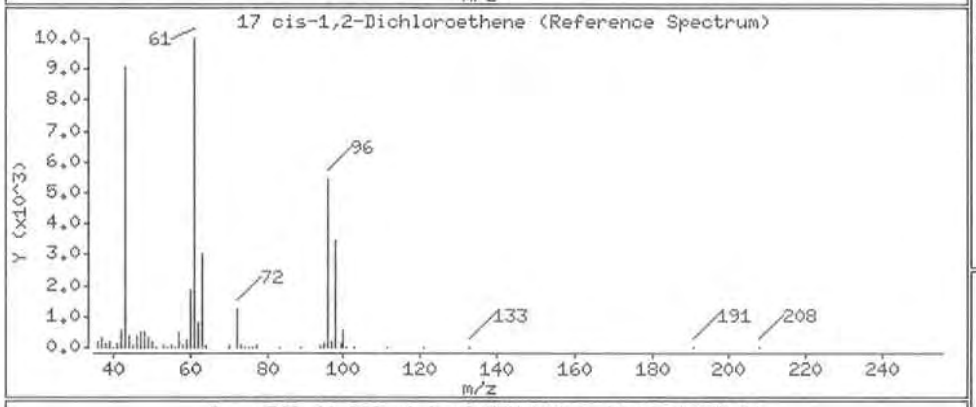
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

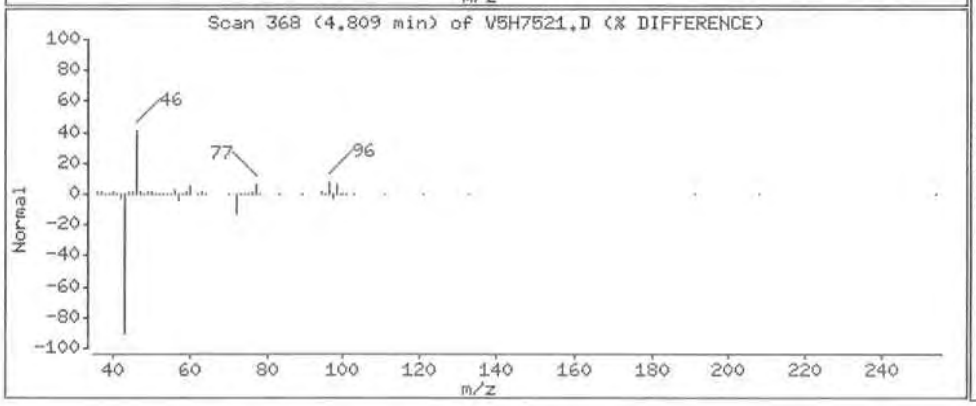
Column phase: DB-624 | Column diameter: 0.25

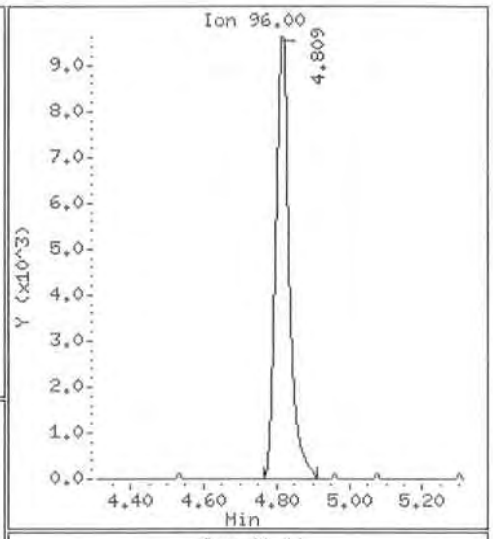
17 cis-1,2-Dichloroethene | Concentration: 16 ug/L

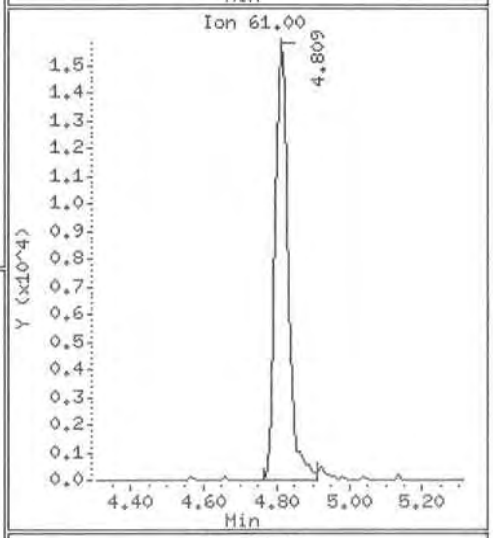


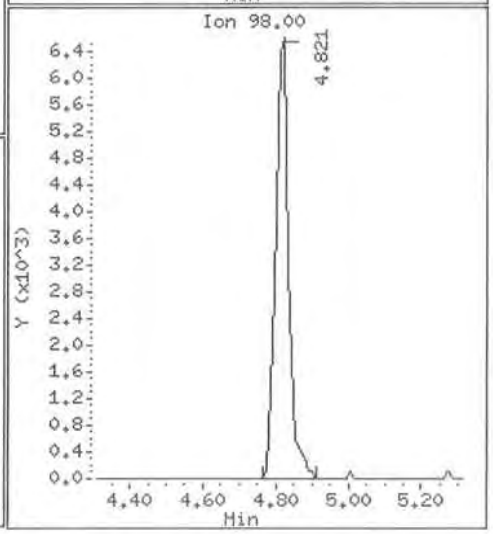












Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D

Date : 16-MAY-2007 13:38

Client ID: Y3AN7DL

Instrument: V5.i

Sample Info: 25ML,F0595-17ADL,,29944,8

Purge Volume: 25.0

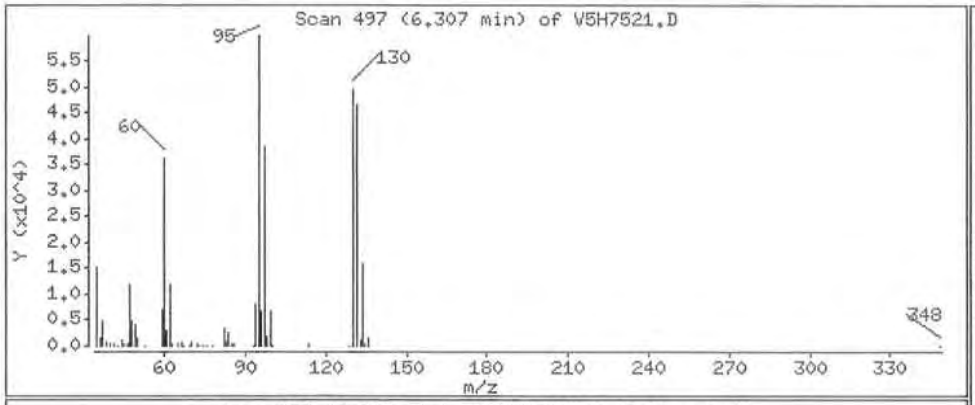
Operator: HZA SRC: LIMS

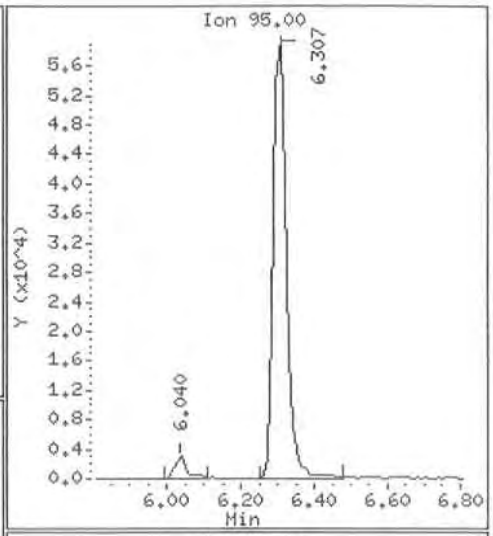
Column phase: DB-624

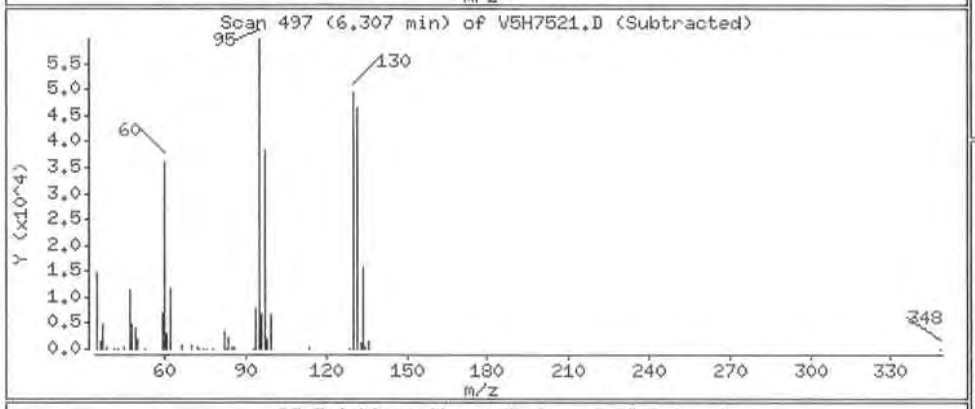
Column diameter: 0.25

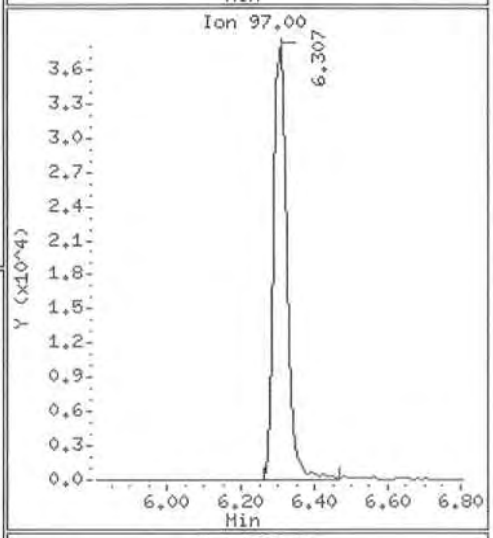
27 Trichloroethene

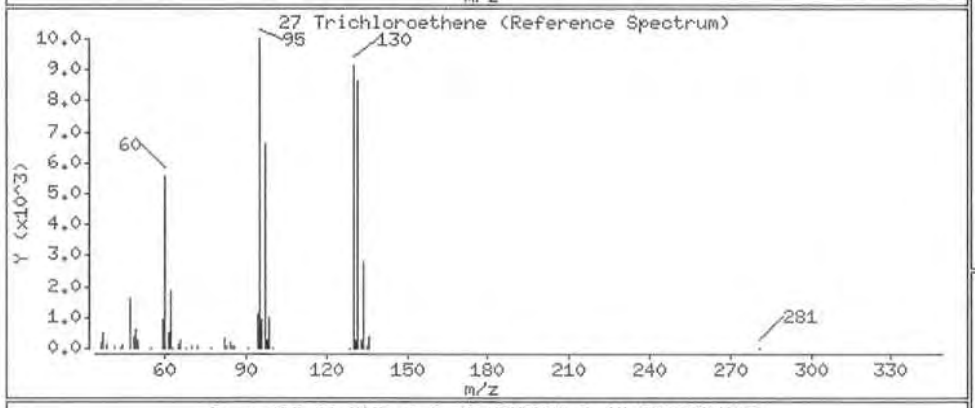
Concentration: 79 ug/L

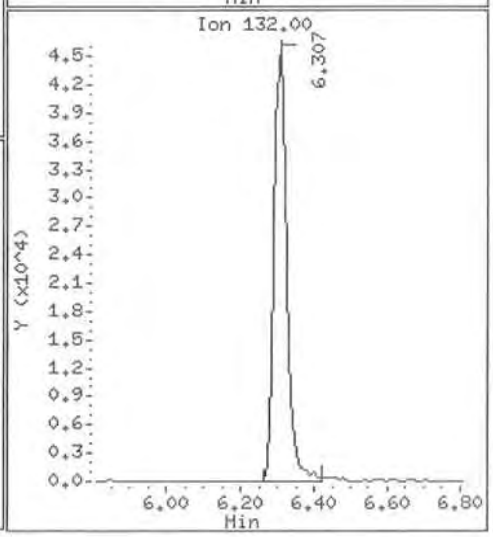


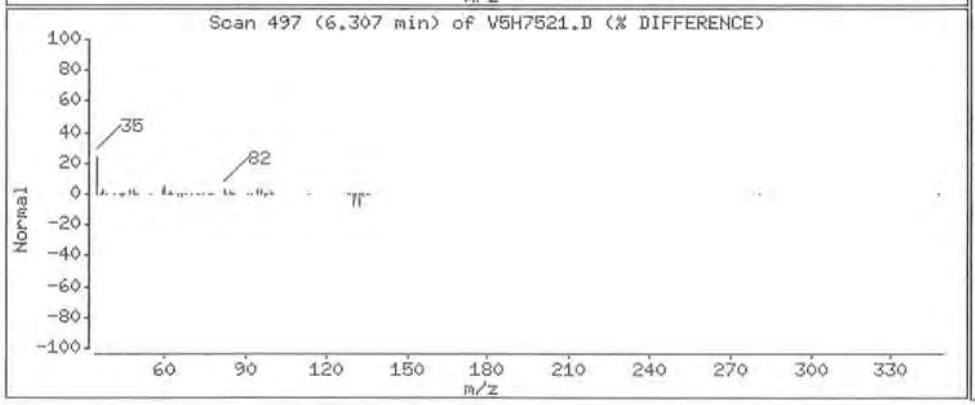












Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7521.D

Date : 16-MAY-2007 13:38

Client ID: Y3AN7DL

Instrument: V5.i

Sample Info: 25ML,F0595-17ADL,,29944.8

Purge Volume: 25.0

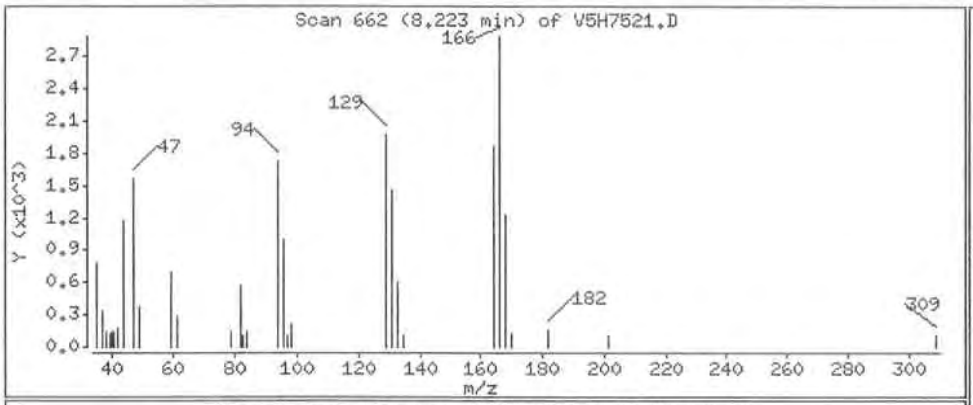
Operator: HZA SRC: LIMS

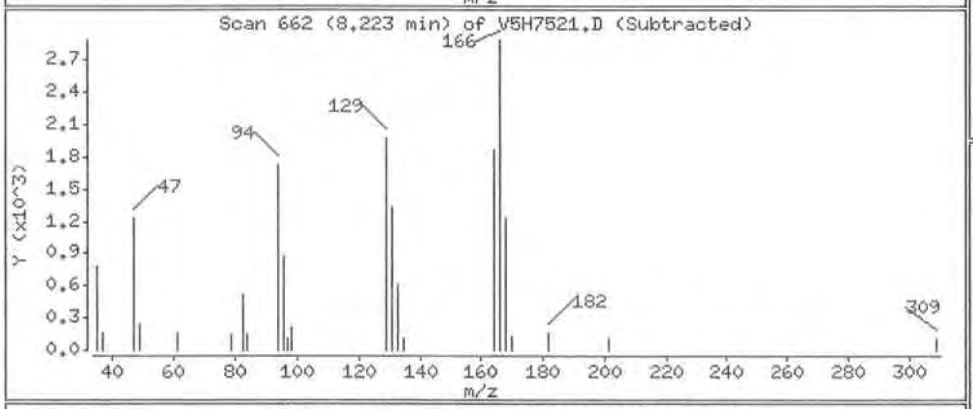
Column phase: DB-624

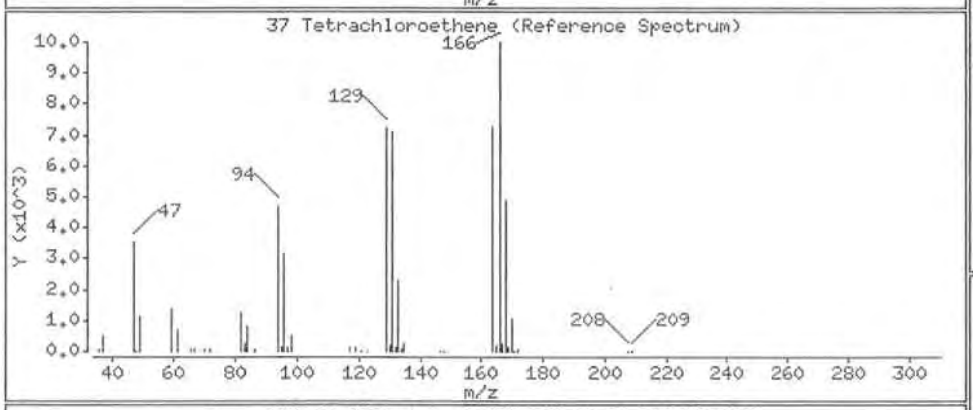
Column diameter: 0.25

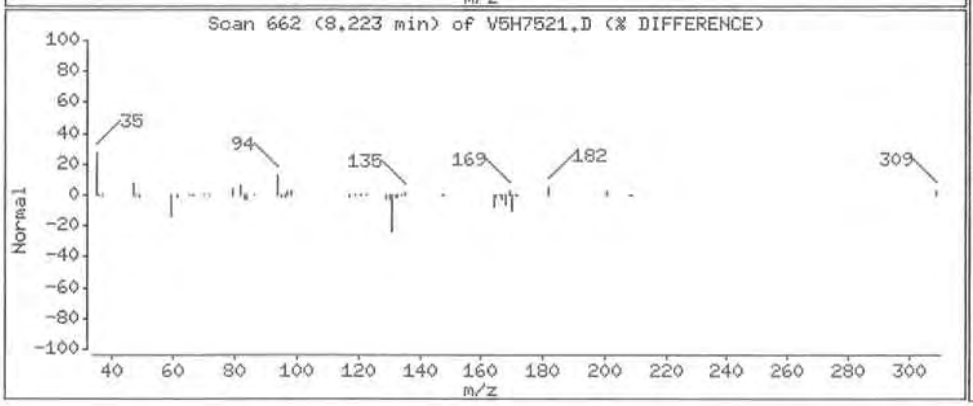
37 Tetrachloroethene

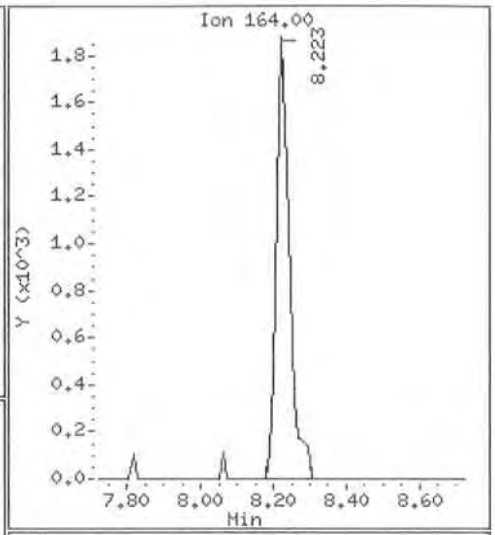
Concentration: 3.4 ug/L

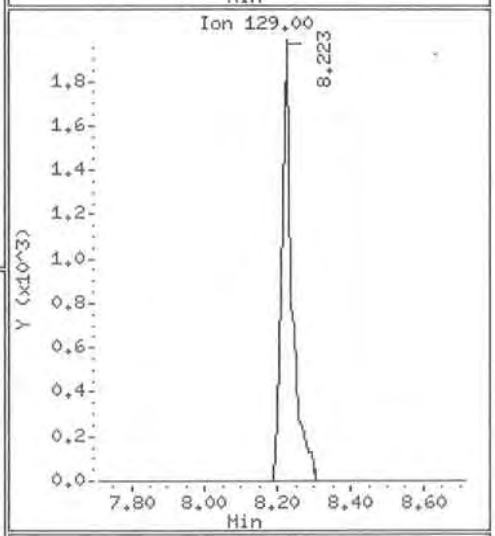


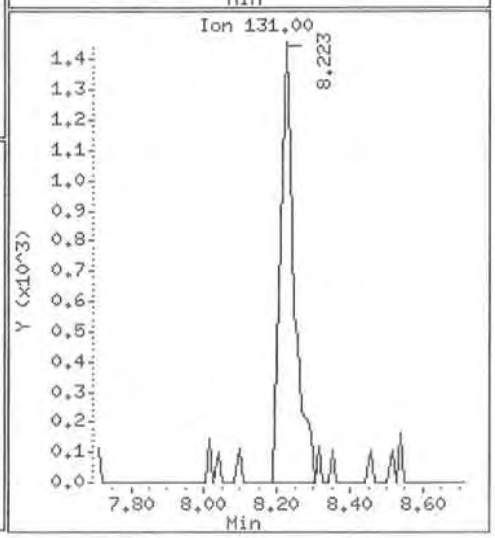












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN8

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7499.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	2.4	
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	0.25	J
156-59-2	cis-1,2-Dichloroethene	4.1	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.87	
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	1.2	
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN8

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7499.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
79-01-6	Trichloroethene	180	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	10	
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.

Y3AN8

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-18A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7499.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L Purge Volume: 25.0 (mL)

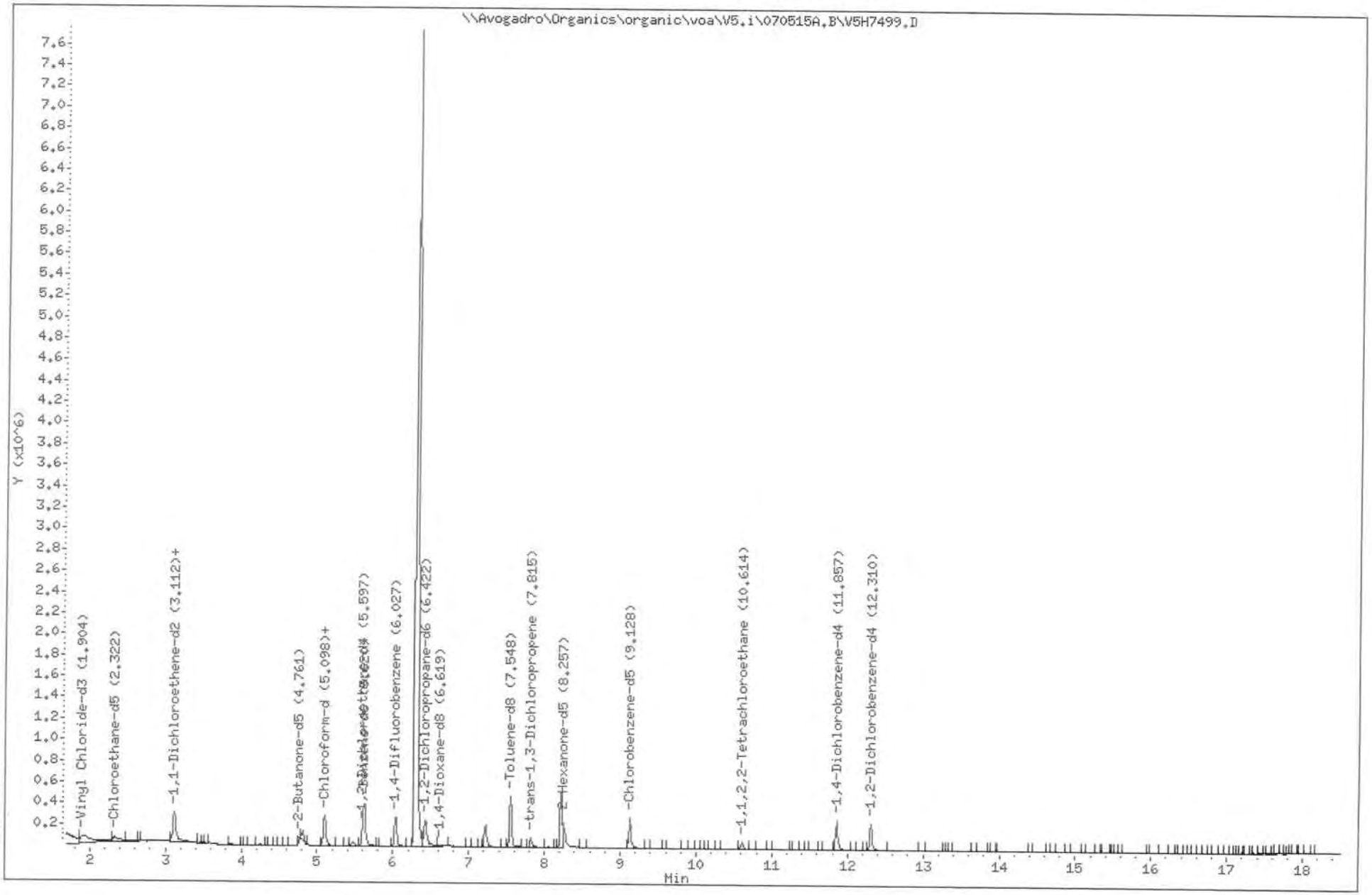
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 [1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D
Date : 16-MAY-2007 00:07
Client ID: Y3AN8
Sample Info: 25ML,F0595-18A,,29931
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



6195

Data File: V5H7499.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D
Lab Smp Id: F0595-18A Client Smp ID: Y3AN8
Inj Date : 16-MAY-2007 00:07
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-18A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.904	1.916	(0.315)	146121	5.05807	5.1
$ 80 Chloroethane-d5	69	2.322	2.322	(0.385)	51731	4.39103	4.4(Q)
$ 81 1,1-Dichloroethene-d2	63	3.112	3.112	(0.515)	227834	5.34862	5.3(R)
7 1,1-Dichloroethene	96	3.123	3.123	(0.517)	35715	2.42312	2.4(Q)
15 1,1-Dichloroethane	63	4.250	4.250	(0.704)	8223	0.25411	0.25(a)
$ 82 2-Butanone-d5	46	4.761	4.761	(0.788)	147347	49.5543	50
17 cis-1,2-Dichloroethene	96	4.807	4.807	(0.796)	63749	4.14544	4.1
$ 83 Chloroform-d	84	5.097	5.098	(0.844)	247668	6.05551	6.1(QR)
19 Chloroform	83	5.109	5.109	(0.846)	28149	0.86515	0.87
22 Carbon Tetrachloride	117	5.469	5.481	(0.599)	28910	1.16408	1.2(H)
$ 23 1,2-Dichloroethane-d4	65	5.597	5.597	(0.927)	98298	6.11261	6.1
$ 84 Benzene-d6	84	5.620	5.620	(0.616)	390920	5.56290	5.6
* 26 1,4-Difluorobenzene	114	6.038	6.038	(1.000)	245203	5.00000	
27 Trichloroethene	95	6.294	6.305	(0.690)	3355695	177.560	180(A)
$ 85 1,2-Dichloropropane-d6	67	6.421	6.433	(0.704)	99733	5.55640	5.6
$ 94 1,4-Dioxane-d8	96	6.619	6.619	(1.096)	10568	319.577	320(Q)
$ 33 Toluene-d8	98	7.548	7.548	(0.827)	342473	5.57659	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.815	7.815	(0.856)	61681	5.24302	5.2
37 Tetrachloroethene	164	8.221	8.221	(0.901)	140164	10.2826	10
$ 87 2-Hexanone-d5	63	8.256	8.256	(0.905)	76537	52.4457	52
* 42 Chlorobenzene-d5	117	9.127	9.127	(1.000)	176712	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.602	10.614	(1.162)	40624	5.85457	5.9

WL
05/17/07

Data File: V5H7499.D
Report Date: 17-May-2007 11:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	11.856	11.856	(1.000)	82079	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.309	12.309	(1.038)	71876	6.19921	6.2(Q)

QC Flag Legend

H24

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: V5H7499.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D
Lab Smp Id: F0595-18A Client Smp ID: Y3AN8
Inj Date : 16-MAY-2007 00:07
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-18A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

Client ID: Y3AN8

Instrument: V5.i

Sample Info: 25ML,F0595-18A,,29931

Purge Volume: 25.0

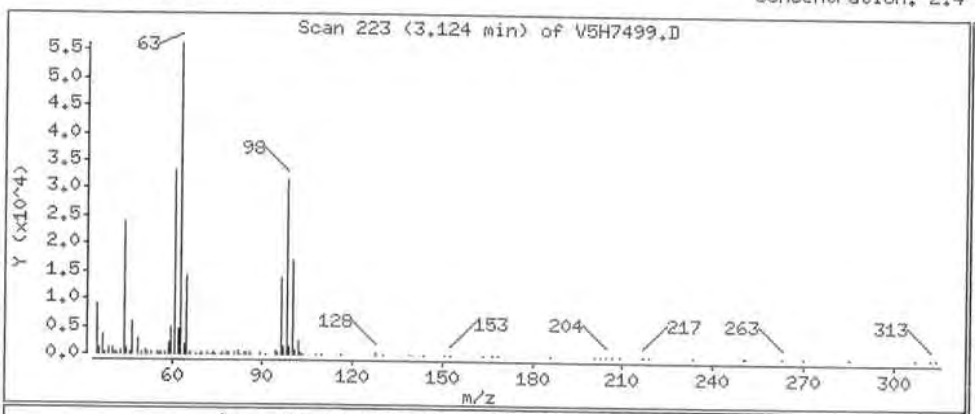
Operator: HZA SRC: LIMS

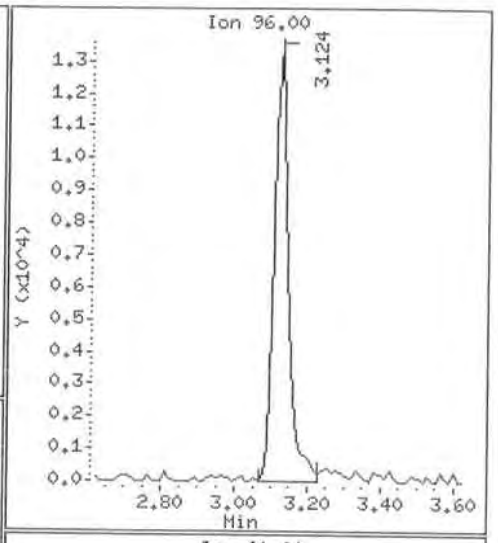
Column phase: DB-624

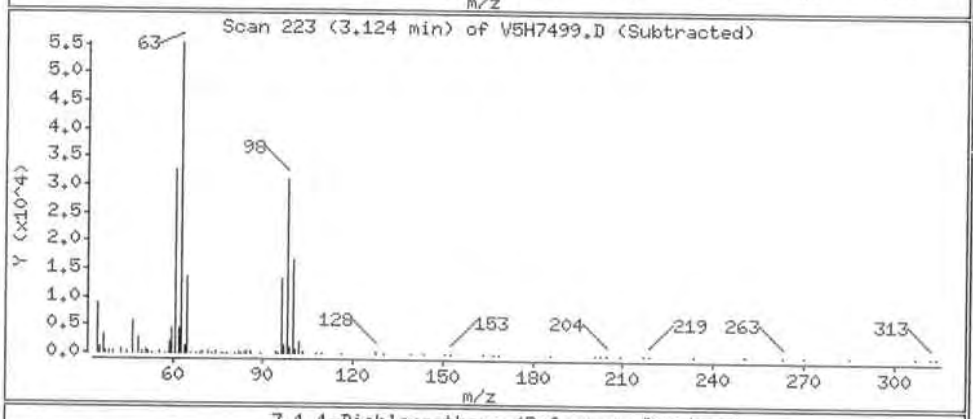
Column diameter: 0.25

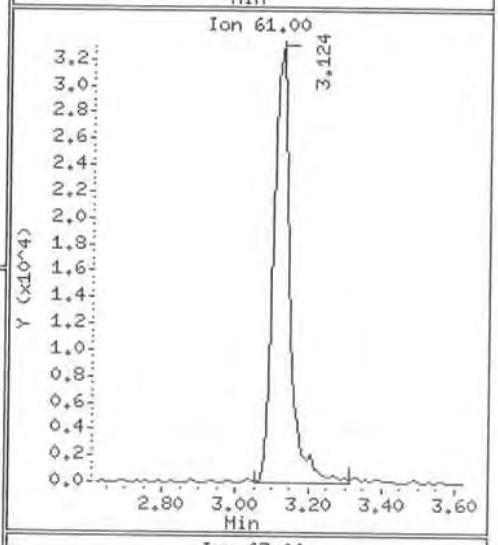
7 1,1-Dichloroethene

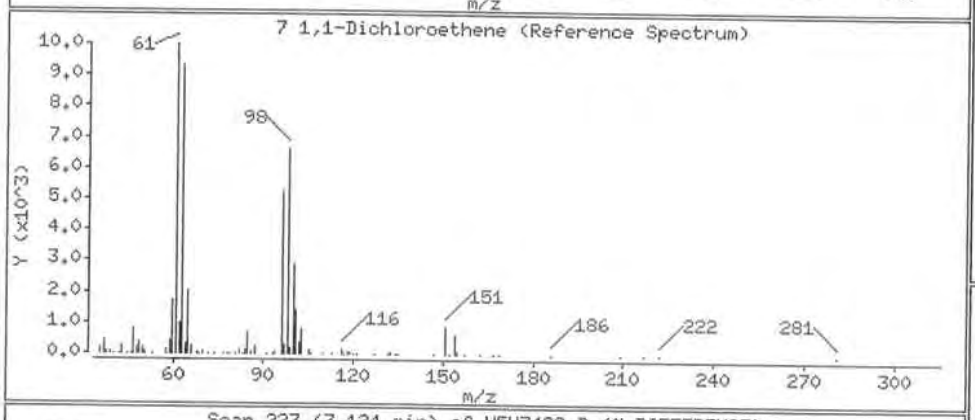
Concentration: 2.4 ug/L

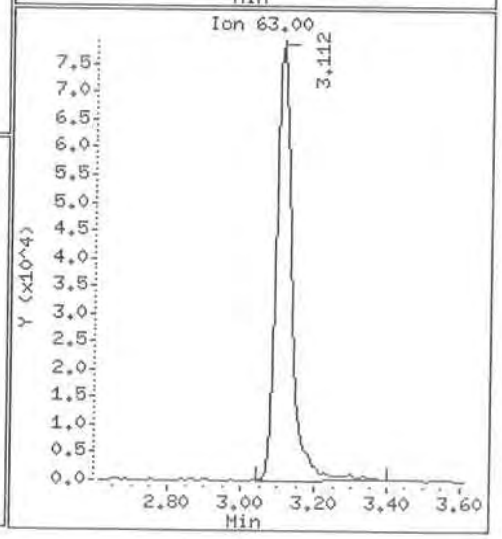


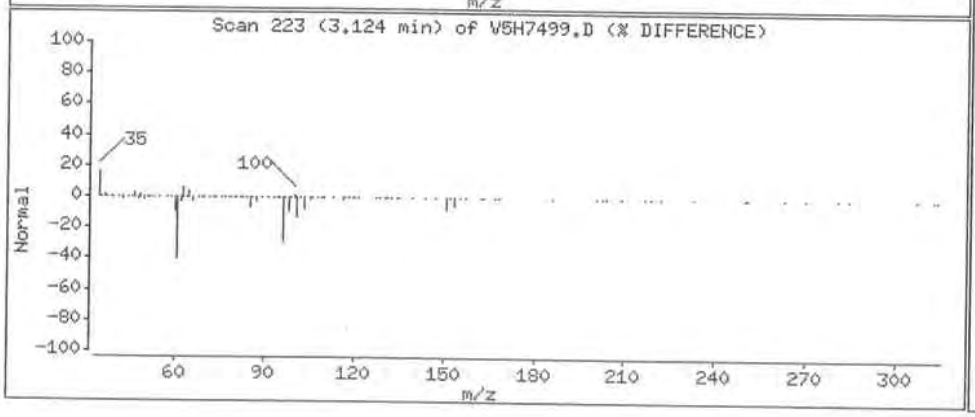












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

Client ID: Y3AN8

Instrument: V5.i

Sample Info: 25ML,F0595-18A,,29931

Purge Volume: 25.0

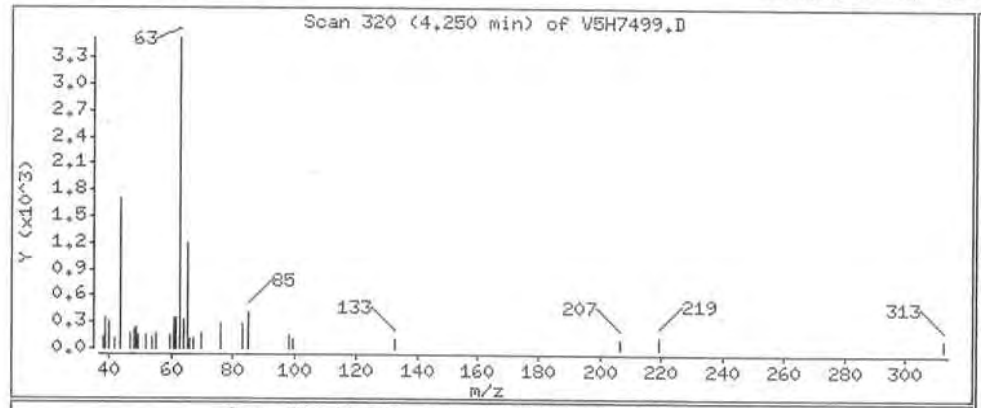
Operator: HZA SRC: LIMS

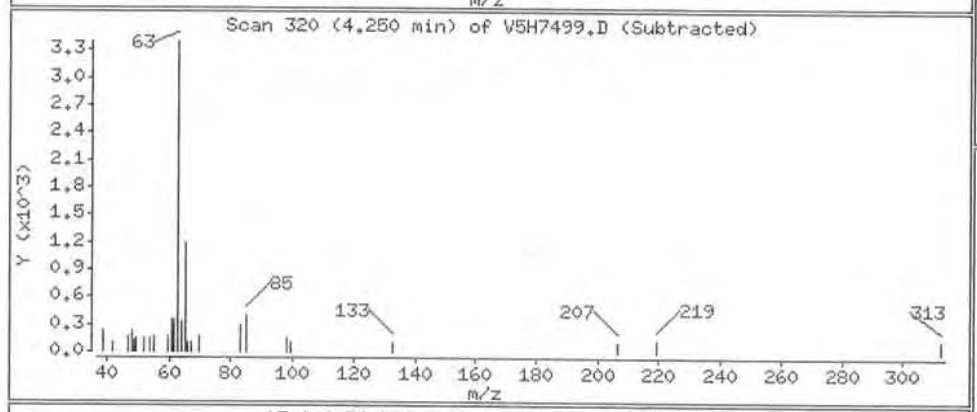
Column phase: DB-624

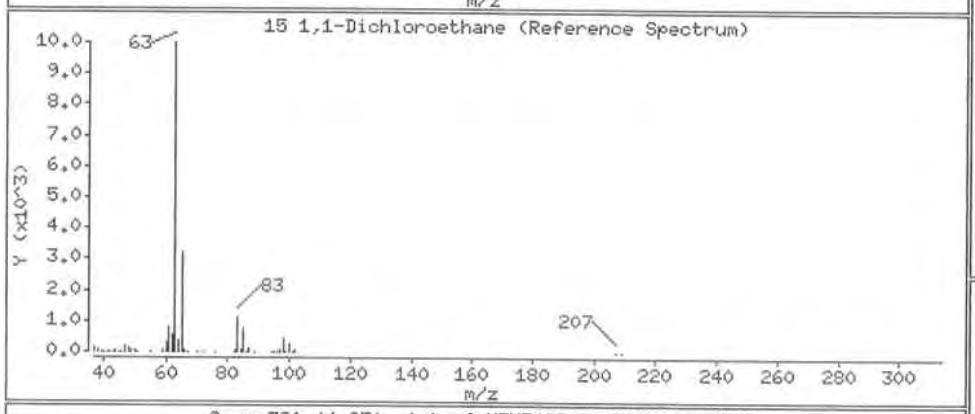
Column diameter: 0.25

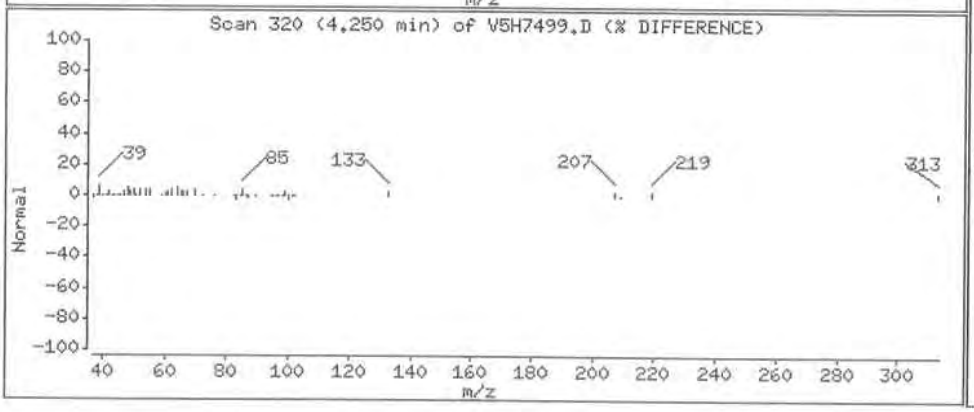
15 1,1-Dichloroethane

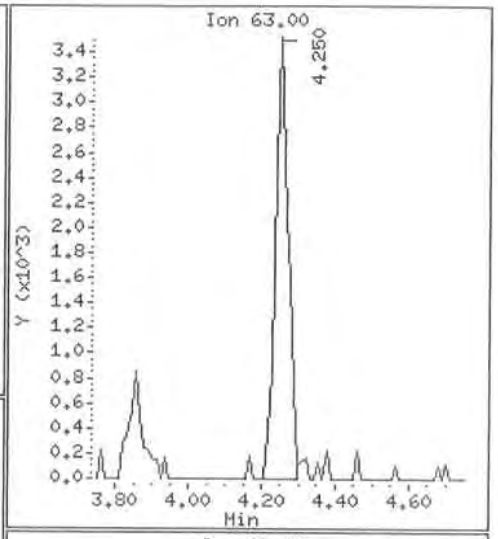
Concentration: 0.25 ug/L

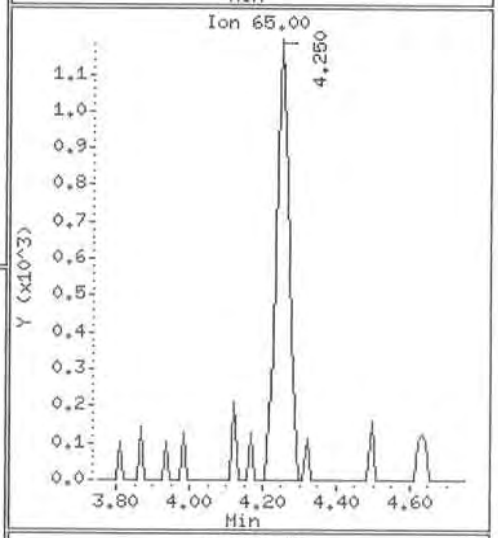


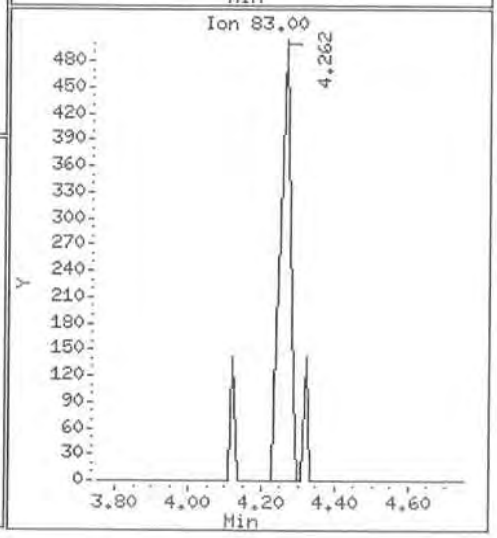












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

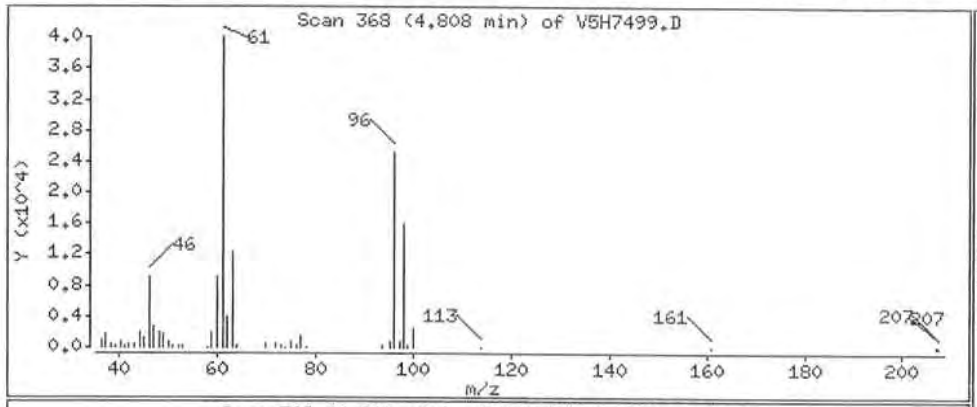
Client ID: Y3AN8 | Instrument: V5.i

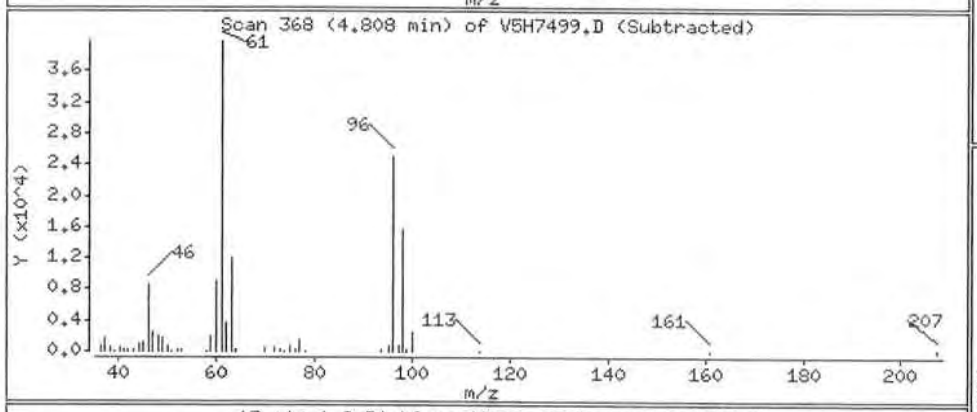
Sample Info: 25ML,F0595-18A,,29931

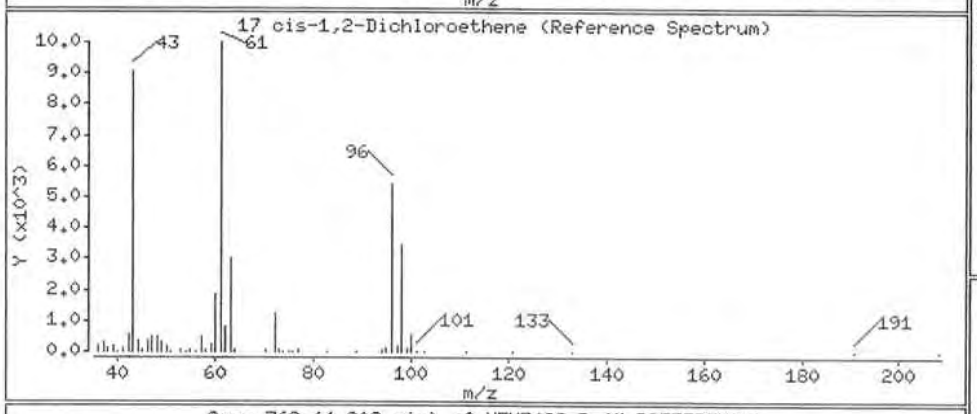
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

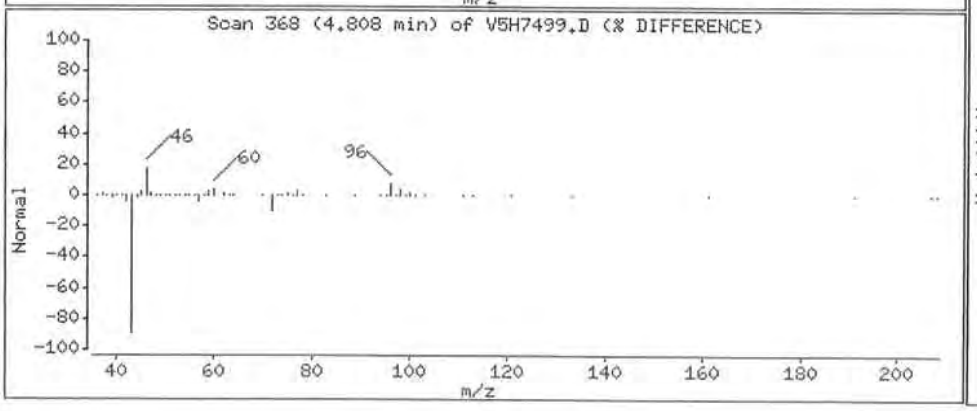
Column phase: DB-624 | Column diameter: 0.25

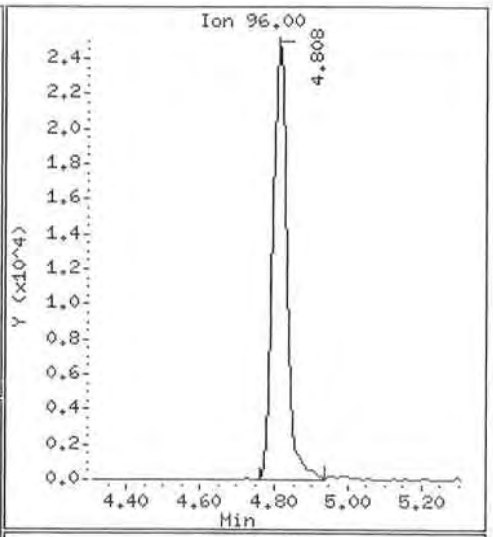
17 cis-1,2-Dichloroethene | Concentration: 4.1 ug/L

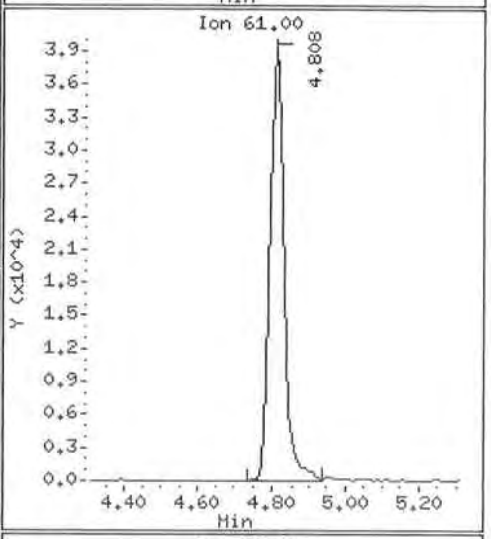


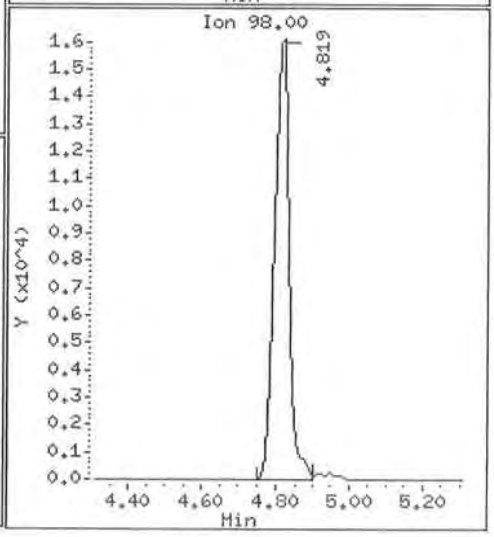












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

Client ID: Y3AN8

Instrument: V5.i

Sample Info: 25ML,F0595-18A,,29931

Purge Volume: 25.0

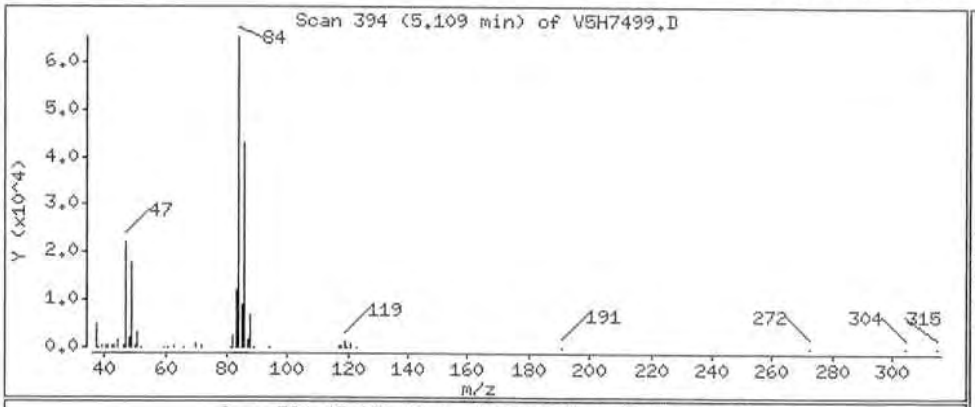
Operator: HZA SRC: LIMS

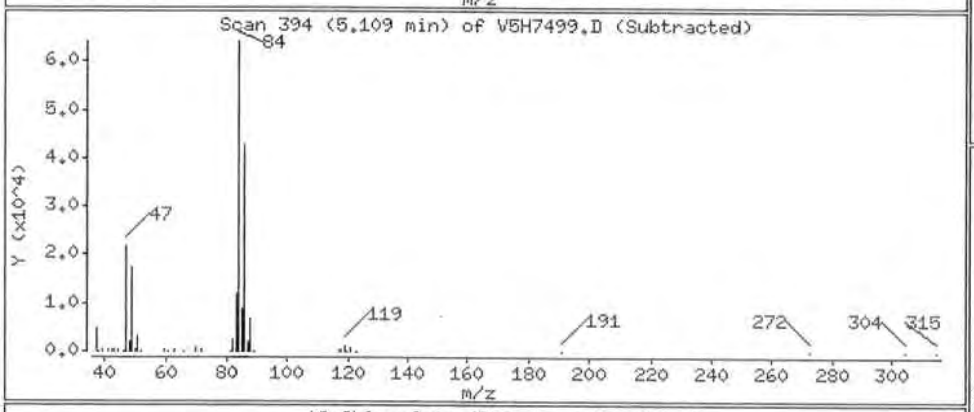
Column phase: DB-624

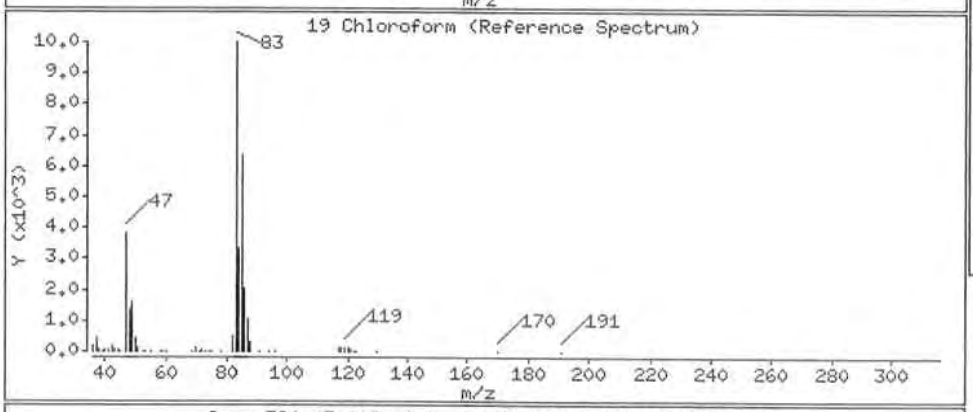
Column diameter: 0.25

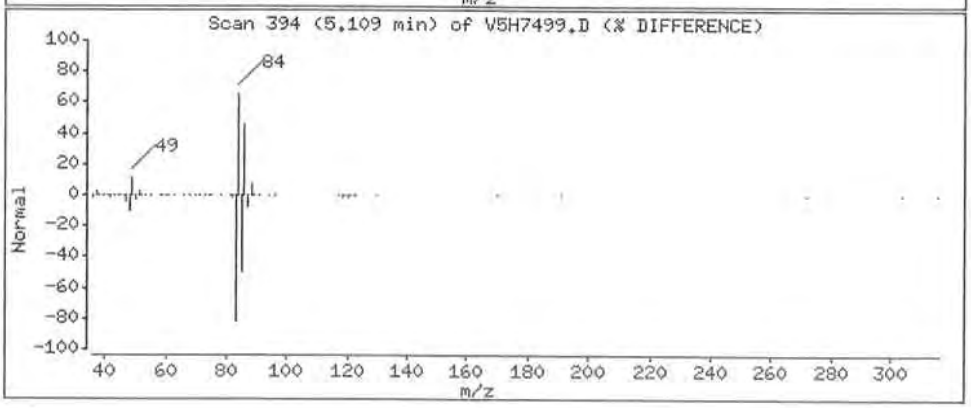
19 Chloroform

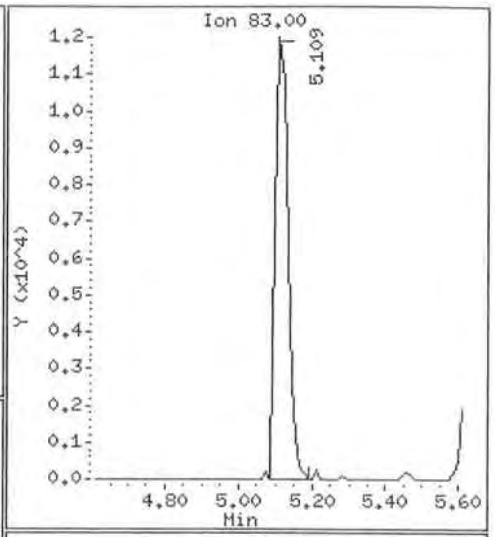
Concentration: 0.87 ug/L

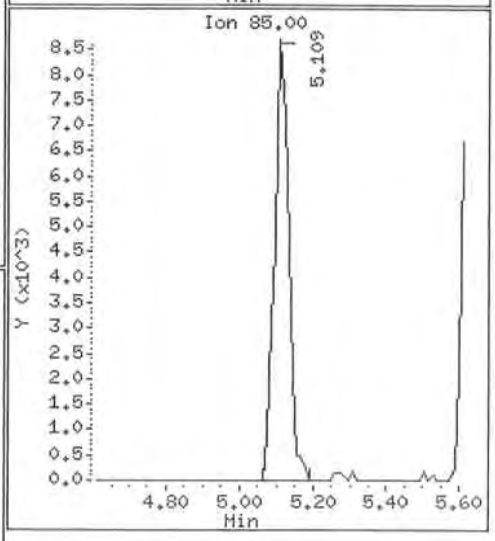












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

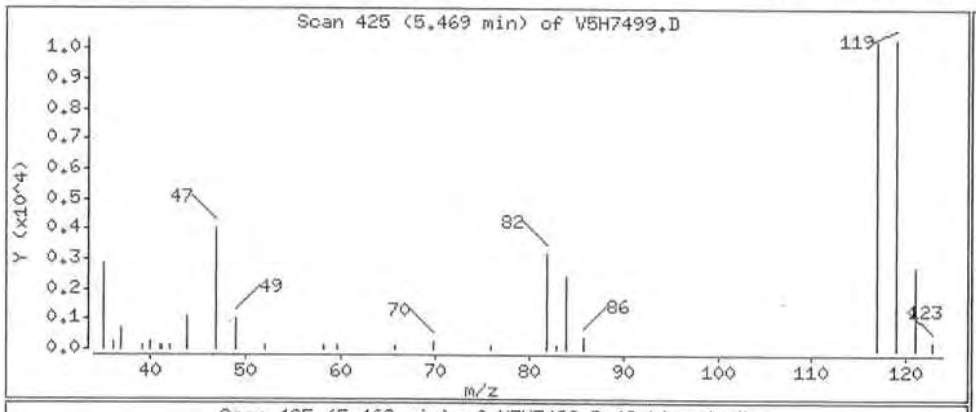
Client ID: Y3AN8 | Instrument: V5.i

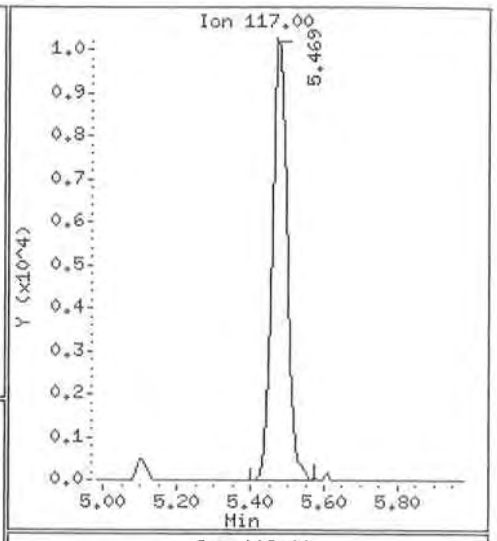
Sample Info: 25ML,F0595-18A,,29931

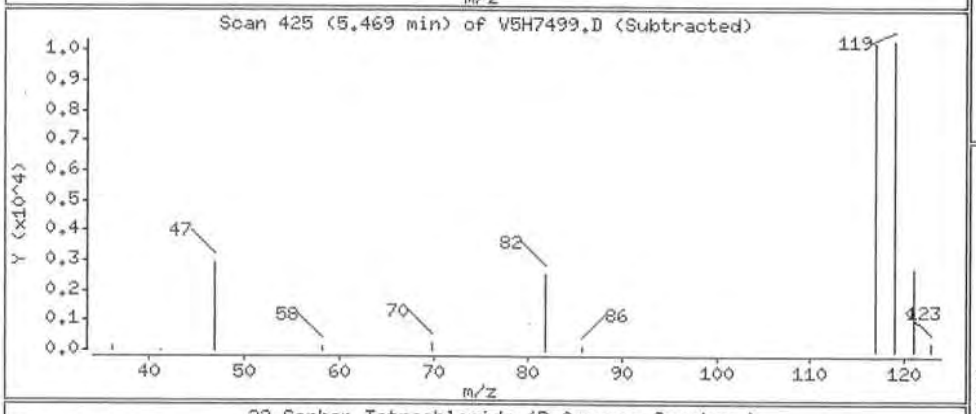
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

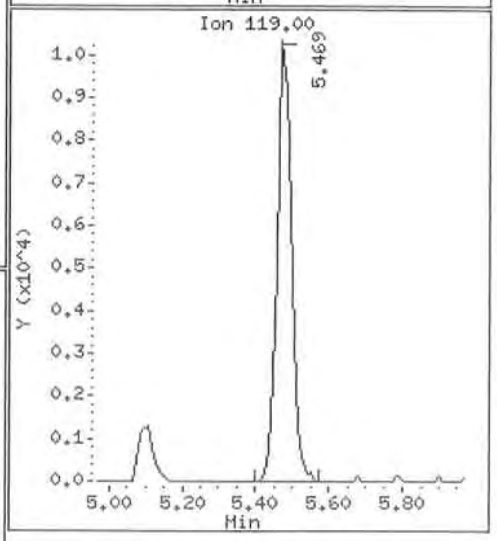
Column phase: DB-624 | Column diameter: 0.25

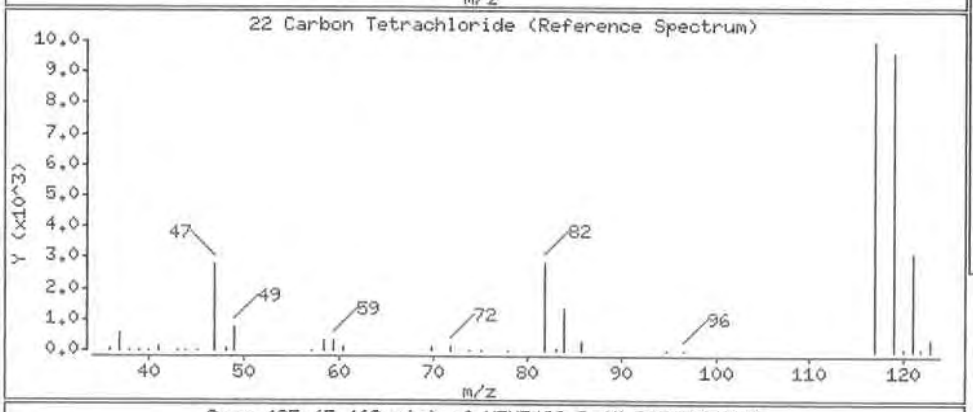
22 Carbon Tetrachloride | Concentration: 1.2 ug/L

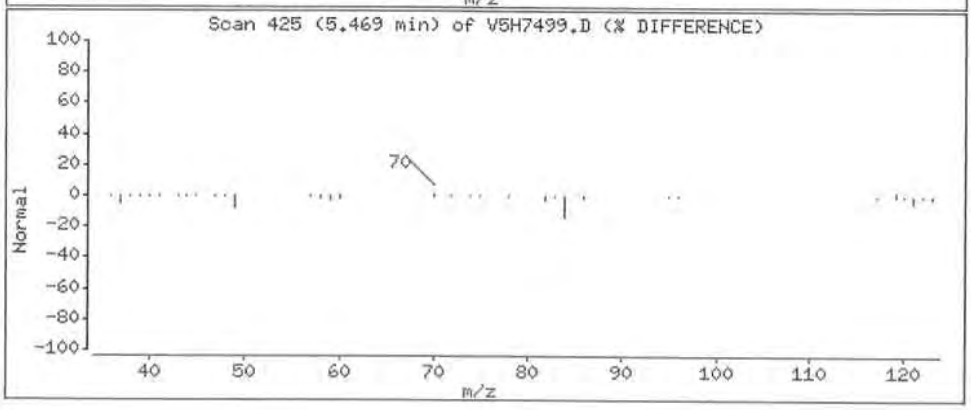












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

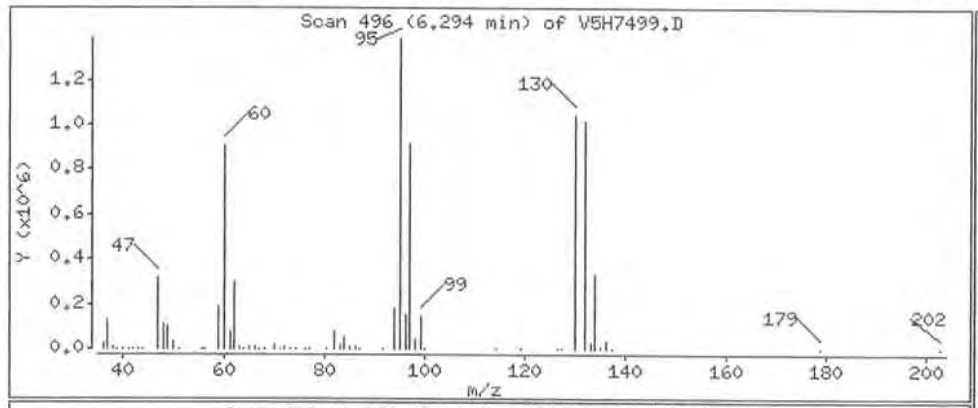
Client ID: Y3AN8 | Instrument: V5.i

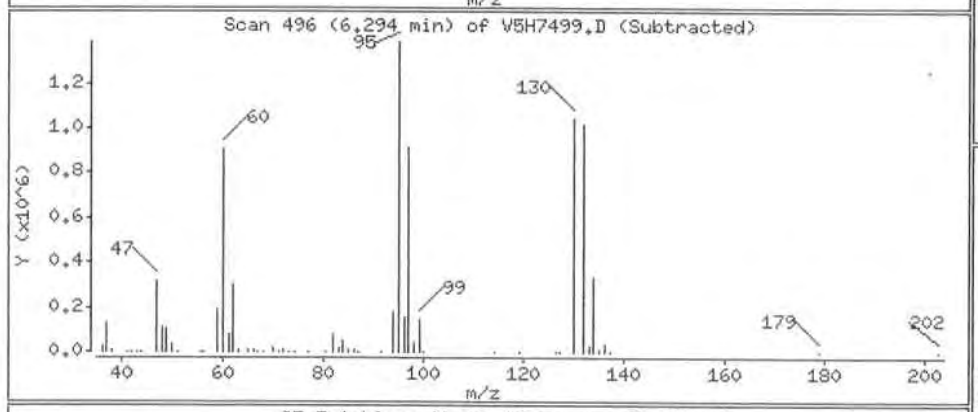
Sample Info: 25ML,F0595-18A,,29931

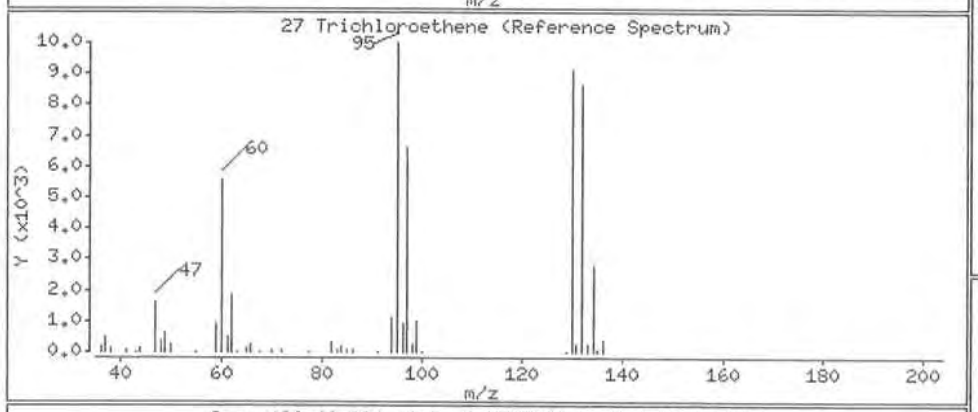
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

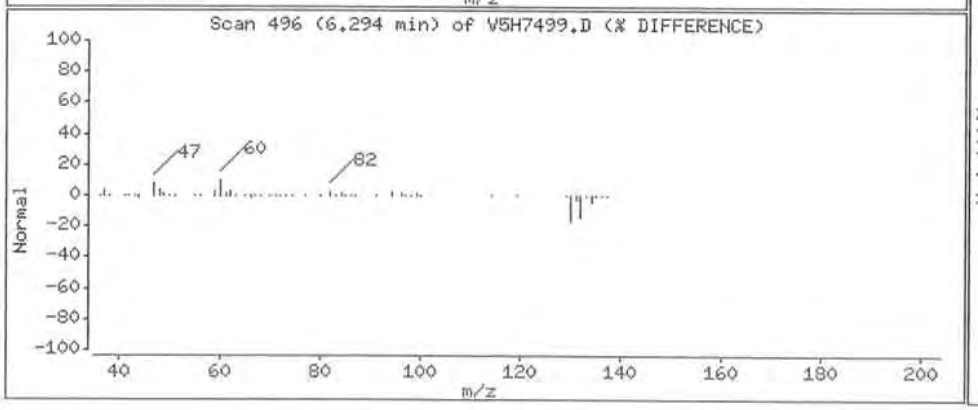
Column phase: DB-624 | Column diameter: 0.25

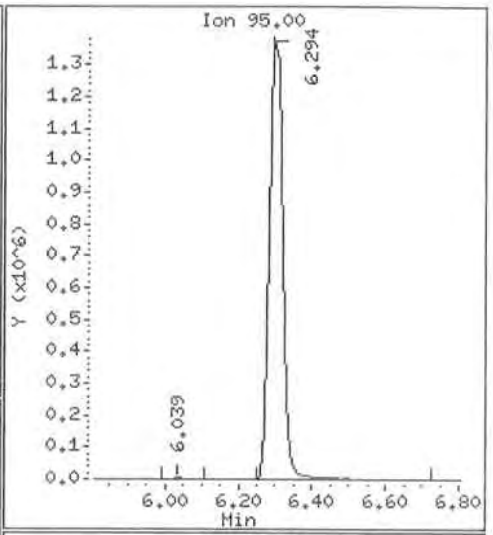
27 Trichloroethene | Concentration: 180 ug/L

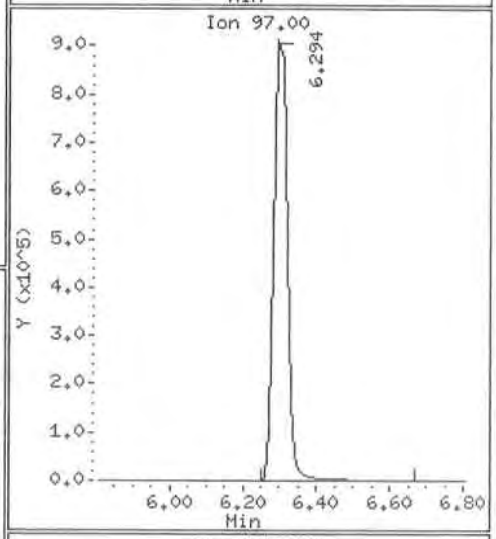


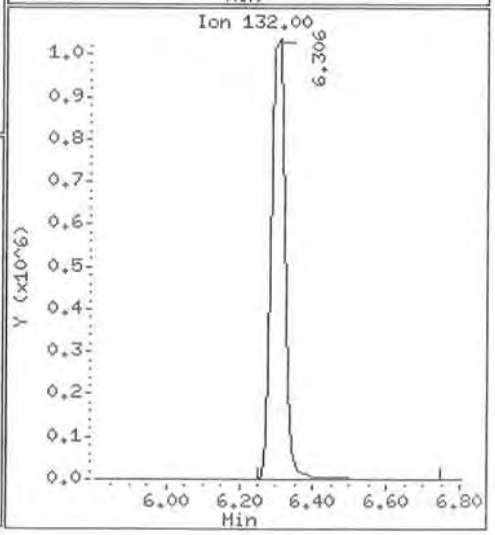












Data File: \\Avogadro\Organics\organic\woa\V5.i\070515A.B\V5H7499.D

Date : 16-MAY-2007 00:07

Client ID: Y3AN8

Instrument: V5.i

Sample Info: 25ML,F0595-18A,,29931

Purge Volume: 25.0

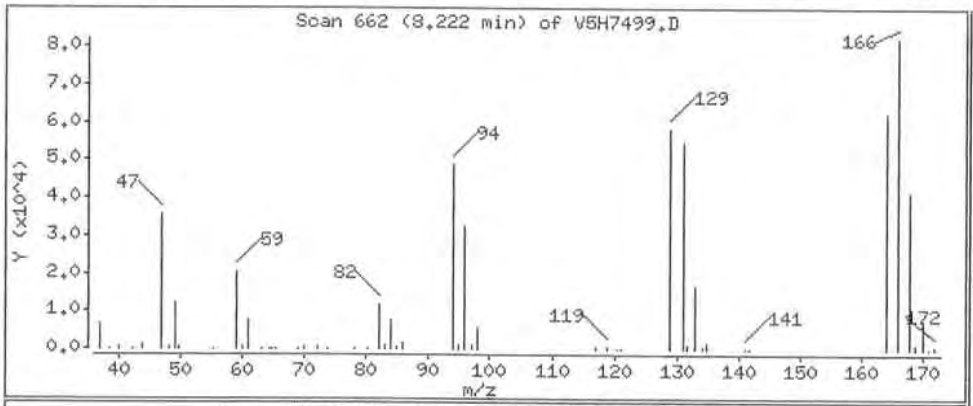
Operator: HZA SRC: LIMS

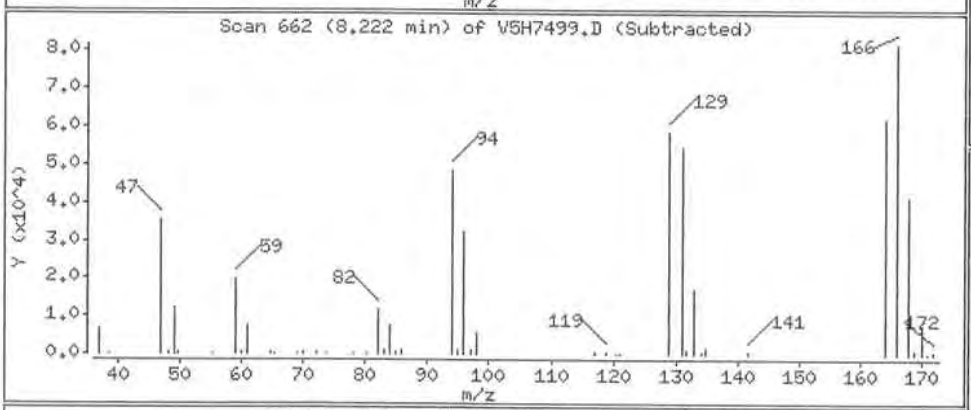
Column phase: DB-624

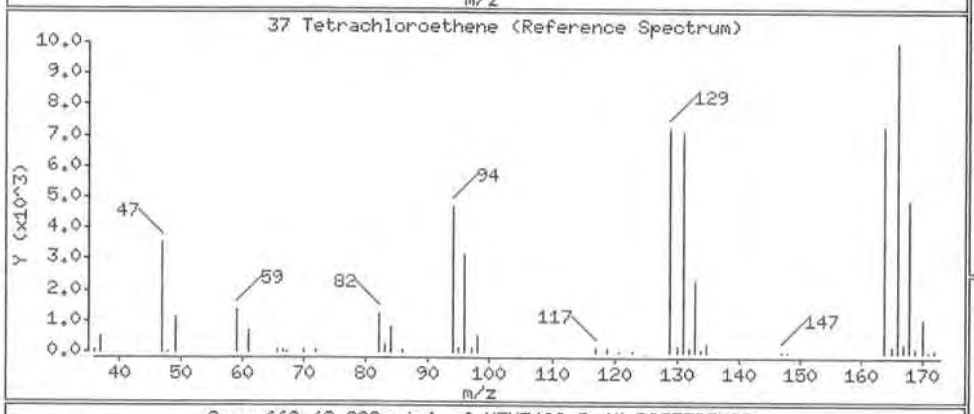
Column diameter: 0.25

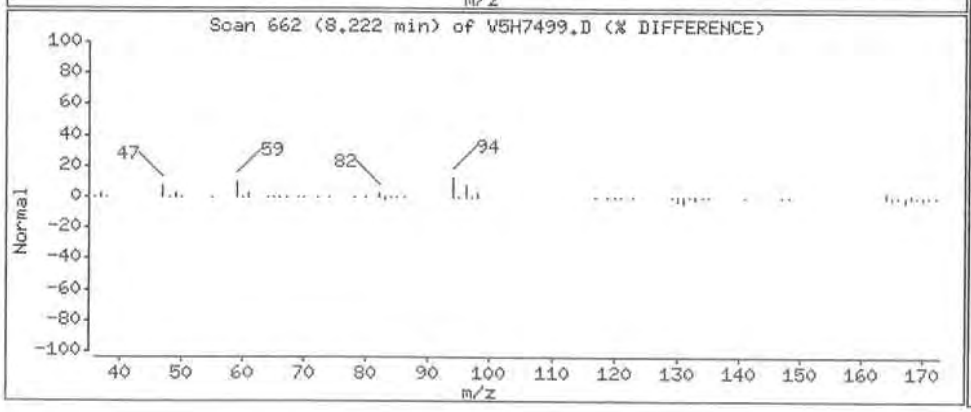
37 Tetrachloroethene

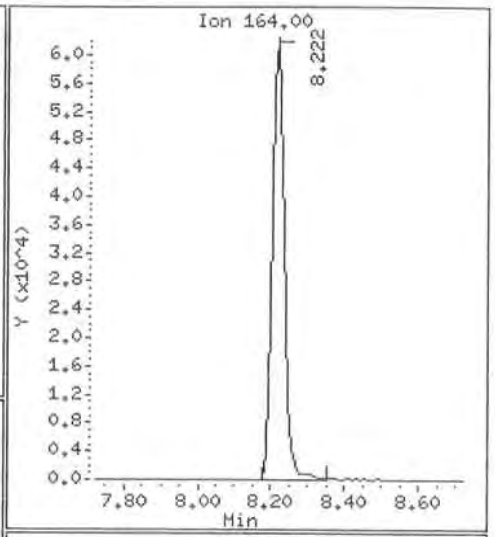
Concentration: 10 ug/L

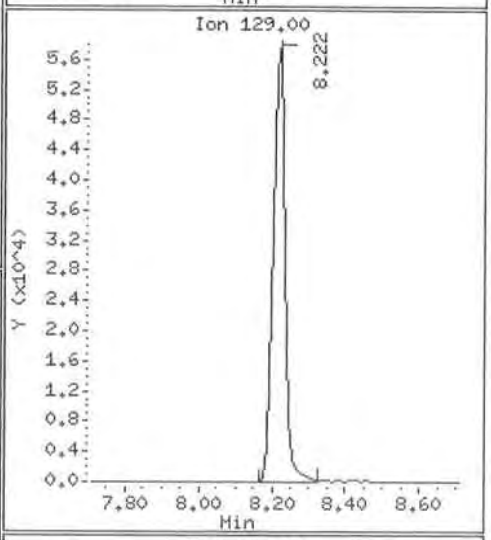


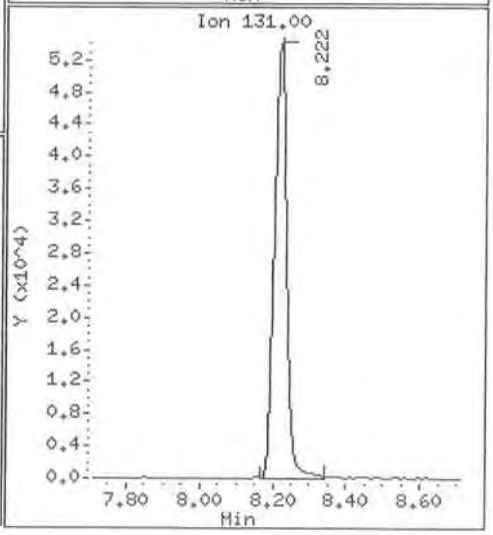












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN8DL

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-18ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7522.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	5.0	DJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	100	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	4.4	DJ
78-93-3	2-Butanone	100	U
74-97-5	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
123-91-1	1,4-Dioxane	400	U
75-65-0	2-Methyl-2-Propanol	100	U

SL, 7/18/07.

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN8DL

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-18ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7522.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	210	D
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
179601-23-1	m,p-Xylene	10	U
95-47-6	o-Xylene	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U

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

EPA SAMPLE NO.
Y3AN8DL

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-18ADL

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7522.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

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

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

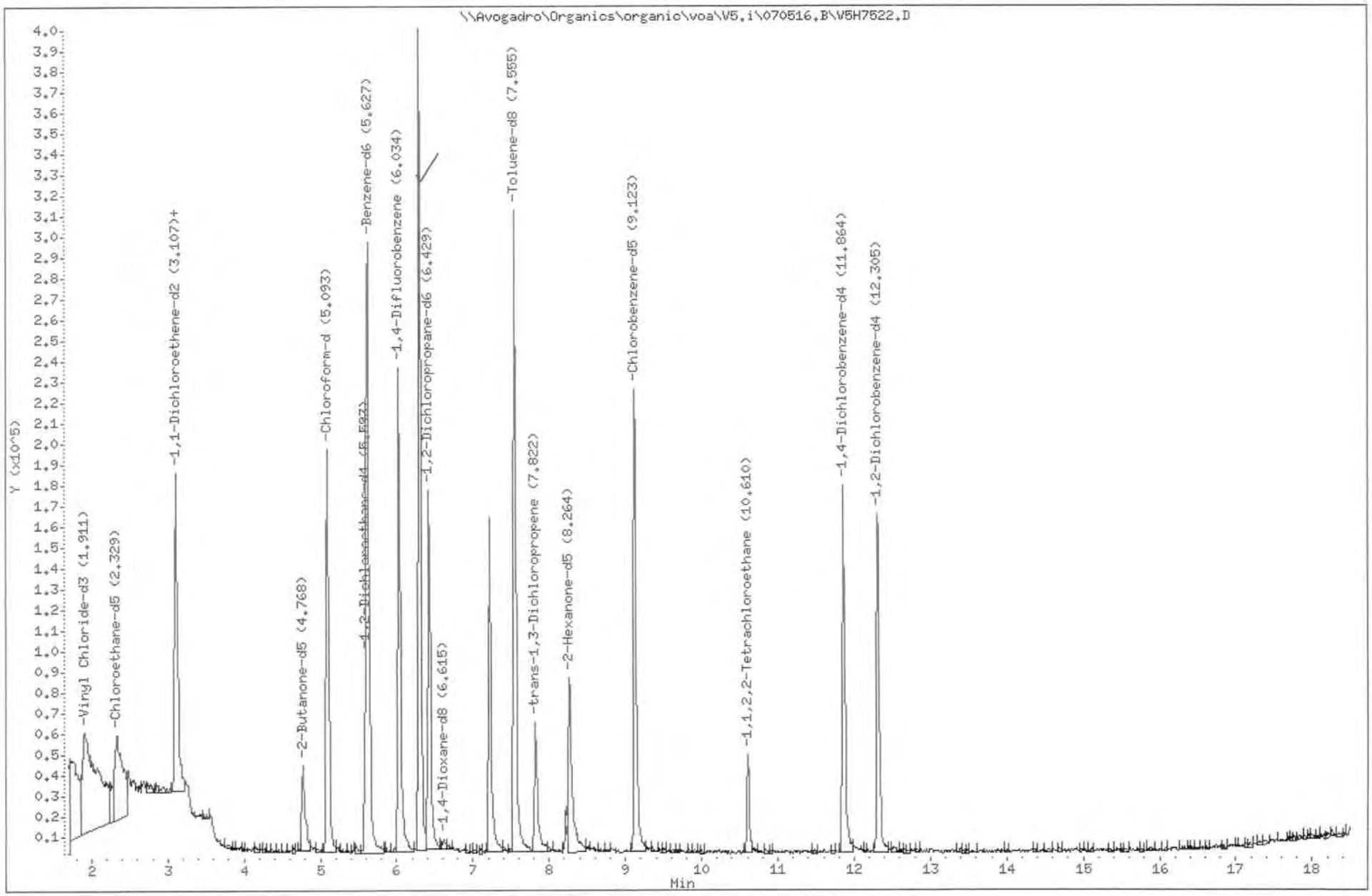
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D
Date : 16-MAY-2007 14:10
Client ID: Y3AN8DL
Sample Info: 25ML,F0595-18ADL,,29944,20
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0209

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D
Lab Smp Id: F0595-18ADL Client Smp ID: Y3AN8DL
Inj Date : 16-MAY-2007 14:10
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-18ADL,,29944,20
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: SOM01.0.sub
Target Version: 4.14

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

Name	Value	Description
DF	20.000	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	1.899	1.905	(0.315)	91761	4.02744	4.0
$ 80 Chloroethane-d5	69	2.341	2.323	(0.388)	41503	4.46677	4.5(Q)
$ 81 1,1-Dichloroethene-d2	63	3.107	3.101	(0.515)	154717	4.60532	4.6
7 1,1-Dichloroethene	96	3.119	3.124	(0.517)	2934	0.25240	5.0(aQ)
$ 82 2-Butanone-d5	46	4.768	4.762	(0.790)	89636	38.2227	38
17 cis-1,2-Dichloroethene	96	4.826	4.808	(0.800)	2663	0.21957	4.4(a)
$ 83 Chloroform-d	84	5.093	5.099	(0.844)	184057	5.70600	5.7(Q)
$ 23 1,2-Dichloroethane-d4	65	5.592	5.598	(0.927)	73603	5.80331	5.8
$ 84 Benzene-d6	84	5.627	5.621	(0.617)	284442	5.16165	5.2
* 26 1,4-Difluorobenzene	114	6.033	6.028	(1.000)	193387	5.00000	
27 Trichloroethene	95	6.301	6.306	(0.691)	156630	10.5686	210
$ 85 1,2-Dichloropropane-d6	67	6.428	6.423	(0.705)	75567	5.36868	5.4
$ 94 1,4-Dioxane-d8	96	6.614	6.608	(1.096)	4989	191.291	190(Q)
$ 33 Toluene-d8	98	7.555	7.549	(0.828)	247910	5.14775	5.1
$ 86 trans-1,3-Dichloropropene-d4	79	7.822	7.816	(0.857)	52296	5.66866	5.7
$ 87 2-Hexanone-d5	63	8.263	8.257	(0.906)	36292	31.7125	32(Q)
* 42 Chlorobenzene-d5	117	9.123	9.128	(1.000)	138575	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.609	10.603	(1.163)	27736	5.09726	5.1(Q)
* 78 1,4-Dichlorobenzene-d4	152	11.863	11.857	(1.000)	59621	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.305	12.310	(1.037)	48843	5.79946	5.8(Q)

WL
05/17/07

K

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D
Report Date: 17-May-2007 14:14

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D
Lab Smp Id: F0595-18ADL Client Smp ID: Y3AN8DL
Inj Date : 16-MAY-2007 14:10
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-18ADL,,29944,20
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: SOM01.0.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D

Date : 16-MAY-2007 14:10

Client ID: Y3AN8DL

Instrument: V5.i

Sample Info: 25ML,F0595-18ADL,,29944,20

Purge Volume: 25.0

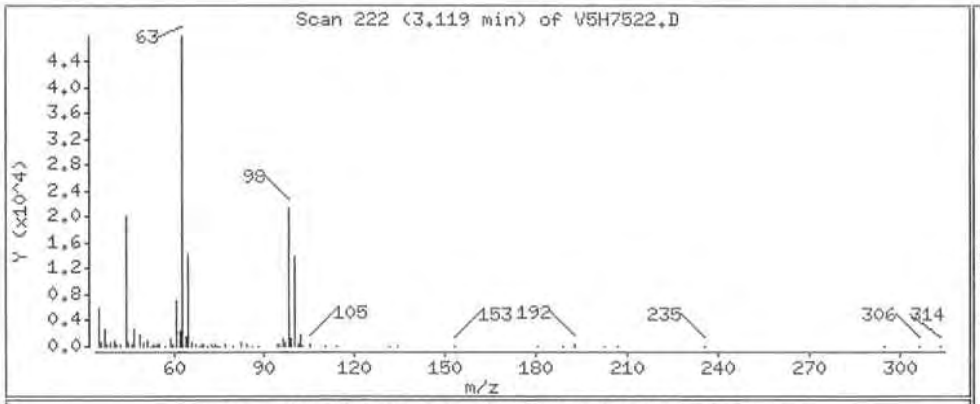
Operator: HZA SRC: LIMS

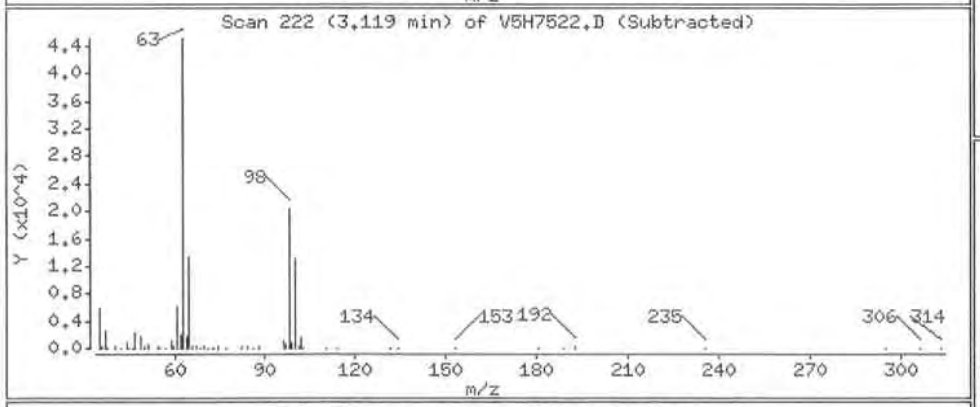
Column phase: DB-624

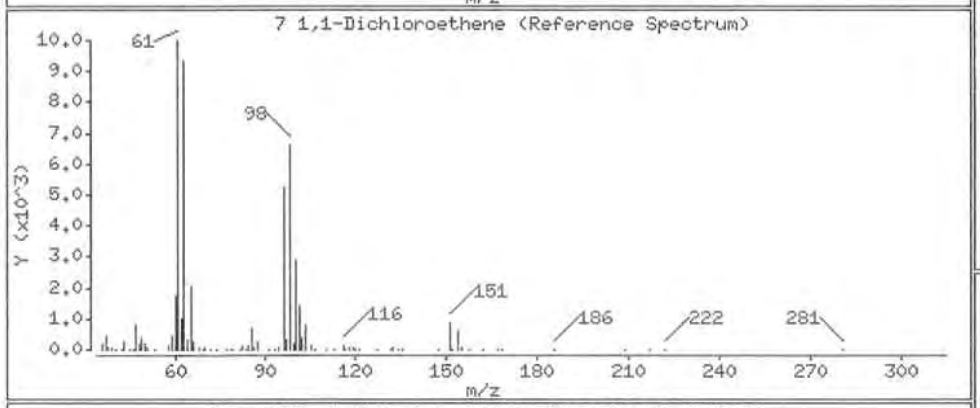
Column diameter: 0.25

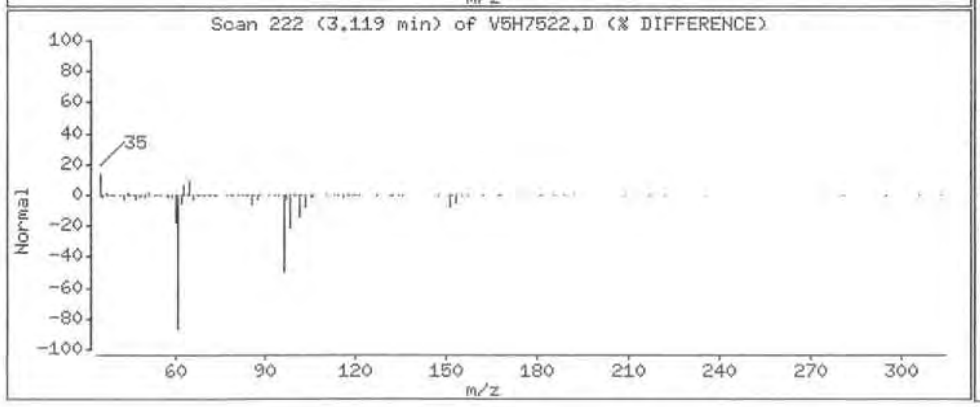
7 1,1-Dichloroethene

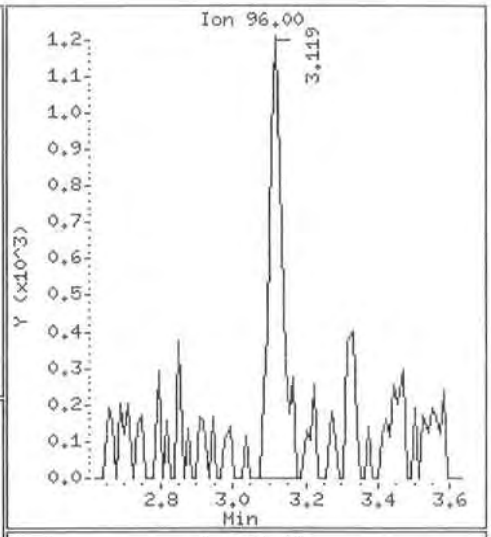
Concentration: 5.0 ug/L

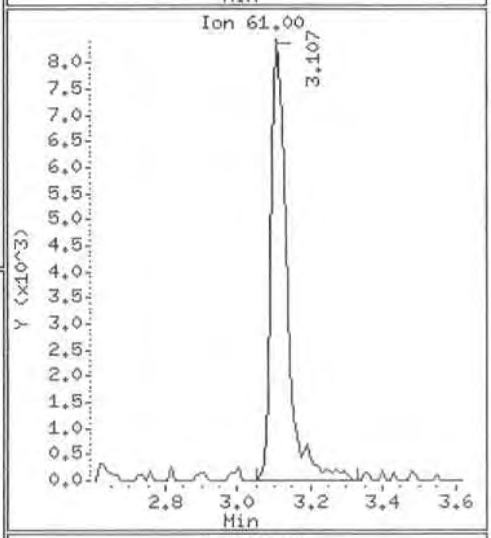


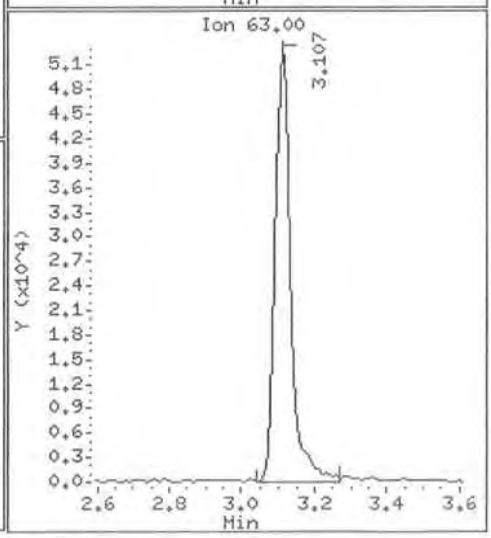












Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D

Date : 16-MAY-2007 14:10

Client ID: Y3AN8DL

Instrument: V5.i

Sample Info: 25ML,F0595-18ADL,,29944,20

Purge Volume: 25.0

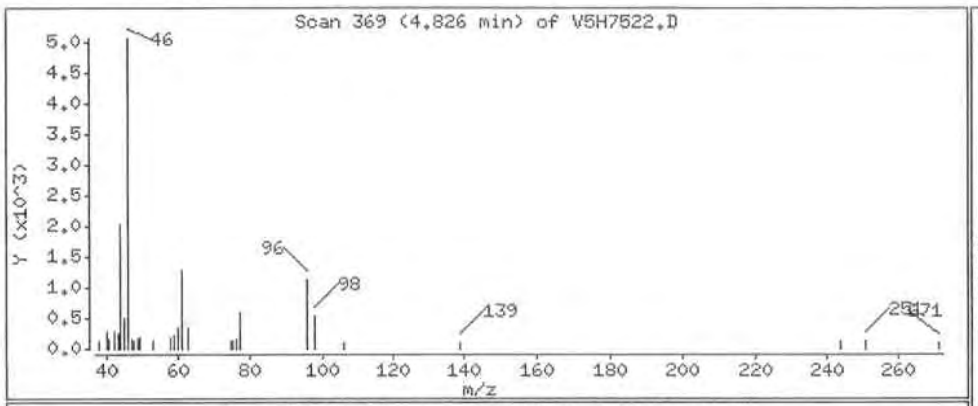
Operator: HZA SRC: LIMS

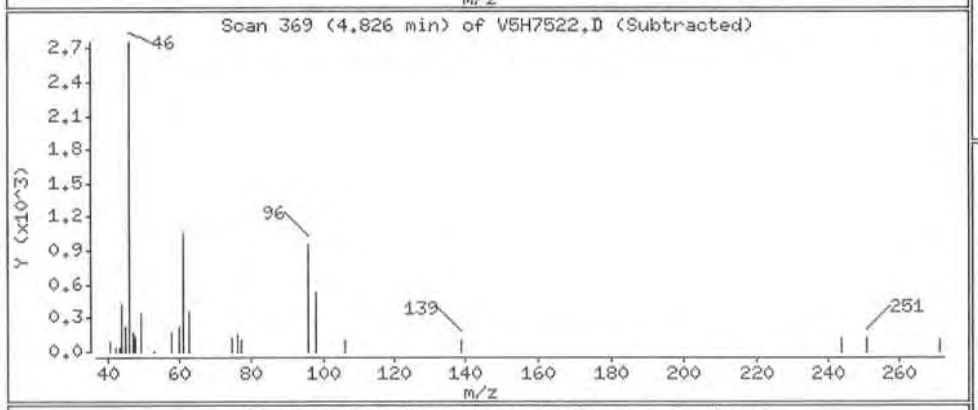
Column phase: DB-624

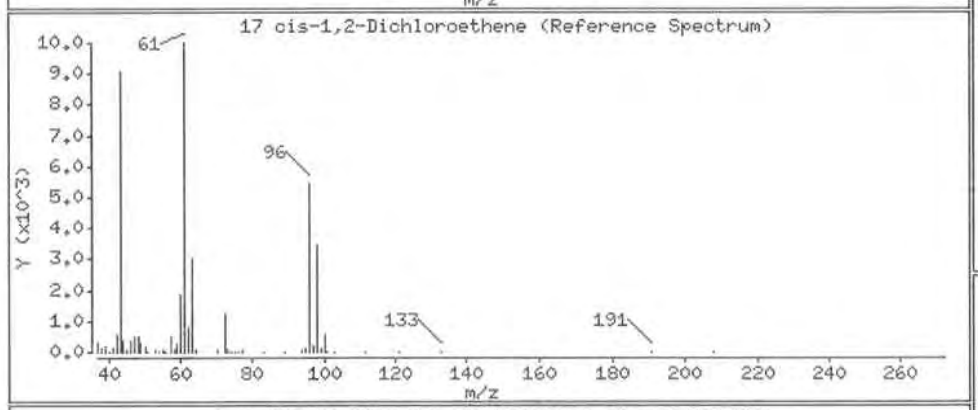
Column diameter: 0.25

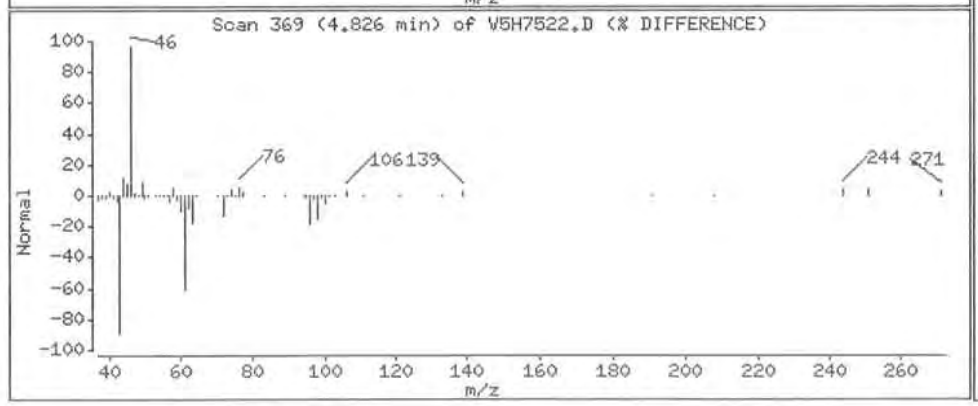
17 cis-1,2-Dichloroethene

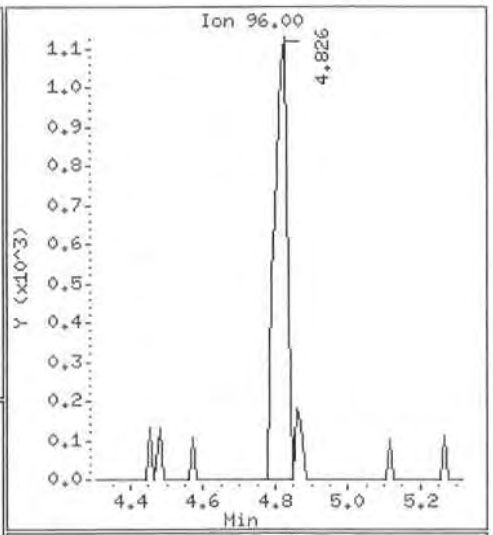
Concentration: 4.4 ug/L

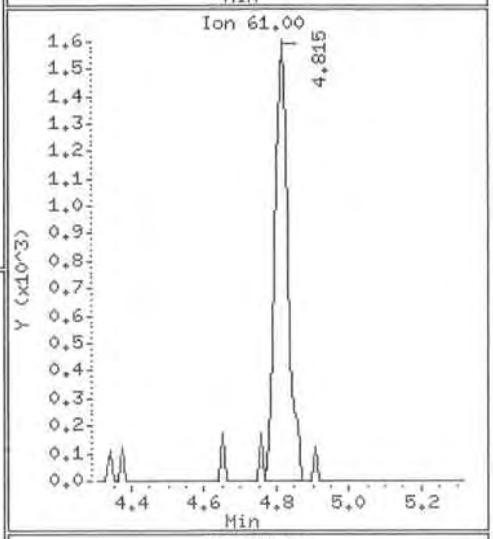


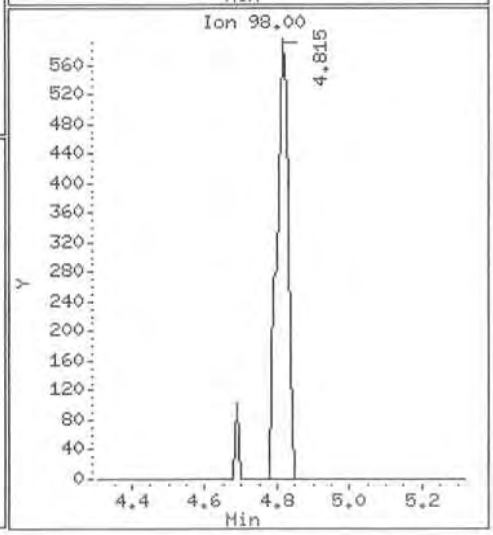












Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7522.D

Date : 16-MAY-2007 14:10

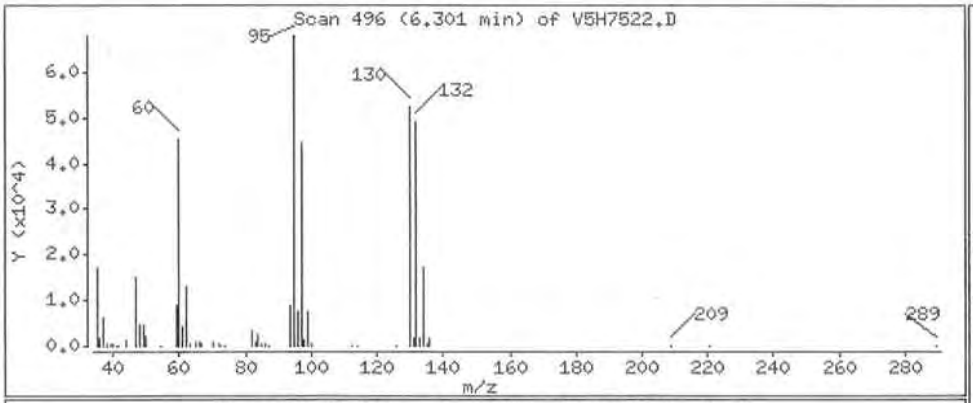
Client ID: Y3AN8DL | Instrument: V5.i

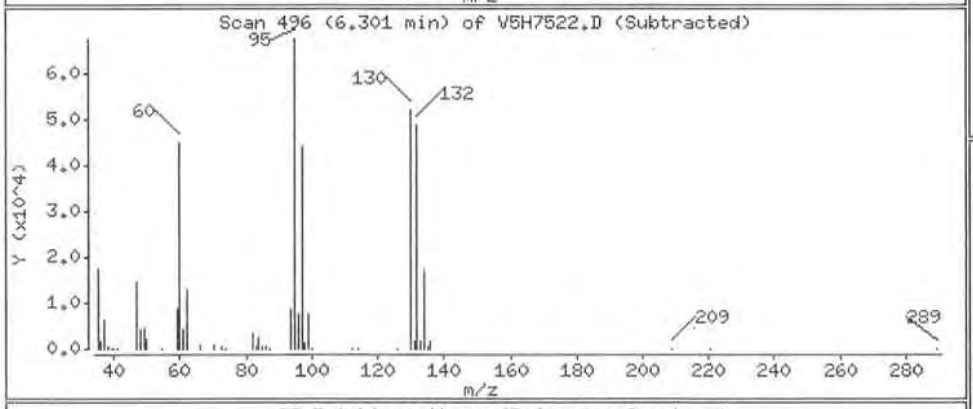
Sample Info: 25ML,F0595-18ADL,,29944,20

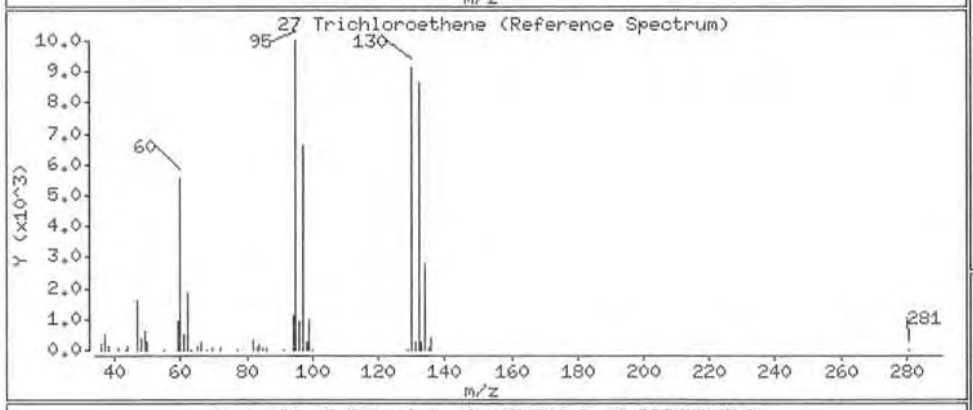
Purge Volume: 25.0 | Operator: HZA SRC: LIMS

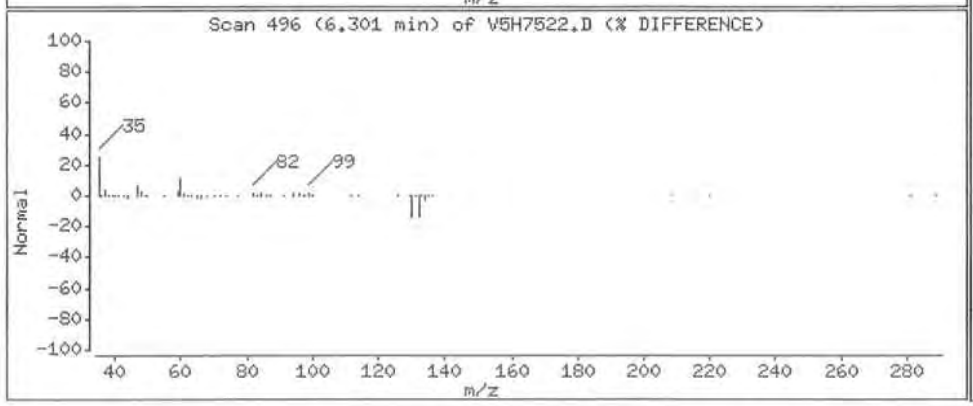
Column phase: DB-624 | Column diameter: 0.25

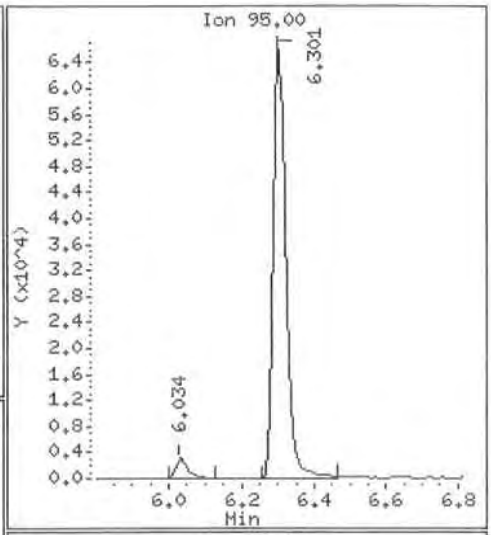
27 Trichloroethene | Concentration: 210 ug/L

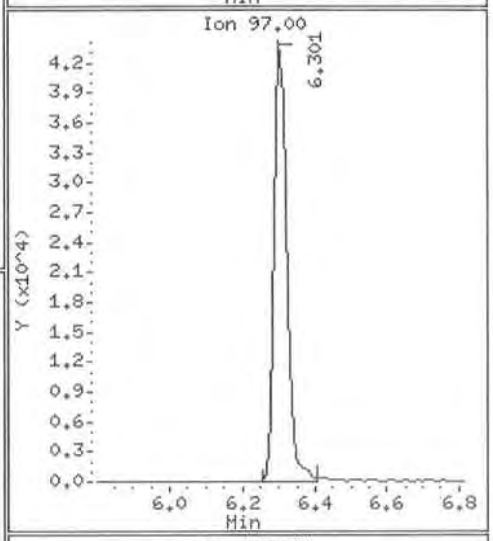


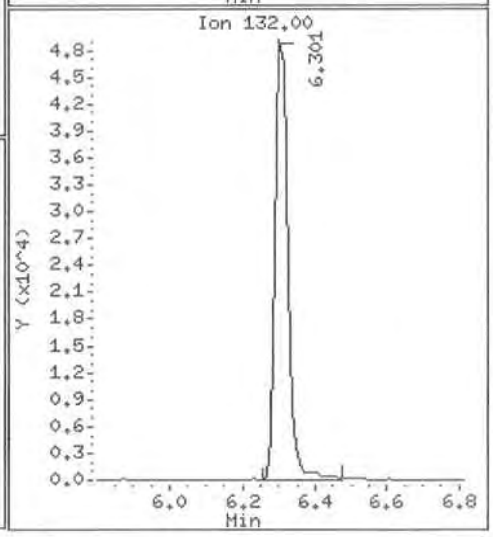












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN9

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7500.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN9

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7500.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/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	1.0	
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.

Y3AN9

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-19A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7500.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L Purge Volume: 25.0 (mL)

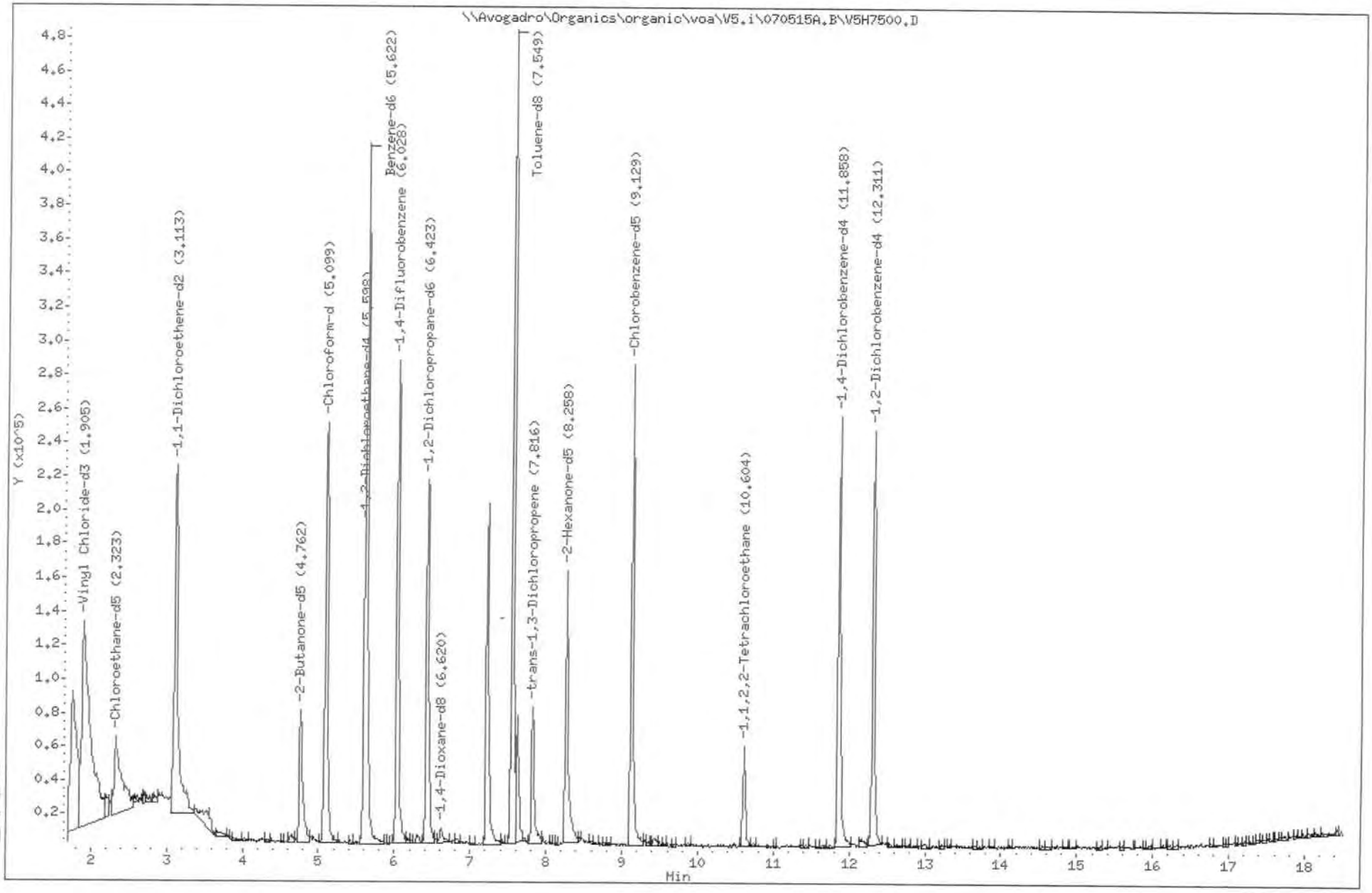
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7500.D
Date : 16-MAY-2007 00:39
Client ID: Y3AN9
Sample Info: 25ML,F0595-19A,,29931
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0219

Data File: V5H7500.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7500.D
Lab Smp Id: F0595-19A Client Smp ID: Y3AN9
Inj Date : 16-MAY-2007 00:39
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-19A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.905	1.916	(0.316)	151714	5.18981	5.2
$ 80 Chloroethane-d5	69	2.335	2.322	(0.387)	76109	6.38418	6.4
$ 81 1,1-Dichloroethene-d2	63	3.113	3.112	(0.516)	214793	4.98307	5.0
$ 82 2-Butanone-d5	46	4.762	4.761	(0.790)	146557	48.7080	49
$ 83 Chloroform-d	84	5.098	5.098	(0.846)	247888	5.98949	6.0(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.597	(0.929)	99665	6.12460	6.1
$ 84 Benzene-d6	84	5.621	5.620	(0.616)	383093	5.25060	5.3
* 26 1,4-Difluorobenzene	114	6.027	6.038	(1.000)	248126	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.422	6.433	(0.704)	102583	5.50454	5.5
$ 94 1,4-Dioxane-d8	96	6.620	6.619	(1.098)	9075	271.196	270(Q)
$ 33 Toluene-d8	98	7.549	7.548	(0.827)	353117	5.53799	5.5
34 Toluene	91	7.618	7.618	(0.835)	64126	1.02424	1.0
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.815	(0.856)	62775	5.13936	5.1
$ 87 2-Hexanone-d5	63	8.257	8.256	(0.905)	75495	49.8251	50
* 42 Chlorobenzene-d5	117	9.128	9.127	(1.000)	183474	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.615	10.614	(1.163)	41972	5.82590	5.8
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.856	(1.000)	82044	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.309	(1.038)	71193	6.14292	6.1(Q)

WL
05/17/07

HZA

0220

Data File: V5H7500.D
Report Date: 17-May-2007 11:52

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: V5H7500.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7500.D
Lab Smp Id: F0595-19A Client Smp ID: Y3AN9
Inj Date : 16-MAY-2007 00:39
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-19A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7500.D

Date : 16-MAY-2007 00:39

Client ID: Y3AN9

Instrument: V5.i

Sample Info: 25ML,F0595-19A,,29931

Purge Volume: 25.0

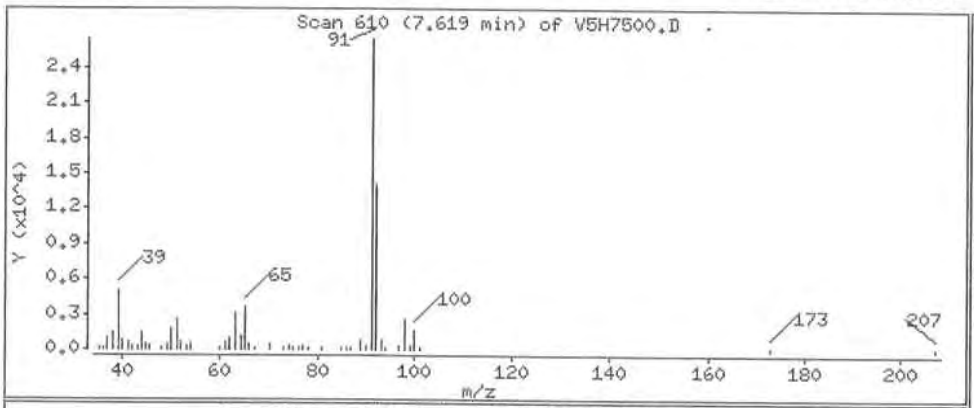
Operator: HZA SRC: LIMS

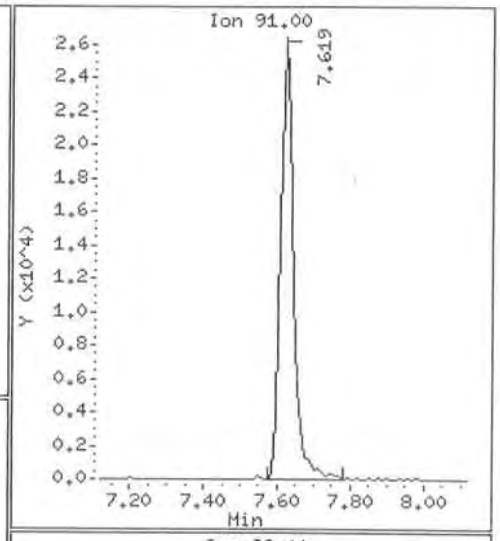
Column phase: DB-624

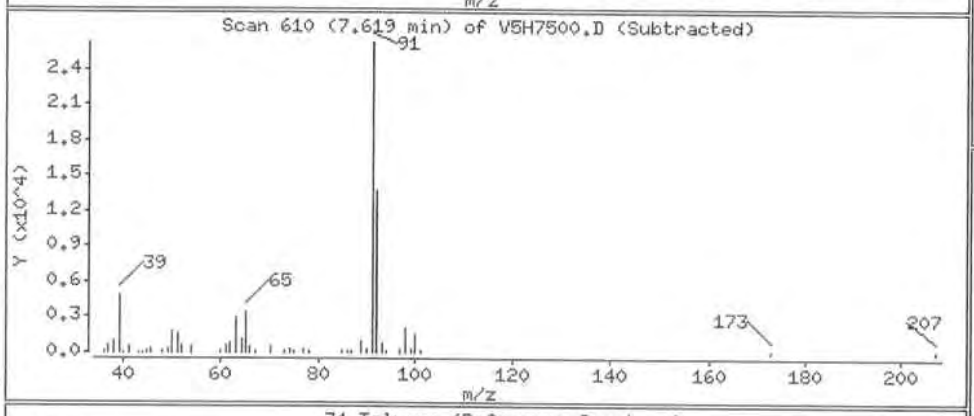
Column diameter: 0.25

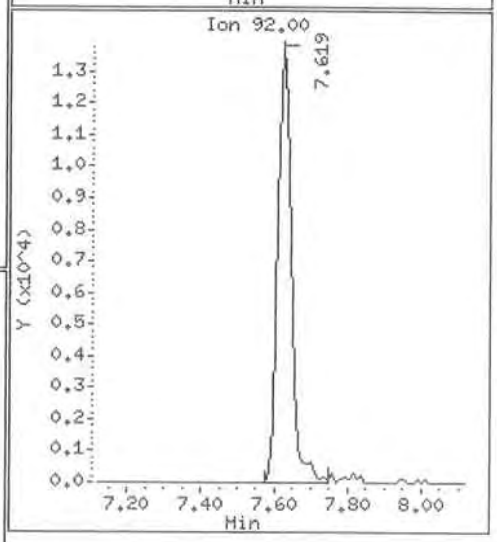
34 Toluene

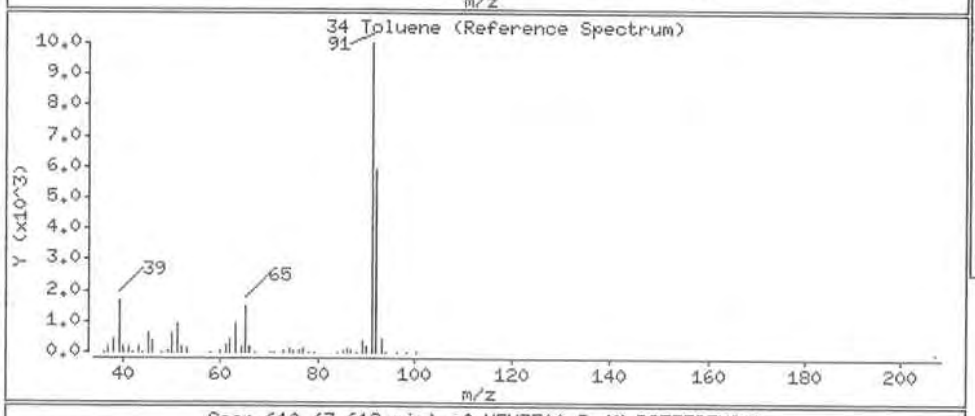
Concentration: 1.0 ug/L

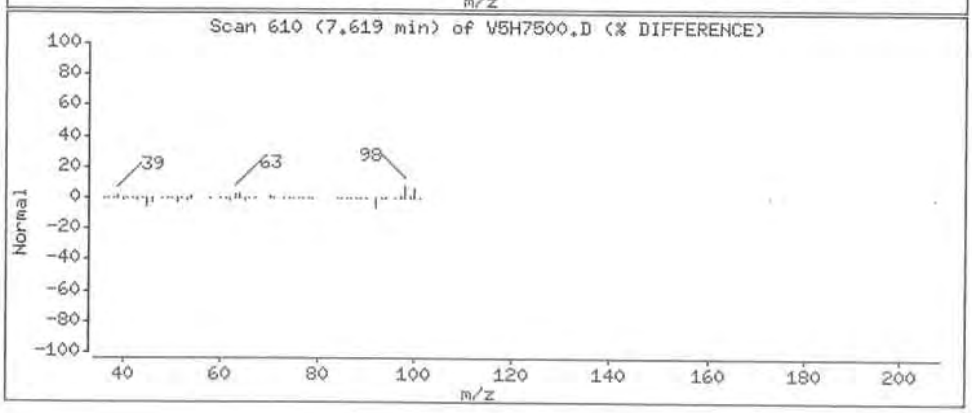












1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AP0

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7501.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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	1.1	
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AP0

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7501.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
79-01-6	Trichloroethene	0.33	J
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.

Y3AP0

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-20A

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7501.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/12/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L Purge Volume: 25.0 (mL)

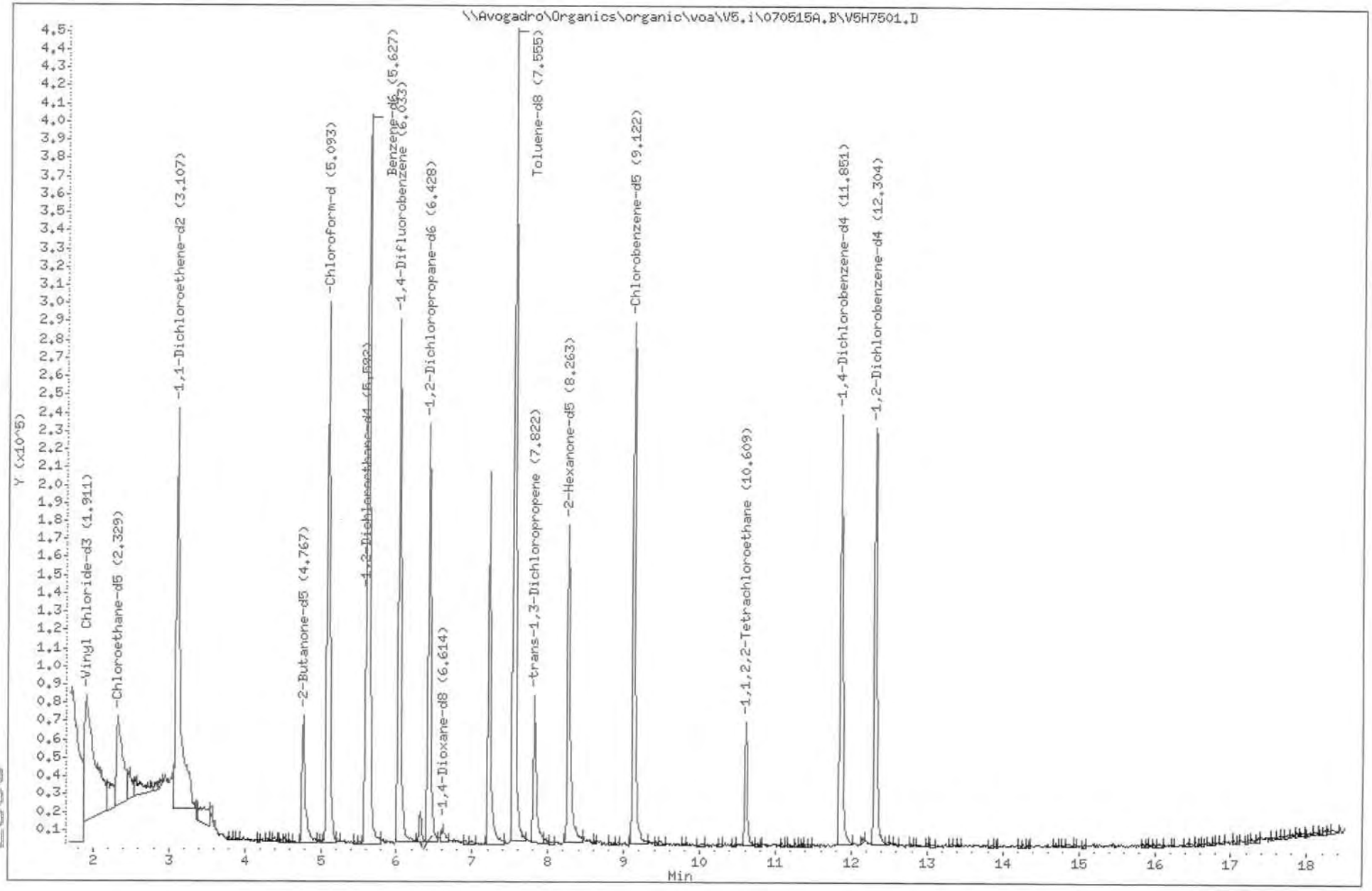
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 [1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7501.D
Date : 16-MAY-2007 01:10
Client ID: Y3AP0
Sample Info: 25ML,F0595-20A,,29931
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



6221

Data File: V5H7501.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7501.D
Lab Smp Id: F0595-20A Client Smp ID: Y3AP0
Inj Date : 16-MAY-2007 01:10
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-20A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.910	1.916	(0.317)	150541	5.14938	5.1
$ 80 Chloroethane-d5	69	2.328	2.322	(0.386)	80826	6.77944	6.8(R)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.112	(0.515)	206914	4.79999	4.8
$ 82 2-Butanone-d5	46	4.767	4.761	(0.790)	140858	46.8111	47
$ 83 Chloroform-d	84	5.092	5.098	(0.844)	249949	6.03893	6.0
19 Chloroform	83	5.115	5.109	(0.848)	35414	1.07555	1.1
$ 23 1,2-Dichloroethane-d4	65	5.591	5.597	(0.927)	102198	6.27988	6.3
$ 84 Benzene-d6	84	5.626	5.620	(0.617)	401568	5.60942	5.6
* 26 1,4-Difluorobenzene	114	6.033	6.038	(1.000)	248141	5.00000	
27 Trichloroethene	95	6.311	6.305	(0.692)	6426	0.33377	0.33(aH)
$ 85 1,2-Dichloropropane-d6	67	6.428	6.433	(0.705)	103034	5.63482	5.6
$ 94 1,4-Dioxane-d8	96	6.613	6.619	(1.096)	10135	302.854	300(Q)
$ 33 Toluene-d8	98	7.554	7.548	(0.828)	347507	5.55458	5.6
$ 86 trans-1,3-Dichloropropene-d4	79	7.821	7.815	(0.857)	62920	5.25006	5.3
$ 87 2-Hexanone-d5	63	8.262	8.256	(0.906)	74300	49.9773	50
* 42 Chlorobenzene-d5	117	9.122	9.127	(1.000)	180020	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.614	(1.163)	39976	5.65532	5.7
* 78 1,4-Dichlorobenzene-d4	152	11.862	11.856	(1.000)	78036	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.315	12.309	(1.038)	73939	6.70754	6.7(QR)

VL
05/17/07

HZA

Data File: V5H7501.D
Report Date: 17-May-2007 11:52

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: V5H7501.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7501.D
Lab Smp Id: F0595-20A Client Smp ID: Y3AP0
Inj Date : 16-MAY-2007 01:10
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-20A,,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7501.D

Date : 16-MAY-2007 01:10

Client ID: Y3AP0

Instrument: V5.i

Sample Info: 25ML,F0595-20A,,29931

Purge Volume: 25.0

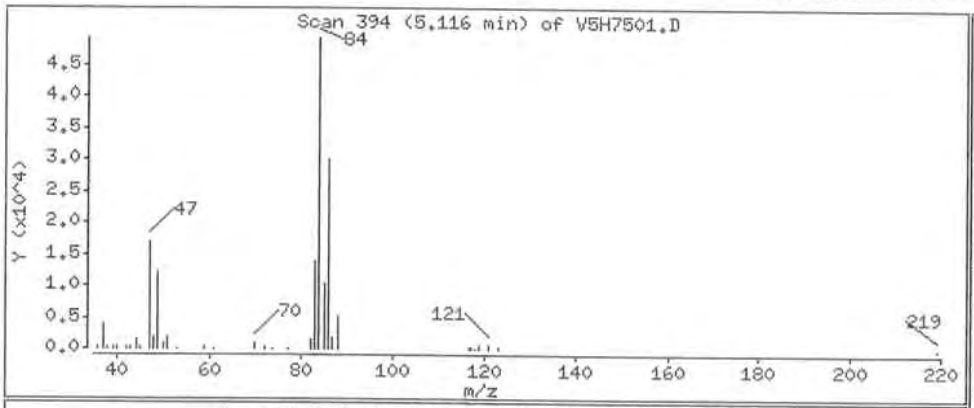
Operator: HZA SRC: LIMS

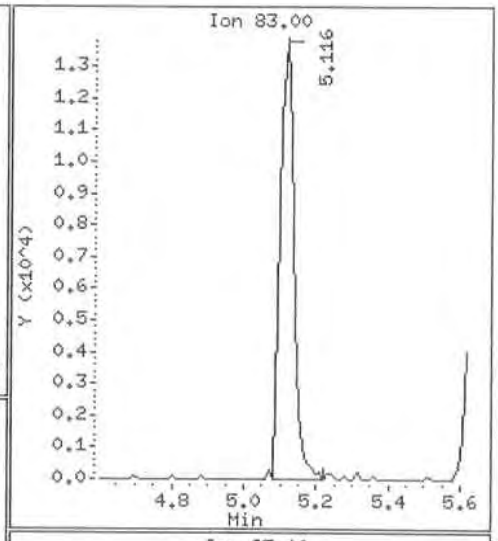
Column phase: DB-624

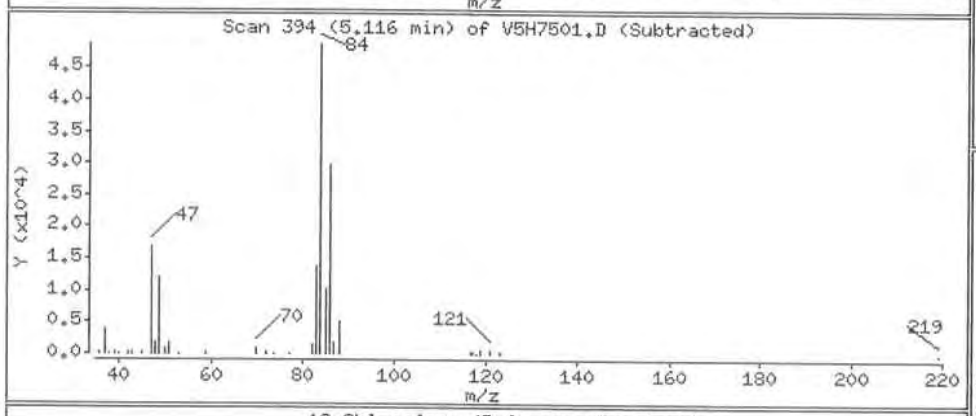
Column diameter: 0.25

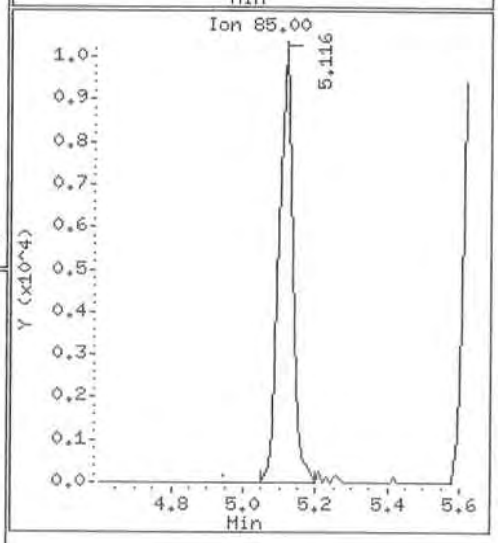
19 Chloroform

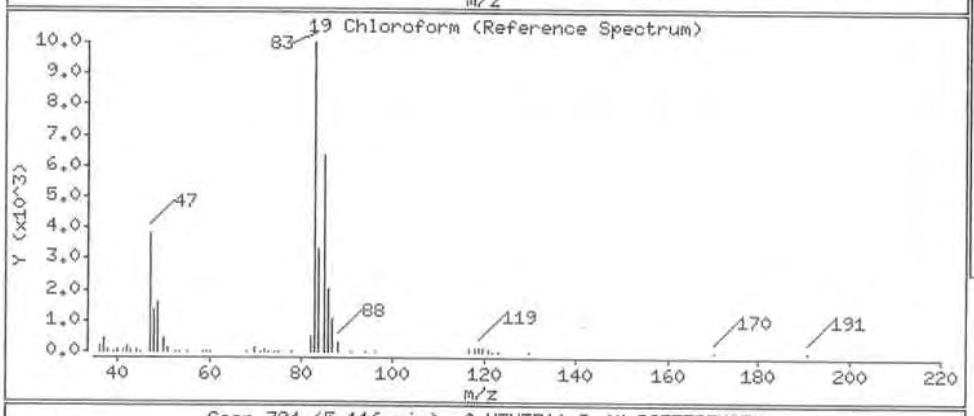
Concentration: 1.1 ug/L

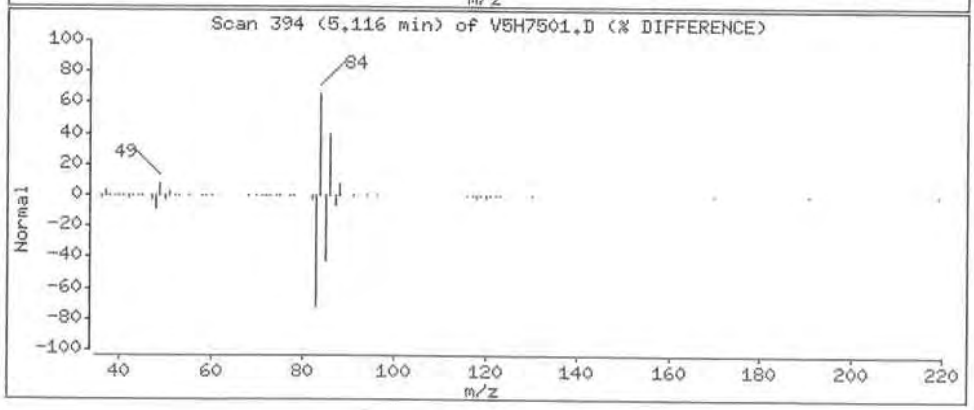












Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7501.D

Date : 16-MAY-2007 01:10

Client ID: Y3AP0

Instrument: V5.i

Sample Info: 25ML,F0595-20A,,29931

Purge Volume: 25.0

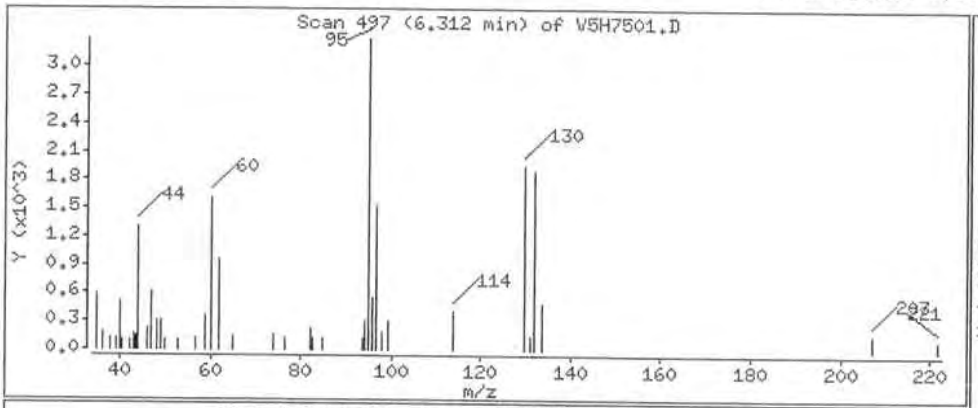
Operator: HZA SRC: LIMS

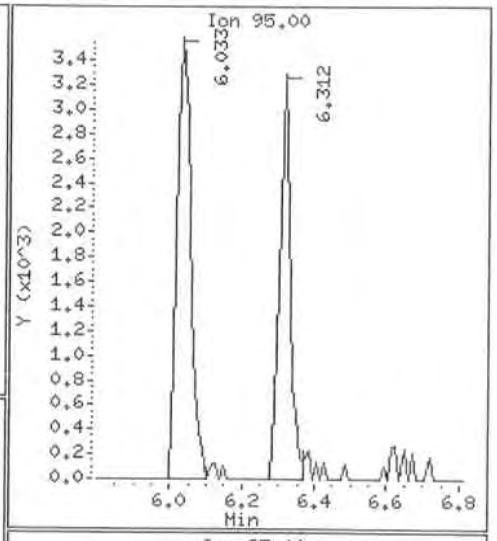
Column phase: DB-624

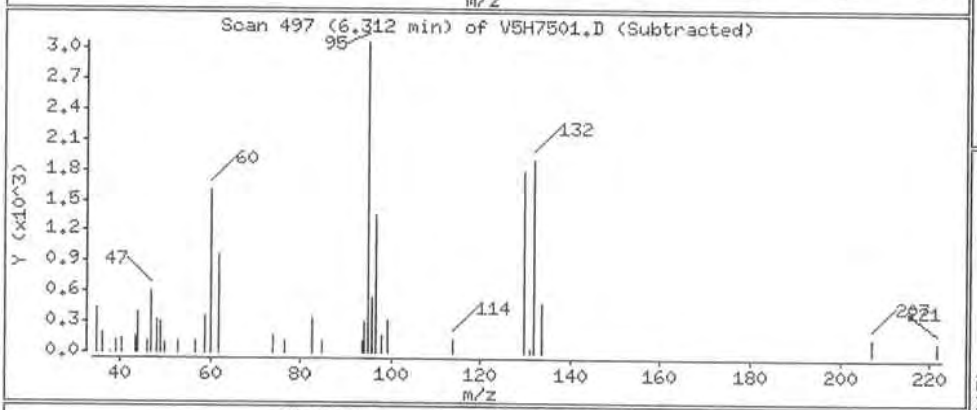
Column diameter: 0.25

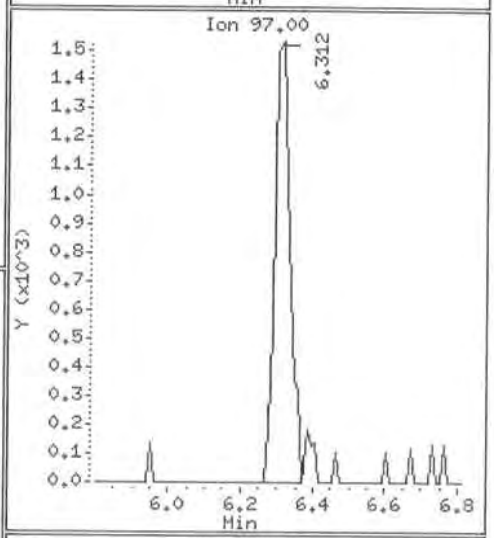
27 Trichloroethene

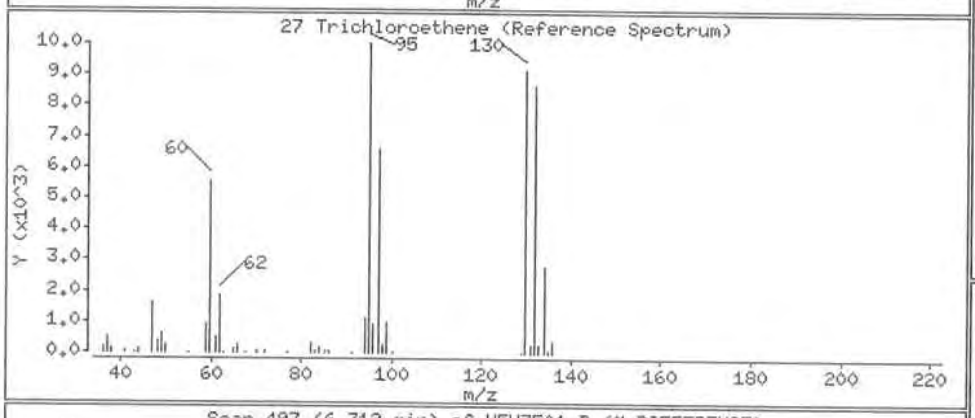
Concentration: 0.33 ug/L

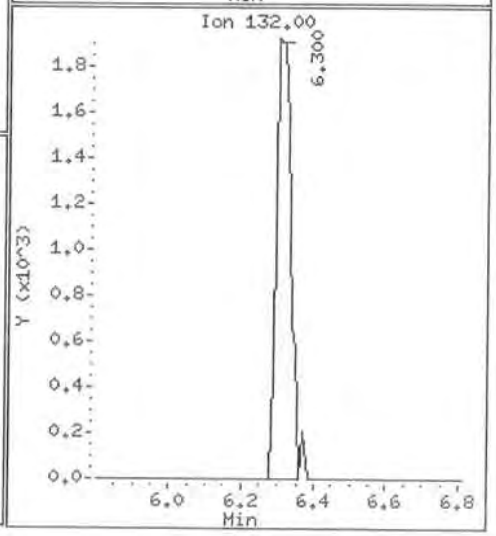


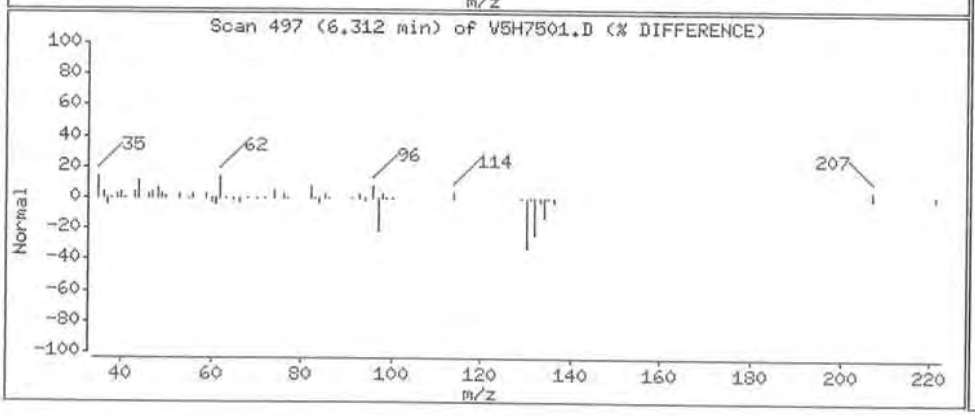












6A - FORM VI VOA-1

VOLATILE ORGANICS INITIAL CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date(s): 05/14/2007 05/14/2007

Heated Purge: (Y/N) N Calibration Time(s): 9:47 11:54

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5H7452.D RRF001 = V5H7453.D

RRF005 = V5H7451A.D RRF010 = V5H7455.D RRF020 = V5H7456.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.207	0.210	0.294	0.313	0.328	0.270	21.3
Chloromethane	0.544	0.599	0.643	0.635	0.653	0.615	7.3
Vinyl chloride	0.503	0.509	0.583	0.548	0.563	0.541	6.3
Bromomethane	0.437	0.455	0.413	0.358	0.302	0.393	16.0
Chloroethane	0.174	0.164	0.206	0.236	0.209	0.198	14.6
Trichlorofluoromethane	0.546	0.754	0.818	0.807	0.810	0.747	15.4
1,1-Dichloroethene	0.296	0.286	0.306	0.299	0.316	0.301	3.7
1,1,2-Trichloro-1,2,2-trifluoroethane	0.226	0.266	0.316	0.254	0.323	0.277	15.0
Acetone	0.072	0.065	0.055	0.045	0.039	0.055	25.1
Carbon disulfide	0.792	0.941	1.009	0.994	0.983	0.944	9.4
Methyl acetate	0.085	0.146	0.080	0.083	0.072	0.093	32.2
Methylene chloride	0.307	0.362	0.345	0.333	0.311	0.332	6.9
trans-1,2-Dichloroethene	0.339	0.354	0.381	0.376	0.358	0.361	4.7
Methyl tert-butyl ether	0.276	0.307	0.308	0.292	0.276	0.292	5.4
1,1-Dichloroethane	0.568	0.674	0.705	0.682	0.670	0.660	8.1
cis-1,2-Dichloroethene	0.284	0.303	0.336	0.326	0.319	0.314	6.5
2-Butanone	0.047	0.055	0.054	0.049	0.045	0.050	8.5
Bromochloromethane	0.076	0.111	0.104	0.099	0.099	0.098	13.2
Chloroform	0.583	0.672	0.706	0.694	0.663	0.663	7.2
1,1,1-Trichloroethane	0.822	0.907	0.971	0.912	0.871	0.897	6.2
Cyclohexane	0.531	0.607	0.716	0.675	0.667	0.639	11.3
Carbon tetrachloride	0.614	0.671	0.778	0.738	0.712	0.703	8.9
Benzene	1.594	1.735	1.818	1.652	1.598	1.679	5.7
1,2-Dichloroethane	0.276	0.271	0.336	0.339	0.335	0.311	11.1
1,4-Dioxane	0.001	0.000	0.000	0.001	0.001	0.001	34.1
Trichloroethene	0.440	0.553	0.595	0.558	0.527	0.535	10.8
Methylcyclohexane	0.502	0.613	0.651	0.622	0.645	0.607	10.0

6B - FORM VI VOA-2

VOLATILE ORGANICS INITIAL CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date(s): 05/14/2007 05/14/2007

Heated Purge: (Y/N) N Calibration Time(s): 9:47 11:54

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5H7452.D RRF001 = V5H7453.D

RRF005 = V5H7451A.D RRF010 = V5H7455.D RRF020 = V5H7456.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.338	0.432	0.405	0.366	0.348	0.378	10.5
Bromodichloromethane	0.421	0.530	0.568	0.533	0.508	0.512	10.8
cis-1,3-Dichloropropene	0.377	0.494	0.552	0.531	0.511	0.493	13.8
4-Methyl-2-pentanone	0.106	0.134	0.153	0.141	0.135	0.134	12.9
Toluene	1.524	1.754	1.850	1.739	1.664	1.706	7.1
trans-1,3-Dichloropropene	0.262	0.324	0.411	0.378	0.382	0.351	16.8
1,1,2-Trichloroethane	0.135	0.168	0.179	0.165	0.155	0.160	10.4
Tetrachloroethene	0.367	0.387	0.414	0.386	0.373	0.386	4.6
2-Hexanone	0.061	0.095	0.111	0.099	0.090	0.091	20.2
Dibromochloromethane	0.202	0.207	0.229	0.230	0.223	0.218	6.0
1,2-Dibromoethane	0.148	0.149	0.181	0.167	0.165	0.162	8.5
Chlorobenzene	0.792	0.980	0.995	0.938	0.903	0.922	8.8
Ethylbenzene	1.759	2.002	2.251	2.139	2.037	2.038	9.0
m,p-Xylene	0.618	0.770	0.758	0.737	0.708	0.718	8.5
o-Xylene	0.484	0.587	0.686	0.644	0.617	0.604	12.6
Styrene	0.554	0.719	0.946	0.869	0.858	0.789	19.6
Bromoform	0.190	0.197	0.241	0.232	0.227	0.217	10.3
Isopropylbenzene	1.518	1.759	2.124	2.024	1.907	1.866	12.7
1,1,2,2-Tetrachloroethane	0.155	0.149	0.174	0.164	0.148	0.158	7.0
1,3-Dichlorobenzene	1.103	1.293	1.353	1.363	1.319	1.286	8.2
1,4-Dichlorobenzene	1.249	1.365	1.381	1.337	1.266	1.320	4.5
1,2-Dichlorobenzene	0.900	0.907	1.007	0.998	0.942	0.951	5.2
1,2-Dibromo-3-chloropropane	0.062	0.035	0.031	0.039	0.037	0.041	29.5
1,2,4-Trichlorobenzene	0.450	0.507	0.552	0.585	0.575	0.534	10.5
1,2,3-Trichlorobenzene	0.210	0.255	0.301	0.337	0.340	0.289	19.3
2-Methyl-2-Propanol	0.009	0.008	0.008	0.009	0.008	0.008	5.8

6C - FORM VI VOA-3

VOLATILE ORGANICS INITIAL CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date(s): 05/14/2007 05/14/2007

Heated Purge: (Y/N) N Calibration Time(s): 9:47 11:54

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

LAB FILE ID: RRF0.5 = V5H7452.D RRF001 = V5H7453.D

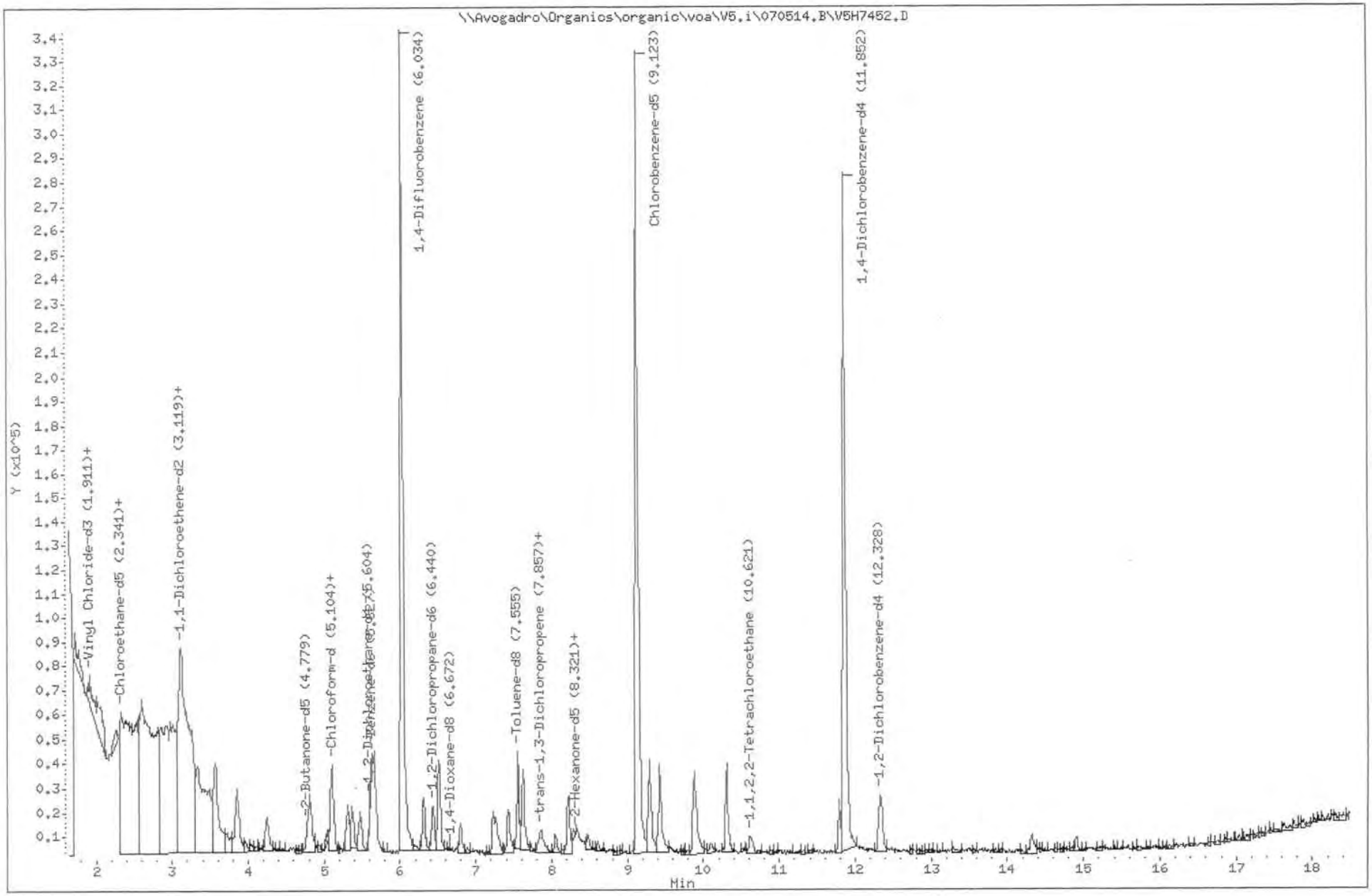
RRF005 = V5H7451A.D RRF010 = V5H7455.D RRF020 = V5H7456.D

COMPOUND	RRF0.5	RRF001	RRF005	RRF010	RRF020	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.487	0.683	0.612	0.570	0.595	0.589	12.1
Chloroethane-d5	0.216	0.228	0.249	0.297	0.211	0.240	14.5
1,1-Dichloroethene-d2	0.740	0.908	0.927	0.879	0.888	0.869	8.5
2-Butanone-d5	0.058	0.062	0.065	0.060	0.059	0.061	4.4
Chloroform-d	0.755	0.851	0.887	0.846	0.831	0.834	5.8
1,2-Dichloroethane-d4	0.317	0.322	0.344	0.329	0.328	0.328	3.1
Benzene-d6	1.880	2.081	2.177	1.909	1.895	1.988	6.7
1,2-Dichloropropane-d6	0.455	0.595	0.552	0.474	0.463	0.508	12.3
Toluene-d8	1.613	1.821	1.916	1.666	1.672	1.738	7.3
trans-1,3-Dichloropropene-d4	0.238	0.337	0.390	0.344	0.355	0.333	17.1
2-Hexanone-d5	0.026	0.035	0.054	0.047	0.044	0.041	26.5
1,4-Dioxane-d8	0.001	0.001	0.001	0.001	0.001	0.001	18.6
1,1,2,2-Tetrachloroethane-d2	0.200	0.197	0.211	0.195	0.178	0.196	6.0
1,2-Dichlorobenzene-d4	0.516	0.734	0.803	0.736	0.743	0.706	15.6

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7452.D
Date : 14-MAY-2007 09:47
Client ID: VSTD0.55H
Sample Info: 25ML,VSTD0.55H,VSTD0.55H
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0236

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7452.D
Report Date: 16-May-2007 15:37

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7452.D
Lab Smp Id: VSTD0.55H Client Smp ID: VSTD0.55H
Inj Date : 14-MAY-2007 09:47
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0.55H,VSTD0.55H
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 10:54 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.655	1.651	(0.274)	6248	0.50000	0.38(a)
2 Chloromethane	50	1.794	1.802	(0.297)	16432	0.50000	0.44(a)
$ 79 Vinyl Chloride-d3	65	1.899	1.906	(0.315)	14714	0.50000	0.41(a)
3 Vinyl Chloride	62	1.922	1.906	(0.319)	15219	0.50000	0.46(a)
4 Bromomethane	94	2.247	2.255	(0.373)	13225	0.50000	0.56
$ 80 Chloroethane-d5	69	2.328	2.336	(0.386)	6518	0.50000	0.45(aQ)
5 Chloroethane	64	2.352	2.348	(0.390)	5246	0.50000	0.44(aQ)
6 Trichlorofluoromethane	101	2.607	2.615	(0.432)	16499	0.50000	0.37(a)
$ 81 1,1-Dichloroethene-d2	63	3.107	3.102	(0.515)	22386	0.50000	0.43(a)
7 1,1-Dichloroethene	96	3.118	3.114	(0.517)	8955	0.50000	0.49(aQ)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.130	3.126	(0.519)	6828	0.50000	0.41(aQ)
9 Acetone	43	3.165	3.161	(0.525)	21697	5.00000	6.5
10 Carbon Disulfide	76	3.339	3.335	(0.553)	23941	0.50000	0.42(a)
11 Methyl Acetate	43	3.281	3.486	(0.544)	2556	0.50000	0.37(a)
12 Methylene Chloride	84	3.571	3.579	(0.592)	9290	0.50000	0.46(a)
98 2-Methyl-2-Propanol ✓	59	3.722	3.718	(0.617)	2743	5.00000	5.4(T)
13 trans-1,2-Dichloroethene	96	3.850	3.857	(0.638)	10245	0.50000	0.47(a)
14 Methyl tert-Butyl Ether	73	3.873	3.869	(0.642)	8336	0.50000	0.47(a)
15 1,1-Dichloroethane	63	4.245	4.252	(0.704)	17171	0.50000	0.43(a)
$ 82 2-Butanone-d5	46	4.779	4.763	(0.792)	17441	5.00000	4.8
17 cis-1,2-Dichloroethene	96	4.814	4.810	(0.798)	8578	0.50000	0.45(a)
16 2-Butanone	43	4.837	4.821	(0.802)	14223	5.00000	4.7

COPY
Original Documents Are Included in CSF COBYZ
Signed: Joanna Strzałkowska Date: 5/25/07

0237

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7452.D
Report Date: 16-May-2007 15:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.046	5.042	(0.836)	2312	0.50000	0.39(a)
$	83 Chloroform-d	84	5.104	5.088	(0.846)	22839	0.50000	0.45(a)
	19 Chloroform	83	5.116	5.112	(0.848)	17632	0.50000	0.44(a)
	20 1,1,1-Trichloroethane	97	5.313	5.309	(0.582)	17144	0.50000	0.46(a)
	21 Cyclohexane	56	5.371	5.367	(0.589)	11085	0.50000	0.42(a)
	22 Carbon Tetrachloride	117	5.476	5.472	(0.600)	12821	0.50000	0.44(a)
$	23 1,2-Dichloroethane-d4	65	5.603	5.599	(0.929)	9579	0.50000	0.48(a)
$	84 Benzene-d6	84	5.627	5.623	(0.617)	39221	0.50000	0.47(a)
	25 Benzene	78	5.661	5.657	(0.621)	33262	0.50000	0.47(a)
	24 1,2-Dichloroethane	62	5.673	5.669	(0.940)	8341	0.50000	0.44(a)
*	26 1,4-Difluorobenzene	114	6.033	6.029	(1.000)	302336	5.00000	(Q)
	27 Trichloroethene	95	6.312	6.308	(0.692)	9191	0.50000	0.41(a)
$	85 1,2-Dichloropropane-d6	67	6.428	6.424	(0.705)	9499	0.50000	0.45(a)
	28 Methylcyclohexane	83	6.509	6.505	(0.714)	10474	0.50000	0.41(a)
	29 1,2-Dichloropropane	63	6.521	6.517	(0.715)	7046	0.50000	0.45(Ta)
$	94 1,4-Dioxane-d8	96	6.672	6.610	(1.106)	659	20.0000	16(TaQ)
	93 1,4-Dioxane	88	6.718	6.668	(1.114)	691	20.0000	25(Q)
	30 Bromodichloromethane	83	6.800	6.795	(0.745)	8787	0.50000	0.41(a)
	31 cis-1,3-Dichloropropene	75	7.276	7.260	(0.798)	7870	0.50000	0.38(a)
	32 4-Methyl-2-Pentanone	43	7.427	7.411	(0.814)	22178	5.00000	4.0
$	33 Toluene-d8	98	7.554	7.550	(0.828)	33657	0.50000	0.46(a)
	34 Toluene	91	7.624	7.620	(0.836)	31801	0.50000	0.45(a)
$	86 trans-1,3-Dichloropropene-d4	79	7.845	7.817	(0.860)	4970	0.50000	0.36(a)
	35 trans-1,3-Dichloropropene	75	7.856	7.841	(0.861)	5468	0.50000	0.37(a)
	36 1,1,2-Trichloroethane	97	8.054	8.038	(0.883)	2808	0.50000	0.42(a)
	37 Tetrachloroethene	164	8.216	8.212	(0.901)	7668	0.50000	0.48(a)
$	87 2-Hexanone-d5	63	8.321	8.259	(0.912)	5444	5.00000	3.2
	38 2-Hexanone	43	8.332	8.317	(0.913)	12821	5.00000	3.4
	39 Dibromochloromethane	129	8.472	8.468	(0.929)	4207	0.50000	0.46(a)
	40 1,2-Dibromoethane	107	8.611	8.607	(0.944)	3087	0.50000	0.46(Ta)
*	42 Chlorobenzene-d5	117	9.122	9.130	(1.000)	208660	5.00000	
	43 Chlorobenzene	112	9.157	9.153	(1.004)	16536	0.50000	0.43(aQ)
	44 Ethylbenzene	91	9.285	9.281	(1.018)	36704	0.50000	0.43(a)
	45 m,p-Xylene	106	9.424	9.420	(1.033)	12885	0.50000	0.43(aQ)
	46 o-Xylene	106	9.877	9.873	(1.083)	10099	0.50000	0.40(a)
	47 Styrene	104	9.912	9.885	(1.087)	11550	0.50000	0.35(a)
	48 Bromoform	173	10.098	10.094	(0.852)	1766	0.50000	0.44(a)
	49 Isopropylbenzene	105	10.307	10.303	(1.130)	31671	0.50000	0.41(a)
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.609	10.605	(1.163)	4182	0.50000	0.51
	51 1,1,2,2-Tetrachloroethane	83	10.643	10.639	(1.167)	3229	0.50000	0.49(TaQ)
	52 1,3-Dichlorobenzene	146	11.793	11.777	(0.995)	10254	0.50000	0.43(a)
*	78 1,4-Dichlorobenzene-d4	152	11.851	11.859	(1.000)	92930	5.00000	(Q)
	53 1,4-Dichlorobenzene	146	11.886	11.882	(1.003)	11603	0.50000	0.47(a)
$	90 1,2-Dichlorobenzene-d4	152	12.316	12.312	(1.039)	4795	0.50000	0.37(aQ)
	54 1,2-Dichlorobenzene	146	12.339	12.335	(1.041)	8366	0.50000	0.47(a)
	55 1,2-Dibromo-3-chloropropane	75	13.291	13.276	(1.122)	574	0.50000	0.76(TQ)
	56 1,2,4-Trichlorobenzene	180	14.325	14.309	(1.209)	4179	0.50000	0.42(a)
	77 1,2,3-Trichlorobenzene	180	14.917	14.901	(1.259)	1953	0.50000	0.36(TaQ)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

WL
05/16/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7452.D
Report Date: 16-May-2007 15:37

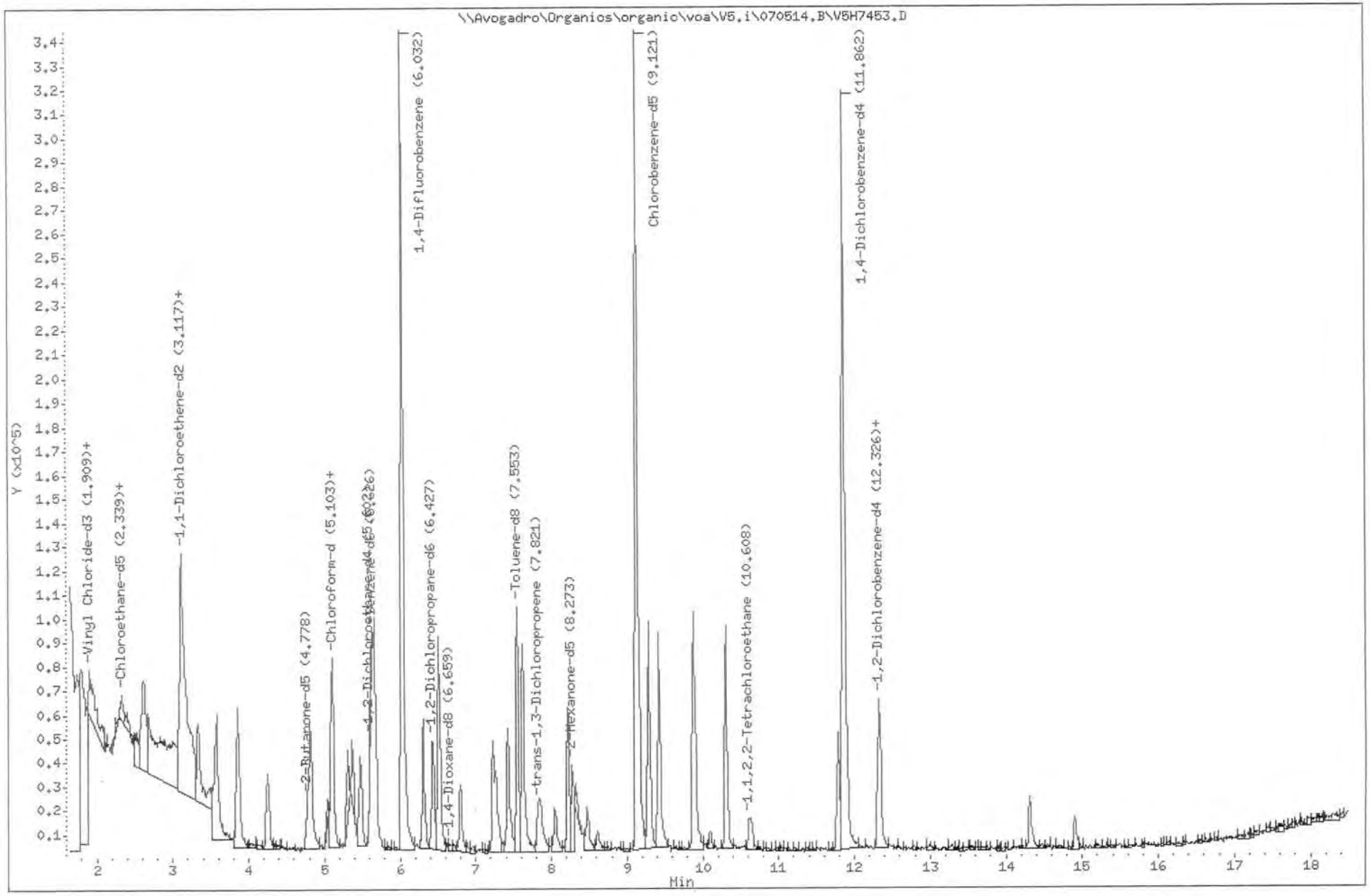
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7453.D
Date : 14-MAY-2007 10:19
Client ID: VSTD0015H
Sample Info: 25ML,VSTD0015H,VSTD0015H
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7453.D
Report Date: 16-May-2007 15:37

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7453.D
Lab Smp Id: VSTD0015H Client Smp ID: VSTD0015H
Inj Date : 14-MAY-2007 10:19
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0015H,VSTD0015H
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 10:54 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 10:19 Cal File: V5H7453.D
Als bottle: 100 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.619	1.651	(0.268)	12912	1.00000	1.0
2 Chloromethane	50	1.804	1.802	(0.299)	36764	1.00000	1.0
$ 79 Vinyl Chloride-d3	65	1.909	1.906	(0.317)	41909	1.00000	1.2
3 Vinyl Chloride	62	1.921	1.906	(0.318)	31259	1.00000	1.0
4 Bromomethane	94	2.257	2.255	(0.374)	27910	1.00000	1.0
$ 80 Chloroethane-d5	69	2.339	2.336	(0.388)	14008	1.00000	1.0
5 Chloroethane	64	2.350	2.348	(0.390)	10075	1.00000	0.97
6 Trichlorofluoromethane	101	2.617	2.615	(0.434)	46270	1.00000	1.2
$ 81 1,1-Dichloroethene-d2	63	3.105	3.102	(0.515)	55728	1.00000	1.1
7 1,1-Dichloroethene	96	3.128	3.114	(0.519)	17525	1.00000	0.98
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.117	3.126	(0.517)	16300	1.00000	1.1
9 Acetone	43	3.163	3.161	(0.524)	39856	10.0000	9.5
10 Carbon Disulfide	76	3.337	3.335	(0.553)	57736	1.00000	1.1
11 Methyl Acetate	43	3.500	3.486	(0.580)	8962	1.00000	0.86
12 Methylene Chloride	84	3.581	3.579	(0.594)	22194	1.00000	1.1
98 2-Methyl-2-Propanol	59	3.709	3.718	(0.615)	4791	10.0000	9.3(T)
13 trans-1,2-Dichloroethene	96	3.848	3.857	(0.638)	21717	1.00000	1.0
14 Methyl tert-Butyl Ether	73	3.872	3.869	(0.642)	18859	1.00000	1.1
15 1,1-Dichloroethane	63	4.255	4.252	(0.705)	41378	1.00000	1.1
$ 82 2-Butanone-d5	46	4.777	4.763	(0.792)	37757	10.0000	10
17 cis-1,2-Dichloroethene	96	4.812	4.810	(0.798)	18612	1.00000	1.0
16 2-Butanone	43	4.824	4.821	(0.800)	33546	10.0000	11

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7453.D
Report Date: 16-May-2007 15:37

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
18 Bromochloromethane	128	5.044	5.042	(0.836)	6802	1.00000	1.2
$ 83 Chloroform-d	84	5.091	5.088	(0.844)	52234	1.00000	1.1
19 Chloroform	83	5.114	5.112	(0.848)	41228	1.00000	1.1
20 1,1,1-Trichloroethane	97	5.312	5.309	(0.582)	39076	1.00000	1.0
21 Cyclohexane	56	5.370	5.367	(0.589)	26130	1.00000	1.1
22 Carbon Tetrachloride	117	5.474	5.472	(0.600)	28912	1.00000	1.0
$ 23 1,2-Dichloroethane-d4	65	5.602	5.599	(0.929)	19773	1.00000	1.0
$ 84 Benzene-d6	84	5.625	5.623	(0.617)	89622	1.00000	1.1
25 Benzene	78	5.660	5.657	(0.621)	74737	1.00000	1.0
24 1,2-Dichloroethane	62	5.672	5.669	(0.940)	16657	1.00000	0.99
* 26 1,4-Difluorobenzene	114	6.032	6.029	(1.000)	306846	5.00000	
27 Trichloroethene	95	6.310	6.308	(0.692)	23839	1.00000	1.1
$ 85 1,2-Dichloropropane-d6	67	6.438	6.424	(0.706)	25647	1.00000	1.1
28 Methylcyclohexane	83	6.508	6.505	(0.714)	26382	1.00000	1.1
29 1,2-Dichloropropane	63	6.519	6.517	(0.715)	18607	1.00000	1.1
$ 94 1,4-Dioxane-d8	96	6.647	6.610	(1.102)	1375	40.0000	41
93 1,4-Dioxane	88	6.682	6.668	(1.108)	619	40.0000	44
30 Bromodichloromethane	83	6.798	6.795	(0.745)	22832	1.00000	1.1
31 cis-1,3-Dichloropropene	75	7.274	7.260	(0.798)	21259	1.00000	1.1
32 4-Methyl-2-Pentanone	43	7.425	7.411	(0.814)	57783	10.0000	11
$ 33 Toluene-d8	98	7.553	7.550	(0.828)	78420	1.00000	1.1
34 Toluene	91	7.623	7.620	(0.836)	75543	1.00000	1.1
$ 86 trans-1,3-Dichloropropene-d4	79	7.820	7.817	(0.857)	14521	1.00000	1.2
35 trans-1,3-Dichloropropene	75	7.855	7.841	(0.861)	13954	1.00000	1.1
36 1,1,2-Trichloroethane	97	8.041	8.038	(0.882)	7227	1.00000	1.1
37 Tetrachloroethene	164	8.215	8.212	(0.901)	16676	1.00000	1.0
$ 87 2-Hexanone-d5	63	8.273	8.259	(0.907)	14990	10.0000	11
38 2-Hexanone	43	8.331	8.317	(0.913)	41062	10.0000	12
39 Dibromochloromethane	129	8.470	8.468	(0.929)	8910	1.00000	1.0
40 1,2-Dibromoethane	107	8.610	8.607	(0.944)	6411	1.00000	1.0(T)
* 42 Chlorobenzene-d5	117	9.121	9.130	(1.000)	215361	5.00000	
43 Chlorobenzene	112	9.156	9.153	(1.004)	42232	1.00000	1.1
44 Ethylbenzene	91	9.283	9.281	(1.018)	86233	1.00000	1.1
45 m,p-Xylene	106	9.423	9.420	(1.033)	33173	1.00000	1.1
46 o-Xylene	106	9.876	9.873	(1.083)	25303	1.00000	1.1
47 Styrene	104	9.899	9.885	(1.085)	30989	1.00000	1.1
48 Bromoform	173	10.096	10.094	(0.851)	4015	1.00000	1.0
49 Isopropylbenzene	105	10.305	10.303	(1.130)	75756	1.00000	1.1
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.607	10.605	(1.163)	8506	1.00000	0.99
51 1,1,2,2-Tetrachloroethane	83	10.642	10.639	(1.167)	6417	1.00000	0.98
52 1,3-Dichlorobenzene	146	11.792	11.777	(0.994)	26331	1.00000	1.1
* 78 1,4-Dichlorobenzene-d4	152	11.861	11.859	(1.000)	101810	5.00000	
53 1,4-Dichlorobenzene	146	11.885	11.882	(1.002)	27786	1.00000	1.0
$ 90 1,2-Dichlorobenzene-d4	152	12.314	12.312	(1.038)	14936	1.00000	1.2
54 1,2-Dichlorobenzene	146	12.337	12.335	(1.040)	18470	1.00000	1.0
M 41 Xylene (total)	106				58476	1.00000	2.2
55 1,2-Dibromo-3-chloropropane	75	13.290	13.276	(1.120)	710	1.00000	0.72(T)
56 1,2,4-Trichlorobenzene	180	14.312	14.309	(1.207)	10319	1.00000	1.1
77 1,2,3-Trichlorobenzene	180	14.904	14.901	(1.257)	5191	1.00000	1.1

QC Flag Legend

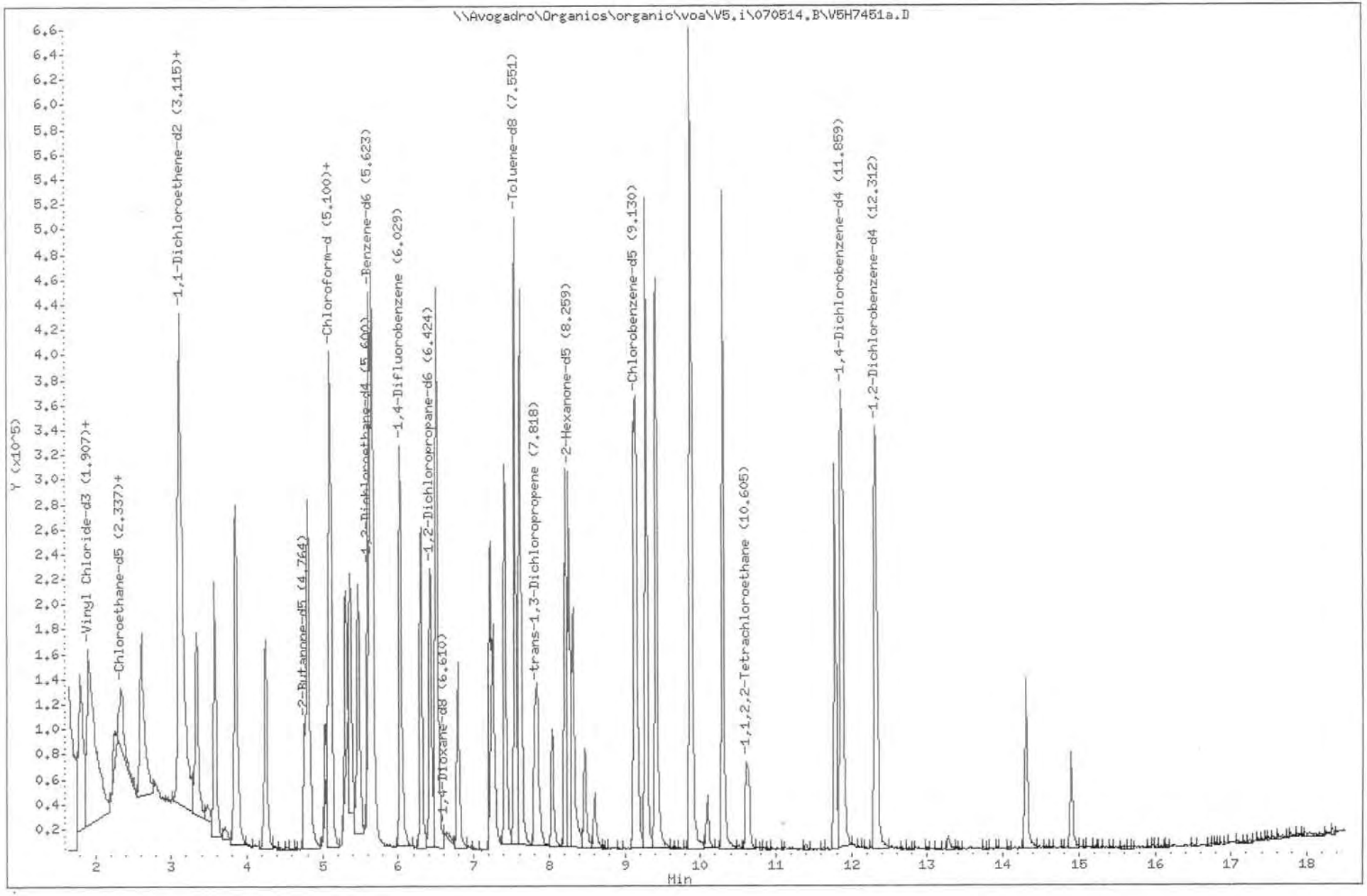
T - Target compound detected outside RT window.

WL
05/16/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7451a.D
Date : 14-MAY-2007 10:51
Client ID: VSTD0055H
Sample Info: 25ML,VSTD0055H,VSTD0055H
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



Data File: V5H7451a.D
Report Date: 16-May-2007 15:37

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7451a.D
Lab Smp Id: VSTD0055H Client Smp ID: VSTD0055H
Inj Date : 14-MAY-2007 10:51
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0055H,VSTD0055H
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 10:54 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 10:51 Cal File: V5H7451a.D
Als bottle: 100 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.651	1.651	(0.274)	85199	5.00000	5.4
2 Chloromethane	50	1.802	1.802	(0.299)	186206	5.00000	5.2
$ 79 Vinyl Chloride-d3	65	1.906	1.906	(0.316)	177041	5.00000	5.2
3 Vinyl Chloride	62	1.906	1.906	(0.316)	168675	5.00000	5.4
4 Bromomethane	94	2.255	2.255	(0.374)	119633	5.00000	5.3
$ 80 Chloroethane-d5	69	2.336	2.336	(0.388)	72203	5.00000	5.2(Q)
5 Chloroethane	64	2.348	2.348	(0.389)	59514	5.00000	5.2
6 Trichlorofluoromethane	101	2.615	2.615	(0.434)	236923	5.00000	5.5
$ 81 1,1-Dichloroethene-d2	63	3.102	3.102	(0.515)	268352	5.00000	5.3
7 1,1-Dichloroethene	96	3.114	3.114	(0.517)	88692	5.00000	5.1(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.126	3.126	(0.518)	91561	5.00000	5.7(Q)
9 Acetone	43	3.161	3.161	(0.524)	158620	50.0000	50
10 Carbon Disulfide	76	3.335	3.335	(0.553)	292197	5.00000	5.3
11 Methyl Acetate	43	3.486	3.486	(0.578)	23039	5.00000	4.3
12 Methylene Chloride	84	3.579	3.579	(0.594)	99770	5.00000	5.2
98 2-Methyl-2-Propanol	59	3.718	3.718	(0.617)	23632	50.0000	49(T)
13 trans-1,2-Dichloroethene	96	3.857	3.857	(0.640)	110377	5.00000	5.3
14 Methyl tert-Butyl Ether	73	3.869	3.869	(0.642)	89152	5.00000	5.3
15 1,1-Dichloroethane	63	4.252	4.252	(0.705)	204151	5.00000	5.3
$ 82 2-Butanone-d5	46	4.763	4.763	(0.790)	186993	50.0000	53
17 cis-1,2-Dichloroethene	96	4.810	4.810	(0.798)	97145	5.00000	5.4
16 2-Butanone	43	4.821	4.821	(0.800)	157360	50.0000	54

Data File: V5H7451a.D
Report Date: 16-May-2007 15:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.042	5.042	(0.836)	30111	5.00000	5.3
$	83 Chloroform-d	84	5.088	5.088	(0.844)	256714	5.00000	5.3
	19 Chloroform	83	5.112	5.112	(0.848)	204445	5.00000	5.3
	20 1,1,1-Trichloroethane	97	5.309	5.309	(0.582)	189235	5.00000	5.4
	21 Cyclohexane	56	5.367	5.367	(0.588)	139576	5.00000	5.6
	22 Carbon Tetrachloride	117	5.472	5.472	(0.599)	151526	5.00000	5.5
$	23 1,2-Dichloroethane-d4	65	5.599	5.599	(0.929)	99468	5.00000	5.2
$	84 Benzene-d6	84	5.623	5.623	(0.616)	424173	5.00000	5.5
	25 Benzene	78	5.657	5.657	(0.620)	354399	5.00000	5.4
	24 1,2-Dichloroethane	62	5.669	5.669	(0.940)	97269	5.00000	5.4
*	26 1,4-Difluorobenzene	114	6.029	6.029	(1.000)	289514	5.00000	
	27 Trichloroethene	95	6.308	6.308	(0.691)	115956	5.00000	5.6
$	85 1,2-Dichloropropane-d6	67	6.424	6.424	(0.704)	107509	5.00000	5.4
	28 Methylcyclohexane	83	6.505	6.505	(0.713)	126895	5.00000	5.4
	29 1,2-Dichloropropane	63	6.517	6.517	(0.714)	78929	5.00000	5.4
$	94 1,4-Dioxane-d8	96	6.610	6.610	(1.096)	9769	250.000	250(Q)
	93 1,4-Dioxane	88	6.668	6.668	(1.106)	6826	250.000	220(Q)
	30 Bromodichloromethane	83	6.795	6.795	(0.744)	110614	5.00000	5.5
	31 cis-1,3-Dichloropropene	75	7.260	7.260	(0.795)	107553	5.00000	5.6
	32 4-Methyl-2-Pentanone	43	7.411	7.411	(0.812)	298261	50.0000	57
$	33 Toluene-d8	98	7.550	7.550	(0.827)	373418	5.00000	5.5
	34 Toluene	91	7.620	7.620	(0.835)	360475	5.00000	5.4
$	86 trans-1,3-Dichloropropene-d4	79	7.817	7.817	(0.856)	76088	5.00000	5.9
	35 trans-1,3-Dichloropropene	75	7.841	7.841	(0.859)	80119	5.00000	5.8
	36 1,1,2-Trichloroethane	97	8.038	8.038	(0.880)	34899	5.00000	5.6
	37 Tetrachloroethene	164	8.212	8.212	(0.900)	80690	5.00000	5.4
$	87 2-Hexanone-d5	63	8.259	8.259	(0.905)	105451	50.0000	66
	38 2-Hexanone	43	8.317	8.317	(0.911)	216875	50.0000	61
	39 Dibromochloromethane	129	8.468	8.468	(0.927)	44637	5.00000	5.2
	40 1,2-Dibromoethane	107	8.607	8.607	(0.943)	35216	5.00000	5.6
*	42 Chlorobenzene-d5	117	9.130	9.130	(1.000)	194887	5.00000	
	43 Chlorobenzene	112	9.153	9.153	(1.003)	193999	5.00000	5.4(Q)
	44 Ethylbenzene	91	9.281	9.281	(1.017)	438765	5.00000	5.5
	45 m,p-Xylene	106	9.420	9.420	(1.032)	147657	5.00000	5.3
	46 o-Xylene	106	9.873	9.873	(1.081)	133649	5.00000	5.7
	47 Styrene	104	9.885	9.885	(1.083)	184300	5.00000	6.0
	48 Bromoform	173	10.094	10.094	(0.851)	24163	5.00000	5.5
	49 Isopropylbenzene	105	10.303	10.303	(1.128)	413978	5.00000	5.7
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.605	10.605	(1.162)	41090	5.00000	5.4
	51 1,1,2,2-Tetrachloroethane	83	10.639	10.639	(1.165)	33948	5.00000	5.5(Q)
	52 1,3-Dichlorobenzene	146	11.777	11.777	(0.993)	135687	5.00000	5.3
*	78 1,4-Dichlorobenzene-d4	152	11.859	11.859	(1.000)	100307	5.00000	
	53 1,4-Dichlorobenzene	146	11.882	11.882	(1.002)	138561	5.00000	5.2
$	90 1,2-Dichlorobenzene-d4	152	12.312	12.312	(1.038)	80529	5.00000	5.7(Q)
	54 1,2-Dichlorobenzene	146	12.335	12.335	(1.040)	100981	5.00000	5.3
M	41 Xylene (total)	106				281306	5.00000	11
	55 1,2-Dibromo-3-chloropropane	75	13.276	13.276	(1.119)	3153	5.00000	3.9(Q)
	56 1,2,4-Trichlorobenzene	180	14.309	14.309	(1.207)	55332	5.00000	5.2
	77 1,2,3-Trichlorobenzene	180	14.901	14.901	(1.257)	30230	5.00000	5.2(Q)

WL
05/16/07

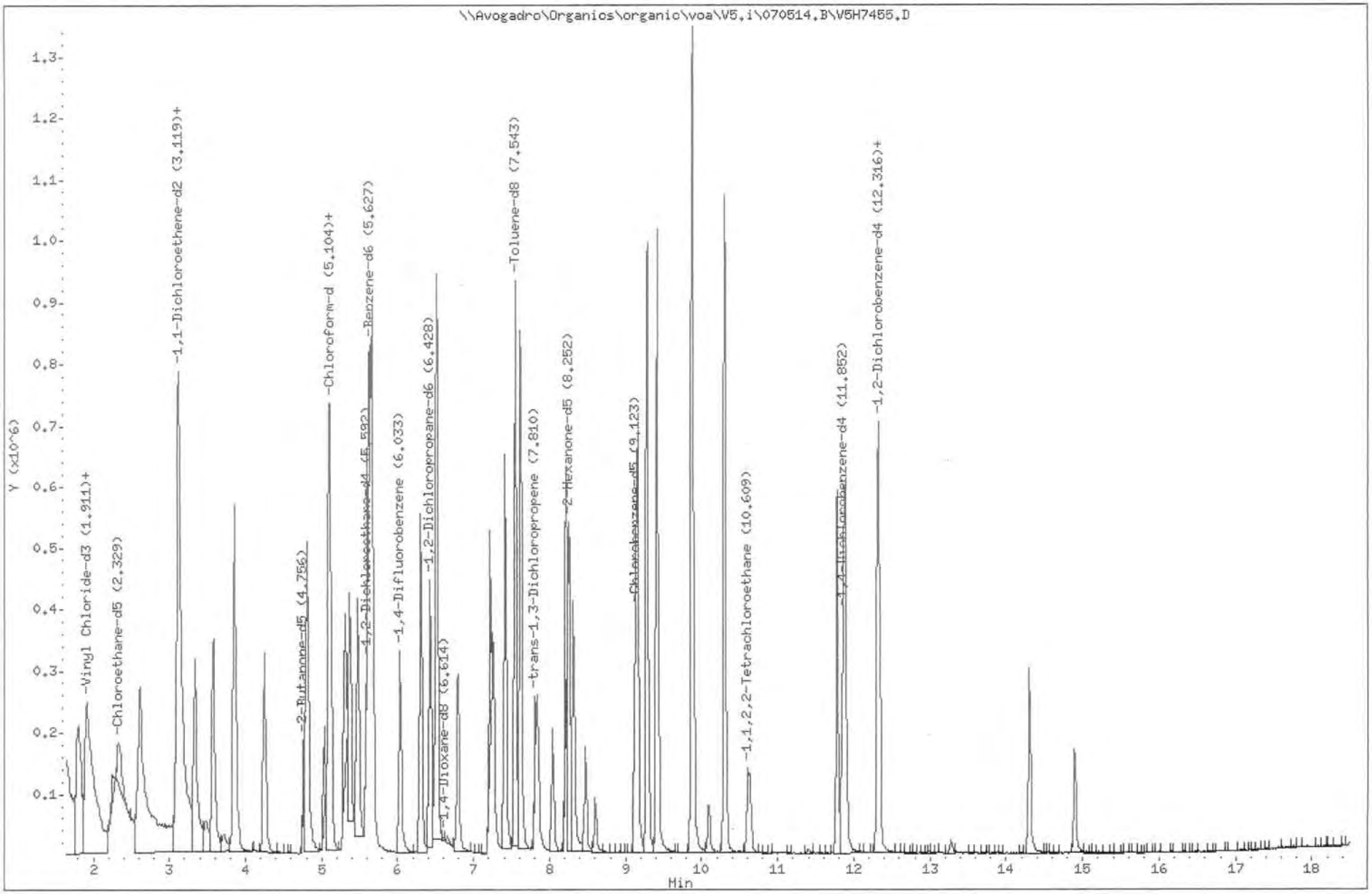
QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7455.D
Date : 14-MAY-2007 11:23
Client ID: VSTD0105H
Sample Info: 25ML,VSTD0105H,VSTD0105H
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



02146

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7455.D
Report Date: 16-May-2007 15:37

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7455.D
Lab Smp Id: VSTD0105H Client Smp ID: VSTD0105H
Inj Date : 14-MAY-2007 11:23
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0105H,VSTD0105H
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 10:54 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:23 Cal File: V5H7455.D
Als bottle: 100 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.620	1.651	(0.269)	178630	10.0000	12
2 Chloromethane	50	1.806	1.802	(0.299)	362517	10.0000	10
$ 79 Vinyl Chloride-d3	65	1.899	1.906	(0.315)	325017	10.0000	9.7
3 Vinyl Chloride	62	1.910	1.906	(0.317)	312796	10.0000	10
4 Bromomethane	94	2.247	2.255	(0.373)	204448	10.0000	8.6
$ 80 Chloroethane-d5	69	2.328	2.336	(0.386)	169285	10.0000	12
5 Chloroethane	64	2.352	2.348	(0.390)	134495	10.0000	12
6 Trichlorofluoromethane	101	2.607	2.615	(0.432)	460765	10.0000	11
$ 81 1,1-Dichloroethene-d2	63	3.106	3.102	(0.515)	501895	10.0000	10
7 1,1-Dichloroethene	96	3.118	3.114	(0.517)	170652	10.0000	10
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.130	3.126	(0.519)	145163	10.0000	9.6
9 Acetone	43	3.165	3.161	(0.525)	254145	100.000	75
10 Carbon Disulfide	76	3.339	3.335	(0.553)	567453	10.0000	11
11 Methyl Acetate	43	3.490	3.486	(0.578)	47356	10.0000	6.6
12 Methylene Chloride	84	3.583	3.579	(0.594)	190161	10.0000	9.9
98 2-Methyl-2-Propanol ✓	59	3.722	3.718	(0.617)	49036	100.000	100(T)
13 trans-1,2-Dichloroethene	96	3.850	3.857	(0.638)	214387	10.0000	10
14 Methyl tert-Butyl Ether	73	3.861	3.869	(0.640)	166783	10.0000	9.9
15 1,1-Dichloroethane	63	4.245	4.252	(0.704)	389169	10.0000	10
$ 82 2-Butanone-d5	46	4.756	4.763	(0.788)	345236	100.000	99
17 cis-1,2-Dichloroethene	96	4.802	4.810	(0.796)	186102	10.0000	10
16 2-Butanone	43	4.814	4.821	(0.798)	280837	100.000	96

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7455.D
Report Date: 16-May-2007 15:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.034	5.042	(0.834)	56636	10.0000	10
$	83 Chloroform-d	84	5.092	5.088	(0.844)	482608	10.0000	10
	19 Chloroform	83	5.116	5.112	(0.848)	395789	10.0000	10
	20 1,1,1-Trichloroethane	97	5.301	5.309	(0.581)	376022	10.0000	10
	21 Cyclohexane	56	5.371	5.367	(0.589)	278479	10.0000	11
	22 Carbon Tetrachloride	117	5.476	5.472	(0.600)	304393	10.0000	11
$	23 1,2-Dichloroethane-d4	65	5.592	5.599	(0.927)	187884	10.0000	10
$	84 Benzene-d6	84	5.626	5.623	(0.617)	787324	10.0000	9.5
	25 Benzene	78	5.661	5.657	(0.621)	681136	10.0000	9.7
	24 1,2-Dichloroethane	62	5.673	5.669	(0.940)	193403	10.0000	11
*	26 1,4-Difluorobenzene	114	6.033	6.029	(1.000)	285343	5.00000	(T)
	27 Trichloroethene	95	6.300	6.308	(0.691)	229951	10.0000	10
$	85 1,2-Dichloropropane-d6	67	6.428	6.424	(0.705)	195286	10.0000	9.1
	28 Methylcyclohexane	83	6.509	6.505	(0.714)	256379	10.0000	10
	29 1,2-Dichloropropane	63	6.521	6.517	(0.715)	150767	10.0000	9.5
$	94 1,4-Dioxane-d8	96	6.614	6.610	(1.096)	17236	400.000	480
	93 1,4-Dioxane	88	6.660	6.668	(1.104)	15377	400.000	670
	30 Bromodichloromethane	83	6.799	6.795	(0.745)	219805	10.0000	10
	31 cis-1,3-Dichloropropene	75	7.252	7.260	(0.795)	218796	10.0000	11
	32 4-Methyl-2-Pentanone	43	7.415	7.411	(0.813)	582920	100.000	110
$	33 Toluene-d8	98	7.543	7.550	(0.827)	687130	10.0000	9.5
	34 Toluene	91	7.612	7.620	(0.835)	717119	10.0000	10
$	86 trans-1,3-Dichloropropene-d4	79	7.810	7.817	(0.856)	141825	10.0000	11
	35 trans-1,3-Dichloropropene	75	7.845	7.841	(0.860)	155961	10.0000	11
	36 1,1,2-Trichloroethane	97	8.042	8.038	(0.882)	67879	10.0000	10
	37 Tetrachloroethene	164	8.216	8.212	(0.901)	159279	10.0000	9.9
$	87 2-Hexanone-d5	63	8.251	8.259	(0.905)	193822	100.000	120
	38 2-Hexanone	43	8.309	8.317	(0.911)	406931	100.000	110
	39 Dibromochloromethane	129	8.472	8.468	(0.929)	94947	10.0000	11
	40 1,2-Dibromoethane	107	8.599	8.607	(0.943)	68709	10.0000	10
*	42 Chlorobenzene-d5	117	9.122	9.130	(1.000)	206171	5.00000	
	43 Chlorobenzene	112	9.157	9.153	(1.004)	386868	10.0000	10
	44 Ethylbenzene	91	9.285	9.281	(1.018)	881884	10.0000	10
	45 m,p-Xylene	106	9.412	9.420	(1.032)	303713	10.0000	10
	46 o-Xylene	106	9.865	9.873	(1.081)	265728	10.0000	11
	47 Styrene	104	9.877	9.885	(1.083)	358348	10.0000	11
	48 Bromoform	173	10.098	10.094	(0.852)	47786	10.0000	11
	49 Isopropylbenzene	105	10.295	10.303	(1.129)	834446	10.0000	11
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.609	10.605	(1.163)	80295	10.0000	9.7
	51 1,1,2,2-Tetrachloroethane	83	10.643	10.639	(1.167)	67422	10.0000	10
	52 1,3-Dichlorobenzene	146	11.781	11.777	(0.994)	281250	10.0000	11
*	78 1,4-Dichlorobenzene-d4	152	11.851	11.859	(1.000)	103161	5.00000	
	53 1,4-Dichlorobenzene	146	11.886	11.882	(1.003)	275820	10.0000	10
$	90 1,2-Dichlorobenzene-d4	152	12.304	12.312	(1.038)	151809	10.0000	11
	54 1,2-Dichlorobenzene	146	12.327	12.335	(1.040)	205971	10.0000	10
M	41 Xylene (total)	106				569441	10.0000	21
	55 1,2-Dibromo-3-chloropropane	75	13.280	13.276	(1.121)	7957	10.0000	9.3
	56 1,2,4-Trichlorobenzene	180	14.301	14.309	(1.207)	120734	10.0000	11
	77 1,2,3-Trichlorobenzene	180	14.905	14.901	(1.258)	69465	10.0000	12

WL
05/16/07

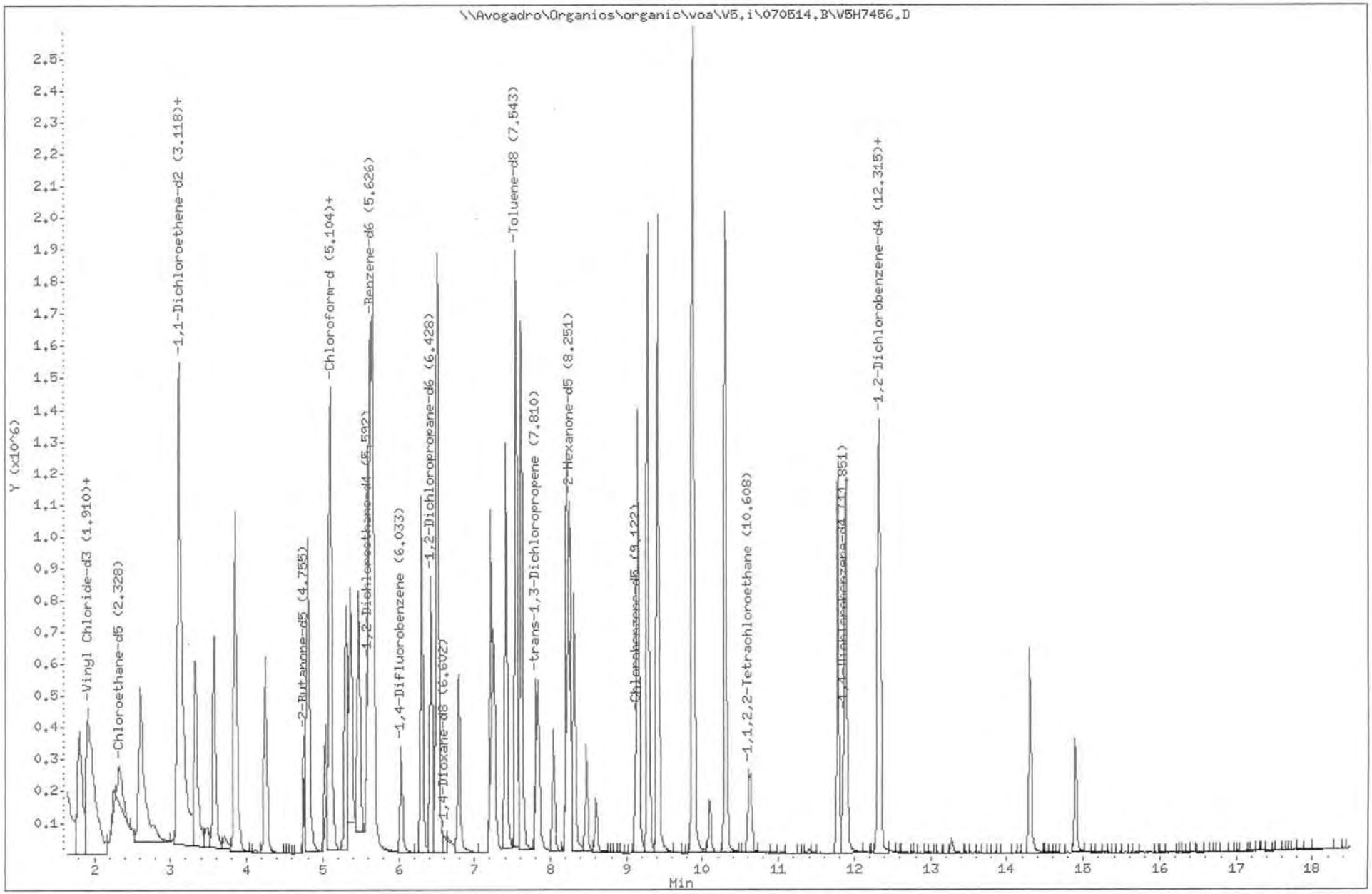
QC Flag Legend

T - Target compound detected outside RT window.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7456.D
Date : 14-MAY-2007 11:54
Client ID: VSTD0205H
Sample Info: 25ML,VSTD0205H,VSTD0205H
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



02149

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7456.D
Report Date: 16-May-2007 15:37

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7456.D
Lab Smp Id: VSTD0205H Client Smp ID: VSTD0205H
Inj Date : 14-MAY-2007 11:54
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0205H,VSTD0205H
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 10:54 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 11:54 Cal File: V5H7456.D
Als bottle: 100 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.654	1.651	(0.274)	374556	20.0000	24(A)
2 Chloromethane	50	1.805	1.802	(0.299)	747000	20.0000	21(A)
$ 79 Vinyl Chloride-d3	65	1.910	1.906	(0.317)	679949	20.0000	20(A)
3 Vinyl Chloride	62	1.910	1.906	(0.317)	643671	20.0000	21(A)
4 Bromomethane	94	2.246	2.255	(0.372)	344712	20.0000	15
$ 80 Chloroethane-d5	69	2.328	2.336	(0.386)	241537	20.0000	18
5 Chloroethane	64	2.351	2.348	(0.390)	239440	20.0000	21(A)
6 Trichlorofluoromethane	101	2.606	2.615	(0.432)	926048	20.0000	22(A)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.102	(0.515)	1015320	20.0000	20(A)
7 1,1-Dichloroethene	96	3.117	3.114	(0.517)	360820	20.0000	21(A)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.129	3.126	(0.519)	369435	20.0000	23(A)
9 Acetone	43	3.164	3.161	(0.525)	440945	200.000	140
10 Carbon Disulfide	76	3.338	3.335	(0.553)	1123952	20.0000	21(A)
11 Methyl Acetate	43	3.489	3.486	(0.578)	82858	20.0000	13
12 Methylene Chloride	84	3.582	3.579	(0.594)	355410	20.0000	19
98 2-Methyl-2-Propanol ✓	59	3.710	3.718	(0.615)	93197	200.000	200(T)
13 trans-1,2-Dichloroethene	96	3.849	3.857	(0.638)	408946	20.0000	20
14 Methyl tert-Butyl Ether	73	3.861	3.869	(0.640)	315672	20.0000	19
15 1,1-Dichloroethane	63	4.244	4.252	(0.704)	765970	20.0000	20(A)
$ 82 2-Butanone-d5	46	4.755	4.763	(0.788)	672962	200.000	190
17 cis-1,2-Dichloroethene	96	4.813	4.810	(0.798)	364963	20.0000	20(A)
16 2-Butanone	43	4.813	4.821	(0.798)	516895	200.000	180

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7456.D
Report Date: 16-May-2007 15:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.034	5.042	(0.834)	113116	20.0000	20(A)
$	83 Chloroform-d	84	5.092	5.088	(0.844)	950049	20.0000	20
	19 Chloroform	83	5.115	5.112	(0.848)	757521	20.0000	20
	20 1,1,1-Trichloroethane	97	5.301	5.309	(0.581)	733585	20.0000	19
	21 Cyclohexane	56	5.370	5.367	(0.589)	561509	20.0000	21(A)
	22 Carbon Tetrachloride	117	5.475	5.472	(0.600)	599870	20.0000	20(A)
$	23 1,2-Dichloroethane-d4	65	5.591	5.599	(0.927)	374691	20.0000	20
$	84 Benzene-d6	84	5.626	5.623	(0.617)	1596676	20.0000	19
	25 Benzene	78	5.661	5.657	(0.621)	1346071	20.0000	19
	24 1,2-Dichloroethane	62	5.661	5.669	(0.938)	383284	20.0000	22(A)
*	26 1,4-Difluorobenzene	114	6.032	6.029	(1.000)	285801	5.00000	(T)
	27 Trichloroethene	95	6.299	6.308	(0.691)	444015	20.0000	20
$	85 1,2-Dichloropropane-d6	67	6.427	6.424	(0.705)	390369	20.0000	18
	28 Methylcyclohexane	83	6.508	6.505	(0.714)	543754	20.0000	21(A)
	29 1,2-Dichloropropane	63	6.520	6.517	(0.715)	292960	20.0000	18
$	94 1,4-Dioxane-d8	96	6.613	6.610	(1.096)	38256	800.000	990(A)
	93 1,4-Dioxane	88	6.659	6.668	(1.104)	32196	800.000	1200(A)
	30 Bromodichloromethane	83	6.799	6.795	(0.745)	427814	20.0000	20
	31 cis-1,3-Dichloropropene	75	7.252	7.260	(0.795)	430603	20.0000	21(A)
	32 4-Methyl-2-Pentanone	43	7.414	7.411	(0.813)	1140087	200.000	200(A)
$	33 Toluene-d8	98	7.542	7.550	(0.827)	1408562	20.0000	19
	34 Toluene	91	7.623	7.620	(0.836)	1401926	20.0000	20
$	86 trans-1,3-Dichloropropene-d4	79	7.809	7.817	(0.856)	298761	20.0000	21(A)
	35 trans-1,3-Dichloropropene	75	7.844	7.841	(0.860)	321721	20.0000	22(A)
	36 1,1,2-Trichloroethane	97	8.041	8.038	(0.882)	130771	20.0000	19
	37 Tetrachloroethene	164	8.216	8.212	(0.901)	314622	20.0000	19
$	87 2-Hexanone-d5	63	8.250	8.259	(0.905)	374474	200.000	220(A)
	38 2-Hexanone	43	8.308	8.317	(0.911)	758892	200.000	200
	39 Dibromochloromethane	129	8.471	8.468	(0.929)	187964	20.0000	20(A)
	40 1,2-Dibromoethane	107	8.599	8.607	(0.943)	138739	20.0000	20(A)
*	42 Chlorobenzene-d5	117	9.121	9.130	(1.000)	210599	5.00000	
	43 Chlorobenzene	112	9.156	9.153	(1.004)	760864	20.0000	20
	44 Ethylbenzene	91	9.284	9.281	(1.018)	1716130	20.0000	20
	45 m,p-Xylene	106	9.412	9.420	(1.032)	596591	20.0000	20
	46 o-Xylene	106	9.865	9.873	(1.081)	519357	20.0000	20(A)
	47 Styrene	104	9.888	9.885	(1.084)	722371	20.0000	22(A)
	48 Bromoform	173	10.097	10.094	(0.852)	95731	20.0000	21(A)
	49 Isopropylbenzene	105	10.294	10.303	(1.129)	1606709	20.0000	20(A)
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.605	(1.163)	150105	20.0000	18
	51 1,1,2,2-Tetrachloroethane	83	10.631	10.639	(1.166)	124280	20.0000	19
	52 1,3-Dichlorobenzene	146	11.781	11.777	(0.994)	555368	20.0000	21(A)
*	78 1,4-Dichlorobenzene-d4	152	11.850	11.859	(1.000)	105296	5.00000	
	53 1,4-Dichlorobenzene	146	11.885	11.882	(1.003)	533289	20.0000	19
$	90 1,2-Dichlorobenzene-d4	152	12.303	12.312	(1.038)	313089	20.0000	21(A)
	54 1,2-Dichlorobenzene	146	12.327	12.335	(1.040)	396845	20.0000	20
M	41 Xylene (total)	106				1115948	20.0000	40
	55 1,2-Dibromo-3-chloropropane	75	13.279	13.276	(1.121)	15735	20.0000	18
	56 1,2,4-Trichlorobenzene	180	14.301	14.309	(1.207)	242373	20.0000	22(A)
	77 1,2,3-Trichlorobenzene	180	14.905	14.901	(1.258)	142997	20.0000	24(A)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.

WL
5/16/07

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 9:11

Lab File ID: V5H7471.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055J Init. Calib. Time(s): 9:47 11:54

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	0.270	0.311	0.010	14.9	40.0
Chloromethane	0.615	0.699	0.010	13.7	40.0
Vinyl chloride	0.541	0.595	0.100	9.9	30.0
Bromomethane	0.393	0.379	0.100	-3.7	30.0
Chloroethane	0.198	0.187	0.010	-5.6	40.0
Trichlorofluoromethane	0.747	0.954	0.010	27.7	40.0
1,1-Dichloroethene	0.301	0.326	0.100	8.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.277	0.279	0.010	0.8	40.0
Acetone	0.055	0.038	0.010	-31.3	40.0
Carbon disulfide	0.944	1.129	0.010	19.6	40.0
Methyl acetate	0.093	0.083	0.010	-10.4	40.0
Methylene chloride	0.332	0.323	0.010	-2.5	40.0
trans-1,2-Dichloroethene	0.361	0.371	0.010	2.7	40.0
Methyl tert-butyl ether	0.292	0.299	0.010	2.4	40.0
1,1-Dichloroethane	0.660	0.733	0.200	11.1	30.0
cis-1,2-Dichloroethene	0.314	0.335	0.010	6.9	40.0
2-Butanone	0.050	0.046	0.010	-7.4	40.0
Bromochloromethane	0.098	0.098	0.050	-0.3	40.0
Chloroform	0.663	0.725	0.200	9.3	30.0
1,1,1-Trichloroethane	0.897	1.020	0.100	13.8	30.0
Cyclohexane	0.639	0.778	0.010	21.8	40.0
Carbon tetrachloride	0.703	0.808	0.100	14.9	30.0
Benzene	1.679	1.800	0.400	7.2	30.0
1,2-Dichloroethane	0.311	0.340	0.100	9.0	30.0
1,4-Dioxane	0.001	0.001	0.005	17.9	50.0
Trichloroethene	0.535	0.581	0.300	8.6	30.0
Methylcyclohexane	0.607	0.659	0.010	8.7	40.0

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 9:11

Lab File ID: V5H7471.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055J Init. Calib. Time(s): 9:47 11:54

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	0.378	0.386	0.010	2.3	40.0
Bromodichloromethane	0.512	0.548	0.200	7.1	30.0
cis-1,3-Dichloropropene	0.493	0.539	0.200	9.4	30.0
4-Methyl-2-pentanone	0.134	0.145	0.010	8.0	40.0
Toluene	1.706	1.791	0.400	5.0	30.0
trans-1,3-Dichloropropene	0.351	0.358	0.100	1.9	30.0
1,1,2-Trichloroethane	0.160	0.169	0.100	5.5	30.0
Tetrachloroethene	0.386	0.394	0.100	2.3	30.0
2-Hexanone	0.091	0.100	0.010	9.1	40.0
Dibromochloromethane	0.218	0.233	0.100	6.8	30.0
1,2-Dibromoethane	0.162	0.168	0.010	4.0	40.0
Chlorobenzene	0.922	0.994	0.500	7.8	30.0
Ethylbenzene	2.038	2.251	0.100	10.5	30.0
m,p-Xylene	0.718	0.766	0.300	6.7	30.0
o-Xylene	0.604	0.658	0.300	9.0	30.0
Styrene	0.789	0.892	0.300	13.1	30.0
Bromoform	0.217	0.250	0.050	15.1	30.0
Isopropylbenzene	1.866	2.075	0.010	11.2	40.0
1,1,2,2-Tetrachloroethane	0.158	0.153	0.100	-3.0	30.0
1,3-Dichlorobenzene	1.286	1.360	0.400	5.7	30.0
1,4-Dichlorobenzene	1.320	1.347	0.400	2.1	30.0
1,2-Dichlorobenzene	0.951	0.975	0.400	2.5	30.0
1,2-Dibromo-3-chloropropane	0.041	0.037	0.010	-10.1	40.0
1,2,4-Trichlorobenzene	0.534	0.496	0.200	-7.0	30.0
1,2,3-Trichlorobenzene	0.289	0.275	0.200	-4.5	30.0
2-Methyl-2-Propanol	0.008	0.009	0.010	11.9	30.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 9:11

Lab File ID: V5H7471.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055J Init. Calib. Time(s): 9:47 11:54

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	0.589	0.637	0.010	8.1	30.0
Chloroethane-d5	0.240	0.285	0.010	18.5	40.0
1,1-Dichloroethene-d2	0.869	0.958	0.010	10.3	30.0
2-Butanone-d5	0.061	0.057	0.010	-6.4	40.0
Chloroform-d	0.834	0.880	0.010	5.5	30.0
1,2-Dichloroethane-d4	0.328	0.341	0.010	4.1	30.0
Benzene-d6	1.988	2.128	0.010	7.0	30.0
1,2-Dichloropropane-d6	0.508	0.522	0.010	2.8	40.0
Toluene-d8	1.738	1.834	0.010	5.5	30.0
trans-1,3-Dichloropropene-d4	0.333	0.330	0.010	-0.8	30.0
2-Hexanone-d5	0.041	0.045	0.010	10.1	40.0
1,4-Dioxane-d8	0.001	0.001	0.005	32.8	50.0
1,1,2,2-Tetrachloroethane-d2	0.196	0.191	0.010	-2.8	30.0
1,2-Dichlorobenzene-d4	0.706	0.764	0.010	8.2	30.0

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 20:24

Lab File ID: V5H7491.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055K Init. Calib. Time(s): 9:47 11:54

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	0.270	0.247	0.010	-8.6	50.0
Chloromethane	0.615	0.706	0.010	14.9	50.0
Vinyl chloride	0.541	0.620	0.010	14.4	50.0
Bromomethane	0.393	0.371	0.010	-5.6	50.0
Chloroethane	0.198	0.234	0.010	18.3	50.0
Trichlorofluoromethane	0.747	0.925	0.010	23.8	50.0
1,1-Dichloroethene	0.301	0.343	0.010	14.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.277	0.221	0.010	-20.1	50.0
Acetone	0.055	0.039	0.010	-29.4	50.0
Carbon disulfide	0.944	1.055	0.010	11.7	50.0
Methyl acetate	0.093	0.084	0.010	-9.5	50.0
Methylene chloride	0.332	0.361	0.010	9.0	50.0
trans-1,2-Dichloroethene	0.361	0.376	0.010	4.1	50.0
Methyl tert-butyl ether	0.292	0.306	0.010	4.9	50.0
1,1-Dichloroethane	0.660	0.739	0.010	12.0	50.0
cis-1,2-Dichloroethene	0.314	0.344	0.010	9.6	50.0
2-Butanone	0.050	0.051	0.010	1.1	50.0
Bromochloromethane	0.098	0.107	0.010	9.3	50.0
Chloroform	0.663	0.751	0.010	13.2	50.0
1,1,1-Trichloroethane	0.897	0.952	0.010	6.2	50.0
Cyclohexane	0.639	0.559	0.010	-12.5	50.0
Carbon tetrachloride	0.703	0.741	0.010	5.4	50.0
Benzene	1.679	1.706	0.010	1.6	50.0
1,2-Dichloroethane	0.311	0.387	0.010	24.3	50.0
1,4-Dioxane	0.001	0.000	0.005	-29.6	50.0
Trichloroethene	0.535	0.563	0.010	5.3	50.0
Methylcyclohexane	0.607	0.482	0.010	-20.6	50.0

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 20:24

Lab File ID: V5H7491.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055K Init. Calib. Time(s): 9:47 11:54

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	0.378	0.382	0.010	1.2	50.0
Bromodichloromethane	0.512	0.535	0.010	4.6	50.0
cis-1,3-Dichloropropene	0.493	0.475	0.010	-3.7	50.0
4-Methyl-2-pentanone	0.134	0.150	0.010	11.5	50.0
Toluene	1.706	1.737	0.010	1.8	50.0
trans-1,3-Dichloropropene	0.351	0.337	0.010	-4.2	50.0
1,1,2-Trichloroethane	0.160	0.174	0.010	8.7	50.0
Tetrachloroethene	0.386	0.387	0.010	0.3	50.0
2-Hexanone	0.091	0.095	0.010	4.4	50.0
Dibromochloromethane	0.218	0.233	0.010	6.6	50.0
1,2-Dibromoethane	0.162	0.170	0.010	5.2	50.0
Chlorobenzene	0.922	0.928	0.010	0.7	50.0
Ethylbenzene	2.038	2.080	0.010	2.1	50.0
m,p-Xylene	0.718	0.684	0.010	-4.7	50.0
o-Xylene	0.604	0.638	0.010	5.7	50.0
Styrene	0.789	0.829	0.010	5.1	50.0
Bromoform	0.217	0.228	0.010	4.9	50.0
Isopropylbenzene	1.866	1.977	0.010	5.9	50.0
1,1,2,2-Tetrachloroethane	0.158	0.160	0.010	1.6	50.0
1,3-Dichlorobenzene	1.286	1.357	0.010	5.5	50.0
1,4-Dichlorobenzene	1.320	1.338	0.010	1.4	50.0
1,2-Dichlorobenzene	0.951	1.016	0.010	6.9	50.0
1,2-Dibromo-3-chloropropane	0.041	0.042	0.010	3.7	50.0
1,2,4-Trichlorobenzene	0.534	0.495	0.010	-7.2	50.0
1,2,3-Trichlorobenzene	0.289	0.279	0.010	-3.1	50.0
2-Methyl-2-Propanol	0.008	0.007	0.010	-16.8	50.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 20:24

Lab File ID: V5H7491.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055K Init. Calib. Time(s): 9:47 11:54

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	0.589	0.610	0.010	3.5	50.0
Chloroethane-d5	0.240	0.304	0.010	26.3	50.0
1,1-Dichloroethene-d2	0.869	0.948	0.010	9.1	50.0
2-Butanone-d5	0.061	0.061	0.010	0.8	50.0
Chloroform-d	0.834	0.925	0.010	10.9	50.0
1,2-Dichloroethane-d4	0.328	0.355	0.010	8.4	50.0
Benzene-d6	1.988	1.978	0.010	-0.5	50.0
1,2-Dichloropropane-d6	0.508	0.515	0.010	1.4	50.0
Toluene-d8	1.738	1.813	0.010	4.3	50.0
trans-1,3-Dichloropropene-d4	0.333	0.309	0.010	-7.2	50.0
2-Hexanone-d5	0.041	0.039	0.010	-6.4	50.0
1,4-Dioxane-d8	0.001	0.001	0.010	-1.3	50.0
1,1,2,2-Tetrachloroethane-d2	0.196	0.204	0.010	3.7	50.0
1,2-Dichlorobenzene-d4	0.706	0.767	0.010	8.6	50.0

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 21:59

Lab File ID: V5H7494.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055L Init. Calib. Time(s): 9:47 11:54

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	0.270	0.268	0.010	-0.7	40.0
Chloromethane	0.615	0.638	0.010	3.7	40.0
Vinyl chloride	0.541	0.571	0.100	5.4	30.0
Bromomethane	0.393	0.348	0.100	-11.6	30.0
Chloroethane	0.198	0.232	0.010	17.3	40.0
Trichlorofluoromethane	0.747	0.877	0.010	17.4	40.0
1,1-Dichloroethene	0.301	0.277	0.100	-7.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.277	0.252	0.010	-9.1	40.0
Acetone	0.055	0.043	0.010	-21.3	40.0
Carbon disulfide	0.944	1.022	0.010	8.2	40.0
Methyl acetate	0.093	0.101	0.010	8.9	40.0
Methylene chloride	0.332	0.339	0.010	2.4	40.0
trans-1,2-Dichloroethene	0.361	0.362	0.010	0.2	40.0
Methyl tert-butyl ether	0.292	0.307	0.010	5.0	40.0
1,1-Dichloroethane	0.660	0.715	0.200	8.4	30.0
cis-1,2-Dichloroethene	0.314	0.335	0.010	6.8	40.0
2-Butanone	0.050	0.048	0.010	-3.9	40.0
Bromochloromethane	0.098	0.107	0.050	9.7	40.0
Chloroform	0.663	0.735	0.200	10.8	30.0
1,1,1-Trichloroethane	0.897	0.925	0.100	3.2	30.0
Cyclohexane	0.639	0.572	0.010	-10.6	40.0
Carbon tetrachloride	0.703	0.691	0.100	-1.6	30.0
Benzene	1.679	1.641	0.400	-2.3	30.0
1,2-Dichloroethane	0.311	0.362	0.100	16.3	30.0
1,4-Dioxane	0.001	0.000	0.005	-23.9	50.0
Trichloroethene	0.535	0.539	0.300	0.8	30.0
Methylcyclohexane	0.607	0.542	0.010	-10.7	40.0

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 21:59

Lab File ID: V5H7494.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055L Init. Calib. Time(s): 9:47 11:54

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	0.378	0.369	0.010	-2.3	40.0
Bromodichloromethane	0.512	0.538	0.200	5.0	30.0
cis-1,3-Dichloropropene	0.493	0.515	0.200	4.6	30.0
4-Methyl-2-pentanone	0.134	0.147	0.010	9.4	40.0
Toluene	1.706	1.719	0.400	0.7	30.0
trans-1,3-Dichloropropene	0.351	0.377	0.100	7.3	30.0
1,1,2-Trichloroethane	0.160	0.171	0.100	7.0	30.0
Tetrachloroethene	0.386	0.370	0.100	-4.0	30.0
2-Hexanone	0.091	0.095	0.010	4.1	40.0
Dibromochloromethane	0.218	0.225	0.100	2.9	30.0
1,2-Dibromoethane	0.162	0.174	0.010	7.8	40.0
Chlorobenzene	0.922	0.948	0.500	2.8	30.0
Ethylbenzene	2.038	2.061	0.100	1.1	30.0
m,p-Xylene	0.718	0.698	0.300	-2.8	30.0
o-Xylene	0.604	0.625	0.300	3.6	30.0
Styrene	0.789	0.816	0.300	3.5	30.0
Bromoform	0.217	0.212	0.050	-2.3	30.0
Isopropylbenzene	1.866	1.963	0.010	5.2	40.0
1,1,2,2-Tetrachloroethane	0.158	0.165	0.100	4.6	30.0
1,3-Dichlorobenzene	1.286	1.295	0.400	0.7	30.0
1,4-Dichlorobenzene	1.320	1.313	0.400	-0.5	30.0
1,2-Dichlorobenzene	0.951	0.960	0.400	1.0	30.0
1,2-Dibromo-3-chloropropane	0.041	0.038	0.010	-6.5	40.0
1,2,4-Trichlorobenzene	0.534	0.502	0.200	-5.9	30.0
1,2,3-Trichlorobenzene	0.289	0.273	0.200	-5.3	30.0
2-Methyl-2-Propanol	0.008	0.008	0.010	-4.6	30.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/15/2007 Time: 21:59

Lab File ID: V5H7494.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055L Init. Calib. Time(s): 9:47 11:54

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	0.589	0.612	0.010	3.8	30.0
Chloroethane-d5	0.240	0.290	0.010	20.8	40.0
1,1-Dichloroethene-d2	0.869	0.954	0.010	9.8	30.0
2-Butanone-d5	0.061	0.062	0.010	2.8	40.0
Chloroform-d	0.834	0.931	0.010	11.6	30.0
1,2-Dichloroethane-d4	0.328	0.368	0.010	12.2	30.0
Benzene-d6	1.988	1.913	0.010	-3.8	30.0
1,2-Dichloropropane-d6	0.508	0.494	0.010	-2.7	40.0
Toluene-d8	1.738	1.740	0.010	0.1	30.0
trans-1,3-Dichloropropene-d4	0.333	0.326	0.010	-2.2	30.0
2-Hexanone-d5	0.041	0.044	0.010	6.0	40.0
1,4-Dioxane-d8	0.001	0.001	0.005	-4.9	50.0
1,1,2,2-Tetrachloroethane-d2	0.196	0.213	0.010	8.3	30.0
1,2-Dichlorobenzene-d4	0.706	0.732	0.010	3.6	30.0

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/16/2007 Time: 9:22

Lab File ID: V5H7512.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055M Init. Calib. Time(s): 9:47 11:54

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	0.270	0.277	0.010	2.3	40.0
Chloromethane	0.615	0.708	0.010	15.1	40.0
Vinyl chloride	0.541	0.598	0.100	10.4	30.0
Bromomethane	0.393	0.388	0.100	-1.3	30.0
Chloroethane	0.198	0.251	0.010	26.9	40.0
Trichlorofluoromethane	0.747	0.844	0.010	12.9	40.0
1,1-Dichloroethene	0.301	0.353	0.100	17.3	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.277	0.248	0.010	-10.3	40.0
Acetone	0.055	0.045	0.010	-17.8	40.0
Carbon disulfide	0.944	1.110	0.010	17.6	40.0
Methyl acetate	0.093	0.102	0.010	9.4	40.0
Methylene chloride	0.332	0.380	0.010	14.7	40.0
trans-1,2-Dichloroethene	0.361	0.397	0.010	9.8	40.0
Methyl tert-butyl ether	0.292	0.323	0.010	10.8	40.0
1,1-Dichloroethane	0.660	0.802	0.200	21.5	30.0
cis-1,2-Dichloroethene	0.314	0.361	0.010	15.0	40.0
2-Butanone	0.050	0.053	0.010	6.5	40.0
Bromochloromethane	0.098	0.113	0.050	15.2	40.0
Chloroform	0.663	0.809	0.200	21.9	30.0
1,1,1-Trichloroethane	0.897	1.078	0.100	20.2	30.0
Cyclohexane	0.639	0.599	0.010	-6.3	40.0
Carbon tetrachloride	0.703	0.839	0.100	19.4	30.0
Benzene	1.679	1.940	0.400	15.5	30.0
1,2-Dichloroethane	0.311	0.404	0.100	29.8	30.0
1,4-Dioxane	0.001	0.001	0.005	-3.6	50.0
Trichloroethene	0.535	0.608	0.300	13.8	30.0
Methylcyclohexane	0.607	0.547	0.010	-9.9	40.0

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/16/2007 Time: 9:22

Lab File ID: V5H7512.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055M Init. Calib. Time(s): 9:47 11:54

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	0.378	0.416	0.010	10.2	40.0
Bromodichloromethane	0.512	0.615	0.200	20.2	30.0
cis-1,3-Dichloropropene	0.493	0.554	0.200	12.4	30.0
4-Methyl-2-pentanone	0.134	0.164	0.010	22.3	40.0
Toluene	1.706	1.980	0.400	16.1	30.0
trans-1,3-Dichloropropene	0.351	0.418	0.100	19.0	30.0
1,1,2-Trichloroethane	0.160	0.199	0.100	24.2	30.0
Tetrachloroethene	0.386	0.404	0.100	4.9	30.0
2-Hexanone	0.091	0.109	0.010	19.3	40.0
Dibromochloromethane	0.218	0.254	0.100	16.3	30.0
1,2-Dibromoethane	0.162	0.196	0.010	21.3	40.0
Chlorobenzene	0.922	1.053	0.500	14.3	30.0
Ethylbenzene	2.038	2.360	0.100	15.8	30.0
m,p-Xylene	0.718	0.761	0.300	6.0	30.0
o-Xylene	0.604	0.710	0.300	17.7	30.0
Styrene	0.789	0.932	0.300	18.1	30.0
Bromoform	0.217	0.253	0.050	16.2	30.0
Isopropylbenzene	1.866	2.234	0.010	19.7	40.0
1,1,2,2-Tetrachloroethane	0.158	0.183	0.100	16.2	30.0
1,3-Dichlorobenzene	1.286	1.344	0.400	4.5	30.0
1,4-Dichlorobenzene	1.320	1.441	0.400	9.2	30.0
1,2-Dichlorobenzene	0.951	1.061	0.400	11.6	30.0
1,2-Dibromo-3-chloropropane	0.041	0.046	0.010	12.0	40.0
1,2,4-Trichlorobenzene	0.534	0.548	0.200	2.7	30.0
1,2,3-Trichlorobenzene	0.289	0.283	0.200	-1.9	30.0
2-Methyl-2-Propanol	0.008	0.009	0.010	6.0	30.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/16/2007 Time: 9:22

Lab File ID: V5H7512.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055M Init. Calib. Time(s): 9:47 11:54

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	0.589	0.662	0.010	12.4	30.0
Chloroethane-d5	0.240	0.190	0.010	-20.9	40.0
1,1-Dichloroethene-d2	0.869	1.036	0.010	19.3	30.0
2-Butanone-d5	0.061	0.064	0.010	6.4	40.0
Chloroform-d	0.834	0.998	0.010	19.6	30.0
1,2-Dichloroethane-d4	0.328	0.411	0.010	25.4	30.0
Benzene-d6	1.988	2.175	0.010	9.4	30.0
1,2-Dichloropropane-d6	0.508	0.555	0.010	9.2	40.0
Toluene-d8	1.738	1.899	0.010	9.3	30.0
trans-1,3-Dichloropropene-d4	0.333	0.368	0.010	10.4	30.0
2-Hexanone-d5	0.041	0.047	0.010	14.4	40.0
1,4-Dioxane-d8	0.001	0.001	0.005	5.9	50.0
1,1,2,2-Tetrachloroethane-d2	0.196	0.237	0.010	20.8	30.0
1,2-Dichlorobenzene-d4	0.706	0.795	0.010	12.5	30.0

7A - FORM VII VOA-1

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/16/2007 Time: 21:11

Lab File ID: V5H7535.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055N Init. Calib. Time(s): 9:47 11:54

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	0.270	0.335	0.010	23.9	50.0
Chloromethane	0.615	0.669	0.010	8.8	50.0
Vinyl chloride	0.541	0.587	0.010	8.4	50.0
Bromomethane	0.393	0.349	0.010	-11.3	50.0
Chloroethane	0.198	0.162	0.010	-17.8	50.0
Trichlorofluoromethane	0.747	1.095	0.010	46.5	50.0
1,1-Dichloroethene	0.301	0.343	0.010	14.3	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.277	0.372	0.010	34.2	50.0
Acetone	0.055	0.041	0.010	-26.0	50.0
Carbon disulfide	0.944	1.074	0.010	13.8	50.0
Methyl acetate	0.093	0.109	0.010	16.8	50.0
Methylene chloride	0.332	0.369	0.010	11.2	50.0
trans-1,2-Dichloroethene	0.361	0.374	0.010	3.5	50.0
Methyl tert-butyl ether	0.292	0.278	0.010	-4.8	50.0
1,1-Dichloroethane	0.660	0.741	0.010	12.3	50.0
cis-1,2-Dichloroethene	0.314	0.349	0.010	11.1	50.0
2-Butanone	0.050	0.050	0.010	-0.2	50.0
Bromochloromethane	0.098	0.106	0.010	8.1	50.0
Chloroform	0.663	0.802	0.010	20.8	50.0
1,1,1-Trichloroethane	0.897	1.052	0.010	17.4	50.0
Cyclohexane	0.639	0.686	0.010	7.3	50.0
Carbon tetrachloride	0.703	0.842	0.010	19.8	50.0
Benzene	1.679	1.830	0.010	9.0	50.0
1,2-Dichloroethane	0.311	0.393	0.010	26.1	50.0
1,4-Dioxane	0.001	0.000	0.005	-37.5	50.0
Trichloroethene	0.535	0.575	0.010	7.5	50.0
Methylcyclohexane	0.607	0.699	0.010	15.3	50.0

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/16/2007 Time: 21:11

Lab File ID: V5H7535.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055N Init. Calib. Time(s): 9:47 11:54

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	0.378	0.381	0.010	0.9	50.0
Bromodichloromethane	0.512	0.579	0.010	13.0	50.0
cis-1,3-Dichloropropene	0.493	0.545	0.010	10.5	50.0
4-Methyl-2-pentanone	0.134	0.144	0.010	7.6	50.0
Toluene	1.706	1.809	0.010	6.1	50.0
trans-1,3-Dichloropropene	0.351	0.398	0.010	13.3	50.0
1,1,2-Trichloroethane	0.160	0.176	0.010	10.0	50.0
Tetrachloroethene	0.386	0.394	0.010	2.1	50.0
2-Hexanone	0.091	0.096	0.010	5.0	50.0
Dibromochloromethane	0.218	0.229	0.010	4.8	50.0
1,2-Dibromoethane	0.162	0.170	0.010	5.0	50.0
Chlorobenzene	0.922	0.989	0.010	7.2	50.0
Ethylbenzene	2.038	2.276	0.010	11.7	50.0
m,p-Xylene	0.718	0.732	0.010	2.0	50.0
o-Xylene	0.604	0.648	0.010	7.4	50.0
Styrene	0.789	0.840	0.010	6.5	50.0
Bromoform	0.217	0.216	0.010	-0.8	50.0
Isopropylbenzene	1.866	2.108	0.010	12.9	50.0
1,1,2,2-Tetrachloroethane	0.158	0.155	0.010	-1.7	50.0
1,3-Dichlorobenzene	1.286	1.356	0.010	5.5	50.0
1,4-Dichlorobenzene	1.320	1.395	0.010	5.7	50.0
1,2-Dichlorobenzene	0.951	1.038	0.010	9.1	50.0
1,2-Dibromo-3-chloropropane	0.041	0.042	0.010	2.4	50.0
1,2,4-Trichlorobenzene	0.534	0.456	0.010	-14.5	50.0
1,2,3-Trichlorobenzene	0.289	0.251	0.010	-13.1	50.0
2-Methyl-2-Propanol	0.008	0.008	0.010	-0.7	50.0

7C - FORM VII VOA-3

VOLATILE CONTINUING CALIBRATION DATA

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Instrument ID: V5 Calibration Date: 05/16/2007 Time: 21:11

Lab File ID: V5H7535.D Init. Calib. Date(s): 05/14/2007 05/14/2007

EPA Sample No.(VSTD#####): VSTD0055N Init. Calib. Time(s): 9:47 11:54

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

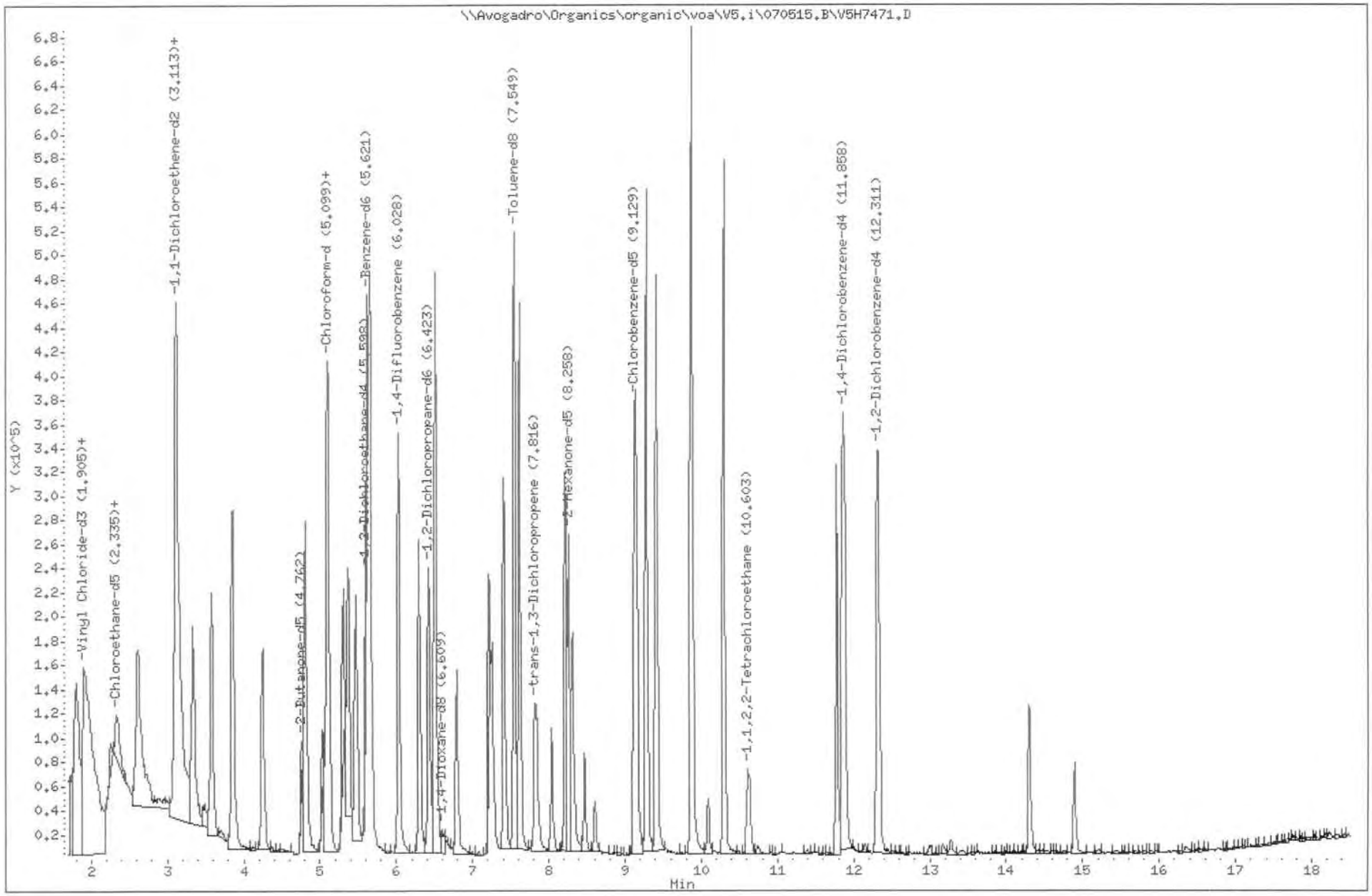
Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF005	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.589	0.637	0.010	8.2	50.0
Chloroethane-d5	0.240	0.194	0.010	-19.3	50.0
1,1-Dichloroethene-d2	0.869	1.038	0.010	19.5	50.0
2-Butanone-d5	0.061	0.057	0.010	-5.3	50.0
Chloroform-d	0.834	0.966	0.010	15.9	50.0
1,2-Dichloroethane-d4	0.328	0.384	0.010	17.2	50.0
Benzene-d6	1.988	2.122	0.010	6.7	50.0
1,2-Dichloropropane-d6	0.508	0.517	0.010	1.8	50.0
Toluene-d8	1.738	1.831	0.010	5.4	50.0
trans-1,3-Dichloropropene-d4	0.333	0.348	0.010	4.5	50.0
2-Hexanone-d5	0.041	0.039	0.010	-4.9	50.0
1,4-Dioxane-d8	0.001	0.001	0.010	-15.5	50.0
1,1,2,2-Tetrachloroethane-d2	0.196	0.206	0.010	4.7	50.0
1,2-Dichlorobenzene-d4	0.706	0.813	0.010	15.2	50.0

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7471.D
Date : 15-MAY-2007 09:11
Client ID: VSTD0055J
Sample Info: 25ML,VSTD0055J,VSTD0055J
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0267

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7471.D
Report Date: 21-May-2007 16:08

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7471.D
Lab Smp Id: VSTD0055J Client Smp ID: VSTD0055J
Inj Date : 15-MAY-2007 09:11
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0055J,VSTD0055J
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 21-May-2007 16:08 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.649	1.649	(0.274)	91203	5.00000	5.7
2 Chloromethane	50	1.800	1.800	(0.299)	205210	5.00000	5.7
$ 79 Vinyl Chloride-d3	65	1.905	1.905	(0.316)	186918	5.00000	5.4
3 Vinyl Chloride	62	1.916	1.916	(0.318)	174561	5.00000	5.5
4 Bromomethane	94	2.276	2.276	(0.378)	111135	5.00000	4.8
$ 80 Chloroethane-d5	69	2.323	2.323	(0.385)	83534	5.00000	5.9
5 Chloroethane	64	2.346	2.346	(0.389)	54783	5.00000	4.7
6 Trichlorofluoromethane	101	2.613	2.613	(0.434)	279975	5.00000	6.4(Q)
$ 81 1,1-Dichloroethene-d2	63	3.113	3.113	(0.516)	281129	5.00000	5.5
7 1,1-Dichloroethene	96	3.113	3.113	(0.516)	95669	5.00000	5.4(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.124	3.124	(0.518)	82006	5.00000	5.0(Q)
9 Acetone	43	3.159	3.159	(0.524)	110701	50.0000	34
10 Carbon Disulfide	76	3.333	3.333	(0.553)	331401	5.00000	6.0
11 Methyl Acetate	43	3.484	3.484	(0.578)	24491	5.00000	4.5
12 Methylene Chloride	84	3.577	3.577	(0.593)	94848	5.00000	4.9
98 2-Methyl-2-Propanol	59	3.716	3.716	(0.617)	27449	50.0000	56(T)
13 trans-1,2-Dichloroethene	96	3.856	3.856	(0.640)	109002	5.00000	5.1(Q)
14 Methyl tert-Butyl Ether	73	3.867	3.867	(0.642)	87729	5.00000	5.1
15 1,1-Dichloroethane	63	4.251	4.251	(0.705)	215245	5.00000	5.6
$ 82 2-Butanone-d5	46	4.762	4.762	(0.790)	166548	50.0000	47
17 cis-1,2-Dichloroethene	96	4.808	4.808	(0.798)	98413	5.00000	5.3
16 2-Butanone	43	4.820	4.820	(0.800)	136108	50.0000	46

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7471.D
Report Date: 21-May-2007 16:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.040	5.040	(0.836)	28640	5.00000	5.0
$	83 Chloroform-d	84	5.087	5.087	(0.844)	258168	5.00000	5.3
	19 Chloroform	83	5.110	5.110	(0.848)	212806	5.00000	5.5
	20 1,1,1-Trichloroethane	97	5.307	5.307	(0.581)	206950	5.00000	5.7
	21 Cyclohexane	56	5.365	5.365	(0.588)	157886	5.00000	6.1
	22 Carbon Tetrachloride	117	5.470	5.470	(0.599)	163818	5.00000	5.7
$	23 1,2-Dichloroethane-d4	65	5.598	5.598	(0.929)	100157	5.00000	5.2
$	84 Benzene-d6	84	5.621	5.621	(0.616)	431783	5.00000	5.4
	25 Benzene	78	5.656	5.656	(0.620)	365133	5.00000	5.4
	24 1,2-Dichloroethane	62	5.667	5.667	(0.940)	99646	5.00000	5.4
*	26 1,4-Difluorobenzene	114	6.027	6.027	(1.000)	293508	5.00000	
	27 Trichloroethene	95	6.294	6.294	(0.690)	117856	5.00000	5.4
$	85 1,2-Dichloropropane-d6	67	6.422	6.422	(0.704)	105879	5.00000	5.1
	28 Methylcyclohexane	83	6.504	6.504	(0.712)	133764	5.00000	5.4
	29 1,2-Dichloropropane	63	6.515	6.515	(0.714)	78386	5.00000	5.1
$	94 1,4-Dioxane-d8	96	6.608	6.608	(1.096)	13139	250.000	330(Q)
	93 1,4-Dioxane	88	6.666	6.666	(1.106)	9248	250.000	290(Q)
	30 Bromodichloromethane	83	6.794	6.794	(0.744)	111246	5.00000	5.4
	31 cis-1,3-Dichloropropene	75	7.258	7.258	(0.795)	109415	5.00000	5.5
	32 4-Methyl-2-Pentanone	43	7.409	7.409	(0.812)	293785	50.0000	54
$	33 Toluene-d8	98	7.549	7.549	(0.827)	372030	5.00000	5.3
	34 Toluene	91	7.618	7.618	(0.835)	363365	5.00000	5.2
$	86 trans-1,3-Dichloropropene-d4	79	7.816	7.816	(0.856)	66997	5.00000	5.0
	35 trans-1,3-Dichloropropene	75	7.839	7.839	(0.859)	72630	5.00000	5.1
	36 1,1,2-Trichloroethane	97	8.036	8.036	(0.880)	34289	5.00000	5.3
	37 Tetrachloroethene	164	8.211	8.211	(0.899)	80004	5.00000	5.1
$	87 2-Hexanone-d5	63	8.257	8.257	(0.905)	92261	50.0000	55
	38 2-Hexanone	43	8.315	8.315	(0.911)	202294	50.0000	55
	39 Dibromochloromethane	129	8.478	8.478	(0.929)	47280	5.00000	5.3
	40 1,2-Dibromoethane	107	8.605	8.605	(0.943)	34132	5.00000	5.2
*	42 Chlorobenzene-d5	117	9.128	9.128	(1.000)	202865	5.00000	
	43 Chlorobenzene	112	9.151	9.151	(1.003)	201567	5.00000	5.4(Q)
	44 Ethylbenzene	91	9.279	9.279	(1.017)	456730	5.00000	5.5
	45 m,p-Xylene	106	9.418	9.418	(1.032)	155485	5.00000	5.3
	46 o-Xylene	106	9.871	9.871	(1.081)	133448	5.00000	5.4
	47 Styrene	104	9.883	9.883	(1.083)	181025	5.00000	5.7
	48 Bromoform	173	10.092	10.092	(0.851)	24887	5.00000	5.8
	49 Isopropylbenzene	105	10.301	10.301	(1.128)	420884	5.00000	5.6
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.603	(1.162)	38707	5.00000	4.9(Q)
	51 1,1,2,2-Tetrachloroethane	83	10.638	10.638	(1.165)	31041	5.00000	4.8(Q)
	52 1,3-Dichlorobenzene	146	11.776	11.776	(0.993)	135214	5.00000	5.3
*	78 1,4-Dichlorobenzene-d4	152	11.857	11.857	(1.000)	99426	5.00000	
	53 1,4-Dichlorobenzene	146	11.880	11.880	(1.002)	133927	5.00000	5.1
$	90 1,2-Dichlorobenzene-d4	152	12.310	12.310	(1.038)	75949	5.00000	5.4(Q)
	54 1,2-Dichlorobenzene	146	12.333	12.333	(1.040)	96940	5.00000	5.1
M	41 Xylene (total)	106				288933	5.00000	11
	55 1,2-Dibromo-3-chloropropane	75	13.274	13.274	(1.119)	3648	5.00000	4.5(Q)
	56 1,2,4-Trichlorobenzene	180	14.308	14.308	(1.207)	49340	5.00000	4.6
	77 1,2,3-Trichlorobenzene	180	14.900	14.900	(1.257)	27390	5.00000	4.8(Q)

WL
05/11/07

QC Flag Legend

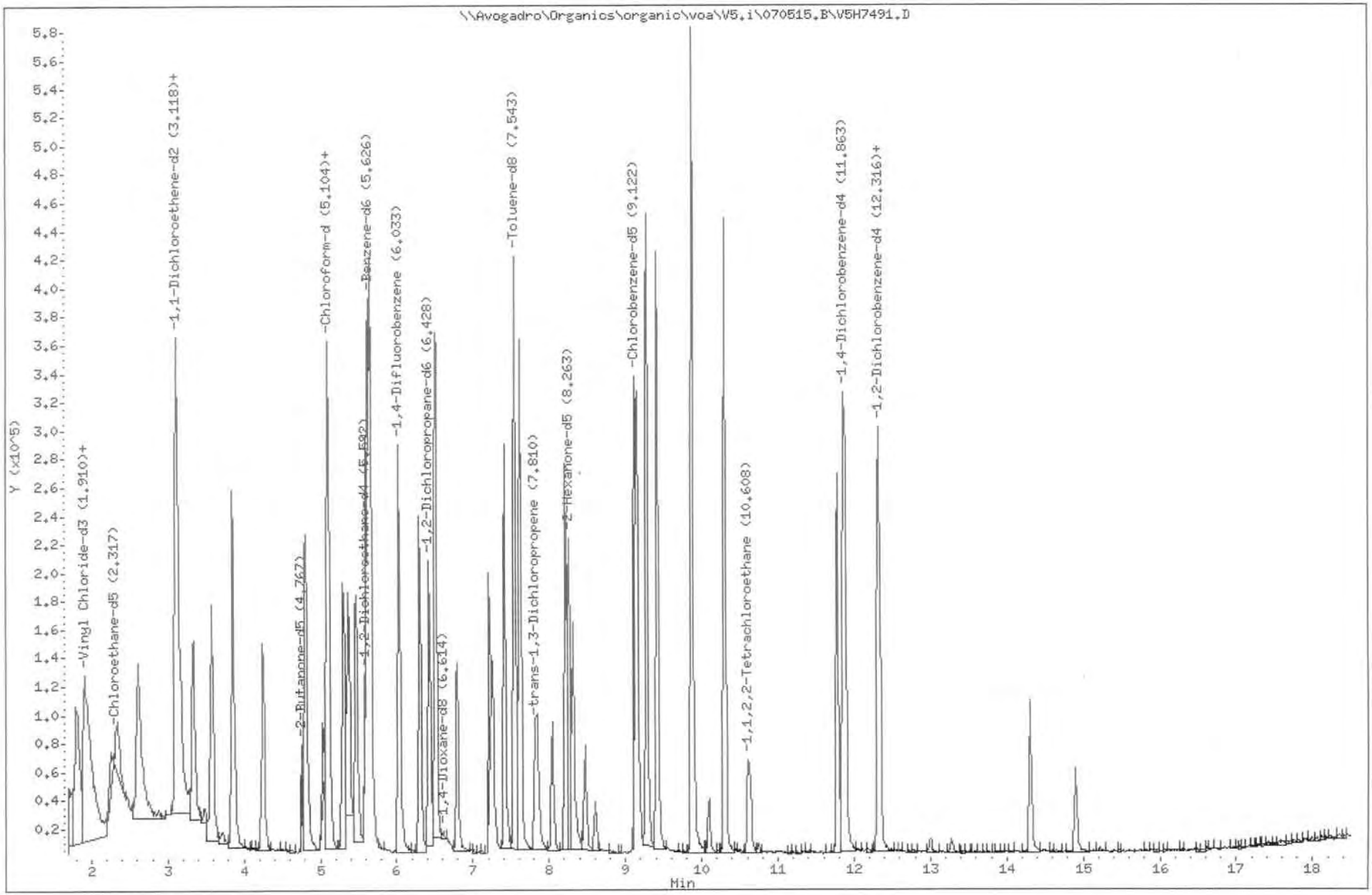
T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

0269 17A

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7491.D
Date : 15-MAY-2007 20:24
Client ID: VSTD0055K
Sample Info: 25ML,VSTD0055K,VSTD0055K
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0276

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7491.D
Report Date: 21-May-2007 16:08

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7491.D
Lab Smp Id: VSTD0055K Client Smp ID: VSTD0055K
Inj Date : 15-MAY-2007 20:24
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0055K,VSTD0055K
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 21-May-2007 16:08 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.654	1.654	(0.274)	59882	5.00000	4.6
2 Chloromethane	50	1.805	1.805	(0.299)	171120	5.00000	5.7
$ 79 Vinyl Chloride-d3	65	1.910	1.910	(0.317)	147742	5.00000	5.2
3 Vinyl Chloride	62	1.910	1.910	(0.317)	150096	5.00000	5.7
4 Bromomethane	94	2.247	2.247	(0.372)	89879	5.00000	4.7
$ 80 Chloroethane-d5	69	2.316	2.316	(0.384)	73533	5.00000	6.3
5 Chloroethane	64	2.351	2.351	(0.390)	56642	5.00000	5.9
6 Trichlorofluoromethane	101	2.618	2.618	(0.434)	224010	5.00000	6.2(Q)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.106	(0.515)	229700	5.00000	5.5
7 1,1-Dichloroethene	96	3.118	3.118	(0.517)	83107	5.00000	5.7(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.129	3.129	(0.519)	53619	5.00000	4.0(Q)
9 Acetone	43	3.164	3.164	(0.525)	93956	50.0000	35
10 Carbon Disulfide	76	3.338	3.338	(0.553)	255518	5.00000	5.6
11 Methyl Acetate	43	3.489	3.489	(0.578)	20423	5.00000	4.5
12 Methylene Chloride	84	3.582	3.582	(0.594)	87518	5.00000	5.4
98 2-Methyl-2-Propanol	59	3.721	3.721	(0.617)	16846	50.0000	42(T)
13 trans-1,2-Dichloroethene	96	3.849	3.849	(0.638)	91203	5.00000	5.2
14 Methyl tert-Butyl Ether	73	3.872	3.872	(0.642)	74213	5.00000	5.2
15 1,1-Dichloroethane	63	4.244	4.244	(0.704)	179062	5.00000	5.6
$ 82 2-Butanone-d5	46	4.755	4.755	(0.788)	148039	50.0000	50
17 cis-1,2-Dichloroethene	96	4.813	4.813	(0.798)	83296	5.00000	5.5
16 2-Butanone	43	4.825	4.825	(0.800)	122762	50.0000	51

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7491.D
Report Date: 21-May-2007 16:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.034	5.034	(0.834)	25937	5.00000	5.5
$	83 Chloroform-d	84	5.092	5.092	(0.844)	224055	5.00000	5.5
	19 Chloroform	83	5.115	5.115	(0.848)	182043	5.00000	5.7
	20 1,1,1-Trichloroethane	97	5.301	5.301	(0.581)	172852	5.00000	5.3
	21 Cyclohexane	56	5.370	5.370	(0.589)	101548	5.00000	4.4
	22 Carbon Tetrachloride	117	5.475	5.475	(0.600)	134508	5.00000	5.3
$	23 1,2-Dichloroethane-d4	65	5.591	5.591	(0.927)	86094	5.00000	5.4
$	84 Benzene-d6	84	5.626	5.626	(0.617)	359096	5.00000	5.0
	25 Benzene	78	5.661	5.661	(0.621)	309806	5.00000	5.1
	24 1,2-Dichloroethane	62	5.672	5.672	(0.940)	93821	5.00000	6.2
*	26 1,4-Difluorobenzene	114	6.032	6.032	(1.000)	242283	5.00000	
	27 Trichloroethene	95	6.299	6.299	(0.691)	102248	5.00000	5.3
$	85 1,2-Dichloropropane-d6	67	6.427	6.427	(0.705)	93474	5.00000	5.1
	28 Methylcyclohexane	83	6.509	6.509	(0.714)	87474	5.00000	4.0
	29 1,2-Dichloropropane	63	6.520	6.520	(0.715)	69386	5.00000	5.1
$	94 1,4-Dioxane-d8	96	6.613	6.613	(1.096)	8061	250.000	250(Q)
	93 1,4-Dioxane	88	6.659	6.659	(1.104)	4560	250.000	180(Q)
	30 Bromodichloromethane	83	6.799	6.799	(0.745)	97213	5.00000	5.2
	31 cis-1,3-Dichloropropene	75	7.263	7.263	(0.796)	86193	5.00000	4.8
	32 4-Methyl-2-Pentanone	43	7.414	7.414	(0.813)	271466	50.0000	56
$	33 Toluene-d8	98	7.542	7.542	(0.827)	329096	5.00000	5.2
	34 Toluene	91	7.623	7.623	(0.836)	315311	5.00000	5.1
$	86 trans-1,3-Dichloropropene-d4	79	7.809	7.809	(0.856)	56071	5.00000	4.6
	35 trans-1,3-Dichloropropene	75	7.844	7.844	(0.860)	61140	5.00000	4.8
	36 1,1,2-Trichloroethane	97	8.041	8.041	(0.882)	31634	5.00000	5.4
	37 Tetrachloroethene	164	8.216	8.216	(0.901)	70243	5.00000	5.0
$	87 2-Hexanone-d5	63	8.262	8.262	(0.906)	70177	50.0000	47(Q)
	38 2-Hexanone	43	8.309	8.309	(0.911)	173186	50.0000	52
	39 Dibromochloromethane	129	8.471	8.471	(0.929)	42234	5.00000	5.3
	40 1,2-Dibromoethane	107	8.610	8.610	(0.944)	30889	5.00000	5.3
*	42 Chlorobenzene-d5	117	9.121	9.121	(1.000)	181560	5.00000	
	43 Chlorobenzene	112	9.156	9.156	(1.004)	168537	5.00000	5.0(Q)
	44 Ethylbenzene	91	9.284	9.284	(1.018)	377622	5.00000	5.1
	45 m,p-Xylene	106	9.412	9.412	(1.032)	124204	5.00000	4.8
	46 o-Xylene	106	9.865	9.865	(1.081)	115865	5.00000	5.3
	47 Styrene	104	9.888	9.888	(1.084)	150565	5.00000	5.3
	48 Bromoform	173	10.097	10.097	(0.852)	19565	5.00000	5.2
	49 Isopropylbenzene	105	10.306	10.306	(1.130)	358905	5.00000	5.3
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.608	(1.163)	36960	5.00000	5.2
	51 1,1,2,2-Tetrachloroethane	83	10.631	10.631	(1.166)	29121	5.00000	5.1(Q)
	52 1,3-Dichlorobenzene	146	11.781	11.781	(0.994)	116366	5.00000	5.3
*	78 1,4-Dichlorobenzene-d4	152	11.851	11.851	(1.000)	85779	5.00000	
	53 1,4-Dichlorobenzene	146	11.885	11.885	(1.003)	114749	5.00000	5.1
$	90 1,2-Dichlorobenzene-d4	152	12.303	12.303	(1.038)	65782	5.00000	5.4(Q)
	54 1,2-Dichlorobenzene	146	12.327	12.327	(1.040)	87170	5.00000	5.3
M	41 Xylene (total)	106				240069	5.00000	10
	55 1,2-Dibromo-3-chloropropane	75	13.279	13.279	(1.121)	3629	5.00000	5.2(Q)
	56 1,2,4-Trichlorobenzene	180	14.301	14.301	(1.207)	42488	5.00000	4.6
	77 1,2,3-Trichlorobenzene	180	14.905	14.905	(1.258)	23971	5.00000	4.8(Q)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

WL
05/21/07

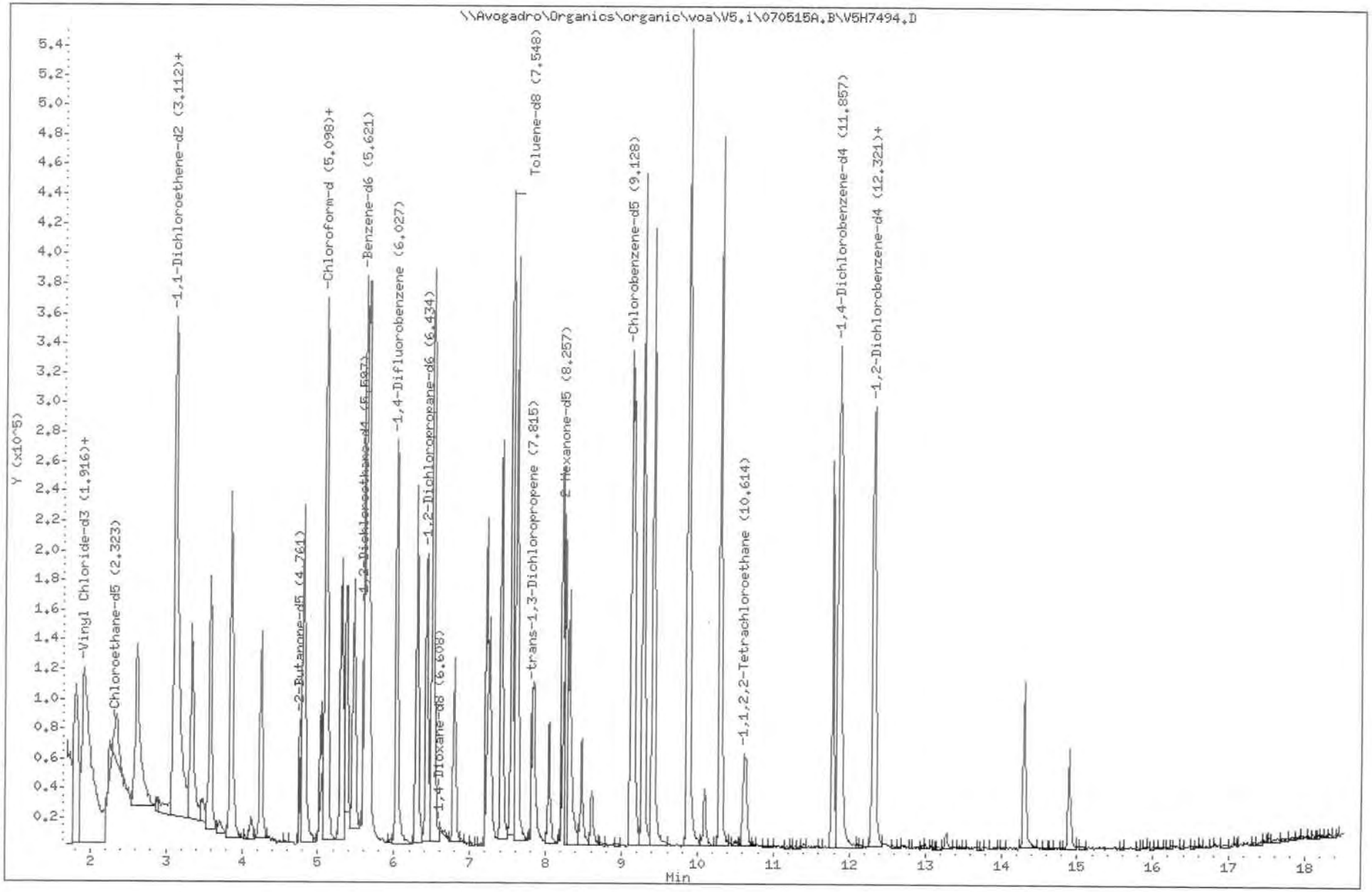
11-7A

0272

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7494.D
Date : 15-MAY-2007 21:59
Client ID: VSTD0055L
Sample Info: 25ML,VSTD0055L,VSTD0055L
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0273

Data File: V5H7494.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7494.D
Lab Smp Id: VSTD0055L Client Smp ID: VSTD0055L
Inj Date : 15-MAY-2007 21:59
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0055L,VSTD0055L
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.637	1.637	(0.271)	63882	5.00000	5.0
2 Chloromethane	50	1.799	1.799	(0.298)	151694	5.00000	5.2
$ 79 Vinyl Chloride-d3	65	1.916	1.916	(0.317)	145522	5.00000	5.2
3 Vinyl Chloride	62	1.916	1.916	(0.317)	135812	5.00000	5.3
4 Bromomethane	94	2.252	2.252	(0.373)	82702	5.00000	4.4
$ 80 Chloroethane-d5	69	2.322	2.322	(0.385)	69036	5.00000	6.0
5 Chloroethane	64	2.345	2.345	(0.388)	55176	5.00000	5.9
6 Trichlorofluoromethane	101	2.612	2.612	(0.433)	208611	5.00000	5.9
$ 81 1,1-Dichloroethene-d2	63	3.112	3.112	(0.515)	226909	5.00000	5.5
7 1,1-Dichloroethene	96	3.123	3.123	(0.517)	65997	5.00000	4.6(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.135	3.135	(0.519)	59949	5.00000	4.5(Q)
9 Acetone	43	3.158	3.158	(0.523)	102861	50.0000	39
10 Carbon Disulfide	76	3.332	3.332	(0.552)	243098	5.00000	5.4
11 Methyl Acetate	43	3.483	3.483	(0.577)	24124	5.00000	5.4
12 Methylene Chloride	84	3.576	3.576	(0.592)	80773	5.00000	5.1
98 2-Methyl-2-Propanol	59	3.704	3.704	(0.613)	18972	50.0000	48(T)
13 trans-1,2-Dichloroethene	96	3.855	3.855	(0.638)	86215	5.00000	5.0(Q)
14 Methyl tert-Butyl Ether	73	3.867	3.867	(0.640)	72938	5.00000	5.3
15 1,1-Dichloroethane	63	4.250	4.250	(0.704)	170169	5.00000	5.4
$ 82 2-Butanone-d5	46	4.761	4.761	(0.788)	148341	50.0000	51
17 cis-1,2-Dichloroethene	96	4.807	4.807	(0.796)	79668	5.00000	5.3
16 2-Butanone	43	4.819	4.819	(0.798)	114531	50.0000	48

Data File: V5H7494.D
Report Date: 17-May-2007 11:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.039	5.039	(0.835)	25551	5.00000	5.5
$	83 Chloroform-d	84	5.098	5.098	(0.844)	221548	5.00000	5.6
	19 Chloroform	83	5.109	5.109	(0.846)	174963	5.00000	5.5
	20 1,1,1-Trichloroethane	97	5.307	5.307	(0.581)	164683	5.00000	5.2
	21 Cyclohexane	56	5.376	5.376	(0.589)	101750	5.00000	4.5
	22 Carbon Tetrachloride	117	5.481	5.481	(0.601)	123041	5.00000	4.9
$	23 1,2-Dichloroethane-d4	65	5.597	5.597	(0.927)	87523	5.00000	5.6
$	84 Benzene-d6	84	5.620	5.620	(0.616)	340546	5.00000	4.8
	25 Benzene	78	5.667	5.667	(0.621)	292172	5.00000	4.9
	24 1,2-Dichloroethane	62	5.667	5.667	(0.938)	86187	5.00000	5.8
*	26 1,4-Difluorobenzene	114	6.038	6.038	(1.000)	237933	5.00000	(TQ)
	27 Trichloroethene	95	6.305	6.305	(0.691)	95940	5.00000	5.0
$	85 1,2-Dichloropropane-d6	67	6.433	6.433	(0.705)	87987	5.00000	4.9
	28 Methylcyclohexane	83	6.514	6.514	(0.714)	96428	5.00000	4.5
	29 1,2-Dichloropropane	63	6.514	6.514	(0.714)	65692	5.00000	4.9
$	94 1,4-Dioxane-d8	96	6.619	6.619	(1.096)	7631	250.000	240(Q)
	93 1,4-Dioxane	88	6.677	6.677	(1.106)	4842	250.000	190(Q)
	30 Bromodichloromethane	83	6.793	6.793	(0.744)	95696	5.00000	5.3
	31 cis-1,3-Dichloropropene	75	7.258	7.258	(0.795)	91725	5.00000	5.2
	32 4-Methyl-2-Pentanone	43	7.420	7.420	(0.813)	261120	50.0000	55
$	33 Toluene-d8	98	7.548	7.548	(0.827)	309694	5.00000	5.0
	34 Toluene	91	7.618	7.618	(0.835)	305936	5.00000	5.0
$	86 trans-1,3-Dichloropropene-d4	79	7.815	7.815	(0.856)	57967	5.00000	4.9
	35 trans-1,3-Dichloropropene	75	7.850	7.850	(0.860)	67136	5.00000	5.4
	36 1,1,2-Trichloroethane	97	8.036	8.036	(0.880)	30514	5.00000	5.3
	37 Tetrachloroethene	164	8.221	8.221	(0.901)	65896	5.00000	4.8
$	87 2-Hexanone-d5	63	8.256	8.256	(0.905)	77896	50.0000	53
	38 2-Hexanone	43	8.314	8.314	(0.911)	169376	50.0000	52
	39 Dibromochloromethane	129	8.477	8.477	(0.929)	39963	5.00000	5.1
	40 1,2-Dibromoethane	107	8.605	8.605	(0.943)	31027	5.00000	5.4
*	42 Chlorobenzene-d5	117	9.127	9.127	(1.000)	177995	5.00000	
	43 Chlorobenzene	112	9.162	9.162	(1.004)	168683	5.00000	5.1(Q)
	44 Ethylbenzene	91	9.278	9.278	(1.017)	366782	5.00000	5.1
	45 m,p-Xylene	106	9.418	9.418	(1.032)	124239	5.00000	4.9
	46 o-Xylene	106	9.871	9.871	(1.081)	111315	5.00000	5.2
	47 Styrene	104	9.882	9.882	(1.083)	145320	5.00000	5.2
	48 Bromoform	173	10.091	10.091	(0.851)	18848	5.00000	4.9
	49 Isopropylbenzene	105	10.300	10.300	(1.129)	349348	5.00000	5.3
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.614	10.614	(1.163)	37838	5.00000	5.4
	51 1,1,2,2-Tetrachloroethane	83	10.637	10.637	(1.165)	29387	5.00000	5.2(Q)
	52 1,3-Dichlorobenzene	146	11.775	11.775	(0.993)	114947	5.00000	5.0
*	78 1,4-Dichlorobenzene-d4	152	11.856	11.856	(1.000)	88755	5.00000	
	53 1,4-Dichlorobenzene	146	11.880	11.880	(1.002)	116538	5.00000	5.0
$	90 1,2-Dichlorobenzene-d4	152	12.309	12.309	(1.038)	64961	5.00000	5.2(Q)
	54 1,2-Dichlorobenzene	146	12.332	12.332	(1.040)	85248	5.00000	5.1
	55 1,2-Dibromo-3-chloropropane	75	13.285	13.285	(1.120)	3387	5.00000	4.7(Q)
	56 1,2,4-Trichlorobenzene	180	14.307	14.307	(1.207)	44589	5.00000	4.7
	77 1,2,3-Trichlorobenzene	180	14.899	14.899	(1.257)	24255	5.00000	4.7(Q)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

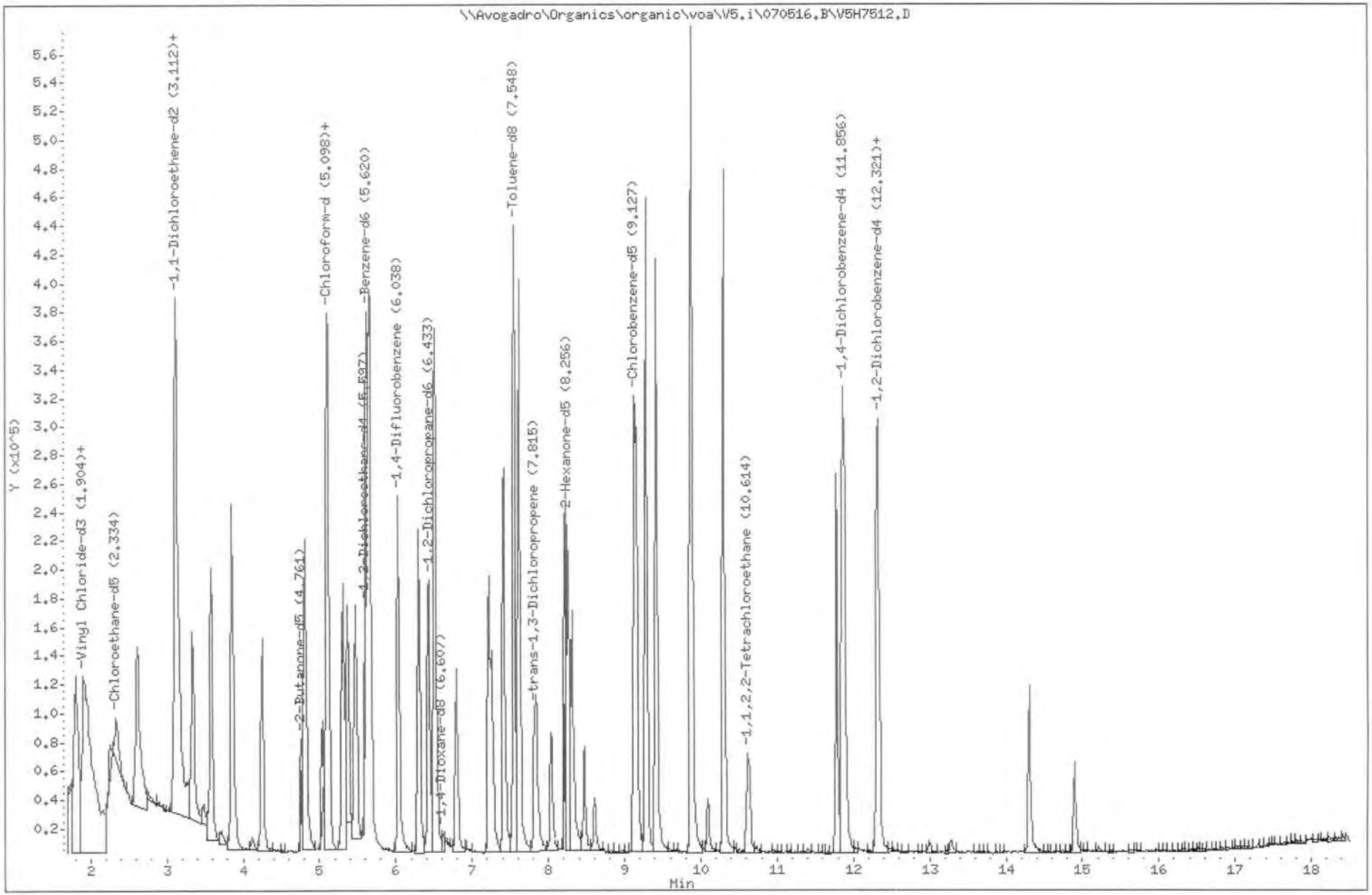
WL
05/17/07

RA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7512.D
Date : 16-MAY-2007 09:22
Client ID: VSTD0055M
Sample Info: 25ML,VSTD0055M,VSTD0055M
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0276

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7512.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7512.D
Lab Smp Id: VSTD0055M Client Smp ID: VSTD0055M
Inj Date : 16-MAY-2007 09:22
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0055M,VSTD0055M
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14
Processing Host: TARGET103

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	1.636	1.650	(0.271)	61487	5.00000	5.1
2 Chloromethane	50	1.799	1.801	(0.298)	157335	5.00000	5.8
$ 79 Vinyl Chloride-d3	65	1.904	1.905	(0.315)	147245	5.00000	5.6
3 Vinyl Chloride	62	1.915	1.905	(0.317)	132896	5.00000	5.5
4 Bromomethane	94	2.252	2.242	(0.373)	86267	5.00000	4.9
$ 80 Chloroethane-d5	69	2.322	2.323	(0.385)	42250	5.00000	4.0(Q)
5 Chloroethane	64	2.356	2.346	(0.390)	55797	5.00000	6.3
6 Trichlorofluoromethane	101	2.612	2.613	(0.433)	187602	5.00000	5.6
$ 81 1,1-Dichloroethene-d2	63	3.111	3.101	(0.515)	230376	5.00000	6.0
7 1,1-Dichloroethene	96	3.123	3.124	(0.517)	78417	5.00000	5.9(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.135	3.136	(0.519)	55232	5.00000	4.5(Q)
9 Acetone	43	3.158	3.159	(0.523)	100424	50.0000	41
10 Carbon Disulfide	76	3.332	3.333	(0.552)	246859	5.00000	5.9
11 Methyl Acetate	43	3.483	3.484	(0.577)	22655	5.00000	5.5
12 Methylene Chloride	84	3.576	3.577	(0.592)	84531	5.00000	5.7(Q)
98 2-Methyl-2-Propanol	59	3.715	3.728	(0.615)	19701	50.0000	53(T)
13 trans-1,2-Dichloroethene	96	3.855	3.856	(0.638)	88217	5.00000	5.5(Q)
14 Methyl tert-Butyl Ether	73	3.866	3.868	(0.640)	71886	5.00000	5.5
15 1,1-Dichloroethane	63	4.249	4.251	(0.704)	178248	5.00000	6.1
$ 82 2-Butanone-d5	46	4.760	4.762	(0.788)	143406	50.0000	53
17 cis-1,2-Dichloroethene	96	4.807	4.808	(0.796)	80199	5.00000	5.8

WL
05/17/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7512.D
Report Date: 17-May-2007 14:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	16 2-Butanone	43	4.818	4.820	(0.798)	118666	50.0000	53
	18 Bromochloromethane	128	5.039	5.041	(0.835)	25084	5.00000	5.8
$	83 Chloroform-d	84	5.097	5.099	(0.844)	221817	5.00000	6.0
	19 Chloroform	83	5.109	5.110	(0.846)	179792	5.00000	6.1
	20 1,1,1-Trichloroethane	97	5.306	5.308	(0.581)	169473	5.00000	6.0
	21 Cyclohexane	56	5.376	5.366	(0.589)	94188	5.00000	4.7
	22 Carbon Tetrachloride	117	5.469	5.470	(0.599)	131959	5.00000	6.0
$	23 1,2-Dichloroethane-d4	65	5.597	5.598	(0.927)	91418	5.00000	6.3
$	84 Benzene-d6	84	5.620	5.621	(0.616)	342012	5.00000	5.5
	25 Benzene	78	5.666	5.656	(0.621)	305085	5.00000	5.8
	24 1,2-Dichloroethane	62	5.666	5.668	(0.938)	89878	5.00000	6.5
*	26 1,4-Difluorobenzene	114	6.038	6.028	(1.000)	222363	5.00000	
	27 Trichloroethene	95	6.305	6.306	(0.691)	95636	5.00000	5.7
$	85 1,2-Dichloropropane-d6	67	6.421	6.423	(0.704)	87233	5.00000	5.5
	28 Methylcyclohexane	83	6.502	6.515	(0.712)	85964	5.00000	4.5
	29 1,2-Dichloropropane	63	6.514	6.515	(0.714)	65443	5.00000	5.5
$	94 1,4-Dioxane-d8	96	6.607	6.608	(1.094)	7938	250.000	260(Q)
	93 1,4-Dioxane	88	6.665	6.678	(1.104)	5730	250.000	240(Q)
	30 Bromodichloromethane	83	6.793	6.794	(0.744)	96764	5.00000	6.0
	31 cis-1,3-Dichloropropene	75	7.257	7.259	(0.795)	87101	5.00000	5.6
	32 4-Methyl-2-Pentanone	43	7.420	7.410	(0.813)	257645	50.0000	61
$	33 Toluene-d8	98	7.548	7.549	(0.827)	298578	5.00000	5.5
	34 Toluene	91	7.617	7.619	(0.835)	311374	5.00000	5.8
$	86 trans-1,3-Dichloropropene-d4	79	7.815	7.816	(0.856)	57798	5.00000	5.5
	35 trans-1,3-Dichloropropene	75	7.849	7.851	(0.860)	65767	5.00000	6.0
	36 1,1,2-Trichloroethane	97	8.035	8.037	(0.880)	31287	5.00000	6.2
	37 Tetrachloroethene	164	8.221	8.223	(0.901)	63597	5.00000	5.2
$	87 2-Hexanone-d5	63	8.256	8.257	(0.905)	74284	50.0000	57(Q)
	38 2-Hexanone	43	8.314	8.315	(0.911)	171381	50.0000	60
	39 Dibromochloromethane	129	8.477	8.478	(0.929)	39895	5.00000	5.8
	40 1,2-Dibromoethane	107	8.604	8.606	(0.943)	30843	5.00000	6.1
*	42 Chlorobenzene-d5	117	9.127	9.128	(1.000)	157227	5.00000	
	43 Chlorobenzene	112	9.162	9.152	(1.004)	165616	5.00000	5.7(Q)
	44 Ethylbenzene	91 ✓	9.278	9.279	(1.017)	371014	5.00000	5.8
	45 m,p-Xylene	106 ✓	9.417	9.419	(1.032)	119632	5.00000	5.3
	46 o-Xylene	106 ✓	9.870	9.872	(1.081)	111661	5.00000	5.9
	47 Styrene	104	9.882	9.883	(1.083)	146471	5.00000	5.9
	48 Bromoform	173	10.091	10.092	(0.851)	20979	5.00000	5.8
	49 Isopropylbenzene	105	10.300	10.301	(1.129)	351234	5.00000	6.0
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.602	10.603	(1.162)	37281	5.00000	6.0
	51 1,1,2,2-Tetrachloroethane	83	10.637	10.638	(1.165)	28817	5.00000	5.8(Q)
	52 1,3-Dichlorobenzene	146 ✓	11.775	11.776	(0.993)	111611	5.00000	5.2
*	78 1,4-Dichlorobenzene-d4	152	11.856	11.857	(1.000)	83031	5.00000	
	53 1,4-Dichlorobenzene	146 ✓	11.879	11.881	(1.002)	119672	5.00000	5.5
$	90 1,2-Dichlorobenzene-d4	152	12.309	12.310	(1.038)	65999	5.00000	5.6(Q)
	54 1,2-Dichlorobenzene	146 ✓	12.332	12.334	(1.040)	88105	5.00000	5.6
M	41 Xylene (total)	106				231293	5.00000	11
	55 1,2-Dibromo-3-chloropropane	75	13.273	13.263	(1.119)	3794	5.00000	5.6(Q)
	56 1,2,4-Trichlorobenzene	180	14.306	14.308	(1.207)	45510	5.00000	5.1
	77 1,2,3-Trichlorobenzene	180	14.899	14.912	(1.257)	23505	5.00000	4.9(Q)

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7512.D
Report Date: 17-May-2007 14:14

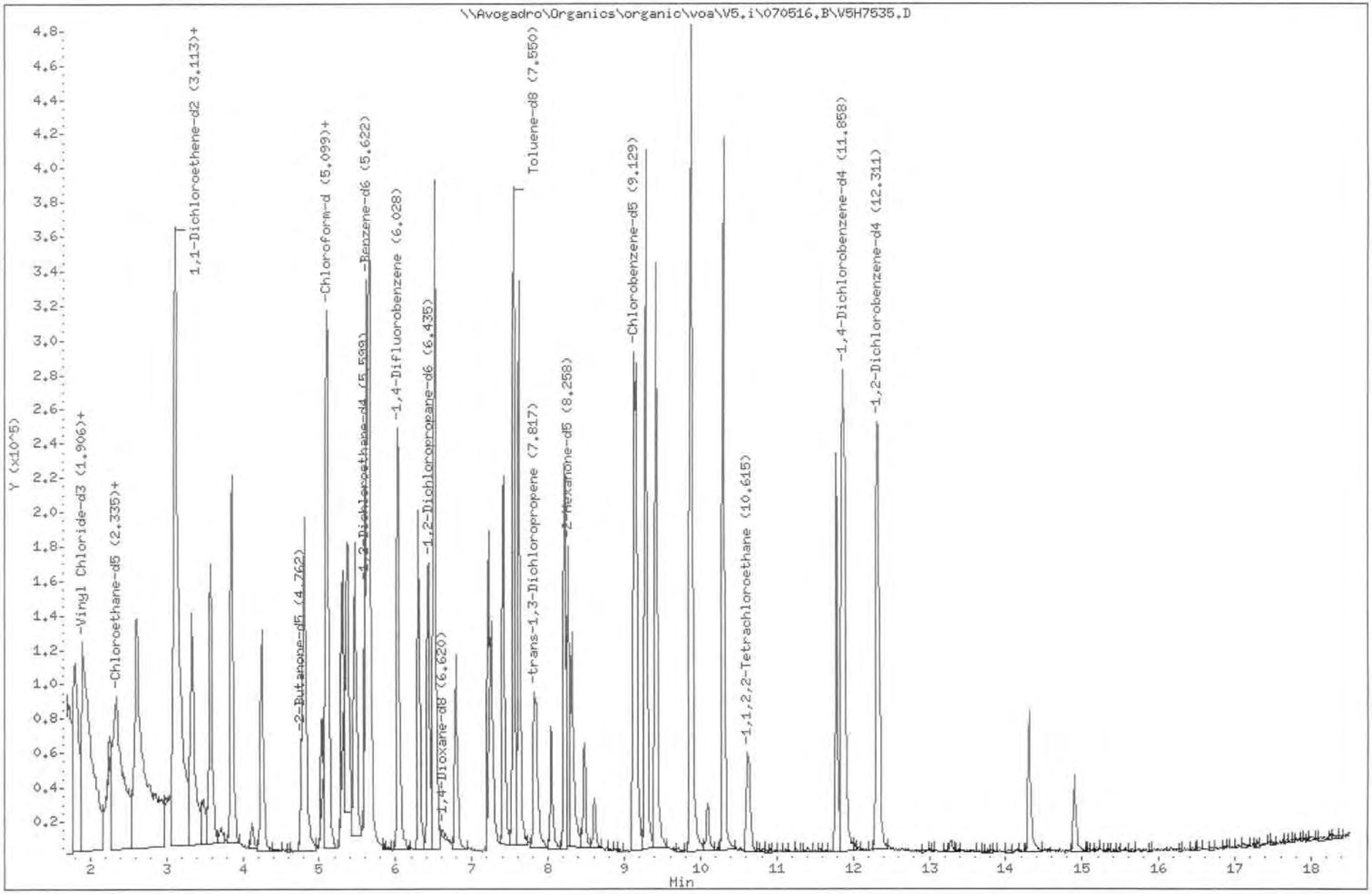
QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7535.D
Date : 16-MAY-2007 21:11
Client ID: VSTD0055N
Sample Info: 25HL,VSTD0055N,VSTD0055N
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0286

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7535.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7535.D
Lab Smp Id: VSTD0055N Client Smp ID: VSTD0055N
Inj Date : 16-MAY-2007 21:11
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VSTD0055N,VSTD0055N
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.650	1.650	(0.274)	68924	5.00000	6.2
2 Chloromethane	50	1.801	1.801	(0.299)	137598	5.00000	5.4
$ 79 Vinyl Chloride-d3	65	1.905	1.905	(0.316)	131090	5.00000	5.4
3 Vinyl Chloride	62	1.905	1.905	(0.316)	120763	5.00000	5.4
4 Bromomethane	94	2.242	2.242	(0.372)	71696	5.00000	4.4(Q)
$ 80 Chloroethane-d5	69	2.323	2.323	(0.385)	39888	5.00000	4.0(Q)
5 Chloroethane	64	2.346	2.346	(0.389)	33408	5.00000	4.1
6 Trichlorofluoromethane	101	2.613	2.613	(0.434)	225238	5.00000	7.3(Q)
$ 81 1,1-Dichloroethene-d2	63	3.101	3.101	(0.515)	213480	5.00000	6.0
7 1,1-Dichloroethene	96	3.124	3.124	(0.518)	70656	5.00000	5.7(Q)
8 1,1,2-Trichloro-1,2,2-trifluo	101	3.136	3.136	(0.520)	76485	5.00000	6.7
9 Acetone	43	3.159	3.159	(0.524)	83643	50.0000	37
10 Carbon Disulfide	76	3.333	3.333	(0.553)	220947	5.00000	5.7
11 Methyl Acetate	43	3.484	3.484	(0.578)	22375	5.00000	5.8
12 Methylene Chloride	84	3.577	3.577	(0.594)	75860	5.00000	5.6
98 2-Methyl-2-Propanol	59	3.728	3.728	(0.619)	17079	50.0000	50(T)
13 trans-1,2-Dichloroethene	96	3.856	3.856	(0.640)	76960	5.00000	5.2(Q)
14 Methyl tert-Butyl Ether	73	3.868	3.868	(0.642)	57160	5.00000	4.8
15 1,1-Dichloroethane	63	4.251	4.251	(0.705)	152430	5.00000	5.6
$ 82 2-Butanone-d5	46	4.762	4.762	(0.790)	118085	50.0000	47
17 cis-1,2-Dichloroethene	96	4.808	4.808	(0.798)	71699	5.00000	5.6
16 2-Butanone	43	4.820	4.820	(0.800)	102824	50.0000	50

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7535.D
Report Date: 17-May-2007 14:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	18 Bromochloromethane	128	5.041	5.041	(0.836)	21781	5.00000	5.4
$	83 Chloroform-d	84	5.099	5.099	(0.846)	198828	5.00000	5.8
	19 Chloroform	83	5.110	5.110	(0.848)	164944	5.00000	6.0
	20 1,1,1-Trichloroethane	97	5.308	5.308	(0.581)	153129	5.00000	5.9
	21 Cyclohexane	56	5.366	5.366	(0.588)	99832	5.00000	5.4
	22 Carbon Tetrachloride	117	5.470	5.470	(0.599)	122481	5.00000	6.0
$	23 1,2-Dichloroethane-d4	65	5.598	5.598	(0.929)	79063	5.00000	5.9
$	84 Benzene-d6	84	5.621	5.621	(0.616)	308796	5.00000	5.3
	25 Benzene	78	5.656	5.656	(0.620)	266394	5.00000	5.4
	24 1,2-Dichloroethane	62	5.668	5.668	(0.940)	80838	5.00000	6.3
*	26 1,4-Difluorobenzene	114	6.028	6.028	(1.000)	205725	5.00000	(TQ)
	27 Trichloroethene	95	6.306	6.306	(0.691)	83640	5.00000	5.4
$	85 1,2-Dichloropropane-d6	67	6.423	6.423	(0.704)	75267	5.00000	5.1
	28 Methylcyclohexane	83	6.515	6.515	(0.714)	101778	5.00000	5.8
	29 1,2-Dichloropropane	63	6.515	6.515	(0.714)	55427	5.00000	5.0
$	94 1,4-Dioxane-d8	96	6.608	6.608	(1.096)	5858	250.000	210(Q)
	93 1,4-Dioxane	88	6.678	6.678	(1.108)	3437	250.000	160(Q)
	30 Bromodichloromethane	83	6.794	6.794	(0.744)	84214	5.00000	5.7
	31 cis-1,3-Dichloropropene	75	7.259	7.259	(0.795)	79298	5.00000	5.5
	32 4-Methyl-2-Pentanone	43	7.410	7.410	(0.812)	209971	50.0000	54
$	33 Toluene-d8	98	7.549	7.549	(0.827)	266546	5.00000	5.3
	34 Toluene	91	7.619	7.619	(0.835)	263342	5.00000	5.3
$	86 trans-1,3-Dichloropropene-d4	79	7.816	7.816	(0.856)	50615	5.00000	5.2
	35 trans-1,3-Dichloropropene	75	7.851	7.851	(0.860)	57944	5.00000	5.7
	36 1,1,2-Trichloroethane	97	8.037	8.037	(0.880)	25655	5.00000	5.5
	37 Tetrachloroethene	164	8.223	8.223	(0.901)	57328	5.00000	5.1
$	87 2-Hexanone-d5	63	8.257	8.257	(0.905)	57163	50.0000	48(Q)
	38 2-Hexanone	43	8.315	8.315	(0.911)	139655	50.0000	53
	39 Dibromochloromethane	129	8.478	8.478	(0.929)	33262	5.00000	5.2
	40 1,2-Dibromoethane	107	8.606	8.606	(0.943)	24710	5.00000	5.2
*	42 Chlorobenzene-d5	117	9.128	9.128	(1.000)	145535	5.00000	
	43 Chlorobenzene	112	9.152	9.152	(1.003)	143900	5.00000	5.4(Q)
	44 Ethylbenzene	91	9.279	9.279	(1.017)	331278	5.00000	5.6
	45 m,p-Xylene	106	9.419	9.419	(1.032)	106539	5.00000	5.1
	46 o-Xylene	106	9.872	9.872	(1.081)	94330	5.00000	5.4
	47 Styrene	104	9.883	9.883	(1.083)	122278	5.00000	5.3
	48 Bromoform	173	10.092	10.092	(0.851)	15431	5.00000	5.0
	49 Isopropylbenzene	105	10.301	10.301	(1.128)	306794	5.00000	5.6
$	89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.603	(1.162)	29926	5.00000	5.2
	51 1,1,2,2-Tetrachloroethane	83	10.638	10.638	(1.165)	22580	5.00000	4.9(Q)
	52 1,3-Dichlorobenzene	146	11.776	11.776	(0.993)	97066	5.00000	5.3
*	78 1,4-Dichlorobenzene-d4	152	11.857	11.857	(1.000)	71562	5.00000	
	53 1,4-Dichlorobenzene	146	11.881	11.881	(1.002)	99803	5.00000	5.3
$	90 1,2-Dichlorobenzene-d4	152	12.310	12.310	(1.038)	58211	5.00000	5.8(Q)
	54 1,2-Dichlorobenzene	146	12.334	12.334	(1.040)	74249	5.00000	5.5
M	41 Xylene (total)	106				200869	5.00000	10
	55 1,2-Dibromo-3-chloropropane	75	13.263	13.263	(1.119)	2989	5.00000	5.1(Q)
	56 1,2,4-Trichlorobenzene	180	14.308	14.308	(1.207)	32646	5.00000	4.3
	77 1,2,3-Trichlorobenzene	180	14.912	14.912	(1.258)	17950	5.00000	4.3(Q)

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

WL
05/17/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7451.D

Date : 14-MAY-2007 09:15

Client ID: BFB5H

Instrument: V5.i

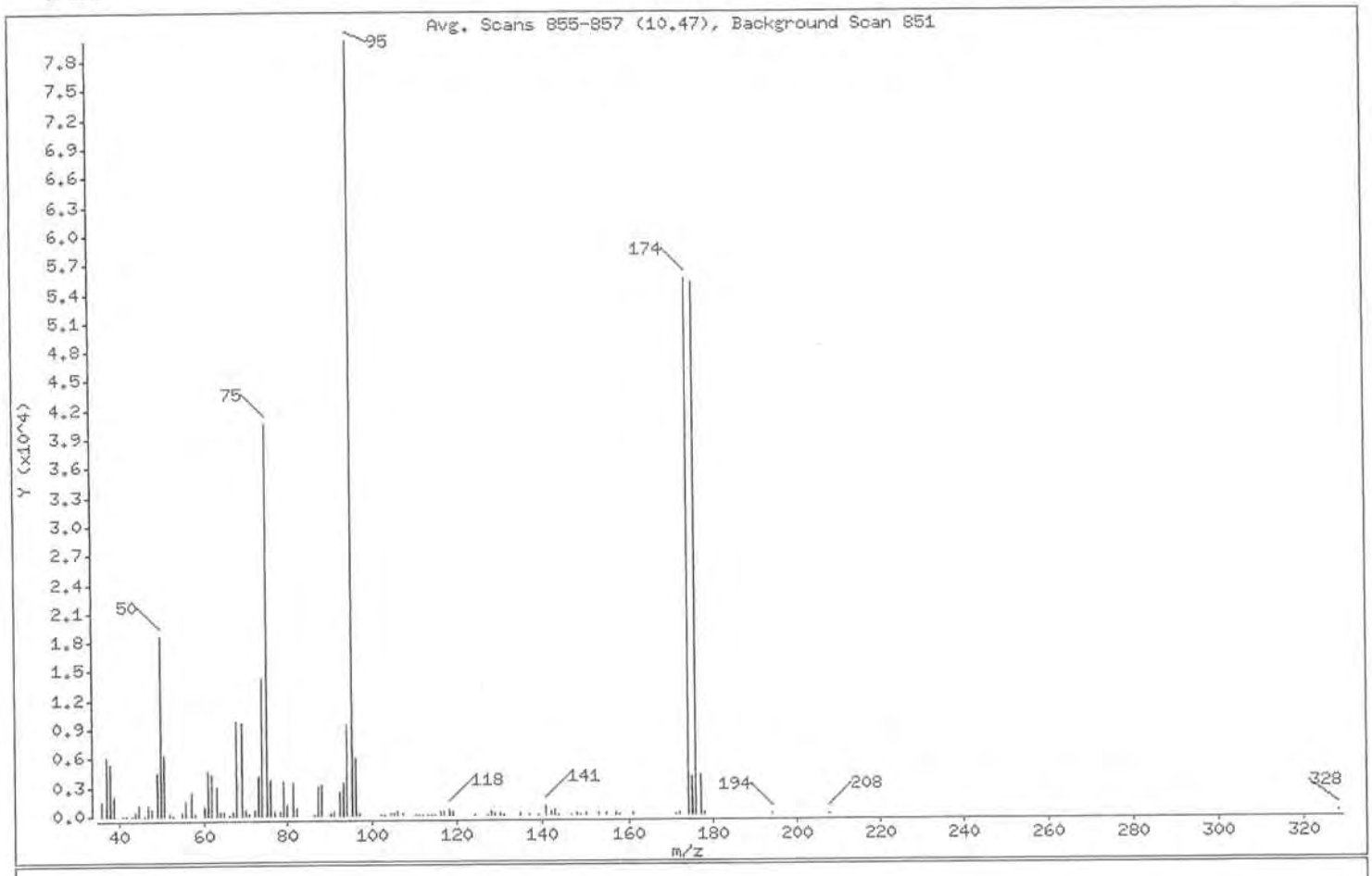
Sample Info: 2UL,BFB5H,BFB5H

Operator: HZA

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	23.16
75	30.00 - 80.00% of mass 95	50.68
96	5.00 - 9.00% of mass 95	7.46
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	69.23
175	5.00 - 9.00% of mass 174	4.90 (7.08)
176	95.00 - 101.00% of mass 174	68.77 (99.34)
177	5.00 - 9.00% of mass 176	4.96 (7.22)

COPY

Original Documents Are Included in CSF COPY 2.

Signed: Joanna Strzalkowska Date: 5/23/07

WL 05/16/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7451.D

Date : 14-MAY-2007 09:15

Client ID: BFB5H

Instrument: V5.i

Sample Info: 2UL,BFB5H,BFB5H

Operator: HZA

Column phase: DB-624

Column diameter: 0.25

Data File: V5H7451.D
Spectrum: Avg. Scans 855-857 (10.47), Background Scan 851
Location of Maximum: 95.00
Number of points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1545	65.00	341	95.00	80056	137.00	79
37.00	6029	66.00	38	96.00	5976	139.00	37
38.00	5251	67.00	279	97.00	120	141.00	884
39.00	1983	68.00	9680	102.00	40	142.00	312
41.00	38	69.00	9531	103.00	64	143.00	550
42.00	33	70.00	633	104.00	259	144.00	37
43.00	22	71.00	146	105.00	114	147.00	34
44.00	356	72.00	534	106.00	367	148.00	155
45.00	1166	73.00	4118	107.00	103	149.00	44
46.00	46	74.00	14093	110.00	85	150.00	100
47.00	1050	75.00	40576	111.00	83	153.00	95
48.00	755	76.00	3623	112.00	36	155.00	144
49.00	4448	77.00	459	113.00	72	157.00	97
50.00	18544	78.00	385	114.00	48	158.00	33
51.00	6258	79.00	3535	115.00	91	161.00	149
52.00	162	80.00	1070	116.00	311	171.00	45
53.00	50	81.00	3340	117.00	402	172.00	225
55.00	346	82.00	808	118.00	462	174.00	55424
56.00	1423	86.00	42	119.00	384	175.00	3923
57.00	2315	87.00	2885	124.00	52	176.00	55056
58.00	178	88.00	3094	127.00	54	177.00	3973
60.00	840	90.00	98	128.00	301	178.00	120
61.00	4670	91.00	327	129.00	124	194.00	38
62.00	4316	92.00	2405	130.00	276	208.00	37
63.00	3016	93.00	3300	131.00	82	328.00	43
64.00	362	94.00	9314	135.00	162		

Data File: \\Avogadro\Organics\organic\voa\V5.i\070514.B\V5H7451.D

Date : 14-MAY-2007 09:15

Client ID: BFB5H

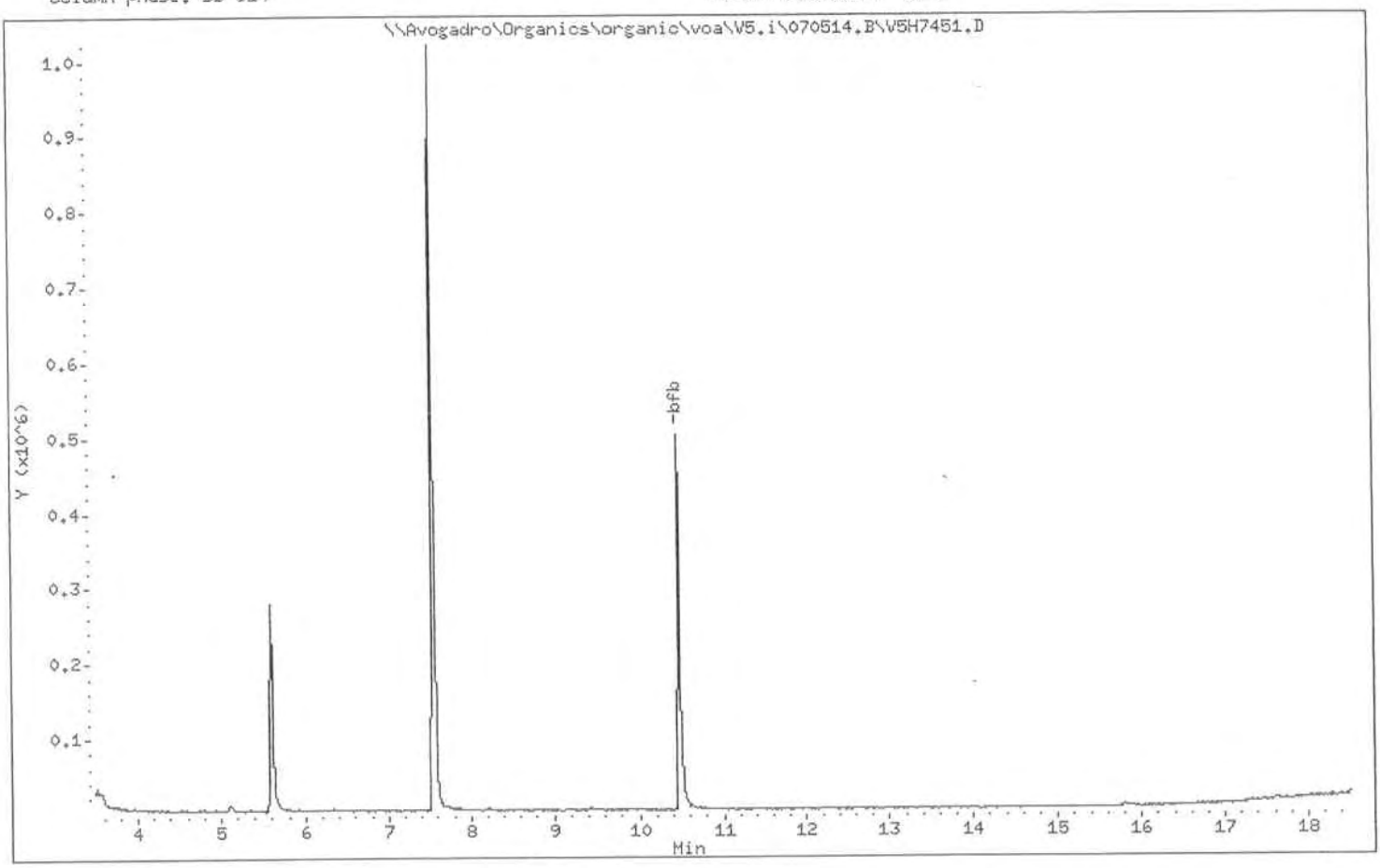
Instrument: V5.i

Sample Info: 2UL,BFB5H,BFB5H

Operator: HZA

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7470.D

Date : 15-MAY-2007 08:44

Client ID: BFB5J

Instrument: V5.i

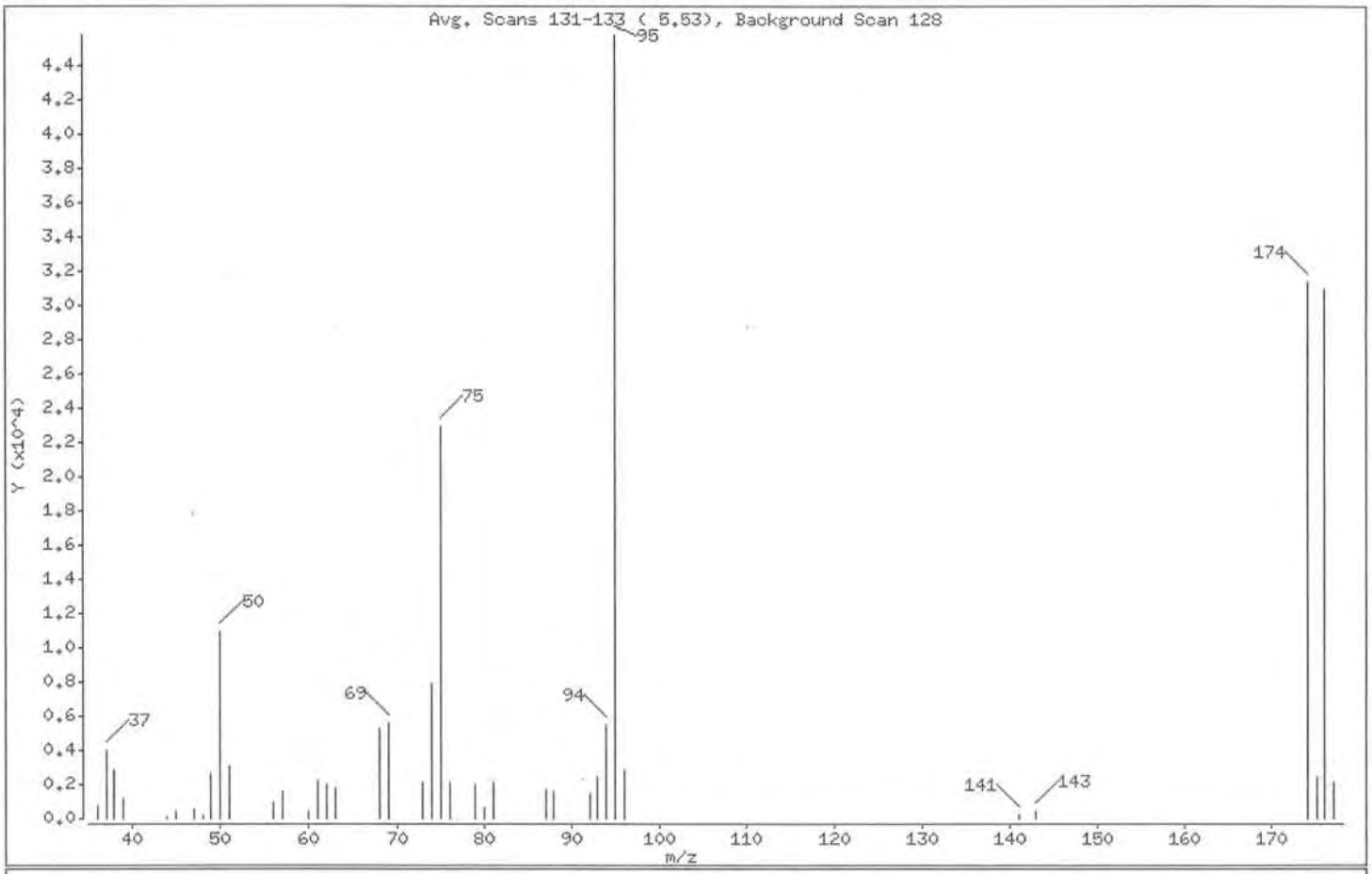
Sample Info: 2UL,BFB5J,BFB5J

Operator: HZA SRC: HZA

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	23.84
75	30.00 - 80.00% of mass 95	50.08
96	5.00 - 9.00% of mass 95	6.31
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	68.47
175	5.00 - 9.00% of mass 174	5.35 (7.82)
176	95.00 - 101.00% of mass 174	67.55 (98.65)
177	5.00 - 9.00% of mass 176	4.59 (6.79)

WL
05/17/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7470.D

Date : 15-MAY-2007 08:44

Client ID: BFB5J

Instrument: V5.i

Sample Info: 2UL,BFB5J,BFB5J

Operator: HZA SRC: HZA

Column phase: DB-624

Column diameter: 0.25

Data File: V5H7470.D
Spectrum: Avg. Scans 131-133 (5.53), Background Scan 128
Location of Maximum: 95.00
Number of points: 39

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	743	51.00	3067	74.00	7910	94.00	5450
37.00	4023	56.00	977	75.00	22936	95.00	45800
38.00	2878	57.00	1613	76.00	2077	96.00	2890
39.00	1200	60.00	437	79.00	1987	141.00	185
44.00	100	61.00	2211	80.00	662	143.00	402
45.00	449	62.00	2051	81.00	2140	174.00	31360
47.00	549	63.00	1762	87.00	1725	175.00	2451
48.00	172	68.00	5304	88.00	1535	176.00	30936
49.00	2632	69.00	5548	92.00	1461	177.00	2102
50.00	10917	73.00	2100	93.00	2438		

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7470.D

Date : 15-MAY-2007 08:44

Client ID: BFB5J

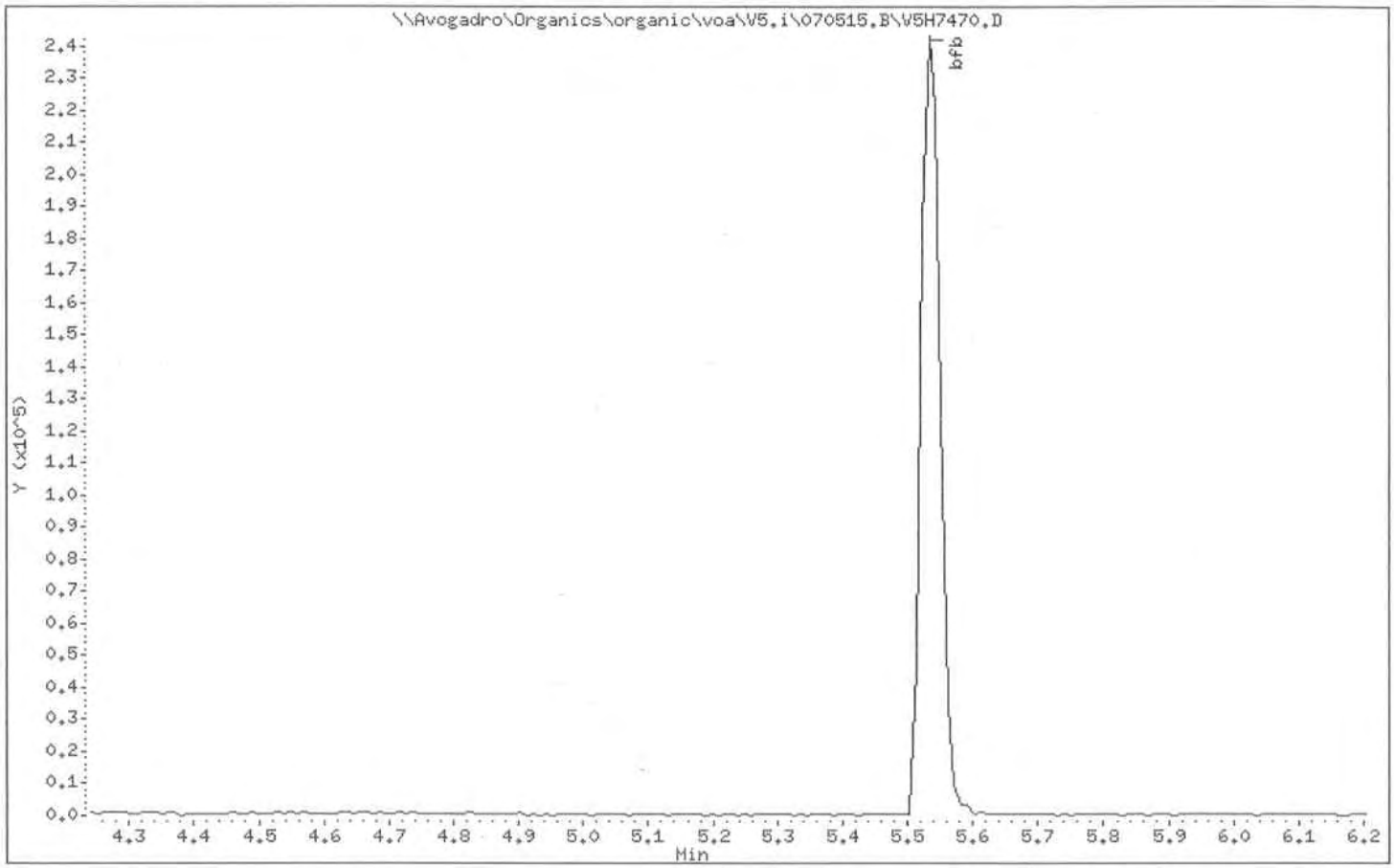
Instrument: V5.i

Sample Info: 2UL,BFB5J,BFB5J

Operator: HZA SRC: HZA

Column phase: DB-624

Column diameter: 0.25



Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7493.D

Date : 15-MAY-2007 21:27

Client ID: BFB5L

Instrument: V5.i

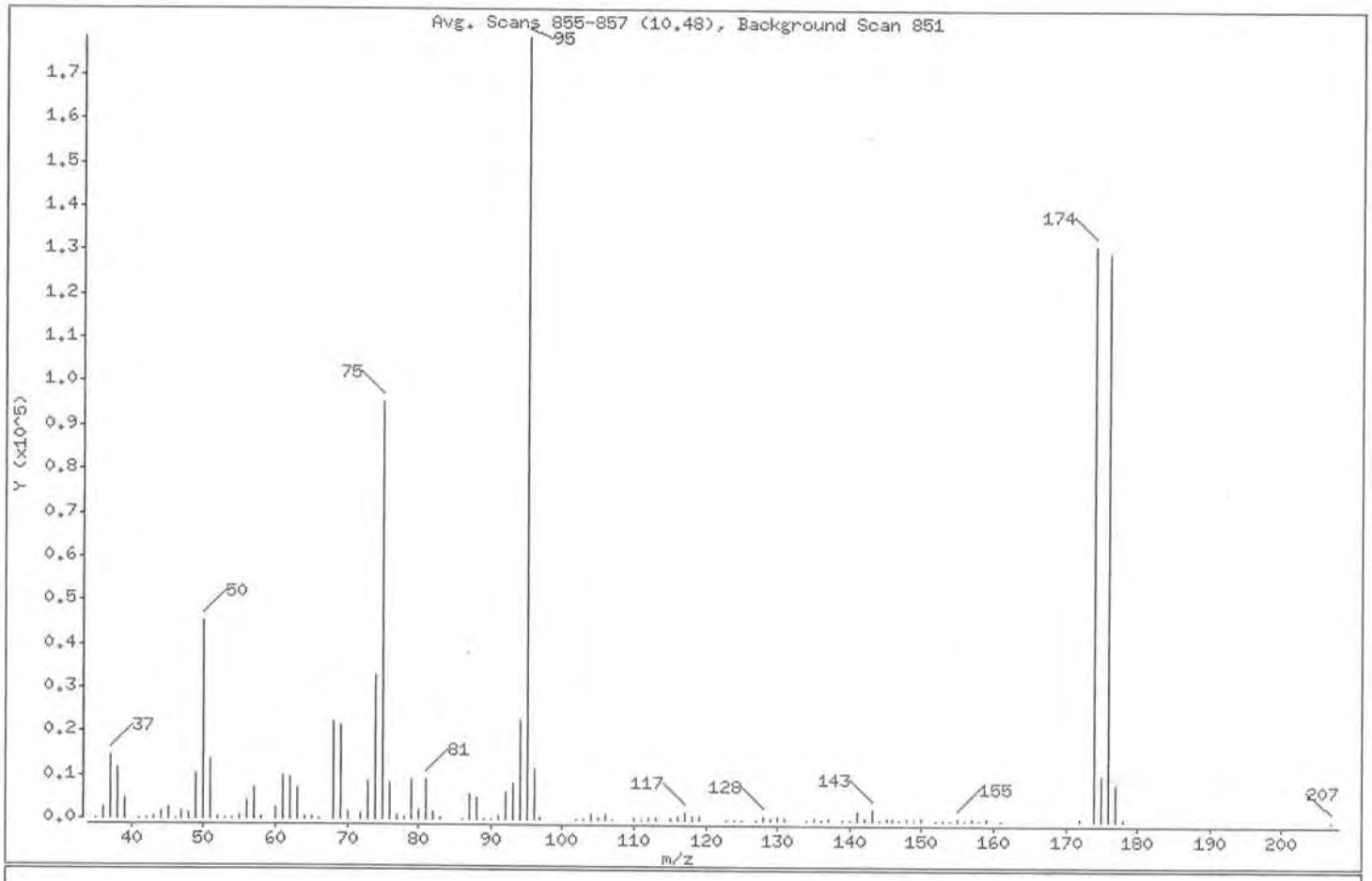
Sample Info: 2UL,BFB5L,BFB5L

Operator: HZA

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	25.19
75	30.00 - 80.00% of mass 95	53.37
96	5.00 - 9.00% of mass 95	6.50
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	73.52
175	5.00 - 9.00% of mass 174	5.77 (7.85)
176	95.00 - 101.00% of mass 174	72.73 (98.93)
177	5.00 - 9.00% of mass 176	4.68 (6.43)

WL
05/17/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7493.D

Date : 15-MAY-2007 21:27

Client ID: BFB5L

Instrument: V5.i

Sample Info: 2UL,BFB5L,BFB5L

Operator: HZA

Column phase: DB-624

Column diameter: 0.25

Data File: V5H7493.D
Spectrum: Avg. Scans 855-857 (10.48), Background Scan 851
Location of Maximum: 95.00
Number of points: 112

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	43	66.00	41	103.00	177	142.00	263
36.00	2472	68.00	21992	104.00	1089	143.00	2318
37.00	14433	69.00	21440	105.00	323	144.00	89
38.00	11519	70.00	1640	106.00	1060	145.00	267
39.00	4388	72.00	1087	107.00	97	146.00	368
41.00	50	73.00	8643	110.00	219	147.00	167
42.00	37	74.00	32824	111.00	145	148.00	541
43.00	244	75.00	95336	112.00	287	149.00	117
44.00	1838	76.00	8077	113.00	294	150.00	217
45.00	2424	77.00	826	115.00	255	152.00	151
46.00	201	78.00	450	116.00	863	153.00	136
47.00	1830	79.00	8862	117.00	1480	154.00	34
48.00	1393	80.00	1960	118.00	779	155.00	413
49.00	10458	81.00	8865	119.00	836	156.00	90
50.00	45000	82.00	1676	123.00	33	157.00	349
51.00	13458	83.00	226	124.00	123	158.00	59
52.00	488	86.00	128	125.00	70	159.00	209
53.00	84	87.00	5660	127.00	125	161.00	175
54.00	73	88.00	5048	128.00	705	172.00	371
55.00	632	89.00	49	129.00	250	174.00	131328
56.00	4019	90.00	103	130.00	659	175.00	10315
57.00	6799	91.00	951	131.00	318	176.00	129920
58.00	364	92.00	5982	134.00	40	177.00	8357
60.00	2402	93.00	8402	135.00	435	178.00	267
61.00	10020	94.00	22528	136.00	114	207.00	34
62.00	9511	95.00	178624	137.00	304		
63.00	6936	96.00	11607	139.00	57		
64.00	579	97.00	337	140.00	153		
65.00	433	102.00	46	141.00	2064		

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7493.D

Date : 15-MAY-2007 21:27

Client ID: BFB5L

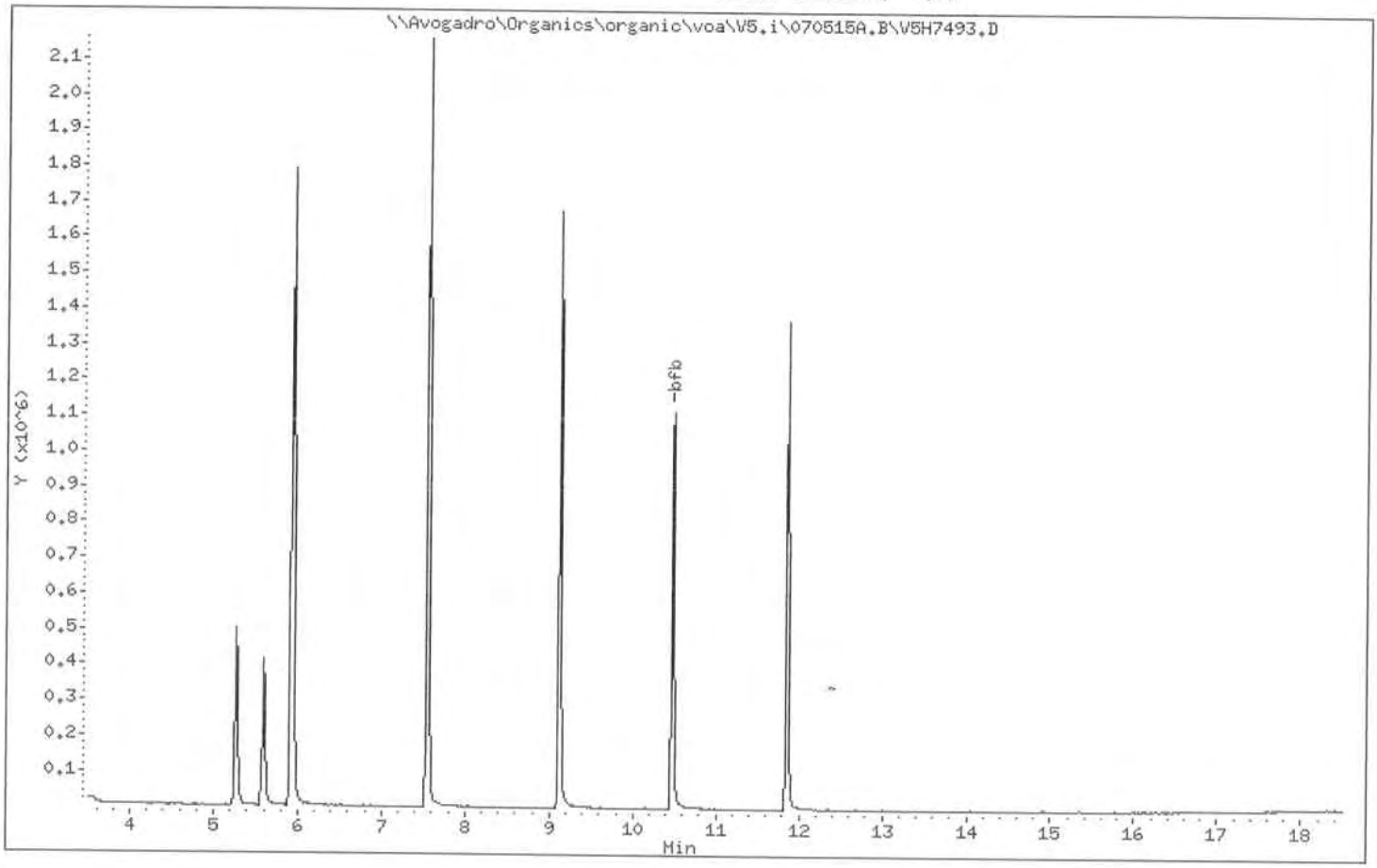
Instrument: V5.i

Sample Info: 2UL,BFB5L,BFB5L

Operator: HZA

Column phase: DB-624

Column diameter: 0.25



1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5J

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29901

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7472A.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5J

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29901

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7472A.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.

VBLK5J

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29901

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7472A.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

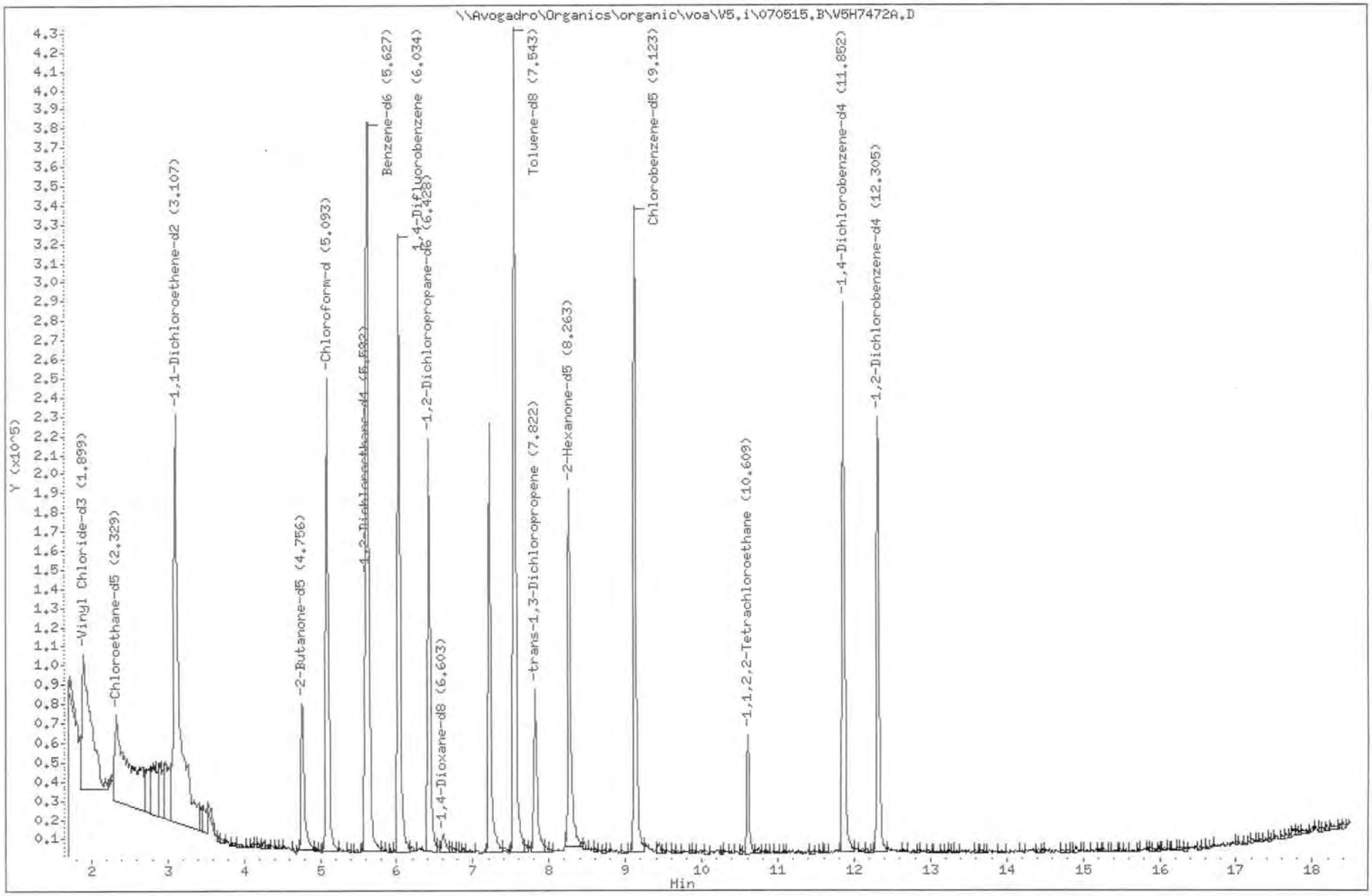
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7472A.D
Date : 15-MAY-2007 10:15
Client ID: VBLK5J
Sample Info: 25ML,MB-29901,VBLK5J,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0295

Data File: V5H7472A.D
Report Date: 21-May-2007 16:07

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7472A.D
Lab Smp Id: MB-29901 Client Smp ID: VBLK5J
Inj Date : 15-MAY-2007 10:15
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-29901,VBLK5J,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 21-May-2007 10:42 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14
Processing Host: TARGET103

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	1.899	1.910	(0.315)	167877	5.01286	5.0
$ 80 Chloroethane-d5	69	2.328	2.316	(0.386)	80760	5.91335	5.9
$ 81 1,1-Dichloroethene-d2	63	3.107	3.106	(0.515)	200933	4.06908	4.1
$ 82 2-Butanone-d5	46	4.756	4.755	(0.788)	153111	44.4190	44
$ 83 Chloroform-d	84	5.092	5.092	(0.844)	228710	4.82379	4.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.592	5.591	(0.927)	87427	4.68975	4.7
$ 84 Benzene-d6	84	5.627	5.626	(0.617)	395767	4.99190	5.0
* 26 1,4-Difluorobenzene	114	6.033	6.032	(1.000)	284252	5.00000	(Q)
$ 85 1,2-Dichloropropane-d6	67	6.428	6.427	(0.705)	97274	4.80357	4.8
$ 94 1,4-Dioxane-d8	96	6.602	6.613	(1.094)	8366	218.234	220(Q)
$ 33 Toluene-d8	98	7.543	7.542	(0.827)	341067	4.92260	4.9
$ 86 trans-1,3-Dichloropropene-d4	79	7.810	7.809	(0.856)	67842	5.11142	5.1
$ 87 2-Hexanone-d5	63	8.263	8.262	(0.906)	77820	47.2653	47(Q)
* 42 Chlorobenzene-d5	117	9.122	9.121	(1.000)	199367	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.609	10.608	(1.163)	38875	4.96587	5.0
* 78 1,4-Dichlorobenzene-d4	152	11.863	11.851	(1.000)	95989	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.304	12.303	(1.037)	71347	5.26185	5.3

WL
05/21/07

Data File: V5H7472A.D
Report Date: 21-May-2007 16:07

QC Flag Legend

Q - Qualifier signal failed the ratio test.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5L

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29931

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7496.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5L

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29931

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7496.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/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.

VBLK5L

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29931

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7496.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L Purge Volume: 25.0 (mL)

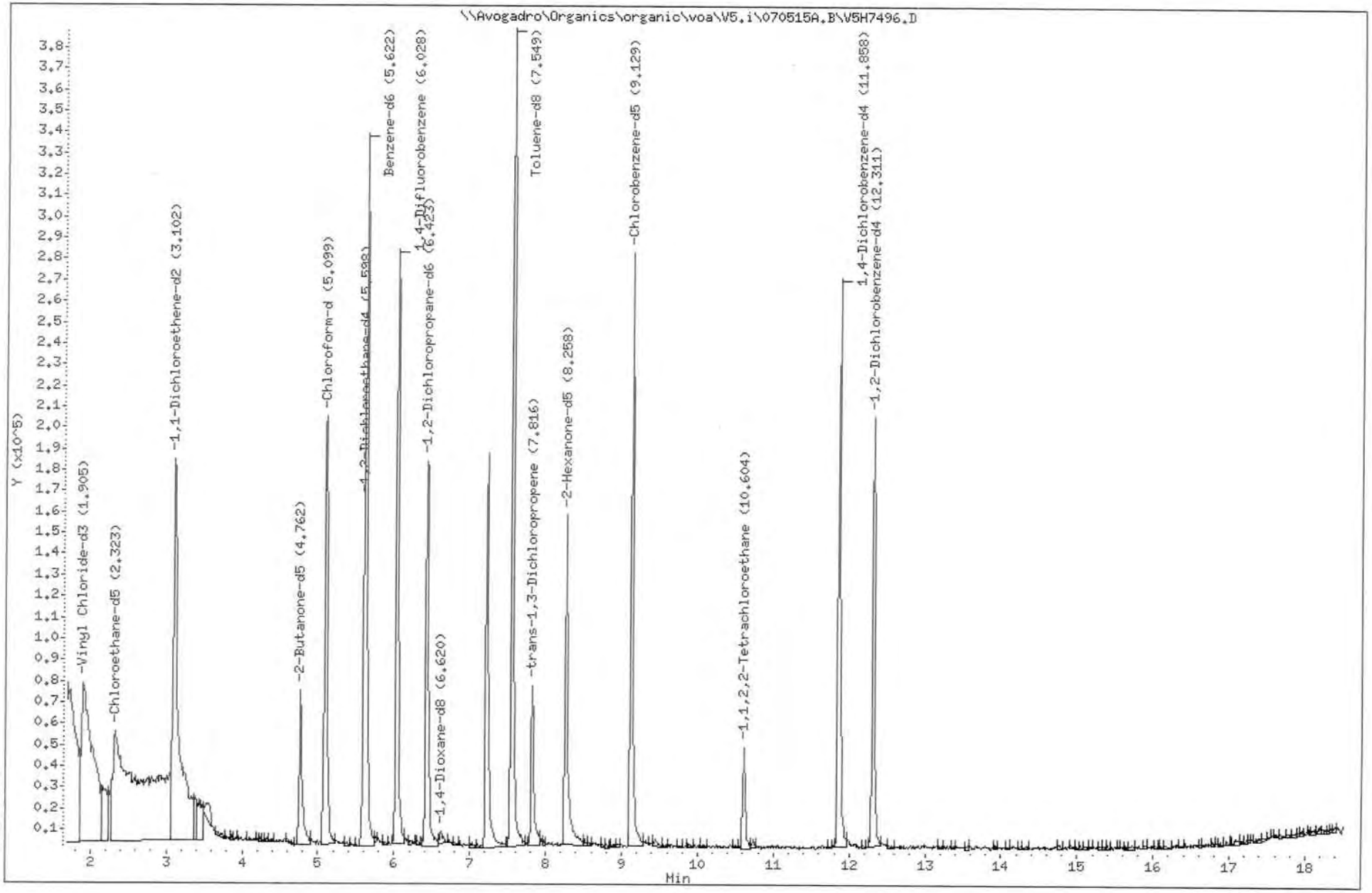
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7496.D
Date : 15-MAY-2007 23:03
Client ID: VBLK5L
Sample Info: 25ML,MB-29931,VBLK5L,29931
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



Data File: V5H7496.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7496.D
Lab Smp Id: MB-29931 Client Smp ID: VBLK5L
Inj Date : 15-MAY-2007 23:03
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-29931,VBLK5L,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.905	1.916	(0.316)	141977	4.79795	4.8
$ 80 Chloroethane-d5	69	2.323	2.322	(0.385)	64850	5.37391	5.4
$ 81 1,1-Dichloroethene-d2	63	3.101	3.112	(0.515)	170609	3.91012	3.9
$ 82 2-Butanone-d5	46	4.762	4.761	(0.790)	140710	46.1987	46
$ 83 Chloroform-d	84	5.099	5.098	(0.846)	200349	4.78226	4.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.597	(0.929)	84803	5.14823	5.1
$ 84 Benzene-d6	84	5.621	5.620	(0.616)	325165	4.68321	4.7
* 26 1,4-Difluorobenzene	114	6.028	6.038	(1.000)	251166	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.422	6.433	(0.704)	84146	4.74476	4.7
$ 94 1,4-Dioxane-d8	96	6.620	6.619	(1.098)	6543	193.163	190(Q)
$ 33 Toluene-d8	98	7.549	7.548	(0.827)	284931	4.69579	4.7
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.815	(0.856)	53249	4.58109	4.6
$ 87 2-Hexanone-d5	63	8.257	8.256	(0.905)	69787	48.3994	48
* 42 Chlorobenzene-d5	117	9.128	9.127	(1.000)	174598	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.614	(1.162)	33013	4.81531	4.8(Q)
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.856	(1.000)	80766	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.309	(1.038)	60263	5.28210	5.3(Q)

WL
05/19/07

QC Flag Legend

Q - Qualifier signal failed the ratio test.

0302 HZA

Data File: V5H7496.D
Report Date: 17-May-2007 11:52

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5H7496.D
Lab Smp Id: MB-29931 Client Smp ID: VBLK5L
Inj Date : 15-MAY-2007 23:03
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-29931,VBLK5L,29931
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515A.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 15:50 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29944

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7514.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29944

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7514.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/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.

VBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-29944

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7514.D

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L Purge Volume: 25.0 (mL)

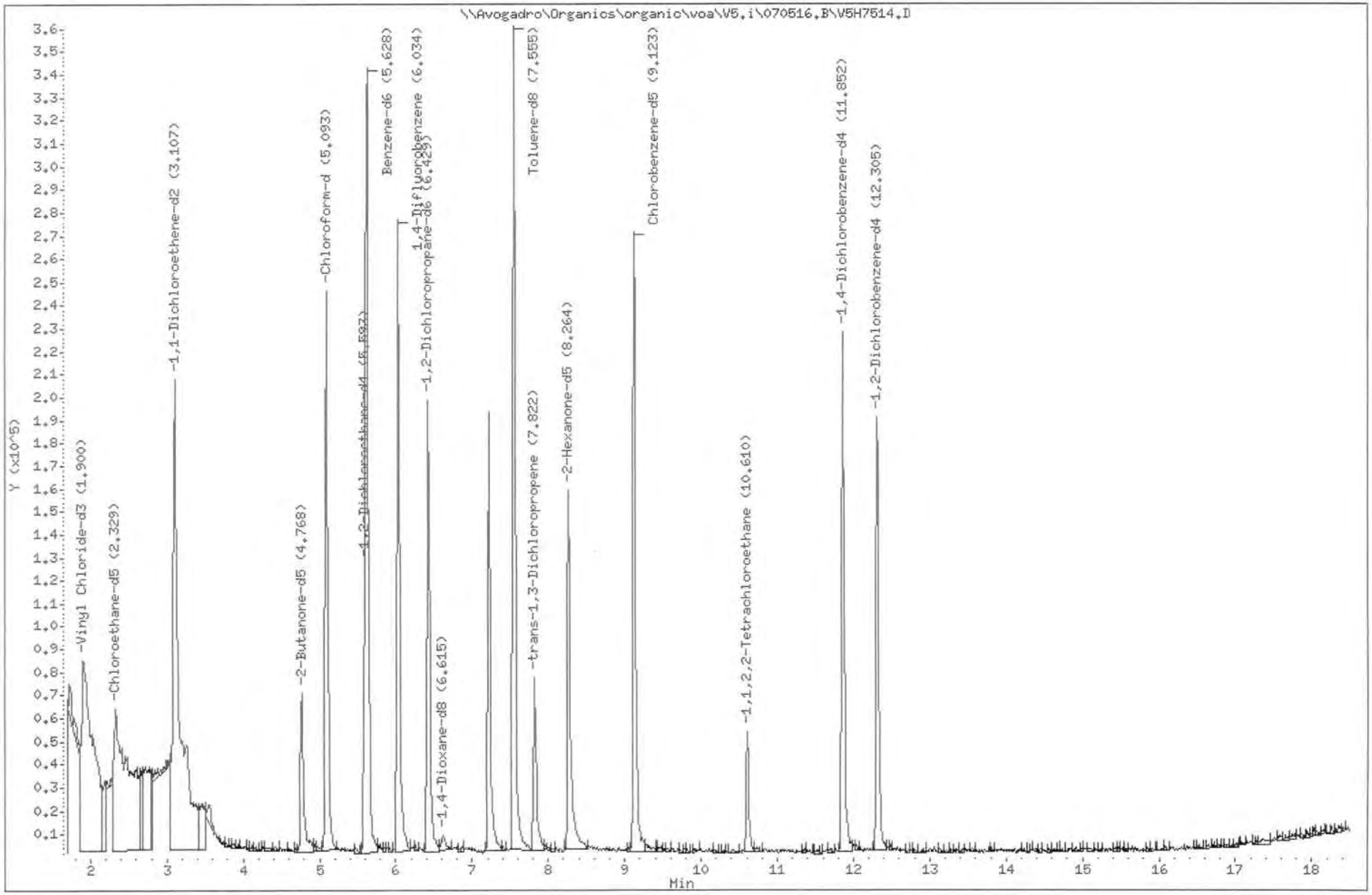
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796[1]	Total Alkanes	N/A	0	J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7514.D
Date : 16-MAY-2007 10:26
Client ID: VBLK5M
Sample Info: 25ML,MB-29944,VBLK5M,29944
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



1068

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7514.D
Report Date: 22-May-2007 10:16

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7514.D
Lab Smp Id: MB-29944 Client Smp ID: VBLK5M
Inj Date : 16-MAY-2007 10:26
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,MB-29944,VBLK5M,29944
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 21-May-2007 10:59 V5.i Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14
Processing Host: TARGET103

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	1.899	1.904	(0.315)	145311	5.39876	5.4
$ 80 Chloroethane-d5	69	2.317	2.322	(0.384)	65062	5.92742	5.9
$ 81 1,1-Dichloroethene-d2	63	3.107	3.111	(0.515)	172732	4.35230	4.4
$ 82 2-Butanone-d5	46	4.768	4.760	(0.790)	135029	48.7405	49
$ 83 Chloroform-d	84	5.093	5.097	(0.844)	211691	5.55529	5.6(Q)
$ 23 1,2-Dichloroethane-d4	65	5.592	5.597	(0.927)	88899	5.93338	5.9
$ 84 Benzene-d6	84	5.627	5.620	(0.617)	331979	5.14920	5.1
* 26 1,4-Difluorobenzene	114	6.034	6.038	(1.000)	228456	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.428	6.421	(0.705)	89018	5.40565	5.4
$ 94 1,4-Dioxane-d8	96	6.614	6.607	(1.096)	9667	313.760	310(Q)
$ 33 Toluene-d8	98	7.555	7.548	(0.828)	292734	5.19555	5.2
$ 86 trans-1,3-Dichloropropene-d4	79	7.822	7.815	(0.857)	55986	5.18712	5.2
$ 87 2-Hexanone-d5	63	8.263	8.256	(0.906)	66268	49.4947	49
* 42 Chlorobenzene-d5	117	9.123	9.127	(1.000)	162125	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.609	10.602	(1.163)	32904	5.16865	5.2
* 78 1,4-Dichlorobenzene-d4	152	11.863	11.856	(1.000)	74668	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.305	12.309	(1.037)	59255	5.61791	5.6(Q)

WL
05/22/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7514.D
Report Date: 22-May-2007 10:16

QC Flag Legend

Q - Qualifier signal failed the ratio test.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5M

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7528.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
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
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VHBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5M

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7528.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/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.
VHBLK5M

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK5M

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7528.D

Level: (TRACE or LOW/MED) TRACE Date Received: 05/10/2007

% Moisture: not dec. Date Analyzed: 05/16/2007

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) UG/L Purge Volume: 25.0 (mL)

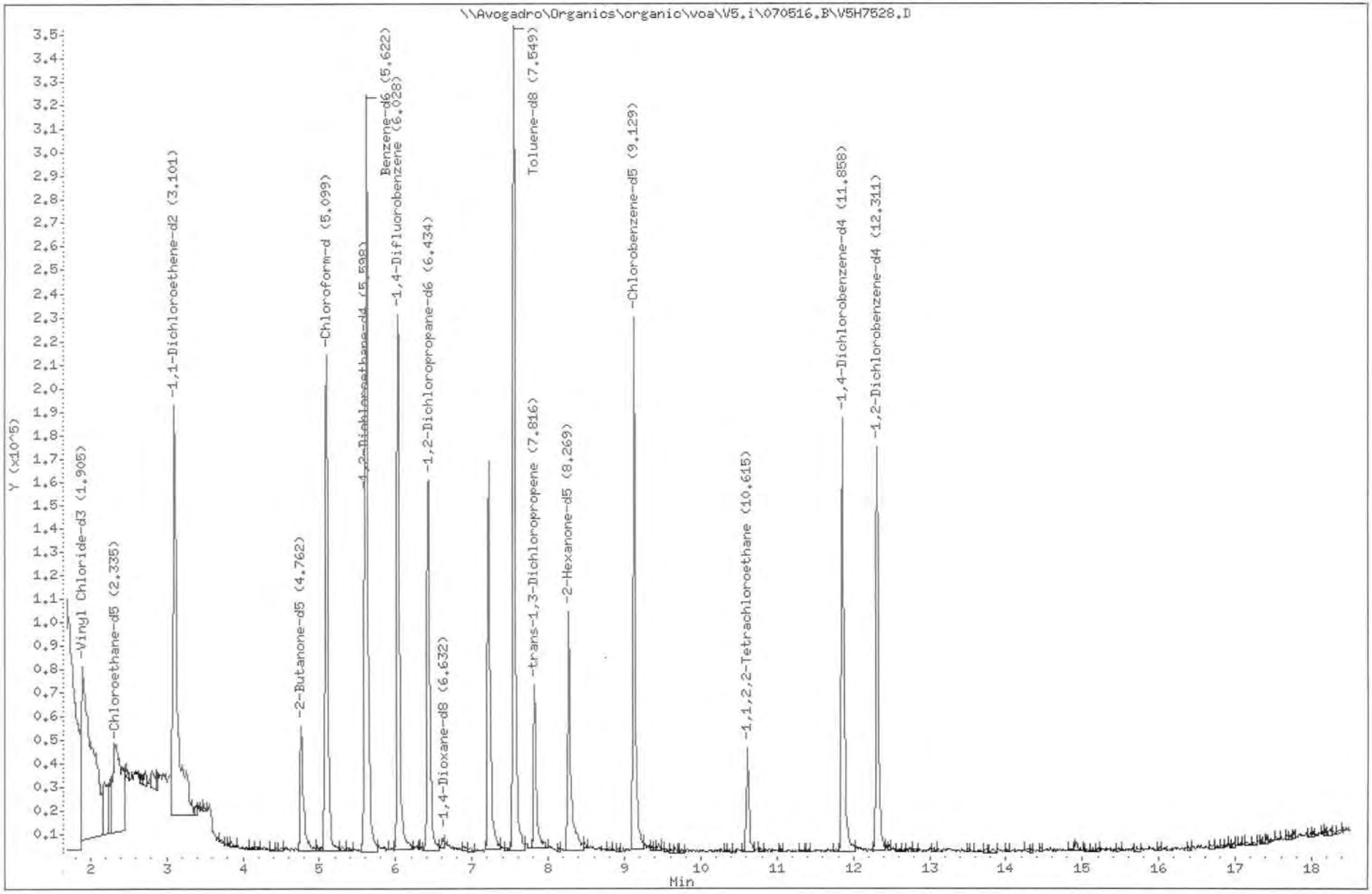
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 [1]	Total Alkanes	N/A		J

[1] EPA-designated Registry Number.

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7528.D
Date : 16-MAY-2007 17:28
Client ID: VHBLK5M
Sample Info: 25ML,VHBLK5M,VHBLK5M,29944
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: HZA
Column diameter: 0.25



0313

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7528.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7528.D
Lab Smp Id: VHBLK5M Client Smp ID: VHBLK5M
Inj Date : 16-MAY-2007 17:28
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VHBLK5M,VHBLK5M,29944
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.905	1.905	(0.315)	99259	4.28052	4.3
$ 80 Chloroethane-d5	69	2.335	2.323	(0.387)	41139	4.35034	4.4
$ 81 1,1-Dichloroethene-d2	63	3.101	3.101	(0.514)	156435	4.57521	4.6
$ 82 2-Butanone-d5	46	4.762	4.762	(0.788)	101606	42.5710	43
$ 83 Chloroform-d	84	5.098	5.099	(0.844)	191845	5.84367	5.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.598	5.598	(0.927)	77693	6.01891	6.0
$ 84 Benzene-d6	84	5.621	5.621	(0.616)	298997	5.33938	5.3
* 26 1,4-Difluorobenzene	114	6.039	6.028	(1.000)	196821	5.00000	
$ 85 1,2-Dichloropropane-d6	67	6.434	6.423	(0.705)	75827	5.30138	5.3
$ 94 1,4-Dioxane-d8	96	6.620	6.608	(1.096)	5871	221.182	220(Q)
$ 33 Toluene-d8	98	7.549	7.549	(0.827)	252284	5.15517	5.2
$ 86 trans-1,3-Dichloropropene-d4	79	7.816	7.816	(0.856)	51579	5.50192	5.5
$ 87 2-Hexanone-d5	63	8.269	8.257	(0.906)	46242	39.7636	40
* 42 Chlorobenzene-d5	117	9.128	9.128	(1.000)	140817	5.00000	
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.615	10.603	(1.163)	26886	4.86238	4.9(Q)
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.857	(1.000)	61868	5.00000	(Q)
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.310	(1.038)	52875	6.05019	6.1(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

WL 05/17/07

Data File: \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7528.D
Report Date: 17-May-2007 14:14

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5H7528.D
Lab Smp Id: VHBLK5M Client Smp ID: VHBLK5M
Inj Date : 16-MAY-2007 17:28
Operator : HZA SRC: HZA Inst ID: V5.i
Smp Info : 25ML,VHBLK5M,VHBLK5M,29944
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070516.B\V5_SOM_TRACE.m
Meth Date : 17-May-2007 11:57 weiluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: STORAGEBLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN4MS

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14AMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7487.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	5.7	
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	4.2	
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	5.4	
107-06-2	1,2-Dichloroethane	0.50	U
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN4MS

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14AMS

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7487.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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

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

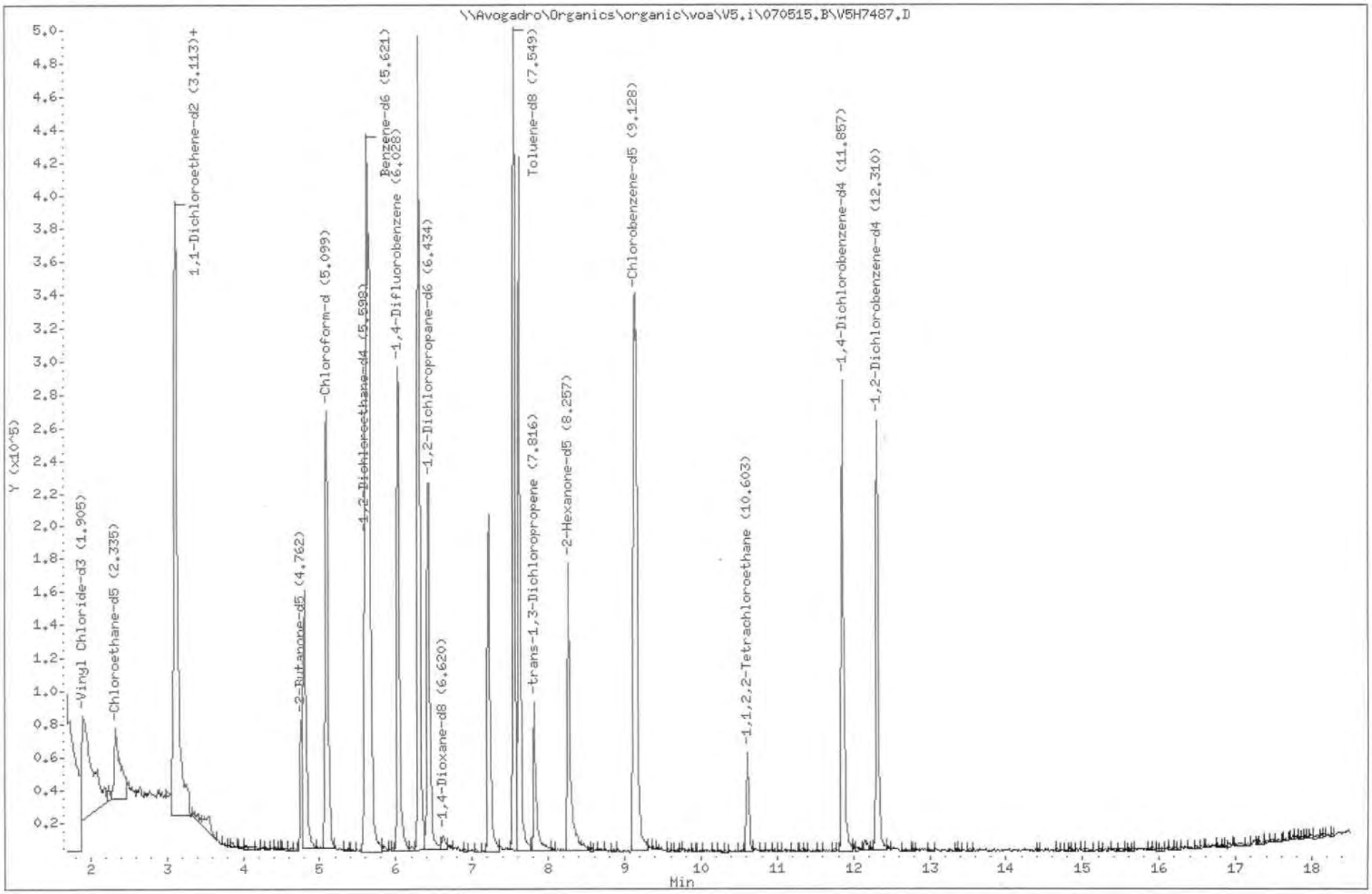
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	11	
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	5.2	
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	5.4	
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\organic\voa\V5.i\070515.B\V5H7487.D
Date : 15-MAY-2007 18:16
Client ID: Y3AN4MS
Sample Info: 25ML,F0595-14AMS,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0318

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7487.D
Report Date: 17-May-2007 11:00

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7487.D
Lab Smp Id: F0595-14AMS Client Smp ID: Y3AN4MS
Inj Date : 15-MAY-2007 18:16
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-14AMS,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.904	1.910	(0.316)	159128	5.15884	5.2
$ 80 Chloroethane-d5	69	2.334	2.316	(0.387)	80882	6.42984	6.4
$ 81 1,1-Dichloroethene-d2	63	3.112	3.106	(0.516)	268462	5.90254	5.9(R)
7 1,1-Dichloroethene	96	3.124	3.118	(0.518)	89965	5.71651	5.7(Q)
$ 82 2-Butanone-d5	46	4.761	4.755	(0.790)	149934	47.2251	47
17 cis-1,2-Dichloroethene	96	4.808	4.813	(0.798)	69371	4.22482	4.2
$ 83 Chloroform-d	84	5.098	5.092	(0.846)	253228	5.79863	5.8(Q)
$ 23 1,2-Dichloroethane-d4	65	5.597	5.591	(0.929)	96657	5.62922	5.6
$ 84 Benzene-d6	84	5.621	5.626	(0.616)	407047	5.57699	5.6
25 Benzene	78	5.667	5.661	(0.621)	331004	5.36908	5.4
* 26 1,4-Difluorobenzene	114	6.027	6.032	(1.000)	261814	5.00000	
27 Trichloroethene	95	6.306	6.299	(0.691)	217565	11.0839	11(R)
$ 85 1,2-Dichloropropane-d6	67	6.422	6.427	(0.704)	108935	5.84338	5.8
$ 94 1,4-Dioxane-d8	96	6.608	6.613	(1.096)	12692	359.456	360(Q)
$ 33 Toluene-d8	98	7.548	7.542	(0.827)	358125	5.61460	5.6
34 Toluene	91	7.618	7.623	(0.835)	327454	5.22841	5.2
$ 86 trans-1,3-Dichloropropene-d4	79	7.815	7.809	(0.856)	65881	5.39179	5.4
$ 87 2-Hexanone-d5	63	8.257	8.262	(0.905)	78403	51.7266	52
* 42 Chlorobenzene-d5	117	9.128	9.121	(1.000)	183537	5.00000	
43 Chlorobenzene	112	9.163	9.156	(1.004)	181646	5.36729	5.4(Q)
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.603	10.608	(1.162)	39392	5.46591	5.5
* 78 1,4-Dichlorobenzene-d4	152	11.857	11.851	(1.000)	85771	5.00000	

WL
05/17/07

0319 HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7487.D
Report Date: 17-May-2007 11:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
$ 90 1,2-Dichlorobenzene-d4	152	12.310	12.303	(1.038)	79543	6.56517	6.6(QR)

QC Flag Legend

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

WL 05/21/07

ITEM

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN4MSD

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14AMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7488.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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) UG/L	Q
75-65-0	2-Methyl-2-Propanol	5.0	U
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	5.3	
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	4.1	
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.48	J
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	5.0	
107-06-2	1,2-Dichloroethane	0.50	U
123-91-1	1,4-Dioxane	20	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Y3AN4MSD

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

Lab Code: MITKEM Case No.: 36359 Mod. Ref No.: 1391.0 SDG No.: Y3AM1

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: F0595-14AMSD

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: V5H7488.D

Level: (TRACE/LOW/MED) TRACE Date Received: 05/11/2007

% Moisture: not dec. Date Analyzed: 05/15/2007

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

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

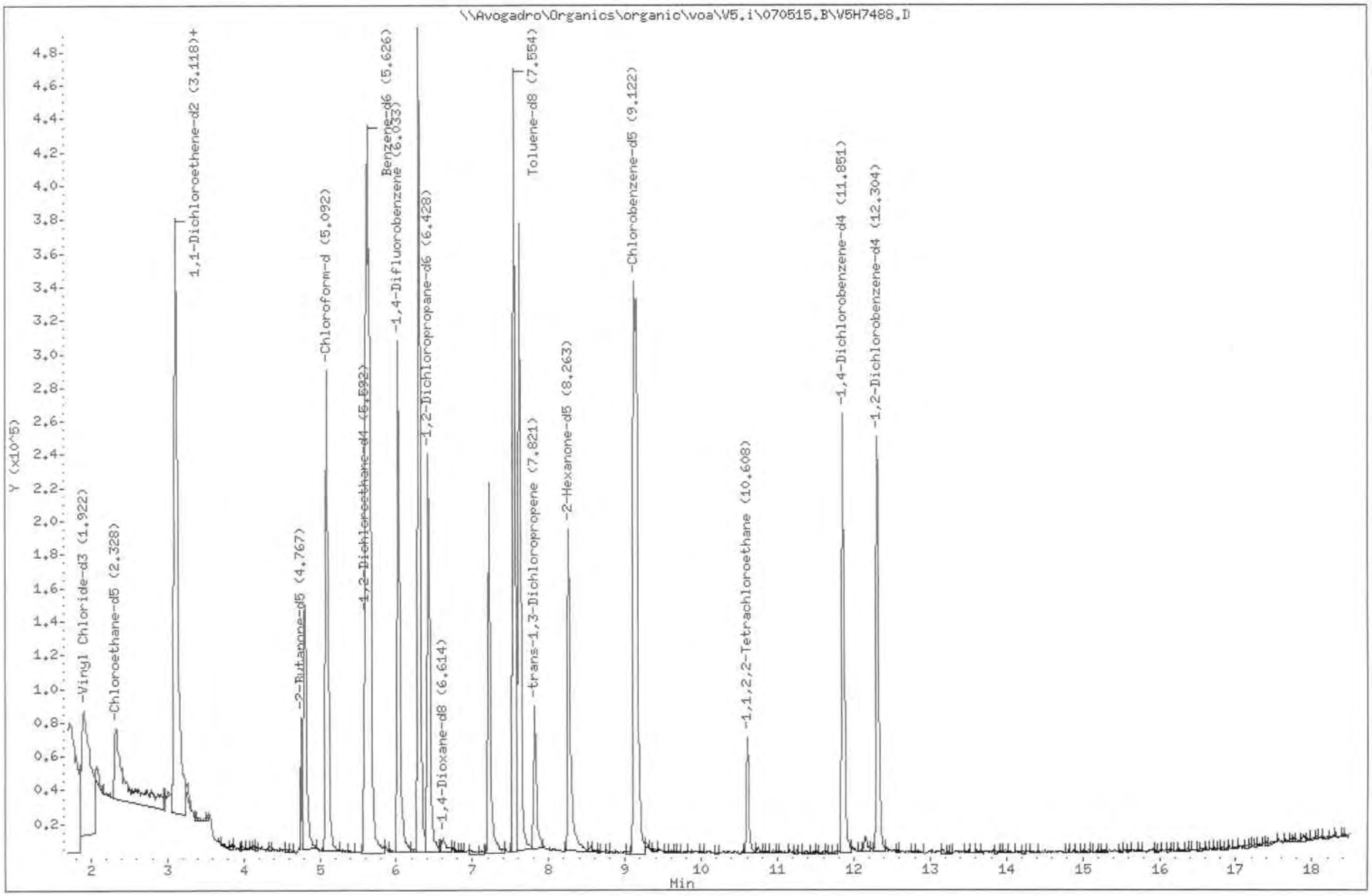
Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-01-6	Trichloroethene	10	
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	5.0	
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\organic\voa\V5.i\070515.B\V5H7488.D
Date : 15-MAY-2007 18:48
Client ID: Y3AN4MSD
Sample Info: 25ML,F0595-14AMSD,,29901
Purge Volume: 25.0
Column phase: DB-624

Instrument: V5.i

Operator: HZA SRC: LIMS
Column diameter: 0.25



0323

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7488.D
Report Date: 17-May-2007 11:20

Mitkem Corporation

SOM01.0 - Trace Water Volatiles

Data file : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7488.D
Lab Smp Id: F0595-14AMSD Client Smp ID: Y3AN4MSD
Inj Date : 15-MAY-2007 18:48
Operator : HZA SRC: LIMS Inst ID: V5.i
Smp Info : 25ML,F0595-14AMSD,,29901
Misc Info :
Comment :
Method : \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5_SOM_TRACE.m
Meth Date : 16-May-2007 11:01 wluo Quant Type: ISTD
Cal Date : 14-MAY-2007 09:47 Cal File: V5H7452.D
Als bottle: 100 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SOM1391.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	1.921	1.910	(0.319)	155541	5.09834	5.1
$ 80 Chloroethane-d5	69	2.328	2.316	(0.386)	61714	4.96033	5.0(Q)
$ 81 1,1-Dichloroethene-d2	63	3.106	3.106	(0.515)	277414	6.16685	6.2(R)
7 1,1-Dichloroethene	96	3.118	3.118	(0.517)	83199	5.34508	5.3(Q)
$ 82 2-Butanone-d5	46	4.767	4.755	(0.790)	141919	45.1952	45
17 cis-1,2-Dichloroethene	96	4.813	4.813	(0.798)	66968	4.12359	4.1
$ 83 Chloroform-d	84	5.092	5.092	(0.844)	248036	5.74258	5.7(Q)
19 Chloroform	83	5.115	5.115	(0.848)	16359	0.47610	0.48(a)
$ 23 1,2-Dichloroethane-d4	65	5.591	5.591	(0.927)	100411	5.91255	5.9
$ 84 Benzene-d6	84	5.626	5.626	(0.617)	409393	5.44364	5.4
25 Benzene	78	5.661	5.661	(0.621)	317554	4.99893	5.0
* 26 1,4-Difluorobenzene	114	6.032	6.032	(1.000)	258949	5.00000	
27 Trichloroethene	95	6.300	6.299	(0.691)	207588	10.2636	10(R)
$ 85 1,2-Dichloropropane-d6	67	6.427	6.427	(0.705)	106191	5.52812	5.5
$ 94 1,4-Dioxane-d8	96	6.613	6.613	(1.096)	9963	285.289	290(Q)
$ 33 Toluene-d8	98	7.554	7.542	(0.828)	361940	5.50699	5.5
34 Toluene	91	7.623	7.623	(0.836)	324447	5.02755	5.0
$ 86 trans-1,3-Dichloropropene-d4	79	7.821	7.809	(0.857)	62194	4.93986	4.9
$ 87 2-Hexanone-d5	63	8.262	8.262	(0.906)	77690	49.7438	50
* 42 Chlorobenzene-d5	117	9.122	9.121	(1.000)	189117	5.00000	
43 Chlorobenzene	112	9.156	9.156	(1.004)	171932	4.93036	4.9(Q)
$ 89 1,1,2,2-Tetrachloroethane-d2	84	10.608	10.608	(1.163)	40679	5.47795	5.5

WL
05/17/07
0324 HZA

Data File: \\Avogadro\Organics\organic\voa\V5.i\070515.B\V5H7488.D
Report Date: 17-May-2007 11:20

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	11.862	11.851	(1.000)	88036	5.00000	
$ 90 1,2-Dichlorobenzene-d4	152	12.315	12.303	(1.038)	75423	6.06496	6.1(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

WL 07/11/07

NZA

E: INSTRUMENT INJECTION LOG VOLATILES LABORATORY

METHOD: CAL ID: ANALYST:

INITIAL CAL: IS/SS ID: ARCHIVE:

Mitkem Corporation
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TUOA
ICAL DATE: 05/14/07

ANALYST: WL
EMV:

BATCH: 070514.B

Start: 14-MAY-07 09:15
End: 14-MAY-07 16:12

Comments:

IS-VW070425A
DMCAHB-VW070425B
DMCC-VW070425C
STD-VW070425D
1,4-DIOX-VW070425E

Reviewed By: 5/16/07

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5H7451	09:15	BFB5H	BFB5H		AQ																			1		OK	
V5H7451A	10:51	VSTD0055H	VSTD0055H		AQ		100	100	100															1		OK	
V5H7452	09:47	VSTD0.55H	VSTD0.55H		AQ		104	107	93															1		OK	
V5H7453	10:19	VSTD0015H	VSTD0015H		AQ		106	111	101															1		OK	
V5H7455	11:23	VSTD0105H	VSTD0105H		AQ		99	106	103															1		OK	
V5H7456	11:54	VSTD0205H	VSTD0205H		AQ		99	108	105															1		OK	
V5H7457	12:26	VSTD0.25H	VSTD0.25H		AQ		98	104	100															1		OK	
V5H7458	12:58	MB-29900	VBLK5H	29900	AQ		103	103	100															1		OK	
V5H7459	13:49	MB-29900	VBLK5H	29900	AQ		104	106	96															1		OK	
V5H7460	14:21	MDL-0.04		29900	AQ		99	101	94															1		OK	MDL study
V5H7461	14:53	MDL-0.1		29900	AQ		96	98	88															1		OK	
V5H7462	15:40	MDL-0.2		29900	AQ		100	102	91															1		OK	
V5H7463	16:12	MDL-0.5		29900	AQ		96	100	90		*													1		OK	

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range - (flagged by L5 ICAL area if SOM is part of method name)
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

Logbook ID 90.0199-03/07

Reviewed By:_____

0326

METHOD

Mitkem Corporation
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TO0A
ICAL DATE: 05/14/07

ANALYST: WL
EMV:

BATCH: 070515.B

Start: 15-MAY-07 08:44
End: 15-MAY-07 20:24

Comments:

IS-VW070515A
DMC A+B-VW070515B
DMC C-VW070515C
STD-VW070515D
1,4-DIOX-VW070515E
MS/MSD-VW070424E

Reviewed By: NEA 5/17/07

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5H7470	08:44	BFB5J	BFB5J		AQ																			1		OK	
V5H7471	09:11	VSTD0055J	VSTD0055J		AQ		100	100	100															1		OK	
V5H7472	09:43	MB-29901	VBLK5J	29901	AQ		110	111	102															1	E	not used	
V5H7472A	10:15	MB-29901	VBLK5J	29901	AQ		97	98	95															1		OK	
V5H7473	10:47	F0595-01A	Y3AM1	29901	AQ	1	92	91	84		*													1		OK	2
V5H7474	11:19	F0595-02A	Y3AM2	29901	AQ	1	88	89	79		*													1		OK	2
V5H7475	11:51	F0595-03A	Y3AM3	29901	AQ	1	87	90	84											*				1		OK	2
V5H7476	12:23	F0595-04A	Y3AM4	29901	AQ	1	94	97	89		*													1		OK	2
V5H7477	12:55	F0595-05A	Y3AM5	29901	AQ	1	97	96	94		*													1		OK	2
V5H7478	13:27	F0595-06A	Y3AM6	29901	AQ	1	96	96	92		*													1		OK	2
V5H7479	13:59	F0595-07A	Y3AM7	29901	AQ	1	96	98	92		*													1		OK	2
V5H7480	14:31	F0595-08A	Y3AM8	29901	AQ	1	93	97	91															1		OK	2
V5H7481	15:03	F0595-09A	Y3AM9	29901	AQ	1	93	93	87		*													1		OK	2
V5H7482	15:35	F0595-10A	Y3AN0	29901	AQ	1	93	93	90		*									*				1		OK	2
V5H7483	16:07	F0595-11A	Y3AN1	29901	AQ	1	92	95	89		*									*				1		OK	2
V5H7484	16:38	F0595-12A	Y3AN2	29901	AQ	1	68	71	64															1		OK	2
V5H7485	17:11	F0595-13A	Y3AN3	29901	AQ	1	88	90	84															1		OK	2
V5H7486	17:44	F0595-14A	Y3AN4	29901	AQ	1	88	94	84		*												*	1		OK	2
V5H7487	18:16	F0595-14AMS	Y3AN4MS	29901	AQ	2	89	90	85			*											*	1	R	OK	2
V5H7488	18:48	F0595-14AMSD	Y3AN4MSD	29901	AQ	3	88	93	87			*												1	R	OK	2
V5H7489	19:20	F0595-15A	Y3AN5	29901	AQ	1	90	92	83		*													1		OK	2
V5H7490	19:52	F0595-16A	Y3AN6	29901	AQ	1	95	92	86		*													1		OK	2
V5H7491	20:24	VSTD0055K	VSTD0055K		AQ		100	100	100															1		OK	

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E - One or more target compounds are above the calibration range - (flagged by L5 ICAL area if SOM is part of method name)
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

0327

METHOD: CAL ID: ANALYST:

Mitkem Corporation
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TVOA
ICAL DATE: 05/14/07

ANALYST: WL
EMV:

BATCH: 070515A.B

Start: 15-MAY-07 21:27
End: 16-MAY-07 08:50

Comments:

I5-VW 070515A
DMCA+II-VW 070515B
DMCC-VW 070515C
STD-VW 070515D
1,4-DIOX-VW 070515E
MS/MSD-VW 070424E

Reviewed By: WL 5/16/07

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5H7493	21:27	BFB5L	BFB5L		AQ																			1		OK	
V5H7494	21:59	VSTD0055L	VSTD0055L		AQ		100	100	100															1		OK	
V5H7495	22:31	MB-29931	VBLK5L	29931	AQ		0*	0*	1*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1		not used	
V5H7496	23:03	MB-29931	VBLK5L	29931	AQ		106	98	91															1		OK	
V5H7498	23:35	F0595-17A	Y3AN7	29931	AQ	1	105	98	92		*	*												1	E	TCE=72, RRX8	2
V5H7499	00:07	F0595-18A	Y3AN8	29931	AQ	1	103	99	92			*		*										1	E	TCE=177, RRX20	2
V5H7500	00:39	F0595-19A	Y3AN9	29931	AQ	1	104	103	92															1		OK, TCE=0	2
V5H7501	01:10	F0595-20A	Y3AP0	29931	AQ	1	104	101	88		*												*	1		OK	2
V5H7502	01:42	F0428-05A	A29M6	29931	AQ	1	94	91	81		*													1		OK	2
V5H7503	02:14	F0428-06A	A29M7	29931	AQ	1	94	90	83		*													1		OK	2
V5H7504	02:46	F0428-07A	A29M8	29931	AQ	1	93	88	79															1		OK	2
V5H7505	03:18	F0428-08A	A29N0	29931	AQ	1	93	87	82															1		OK	2
V5H7506	03:50	F0428-09A	A29N1	29931	AQ	1	89	88	82		*													1		OK	2
V5H7507	04:22	F0428-10A	A29N2	29931	AQ	1	93	89	78		*													1	E	CIS-DCE=154, RRX16	2
V5H7508	04:54	F0428-11A	A29N3	29931	AQ	1	91	84	82															1	E	CIS-DCE=151, RRX16	2
V5H7509	05:26	F0428-12A	A29N4	29931	AQ	1	89	85	76															1		RRX1	2
V5H7510	05:57	F0428-12AMS	A29N4MS	29931	AQ	1	82	78	71		*	*												1	R	OK	2
V5H7511	08:50	F0428-12AMSD	A29N4MSD	29931	AQ	1	95	86	76		*	*												1	R	OK	2

* - Internal Standard or Surrogate outside of control limits
E - One or more target compounds are above the calibration range - (flagged by L5 ICAL area if SOM is part of method name)
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

0328

Logbook ID 90.0199-03/07

Reviewed By:_____

METHOD: CAL ID: ANALYST:

Mitkem Corporation
Volatiles Laboratory

Instrument V5 Injection Log

METHOD: TUOA
ICAL DATE: 05/14/07

ANALYST: WL
EMV:

BATCH: 070516.B

Start: 16-MAY-07 09:22
End: 16-MAY-07 21:11

Comments:

I5-VW070515A
DMCA+B-VW070515B
DMCC-VW070515C
STD-VW070515D
1,4-Dlox-VW070515E

Reviewed By: IM 5/17/07

FILE	TIME	LAB ID	CLIENT ID	PREP BATCH	MT	BN	INTERNAL STDS FBZ	CBZ	DCB	SURROGATES OLC-SOM A	B	C	D	E	F	G	H	I	J	K	L	M	N	DILN	FLG	COMMENTS	pH
V5H7512	09:22	VSTD0055M	VSTD0055M		AQ		100	100	100															1		ok	
V5H7514	10:26	MB-29944	VBLK5M	29944	AQ		103	103	90															1		ok	
V5H7515	10:58	F0428-13A	A29N5	29944	AQ	1	96	95	80															1		ok	2
V5H7517	11:30	F0428-14A	A29N6	29944	AQ	1	98	96	83		*													1		ok	2
V5H7518	12:02	F0428-15A	A29P2	29944	AQ	1	87	88	76															1		ok	2
V5H7519	12:34	F0428-17A	A29P6	29944	AQ	1	91	89	76															1		ok	2
V5H7520	13:06	F0428-12A	A29N4	29944	AQ	2	90	91	74															1		ok	2
V5H7521	13:38	F0595-17ADL	Y3AN7DL	29944	AQ	2	91	89	73															8		ok, TCE = 9.9	2
V5H7522	14:10	F0595-18ADL	Y3AN8DL	29944	AQ	2	87	88	72															20		ok. TCE = 10.6	2
V5H7523	14:42	F0428-10ADL	A29N2DL	29944	AQ	2	85	86	70															16		ok, cis-DCE = 10	2
V5H7524	15:14	F0428-11ADL	A29N3DL	29944	AQ	2	85	86	72															16		ok, cis-DCE = 10	2
V5H7526	16:24	F0606-01A	Y3A87	29944	AQ	1	88	87	70															1		ok	2
V5H7527	16:56	F0428-16A	A29P4	29944	AQ	1	90	91	82		*			*										1		ok	2
V5H7528	17:28	VHBLK5M	VHBLK5M	29944	AQ		89	90	75															1		ok (F0595)	
V5H7529	18:00	F0598-09A	C0BZ0	29944	AQ	1	84	87	73															1		ok	2
V5H7530	18:32	F0598-11A	C0BZ2	29944	AQ	1	82	82	67			*												1		ok	2
V5H7531	19:04	F0598-12A	C0BZ3	29944	AQ	1	81	82	71															1		ok	2
V5H7532	19:35	F0598-13A	C0BZ4	29944	AQ	1	83	83	70					*										1		ok	2
V5H7533	20:07	F0598-14A	C0BZ6	29944	AQ	1	85	86	66		*												*	1		ok	2
V5H7534	20:39	VHBLK5M	VHBLK5M	29944	AQ		84	80	63															1		ok (F0428)	
V5H7535	21:11	VSTD0055N	VSTD0055N		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 - (flagged by L5 ICAL area if SOM is part of method name)
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

0329

MITKEM CORPORATION: VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R#	Returned to R1
5-11-07	F0592	EPA	01A-20A	CW	IM	T	R4	
	F0593	EPA	01A-20A			T	R4	
	F0594	EPA	01A-20A			T	R4	
	F0573	Mitkem	07A			M	R9	
	F0516	LaBella	01B-07B			US	R10	
	F0551	RIRRC	17A-20A			H	R10	
	F0605	RIRRC	01A			H	R10	
	F0595	EPA	01A-10A			T	R4	
	F0602	CA Rich	01B-07B, 09B-14B			US	R10	1 Jar of 01 moved to H2 → H2
	F0602	CA Rich	08A, 15A			H	R10	
	F0576	Chem	24A, 25A			H	R9	
	F0428	EPA	05A-21A			T	R4	
	~~F0604~~	~~EPA~~	~~01A-03A~~			T	R4	
5-11-07	F0603 ~~F0604~~	EPA	01A-15A	CW	IM	T	R4	

Reviewed By: IZA 5/14/07

Logbook ID 90.0191-04/07

"Preservative Used" Key

UA = Unpreserved Aqu. H = HCL A = Air M= MeOH E = Encore
US = Unpreserved Soil N = $NaHSO_4$ F = Freeze T= Trace, HCL

MITKEM CORPORATION: VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R#	Returned to R1
5·11·07	F0597	RIRRC	01A-02A 01D-02D	CW	NZA	UA	R10	
	F0597	RIRRC	03A			H	R10	
	F0580	EPA	10A-20A			T	R13	
	F0598	EPA	01A-04A			T	R4	
	F0599	Equitech	01A-03A			H	~~R4~~ R10 CW	
	F0590	EPA	04A-13A			T	~~R4~~ R4	5-11-07
5·11·07	F0601	Sterling	01A-05A, 01B-05B	CW	NZA	H	R10	
5·14·07	F0597	RIRRC	04A, 04D		NZA	UA	R10	
	F0597	RIRRC	05A			H	R10	
	F0595	EPA	17-20A			T	R4	
	F0590	EPA	14-20A			T	R4	
	F0600	EPA	01A			T	R4	
	F0607	DEB	01A, 04A, 05A			UA	R10	
5·14·07	F0598	EPA	05A-08A	CW	NZA	T	R4	

Reviewed By: NZA 5/16/07

Logbook ID 90.0191-04/07

"Preservative Used" Key

UA = Unpreserved Aqu.	**H** = HCL	**A** = Air	**M**= MeOH	**E** = Encore
US = Unpreserved Soil		**N** = $NaHSO_4$	**F** = Freeze	**T**= Trace, HCL

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
4/9/07	GRO STD	VP060125B	1000 ppm	40 ul	4 ml	064748	10 ppm	VW070409A	5/9/07	SB
4/9/07	GRO SS (BFB)	VP030117F	5000 ppm	16 ul	4 ml	064748	20 ppm	VW070409B	5/9/07	SB
4/11/07	SOM - IS	VP061011A	2500 ppm	160 ml	4 ml	064748	100 PPM	VW070411A	05/11/07	WL
	SOM-DMCA+B GAS	VP060914A	2000 ppm	200 ul	4 ml	064748	100 PPM	VW070411B	05/11/07	WL
	SOM-DMCA+B Non-GAS	VP060914B	2000 ppm	200 ul						
	SOM-DMCA+B Vertane	VW070109G	5000 ppm	160 ul						
	SOM - DMCC	VW070122A	2000 ppm	400 ul	4 ml	064748	2000 ppm	VW070411C	05/11/07	WL
	SOM - STD GAS	VP061211C	2000 ppm	200 ul	4 ml	064748	100 PPM	VW070411D	05/11/07	WL
	SOM - STD STD	VP060818B	2000 ppm	200 ul						
	SOM - STD Vertane	VP060104A	5000 ppm	160 ul						
4/11/07	SOM - 1,4-DIOX	VW070405JJ (VW060414B)	20,000 ppm	400 ul	4 ml	064748	2000 PPM	VW070411E	05/11/07	WL
4/12/07	OLM - LCS	VP061228C	2500 ppm	40 ul	1 ml	064748	100 PPM	VW070412A	04/19/07	WL
04/16/07	OLC - IS	VP061011A	2500 ppm	8 ul	1 ml	064748	20 PPM	VW070416A	04/23/07	WL
	OLC-DMCA GAS	VP060914A	2000 ppm	10 ul	1 ml	064748	20 PPM	VW070416B		
	OLC-DMCA Non-GAS	VP060914B	2000 PPM	10 ul						
	OLC-DMCA BFM	VW060921D	2000 PPM	10 ul						
	OLC-STD STD	VP060926A	2000 PPM	10 ul	1 ml	064748	20 PPM	VW070416D		
	OLC-STD GAS	VP060406A	2000 PPM	10 ul					4/23/07	WL
04/10/07	Custom	VP070125A	400 PPM	50 ul						

Lot # 4/19/07

Reviewed by : WA 4/17/07

Logbook ID 90.0152-12/06

0332

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
04/16/07	OLC-DMCB	VP VW070109G	5000ppm	10ml	1ml	064748	50 ppm	VW070416C	04/23/07	WL
04/16/07	OLC-Ketone	VP060104A	5000ppm	20ml	1ml	064748	100ppm	VW070416E	04/23/07	WL
04/17/07	OLM-IS	VP060406B	2500ppm	40ml	1ml	064748	100ppm	VW070417A	04/24/07	WL
	OLM-SS	VP060427A	2500ppm	40ml	1ml	064748	100ppm	VW070417A	04/24/07	WL
	Ketone	VP060223A	5000ppm	20ml	1ml	064748	100ppm	VW070417C	04/24/07	WL
4/17/07	OLM-STD CAI2000	VP051014E	2000ppm	50ml						
	GAS	VP060406A	2000ppm	50ml						
04/18/07	SOM-SIM IS	VW070411A	100ppm	80ml	4ml	064748	2ppm	VW070418A	05/18/07	WL
	SOM-SIM DMCA+B	VW070411B	100ppm	80ml	4ml	064748	2ppm	VW070418B		
	SOM-SIM DMCC	VW070411C	2000ppm	160ml	4ml		80ppm	VW070418C		
	SOM-SIM STD	VW070411D	100ppm	80ml	4ml		2ppm	VW070418D		
04/18/07	SOM-1,4-DIOXANE SIM	VW070411E	2000ppm	100ml	4ml	064748	80ppm	VW070418E	05/18/07	WL
4/18/07	8260-25ISS	VP061228A	2500ppm	400µl	4ml	064748	250ppm	VP070418A	5/18/07	JP
4/18/07		VP061228B	2500ppm	400µl					5/18/07	JP
4/19/07	8260 502A-A	VP051116D/R	2000ppm	200µl	4ml	064748	100ppm	VW070419B	5/19/07	NZA
	2.5V 502A-B	VP051116D/B	2000ppm	200µl						
	STD ADD	VP070213A	400-200	1ml						
	ADD	VP070213B	400-200	1ml						
4/19/07	2-CVE	VP051110A	5000ppm	80µl	4ml	064748	100ppm	VW070419C	5/19/07	NZA

Reviewed by : NZA 4/24/07

Logbook ID 90.0152-12/06

0333

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
4/20/07	82/8 STD MA 4/23/07									
4/23/07	GRO LCS/MS	VP640407D	2500ppm	40 ul	1ml	064748	100ppm	VW070423A	5/23/07	SB
4/24/07	OLM IS	VP060406B	2500ppm	40 ul	1ml	064748	100ppm	VW070424A	5/1/07	MA
	SS	VP060427A	2500ppm	40 ul	1ml	064748	100ppm	VW070424B	5/1/07	MA
	OLM STD GAS	VP060406A	2000ppm	40 ul	1ml	064748	100ppm	VW070424C	5/1/07	MA
	Calzoid	VP057014E	2000ppm	40 ul			MA 4/24/07			
	Halomes	VP060104A	5000ppm	20 ul			1000 500ppm	VW070424D	5/1/07	MA
4/24/07	THF	VP021202A	NaOA	4mg	4ml	064748	20ppm	VW070425A	05/25/07	WL
04/25/07	TVOA - IS	VP061011A	2500ppm	32 ul	4ml	064748				
	TVOA-DMCAB GAS	VP060914A	2000ppm	4 ul	4ml	064748	20ppm	VW070425B		
	TVOA-DMCAB Non-GAS	VP060914B	2000ppm	4 ul						
	TVOA-DMCAB DMCB	VW070109G	5000ppm	160 ul	4ml	064748	800ppm	VW070425C		
	TVOA - DMCC	VW070127A	20,000ppm	160 ul						
	TVOA - STD GAS	VP061011C	2000ppm	4 ul	4ml	064748	20ppm	VW070425D		
	TVOA - STD STD	VP060813B	2000ppm	4 ul						
	TVOA - STD Kerlam	VP060104A	5000ppm	160 ul						
04/25/07	TVOA - 1,4-DIOXANE	VW070405F	20,000ppm	160 ul	4ml	064748	800ppm	VW070425E	05/25/07	WL
				MA	4/26/07					

Reviewed by : SB 5/10/07

Logbook ID 90.0152-12/06

0334

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION		STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT # MeOH	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
4/26/07	30M-STD	STD	VP060818B	2000 ppm	100 µl	2 ml	064748	100 ppm	VWC704261A	5/26/07	HZA
		GAS	VP061011C	2000 ppm	100 µl						
		Ketones	VP060104A	5000 ppm	80 µl						J.P
4/26/07	SC60-STD	STD	VP060526A	3000 ppm	300 µl	4 ml	064748	100 ppm	VP070426B	5/28/07	
		custom	VP070307A	400-3000 ppm	1 ml						
		GAS	VP060406A	3000 ppm	300 µl						J.P
4/26/07		Ketone	VP060104A	5000 ppm	80 µl						
04/24/07	OLM-LCS		VP061229C	2500 ppm	40 ul	1 ml	064748	100 ppm	VW070424E	04/31/07	WL
05/01/07	OLC-ZS		VP061011A	2500 ppm	8 ml	1 ml	064748	2 ppm	VW070501A	05/01/07	WL
	OLC-PMCA	GAS	VP060914A	2000 ppm	10 ml	1 ml	064748	20 ppm	VW070501B	05/01/07	WL
		Non-GAS	VP060919B	2000 ppm							
		BFM	VW060921D	2000 ppm							
	OLC-PMCB		VW070109G	5000 ppm	10 ml	1 ml	064748	50 ppm	VW070501C	05/05/07	WL
	OLC-STD	STD	VP060926A	2000 ppm	10 ml	1 ml	064748	20 ppm	VW070501D	05/01/07	WL
		GAS	VP060906A	2000 ppm	10 ml						
		Custom	VP070127A	400 ppm	~~10 ml~~ 50 ml WL 05/01/07						
05/01/07	Ketone		VP060104A	5000 ppm	200 ul	1 ml	064748	100 ppm	VW070501E	05/01/07	WL
5/3/07	8260-ZS/SS		VP070419A	2500 ppm	400 µl	4 ml	064748	250 ppm	VW070503A	6/3/07	HZA
			VP070419B	2500 ppm	400 µl						

Reviewed by: 5/10/07

Logbook ID 90.0152-12/06

0335

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
3/29/07	Isopropanol	VP060913B	Neat	5mg	1mL	064748	500ppm	VW070329H	9/29/07	WA
3/29/07	Hexane	VW070329G	5000ppm	8mL	4mL	064748	10ppm	VW070329I	9/29/07	WA
	Isopropanol	VW070329H	5000ppm	400µL			500ppm			
3/30/07	CZ BOT 2 CYL	VP051110A	5000ppm	80µL	4mL	064748	100ppm	VP070330A	4/30/07	JP
4/5/07	TVOA - ZS	VP061011A	2500ppm	32mL	4mL	064748	20ppm	VW070405A	5/5/07	WA
	TVOA - DMCA GAS	VP060914A	2000ppm	40mL	4mL	064748	20ppm	VW070405B		
	4B DM-GAS	VP060914B	2000ppm	40mL			20ppm			
	DMCB	VW070109G	5000ppm	160µL			200ppm			
	TVOA - DMCC	VW070112A	20,000ppm	160µL	4mL	064748	800ppm	VW070405C		
	TVOA - STD GAS	VP061011C	2000ppm	40mL				VW070405D		
	STD	VP060818B	2000ppm	40mL	4mL	064748	20ppm			
	Ketone	VP060104A	5000ppm	160µL						
4/5/07	TVOA - 14D.OX	VW070405F	20,000ppm	160mL	4mL	064748	800ppm	VW070405E		WA
4/5/07	14D.OX (stock)	VP060608B	Neat	40mg	2mL	064748	20,000ppm	VW070405F	5/5/07	WA
4/5/07	OXY - 25	VP060406B	2500ppm	40µL	1mL		100ppm	VP070406A	4/13/07	JP
	OXY - 50	VP060427A	2500ppm	40µL	1mL		100ppm	VP070406B		
4/6/07	OXY - STD KETONE	VP060223A	5000ppm	40µL	1mL	064748	100ppm	VP070406C		
	CA2000	VP051014E	2000ppm	40µL					4/13/07	JP
	GAS	VP060406A	2000ppm	40µL						

Reviewed by : WA 4/9/07

Logbook ID 90.0152-12/06

0336

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION		STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
3/19/07	8260-STD	STD	VP 060906A	2000ppm	200 µl	4ml	064748	100ppm	VP 070319B	4/19/07	JP
		CUSTOM	VP 070185A	400-2000ppm	1ml						
		GAS	VP 060881A	2000ppm	100 µl					4/19/07	JP
3/19/07		KETONE	VP 060104A	5000ppm	80 µl						
03/21/07	SOM - IS		VP061011A	2500ppm	80 µl	2ml	064748	100ppm	VW070321A	04/21/07	WL
	SOM-DMCA+B	GAS	VP060914A	2000ppm	100 µl	2ml	064748	100ppm	VW070321B		
		Mix-GAS	VP060914B	2000ppm	100 µl	2ml					
		Ketone	VW070109G	5000ppm	80 µl	2ml					
	SOM-DMCC		VW070122A	20,000ppm	400 µl	4ml	064748	2000ppm	VW070321C		
	SOM-STD	GAS	VP061011C	2000ppm	100 µl	2ml	064748	100ppm	VW070321D		
		STD	VP060818B	2000ppm	100 µl						
		Ketone	VP060104A	5000ppm	80 µl						
03/21/07	SOM-14D10XCAIVE		VW060914B	20,000ppm	400 µl	4ml	064748	2000ppm	VW070321E	04/21/07	WL
3/21/07	GRO (LCS/MS)		VP040407D	2500ppm	40 µl	1ml	064748	100ppm	VW070321F	4/21/07	SB
3/22/07	OZM - IS/SS		VP 060406B	2500 ppm	240 µl	~~1ml~~ 4ml 3/22/07	064748	~~100~~ 125 ppm	VN 070322A	3/29/07	JP
	OZM - ~~SS~~ 3/22/07		VP 060422A	2500ppm	240 µl	~~1ml~~	064748	~~100 ppm~~ 3/22/07	~~VP 070322B~~ 3/22/07		
	OZM - STD	KETONE	VP 060106A	5000 ppm	80 µl	1ml	064748	100ppm	VP 070322C		
		CAL 2000	VP 051019E	2000 ppm	50 µl					3/19/07	JP
3/22/07		GAS	VP 060906A	2000 ppm	40 µl						

Reviewed by : NZA 3/24/07

Logbook ID 90.0152-12/06

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
3/13/07	VPH STD/SS	VP060711C	10,000 ppm	4 µl	4 ml	064748	10 ppm	VW070313A	4/13/07	SB
3/13/07	VPH SS	VP060711D-1	1000 ppm	400 µl	4 ml	064748	100 ppm	VW070313B	4/13/07	SB
3/13/07	R260-26V / 502A-R	VP060711E/K 2000 ppm →		50 µl						
	502A-B	VP060711E/B 2000 ppm →		50 µl	1 ml	064748	100 ppm	VW070313C	4/13/07	NZA
	ADD	VP070213A	400→2000 ppm	250 µl						
3/13/07	ADD	VP070213B	400→5000 ppm	250 µl						
3/14/07	R260-25HL 15/SS	VP 060718B 060711E/B 3/14/07	1500 ppm	100 µl	4 ml	064748	125 ppm	VN 070314A	4/14/07	DP
		VP 060711E/B 3/14/07	1500 ppm	100 µl						
	R260-25HL STD	VN070303B	100 ppm	800 µl	4 ml	064748	20 ppm	VN 070314B	4/14/07	DP
3/14/07	KETONE	VP060104A	5000 ppm	144 µl						
03/14/07	TUGA-I5	VP061011A	2500 ppm	32 ml	4 ml	064748	20 ppm	VW070314C	4/14/07	WL
	TUGA-DMCAHB GAS	VP060916A	2000 ppm	40 ml	4 ml	064748	20 ppm	VW070314D	04/14/07	
	Non-GAS	VP060916B	2000 ppm	40 ml			200 ppm			
	DMCB	VP070109G	5000 PPM	160 ml						
3/14/07	TUGA-DMCC	VW070122A	20,000 ppm	160 ml	4 ml	064748	800 ppm	VW070314E	4/14/07	WL
		VP030117E	5000 PPM	40 ml	8 ml	064748	25 ppm	VW070319A	04/19/07	WL
03/29/07	Tune									DP
3/14/07	R260 25/SS	VP 061208A	2500 ppm	400 µl	4 ml	125647 & 8	250 ppm	VP070319A1	4/19/07	DP
3/14/07		VP 061208B	2500 ppm	400 µl						
3/14/07					NZA	3/29/07				

Reviewed by: NZA 3/29/07

Logbook ID 90.0152-12/06

0238

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
9/12/06	8260 - 25mL SS	VW060824B	100ppm	200uL	1mL	056594	20ppm	VW060912D	10/12/06	HZA
	8260-25mL STD	VW060831A	100ppm	200uL	1mL	056594	20ppm	VW060912E	10/12/06	HZA
	STD Ketone	VP060104A	5000ppm	36uL						
	2CVE	VW060912F	100ppm	200uL						
9/12/06	8260 - 2CVE	VP051014C	2000ppm	200uL	4mL	056594	100ppm	VW060912F	10/12/06	HZA
9/13/06	OLM - IS	VP060330A	2500ppm	40uL	1mL	056594	100ppm	VW060913A	9/20/06	HZA
9/13/06	OLM - SS	VP060427A	2500ppm	40uL	1mL	056594	100ppm	VW060913B	9/20/06	HZA HZA 9/3/06
9/13/06	Hexane (stock)	VP060913A	Neat	20mg	4mL	056594	5000ppm	VW060913C	3/13/07	HZA
9/13/06	Hexane-SOM-T	VW060913C	5000ppm	16uL	4mL	056594	20ppm	VW060913D	10/13/06	HZA
9/13/06	Isopropanol	VP060913B	Neat	20mg	4mL	056594	5000ppm	VW060913E	10/13/06	HZA
9/13/06	Isopropanol - TVOA	VW060913E	5000ppm	800uL	4mL	056594	1000ppm	VW060913F	10/13/06	HZA
9/13/06	Hexane-SOM-L	VW060913C	5000ppm	80uL	4mL	056594	100ppm	VW060913G	10/13/06	HZA
9/14/06	25+DMC for TVOA IS	VP060614C	2500ppm	32uL	4mL	056594	20ppm	VW060914A	9/14/06 HZA	
	DMCA	VP060823A VP060525B	2000ppm	40uL 40uL			20ppm		10/14/06	HZA
	DMCB	VW060714G	5000ppm	160uL			200ppm			
	DMCC	VW060912A	20,000ppm	160uL 200uL		HZA 9/14/06	1000ppm 800ppm			
9/14/06	SOM-DMCC (14Diox) Stock	VP060608B ~~VP060310E~~	Neat	80mg	4mL	056594	20,000ppm	VW060914B	3/14/06	HZA
9/14/06	SOM-14Diox Stock	VP060608B ~~VP060310E~~	Neat	80mg	4mL	056594	20,000ppm	VW060914C	3/14/06	HZA
9/15/06	OLM IS/SS	VP060330A VP060427A	2500ppm	800uL 200uL	2mL	056594	250ppm	VW060915A	9/22/06	HZA

HZA 9/20/06

Reviewed by: [signature] 9/19/06

Logbook ID 90.0152-09/05

0339

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
	OLC - STD STD	VP051110D	2000 ppm	10 µl						
	GAS	VP060221A	2000ppm	10 µl	1 ml	064748	20 ppm	VW070109E	1/16/07	HZA
		VP060128A	400 ppm	50 µl						
	OLYTOM	VP0[illegible]2202A	Neat	0.4 mg						
	THF	VP060104A	5000 ppm	20 µl	1 ml	064748	100 ppm	VW070109F	1/16/07	HZA
	OLC - Ketones	VP060310B	Neat	20 mg	4 ml	064748	5,000 ppm	VW070109G	7/9/07	HZA
1/9/07	DMCB (Stock)	VP060310D	Neat	20 mg						
1/9/07	LLS	VP060818A	2500 ppm	40 µl	1 ml	064748	100 ppm	VW070109I	1/16/07	HZA
1/9/07		VP040407C-1	2500 ppm	40 µl	1 ml	064748	100 ppm	VW070115A	2/15/07	SB
1/15/07	GRO ICV (Gas Std)	VP061011A	2500 ppm	32 µl	4 ml	064748	20 ppm	VW070115B		HZA
1/15/07	TVOA - 15	VP060914A	2000 ppm	40 µl			20 ppm			
	TVOA - PMCA + B	VP060914B	2000 ppm	40 µl	4 ml	064748	20 ppm	VW070115C		
		VW070109G	5000 ppm	160 µl			200 ppm			
		VW060912A	20,000 ppm	160 µl	4 ml	064748	800 ppm	VW070115D		
	TVOA - PMCC	VP061011C	2000 ppm	40 µl			20 ppm			
	TVOA STD GAS	VP060818B	2000 ppm	40 µl	4 ml	064748	20 ppm	VW070115E		
	STD	VP060104A	5000 ppm	160 µl			200 ppm			
	Ketone	VW060914B	20,000 ppm	160 µl	4 ml	064748	800 ppm	VW070115F	2/15/07	HZA
1/15/07	TVOA - 14 Diox	VP060818A	2500 ppm	40 µl	1 ml	064748	100 ppm	VW070115G	2/15/07	HZA
1/15/07	SOM - LLS									

Reviewed by : HZA 1/18/07

Logbook ID 90.0152-09/05

0340

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLVI LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
1/18/07	8260-25mL	VP 051110A	5000 ppm	80 µL	4 mL	064748	100 ppm	VW070118D	2/18/07	JP
	8260-25mL	VP060918C	2500 ppm	200 mL	4 mL	064748	125 PPM	VW070117E	2/17/07	WL
	IS/SS	VP060918D	2500 ppm	200 mL						
	8260-25mL STD	SIW070104A	100 PPM	80 mL	4 mL	064748	20 PPM	VW070117F	2/17/07	
	STD Kerkone	VP060401A	5000 ppm	14 mL						
	02M-26	VV060390A	2500 ppm	160 µL	4 mL	064748	100 ppm	VW070118A	11/25/07	JP
	02M-SS	VV060927A	2500 ppm	160 µL	4 mL	064748	100 ppm	VW070110B	11/25/07	
	02M STD CAL 2000	VV051014E	2000 ppm	200 µL	4 mL	064748	100 ppm	VW070118C	11/25/07	JP
	KETONE	VV060406A	5000 ppm	80 µL						
	GAS	VV060406A	2000 ppm	200 µL						
1/16/07		VP060710E WL	pure	Zafmetal	4 mL	064748	20,000 PPM	VW070122A	07/22/07	WL
1/22/07	SOM-1,4-DIOXANE (Stock)				2 mL	064748	100 PPM	VW070122B	02/21/07	
	SOM - IS	VP061011A	2500 PPM	80 mL						
	DMCAB.	VP060914A	2000 PPM	100 mL	2 mL	064748	100 PPM	VW070122C	02/21/07	
		VP060914B	2000 PPM	100 mL			200 PPM			
		VW060714G	5000 PPM	80 mL						
	HFA	VW070122A	20,000 PPM	400 mL	4 mL	064748	2000 PPM	VW070122D	02/21/07	
	SOM - DMCC	VP061011C	2000 PPM	100 mL						
	SOM - STD GAS	VP060818B	2000 PPM	100 mL	2 mL	064748	200 PPM	VW070122E	02/21/07	WL
	STD	VP060104A	5000 PPM	80 mL						
	Kerkone	VW060914B	2000 PPM	200 mL	2 mL	064748	2000 PPM	VW070122F	02/21/07	
01/22/07	SOM - 1,4-MeX									

Reviewed by: NG 1/25/07

Logbook ID 90.0152-12/06

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
02/27/07	IS- TVOA	VP061011A	2500ppm	32ml	4ml		20ppm	VW070227A	03/11/07	WL
	DMCA+B GAS	VP060914A	2000ppm	40ml	4ml	064749	20ppm	VW070227B	03/27/07	
	-TVOA Non-GAS	VP060914B	2000ppm	40ml						
	DMCB	VW070109G	5000ppm	160ml						
	DMCC-TVOA	VW070112A	24,000ppm	160ml	4ml		80ppm	VW070227C	03/27/07	
	GAS	VP061011C	2000ppm	40ml	4ml	064749	20ppm	VW070227D		
	STD-TVOA STD	VP060818B	2000ppm	40ml						
	Karbone	VP060109A	5000ppm	160ml						
02/27/07	1,4-DIOXANE	VW060914B	20,000ppm	160ml	4ml		80ppm	VW070227E		
02/27/07	8260-2CVE	VP051110A	5000ppm	80ml	4ml	064749	100ppm	VW070227A	LWL	WL
02/27/07	OLM-IS	VP060609B	2500ppm	40ml	1ml	064749	100ppm	VW070228B		
	OLM-SS	VP060427A	2500ppm	40ml	1ml		100ppm	VW070228C		
	Karbone	VP060104A	5000ppm	2ml	1ml		100ppm	VW070228D		
	OLM-STD CA12000	VP051014E	2000ppm	50ml						
	GAS	VP060406A	2000ppm	50ml						
2/25/07	OLM-LCS	VP060818A	2500ppm	40ml	1ml		100ppm	VW070228E	WL	WL

☆ the original is not finished as of 3/1/07

Reviewed by : _____

Logbook ID 90.0152-12/06

0342

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
03/02/07	SOM - IS	VP061011A	2500 ppm	80 ml	2 ml	064748	100 ppm	VW070302A	04/02/07	WL
	SOM - DMCC	VW070122A	20,000 ppm	400 ml	4 ml	064748	2000 ppm	VW070302C	04/02/07	
	SOM-STD GAS	VP061011C	2000 ppm	100 ml	2 ml	064748	100 ppm	VW070302D	04/02/07	
	SOM-STD STD	VP060818B	2000 ppm	100 ml						
	SOM-STD Ketone	VP060104A	5000 ppm	80 ml						
	1,4-DIOXANE	VW060914B	20,000 ppm	400 ml	4 ml	064748	2000 ppm	VW070302E	04/02/07	
3/3/07	0260 25/25	VP061208A	1500 ppm	400 µL	4 mL	064748	250 ppm	VP070303A	7/4/07	DP
		VP061208B	1500 ppm	400 µL						
	0260-STD STD	VP	1000 ppm	100 µL	4 mL	064748	100 ppm	VN070303B		
	0260-STD CUCFOH	VP	100-1000 ppm	1 mL						
	0260-STD GAS	VP	1000 ppm	200 µL						DP
3/3/07	KETONE	VP	5000 ppm	80 µL						
3/6/07	GRO STD	VP060125B	1000 ppm	40 ml	4 ml	064748	10 ppm	VW070306A	4/6/07	SB
	GRO SS (BFB)	VP030117F	5000 ppm	16 ml	4 ml	064748	20 ppm	VW070306B	4/6/07	SB
3/6/07	GRO LCS/MS	VP040407C	2500 ppm	40 ml	1 ml	064748	100 ppm	VW070306C	4/6/07	SB
3/7/07	OLC - IS	VP061011A	2500 ppm	8 µL	1 mL	064748	20 ppm	VW070307A	3/14/07	HZA
3/7/07	OLC - DMCA	VP060916A HZA 3/7/07	2000 ppm	10 µL	1 mL	064748	20 ppm	VW070302B	3/14/07	HZA
		VP060914B	2000 ppm	10 µL						
		VW060921D	2000 ppm	10 µL						

Reviewed by : HZA 3/8/07

Logbook ID 90.0152-12/06

0343

Mitlcem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
3/7/07	OLC- DMCB	VW0701096	5000ppm	10ml	1ml	064749	20ppm	VW070307C	3/14/07	WZA
	OLC STD	VP060926A	2000ppm	10ml						
	STD GAS	VP060406A	2000ppm	10ml	1ml	064749	20ppm	VW070307D	3/14/07	WZA
	CHBrCl3M	VP070125A	400ppm	10ml						
3/7/07	OLC- KetoMB	VP060104A	5000ppm	20ml	1ml	064749	100ppm	VW070307E	3/14/07	WZA
								VW070307F		
3/7/07	OLM-LCS		not used	WZA	3/13/07			VW070309A	04/09/07	WL
03/09/07	SOM-SIM IS	VW070227A	2ppm	400ml	4ml	064748	2ppm	VW070309B		
	DMCHB	VW070227B	20ppm	400ml	4ml	064748	2ppm	VW070309C		
	DMCC	VW070227C	800ppm	400ml	4ml	064748	80ppm	VW070309D		
	STD	VW070227D	20ppm	400ml	4ml	064748	2ppm	VW070309E		
	1,4-DIOX	VW070227E	800ppm	400ml	4ml	064749	80ppm	VW070312A	03/19/07	WL
03/12/07	OLM- IS	VP060406B	2500ppm	40ml	1ml	064748	100ppm	VW070312B		
	OLM-SS	VP060927A	2500ppm	40ml	1ml					
	Ketone	VP060104A	5000ppm	20ml				VW070312C		
	OLM-STD CAT 2000	VP051014E	2000ppm	50ml	1ml					
	GAS	VP060406A	2000ppm	40ml	WL 03/14/07			VW070312D		
3/12/07	OLM-LCS	VP060818A	2500ppm	40ml	1ml					
03/14/07	TVOA - IS	VP061011A	2500ppm	40ml	1ml	064749	20ppm	VW070314A	03/19/07	WL
	TVOA - DMCC	VP070122A	20ppm	160ml	4ml	064749	800ppm	VW070314C	03/19/07	WL

VW WL 03/14/07

WL 03/14/07

Reviewed by : _____

Logbook ID 90.0152-12/06

Mitkem Corporation

VOA Working Standard Logbook

DATE	DESCRIPTION	STOCK ID	STOCK CONC	INIT VOL	FINAL VOL	SOLV/ LOT #	FINAL CONC	WORKING STD ID	EXP DATE	Analyst
3/13/07	VPH STD/SS	VP060711C	10,000 ppm	4 ul	4 ml	064748	10 ppm	VW070313A	4/13/07	SB
3/13/07	VPH SS	VP060711D-1	1000 ppm	400 ul	4 ml	064748	100 ppm	VW070313B	4/13/07	SB
3/13/07	8260-ZCV 502A-R	VP0511160/R 2000 ppm →		50 ul						
	502A-B	VP0511160/B 2000 ppm →		50 ul	1 ml	064748	100 ppm	VW070313C	4/13/07	NBA
	ADD	VP070213A	400-2000 ppm	250 ul						
3/13/07	ADD	VP070213B	400-5000 ppm	250 ul						
3/14/07	8260-25HL IS/SS	VP 060810D 3/14/07	1500 ppm	100 µl	4 ml	064748	125 ppm	VN 070314A	4/14/07	J.P
		VP 060711A(3) 3/14/07	1500 ppm	100 µl						
	8260-25HL STD	VN070303B	100 ppm	800 µl	4 ml	064748	20 ppm	VN 070314B	4/14/07	J.P
3/14/07	KETONE	VP060104A	5000 ppm	144 µl						
03/14/07	TVOA-IS	VP061011A	2500 ppm	32 ul	4 ml	064748	20 ppm	VW070314C	4/14/07	WL
	TVOA-DMCAHB GAS	VP060914A	2000 ppm	40 ul	4 ml	064748	20 ppm	VW070314D	04/14/07	
	TVOA-DMCAHB Non-GAS	VP060914B	2000 ppm	40 ul			200 ppm			
	TVOA-DMCAHB DMCB	VP70109G	5000 ppm	160 ul						
3/14/07	TVOA-DMCC	VW070122A	20,000 ppm	160 ul	4 ml	064748	800 ppm	VW070314E	4/14/07	WL

Reviewed by : _____

Logbook ID 90.0152-12/06

0345

em Corporation

Primary Standard Receipt Logbook

te	Description	Vendor Lot #	Concentration	Mitkem ID	*Exp. Date	**Status	Analyst
/05	8260 Custom Std	Ultra: CUS-6268 Lot # CB-2085	Various	VP051122A	1/31/06	I	SB
/05	SOM DMCVA	USEPA QATS PE3421000J	1000 ug/mL	VP051130A	06/06		[illegible]
/05	SOM DMCVB	USEPA QATS PE3429103	2000 ug/mL	VP051130B	06/06		[illegible]
/05	SOM DMCVC	USEPA QATS PE3427003	5000 ug/mL	VP051130C	06/06		[illegible]
9/05	Custom Freon Std Freon 123a	Restek: 559601 Lot # A042125	200 ug/ml	VP051229A	12/10		HZ
/06	VOA CAL MIX #1 (Ketones)	Restek: 30006 Lot # A038595	5000 ug/ml	VP060104A	11/08	I	SB
5/06	GRO/STD (WISC)	ULTRA: UST-100 Lot # U-13335	1000 ug/ml	VP060125A-D	9/07	I	SB
/06	8260 Custom Std	Ultra: CUS-6268 Lot # CC-0312	Various	VP060201A	05/06	I	SB
21/06	VOC Gas Mixture	Ultra: DWM-544 Lot CB-2770	2000 ug/ml	VP060221A	12/31/08	I	SB
↓	8260 IS	Ultra: STM-520 Lot: CB-2663	2500 ug/ml	VP060221B	12/31/08	I	SB
21/06	8260 SS	Ultra: STM-530 Lot CB-1899	2500 ug/ml	VP060221C	9/30/08	I	SB
23/06	OLM (Ketones)	Restek: 30006 Lot # A038595	5000 ug/ml	VP060223A	11/08	I	SB
23/06	OLM/OLC (GAS)	Restek: 30042 Lot # A041205	2000 ug/ml	VP060223B	7/12	I	SB

* Expiration dates are 1 year for stock solutions and 5 years for neat materials unless noted otherwise.

** Status: I => In use; D => expired and disposed of.

0346

Page #: 12

Reviewed by: SB 2/23/06

gbook ID 90.0151-05/04

em Corporation

Primary Standard Receipt Logbook

te	Description	Vendor Lot #	Concentration	Mitkem ID	*Exp. Date	**Status	Analyst
/06	VOA MS Spike Mix (OLM LCS)	Restek 30005 Lot # A034827	2500 ug/ml	VP060223C	9/08	I	SB
/06	CLP SOM VOA Non-Ketone DMC (A)	CAMBRIDGE: ES-5286 Lot # PR-16604	100 ug/ml	VP060310A	5/13/15	I	SB
	2-Butanone (D5)	CAMB: DLM-663-0 LOT P-6257	1 gram (neat)	VP060310B	n/a	I	SB
	Bromoform-D	CAMB: DLM-400-0 LOT: PR-12660/04261BF	10g (neat)	VP060310C	n/a	I	SB
	2-Hexanone (D5)	CAMB: DLM-2909-0 LOT: K-460	1 gram (neat)	VP060310D	n/a	I	SB
/	1,4-Dioxane (D8)	CAMB: DLM-25-5 LOT: 5G-772	5 grams (neat)	VP060310E	n/a	I	SB
0/06	Methanol-D	CAMB: DLM-15-50 LOT: 5C-521	50 grams	VP060310F	n/a	I	SB
0/06	~~8260~~ IS (OLM)	Ultra: STM-272 LOT CB-1836	2500 ug/ml	VP060330A	09/08	I	SB
0/06	~~8260~~ GAS (OLM)	ULTRA: DWM-544 LOT CC-0211	2000 ug/ml	VP060406A	2/28/09	I	SB
6/06	~~8260~~ IS (OLM)	ULTRA: STM-272 LOT: CB-1836	2500 ug/ml	VP060406B	9/30/08	I	SB
	SB 4/6/06						
/06	8260 Custom Std	Ultra: CUS-6268 LOT CC-1028	Various	VP060406C	8/31/06	I	SB

0347

* Expiration dates are 1 year for stock solutions and 5 years for neat materials unless noted otherwise.

** Status: I => In use; D => expired and disposed of.

Reviewed by: [signature] 5/9/06

Page #: 13

em Corporation

Primary Standard Receipt Logbook

te	Description	Vendor Lot #	Concentration	Mitkem ID	*Exp. Date	**Status	Analyst
/06	VOA System monitoring OLM SS spiking sol'n	Cat # STM-262 Lot # CB-1968	2500 ug/ml	VP060427A	9/30/08	I	SB
	8260 IS	Cat # STM-520 Lot # CB-2663	2500 ug/ml	VP060427B	12/31/08	I	SB
	8260 SS	Cat # STM-530 Lot # CB-1899	2500 ug/ml	VP060427C	9/30/08	I	SB
/06	Fluorobenzene (8021 IS)	Cat # STS-160 Lot # CB-1633	2000 ug/ml	~~VP04~~ VP060427D	8/31/09	I	SB
-/06	SOM DMCA	Cambridge GS-5286 Lot # PR-16604	100 ug/ml	VP060512A	5/13/15	I	NZ
/06	SOM DMCA	O2Si: 122032-01 Lot # PR-11791 NZ 5/25/06	2,000 mg/L	VP060525A	5/27/2009	I	NZ
5/06	SOM DMCA - non-gas	O2Si: 122001-03 Lot # 117880	2,000 mg/L	VP060525B	5/26/2009	I	NZ
5/06	SOM DMCA - gas	Ultra: CUS-6268 Lot: CC-1028	400-2000 ppm	VP060608 NZ 6/9/06	8/31/2006	I	NZ
08/06	8260 CUSTOM STD	Ultra: RCC-180 Lot: NT02237	Neat	VP060608B	01/31/2008	I	NZ
8/06	1,4-Dioxane	RESTEK Cat # 30241 Lot # A040477	2500 ppm	VP060614A	10/10	I	NZ
14/06	8260 -IS	RESTEK Cat # 30240 Lot # A043435	2500 ppm	VP060614B	3/11	I	NZ
	8260 -SS	RESTEC Cat # 30091 Lot # A036482	2500 ppm	VP060614C	4/10	I	NZ
	SOM -IS	RESTEC Cat # 30287 Lot # A043149	2000 ppm	VP060614D	2/11	I	NZ
14/06	SOM - 1,4-Dioxane						

* Expiration dates are 1 year for stock solutions and 5 years for neat materials unless noted otherwise.

** Status: I => In use; D => expired and disposed of.

Reviewed by: SB 7/11/06

Page #: 14

kem Corporation

A Primary Standard Receipt Logbook

ate	Description	Vendor Lot #	Concentration	Mitkem ID	*Exp. Date	**Status	Analyst
/06	8260 Surrogate (3 vials)	Lot # A043935 Cat # 30204	2500 ug/ml	VP060711A	03/2011	I	SB
	8260 IS (2 vials)	Lot # A040977 Cat # 30241	2500 ug/ml	VP060711B	10/2010	I	
	VPH STD/SS (1 vial)	Lot A033444 Cat # 30604	10,000 ug/ml	VP060711C	09/2007	I	
	VPH SS 4 (8 vials)	Lot # A032924 Cat # 30435	1000 ug/ml	VP060711D	08/2011	I	SB
/06	VPH MS/SS 2 (8 vials)	Lot # A030286 Cat # 30605	50 ug/ml	VP060711E	01/2007	I	SB
/06	Scotty 14 Gases	Supelco 23437 Lot # 6150036	1%	VP060816A	06/04/2008	I	HZA
	8260 ADD (10V)	Accu Standard Lot B6070147	2000 ug/ml	VP060816B	02/07/07 11/24/2006	I	HZA
/16/06	Custom OLC3.2 Standard	Accu Standard Lot B2080263-1A	2000 ug/ml	VP060816C	12/20/06 7/18/2008	I	HZA
/17/06	VOA Matrix Spike Mix	Restek Cat # 30005 Lot # A041175	2500 ppm	VP060818A	11/10	I	HZA
/17/06	OLC3.2 VOA Mega Mix	Restek Cat # 30492 Lot # A037474	1000-2000 ug/ml	VP060818B	7/08	I	HZA
/17/06	8260 SS	Restek Cat # 30240 Lot # A043935	2500 ppm	VP060818C	3/11	I	HZA
/19/06	8260 IS	Restek Cat # 30241 Lot # A044709	2500 ppm	VP060818D	4/11	I	HZA
/23/06	SOM DMCA (non-gas)	O2Si 122032-01 Lot No: 114606	2,000 ppm	VP060823A	8/26/2009	I	HZA

* Expiration dates are 1 year for stock solutions and 5 years for neat materials unless noted otherwise.

** Status: I => In use; D => expired and disposed of.

0349

Reviewed by: HZA 9/7/06

Page #: 15

em Corporation

Primary Standard Receipt Logbook

te	Description	Vendor Lot #	Concentration	Mitkem ID	*Exp. Date	**Status	Analyst
/06	Hexane	T.J. Baker CAS NO# 110-543 Lot# C22E22	Neat	VP060913 A	9/30/2007	I	HZA
/06	Isopropanol	Fisher Cat # A 451-4 Lot # 011421	Neat	VP060913B		I	HZA
/06	SOM DMCA (NON-GAS)	O2Si Cat No: 122032-01 Lot No: 119987	2000 ppm	VP060914A	9/16/2009	I	HZA
/06	SOM DMCA (GAS)	O2Si Cat No: 122001-03 Lot No: 117890	2000 ppm	VP060914B	5/26/2009	I	HZA
/06	HZA 9/26/06 ~~SHAA~~ 8260-STD	Cat No. DWM-584N Lot No. CC-2573	2000 ppm	VP060926A	9/31/2009	I	HZA
/06	(HZA) 8260-Custom	Ultra: CUS-6268 Lot #. CC-2981	400-2000 ppm	VP060928A	Jan/2007	I	HZA
/06	Naphthalene	SUPELCO Cat No. 40053 Lot. LB33687	5000 ppm	VP061003A	Sep/2008	I	HZA
/06	SOM-IS (OLC)	Restec Cat # 30091 Lot # A036982	2500 ppm	VP061011A	4/10	I	HZA
/06	CLP VOA Cal 2000	Restec Cat # 30456 Lot # A043830	2000 ppm	VP061011B	3/09	I	HZA
/06	502.2 Calibration Mix#1 (GAS)	Restec Cat # 30042 Lot # A046373	2000 ppm	VP061011C	3/13	I	HZA
31/06	VPH STD/SS	Restek Cat # 30604 Lot # A033445	10,000 ppm	VP061031A	09/2007	I	SB
31/06	VPH MS/SS	Restek Cat 30605 Lot # A044309	50 ppm	VP061031B	05/2013	I	SB
7/06	Naphthalene (EPA-1134)	Ultra EPA-1134 Lot #. U-0088A	5000 ppm	VP061107A	3/2009	I	HZA

0350

* Expiration dates are 1 year for stock solutions and 5 years for neat materials unless noted otherwise.

** Status: I => In use; D => expired and disposed of.

book ID 90.0151-05/04 Reviewed by: HZA 9/20/06 Page #: 16

:kem Corporation

:A Primary Standard Receipt Logbook

ate	Description	Vendor Lot #	Concentration	Mitkem ID	*Exp. Date	**Status	Analyst
15/06	2-CVE	Ultra Cat. N.: EPA-1016 lot No. CB-1591	5000 ppm	VP061115A	8/31/2008	I	HZA
21/06	2-CVE	Restek Cat #: 30265 lot # A043617	2000 ppm	VP061121A	8/31/2011	I	HZA
21/06	SOM-PMCA (non-GAS)	O2Si Cat N: 122032-01 lot No: 121495	2000 ppm	VP061121B	11/21/2009	I	HZA
22/06	SOM-PMCA (GAS)	O2Si Cat N: 122001-03 lot No: 117880	2000 ppm	VP061121C	5/26/2009	I	HZA
8/06	8260-IS	Ultra Cat. No: STM-520 lot Num: CC-1318	2500 ppm	VP061208A	6/2009	I	HZA
8/06	8260-SS	Ultra Cat. No: STM-530 lot No: CC-1146	2500 ppm	VP061208B	6/2009	I	HZA
28/06	8260-IS	Restek Cat No: 30241 lot No. A044709	2500 ppm	VP061228A	4/2011	I	HZA
28/06	8260-SS	Restek Cat No. 30240 lot No. A047400	2500 ppm	VP061228B	9/2011	I	HZA
28/06	~~8260~~ HZA 12/28/06 LCS	Restek Cat No: 30205 lot No. A045582	2500 ppm	VP061228C	6/2011	I	HZA
	—	USE NEW BOOK —					

* Expiration dates are 1 year for stock solutions and 5 years for neat materials unless noted otherwise.

** Status: I => In use; D => expired and disposed of.

0351

gbook ID 90.0151-05/04

Reviewed by:_____

Page #: 17

From: Origin ID: SNAA (714)697-6191
Mike Palm
CH2MHill
3 Hutton Centre Drive
Suite 200
Santa Ana, CA 92707

FedEx Express

E

CLS022387/21/23

Ship Date: 08MAY07
ActWgt: 25 LB
System#: 1271534/INET2600
Account#: S *********

Dimmed: 14 X 12 X 16 IN

Delivery Address Bar Code

SHIP TO: (401)732-3400 **BILL SENDER**

MITKEM Sample Custodian
MITKEM Corporation
175 Metro Center Blvd

Warwick, RI 02886

Ref # 335379.FI.03
Invoice #
PO #
Dept #

PRIORITY OVERNIGHT

WED
Deliver By:
09MAY07

TRK# 7902 4250 7795 FORM 0201

PVD A1

02886 -RI-US

XH NCOA

Case 36359
SDG Y3AM1

Agnes RNG
5/10/07

Shipping Label: Your shipment is complete.

Return to History

1. **Use the "Print" feature from your browser to send this page to your laser printer.**
2. **Fold the printed page along the horizontal line.**
3. **Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.**

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

From: Origin ID: SNAA (714)697-6191
Mike Palm
CH2MHill
3 Hutton Centre Drive
Suite 200
Santa Ana, CA 92707

FedEx Express

E

CLS022307/21/23

Ship Date: 10MAY07
ActWgt: 25 LB
System#: 1271534/INET2600
Account#: S *********

Dimmed: 14 X 12 X 16 IN

Delivery Address Bar Code

SHIP TO: (401)732-3400 **BILL SENDER**

MITKEM Sample Custodian
MITKEM Corporation
175 Metro Center Blvd

Warwick, RI 02886

Ref # 335379.FI.03
Invoice #
PO #
Dept #

PRIORITY OVERNIGHT

FRI
Deliver By:
11MAY07

TRK# 7991 3782 6496 FORM 0201

PVD A1

02886 -RI-US

XH NCOA

Agnes RNG
5/11/07

Case 36359
SDG Y3AM1

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From: Origin ID: SNAA (714)697-6191
Mike Palm
CH2MHill
3 Hutton Centre Drive
Suite 200
Santa Ana, CA 92707

FedEx Express

CLS022307/21/23

Ship Date: 11MAY07
ActWgt: 25 LB
Dimmed: 14 X 12 X 16 IN
System#: 1271534/INET2600
Account#: S *********

Delivery Address Bar Code

Ref # 335379.fi.03
Invoice #
PO #
Dept #

SHIP TO: (401)732-3400 **BILL SENDER**

MITKEM Sample Custodian
MITKEM Corporation
175 Metro Center Blvd

Warwick, RI 02886

##
PRIORITY SATURDAY
##

TRK# **7916 8625 2947** FORM 0201

Deliver By:
12MAY07

PVD A1

02886 -RI-US

X0 NCOA

GusRig
5/14/07

Case 36359
SDG Y3AM1

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Contract Laboratory Program

Sample Delivery Group (SDG)

Cover Sheet

SDG Number Y3AM1

Laboratory Name	Mitkem Coroporation	Lab Code	MITKEM
Contract No.	EP-W-05-030	Case No.	36359
Analysis Price	$ 0.00	SDG Turnaround	21 days

EPA Sample Numbers in SDG (Listed in Numerical Order)

01) Y3AM1	08) Y3AM8	15) Y3AN4MS	22) Y3AP0
02) Y3AM2	09) Y3AM9	16) Y3AN4MSD	
03) Y3AM3	10) Y3AN0	17) Y3AN5	
04) Y3AM4	11) Y3AN1	18) Y3AN6	
05) Y3AM5	12) Y3AN2	19) Y3AN7	
06) Y3AM6	13) Y3AN3	20) Y3AN8	
07) Y3AM7	14) Y3AN4	21) Y3AN9	

First Sample in SDG	Last Sample in SDG
Y3AM1	Y3AP0
First Sample Receipt Date	**Last Sample Receipt Date**
05/10/2007	05/12/2007

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 [illegible] Date 5/14/2007

Modified Analysis 1391.0

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

EPA

Case No:	36359
DAS No:	
SDG No:	Y3AM1

L

Date Shipped:	5/9/2007
Carrier Name:	FedEx
Airbill:	790242507795
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	5-9-07/1630	[signature]	5-10-07 0850
2				
3				
4				

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$0
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
01	Y3AM1	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	1	S: 5/9/2007	9:20		OK
02	Y3AM2	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	2	S: 5/9/2007	12:00		
03	Y3AM3	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	3	S: 5/9/2007	12:40		
04	Y3AM4	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	4	S: 5/9/2007	13:20		
05	Y3AM5	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	5	S: 5/9/2007	14:00		
06	Y3AM6	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	6	S: 5/9/2007	14:35		
07	Y3AM7	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	7	S: 5/9/2007	14:50		
08	Y3AM8	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	8	S: 5/9/2007	15:15		
09	Y3AM9	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	9	S: 5/9/2007	15:45		OK

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 4°C	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

TR Number: 9-530112900-050907-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

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

Case No:	36359
DAS No:	
SDG No:	Y3AM1

L

Date Shipped:	5/10/2007
Carrier Name:	FedEx
Airbill:	799137826496
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature:

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	5-10-07/ 1500	[signature]	5-11-07 9:00
2				
3				
4				

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$0
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
10 Y3AN0	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	10	S: 5/10/2007	8:35		OK
1 Y3AN1	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	11	S: 5/10/2007	9:40		
2 Y3AN2	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	12	S: 5/10/2007	10:20		
3 Y3AN3	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	13	S: 5/10/2007	10:40		
4 Y3AN4	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (6)	14	S: 5/10/2007	11:25		
5 Y3AN5	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	15	S: 5/10/2007	12:05		
6 Y3AN6	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	16	S: 5/10/2007	12:30		OK

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: Y3AN4	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3C	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

TR Number: 9-530112900-051007-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

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

Case No:	36359
DAS No:	
SDG No:	Y3AM1

L

Date Shipped:	5/11/2007
Carrier Name:	FedEx
Airbill:	791686252947
Shipped to:	Mitkem Corporation 175 Metro Center Blvd. Warwick RI 02886 (401) 732-3400

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	5/11/07 1700		5/12/07 8:45
2			
3			
4			

For Lab Use Only

Lab Contract No:	EP-W-05-030
Unit Price:	$0
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
17	Y3AN7	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	17	S: 5/11/2007	11:05		OK
18	Y3AN8	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	18	S: 5/11/2007	12:10		
19	Y3AN9	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	19	S: 5/11/2007	13:00		
20	Y3AP0	Ground Water/ Mike Palm	L/G	VOA (21)	(HCL) (3)	20	S: 5/11/2007	15:30		OK

SDG - Final Sample

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 2°C	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

TR Number: 9-530112900-051107-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

Mitkem Corporation — *14/May/07 12:41* — WorkOrder: F0595

Client ID: EPAINV
Project: SOM Region IX Modified Analysis
Location:
Comments: N/A

Case: 36359
SDG: Y3AM1
PO: EP-W-05-030

Report Level: CLP_REPORT
EDD: SOM_SEDD
HC Due: 06/04/07
Fax Due:

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL	Storage
F0595-01A	Y3AM1	05/09/2007 9:20	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-02A	Y3AM2	05/09/2007 12:00	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-03A	Y3AM3	05/09/2007 12:40	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-04A	Y3AM4	05/09/2007 13:20	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-05A	Y3AM5	05/09/2007 14:00	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-06A	Y3AM6	05/09/2007 14:35	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-07A	Y3AM7	05/09/2007 14:50	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-08A	Y3AM8	05/09/2007 15:15	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-09A	Y3AM9	05/19/2007 15:45	05/10/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-10A	Y3AN0	05/10/2007 8:35	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA

Client Rep: Agnes R Ng

9359

Client ID: EPAINV
Project: SOM Region IX Modified Analysis
Location:
Comments: N/A

Case: 36359
SDG: Y3AM1
PO: EP-W-05-030

Report Level: CLP_REPORT
EDD: SOM_SEDD
HC Due: 06/04/07
Fax Due:

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL	Storage
F0595-11A	Y3AN1	05/10/2007 9:40	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-12A	Y3AN2	05/10/2007 10:20	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-13A	Y3AN3	05/10/2007 10:40	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-14A	Y3AN4	05/10/2007 11:25	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☑	☑	VOA
F0595-15A	Y3AN5	05/10/2007 12:05	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-16A	Y3AN6	05/10/2007 12:30	05/11/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-17A	Y3AN7	05/11/2007 11:05	05/12/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-18A	Y3AN8	05/11/2007 12:10	05/12/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA
F0595-19A	Y3AN9	05/11/2007 13:00	05/12/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA

Client Rep: Agnes R Ng

0359

Client ID: EPAINV
Project: SOM Region IX Modified Analysis
Location:
Comments: N/A

Case: 36359
SDG: Y3AM1
PO: EP-W-05-030

Report Level: CLP_REPORT
EDD: SOM_SEDD
HC Due: 06/04/07
Fax Due:

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL	Storage
F0595-20A	Y3AP0	05/11/2007 15:30	05/12/2007	Aqueous	SOM1.0_VOA_TRACE_W	1391.0	☐	☐	☑	VOA

Client Rep: Agnes R Ng

0391

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Mitkem Corporation	Page 1 of 2
Received By (Print Name) Cassandra McGorry	Log-in Date 5-11-07
Received By (Signature) CMcGorry	
Case Number 30359	Sample Delivery Group No. Y3AM1 / Mod. Ref. No. 1391-0

Remarks:
(1) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present/Absent* Intact/Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present/Absent*
4. Airbill	Airbill/Sticker Present/Absent*
5. Airbill No.	FEDEX 7902 4250 7795 5-11-07
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
9. Cooler Temperature	4°C
10. Does information on TR/COCs and sample tags agree?	Yes/No*
11. Date Received at Laboratory	5-11-07
12. Time Received	8:50

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
Y3AM1	N/A	F0595-01	Okay
Y3AM2		02	
Y3AM3		03	
Y3AM4		04	
Y3AM5		05	
Y3AM6		06	
Y3AM7		07	
Y3AM8		08	
Y3AM9	N/A	F0595-09	Okay

Sample Transfer

Fraction VOA (1)	Fraction BNA/Pest/Aro (1)
Area # VOA Lab	Area #
By CM	By
On ~~5/10/07~~ 5/11/07 ARN 5/11/07	On

5-11-07 CMW

* Contact SMO and attach record of resolution.

Reviewed By ARN	Logbook No.
Date ~~5/10/07~~ 5/11/07 ARN 5/11/07	Logbook Page No.

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Mitkem Corporation	Page 2 of 2
Received By (Print Name) Cassandra McCarty	Log-in Date 5-11-07
Received By (Signature) [signature]	
Case Number 36359	Sample Delivery Group No. Y3AN1 / Mod. Ref. No. 1391-0

Remarks:
(1) Please see associated sample/extract transfer logbook pages submitted with this data package.

1. Custody Seal(s)	Present/Absent* Intact/Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present/Absent*
4. Airbill	Airbill/Sticker Present/Absent*
5. Airbill No.	FEDEX 7991 3782 6496
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
9. Cooler Temperature	3°C
10. Does information on TR/COCs and sample tags agree?	Yes/No*
11. Date Received at Laboratory	5-11-07
12. Time Received	9:00

EPA Sample #	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
Y3AN0	N/A	F0595-10	Okay
Y3AN1		11	
Y3AN2		12	
Y3AN3		13	
Y3AN4		14	
Y3AN5		15	
Y3AN6	N/A	F0595-16	Okay

5-11-07 (aw)

Sample Transfer

Fraction VOA (1)	Fraction BNA/Pest/Aro (1)
Area # VOA Lab	Area #
By CM	By
On 5/11/07	On

* Contact SMO and attach record of resolution.

Reviewed By ARN	Logbook No.
Date 5/11/07	Logbook Page No.

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Mitkem Corporation	Page 1 of 1
Received By (Print Name) Cassandra McGorty	Log-in Date 5-14-07
Received By (Signature) [signature]	
Case Number 36359	Sample Delivery Group No. Y3AM1 — Mod. Ref. No. 1391-0

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	Y3AN7	N/A	F0595-17	Okay
2. Custody Seal Nos.	N/A	Y3AN8	↓	↓ 18	↓
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present/Absent*	Y3AN9	↓	↓ 19	↓
4. Airbill	Airbill/Sticker Present/Absent*	Y3AP0	N/A	F0595-20	Okay
5. Airbill No.	FEDEX 7916 8625 2947				
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				
9. Cooler Temperature	2°C				
10. Does information on TR/COCs and sample tags agree?	Yes/No*		5-14-07 [initials]		
11. Date Received at Laboratory	5-12-07				
12. Time Received	8:45				

Sample Transfer

Fraction VOA (1)	Fraction BNA/Pest/Aro (1)
Area # VOA Lab	Area #
By CM	By
On 5/14/07	On

* Contact SMO and attach record of resolution.

Reviewed By ARN	Logbook No.
Date 5/14/07	Logbook Page No.

Agnes Ng

From: "Kramer, Caroline" <ckramer5@fedcsc.com>
To: "Agnes Ng" <agnes_ng@mitkem.com>
Cc: "Mary O'Donnell" <Odonnell.Mary@epamail.epa.gov>; "R9" <R9RSCC@epa.gov>
Sent: Tuesday, May 15, 2007 11:21 AM
Subject: Region 09 | Case 36359 | Lab MITKEM | Issue Laboratory problems | FINAL

Agnes,
Summary Start
Issue: This MA is associated with case 36359. The MA is to include tertiary butyl alcohol. In our LIMS, the name of the compound is being used (2-methyl-2-propanol). The CAS number is the same. Will it be possible to use 2-methyl-2-propanol or do the forms have to say tertiary butyl alcohol? Will it be a problem for the Region if the lab uses the 2-methyl-2-propanol compound name?
Resolution: Per Region 9, the Region does not have a problem using the compound name 2-methyl-2-propanol instead of tertiary butyl alcohol. The lab will note the issue in the SDG Narrative and proceed with the analysis of the samples.
Summary End

Please let me know if you have any questions or problems.
Thank you,

Caroline L. Kramer
Computer Sciences Corporation (CSC)
ckramer5@fedcsc.com
703-818-4248

—— Forwarded by Caroline Kramer/CIV/CSC on 05/14/2007 03:13 PM ——

Caroline Kramer/CIV/CSC

05/14/2007 03:05 PM

To r9rscc <r9rscc@epa.gov;Odonnell.Mary;>

cc

Subject (5-14) | Case 36359 | Lab MITKEM | Issue Laboratory problems

Rich,
MITKEM is reporting the following issue regarding Case 36359. Please advise on how the Region wishes the lab to proceed.

Issue: This MA is associated with case 36359. The MA is to include tertiary butyl alcohol. In our LIMS, the name of the compound is being used (2-methyl-2-propanol). The CAS number is the same. Will it be possible to use 2-methyl-2-propanol or do the forms have to say tertiary butyl alcohol? Will it be a problem for the Region if the lab uses the 2-methyl-2-propanol compound name?

Please let me know if you have any questions or problems.
Thank you,
Caroline L. Kramer
Computer Sciences Corporation (CSC)
ckramer5@csc.com
703-818-4248

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From: Bauer, Heather
Sent: Monday, May 14, 2007 2:55 PM
To: Kramer, Caroline
Cc: Benhoff, Michael; Maruska, Gale
Subject: RE: MA 1391.0

Caroline,
Can you please ask the Region if this will be a problem for them?

Thanks,
Heather

Heather Bauer

From: Huyser, Nan
Sent: Monday, May 14, 2007 2:41 PM
To: Bauer, Heather; Abousaeedi, Nazy
Cc: Kramer, Caroline; Benhoff, Michael; Maruska, Gale
Subject: RE: MA 1391.0

It will not be a problem for CCS as long as the Region is fine with the other compound name.

Nan

From: Bauer, Heather
Sent: Monday, May 14, 2007 2:32 PM
To: Huyser, Nan; Abousaeedi, Nazy
Cc: Kramer, Caroline; Benhoff, Michael; Maruska, Gale
Subject: MA 1391.0

Following is a question from MITKEM regarding MA 1391.0 (attached). Please advise on how the lab should proceed.

Issue 1. This MA is associated with case 36359. The MA is to include tertiary butyl alcohol. In our LIMS, the name of the compound is being used (2-methyl-2-propanol). The CAS number is the same. Will it be possible to use 2-methyl-2-propanol or do the forms have to say tertiary butyl alcohol?

Thanks,
Heather

Heather Bauer

From: Agnes Ng [mailto:agnes_ng@mitkem.com]
Sent: Monday, May 14, 2007 2:17 PM
To: Kramer, Caroline
Cc: Bauer, Heather
Subject: MA 1391.0

Hi Caroline,

This MA is associated with case 36359. The MA is to include tertiary butyl alcohol. In our LIMS, the name of the compound is being used (2-methyl-2-propanol). The CAS number is the same. Will it be possible to use 2-methyl-2-propanol or do the forms have to say tertiary butyl alcohol?

Thanks
Agnes Ng
CLP Project Manager
(P) 401-732-3400 x316
(F) 401-732-3499
****
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Agnes Ng

From: "Caroline Kramer" <ckramer5@csc.com>
To: <agnes_ng@mitkem.com>
Cc: "9rscc" <r9rscc@epa.gov;Odonnell.Mary;;>
Sent: Monday, May 14, 2007 2:17 PM
Subject: Region 09 | Case 36359 | Lab MITKEM | Issue Multiple | FINAL

Agnes,
Summary Start
-Laboratory Problems-

Issue 1: The lab would like to know if the Case is complete?
Resolution 1: Per Region 9, samples were shipped out Friday for Saturday delivery, this was the last shipment and the Case is now complete.

-Discrepances with tags, jars, and/or TR/COC-
Issue 2: The analysis listed on the TR/COC is VOA, however the lab is

scheduled for TVOA under MA 1391.0.
Resolution 2: Per Region 9, the laboratory will follow the analysis listed on teh Scheduling Notification Form, note the issue in teh SDG Narrative and proceed with the analysis of the samples.

-Non-sampler Issue-
Issue 3: There were no sample tags received with the samples.
Resolution 3: In accordance with previous direction from Region 9, the lab will note the issue in the SDG Narrative and proceed with the analysis of

the samples. Region 9 does not use sample tags.

Summary End

Please let me know if you have any quesitons or problmes.

Thank you,

Caroline L. Kramer
Computer Sciences Corporation (CSC)
ckramer5@csc.com
703-818-4248

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---- Forwarded by Caroline Kramer/CIV/CSC on 05/14/2007 02:12 PM ----

R9RSCC@epamail.epa.gov
Sent by: Bauer.Richard@epamail.epa.gov

05/14/2007 02:11 PM

To Caroline Kramer/CIV/CSC@CSC
cc r9rscc <r9rscc@epa.gov;Odonnell.Mary;;>
Subject Re: (5-13) | Case 36359 | Lab MITKEM | Issue Multiple

Issue #2: Follow the scheduled analysis.

Issue #3 Samples were shipped Friday for Saturday delivery. This was the last shipment. Case is complete.

****
Region 9 RSCC
EPA Region 9 Laboratory
Office: 510-412-2389
Fax: 510-412-2302
email: R9RSCC@epa.gov
****

Caroline Kramer <ckramer5@csc.com>

05/14/2007 09:56 AM

To r9rscc <r9rscc@epa.gov;Odonnell.Mary;>
cc
Subject (5-13) | Case 36359 | Lab MITKEM | Issue Multiple

Rich,
MITKEM is reporting the following issues regarding Case 36359. Issue 3 can be resolved using a standard answer, however please advise for issues 1 and 2.

-Laboratory Problems-
Issue 1: The lab would like to know if the Case is complete?

-Discrepances with tags, jars, and/or TR/COC-
Issue 2: The analysis listed on the TR/COC is VOA, however the lab is scheduled for TVOA under MA 1391.0.

-Non-sampler Issue-
Issue 3: There were no sample tags received with the samples.
Resolution 3: In accordance with previous direction from Region 9, the lab will note the issue in the SDG Narrative and proceed with the analysis of the samples. Region 9 does not use sample tags.

Please let me know if you have any questions or problems.
Thank you,
Caroline L. Kramer
Computer Sciences Corporation (CSC)
ckramer5@csc.com
703-818-4248

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From: Agnes Ng [mailto:agnes_ng@mitkem.com]
Sent: Monday, May 14, 2007 12:48 PM
To: Kramer, Caroline
Subject: Case 36359

Hi Caroline,

Is this case complete?

The analysis listed on the TR is VOA. We were scheduled for TVOA by MA 1391.0.

We did not receive any tags with the samples.

Thanks,
Agnes Ng

CLP Project Manager
(P) 401-732-3400 x316
(F) 401-732-3499
****
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