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SFUND RECORDS CTR
2397737

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: 4/7/2014

Subject: Analytical Testing Results - Project R14S39
SDG: 14072D

From: Brenda Bettencourt, Director
EPA Region 9 Laboratory
MTS-2

To: Alana Lee
California Site Cleanup Section 3
SFD-7-3

Attached are the results from the analysis of samples from the **MEW 2014 Manhole Screening Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Volatile Organic Compounds by GC/MS

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403028-01									**Air - Sampled: 03/12/14 13:04**
Sample ID: MH60									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14C056	03/13/14	03/13/14	TO-15/SOP311
Chloromethane		ND	U	4	"	"	"	"	TO-15/SOP311
Vinyl chloride		ND	U	5	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroethane		ND	U	6	"	"	"	"	TO-15/SOP311
Trichlorofluoromethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	U	20	"	"	"	"	TO-15/SOP311
1,1-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Dichloromethane		4	B1, C1, J	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		8	C1	8	"	"	"	"	TO-15/SOP311
Chloroform		20		10	"	"	"	"	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Carbon tetrachloride		ND	U	10	"	"	"	"	TO-15/SOP311
Benzene		ND	U	7	"	"	"	"	TO-15/SOP311
1,2-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
Trichloroethene		40		10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	"	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
Toluene		ND	U	8	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Tetrachloroethene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	9	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	9	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,3,5-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,3-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,4-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trichlorobenzene		ND	C3, J, U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Lab ID: 1403028-03 — **Air - Sampled: 03/12/14 13:54**

Sample ID: MH62

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Volatile Organic Compounds by TO-15									
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14C056	03/13/14	03/13/14	TO-15/SOP311
Chloromethane		ND	U	4	"	"	"	"	TO-15/SOP311
Vinyl chloride		6		5	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroethane		ND	U	6	"	"	"	"	TO-15/SOP311
Trichlorofluoromethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloro-1,2,2-trifluoroethane		8	C1, J	20	"	"	"	"	TO-15/SOP311
1,1-Dichloroethene		20		8	"	"	"	"	TO-15/SOP311
Dichloromethane		9	B1	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		10		8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene	RE1	200		70	"	B14C068	03/14/14	03/15/14	TO-15/SOP311
Chloroform	RE1	400		90	"	"	"	"	TO-15/SOP311
1,1,1-Trichloroethane		7	C1, J	10	"	B14C056	03/13/14	03/13/14	TO-15/SOP311
Carbon tetrachloride		ND	U	10	"	"	"	"	TO-15/SOP311
Benzene		ND	U	7	"	"	"	"	TO-15/SOP311
1,2-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
Trichloroethene	RE1	1,200		100	"	B14C068	03/14/14	03/15/14	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	B14C056	03/13/14	03/13/14	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
Toluene		7	C1, J	8	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Tetrachloroethene		70		10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	9	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	9	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,3,5-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,3-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,4-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trichlorobenzene		ND	C3, J, U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403028-05									**Air - Sampled: 03/12/14 14:08**
Sample ID: MH64									
							Volatile Organic Compounds by TO-15		
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14C056	03/13/14	03/13/14	TO-15/SOP311
Chloromethane		ND	U	4	"	"	"	"	TO-15/SOP311
Vinyl chloride		ND	U	5	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroethane		ND	U	6	"	"	"	"	TO-15/SOP311
Trichlorofluoromethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	U	20	"	"	"	"	TO-15/SOP311
1,1-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Dichloromethane		4	B1, C1, J	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		40		8	"	"	"	"	TO-15/SOP311
Chloroform		30		10	"	"	"	"	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Carbon tetrachloride		ND	U	10	"	"	"	"	TO-15/SOP311
Benzene		ND	U	7	"	"	"	"	TO-15/SOP311
1,2-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
Trichloroethene		40		10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	"	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
Toluene		ND	U	8	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Tetrachloroethene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	9	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	9	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,3,5-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,3-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,4-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trichlorobenzene		ND	C3, J, U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Lab ID: 1403028-07 — **Air - Sampled: 03/12/14 14:39**

Sample ID: MH66

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Volatile Organic Compounds by TO-15									
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14C056	03/13/14	03/14/14	TO-15/SOP311
Chloromethane		5		4	"	"	"	"	TO-15/SOP311
Vinyl chloride		9		5	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroethane		ND	U	6	"	"	"	"	TO-15/SOP311
Trichlorofluoromethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloro-1,2,2-trifluoroethane		10	C1, J	20	"	"	"	"	TO-15/SOP311
1,1-Dichloroethene		20		8	"	"	"	"	TO-15/SOP311
Dichloromethane		10	B1	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		10		9	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene	RE1	400		200	"	B14C068	03/14/14	03/15/14	TO-15/SOP311
Chloroform	RE1	900		200	"	"	"	"	TO-15/SOP311
1,1,1-Trichloroethane		9	C1, J	10	"	B14C056	03/13/14	03/14/14	TO-15/SOP311
Carbon tetrachloride		ND	U	10	"	"	"	"	TO-15/SOP311
Benzene		ND	U	7	"	"	"	"	TO-15/SOP311
1,2-Dichloroethane		ND	U	9	"	"	"	"	TO-15/SOP311
Trichloroethene	RE1	1,900		200	"	B14C068	03/14/14	03/15/14	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	B14C056	03/13/14	03/14/14	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
Toluene		10		8	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Tetrachloroethene		100		10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	9	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	9	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,3,5-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,3-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,4-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trichlorobenzene		ND	C3, J, U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Lab ID: 1403028-09 — **Air - Sampled: 03/12/14 15:17**

Sample ID: MH68

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Volatile Organic Compounds by TO-15									
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14C056	03/13/14	03/14/14	TO-15/SOP311
Chloromethane		2	C1, J	4	"	"	"	"	TO-15/SOP311
Vinyl chloride		ND	U	5	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroethane		ND	U	5	"	"	"	"	TO-15/SOP311
Trichlorofluoromethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	U	20	"	"	"	"	TO-15/SOP311
1,1-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Dichloromethane		5	B1, C1, J	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroform		100		10	"	"	"	"	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Carbon tetrachloride		ND	U	10	"	"	"	"	TO-15/SOP311
Benzene		ND	U	6	"	"	"	"	TO-15/SOP311
1,2-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
Trichloroethene		10		10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	9	"	"	"	"	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
Toluene		10		7	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Tetrachloroethene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	9	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	9	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	9	"	"	"	"	TO-15/SOP311
Styrene		ND	U	8	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
1,3,5-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trimethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,3-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,4-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trichlorobenzene		ND	C3, J, U	10	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Manager:	Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number:	R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project:	MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method

Lab ID: 1403028-10 **Air - Sampled: 03/12/14 15:27**

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method

Lab ID: **1403028-11** **Air - Sampled: 03/12/14 15:41**

United States Environmental Protection Agency
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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method

Lab ID: **1403028-12** **Air - Sampled: 03/12/14 15:47**

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14072D
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14C056 - - General Air prep - VOCs, Soil Gas										**Prepared & Analyzed: 03/13/14**
										Volatile Organic Compounds by TO-15 - Quality Control
LCS (B14C056-BS1)										
Vinyl chloride	28		2.6	"	26.8		104	69-125		200
Bromomethane	39		3.9	"	40.0		97	66-125		200
Chloroethane	26		2.6	"	27.2		97	67-125		200
Trichlorofluoromethane	55		5.6	"	60.1		92	68-133		200
1,1,2-Trichloro-1,2,2-trifluoroethane	69		7.7	"	74.3		93	64-125		200
1,1-Dichloroethene	38		4	"	38.0		99	73-128		200
Dichloromethane	31		3.5	"	34.0		92	73-116		200
1,1-Dichloroethane	39		4	"	39.2		100	72-125		200
cis-1,2-Dichloroethene	40		4	"	40.0		100	77-129		200
Chloroform	47		4.9	"	49.8		94	77-126		200
1,1,1-Trichloroethane	50		5.5	"	55.1		91	74-133		200
Carbon tetrachloride	58		6.3	"	64.7		90	71-141		200
Benzene	34		3.2	"	32.2		105	81-125		200
1,2-Dichloroethane	39		4	"	39.6		99	61-153		200
Trichloroethene	54		5.4	"	54.2		100	73-128		200
1,2-Dichloropropane	51		4.6	"	47.6		108	77-129		200
cis-1,3-Dichloropropene	49		4.5	"	46.7		106	80-136		200
Toluene	39		3.8	"	38.4		102	78-133		200
trans-1,3-Dichloropropene	50		4.5	"	48.5		103	79-146		200
1,1,2-Trichloroethane	58		5.5	"	56.2		104	74-134		200
Tetrachloroethene	68		6.8	"	67.8		100	73-130		200
1,2-Dibromoethane (EDB)	82		7.7	"	79.1		103	78-133		200
Chlorobenzene	49		4.6	"	47.8		103	81-126		200
Ethylbenzene	46		4.3	"	44.3		104	82-130		200
m&p-Xylene	91		8.7	"	88.5		103	82-131		200
o-Xylene	45		4.3	"	44.7		101	82-132		200
Styrene	44		4.3	"	43.0		102	65-141		200
1,1,2,2-Tetrachloroethane	70		6.9	"	70.0		101	73-127		200
1,3,5-Trimethylbenzene	49		4.9	"	50.6		97	77-132		200
1,2,4-Trimethylbenzene	48		4.9	"	49.6		96	78-131		200
1,3-Dichlorobenzene	57		6	"	59.5		96	79-124		200
1,4-Dichlorobenzene	58		6	"	59.5		97	75-127		200
1,2-Dichlorobenzene	57		6	"	59.5		96	77-124		200
1,2,4-Trichlorobenzene	69		7.4	"	67.5		102	55-132		200
Hexachlorobutadiene	95		11	"	101		94	52-131		200
Batch B14C068 - - General Air prep - VOCs, Soil Gas										**Prepared & Analyzed: 03/14/14**
										Volatile Organic Compounds by TO-15 - Quality Control
Blank (B14C068-BLK1)										
1,2-Dichlorotetrafluoroethane	ND	U	7	ug/m³ Air						
Chloromethane	ND	U	2.1	"						
Vinyl chloride	ND	U	2.6	"						

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Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 04/07/14 14:29
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14C068 - - General Air prep - VOCs, Soil Gas										**Prepared & Analyzed: 03/14/14**
								Volatile Organic Compounds by TO-15 - Quality Control		
LCS (B14C068-BS1)										
1,1,2-Trichloro-1,2,2-trifluoroethane	81		7.7	"	74.3		110	64-125		200
1,1-Dichloroethene	39		4	"	38.0		104	73-128		200
Dichloromethane	29		3.5	"	34.0		86	73-116		200
1,1-Dichloroethane	40		4	"	39.2		103	72-125		200
cis-1,2-Dichloroethene	41		4	"	40.0		102	77-129		200
Chloroform	52		4.9	"	49.8		104	77-126		200
1,1,1-Trichloroethane	58		5.5	"	55.1		105	74-133		200
Carbon tetrachloride	70		6.3	"	64.7		108	71-141		200
Benzene	31		3.2	"	32.2		95	81-125		200
1,2-Dichloroethane	38		4	"	39.6		96	61-153		200
Trichloroethene	55		5.4	"	54.2		101	73-128		200
1,2-Dichloropropane	44		4.6	"	47.6		92	77-129		200
cis-1,3-Dichloropropene	44		4.5	"	46.7		94	80-136		200
Toluene	36		3.8	"	38.4		94	78-133		200
trans-1,3-Dichloropropene	46		4.5	"	48.5		94	79-146		200
1,1,2-Trichloroethane	52		5.5	"	56.2		93	74-134		200
Tetrachloroethene	67		6.8	"	67.8		99	73-130		200
1,2-Dibromoethane (EDB)	77		7.7	"	79.1		97	78-133		200
Chlorobenzene	46		4.6	"	47.8		96	81-126		200
Ethylbenzene	42		4.3	"	44.3		96	82-130		200
m&p-Xylene	86		8.7	"	88.5		97	82-131		200
o-Xylene	43		4.3	"	44.7		97	82-132		200
Styrene	42		4.3	"	43.0		98	65-141		200
1,1,2,2-Tetrachloroethane	69		6.9	"	70.0		99	73-127		200
1,3,5-Trimethylbenzene	53		4.9	"	50.6		105	77-132		200
1,2,4-Trimethylbenzene	53		4.9	"	49.6		106	78-131		200
1,3-Dichlorobenzene	64		6	"	59.5		108	79-124		200
1,4-Dichlorobenzene	64		6	"	59.5		107	75-127		200
1,2-Dichlorobenzene	64		6	"	59.5		107	77-124		200
1,2,4-Trichlorobenzene	73		7.4	"	67.5		108	55-132		200
Hexachlorobutadiene	109		11	"	101		107	52-131		200
Duplicate (B14C068-DUP1)		**Source: 1403028-02RE1**								
1,2-Dichlorotetrafluoroethane	ND	U	120	ug/m³ Air		ND				20
Chloromethane	ND	U	36	"		ND				20
Vinyl chloride	ND	U	45	"		ND				20
Bromomethane	ND	U	68	"		ND				20
Chloroethane	ND	U	46	"		ND				20
Trichlorofluoromethane	ND	U	99	"		ND				20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	U	130	"		ND				20
1,1-Dichloroethene	ND	U	70	"		ND				20
Dichloromethane	40	C1, J	61	"		37			3	20

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Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Qualifiers and Comments

J The reported result for this analyte should be considered an estimated value.

C3 The initial calibration for this analyte did not meet calibration criteria.

C1 The reported concentration for this analyte is below the quantitation limit.

B1 The concentration of this analyte found in this sample was less than five times the concentration found in the associated method blank.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

B3

ICF International
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

DATE: ~~March 31, 2014~~ April 3

TO: Richard Bauer, Chemistry TM, EPA Region 9, Laboratory Section, MTS-2

FROM: Ziyad Rajabi, Organic Group Leader

SUBJECT: Analytical Results for TDF 10101071

As assigned under EPA Contract No. EP-W-13-029, TDF 10101071, ESAT completed analysis of 12 soil gas samples for the Middlefield-Ellis-Whisman project, Case R14S39, SDG 14072D, Work Order 1403028 for TO 15 following EPA Region 9 Laboratory SOP 311 based on method TO15. The draft analytical report and raw data package are attached.

Work on this TDF is complete. If you have any questions regarding this information please contact me at extension 22390.

B3

EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**VOCs**
Project Number:	**R14S39**
SDG Number:	**14072D**
Work Order:	**1403028**
ESAT DCN:	**16790**

Contents

- **Review Forms**
- **Tracking Forms**
- ***Sample Preparation***
- **Data**
  -Initial Calibration Data
  -Sample Data
- ***Miscellaneous Data***
- ***Canister Certification Data***

Sections in italics are included as applicable

REVIEW FORMS

General Project Management and ESAT Contractor Oversight Review

Project Number: R14S39 SDG: 14072D

Analysis: TO 15 Number of Pages: 577

Reviewer: Christopher Caguranzan

- ✓ Review project notes and requirements (including TDF) and verify that correct analytical procedures and any special instructions were followed. Note any significant deviations or omissions in report narrative or return to contractor for correction.
- ✓ Review project memo field for each work order and include information pertinent to data users in report narrative. (Information important only to chemist reviewing the raw data package should be included in data package, but not in the report narrative).
- ✓ Review chain of custody documentation and verify that information in report corresponds correctly. Verify that any sample shipping or handling issues are properly documented and reported.
- ✓ Review analytical report and QC report and verify that qualifier flags for holding times, sample handling, surrogates, blanks, blank spikes, matrix QC, and calibration range have been appropriately applied.
- ✓ Review LIMS Data Entry table for unaddressed outliers.
- ✓ Verify that all major sections of data package are present.

Comments: 04/07/2014

Reviewer Signature Date 04/07/2014

G:\USER\ESAT\# LAB DATA Deliverables\R14S39\14072D-TO15-16790.docx

ESAT Region 9 | **ICF International**
Case: R14S39 | **Analysis:** VOCs | **TDF:** 10101071 | **Matrix:** soil gas
DCN: 16790 | **Site:** Middlefield-Ellis-Whisman | **SDG:** 14072D

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer:	Package Prep (P): FM	Technical (T): [illegible]	Final (F): KO
	Date: 3/27/14	Date: 4-2-14	Date: 4/3/2014

P T F N/A (indicates that the item is present and reviewed for accuracy and completeness)

Report Section

- ✓ ✓ ✓ ESAT Cover Memo (original)
- ✓ ✓ ✓ TDF included and requirements met (e.g. project analytes, project QLs, special procedures)
- ✓ ✓ ✓ Draft LIMS Report

Data Package Cover

- ✓ ✓ ✓ Case, SDG, Work Order(s), TDF#-DCN [First numbered page in the data package]

Review Forms

- ✓ ✓ ✓ EPA Review Form and Technical Review Guide included and complete.
- ¤ ¤ ¤ ✓ LIMS memo field; include as applicable.
- ¤ ¤ ¤ ✓ Discrepancy form(s) include as applicable
- ✓ ✓ ✓ ¤ Daily folder review forms are complete and reviewed; QC outliers noted
- ✓ ✓ ✓ ¤ Analysis matrix listing all analytical runs is included, as applicable

Tracking Forms

- ✓ ✓ ✓ Work Orders and Chains of Custody forms included and reviewed.
- ✓ ✓ ✓ Preparation and analyses performed within holding times. Qualify and/or explain deviations in memo field
- ¤ ¤ ¤ ✓ Cooler temperatures recorded on COC are within specification. Qualify and/or explain deviations in memo field

Sample Preparation

- ✓ ✓ ✓ ¤ Bench sheets and extraction logs, where applicable
- ¤ ¤ ¤ ✓ Sample cleanup data and records (e.g. GPC logs)
- ¤ ¤ ¤ ✓ Homogenization and Moisture data

Initial Calibration Data

Group ICAL data by instrument and analysis date:

- ✓ ✓ ✓ ¤ All ICALs associated with samples are present, reviewed, and pass SOP criteria. (If failure, discrepancy form must be included)
- ✓ ✓ ¤ ¤ Check for misidentification (e.g. isomers such as dichlorobenzene)

Sample Data

Group data for the following areas in sections by method, instrument, and analysis date.

Continuing Calibrations

- ✓ ✓ ✓ ¤ All CCALs associated with samples are present and meet SOP criteria. If not, discrepancy form included.
- ✓ ✓ ¤ Average RRFs from associated ICAL are correctly transposed to CCAL summary form
- ✓ ✓ ¤ CCAL RRFs and %Ds calculated correctly. Check at least 1 surrogate & 1 target analyte
- ✓ ✓ ¤ Check %Ds and RRFs against SOP criteria

ESAT Region 9 **ICF International**
Case: R14S39 **Analysis:** VOCs **TDF:** 10101071 **Matrix:** soil gas
DCN: 16790 **Site:** Middlefield-Ellis-Whisman **SDG:** 14072D

P T F N/A (indicates that the item is present and reviewed for accuracy and completeness)

Quantitation Limit Standards
☑ ☑ ☑ ☐ Percent recoveries of 60-140% met; outliers noted and flagged

Laboratory Control Samples
☑ ☑ ☑ Percent recoveries met. If not, discrepancy form included unless not required because: _____

Method Blanks
☑ ☑ ☑ Present and no target analyte results > ½ QL; if not, flag data as appropriate

~~MS/MSD~~ or Duplicate Data
☑ ☑ ☑ ☐ Percent recoveries and RPDs were met; outliers are noted and flagged. Note significant deviations in LIMS memo field

Sample Data
☑ ☑ ☑ ☐ Bench sheet(s) and injection or run logs present for all samples
☑ ☑ ☑ ☐ Internal standards meet SOP criteria
☑ ☑ ☑ ☐ System Monitoring Compound/Surrogate recoveries met; outliers are noted and flagged
☑ ☑ ☐ All non-detects are reported as ND on the quantitation report and explained for QC samples
☑ ☑ ☐ Quantitation results are correctly calculated. Check at least one surrogate or one target analyte
☑ ☑ ☐ Mass spectral data are present for all target analytes
☑ ☑ ☑ ☐ Check for manual integrations (m) identified on quantitation reports. Verify presence of manual integration data, initialed and dated by a supervisor
☑ ☑ ☑ ☐ Compound concentrations exceeding the upper range of the instrument are reported from the dilution run
☑ ☑ Check for carry-over contamination
☑ ☑ ☑ ☐ Dilutions and reruns appropriate.
☐ ☐ ☑ TICs properly identified; TIC report and data present; proper TIC name used (Organics)
☑ ☑ ☐ ☐ QC outliers are appropriately flagged in LIMS

Miscellaneous Data
☐ ☐ ☐ ☑ Storage blank data present
☐ ☐ ☐ ☑ Other data, as applicable _____

Canister Certification Data (TO 15 only)
☑ ☑ ☑ ☐ Data and supporting QC present

Standards Records
☑ ☑ ☐ ☐ LIMS Standards pdf created and filed as:
I:\PDF\Standard\ R14S39_14072D_VOCSoilGas.pdf

For ESAT Files: ESAT Review form (original) and Cover Memo (copy)

SAMPLE TRACKING FORMS

WORK ORDER

Printed: 3/13/2014 12:36:35PM

1403028

EPA Region 9 Laboratory

Client: **California Site Cleanup Section 3**
Project: **MEW 2014 Manhole Screening Investigation**
Project Number: **R14S39**

Report To:
California Site Cleanup Section 3
Alana Lee
75 Hawthorne Street
San Francisco, CA 94105
Phone: (415) 972-3141
Fax: (415) 947-3526

Project Contact
California Site Cleanup Section 3
Alana Lee
75 Hawthorne Street
San Francisco, CA 94105
Phone :(415) 972-3141
Fax: (415) 947-3526

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
1 Box	Box	24	No	Yes	Yes	No	No	

Date Due:	04/12/14 15:00 (30 day TAT)	SDG:	14072D
Received By:	Susan Sturges	Date Received:	03/13/14 08:54
Logged In By:	Susan Sturges	Date Logged In:	03/13/14 11:46

Analysis	Hold Time Expires	Comments
1403028-01 MH60 [Air] Sampled 03/12/14 13:04 Pacific		**Can 1988**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-02 MH61 [Air] Sampled 03/12/14 13:30 Pacific		**Can 629**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-03 MH62 [Air] Sampled 03/12/14 13:54 Pacific		**Can 1107**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-04 MH63 [Air] Sampled 03/12/14 14:01 Pacific		**Can 1113**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-05 MH64 [Air] Sampled 03/12/14 14:08 Pacific		**Can 1120**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-06 MH65 [Air] Sampled 03/12/14 14:18 Pacific		**Can 1986**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-07 MH66 [Air] Sampled 03/12/14 14:39 Pacific		**Can 626**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-08 MH67 [Air] Sampled 03/12/14 15:14 Pacific		**Can 1980**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final

WORK ORDER

Printed: 3/13/2014 12:36:35PM

1403028

EPA Region 9 Laboratory

Client: California Site Cleanup Section 3 **Project Number:** R14S39
Project: MEW 2014 Manhole Screening Investigation

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments
1403028-09 MH68 [Air] Sampled 03/12/14 15:17 Pacific		**Can 1983**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-10 MH69 [Air] Sampled 03/12/14 15:27 Pacific		**Can 1994**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-11 MH70 [Air] Sampled 03/12/14 15:41 Pacific		**Can 1118**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final
1403028-12 MH71 [Air] Sampled 03/12/14 15:47 Pacific		**Can 1100**
VOCs, Soil Gas	04/11/14	14 day prelim - 28 day final

Reviewed By

Date

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO-15**	**Analyst Initial**	**EM**	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	B14C056 S14C050
Instrument ID	**HP5973K**	**Date Analyzed**	**3/13/2014**	**Date**	4/3/2/14	**Chemstation Last Update**	Mar 14 19:07:29 2014
Cases	**R14S39**			**SDGs**	**14072D**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X		Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
X			QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
X			MS/MSD
	X	✓	Samples (within calibration range, results calculated correctly)
	X	✓	Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
X			Others: Shares QC with Initial Calibration

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
BLK	031314K12	0.54ppbv	<1/2RL					Dichloromethane B-flag

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO-15	Analyst Initial	EM	Reviewer Initial		Batch/ Sequence	B14C056 S14C050
Instrument ID	HP5973K	Date Analyzed	3/13/2014	Date	4-2-14	Chemstation Last Update	Mar 14 19:07:29 2014
Cases	INITIAL CALIBRATION			SDGs	ICAL1403006		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X		Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
X			QLS (level, frequency, and recovery) (include Chemstation summary)
X			Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS (level, frequency, and recovery) (include Chemstation summary)SCV
X			MS/MSD
X			Samples (within calibration range, results calculated correctly)
	X	✓	Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
SCV	031314K09	65%	70-130%			X	X	1,2,4-Trichlorobenzene

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO-15**	**Analyst Initial**	**EM**	**Reviewer Initial**	RW	**Batch/ Sequence**	NA S14C061
Instrument ID	**HP5973K**	**Date Analyzed**	**3/14/2014**	**Date**	3/28/14	**Chemstation Last Update**	Mar 14 18:45:24 2014
Cases	**Initial Calibration**			**SDGs**	**ICAL** 140307		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
X			QLS (level, frequency, and recovery) (include Chemstation summary)
X			Method / Extraction / Storage Blanks (frequency and contamination levels)
X			Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
X			LCS (level, frequency, and recovery) (include Chemstation summary)
X			MS/MSD
X			Samples (within calibration range, results calculated correctly)
	X	✓	Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
X			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
								OK

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO-15**	**Analyst Initial**	**EM**	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	B14C068 S14C061
Instrument ID	**HP5973K**	**Date Analyzed**	**3/14/2014**	**Date**	4/2/14	**Chemstation Last Update**	Mar 14 18:45:41 2014
Cases	**R14S39**			**SDGs**	**14072D**		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	X	✓	Runlog (Present, legible, peer reviewed)
	X	✓	Tune/ Degradation Standard
	X	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	X	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
X			QLS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
X		✓	Surrogate Recoveries
	X	✓	IS Areas (SOP criteria met)
	X	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	X	✓	MS/MSD/DUPLICATE
	X	✓	Samples (within calibration range, results calculated correctly)
	X	✓	Manual Integration Verified
X			Standard Prep Log (all pages present, legible, peer reviewed, legible)
X			Sample Prep/Extraction (all pages present, legible, peer reviewed)
	X	✓	Others: Shares QC with Initial Calibration

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
BLK	031414K13	0.55ppb	<1/2QL				X	Dichloromethane

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R13S39
SDG: 14072D
Analysis: TO-15

Analyst: EM
Reviewed by:
Workorder: 1403028

Sample ID						
Instrument:	CAN	Dilution	SAMPLE ID	HP5973K	Dilution	HP5973K
Analysis Date:		3/13/2014		3/13/2014	3/14/2014	3/14/2014
Sequence:				S14C050		S14C061
Batch:				B14C056		B14C068
1403028-01	1988	2.09	MH60	200mL RPT		
1403028-02	629	2.11	MH61	200mL RPT (RR OC CPDS)	2.08	50mL RE1 RPT 50mL DUP1 RPT
1403028-03	1107	2.1	MH62	200mL RPT (RR OC CPDS)	2.23	50mL RE1 RPT
1403028-04	1113	2.11	MH63	200mL RPT (RR OC CPDS)	2.14	50mL RE1 RPT
1403028-05	1120	2.09	MH64	200mL RPT RR to confirm TCE conc	1.75	200mL RE1 for conf only
1403028-06	1986	2.11	MH65	200mL RPT		
1403028-07	626	2.11	MH66	200mL RPT (RR OC CPDS)	1.81	20mL RE1 RPT
1403028-08	1980	2.1	MH67	200mL RPT RR to confirm TCE conc	1.42	200mL RE1 for conf only
1403028-09	1983	1.97	MH68	200mL RPT		
1403028-10	1994	1.98	MH69	200mL RPT		
1403028-11	1118	2.1	MH70	200mL RPT		
1403028-12	1100	2.1	MH71	200mL RPT		
Blank				B14C056-BLK1		B14C068-BLK1
Blank Spike				B14C056-BS1		B14C068-BS1
Duplicate						B14C068-DUP1

Definitions

RPT	Report
NU	Not Used
OC	Over calibration
OTT	Out of tune time
nX	Dilution, where n is dilution factor

Loop Method	SPLIT FLOW	SAMPLE SIZE
Loop.CTD	0	1
Loop5.CTD	5	0.67
Loop10.CTD	10	0.5
Loop15.CTD	15	0.4
Loop20.CTD	20	0.33
Loop40.CTD	40	0.2

U.S. Environmental Protection Agency	CHAIN OF CUSTODY RECORD	EPA REGION 9 75 Hawthorne Street San Francisco, California 94105
Project / Case Number MEW - M6	Project: **MEW Manhole Sampling - March 2013**	EPA Project Manager contact: Alana Lee, 415-972-3141 Lee.Alana@epa.gov
EPA R9 Laboratory	Samplers: *(Signature)* [signature] 3/12/14 [signature] 3/12/14	**Analysis Requested: TO15**

Lab ID	Field Sample ID (Location)	Canister ID	Flow Ctrl ID	Comp	Grab	Sample Date	Sample Time	Initial Pressure	Final Pressure	PID reading	COMMENTS
	MH60	1988	N/A		X	3/12/2014	1504	-30	0"	N/A	
	MH61	629	N/A		X	3/12/2014	1330	-30	0"		Bubble Bldg
	MH62	1107	N/A		X	3/12/2014	1354	-30	0"		RT Jones 253
	MH63	1113	N/A		X	3/12/2014	1401	-30	0"		Vernon 1 - OPHA
	MH64	1120	N/A		X	3/12/2014	1408	-30	0"		Vernon 2 - OPHA
	MH65	1986	N/A		X	3/12/2014	1418	-30	0"		RT Jones/Stevens Way
	MH66	626	N/A		X	3/12/2014	1439	-30	0"		King Rd N223 Wind
	MH67	1980	N/A		X	3/12/2014	1514	-30	0"		F6-017
	MH68	1983	N/A		X	3/12/2014	1517	-30	0"		F6-017
	MH69	1994	N/A		X	3/12/2014	1527	-30	0"		# Storm - Evandale 272 / Whisman 600
	MH70	1118	N/A		X	3/12/2014	1541	-30	0"		F5-015 822 Emily ~~F5-053 Whisman~~
	MH71	1100	N/A		X	3/12/2014	1547	-30	0"	✓	F5-017 Emily

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)* Date/Time
[signature]	3/13/14 8:54 am	[signature] 3/13/14 8:54 am

Received for Laboratory by: *(Signature)*	Date/Time	Temp
		No custody seals - hand delivered Arrived at lab at 24P

3/

SAMPLE PREPARATION

PREPARATION BENCH SHEET

B14C056

EPA Region 9 Laboratory

'rinted: 3/14/2014 5:48:26PM

Project: R14S39 - MEW 2014 Manhole Screening Investigation

Matrix: Air **Analysis:VOCs, Soil Gas** **Prepared using: Air - - General Air prep** **(No Surrogate)**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	Extraction Comments
1403028-01 A	MH60	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-02 A	MH61	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-03 A	MH62	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-04 A	MH63	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-05 A	MH64	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-06 A	MH65	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-07 A	MH66	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-08 A	MH67	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-09 A	MH68	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-10 A	MH69	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-11 A	MH70	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
1403028-12 A	MH71	03/13/14 12:38	200	200					EM	14 day prelim - 28 day final
B14C056-BLK1	Blank	03/13/14 12:38	200	200					EM	
B14C056-BS1	LCS	03/13/14 12:38	200	200	1411096		100000		EM	

Reagents

Reagent # **Description**

Preparation Reviewed By 4-2-14 Date

PREPARATION BENCH SHEET

B14C068

EPA Region 9 Laboratory

'rinted: 3/25/2014 7:51:24PM

Project: R14S39 - MEW 2014 Manhole Screening Investigation

Matrix: Air **Analysis: VOCs, Soil Gas** **Prepared using: Air - - General Air prep** **(No Surrogate)**

Lab Number	SampleName	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Prepared By	Extraction Comments
1403028-02RE1 A	MH61	03/14/14 12:42	50	200					EM	14 day prelim - 28 day final
1403028-03RE1 A	MH62	03/14/14 12:42	50	200					EM	14 day prelim - 28 day final
1403028-04RE1 A	MH63	03/14/14 12:42	50	200					EM	14 day prelim - 28 day final
1403028-05RE1 A	MH64	03/14/14 12:42	200	200					EM	14 day prelim - 28 day final
1403028-07RE1 A	MH66	03/14/14 12:42	20	200					EM	14 day prelim - 28 day final
1403028-08RE1 A	MH67	03/14/14 12:42	200	200					EM	14 day prelim - 28 day final
B14C068-BLK1	Blank	03/14/14 12:42	200	200					EM	
B14C068-BS1	LCS	03/14/14 12:42	200	200	1413028		100000		EM	
B14C068-DUP1	Duplicate	03/14/14 12:42	50	200		403028-02RE			EM	

Reagents

Reagent #	Description

Preparation Reviewed By — Date: 4-2-14

SOIL GAS DILUTION LOG

DATE/ INITIAL	TIME	LAB SAMPLE #	CLIENT SAMPLE #	CAN ID	INITIAL PRESSURE (PSI)	INITIAL VOL (mL)	FINAL VOL (mL)	FINAL PRESSURE (PSI)	AMBIENT PRESSURE (PSI)	DILUTION FACTOR
3/13/14 EM TD	13:33	1403028-01	MH60	1988	14.2	400	400	29.8	29.91/14.69	2.09
	13:43	02	MH61	629	14.1	400	400	29.8	—	2.11
	13:46	03	MH62	1107	14.1	400	400	29.7	—	2.1
	13:49	04	MH63	1113	14.1	400	400	29.8	—	2.11
	13:52	05	MH64	1120	14.3	400	400	29.9	—	2.09
	13:53	06	MH65	1986	14.0	400	400	29.6	—	2.11
	13:57	07	MH66	626	14.1	400	400	29.7	—	2.11
	14:00	08	MH67	1980	14.1	400	400	29.7	—	2.1
	14:02	09	MH68	1983	14.3	400	400	28.3	—	1.97
	14:06	10	MH69	~~1994~~ 1994	14.2	400	400	28.2	—	1.98
	14:08	11	MH70	1118	14.1	400	400	29.7	—	2.1
	14:13	12	MH71	1100	14.1	400	400	29.7	—	2.1
3-14-14 TD	10:54	1403028-02	MH61	629	14.7	400	400	30.7	29.85/14.66	2.08
	11:15	1403028-03	MH62	1107	14.02	400	400	31.8	—	2.23
	11:18	1403028-04	MH63	1113	13.9	400	400	29.8	—	2.14
	11:21	1403028-07	MH66	626	17.2	400	400	31.2	—	1.81
	11:25	1403028-05	MH64	1120	14.4	400	400	25.3	29.85/14.66	1.75
	11:28	1403028-08	MH67	1980	17.1	400	400	24.4	—	1.42

USEPA REGION 9 LABORATORY

SOIL GAS DILUTION LOG 2-6.xls

Reviewed by: RA

Date: 3/14/14

Instrument: HP5973K

Analysis Date: 3/13/14

INITIAL CALIBRATION DATA

ANALYSIS SEQUENCE

S14C050

Instrument: HP5973K

Calibration ID: 1403006

Printed: 3/25/2014 1:38:16PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S14C050-TUN1	QC		1		1410062			
S14C050-CAL1	QC		2		1411090			
S14C050-CAL2	QC		3		1411091			
S14C050-CAL3	QC		4		1411092			
S14C050-CAL4	QC		5		1411093			
S14C050-CAL5	QC		6		1411094			
S14C050-CAL6	QC		7		1411095			
S14C050-SCV1	QC		8		1411087			
S14C050-CCV1	QC		9		1411093			
B14C056-BS1	QC		10					
B14C056-BLK1	QC		11			1350050		
1403028-01	VOCs, Soil Gas	A	12			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-02	VOCs, Soil Gas	A	13			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-03	VOCs, Soil Gas	A	14			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-04	VOCs, Soil Gas	A	15			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-05	VOCs, Soil Gas	A	16			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-06	VOCs, Soil Gas	A	17			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-07	VOCs, Soil Gas	A	18			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-08	VOCs, Soil Gas	A	19			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-09	VOCs, Soil Gas	A	20			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-10	VOCs, Soil Gas	A	21			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-11	VOCs, Soil Gas	A	22			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-12	VOCs, Soil Gas	A	23			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final

Samples Loaded By Date

Data Processed By Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2014\031314KAA.SEQ
Date: 03-25-2014
Time: 13:34:34
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Samp Pos	Cal Vol.	Std Vol.	Method	Time
PRIME	3	2	100	40	C:\Smart\TO15.CTD	12:00
BFB 1311118	3	2	100	40	C:\Smart\TO15.CTD	12:00
10 ppbv 1408111	3	2	100	0	C:\Smart\TO15.CTD	12:00
1 ppbv 1408112	3	3	20	0	C:\Smart\TO15.CTD	12:00
2 ppbv 1408112	3	3	40	0	C:\Smart\TO15.CTD	12:00
5ppbv 1408112	3	3	100	0	C:\Smart\TO15.CTD	12:00
15 ppbv 1408111	3	2	150	0	C:\Smart\TO15.CTD	12:00
20 ppbv 1408111	3	2	200	0	C:\Smart\TO15.CTD	12:00
10 ppbv1408115 SCV	3	4	100	0	C:\Smart\TO15.CTD	12:00
10 ppbv 1408111	3	2	100	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1555E	3	5	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 7339	3	6	200	0	C:\Smart\TO15.CTD	12:00
1403028-01	3	6	200	0	C:\Smart\TO15.CTD	12:00
1403028-02	3	7	200	0	C:\Smart\TO15.CTD	12:00
1403028-03	3	8	200	0	C:\Smart\TO15.CTD	12:00
IBL	3	9	200	0	C:\Smart\TO15.CTD	12:00
1403028-04	3	10	200	0	C:\Smart\TO15.CTD	12:00
1403028-05	3	11	200	0	C:\Smart\TO15.CTD	12:00
1403028-06	3	12	200	0	C:\Smart\TO15.CTD	12:00
IBL	4	1	200	0	C:\Smart\TO15.CTD	12:00
1403028-07	4	2	200	0	C:\Smart\TO15.CTD	12:00
1403028-08	4	3	200	0	C:\Smart\TO15.CTD	12:00
1403028-09	4	4	200	0	C:\Smart\TO15.CTD	12:00
IBL	4	5	200	0	C:\Smart\TO15.CTD	12:00
1403028-10	4	6	200	0	C:\Smart\TO15.CTD	12:00
1403028-11	4	7	200	0	C:\Smart\TO15.CTD	12:00
1403028-12	4	8	200	0	C:\Smart\TO15.CTD	12:00
IBL	4	9	200	0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\msdchem\1\DATA\2014\031314KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	33	031314K01.D	1.	S14C050-PRM1	BFB STD /IS 1350050/10ppbv STD	13 Mar 2014 06:54
2	32	031314K02.D	1.	S14C050-TUN1	BFB STD/IS 150050/10ppbv STD	13 Mar 2014 07:42
3	32	031314K03.D	1.	S14C050-CAL4	10 ppbv 1411093	13 Mar 2014 08:29
4	33	031314K04.D	1.	S14C050-CAL1	1.0 ppbv 1411090	13 Mar 2014 09:14
5	33	031314K05.D	1.	S14C050-CAL2	2.0 ppbv 1411091	13 Mar 2014 10:42
6	33	031314K06.D	1.	S14C050-CAL3	5.0 ppbv 1411092	13 Mar 2014 11:30
7	32	031314K07.D	1.	S14C050-CAL5	15 ppbv 1411094	13 Mar 2014 12:19
8	32	031314K08.D	1.	S14C050-CAL6	20 ppbv 1411095	13 Mar 2014 13:09
9	34	031314K09.D	1.	S14C050-SCV1	10 ppbv SCV	13 Mar 2014 13:56
10	32	031314K10.D	1.	S14C050-CCV1@B14C056-BS1	10 ppbv 1411093	13 Mar 2014 14:43
11	35	031314K11.D	1.	CAN 1555E	200mL CAN 1555E	13 Mar 2014 16:01
12	35	031314K12.D	1.	B14C056-BLK1	200mL CAN 7339	13 Mar 2014 16:50
13	36	031314K13.D	2.09	1403028-01	200mL MH60 CAN 1988	13 Mar 2014 17:39
14	37	031314K14.D	2.11	1403028-02	200mL MH61 CAN 629	13 Mar 2014 18:28
15	38	031314K15.D	2.1	1403028-03	200mL MH62 CAN 1107	13 Mar 2014 19:16
16	39	031314K16.D	1.	IBL	IBL	13 Mar 2014 20:05
17	10	031314K17.D	2.11	1403028-04	200mL MH63 CAN 1113	13 Mar 2014 20:54
18	11	031314K18.D	2.09	1403028-05	200mL MH64 CAN 1120	13 Mar 2014 21:43
19	12	031314K19.D	2.11	1403028-06	200mL MH65 CAN 1986	13 Mar 2014 22:32
20	41	031314K20.D	1.	IBL	IBL	13 Mar 2014 23:21
21	42	031314K21.D	2.11	1403028-07	200mL MH66 CAN 626	14 Mar 2014 00:10
22	43	031314K22.D	2.1	1403028-08	200mL MH67 CAN 1980	14 Mar 2014 00:58
23	44	031314K23.D	1.97	1403028-09	200mL MH68 CAN 1983	14 Mar 2014 01:47
24	45	031314K24.D	1.	IBL	IBL	14 Mar 2014 02:36
25	46	031314K25.D	1.98	1403028-10	200mL MH69 CAN 1994	14 Mar 2014 03:25
26	47	031314K26.D	2.1	1403028-11	200mL MH70 CAN 1118	14 Mar 2014 04:13
27	48	031314K27.D	2.1	1403028-12	200mL MH71 CAN 1100	14 Mar 2014 05:02
28	49	031314K28.D	1.	IBL	IBL	14 Mar 2014 05:51

25 Mar 2014 13:35

000114

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031314KAA.M
Title : TO15
Last Update : Fri Mar 14 19:07:29 2014
Response Via : Initial Calibration

Calibration Files
1 =031314K04.D 2 =031314K05.D 5 =031314K06.D 10 =031314K03.D 15 =031314K07.D
20 =031314K08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.574	0.459	0.459	0.486	0.502	0.496	0.496	8.54
3)	T	Dichlorodifluo...	2.404	1.846	1.767	2.167	1.869	1.862	1.986	12.41
4)	T	1,2-Dichlorote...	1.953	1.529	1.472	1.784	1.607	1.643	1.665	10.64
5)	T	Chloromethane	0.658	0.544	0.542	0.557	0.594	0.593	0.581	7.61
6)	T	Vinyl chloride	0.788	0.624	0.617	0.720	0.669	0.676	0.682	9.41
7)	T	1,3-Butadiene	0.571	0.436	0.439	0.521	0.491	0.499	0.493	10.37
8)	T	Bromomethane	0.687	0.566	0.520	0.646	0.545	0.586	0.592	10.72
9)	T	Chloroethane	0.455	0.382	0.352	0.416	0.358	0.377	0.390	9.96
10)	T	Bromoethene	0.570	0.495	0.448	0.572	0.480	0.528	0.516	9.72
11)	T	Trichlorofluor...	2.409	2.069	1.868	2.243	1.870	1.983	2.074	10.41
12)	T	1,1,2-Trichlor...	1.462	1.187	1.078	1.354	1.069	1.160	1.218	12.92
13)	T	1,1-Dichloroet...	1.406	1.235	1.161	1.312	1.196	1.263	1.262	6.95
14)	T	Acetone	1.052	0.954	0.963	1.094	1.045	1.068	1.029	5.59
15)	T	Carbon disulfide	1.887	1.589	1.501	1.767	1.556	1.674	1.662	8.68
16)	T	2-Propanol	0.967	0.889	0.925	1.088	1.074	1.110	1.009	9.30
17)	T	Allyl chloride	0.893	0.772	0.762	0.848	0.829	0.836	0.823	5.98
18)	T	Dichloromethane	1.515	1.129	0.921	0.915	0.861	0.861	1.034	24.77
19)	T	tert-Butyl met...	1.944	1.787	1.847	2.206	1.961	1.967	1.952	7.36
20)	T	trans-1,2-Dich...	1.028	0.904	0.858	0.993	0.913	0.912	0.935	6.76
21)	T	Hexane	1.163	1.045	1.002	1.134	1.068	1.078	1.082	5.43
22)	T	1,1-Dichloroet...	1.696	1.481	1.384	1.553	1.411	1.419	1.491	7.88
23)	T	Vinyl acetate	1.655	1.615	1.619	1.915	1.887	1.918	1.768	8.64
24)	T	cis-1,2-Dichlo...	1.199	1.096	1.043	1.149	1.075	1.084	1.108	5.11
25)	T	2-Butanone (MEK)	0.289	0.273	0.301	0.347	0.315	0.322	0.308	8.50
26)	T	Ethyl acetate	0.201	0.200	0.191	0.209	0.210	0.212	0.204	3.88
27)	T	Tetrahydrofuran	0.815	0.764	0.785	0.825	0.841	0.833	0.810	3.71
28)	T	Chloroform	1.779	1.651	1.529	1.708	1.534	1.548	1.625	6.43
29)	T	Cyclohexane	1.154	1.081	1.053	1.133	1.100	1.110	1.105	3.27
30)	T	1,1,1-Trichlor...	2.043	1.904	1.727	1.973	1.734	1.755	1.856	7.32
31)	T	Carbon tetrach...	2.185	1.987	1.791	2.094	1.814	1.854	1.954	8.26
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.861	0.825	0.785	0.773	0.808	0.799	0.808	3.89
34)	T	2,2,4-Trimethy...	1.150	1.142	1.122	1.104	1.202	1.176	1.149	3.09
35)	T	1,2-Dichloroet...	0.469	0.451	0.419	0.426	0.434	0.426	0.437	4.33
36)	T	Heptane	0.431	0.443	0.428	0.409	0.466	0.457	0.439	4.71
37)	T	Trichloroethene	0.369	0.349	0.324	0.346	0.336	0.328	0.342	4.84
38)	T	1,2-Dichloropr...	0.309	0.304	0.289	0.279	0.300	0.294	0.296	3.60
39)	T	1,4-Dioxane	0.155	0.150	0.144	0.157	0.159	0.158	0.154	3.70
40)	T	Bromodichlorom...	0.576	0.570	0.523	0.562	0.566	0.567	0.560	3.40
41)	T	cis-1,3-Dichlo...	0.483	0.479	0.454	0.457	0.474	0.472	0.470	2.51
42)	T	4-Methyl-2-pen...	0.593	0.610	0.602	0.592	0.663	0.656	0.619	5.13
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.141	1.090	1.013	1.058	1.105	1.066	1.079	4.05
45)	T	trans-1,3-Dich...	0.522	0.538	0.515	0.538	0.565	0.541	0.536	3.23
46)	T	1,1,2-Trichlor...	0.377	0.362	0.330	0.347	0.355	0.344	0.353	4.57
47)	T	Tetrachloroethene	0.561	0.537	0.495	0.544	0.533	0.512	0.530	4.41
48)	T	2-Hexanone	0.625	0.641	0.639	0.653	0.757	0.708	0.670	7.66
49)	T	Chlorodibromom...	0.617	0.593	0.544	0.616	0.623	0.595	0.598	4.88
50)	T	1,2-Dibromoeth...	0.570	0.553	0.498	0.550	0.557	0.538	0.544	4.61
51)	T	Chlorobenzene	0.873	0.848	0.803	0.827	0.830	0.815	0.833	2.99
52)	T	Ethylbenzene	1.515	1.548	1.483	1.499	1.543	1.518	1.518	1.64
53)	T	m&p-Xylene	1.180	1.204	1.139	1.193	1.218	1.192	1.188	2.29
54)	T	o-Xylene	1.223	1.189	1.187	1.204	1.252	1.193	1.208	2.08
55)	T	Styrene	0.913	0.904	0.901	0.947	0.973	0.934	0.929	3.05
56)	T	Bromoform	0.669	0.604	0.583	0.706	0.674	0.675	0.652	7.26

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031314KAA.M
Title : TO15

57)	T	1,1,2,2-Tetrac...	0.885	0.838	0.793	0.827	0.860	0.873	0.846	3.98
58)	T	4-Ethyltoluene	1.550	1.412	1.383	1.556	1.563	1.567	1.505	5.59
59)	T	1,3,5-Trimethy...	1.477	1.359	1.345	1.448	1.471	1.447	1.425	4.05
60)	T	1,2,4-Trimethy...	1.529	1.453	1.353	1.485	1.549	1.463	1.472	4.70
61)	T	1,3-Dichlorobe...	1.096	1.023	0.957	1.049	1.088	1.025	1.040	4.88
62)	T	1,4-Dichlorobe...	1.124	1.018	0.950	1.044	1.089	1.028	1.042	5.78
63)	T	Benzyl chloride	1.274	1.155	1.121	1.311	1.423	1.322	1.268	8.87
64)	T	1,2-Dichlorobe...	1.096	1.002	0.932	1.042	1.022	0.985	1.013	5.44
65)	T	1,2,4-Trichlor...	1.155	0.996	0.959	1.101	0.997	0.976	1.031	7.65
66)	T	Hexachlorobuta...	1.112	0.936	0.861	0.966	0.779	0.728	0.897	15.48

(#) = Out of Range

00016

RT DUPLICATE REPORT

Instrument Name: HP5973K
Sample Name: S14C050-CAL4
Misc Info: 10 ppbv 1411093
Date Acquired: 3/13/2014 8:29
QLast Update: Fri Mar 14 19:04:13 2014
Operator: EM

#	Name	RT	CONC	Qion	
1)	BROMOCHLOROMETHANE	15.438	22.000	49.1	15.043
2)	Propene	4.372	10.097	41.1	
3)	Dichlorodifluoromethane	4.463	11.243	85	
4)	1,2-Dichlorotetrafluoroethane	4.816	11.252	85	
5)	Chloromethane	5.011	10.061	50.1	
6)	Vinyl chloride	5.333	11.085	62.1	
7)	1,3-Butadiene	5.431	10.580	54.1	
8)	Bromomethane	6.362	11.245	94	
9)	Chloroethane	6.690	10.989	64.1	
10)	Bromoethene	7.262	11.545	106	
11)	Trichlorofluoromethane	7.408	11.577	101	
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.221	10.782	151	
13)	1,1-Dichloroethene	9.294	9.982	61.1	
14)	Acetone	9.817	11.162	43.1	
15)	Carbon disulfide	10.012	11.163	76	
16)	2-Propanol	10.450	11.436	45.1	
17)	Allyl chloride	10.839	11.029	41.1	
18)	Dichloromethane	11.380	8.680	49.1	
19)	tert-Butyl methyl ether (MTBE)	12.074	12.096	73.1	
20)	trans-1,2-Dichloroethene	12.098	10.839	61.1	
21)	Hexane	12.713	10.805	57.1	
22)	1,1-Dichloroethane	13.449	10.106	63.1	
23)	Vinyl acetate	13.595	11.479	43.1	
24)	cis-1,2-Dichloroethene	14.897	10.482	61.1	
25)	2-Butanone (MEK)	14.994	11.808	72.1	
26)	Ethyl acetate	15.043	10.669	61.1	
27)	Tetrahydrofuran	15.456	10.485	42.1	
28)	Chloroform	15.596	10.726	83	
29)	Cyclohexane	15.834	10.769	56.1	
30)	1,1,1-Trichloroethane	15.876	10.740	97	
31)	Carbon tetrachloride	16.138	11.040	116.9	
32)	1,4-DIFLUOROBENZENE	17.446	22.000	114.1	16.971
33)	Benzene	16.625	9.658	78.1	16.588
34)	2,2,4-Trimethylpentane	16.588	10.092	57.1	
35)	1,2-Dichloroethane	16.825	9.550	62.1	
36)	Heptane	16.971	9.793	43.1	
37)	Trichloroethene	17.859	10.212	130	
38)	1,2-Dichloropropane	18.358	9.731	63.1	
39)	1,4-Dioxane	18.559	10.696	88.1	
40)	Bromodichloromethane	18.827	10.429	83	
41)	cis-1,3-Dichloropropene	19.593	10.031	75.1	
42)	4-Methyl-2-pentanone (MIBK)	19.831	10.045	43.1	

43)	CHLOROBENZENE-d5	22.349	22.000	117.1	21.680
44)	Toluene	20.068	10.008	91.1	
45)	trans-1,3-Dichloropropene	20.536	10.727	75.1	
46)	1,1,2-Trichloroethane	20.840	10.133	97	
47)	Tetrachloroethene	20.926	10.262	165.9	
48)	2-Hexanone	21.181	10.132	43.1	
49)	Chlorodibromomethane	21.449	10.710	128.9	
50)	1,2-Dibromoethane (EDB)	21.680	10.410	107	
51)	Chlorobenzene	22.398	10.332	112	
52)	Ethylbenzene	22.489	10.078	91.1	
53)	m&p-Xylene	22.672	20.492	91.1	
54)	o-Xylene	23.316	10.270	91.1	
55)	Styrene	23.353	10.305	104.1	
56)	Bromoform	23.730	11.155	172.9	
57)	1,1,2,2-Tetrachloroethane	24.424	9.976	83	
58)	4-Ethyltoluene	24.667	10.756	105.1	
59)	1,3,5-Trimethylbenzene	24.764	10.474	105.1	
60)	1,2,4-Trimethylbenzene	25.367	10.192	105.1	
61)	1,3-Dichlorobenzene	25.896	9.991	146	
62)	1,4-Dichlorobenzene	26.042	9.926	146	
63)	Benzyl chloride	26.255	10.761	91.1	0.000
64)	1,2-Dichlorobenzene	26.644	10.188	146	0.000
65)	1,2,4-Trichlorobenzene	29.108	9.727	180	0.000
66)	Hexachlorobutadiene	29.248	10.235	224.9	0.000

CHEMSTATION CONCENTRATION REPORT

Instrument Name: HP5973K
Sample Name: S14C050-SCV1
Misc Info: 10 ppbv SCV
Date Acquired: 3/13/2014 13:56
QLast Update: Fri Mar 14 19:07:29 201
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
1)	BROMOCHLOROMETHANE	22.00	22.00	22.00	22.00	22.00	22.00
2)	Propene	1.030	2.06	5.15	10.30	15.45	20.60
3)	Dichlorodifluoromethane	1.03	2.06	5.15	10.30	15.45	20.60
4)	1,2-Dichlorotetrafluoroethane	1.05	2.10	5.25	10.50	15.75	21.00
5)	Chloromethane	1.05	2.10	5.25	10.50	15.75	21.00
6)	Vinyl chloride	1.05	2.10	5.25	10.50	15.75	21.00
7)	1,3-Butadiene	1.00	2.00	5.00	10.00	15.00	20.00
8)	Bromomethane	1.03	2.06	5.15	10.30	15.45	20.60
9)	Chloroethane	1.03	2.06	5.15	10.30	15.45	20.60
10)	Bromoethene	1.04	2.08	5.20	10.40	15.60	20.80
11)	Trichlorofluoromethane	1.07	2.14	5.35	10.70	16.05	21.40
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	0.97	1.94	4.85	9.70	14.55	19.40
13)	1,1-Dichloroethene	0.96	1.92	4.80	9.60	14.40	19.20
14)	Acetone	1.05	2.10	5.25	10.50	15.75	21.00
15)	Carbon disulfide	1.05	2.10	5.25	10.50	15.75	21.00
16)	2-Propanol	1.06	2.12	5.30	10.60	15.90	21.20
17)	Allyl chloride	1.07	2.14	5.35	10.70	16.05	21.40
18)	Dichloromethane	0.98	1.96	4.90	9.80	14.70	19.60
19)	tert-Butyl methyl ether (MTBE)	1.07	2.14	5.35	10.70	16.05	21.40
20)	trans-1,2-Dichloroethene	1.02	2.04	5.10	10.20	15.30	20.40
21)	Hexane	1.03	2.06	5.15	10.30	15.45	20.60
22)	1,1-Dichloroethane	0.97	1.94	4.85	9.70	14.55	19.40
23)	Vinyl acetate	1.06	2.12	5.30	10.60	15.90	21.20
24)	cis-1,2-Dichloroethene	1.01	2.02	5.05	10.10	15.15	20.20
25)	2-Butanone (MEK)	1.05	2.10	5.25	10.50	15.75	21.00
26)	Ethyl acetate	1.04	2.08	5.20	10.40	15.60	20.80
27)	Tetrahydrofuran	1.03	2.06	5.15	10.30	15.45	20.60
28)	Chloroform	1.02	2.04	5.10	10.20	15.30	20.40
29)	Cyclohexane	1.05	2.10	5.25	10.50	15.75	21.00
30)	1,1,1-Trichloroethane	1.01	2.02	5.05	10.10	15.15	20.20
31)	Carbon tetrachloride	1.03	2.06	5.15	10.30	15.45	20.60
32)	1,4-DIFLUOROBENZENE	22.00	22.00	22.00	22.00	22.00	22.00
33)	Benzene	1.01	2.02	5.05	10.10	15.15	20.20
34)	2,2,4-Trimethylpentane	1.05	2.10	5.25	10.50	15.75	21.00
35)	1,2-Dichloroethane	0.98	1.96	4.90	9.80	14.70	19.60
36)	Heptane	1.05	2.10	5.25	10.50	15.75	21.00
37)	Trichloroethene	1.01	2.02	5.05	10.10	15.15	20.20
38)	1,2-Dichloropropane	1.03	2.06	5.15	10.30	15.45	20.60
39)	1,4-Dioxane	1.05	2.10	5.25	10.50	15.75	21.00
40)	Bromodichloromethane	1.04	2.08	5.20	10.40	15.60	20.80
41)	cis-1,3-Dichloropropene	1.03	2.06	5.15	10.30	15.45	20.60
42)	4-Methyl-2-pentanone (MIBK)	1.05	2.10	5.25	10.50	15.75	21.00

43)	CHLOROBENZENE-d5	22.00	22.00	22.00	22.00	22.00	22.00
44)	Toluene	1.02	2.04	5.10	10.20	15.30	20.40
45)	trans-1,3-Dichloropropene	1.07	2.14	5.35	10.70	16.05	21.40
46)	1,1,2-Trichloroethane	1.03	2.06	5.15	10.30	15.45	20.60
47)	Tetrachloroethene	1.00	2.00	5.00	10.00	15.00	20.00
48)	2-Hexanone	1.04	2.08	5.20	10.40	15.60	20.80
49)	Chlorodibromomethane	1.04	2.08	5.20	10.40	15.60	20.80
50)	1,2-Dibromoethane (EDB)	1.03	2.06	5.15	10.30	15.45	20.60
51)	Chlorobenzene	1.04	2.08	5.20	10.40	15.60	20.80
52)	Ethylbenzene	1.02	2.04	5.10	10.20	15.30	20.40
53)	m&p-Xylene	2.04	4.08	10.20	20.40	30.60	40.80
54)	o-Xylene	1.03	2.06	5.15	10.30	15.45	20.60
55)	Styrene	1.01	2.02	5.05	10.10	15.15	20.20
56)	Bromoform	1.03	2.06	5.15	10.30	15.45	20.60
57)	1,1,2,2-Tetrachloroethane	1.02	2.04	5.10	10.20	15.30	20.40
58)	4-Ethyltoluene	1.04	2.08	5.20	10.40	15.60	20.80
59)	1,3,5-Trimethylbenzene	1.03	2.06	5.15	10.30	15.45	20.60
60)	1,2,4-Trimethylbenzene	1.01	2.02	5.05	10.10	15.15	20.20
61)	1,3-Dichlorobenzene	0.99	1.98	4.95	9.90	14.85	19.80
62)	1,4-Dichlorobenzene	0.99	1.98	4.95	9.90	14.85	19.80
63)	Benzyl chloride	1.04	2.08	5.20	10.40	15.60	20.80
64)	1,2-Dichlorobenzene	0.99	1.98	4.95	9.90	14.85	19.80
65)	1,2,4-Trichlorobenzene	0.91	1.82	4.55	9.10	13.65	18.20
66)	Hexachlorobutadiene	0.95	1.90	4.75	9.50	14.25	19.00

CALIBRATION AREA REPORT

Instrument Name: HP5973K
Sample Name: S14C050-SCV1
Misc Info: 10 ppbv SCV
Date Acquired: 3/13/2014 13:56
QLast Update: Fri Mar 14 19:07:29 201
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
1)	BROMOCHLOROMETHANE	709566	743665	789402	697232	805176	813362
2)	Propene	19078	31960	84858	158716	283767	377812
3)	Dichlorodifluoromethane	79872	128598	326674	707608	1057105	1418259
4)	1,2-Dichlorotetrafluoroethane	66165	108572	277288	593674	926844	1275906
5)	Chloromethane	22302	38613	102112	185326	342349	460058
6)	Vinyl chloride	26701	44294	116178	239658	385534	524679
7)	1,3-Butadiene	18415	29499	78736	165278	269776	369007
8)	Bromomethane	22843	39445	96091	210887	308204	446235
9)	Chloroethane	15107	26573	65105	135764	202462	286996
10)	Bromoethene	19130	34830	83694	188647	273850	405902
11)	Trichlorofluoromethane	83166	149684	358748	760904	1098703	1569217
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	45739	77859	187582	416293	569487	832343
13)	1,1-Dichloroethene	43542	80160	200000	399282	630480	896746
14)	Acetone	35621	67705	181410	364040	602762	829009
15)	Carbon disulfide	63913	112797	282801	588046	897356	1299738
16)	2-Propanol	33072	63707	175863	365588	625281	869872
17)	Allyl chloride	30824	55869	146225	287802	487268	661504
18)	Dichloromethane	47908	74811	161975	284326	463081	623623
19)	tert-Butyl methyl ether (MTBE)	67117	129296	354726	748343	1152236	1555956
20)	trans-1,2-Dichloroethene	33840	62387	157092	321110	511262	687618
21)	Hexane	38630	72758	185223	370362	603859	821150
22)	1,1-Dichloroethane	53073	97166	240911	477391	751319	1017573
23)	Vinyl acetate	56575	115718	307817	643212	1098266	1503128
24)	cis-1,2-Dichloroethene	39069	74853	189041	367973	596146	809333
25)	2-Butanone (MEK)	9802	19369	56698	115554	181650	250313
26)	Ethyl acetate	6743	14067	35647	68902	119895	162776
27)	Tetrahydrofuran	27090	53182	145025	269271	475674	634233
28)	Chloroform	58544	113847	279965	552395	859408	1167575
29)	Cyclohexane	39075	76728	198346	377084	633960	861666
30)	1,1,1-Trichloroethane	66561	130026	313104	631810	961901	1311029
31)	Carbon tetrachloride	72596	138391	331015	683667	1025799	1411948
32)	1,4-DIFLUOROBENZENE	2162682	2180127	2271777	2218665	2283718	2384523
33)	Benzene	85532	165112	409623	787408	1270605	1748987
34)	2,2,4-Trimethylpentane	118747	237668	608257	1169681	1964897	2677192
35)	1,2-Dichloroethane	45162	87649	211860	421303	662839	904614
36)	Heptane	44459	92263	232103	433643	761842	1040736
37)	Trichloroethene	36668	69797	168835	352034	528606	717739
38)	1,2-Dichloropropane	31321	61986	153885	290379	480565	657034
39)	1,4-Dioxane	16009	31278	78112	165952	259400	360598
40)	Bromodichloromethane	58865	117525	280738	589369	916217	1277217
41)	cis-1,3-Dichloropropene	48891	97803	241243	475157	760423	1052956
42)	4-Methyl-2-pentanone (MIBK)	61222	126888	326597	627370	1084486	1492434

43)	CHLOROBENZENE-d5	1933415	2017227	2094248	1984797	2005780	2202262
44)	Toluene	102288	203901	491883	973941	1541109	2176823
45)	trans-1,3-Dichloropropene	49137	105496	262463	519188	827549	1158071
46)	1,1,2-Trichloroethane	34157	68409	162018	322422	500276	710088
47)	Tetrachloroethene	49292	98583	235773	491061	728856	1025283
48)	2-Hexanone	57113	122190	316337	612757	1076709	1474323
49)	Chlorodibromomethane	56444	113169	269306	577856	885743	1239626
50)	1,2-Dibromoethane (EDB)	51619	104473	244019	511177	784768	1109438
51)	Chlorobenzene	79833	161802	397692	776324	1180859	1697385
52)	Ethylbenzene	135834	289624	720145	1379845	2152493	3099418
53)	m&p-Xylene	211530	450501	1105779	2195767	3399111	4867344
54)	o-Xylene	110743	224614	582010	1119227	1763312	2460726
55)	Styrene	81041	167400	433205	863294	1344604	1888323
56)	Bromoform	60569	114182	285863	655961	949016	1392098
57)	1,1,2,2-Tetrachloroethane	79337	156709	385086	761230	1199407	1782549
58)	4-Ethyltoluene	141678	269301	684901	1460553	2223454	3262908
59)	1,3,5-Trimethylbenzene	133745	256817	659480	1346252	2072554	2984302
60)	1,2,4-Trimethylbenzene	135725	269265	650472	1353440	2139737	2957427
61)	1,3-Dichlorobenzene	95386	185840	451272	937243	1473509	2030940
62)	1,4-Dichlorobenzene	97788	184813	447762	933125	1474565	2036629
63)	Benzyl chloride	116445	220416	554820	1230785	2024309	2753116
64)	1,2-Dichlorobenzene	95378	181933	439494	931236	1383378	1952276
65)	1,2,4-Trichlorobenzene	92405	166271	415272	904331	1240474	1777651
66)	Hexachlorobutadiene	92897	163105	389269	828362	1012491	1384730

CHEMSTATION VS LIMS CONCENTRATION REPORT

Instrument Name: HP5973K
Sample Name: S14C050-SCV1
Misc Info: 10 ppbv SCV
Date Acquired: 3/13/2014 13:56
QLast Update: Fri Mar 14 19:07:29 2C
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
		1	2	5	10	15	20
1)	BROMOCHLOROMETHANE						
2)	Propene	OK	OK	OK	OK	OK	OK
3)	Dichlorodifluoromethane	OK	OK	OK	OK	OK	OK
4)	1,2-Dichlorotetrafluoroethane	OK	OK	OK	OK	OK	OK
5)	Chloromethane	OK	OK	OK	OK	OK	OK
6)	Vinyl chloride	OK	OK	OK	OK	OK	OK
7)	1,3-Butadiene	OK	OK	OK	OK	OK	OK
8)	Bromomethane	OK	OK	OK	OK	OK	OK
9)	Chloroethane	OK	OK	OK	OK	OK	OK
10)	Bromoethene	OK	OK	OK	OK	OK	OK
11)	Trichlorofluoromethane	OK	OK	OK	OK	OK	OK
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	OK	OK	OK	OK	OK	OK
13)	1,1-Dichloroethene	OK	OK	OK	OK	OK	OK
14)	Acetone	OK	OK	OK	OK	OK	OK
15)	Carbon disulfide	OK	OK	OK	OK	OK	OK
16)	2-Propanol	OK	OK	OK	OK	OK	OK
17)	Allyl chloride	OK	OK	OK	OK	OK	OK
18)	Dichloromethane	OK	OK	OK	OK	OK	OK
19)	tert-Butyl methyl ether (MTBE)	OK	OK	OK	OK	OK	OK
20)	trans-1,2-Dichloroethene	OK	OK	OK	OK	OK	OK
21)	Hexane	OK	OK	OK	OK	OK	OK
22)	1,1-Dichloroethane	OK	OK	OK	OK	OK	OK
23)	Vinyl acetate	OK	OK	OK	OK	OK	OK
24)	cis-1,2-Dichloroethene	OK	OK	OK	OK	OK	OK
25)	2-Butanone (MEK)	OK	OK	OK	OK	OK	OK
26)	Ethyl acetate	OK	OK	OK	OK	OK	OK
27)	Tetrahydrofuran	OK	OK	OK	OK	OK	OK
28)	Chloroform	OK	OK	OK	OK	OK	OK
29)	Cyclohexane	OK	OK	OK	OK	OK	OK
30)	1,1,1-Trichloroethane	OK	OK	OK	OK	OK	OK
31)	Carbon tetrachloride	OK	OK	OK	OK	OK	OK
32)	1,4-DIFLUOROBENZENE						
33)	Benzene	OK	OK	OK	OK	OK	OK
34)	2,2,4-Trimethylpentane	OK	OK	OK	OK	OK	OK
35)	1,2-Dichloroethane	OK	OK	OK	OK	OK	OK
36)	Heptane	OK	OK	OK	OK	OK	OK
37)	Trichloroethene	OK	OK	OK	OK	OK	OK
38)	1,2-Dichloropropane	OK	OK	OK	OK	OK	OK
39)	1,4-Dioxane	OK	OK	OK	OK	OK	OK
40)	Bromodichloromethane	OK	OK	OK	OK	OK	OK
41)	cis-1,3-Dichloropropene	OK	OK	OK	OK	OK	OK
42)	4-Methyl-2-pentanone (MIBK)	OK	OK	OK	OK	OK	OK
43)	CHLOROBENZENE-d5						

44)	Toluene	OK	OK	OK	OK	OK	OK
45)	trans-1,3-Dichloropropene	OK	OK	OK	OK	OK	OK
46)	1,1,2-Trichloroethane	OK	OK	OK	OK	OK	OK
47)	Tetrachloroethene	OK	OK	OK	OK	OK	OK
48)	2-Hexanone	OK	OK	OK	OK	OK	OK
49)	Chlorodibromomethane	OK	OK	OK	OK	OK	OK
50)	1,2-Dibromoethane (EDB)	OK	OK	OK	OK	OK	OK
51)	Chlorobenzene	OK	OK	OK	OK	OK	OK
52)	Ethylbenzene	OK	OK	OK	OK	OK	OK
53)	m&p-Xylene	OK	OK	OK	OK	OK	OK
54)	o-Xylene	OK	OK	OK	OK	OK	OK
55)	Styrene	OK	OK	OK	OK	OK	OK
56)	Bromoform	OK	OK	OK	OK	OK	OK
57)	1,1,2,2-Tetrachloroethane	OK	OK	OK	OK	OK	OK
58)	4-Ethyltoluene	OK	OK	OK	OK	OK	OK
59)	1,3,5-Trimethylbenzene	OK	OK	OK	OK	OK	OK
60)	1,2,4-Trimethylbenzene	OK	OK	OK	OK	OK	OK
61)	1,3-Dichlorobenzene	OK	OK	OK	OK	OK	OK
62)	1,4-Dichlorobenzene	OK	OK	OK	OK	OK	OK
63)	Benzyl chloride	OK	OK	OK	OK	OK	OK
64)	1,2-Dichlorobenzene	OK	OK	OK	OK	OK	OK
65)	1,2,4-Trichlorobenzene	OK	OK	OK	OK	OK	OK
66)	Hexachlorobutadiene	OK	OK	OK	OK	OK	OK

LIMS CONCENTRATION REPORT

Instrument Name: HP5973K
Sample Name: S14C050-SCV1
Misc Info: 10 ppbv SCV
Date Acquired: 3/13/2014 13:56
QLast Update: Fri Mar 14 19:07:29 20
Operator: EM

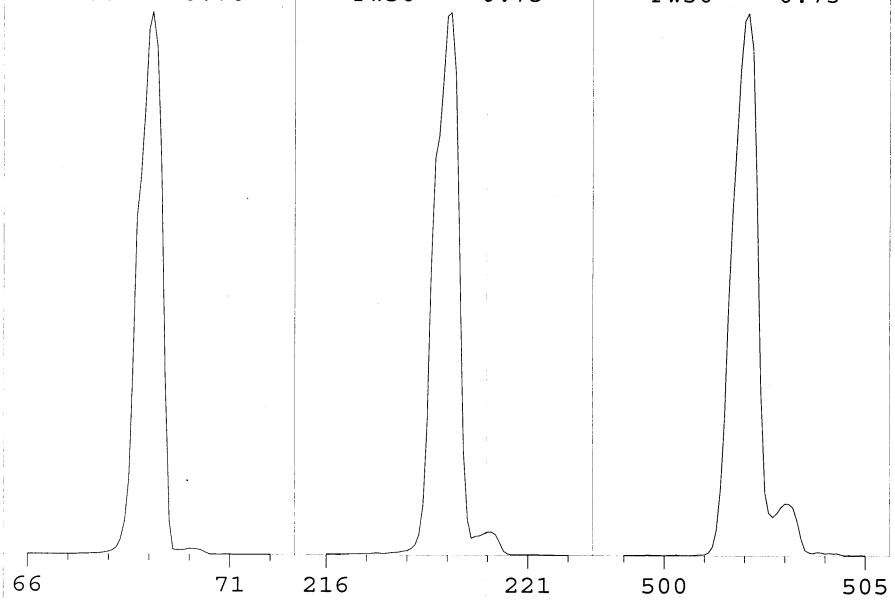
#	Name	Amount	L1	L2	L3	L4	L5	L6
			1	2	5	10	15	20
1)	BROMOCHLOROMETHANE	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2)	Propene	0.0206	1.030	2.06	5.15	10.3	15.45	20.6
3)	Dichlorodifluoromethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
4)	1,2-Dichlorotetrafluoroethane	0.021	1.05	2.1	5.25	10.5	15.75	21
5)	Chloromethane	0.021	1.05	2.1	5.25	10.5	15.75	21
6)	Vinyl chloride	0.021	1.05	2.1	5.25	10.5	15.75	21
7)	1,3-Butadiene	0.02	1	2	5	10	15	20
8)	Bromomethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
9)	Chloroethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
10)	Bromoethene	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
11)	Trichlorofluoromethane	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0194	0.97	1.94	4.85	9.7	14.55	19.4
13)	1,1-Dichloroethene	0.0192	0.96	1.92	4.8	9.6	14.4	19.2
14)	Acetone	0.021	1.05	2.1	5.25	10.5	15.75	21
15)	Carbon disulfide	0.021	1.05	2.1	5.25	10.5	15.75	21
16)	2-Propanol	0.0212	1.06	2.12	5.3	10.6	15.9	21.2
17)	Allyl chloride	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
18)	Dichloromethane	0.0196	0.98	1.96	4.9	9.8	14.7	19.6
19)	tert-Butyl methyl ether (MTBE)	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
20)	trans-1,2-Dichloroethene	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
21)	Hexane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
22)	1,1-Dichloroethane	0.0194	0.97	1.94	4.85	9.7	14.55	19.4
23)	Vinyl acetate	0.0212	1.06	2.12	5.3	10.6	15.9	21.2
24)	cis-1,2-Dichloroethene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
25)	2-Butanone (MEK)	0.021	1.05	2.1	5.25	10.5	15.75	21
26)	Ethyl acetate	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
27)	Tetrahydrofuran	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
28)	Chloroform	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
29)	Cyclohexane	0.021	1.05	2.1	5.25	10.5	15.75	21
30)	1,1,1-Trichloroethane	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
31)	Carbon tetrachloride	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
32)	1,4-DIFLUOROBENZENE	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
33)	Benzene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
34)	2,2,4-Trimethylpentane	0.021	1.05	2.1	5.25	10.5	15.75	21
35)	1,2-Dichloroethane	0.0196	0.98	1.96	4.9	9.8	14.7	19.6
36)	Heptane	0.021	1.05	2.1	5.25	10.5	15.75	21
37)	Trichloroethene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
38)	1,2-Dichloropropane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
39)	1,4-Dioxane	0.021	1.05	2.1	5.25	10.5	15.75	21
40)	Bromodichloromethane	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
41)	cis-1,3-Dichloropropene	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
42)	4-Methyl-2-pentanone (MIBK)	0.021	1.05	2.1	5.25	10.5	15.75	21
43)	CHLOROBENZENE-d5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
44)	Toluene	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
45)	trans-1,3-Dichloropropene	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
46)	1,1,2-Trichloroethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
47)	Tetrachloroethene	0.02	1	2	5	10	15	20
48)	2-Hexanone	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
49)	Chlorodibromomethane	0.0208	1.04	2.08	5.2	10.4	15.6	20.8

50)	1,2-Dibromoethane (EDB)	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
51)	Chlorobenzene	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
52)	Ethylbenzene	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
53)	m&p-Xylene	0.0408	2.04	4.08	10.2	20.4	30.6	40.8
54)	o-Xylene	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
55)	Styrene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
56)	Bromoform	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
57)	1,1,2,2-Tetrachloroethane	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
58)	4-Ethyltoluene	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
59)	1,3,5-Trimethylbenzene	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
60)	1,2,4-Trimethylbenzene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
61)	1,3-Dichlorobenzene	0.0198	0.99	1.98	4.95	9.9	14.85	19.8
62)	1,4-Dichlorobenzene	0.0198	0.99	1.98	4.95	9.9	14.85	19.8
63)	Benzyl chloride	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
64)	1,2-Dichlorobenzene	0.0198	0.99	1.98	4.95	9.9	14.85	19.8
65)	1,2,4-Trichlorobenzene	0.0182	0.91	1.82	4.55	9.1	13.65	18.2
66)	Hexachlorobutadiene	0.019	0.95	1.9	4.75	9.5	14.25	19

5973N

Wed Mar 12 19:23:28 2014 Instrument: HP5973K
C:\msdchem\1\5973N\BFB031214KA.u US03960556

Mass	69.10	Mass	219.10	Mass	502.10
Ab	373522	Ab	190597	Ab	25285
Pw50	0.70	Pw50	0.73	Pw50	0.73

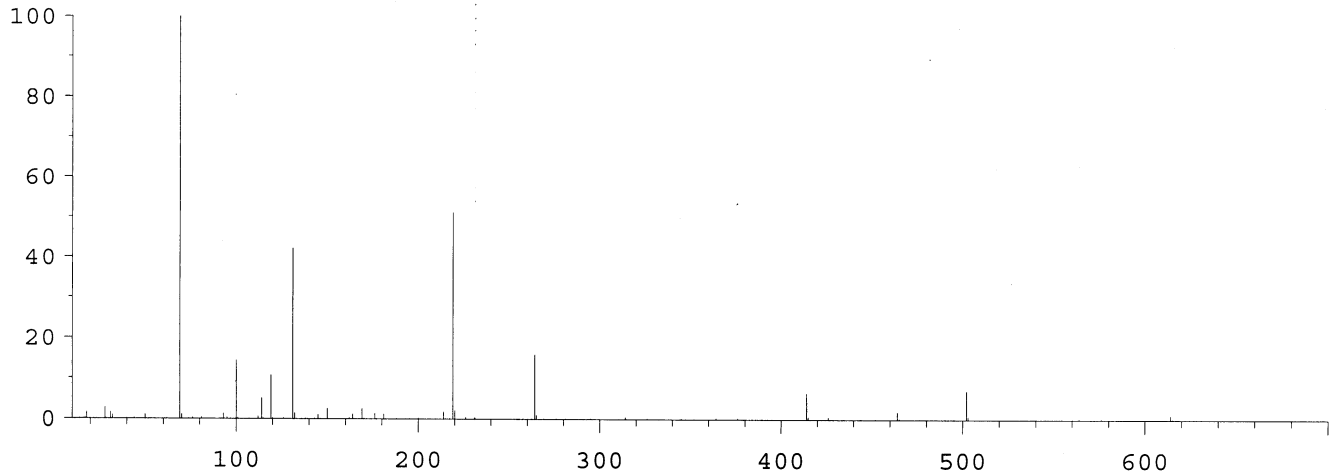


Ion Pol	Pos	MassGain	99
		MassOffs	-8
Emission	34.6	AmuGain	2003
EIEnrgy	69.9	AmuOffs	125
Filament	1	Wid219	-0.016
		DC Pol	Pos
Repeller	32.97		
IonFcus	86.4	HEDEnab	On
EntLens	16.5	EMVolts	1482
EntOffs	19.07		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
109 peaks Base: 69.10 Abundance: 298432



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	298432	100.00	70.10	3249	1.09
219.00	152192	51.00	220.00	6280	4.13
502.00	20832	6.98	503.00	1999	9.60

Air/Water Check: H20~1.52% N2~2.73% O2~0.92% CO2~0.21% N2/H2O~180.28%

Column Flow: Front: 1.499 Back: 0 ml/min. Interface Temp: 260

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 48955
Repeller Maximum 35 volts using ion 219; Gain Factor 0.49

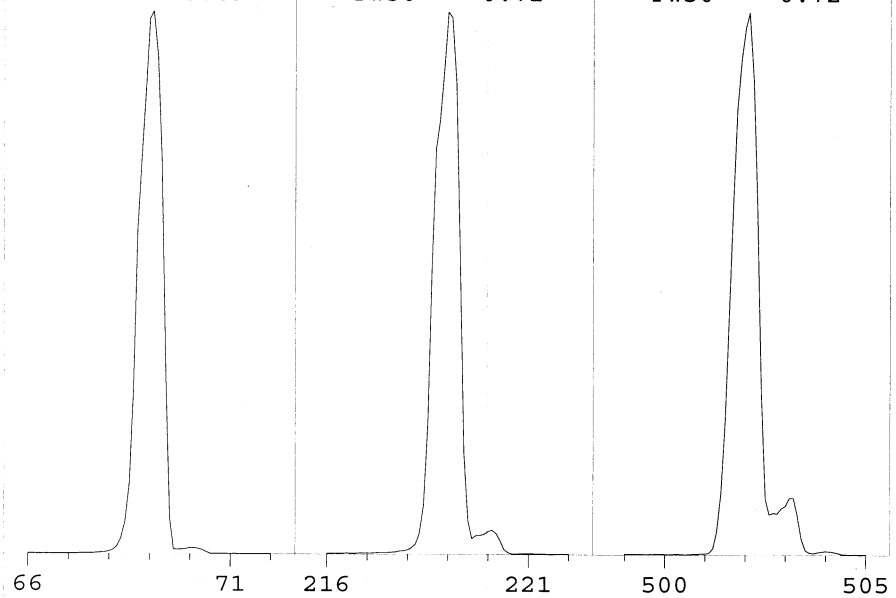
MassGain Values(Samples): 99(3) 99(2) 99(1) 99(0) 99(FS)

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	125.0	125.0	125.0	125.0	125.0	125.0	125.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

5973N

Wed Mar 12 19:23:57 2014 Instrument: HP5973K
C:\msdchem\1\5973N\BFB031214KA.u US03960556

Mass	69.10	Mass	219.00	Mass	502.10
Ab	309823	Ab	154057	Ab	21653
Pw50	0.69	Pw50	0.72	Pw50	0.72

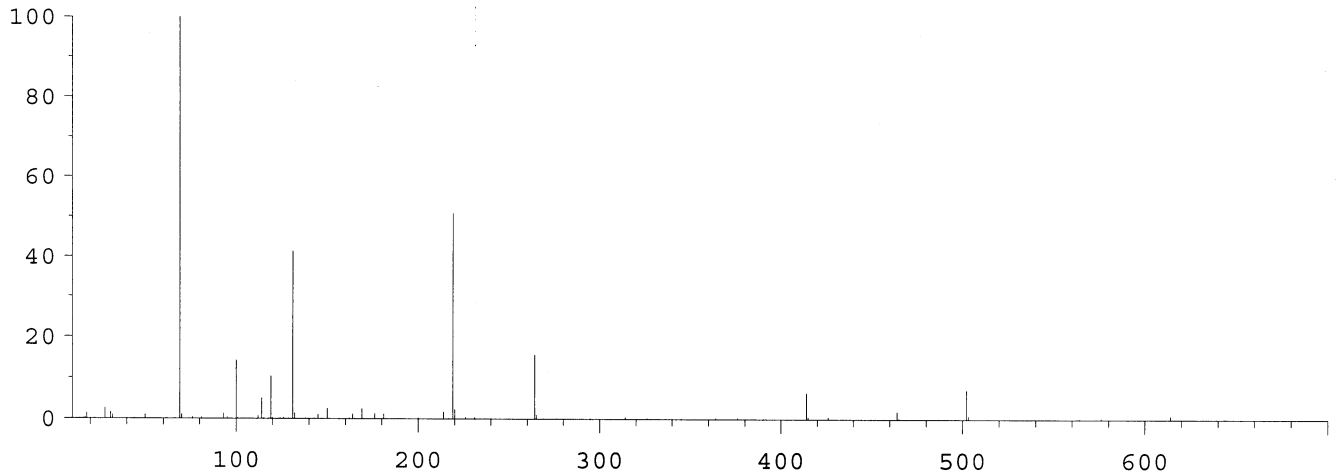


Ion Pol	Pos	MassGain	99
		MassOffs	-8
Emission	34.6	AmuGain	2003
EIEnrgy	69.9	AmuOffs	125
Filament	1	Wid219	-0.016
		DC Pol	Pos
Repeller	32.97		
IonFcus	86.4	HEDEnab	On
EntLens	16.5	EMVolts	1482
EntOffs	19.07		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
104 peaks Base: 69.10 Abundance: 274688



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	274688	100.00	70.10	2877	1.05
219.00	139520	50.79	220.00	6334	4.54
502.00	19568	7.12	503.10	2126	10.86

Air/Water Check: H20~1.38% N2~2.68% O2~0.96% CO2~0.15% N2/H2O~194.84%

Column Flow: Front: 1.499 Back: 0 ml/min. Interface Temp: 260

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 47544
Repeller Maximum 35 volts using ion 219; Gain Factor 0.48

MassGain Values(Samples): 99(3) 99(2) 99(1) 99(0) 99(FS)

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	125.0	125.0	125.0	125.0	125.0	125.0	125.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K01.D
Acq On : 13 Mar 2014 6:54
Instrument: HP5973K
Operator : EM
Sample : S14C050-PRM1
Misc : BFB STD /IS 1350050/10ppbv STD
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 25 13:35:09 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

NU

em 3/27/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	741293	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2342319	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2076263	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	153148	9.16	ppbv	99
3) Dichlorodifluoromethane	4.463	85	661424	9.88	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	564906	10.07	ppbv	98
5) Chloromethane	5.011	50	180075	9.20	ppbv	99
6) Vinyl chloride	5.339	62	228485	9.94	ppbv	99
7) 1,3-Butadiene	5.437	54	158107	9.52	ppbv	99
8) Bromomethane	6.361	94	195096	9.79	ppbv	99
9) Chloroethane	6.696	64	125826	9.58	ppbv	99
10) Bromoethene	7.262	106	175144	10.08	ppbv	100
11) Trichlorofluoromethane	7.408	101	710812	10.17	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	388007	9.45	ppbv	100
13) 1,1-Dichloroethene	9.300	61	376665	8.86	ppbv	98
14) Acetone	9.817	43	335575	9.68	ppbv	99
15) Carbon disulfide	10.012	76	535239	9.56	ppbv	99
16) 2-Propanol	10.450	45	339154	9.98	ppbv	97
17) Allyl chloride	10.839	41	261642	9.43	ppbv	99
18) Dichloromethane	11.380	49	263065	7.55	ppbv	99
19) tert-Butyl methyl ethe...	12.080	73	665184	10.11	ppbv	100
20) trans-1,2-Dichloroethene	12.104	61	293277	9.31	ppbv	100
21) Hexane	12.713	57	331135	9.09	ppbv	99
22) 1,1-Dichloroethane	13.449	63	433214	8.63	ppbv	99
23) Vinyl acetate	13.595	43	584676	9.81	ppbv	99
24) cis-1,2-Dichloroethene	14.897	61	338654	9.07	ppbv	100
25) 2-Butanone (MEK)	14.994	72	105852	10.20	ppbv #	77
26) Ethyl acetate	15.049	61	67391	9.82	ppbv #	93
27) Tetrahydrofuran	15.456	42	251173	9.20	ppbv	98
28) Chloroform	15.596	83	520387	9.50	ppbv	99
29) Cyclohexane	15.834	56	358788	9.64	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	592622	9.48	ppbv	100
31) Carbon tetrachloride	16.138	117	644672	9.79	ppbv	99
33) Benzene	16.631	78	743456	8.64	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1098682	8.98	ppbv	100
35) 1,2-Dichloroethane	16.831	62	397408	8.53	ppbv	100
36) Heptane	16.971	43	410707	8.79	ppbv	99
37) Trichloroethene	17.859	130	327508	9.00	ppbv	99
38) 1,2-Dichloropropane	18.364	63	272378	8.65	ppbv	99
39) 1,4-Dioxane	18.565	88	157874	9.64	ppbv	99
40) Bromodichloromethane	18.827	83	544748	9.13	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	442484	8.85	ppbv	100
42) 4-Methyl-2-pentanone (...	19.831	43	595496	9.03	ppbv	99
44) Toluene	20.068	91	933912	9.17	ppbv	100
45) trans-1,3-Dichloropropene	20.536	75	469013	9.26	ppbv	100
46) 1,1,2-Trichloroethane	20.846	97	300148	9.02	ppbv	100
47) Tetrachloroethene	20.926	166	454488	9.08	ppbv	100
48) 2-Hexanone	21.181	43	570313	9.01	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K01.D
Acq On : 13 Mar 2014 6:54
Instrument: HP5973K
Operator : EM
Sample : S14C050-PRM1
Misc : BFB STD /IS 1350050/10ppbv STD
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 25 13:35:09 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	531881	9.42	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	467240	9.10	ppbv	99
51) Chlorobenzene	22.398	112	712583	9.07	ppbv	99
52) Ethylbenzene	22.489	91	1268095	8.85	ppbv	100
53) m&p-Xylene	22.672	91	1997595	17.82	ppbv	99
54) o-Xylene	23.316	91	1035202	9.08	ppbv	99
55) Styrene	23.353	104	785113	8.96	ppbv	100
56) Bromoform	23.730	173	575218	9.35	ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.424	83	679415	8.51	ppbv	99
58) 4-Ethyltoluene	24.667	105	1316446	9.27	ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1224951	9.11	ppbv	99
60) 1,2,4-Trimethylbenzene	25.367	105	1256713	9.05	ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	908048	9.25	ppbv	100
62) 1,4-Dichlorobenzene	26.042	146	903795	9.19	ppbv	100
63) Benzyl chloride	26.255	91	1184073	9.90	ppbv	100
64) 1,2-Dichlorobenzene	26.644	146	836754	8.75	ppbv	100
65) 1,2,4-Trichlorobenzene	29.108	180	886368	9.11	ppbv	99
66) Hexachlorobutadiene	29.248	225	804460	9.50	ppbv	99

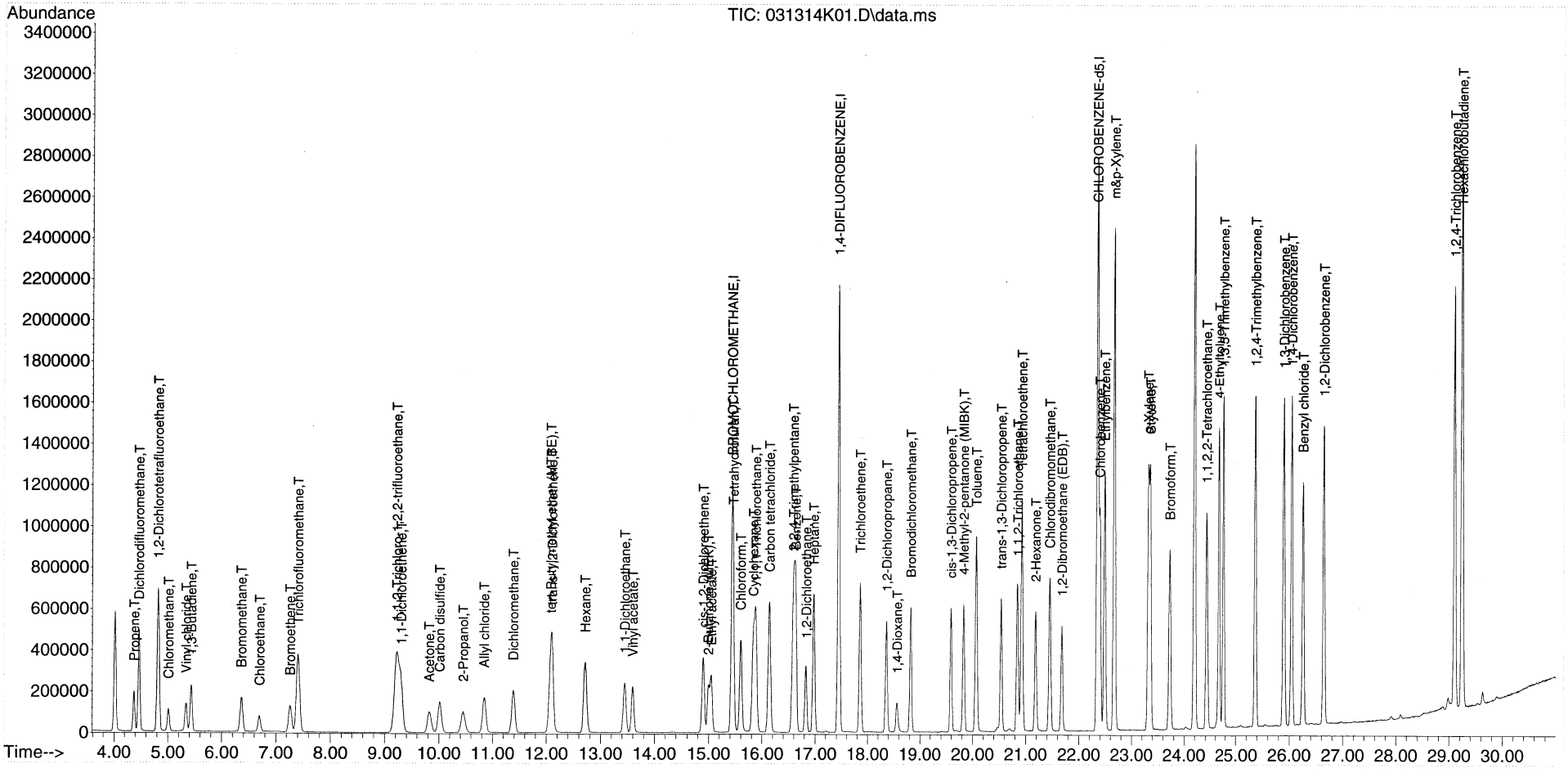
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K01.D
Acq On : 13 Mar 2014 6:54
Instrument: HP5973K
Operator : EM
Sample : S14C050-PRM1
Misc : BFB STD /IS 1350050/10ppbv STD
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 25 13:35:09 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

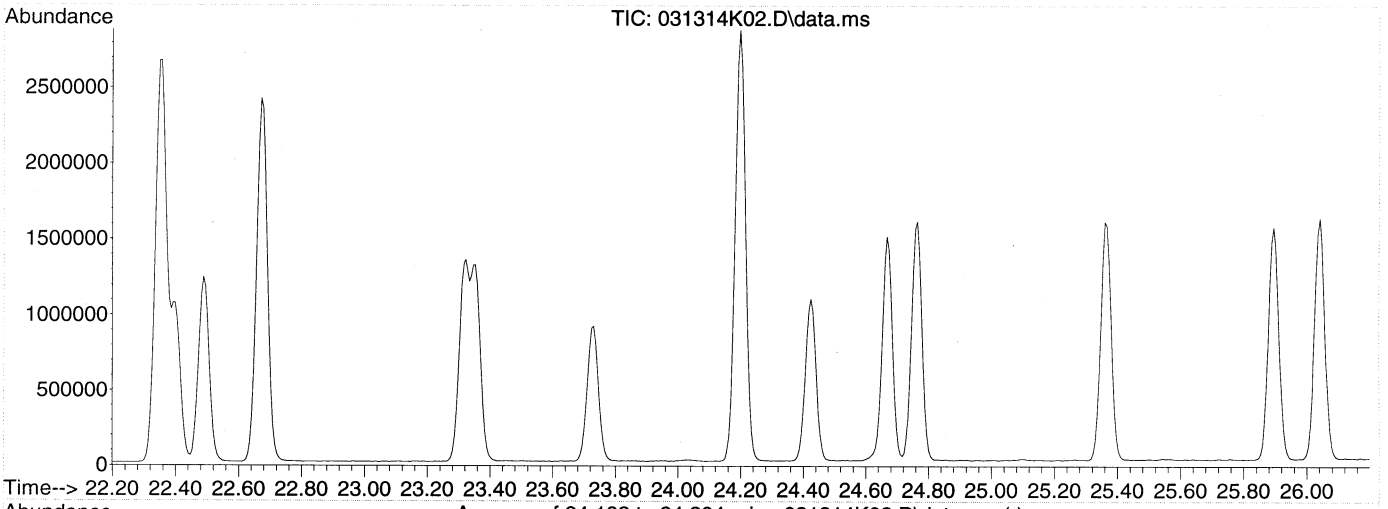


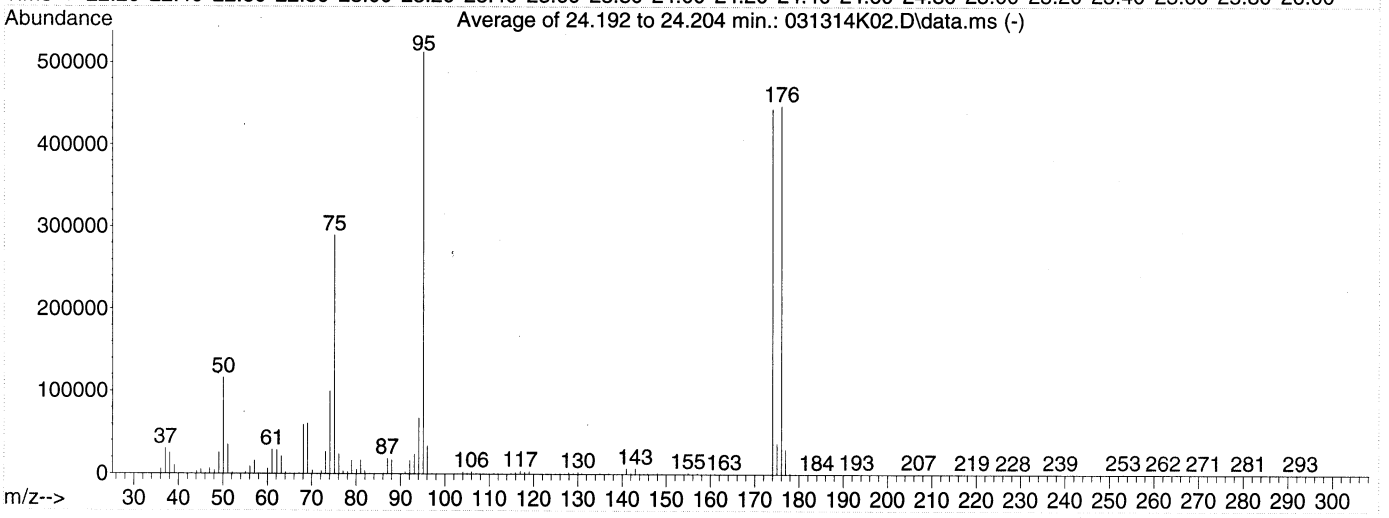
BFB

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K02.D
Acq On : 13 Mar 2014 7:42
Operator : EM
Sample : S14C050-TUN1
Misc : BFB STD/IS 150050/10ppbv STD
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Title : TO15
Last Update : Fri Mar 14 19:40:54 2014





AutoFind: Scans 3388, 3389, 3390; Background Corrected with Scan 3373

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.7	116445	PASS
75	95	30	66	56.4	289361	PASS
95	95	100	100	100.0	512832	PASS
96	95	5	9	6.6	33619	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.5	443456	PASS
175	174	4	9	8.3	36737	PASS
176	174	93	101	100.9	447249	PASS
177	176	5	9	6.6	29346	PASS

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.15	11	45.05	4828	56.10	8875	67.00	543
36.05	5816	46.10	416	57.10	15703	67.20	525
37.10	30452	47.00	6304	58.10	721	68.10	59288
38.10	24955	48.05	4227	58.90	67	69.05	60799
39.10	9728	49.10	25410	60.05	6184	70.10	4241
40.10	364	50.10	116445	61.05	28894	71.05	294
41.20	152	51.10	35070	62.10	28549	72.10	3378
41.95	79	52.10	1428	63.10	21237	73.10	26798
42.40	22	53.05	189	64.10	1700	74.05	100191
43.05	317	54.15	16	65.10	265	75.10	289361
44.10	2996	55.10	1683	66.15	141	76.10	23776

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.05	3011	88.00	16607	98.60	9	107.00	573
78.00	2083	89.70	26	99.50	7	108.65	183
78.95	15786	91.00	2229	99.80	7	109.30	41
80.05	4916	92.10	15568	100.40	8	109.95	306
81.00	15988	93.10	23795	101.35	76	110.95	457
81.95	3236	94.10	67301	102.15	44	111.20	139
83.05	316	95.10	512832	102.85	162	111.95	425
84.10	40	96.05	33619	103.10	277	112.70	67
85.20	25	97.10	774	104.00	2220	112.95	334
86.10	700	97.80	31	105.00	909	113.80	11
87.00	18499	98.15	32	106.00	2498	114.90	826

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.90	1909	124.95	199	133.95	280	141.95	1015
117.00	3466	125.85	220	135.00	987	142.95	6368
118.00	2055	126.05	49	135.85	196	144.00	440
119.00	2991	127.05	218	137.00	1009	144.95	485
120.00	186	127.95	1884	137.90	9	145.80	862
121.20	30	128.95	1183	138.30	46	147.05	451
121.40	31	130.00	2153	138.60	29	147.95	1495
121.95	131	130.90	867	138.85	91	149.00	421
122.90	127	131.90	111	140.00	413	149.90	229
123.10	85	132.10	19	140.20	200	150.10	314
124.00	390	133.05	66	141.00	6249	150.70	23

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
151.05	75	160.95	762	169.60	33	178.10	320
151.90	62	161.75	0	169.80	35	179.10	108
152.05	188	162.20	96	170.15	143	179.90	20
152.90	290	163.05	138	170.55	136	181.15	51
154.00	383	165.20	58	171.10	92	182.10	27
154.95	1291	165.80	11	171.95	295	182.80	10
156.00	107	166.80	19	174.00	443456	184.00	24
157.00	998	167.25	30	175.00	36737	184.70	8
157.90	144	168.60	35	176.00	447249	188.00	49
158.95	789	169.00	24	177.00	29346	188.80	24
160.05	50	169.30	44	177.90	586	189.20	15

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
189.80	17	199.10	31	216.80	23	225.70	37
191.00	152	201.60	7	217.20	31	228.30	11
191.60	59	202.20	27	218.00	46	229.60	7
192.20	90	207.05	605	219.10	141	230.90	7
193.05	414	210.25	80	220.10	35	233.20	75
193.80	17	210.70	9	220.90	18	233.80	22
194.15	79	211.70	8	221.40	15	234.30	13
194.90	12	212.90	7	221.90	29	235.00	44
196.30	22	213.60	31	223.15	82	236.10	53

196.80	22	215.65	27	224.00	46	237.05	10
197.85	37	216.15	36	225.10	79	238.10	32

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
238.95	156	251.30	34	263.05	7	273.05	87
240.10	22	251.60	31	263.30	23	274.00	12
240.60	13	253.05	484	263.70	9	274.70	11
240.90	14	253.80	125	263.90	16	275.40	29
241.20	39	255.05	120	265.10	59	276.20	11
244.40	15	255.70	23	265.30	18	280.30	20
245.90	14	256.30	25	266.05	35	281.15	107
248.00	39	258.10	9	268.15	142	281.90	41
249.05	5	258.30	10	269.10	75	282.10	98
249.80	60	260.90	92	271.15	404	282.80	38
250.10	7	262.10	141	271.85	86	285.40	12

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
286.20	10	294.75	15				
286.85	18	296.20	28				
287.40	29	298.20	10				
289.85	19						
291.30	17						
291.95	35						
292.80	45						
293.00	13						
293.30	20						
294.00	12						
294.20	40						

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:04:20 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:13 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	100	0.00
2	T	Propene	0.496	0.486	2.0	100	0.00
3	T	Dichlorodifluoromethane	1.986	2.167	-9.1	100	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.665	1.784	-7.1	100	0.00
5	T	Chloromethane	0.581	0.557	4.1	100	0.00
6	T	Vinyl chloride	0.682	0.720	-5.6	100	0.00
7	T	1,3-Butadiene	0.493	0.521	-5.7	100	0.00
8	T	Bromomethane	0.592	0.646	-9.1	100	0.00
9	T	Chloroethane	0.390	0.416	-6.7	100	0.00
10	T	Bromoethene	0.516	0.572	-10.9	100	0.00
11	T	Trichlorofluoromethane	2.074	2.243	-8.1	100	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	1.218	1.354	-11.2	100	0.00
13	T	1,1-Dichloroethene	1.262	1.312	-4.0	100	0.00
14	T	Acetone	1.029	1.094	-6.3	100	0.00
15	T	Carbon disulfide	1.662	1.767	-6.3	100	0.00
16	T	2-Propanol	1.009	1.088	-7.8	100	0.00
17	T	Allyl chloride	0.823	0.848	-3.0	100	0.00
18	T	Dichloromethane	1.034	0.915	11.5	100	0.00
19	T	tert-Butyl methyl ether (MT	1.952	2.206	-13.0	100	0.00
20	T	trans-1,2-Dichloroethene	0.935	0.993	-6.2	100	0.00
21	T	Hexane	1.082	1.134	-4.8	100	0.00
22	T	1,1-Dichloroethane	1.491	1.553	-4.2	100	0.00
23	T	Vinyl acetate	1.768	1.915	-8.3	100	0.00
24	T	cis-1,2-Dichloroethene	1.108	1.149	-3.7	100	0.00
25	T	2-Butanone (MEK)	0.308	0.347	-12.7	100	0.00
26	T	Ethyl acetate	0.204	0.209	-2.5	100	0.00
27	T	Tetrahydrofuran	0.810	0.825	-1.9	100	0.00
28	T	Chloroform	1.625	1.708	-5.1	100	0.00
29	T	Cyclohexane	1.105	1.133	-2.5	100	0.00
30	T	1,1,1-Trichloroethane	1.856	1.973	-6.3	100	0.00
31	T	Carbon tetrachloride	1.954	2.094	-7.2	100	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	100	0.00
33	T	Benzene	0.808	0.773	4.3	100	0.00
34	T	2,2,4-Trimethylpentane	1.149	1.104	3.9	100	0.00
35	T	1,2-Dichloroethane	0.437	0.426	2.5	100	0.00
36	T	Heptane	0.439	0.409	6.8	100	0.00
37	T	Trichloroethene	0.342	0.346	-1.2	100	0.00
38	T	1,2-Dichloropropane	0.296	0.279	5.7	100	0.00
39	T	1,4-Dioxane	0.154	0.157	-1.9	100	0.00
40	T	Bromodichloromethane	0.560	0.562	-0.4	100	0.00
41	T	cis-1,3-Dichloropropene	0.470	0.457	2.8	100	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.619	0.592	4.4	100	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	100	0.00
44	T	Toluene	1.079	1.058	1.9	100	0.00
45	T	trans-1,3-Dichloropropene	0.536	0.538	-0.4	100	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:04:20 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:13 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	1,1,2-Trichloroethane	0.353	0.347	1.7	100	0.00
47	T	Tetrachloroethene	0.530	0.544	-2.6	100	0.00
48	T	2-Hexanone	0.670	0.653	2.5	100	0.00
49	T	Chlorodibromomethane	0.598	0.616	-3.0	100	0.00
50	T	1,2-Dibromoethane (EDB)	0.544	0.550	-1.1	100	0.00
51	T	Chlorobenzene	0.833	0.827	0.7	100	0.00
52	T	Ethylbenzene	1.518	1.499	1.3	100	0.00
53	T	m&p-Xylene	1.188	1.193	-0.4	100	0.00
54	T	o-Xylene	1.208	1.204	0.3	100	0.00
55	T	Styrene	0.929	0.947	-1.9	100	0.00
56	T	Bromoform	0.652	0.706	-8.3	100	0.00
57	T	1,1,2,2-Tetrachloroethane	0.846	0.827	2.2	100	0.00
58	T	4-Ethyltoluene	1.505	1.556	-3.4	100	0.00
59	T	1,3,5-Trimethylbenzene	1.425	1.448	-1.6	100	0.00
60	T	1,2,4-Trimethylbenzene	1.472	1.485	-0.9	100	0.00
61	T	1,3-Dichlorobenzene	1.040	1.049	-0.9	100	0.00
62	T	1,4-Dichlorobenzene	1.042	1.044	-0.2	100	0.00
63	T	Benzyl chloride	1.268	1.311	-3.4	100	0.00
64	T	1,2-Dichlorobenzene	1.013	1.042	-2.9	100	0.00
65	T	1,2,4-Trichlorobenzene	1.031	1.101	-6.8	100	0.00
66	T	Hexachlorobutadiene	0.897	0.966	-7.7	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:04:20 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:13 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	697232	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2218665	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	1984797	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.372	41	158716	10.10	ppbv		100
3) Dichlorodifluoromethane	4.463	85	707608	11.24	ppbv		100
4) 1,2-Dichlorotetrafluor...	4.816	85	593674	11.25	ppbv		100
5) Chloromethane	5.011	50	185326	10.06	ppbv		100
6) Vinyl chloride	5.333	62	239658	11.09	ppbv		100
7) 1,3-Butadiene	5.431	54	165278	10.58	ppbv		100
8) Bromomethane	6.362	94	210887	11.25	ppbv		100
9) Chloroethane	6.690	64	135764	10.99	ppbv		100
10) Bromoethene	7.262	106	188647	11.55	ppbv		100
11) Trichlorofluoromethane	7.408	101	760904	11.58	ppbv		100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	416293	10.78	ppbv		100
13) 1,1-Dichloroethene	9.294	61	399282	9.98	ppbv		100
14) Acetone	9.817	43	364040	11.16	ppbv		100
15) Carbon disulfide	10.012	76	588046	11.16	ppbv		100
16) 2-Propanol	10.450	45	365588	11.44	ppbv		100
17) Allyl chloride	10.839	41	287802	11.03	ppbv		100
18) Dichloromethane	11.380	49	284326	8.68	ppbv		100
19) tert-Butyl methyl ethe...	12.074	73	748343	12.10	ppbv		100
20) trans-1,2-Dichloroethene	12.098	61	321110	10.84	ppbv		100
21) Hexane	12.713	57	370362	10.80	ppbv		100
22) 1,1-Dichloroethane	13.449	63	477391	10.11	ppbv		100
23) Vinyl acetate	13.595	43	643212	11.48	ppbv		100
24) cis-1,2-Dichloroethene	14.897	61	367973	10.48	ppbv		100
25) 2-Butanone (MEK)	14.994	72	115554	11.81	ppbv		100
26) Ethyl acetate	15.043	61	68902	10.67	ppbv	#	100
27) Tetrahydrofuran	15.456	42	269271	10.49	ppbv		100
28) Chloroform	15.596	83	552395	10.73	ppbv		100
29) Cyclohexane	15.834	56	377084	10.77	ppbv		100
30) 1,1,1-Trichloroethane	15.876	97	631810	10.74	ppbv		100
31) Carbon tetrachloride	16.138	117	683667	11.04	ppbv		100
33) Benzene	16.625	78	787408	9.66	ppbv		100
34) 2,2,4-Trimethylpentane	16.588	57	1169681	10.09	ppbv		100
35) 1,2-Dichloroethane	16.825	62	421303	9.55	ppbv		100
36) Heptane	16.971	43	433643	9.79	ppbv		100
37) Trichloroethene	17.859	130	352034	10.21	ppbv		100
38) 1,2-Dichloropropane	18.358	63	290379	9.73	ppbv		100
39) 1,4-Dioxane	18.559	88	165952	10.70	ppbv		100
40) Bromodichloromethane	18.827	83	589369	10.43	ppbv		100
41) cis-1,3-Dichloropropene	19.593	75	475157	10.03	ppbv		100
42) 4-Methyl-2-pentanone (...	19.831	43	627370	10.04	ppbv		100
44) Toluene	20.068	91	973941	10.01	ppbv		100
45) trans-1,3-Dichloropropene	20.536	75	519188	10.73	ppbv		100
46) 1,1,2-Trichloroethane	20.840	97	322422	10.13	ppbv		100
47) Tetrachloroethene	20.926	166	491061	10.26	ppbv		100
48) 2-Hexanone	21.181	43	612757	10.13	ppbv		100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:04:20 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:13 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	577856	10.71	ppbv	100
50) 1,2-Dibromoethane (EDB)	21.680	107	511177	10.41	ppbv	100
51) Chlorobenzene	22.398	112	776324	10.33	ppbv	100
52) Ethylbenzene	22.489	91	1379845	10.08	ppbv	100
53) m&p-Xylene	22.672	91	2195767	20.49	ppbv	100
54) o-Xylene	23.316	91	1119227	10.27	ppbv	100
55) Styrene	23.353	104	863294	10.30	ppbv	100
56) Bromoform	23.730	173	655961	11.16	ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.424	83	761230	9.98	ppbv	100
58) 4-Ethyltoluene	24.667	105	1460553	10.76	ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1346252	10.47	ppbv	100
60) 1,2,4-Trimethylbenzene	25.367	105	1353440	10.19	ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	937243	9.99	ppbv	100
62) 1,4-Dichlorobenzene	26.042	146	933125	9.93	ppbv	100
63) Benzyl chloride	26.255	91	1230785	10.76	ppbv	100
64) 1,2-Dichlorobenzene	26.644	146	931236	10.19	ppbv	100
65) 1,2,4-Trichlorobenzene	29.108	180	904331	9.73	ppbv	100
66) Hexachlorobutadiene	29.248	225	828362	10.24	ppbv	100

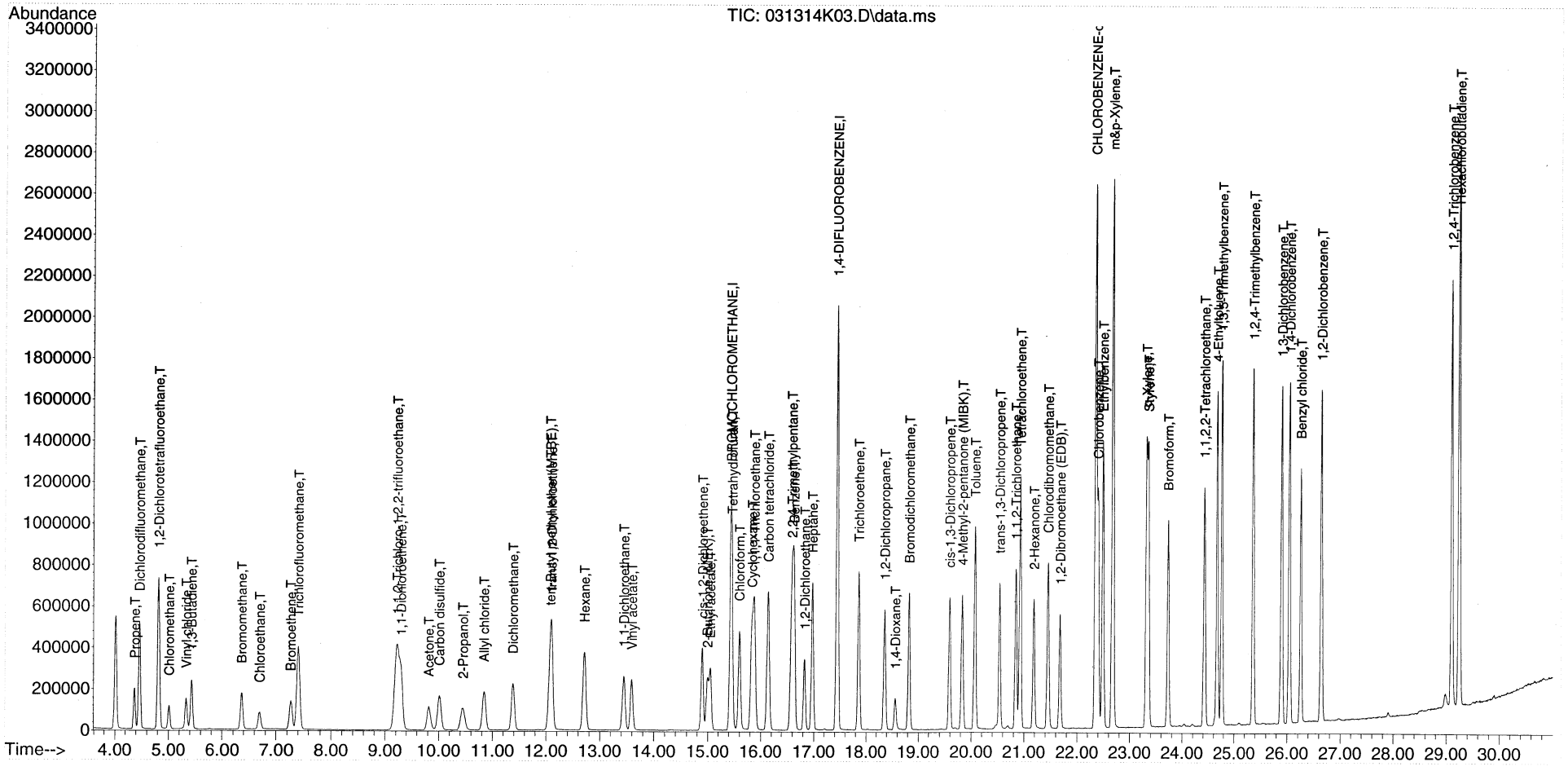
(#) = qualifier out of range (m) = manual integration (+) = signals summed

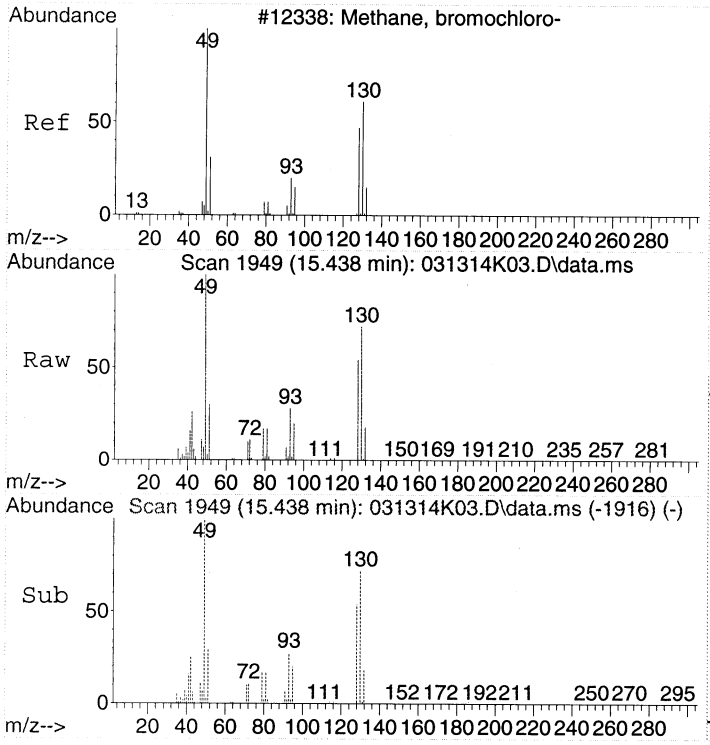
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:04:20 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:13 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

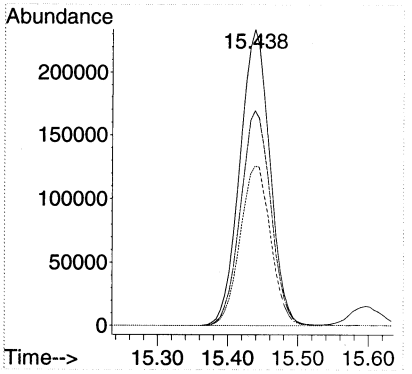


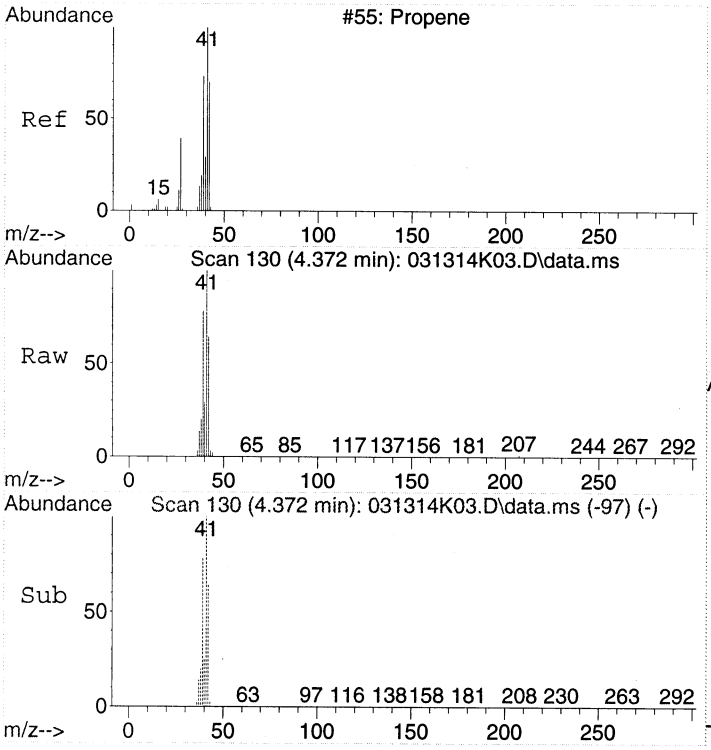


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 49 Resp: 697232

Ion	Ratio	Lower	Upper
49	100		
130	73.4	53.4	93.4
128	55.1	35.1	75.1

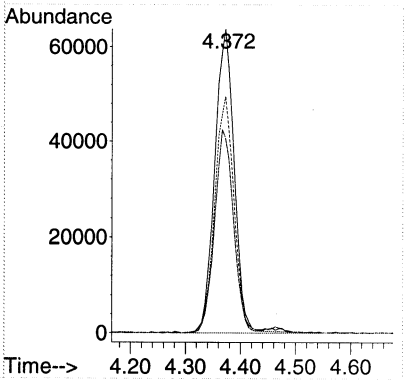


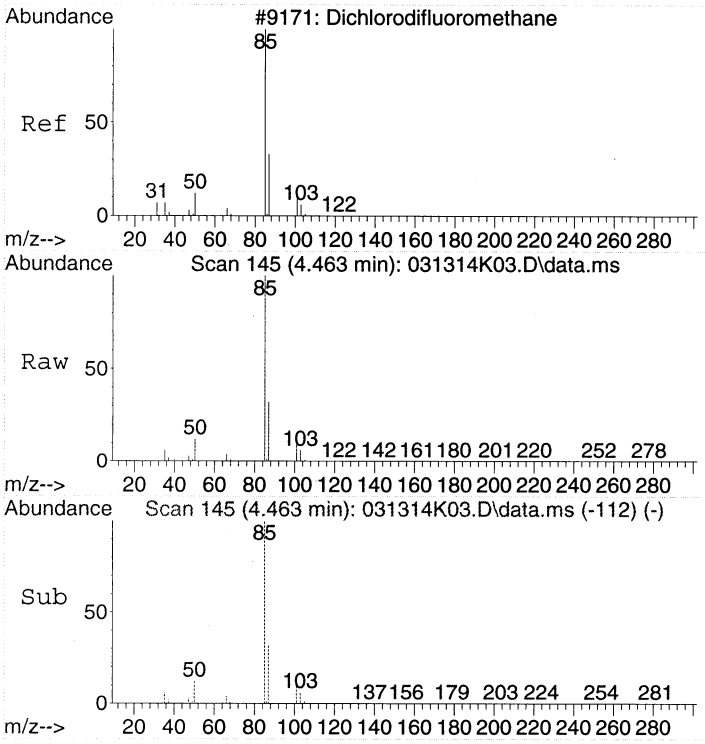


#2
Propene
Concen: 10.10 ppbv
RT: 4.372 min Scan# 130
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 41 Resp: 158716

Ion	Ratio	Lower	Upper
41	100		
42	66.3	46.3	86.3
39	76.1	56.1	96.1

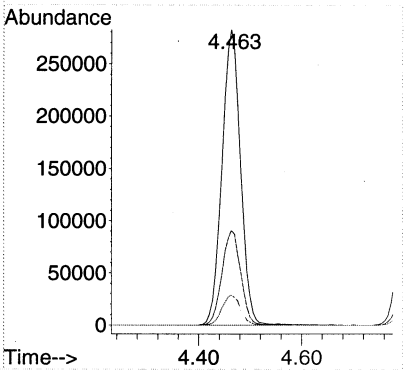


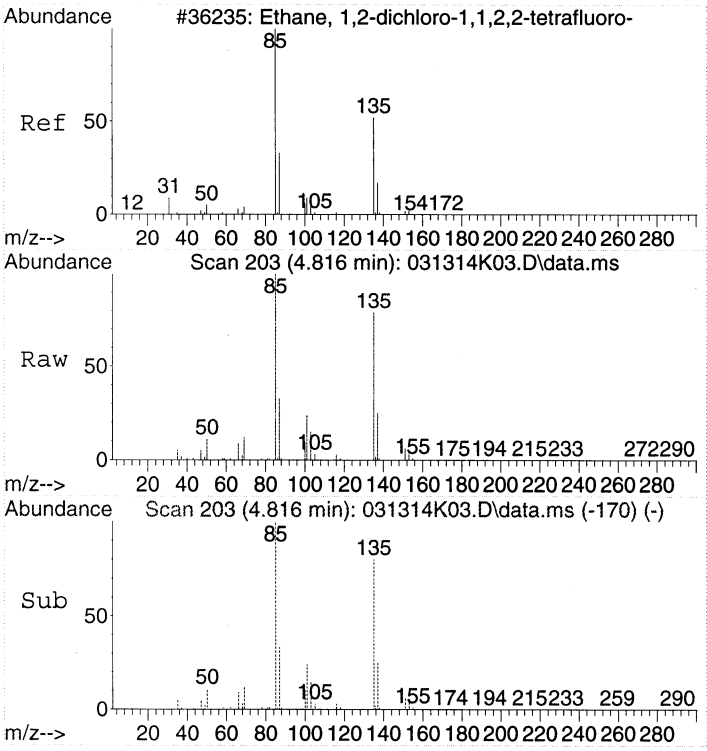


#3
Dichlorodifluoromethane
Concen: 11.24 ppbv
RT: 4.463 min Scan# 145
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 85 Resp: 707608

Ion	Ratio	Lower	Upper
85	100		
87	32.4	12.4	52.4
101	10.1	0.0	30.1

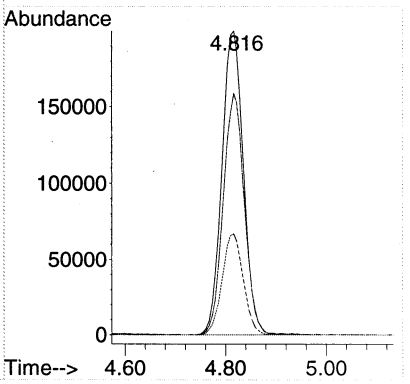


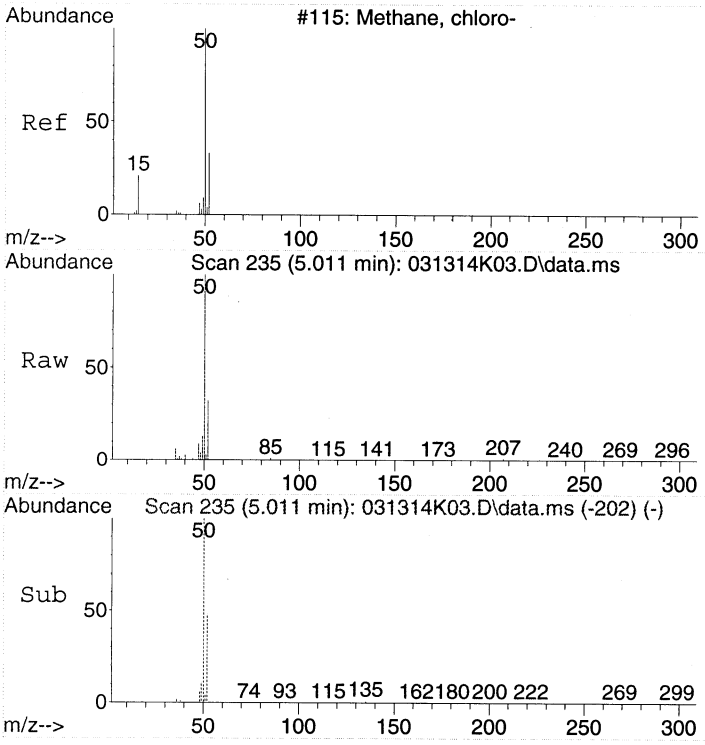


#4
1,2-Dichlorotetrafluoroethane
Concen: 11.25 ppbv
RT: 4.816 min Scan# 203
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 85 Resp: 593674

Ion	Ratio	Lower	Upper
85	100		
135	78.8	58.8	98.8
87	33.0	13.0	53.0

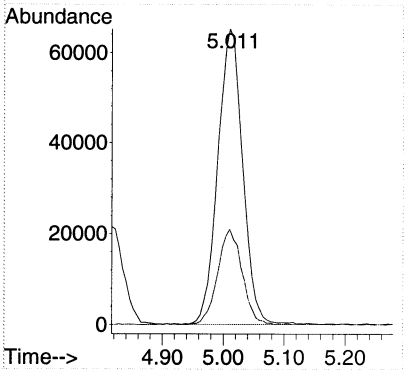


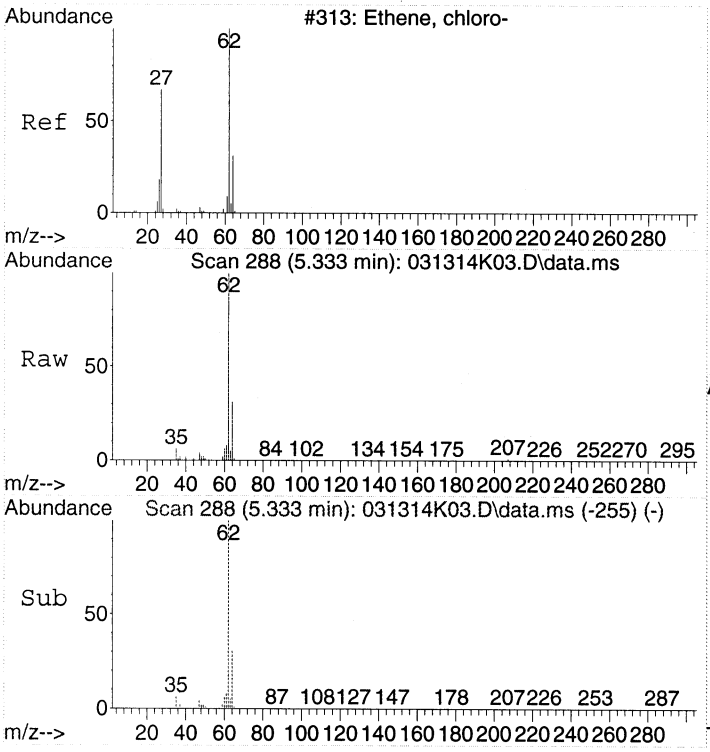


#5
Chloromethane
Concen: 10.06 ppbv
RT: 5.011 min Scan# 235
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 50 Resp: 185326

Ion	Ratio	Lower	Upper
50	100		
52	32.1	12.1	52.1

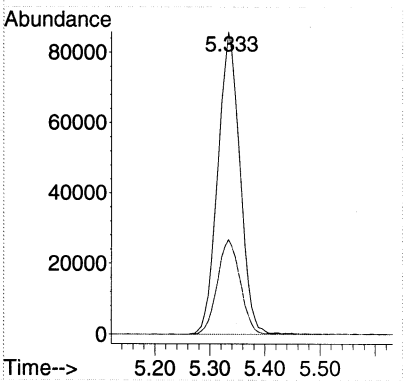


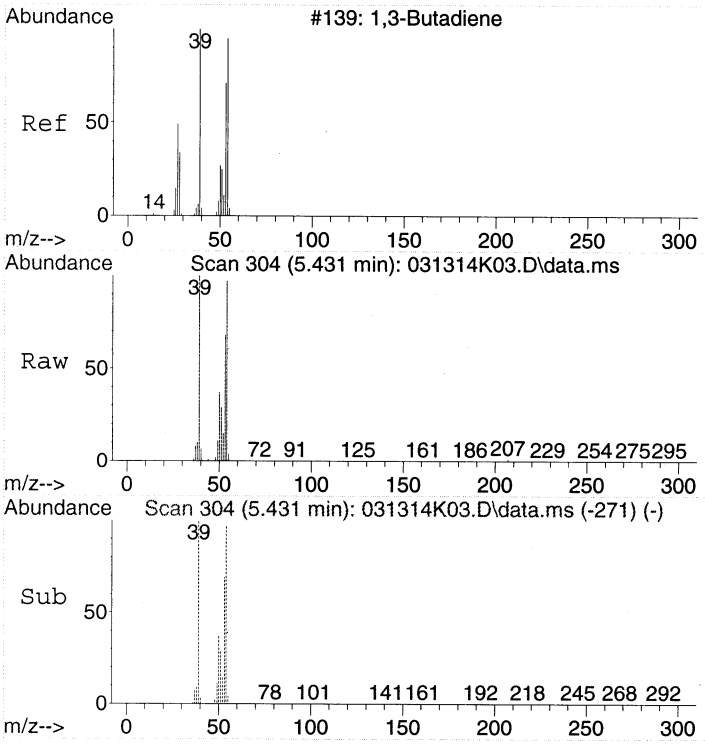


#6
Vinyl chloride
Concen: 11.09 ppbv
RT: 5.333 min Scan# 288
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 62 Resp: 239658

Ion	Ratio	Lower	Upper
62	100		
64	32.5	12.5	52.5

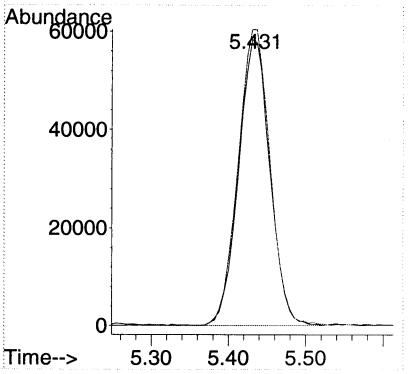


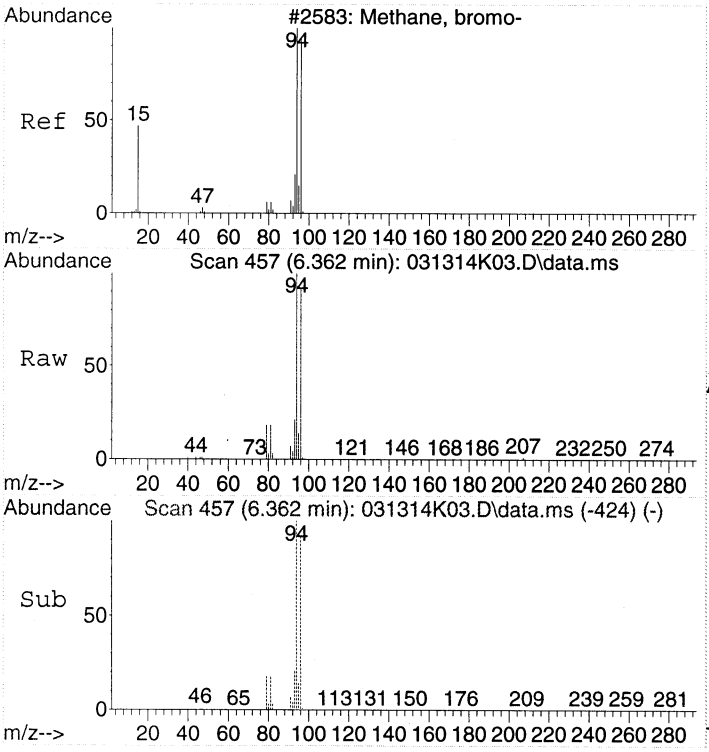


#7
1,3-Butadiene
Concen: 10.58 ppbv
RT: 5.431 min Scan# 304
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 54 Resp: 165278

Ion	Ratio	Lower	Upper
54	100		
39	105.7	85.7	125.7

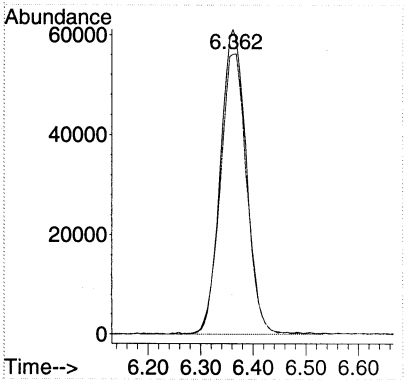


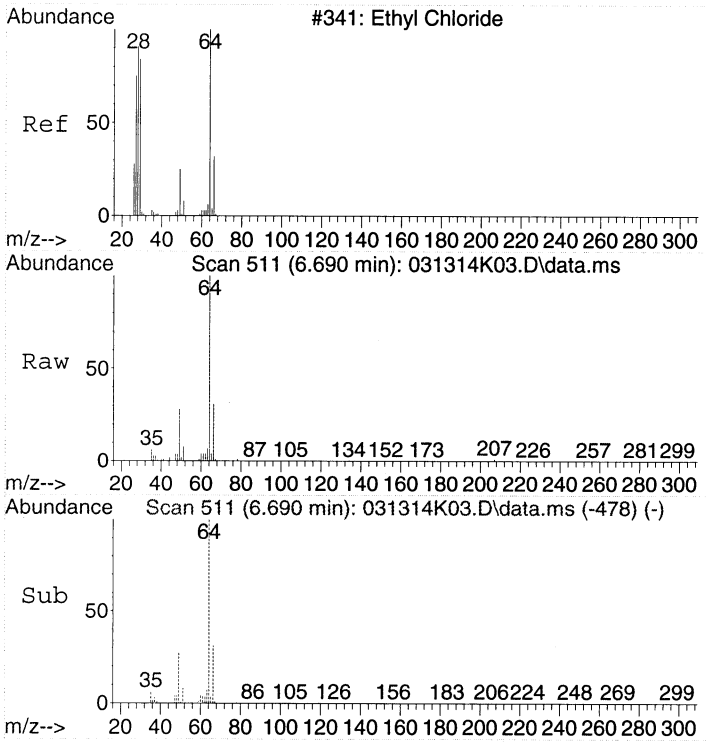


#8
Bromomethane
Concen: 11.25 ppbv
RT: 6.362 min Scan# 457
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 94 Resp: 210887

Ion	Ratio	Lower	Upper
94	100		
96	93.2	73.2	113.2

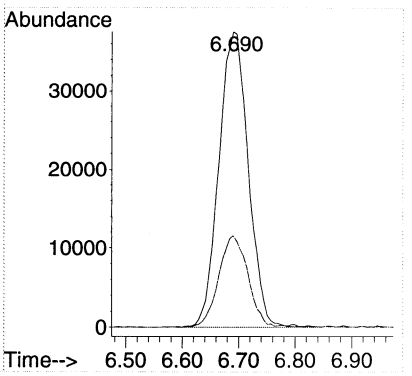


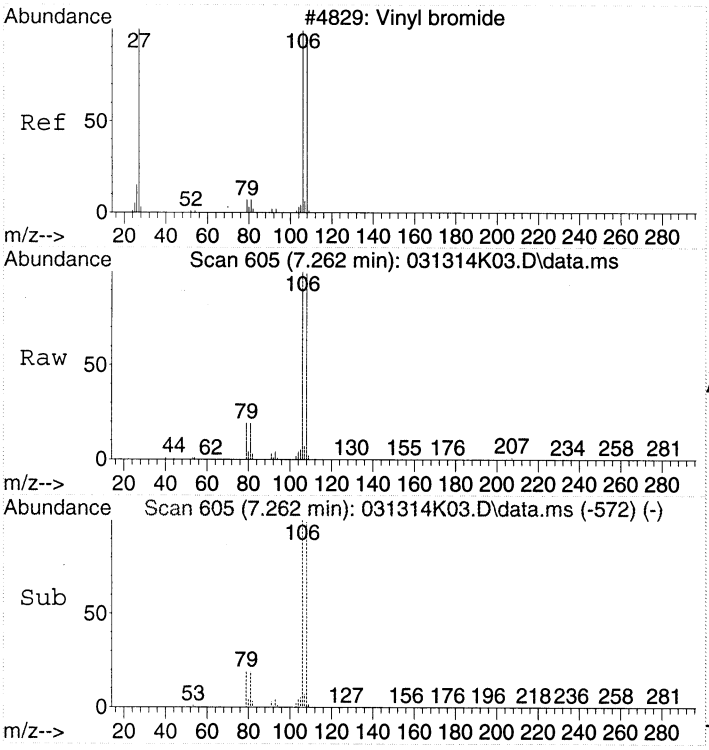


#9
Chloroethane
Concen: 10.99 ppbv
RT: 6.690 min Scan# 511
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 64 Resp: 135764

Ion	Ratio	Lower	Upper
64	100		
66	31.0	11.0	51.0

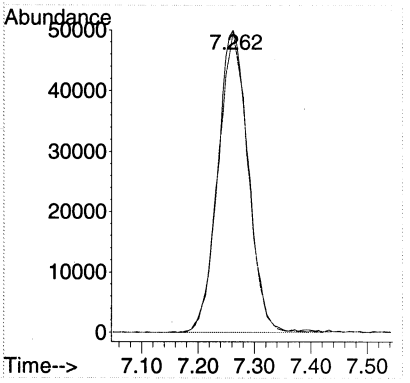


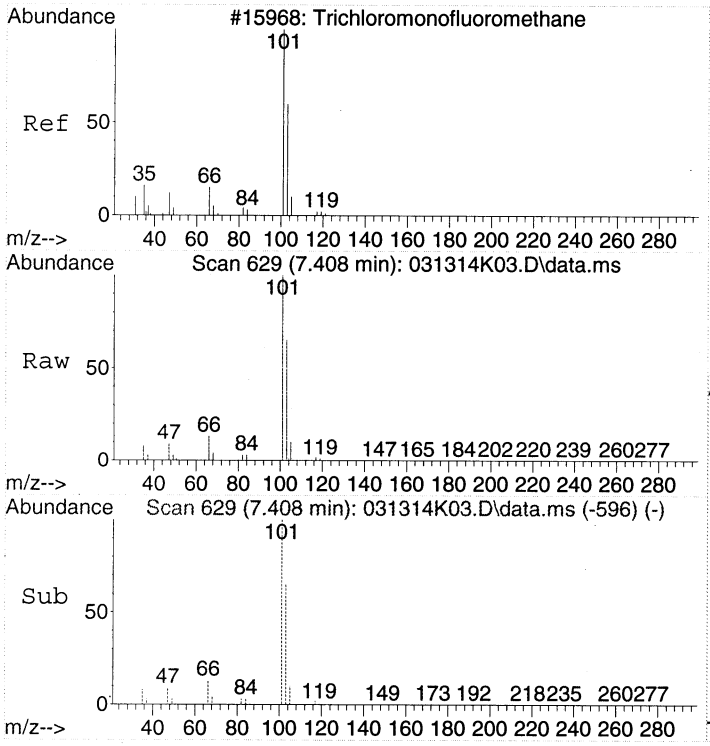


#10
Bromoethene
Concen: 11.55 ppbv
RT: 7.262 min Scan# 605
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:106 Resp: 188647

Ion	Ratio	Lower	Upper
106	100		
108	96.9	0.0	216.9

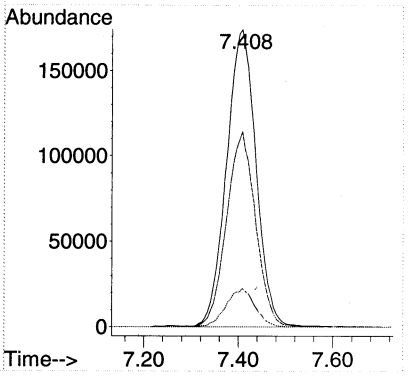


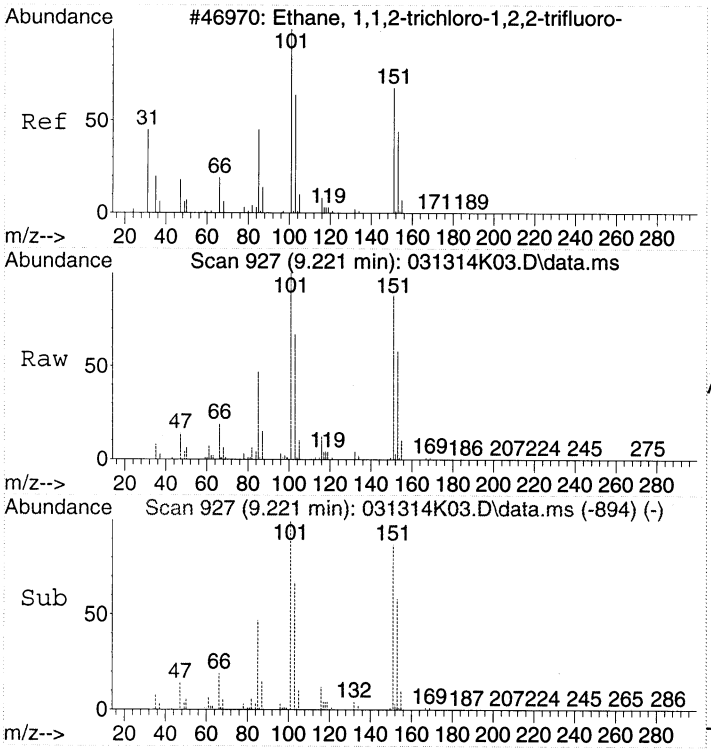


#11
Trichlorofluoromethane
Concen: 11.58 ppbv
RT: 7.408 min Scan# 629
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:101 Resp: 760904

Ion	Ratio	Lower	Upper
101	100		
103	63.8	43.8	83.8
66	12.7	0.0	32.7

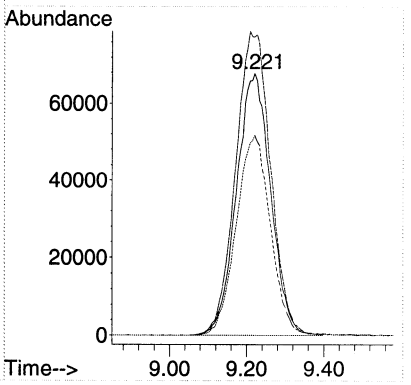


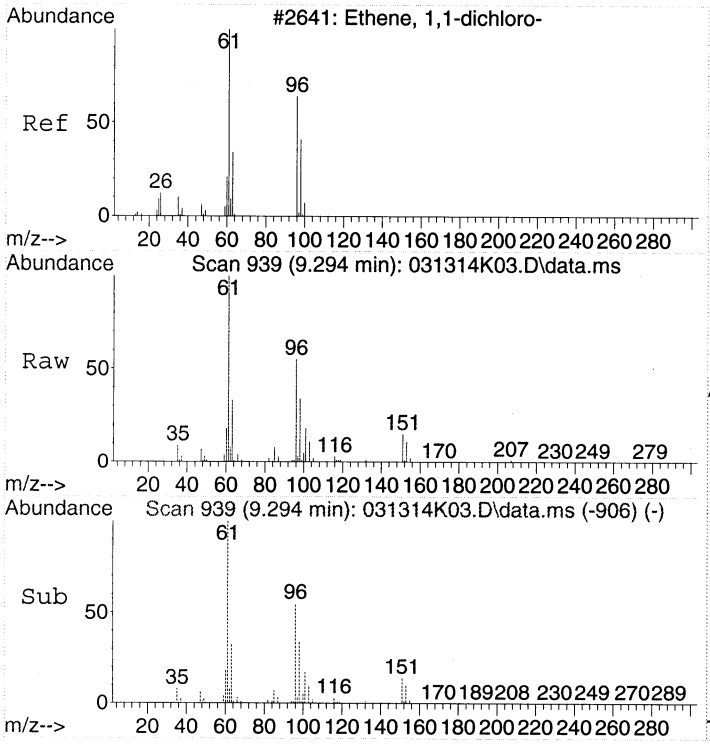


#12
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 10.78 ppbv
RT: 9.221 min Scan# 927
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:151 Resp: 416293

Ion	Ratio	Lower	Upper
151	100		
101	119.3	99.3	139.3
103	76.4	56.4	96.4

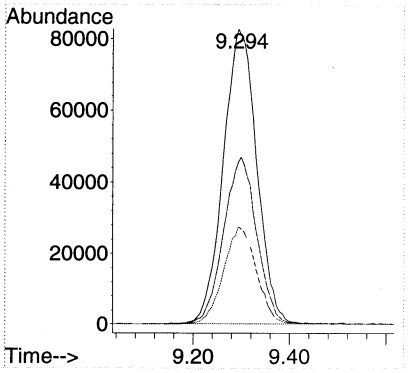


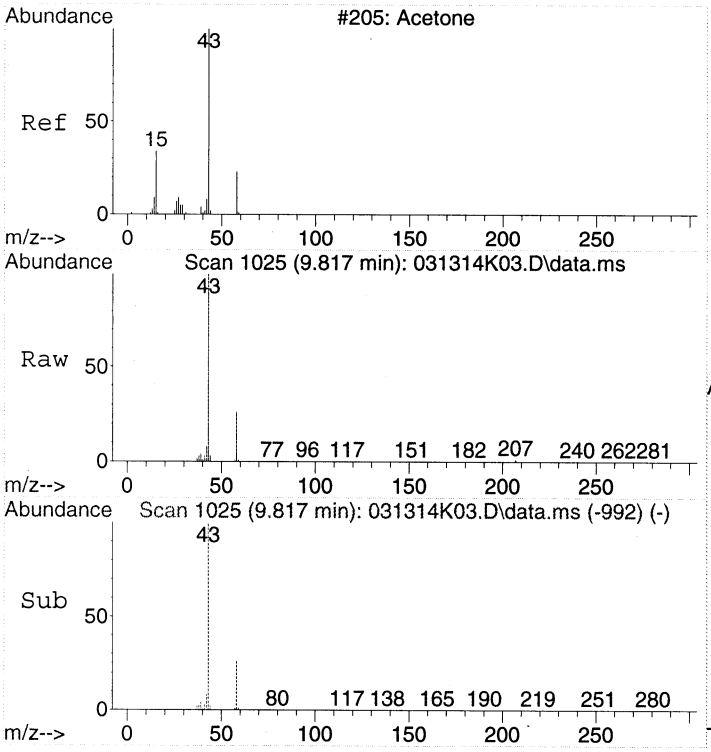


#13
1,1-Dichloroethene
Concen: 9.98 ppbv
RT: 9.294 min Scan# 939
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 61 Resp: 399282

Ion	Ratio	Lower	Upper
61	100		
96	56.1	36.1	76.1
63	32.7	12.7	52.7

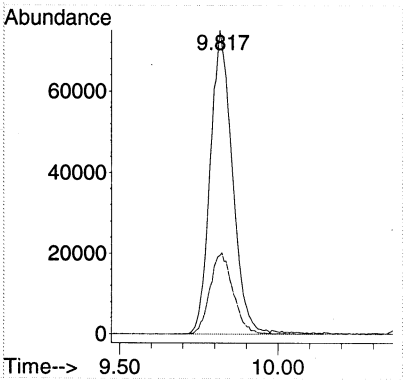


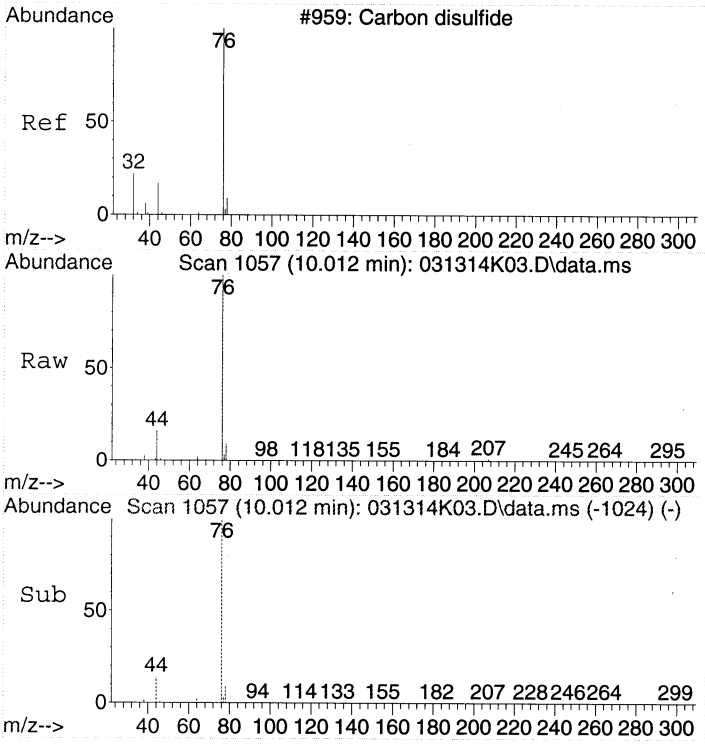


#14
Acetone
Concen: 11.16 ppbv
RT: 9.817 min Scan# 1025
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 43 Resp: 364040

Ion	Ratio	Lower	Upper
43	100		
58	28.0	8.0	48.0

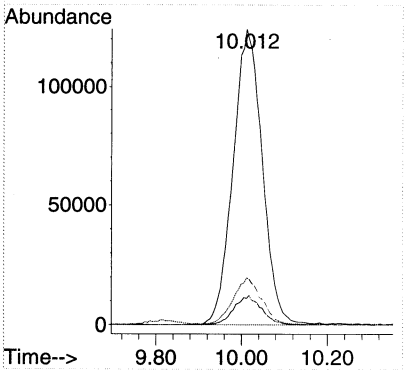


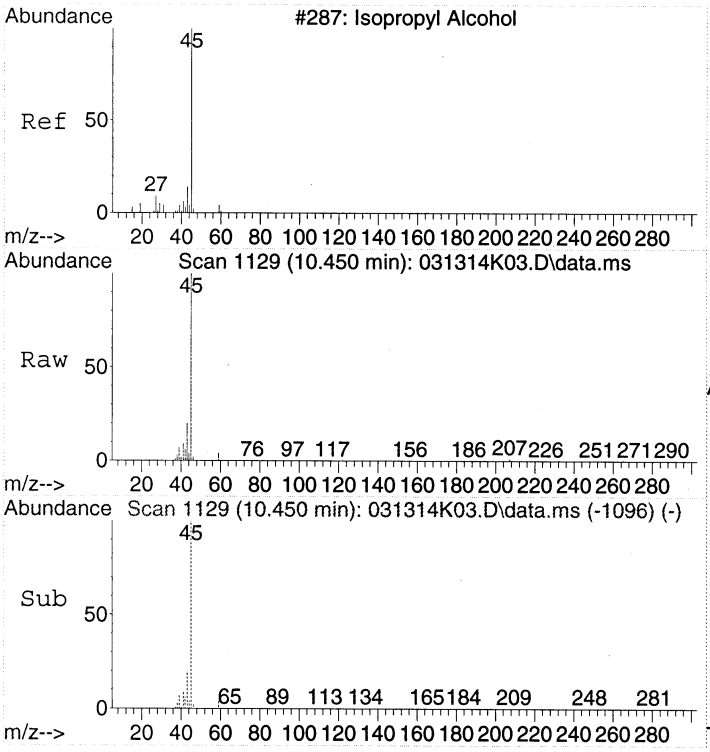


#15
Carbon disulfide
Concen: 11.16 ppbv
RT: 10.012 min Scan# 1057
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 76 Resp: 588046

Ion	Ratio	Lower	Upper
76	100		
78	9.5	0.0	29.5
44	14.9	0.0	34.9

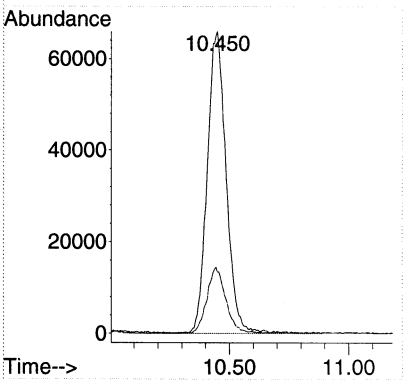


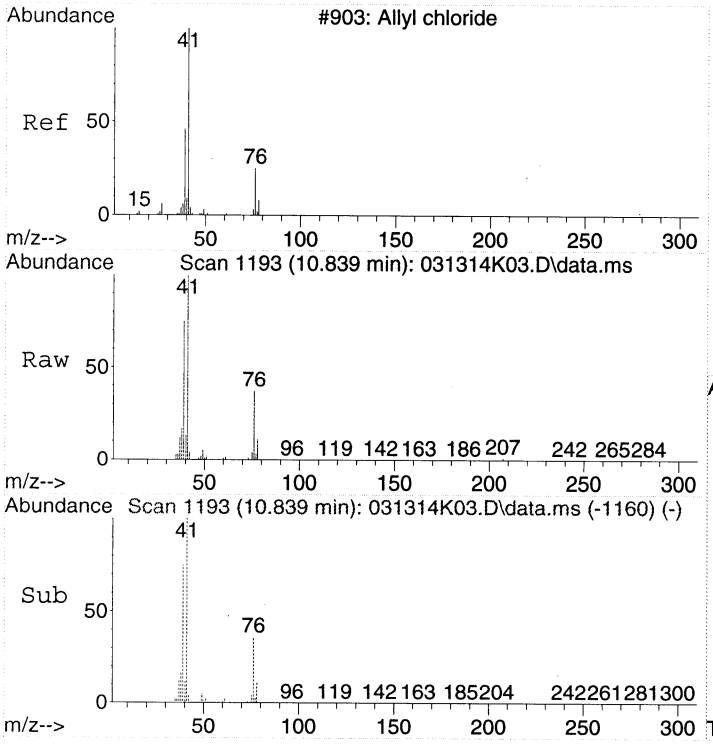


#16
2-Propanol
Concen: 11.44 ppbv
RT: 10.450 min Scan# 1129
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 45 Resp: 365588

Ion	Ratio	Lower	Upper
45	100		
43	21.3	1.3	41.3

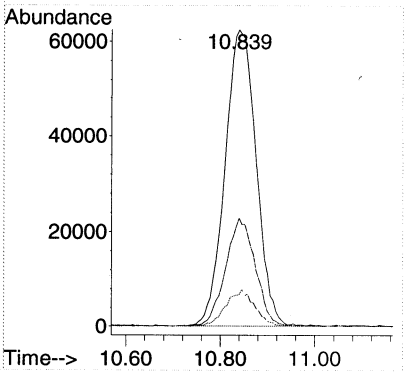


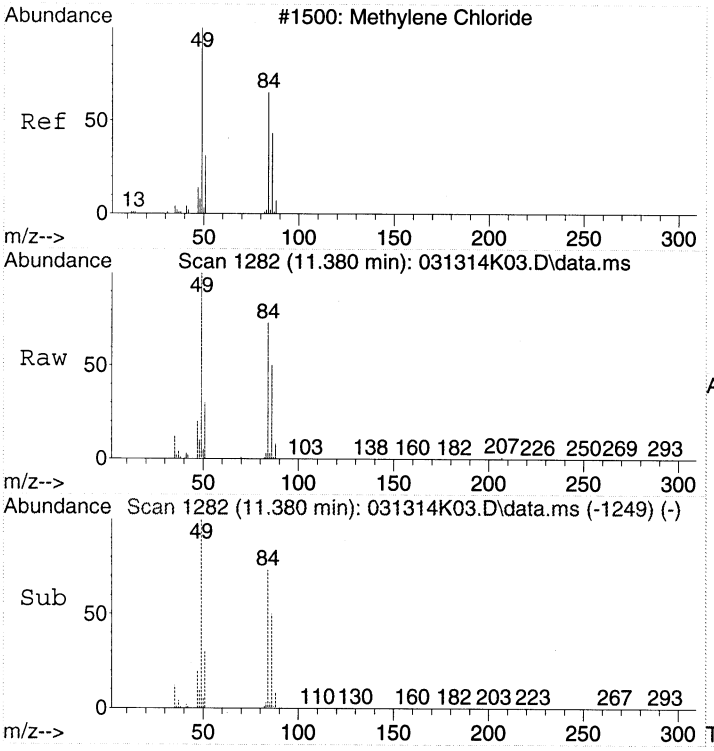


#17
Allyl chloride
Concen: 11.03 ppbv
RT: 10.839 min Scan# 1193
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 41 Resp: 287802

Ion	Ratio	Lower	Upper
41	100		
76	34.8	14.8	54.8
78	11.6	0.0	31.6

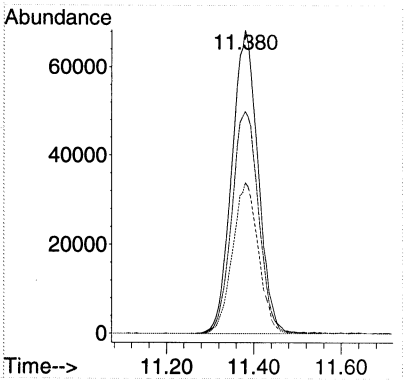


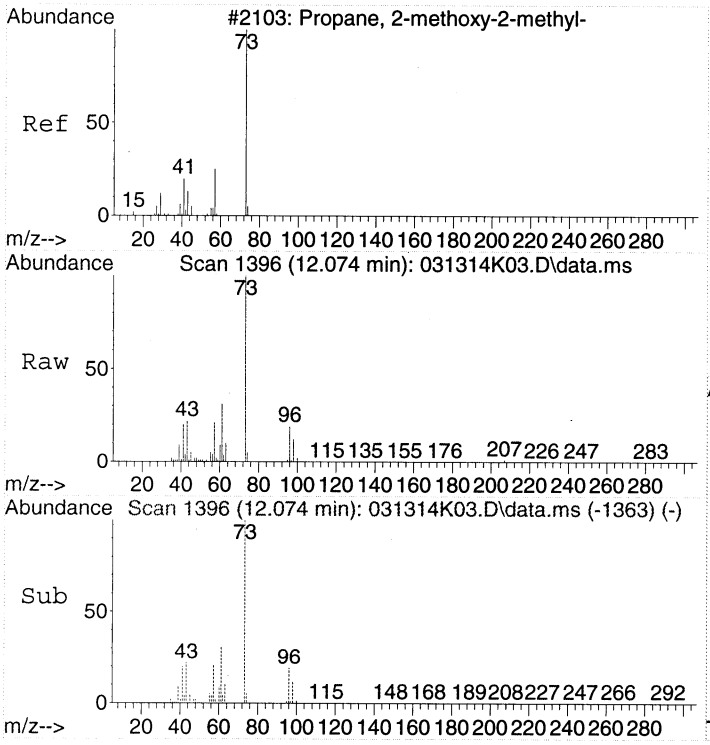


#18
Dichloromethane
Concen: 8.68 ppbv
RT: 11.380 min Scan# 1282
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 49 Resp: 284326

Ion	Ratio	Lower	Upper
49	100		
84	74.7	54.7	94.7
86	49.1	29.1	69.1

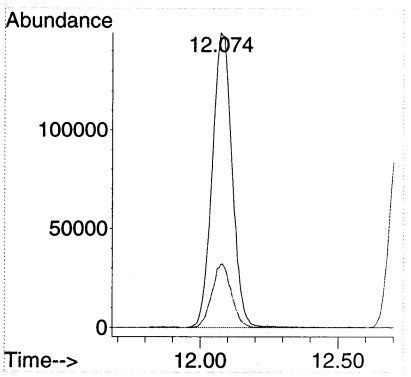


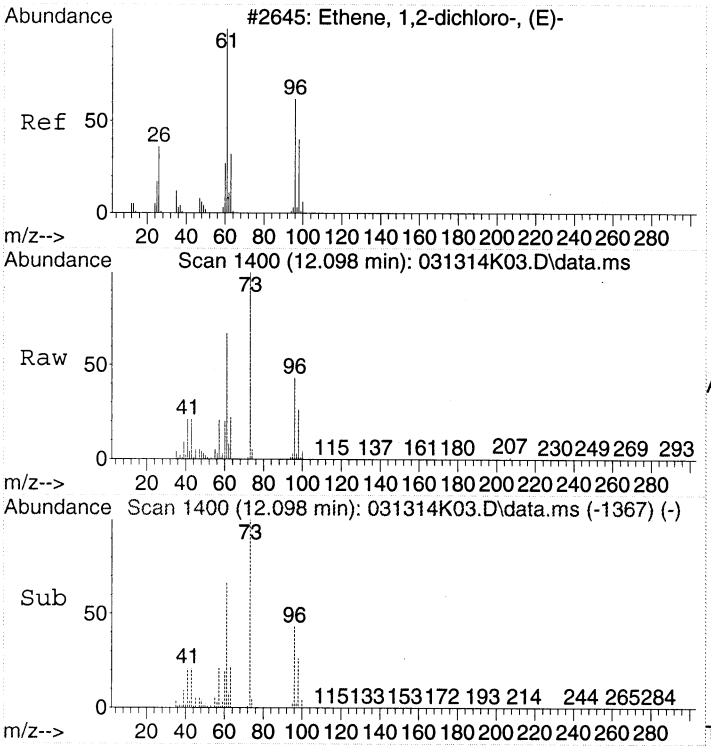


#19
tert-Butyl methyl ether (MTBE)
Concen: 12.10 ppbv
RT: 12.074 min Scan# 1396
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 73 Resp: 748343

Ion	Ratio	Lower	Upper
73	100		
57	21.2	1.2	41.2

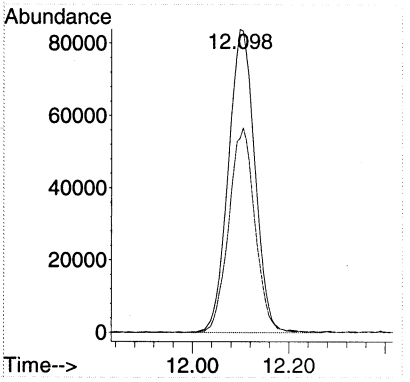


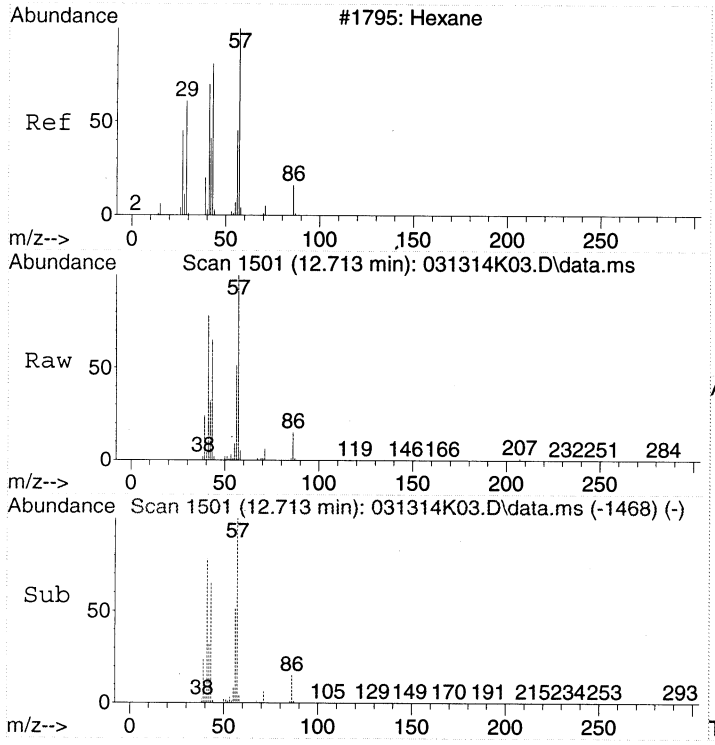


#20
trans-1,2-Dichloroethene
Concen: 10.84 ppbv
RT: 12.098 min Scan# 1400
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 61 Resp: 321110

Ion	Ratio	Lower	Upper
61	100		
96	66.8	46.8	86.8

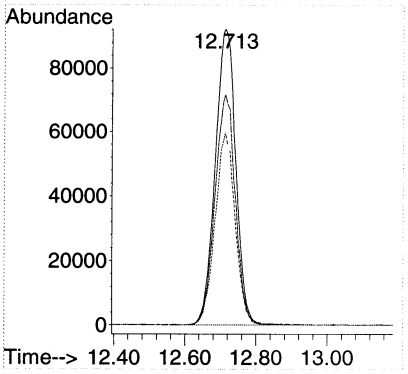


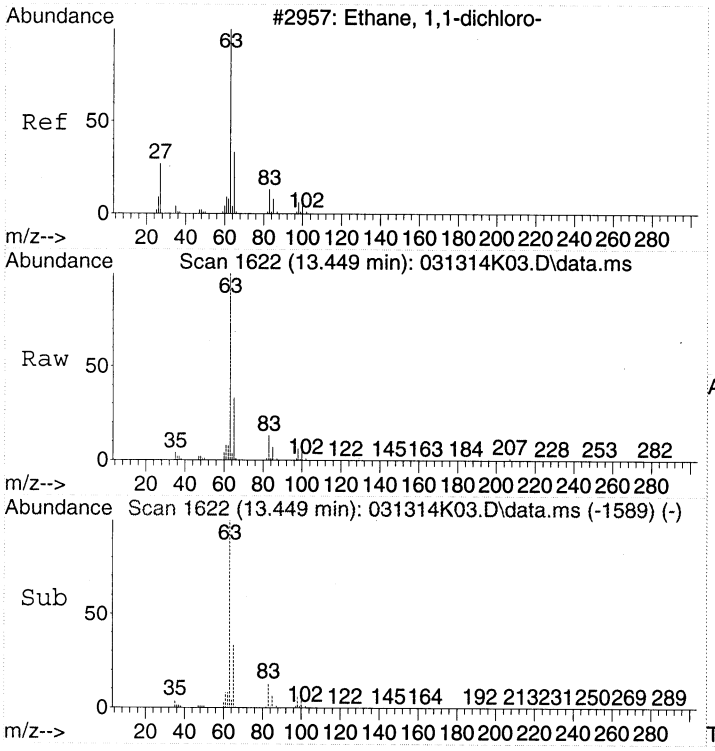


#21
Hexane
Concen: 10.80 ppbv
RT: 12.713 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 57 Resp: 370362

Ion	Ratio	Lower	Upper
57	100		
41	76.9	56.9	96.9
43	62.9	42.9	82.9

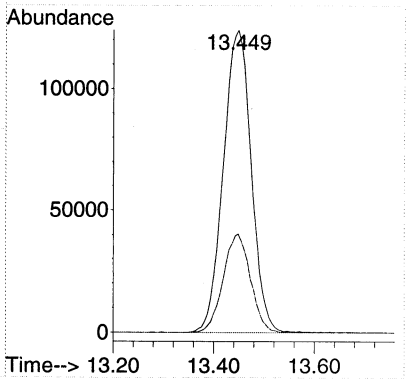


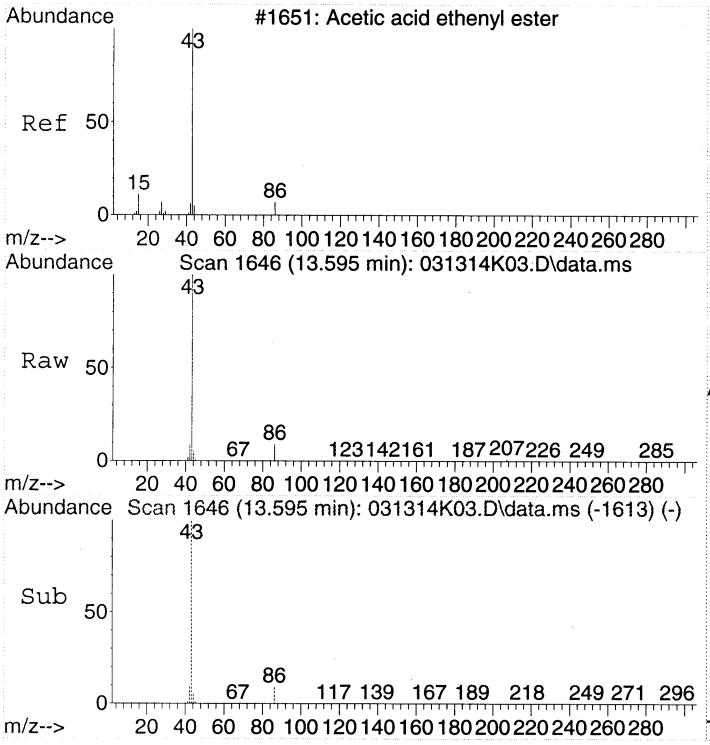


#22
1,1-Dichloroethane
Concen: 10.11 ppbv
RT: 13.449 min Scan# 1622
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 63 Resp: 477391

Ion	Ratio	Lower	Upper
63	100		
65	31.8	11.8	51.8

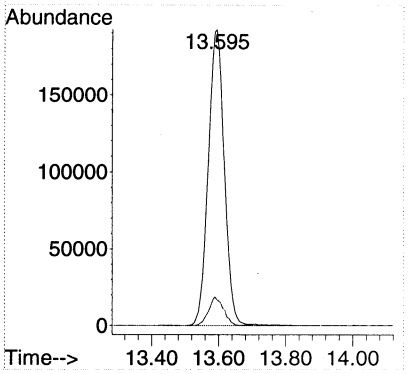


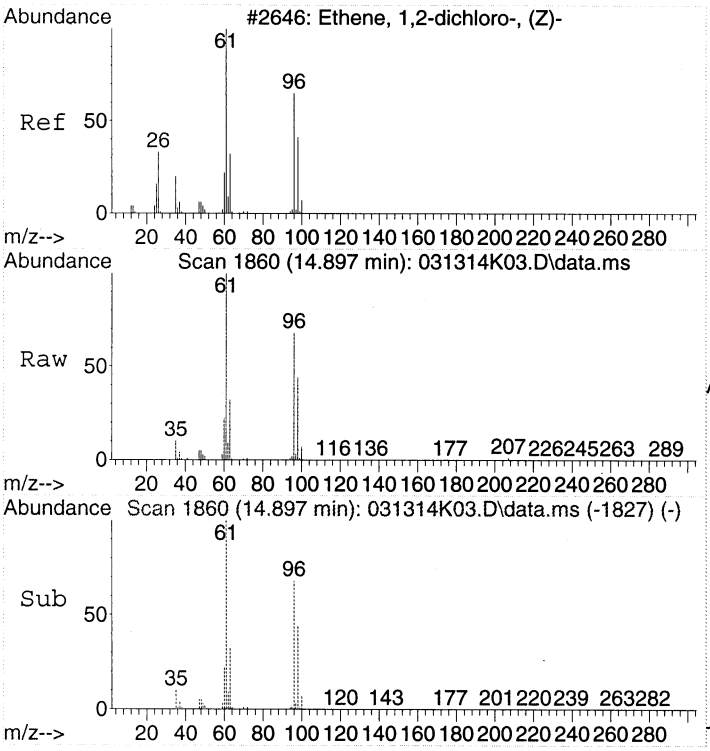


#23
Vinyl acetate
Concen: 11.48 ppbv
RT: 13.595 min Scan# 1646
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 43 Resp: 643212

Ion	Ratio	Lower	Upper
43	100		
86	9.2	0.0	29.2

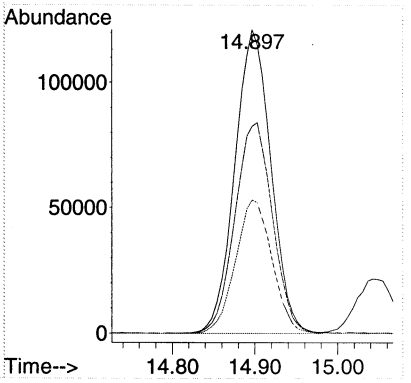


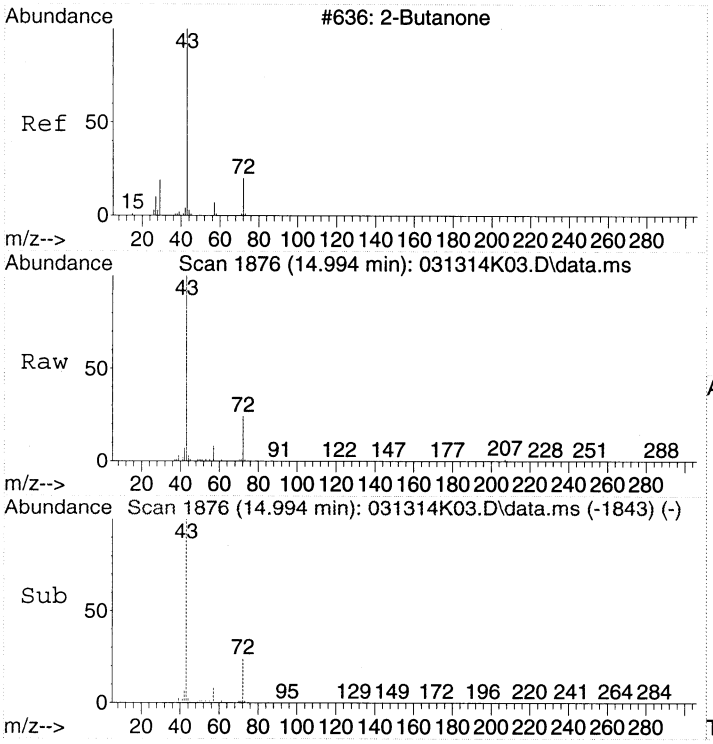


#24
cis-1,2-Dichloroethene
Concen: 10.48 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 61 Resp: 367973

Ion	Ratio	Lower	Upper
61	100		
96	72.9	52.9	92.9
98	44.5	24.5	64.5

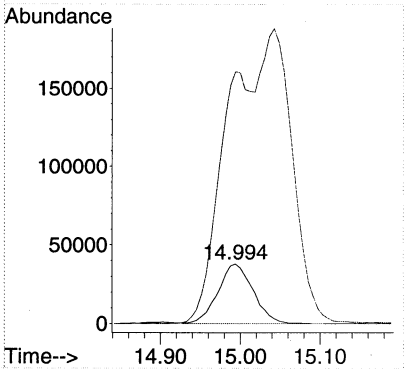


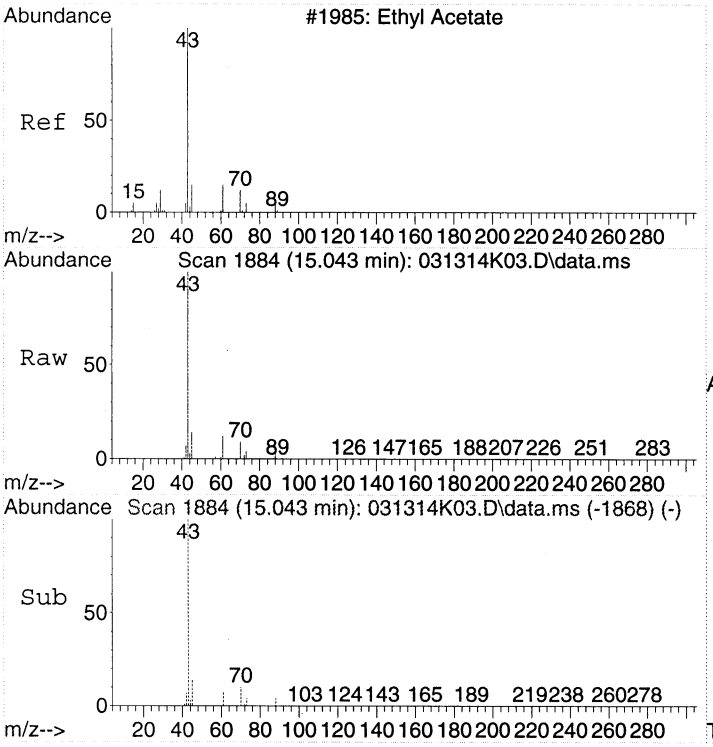


#25
2-Butanone (MEK)
Concen: 11.81 ppbv
RT: 14.994 min Scan# 1876
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 72 Resp: 115554

Ion	Ratio	Lower	Upper
72	100		
43	428.1	418.1	438.1

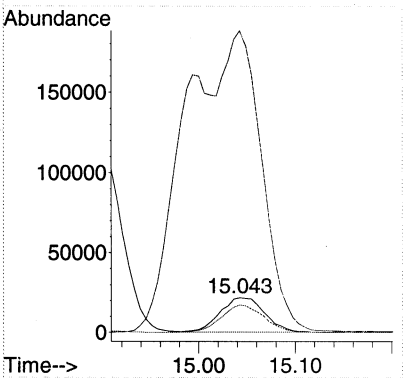


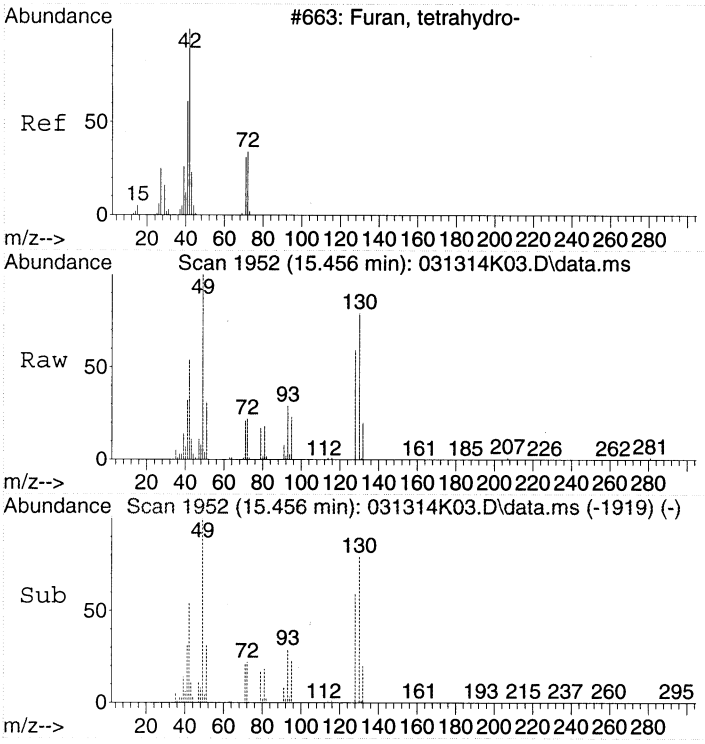


#26
Ethyl acetate
Concen: 10.67 ppbv
RT: 15.043 min Scan# 1884
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 61 Resp: 68902

Ion	Ratio	Lower	Upper
61	100		
43	0.0	0.0	10.0
70	77.0	67.0	87.0

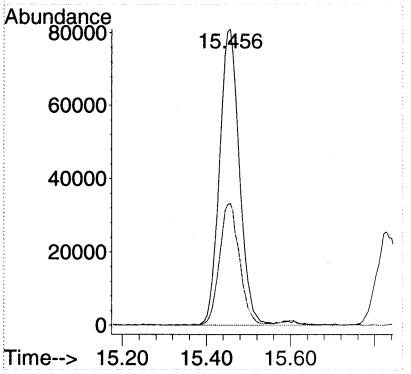


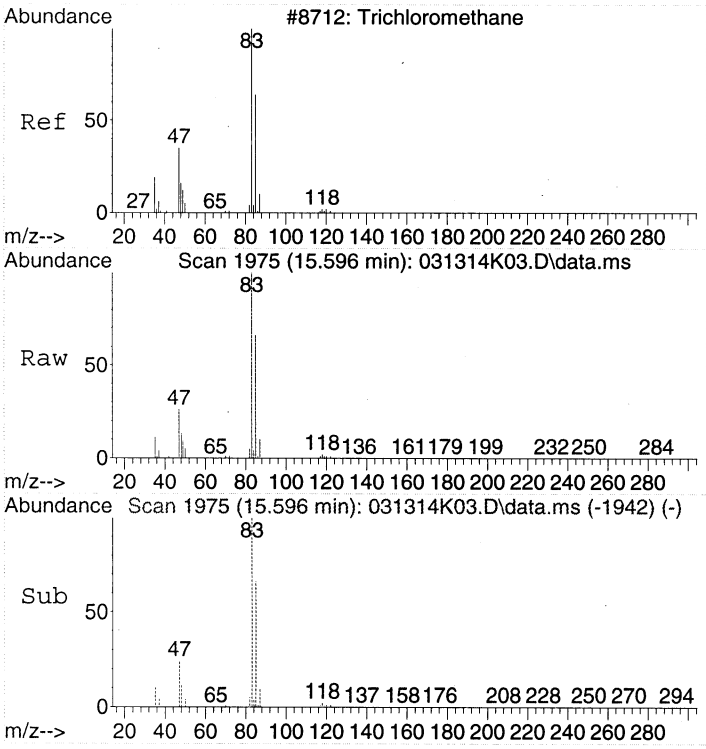


#27
Tetrahydrofuran
Concen: 10.49 ppbv
RT: 15.456 min Scan# 1952
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 42 Resp: 269271

Ion	Ratio	Lower	Upper
42	100		
72	42.5	22.5	62.5

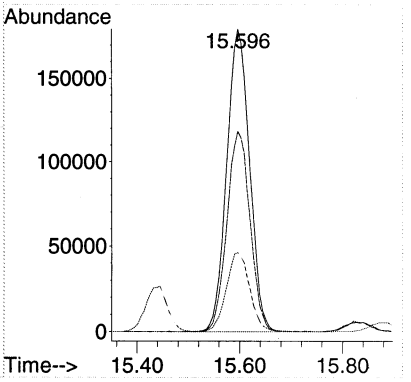


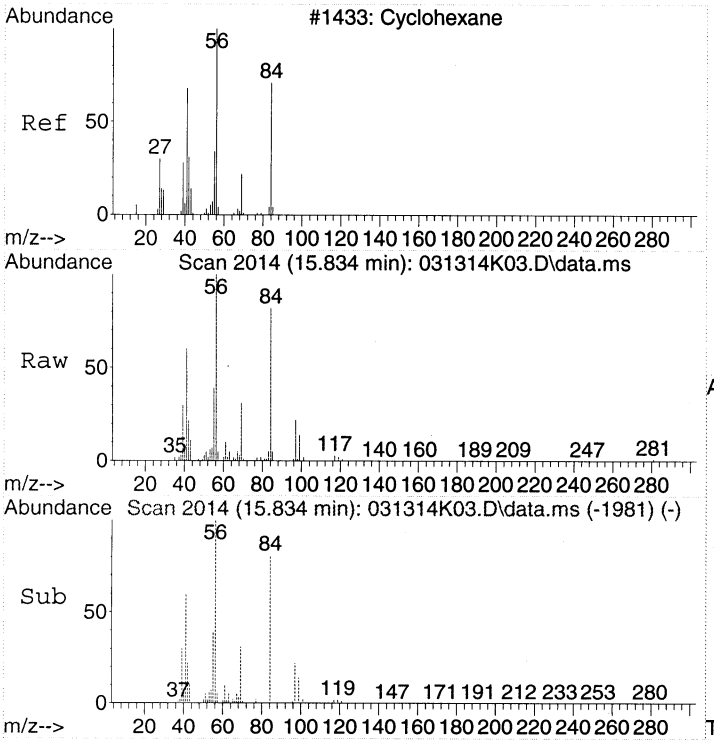


#28
Chloroform
Concen: 10.73 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 83 Resp: 552395

Ion	Ratio	Lower	Upper
83	100		
85	66.8	46.8	86.8
47	26.3	6.3	46.3

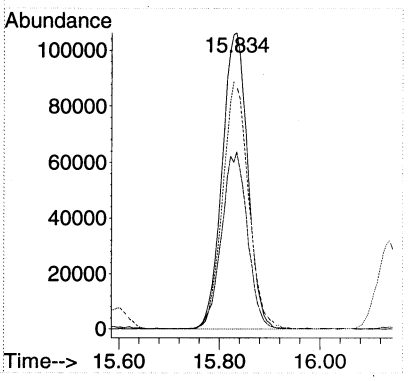


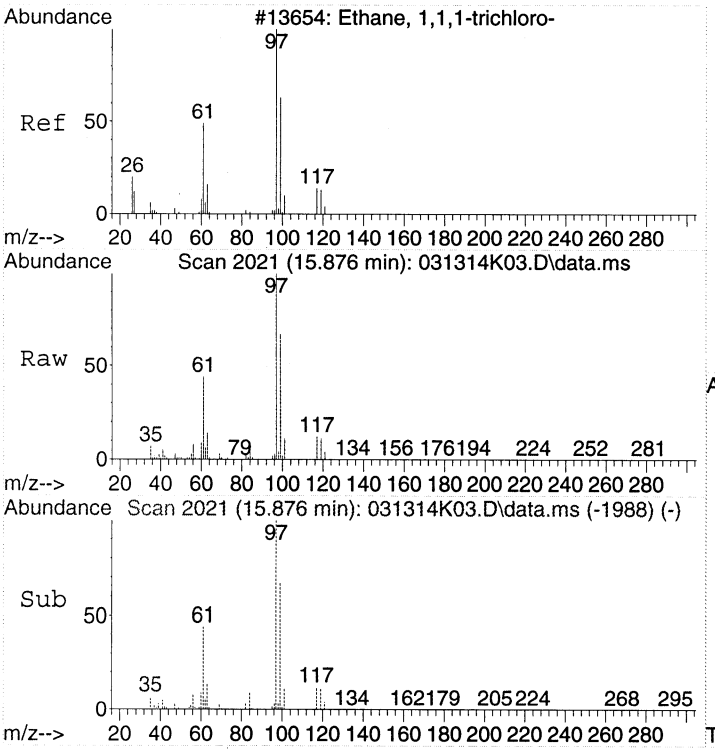


#29
Cyclohexane
Concen: 10.77 ppbv
RT: 15.834 min Scan# 2014
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 56 Resp: 377084

Ion	Ratio	Lower	Upper
56	100		
41	60.0	40.0	80.0
84	84.7	64.7	104.7

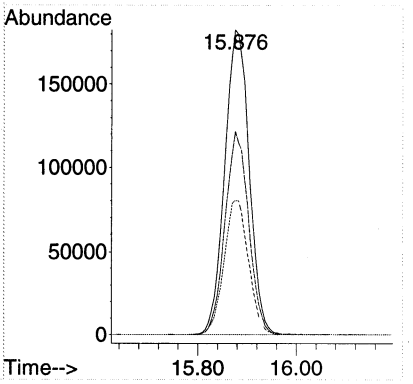


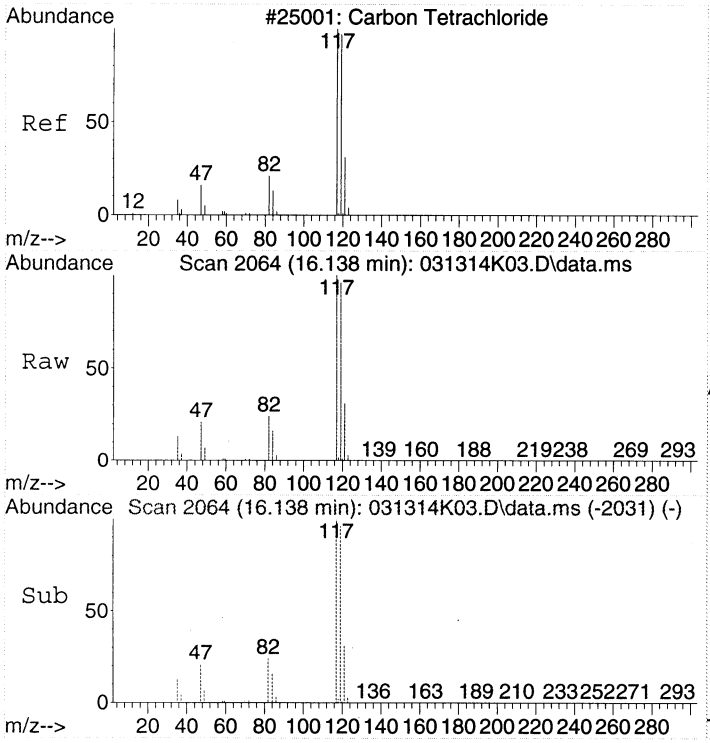


#30
1,1,1-Trichloroethane
Concen: 10.74 ppbv
RT: 15.876 min Scan# 2021
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 97 Resp: 631810

Ion	Ratio	Lower	Upper
97	100		
99	64.5	44.5	84.5
61	44.3	24.3	64.3

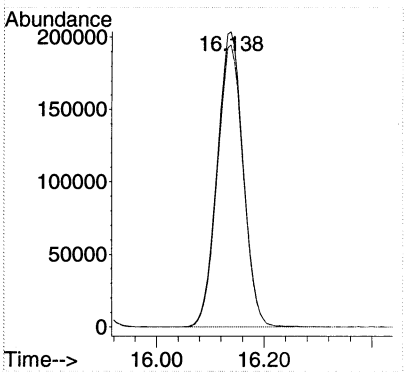


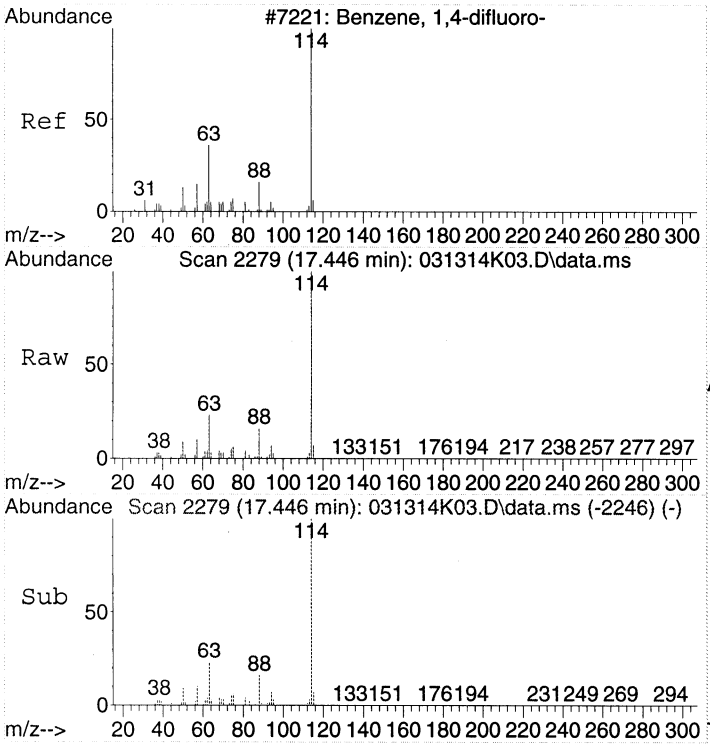


#31
Carbon tetrachloride
Concen: 11.04 ppbv
RT: 16.138 min Scan# 2064
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:117 Resp: 683667

Ion	Ratio	Lower	Upper
117	100		
119	95.2	75.2	115.2

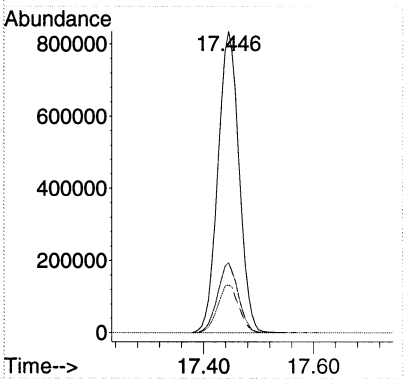


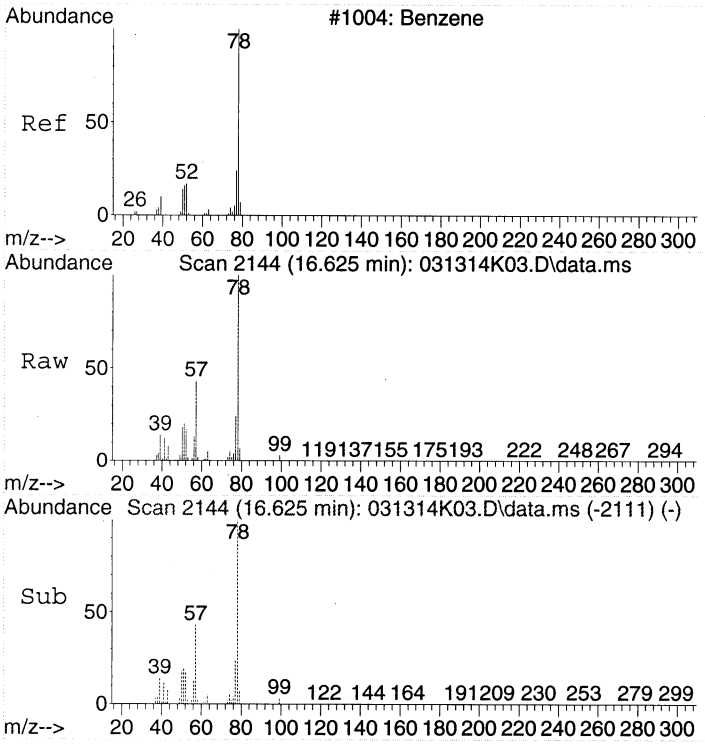


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:114 Resp: 2218665

Ion	Ratio	Lower	Upper
114	100		
63	22.7	2.7	42.7
88	16.0	0.0	36.0

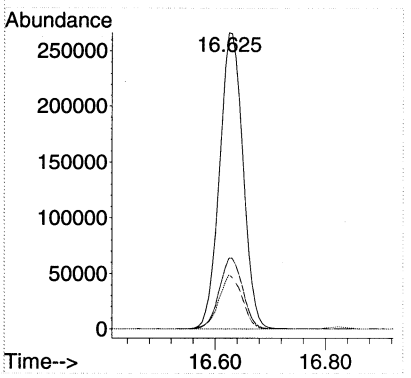


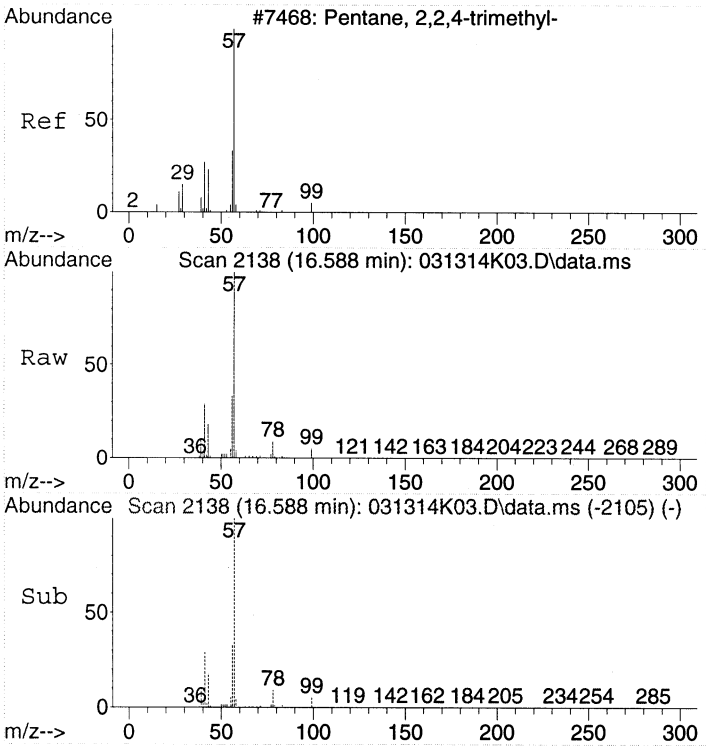


#33
Benzene
Concen: 9.66 ppbv
RT: 16.625 min Scan# 2144
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 78 Resp: 787408

Ion	Ratio	Lower	Upper
78	100		
77	24.2	4.2	44.2
50	18.4	0.0	38.4

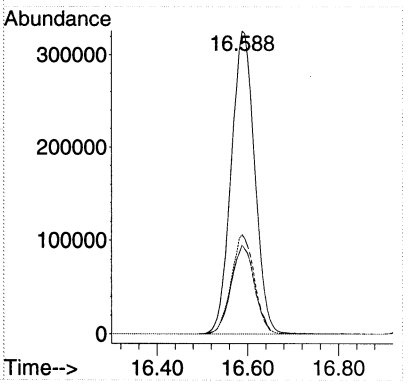


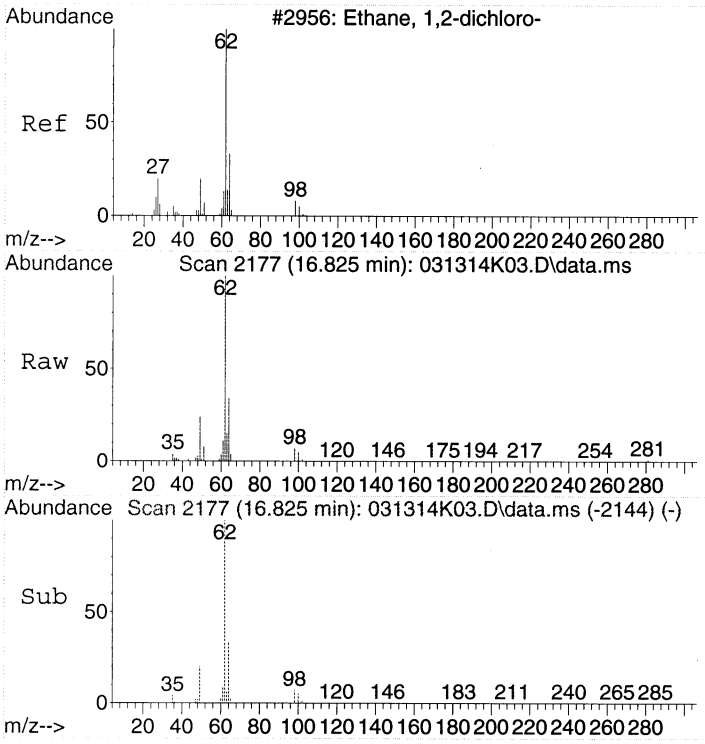


#34
2,2,4-Trimethylpentane
Concen: 10.09 ppbv
RT: 16.588 min Scan# 2138
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 57 Resp: 1169681

Ion	Ratio	Lower	Upper
57	100		
41	29.2	9.2	49.2
56	32.6	12.6	52.6

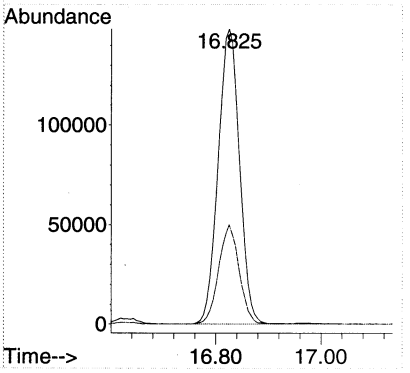


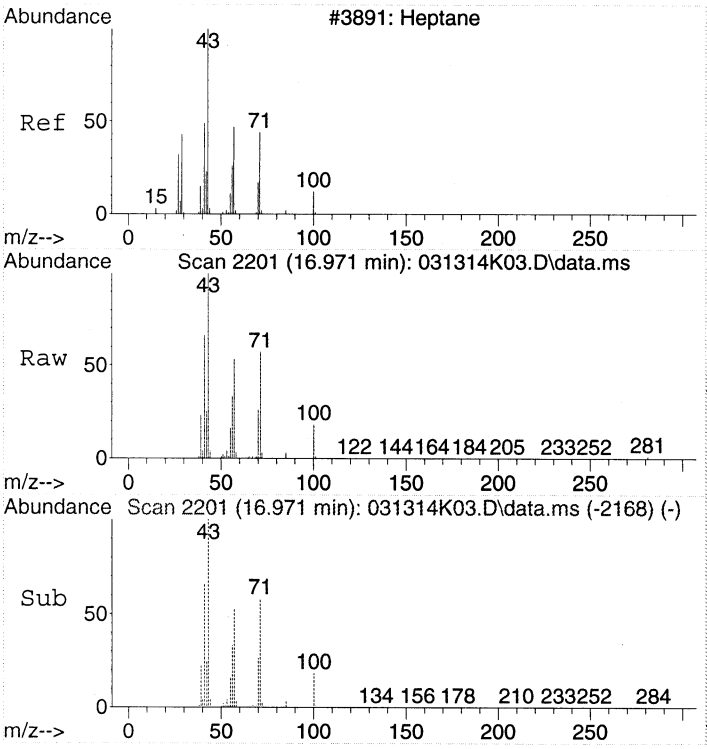


#35
1,2-Dichloroethane
Concen: 9.55 ppbv
RT: 16.825 min Scan# 2177
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 62 Resp: 421303

Ion	Ratio	Lower	Upper
62	100		
64	32.4	12.4	52.4

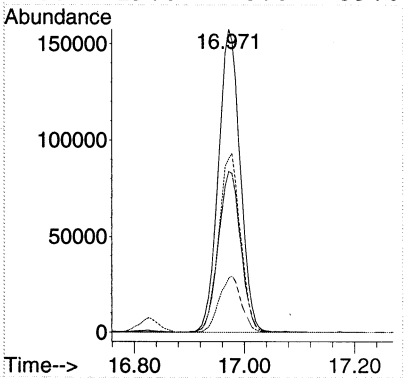


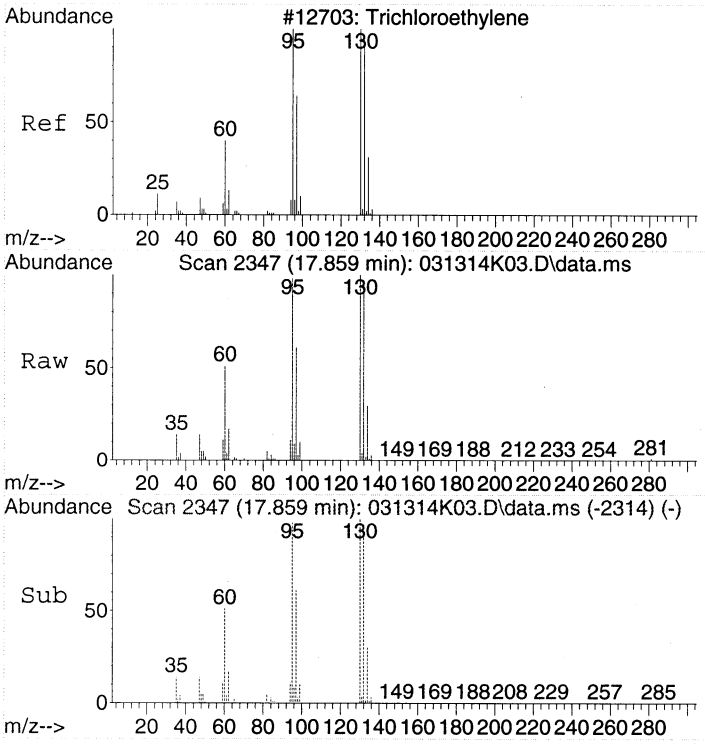


#36
Heptane
Concen: 9.79 ppbv
RT: 16.971 min Scan# 2201
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 43 Resp: 433643

Ion	Ratio	Lower	Upper
43	100		
57	54.5	34.5	74.5
71	59.5	39.5	79.5
100	19.0	0.0	39.0

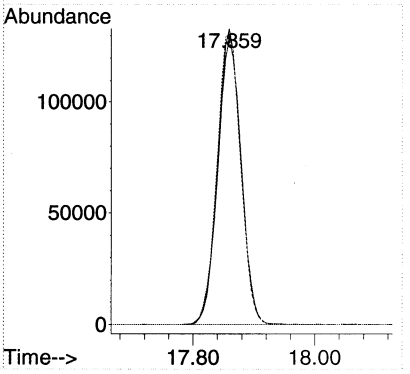


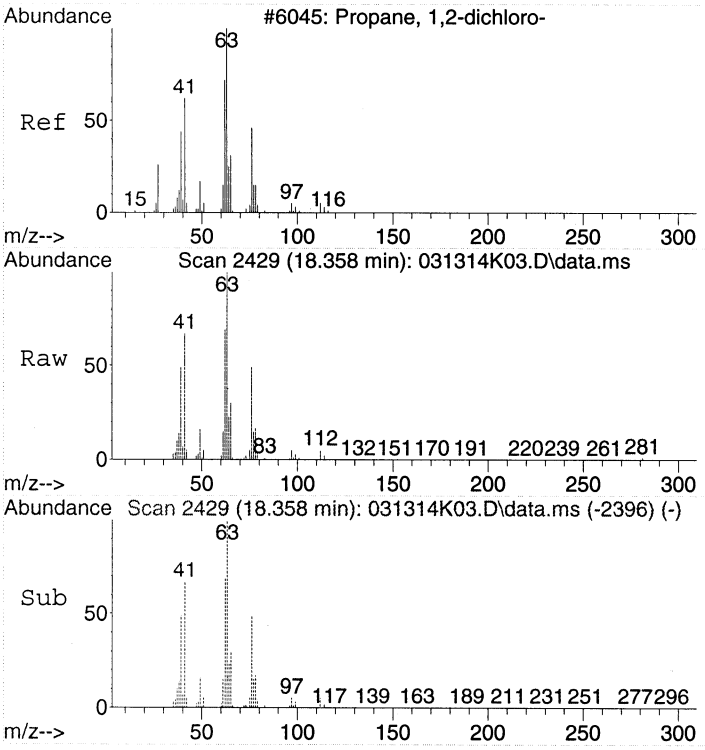


#37
Trichloroethene
Concen: 10.21 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:130 Resp: 352034

Ion	Ratio	Lower	Upper
130	100		
132	97.7	77.7	117.7
95	100.9	80.9	120.9

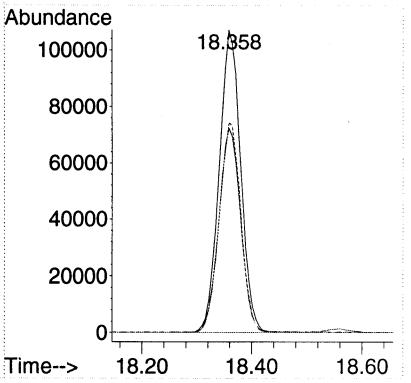


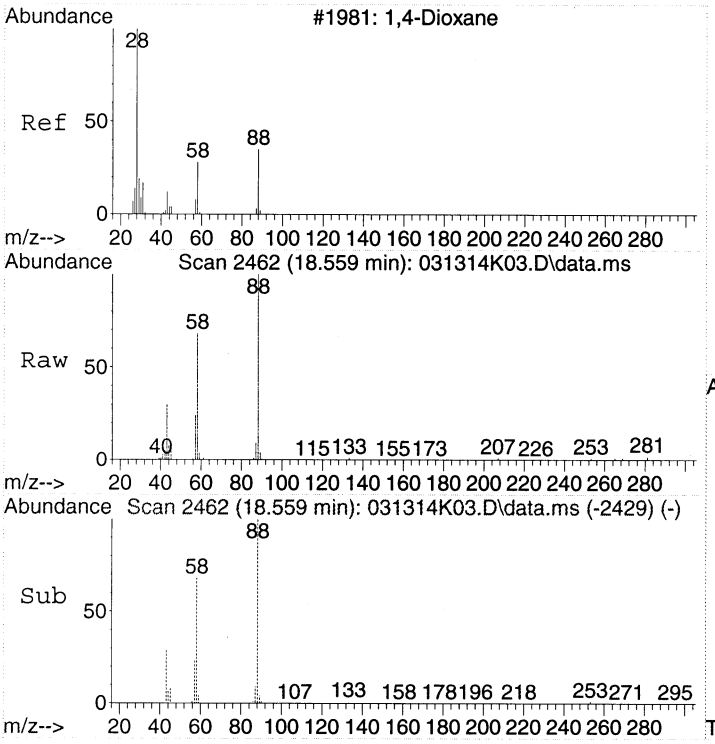


#38
1,2-Dichloropropane
Concen: 9.73 ppbv
RT: 18.358 min Scan# 2429
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 63 Resp: 290379

Ion	Ratio	Lower	Upper
63	100		
41	68.4	48.4	88.4
62	69.6	49.6	89.6

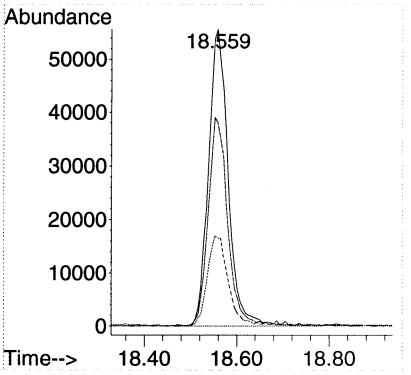


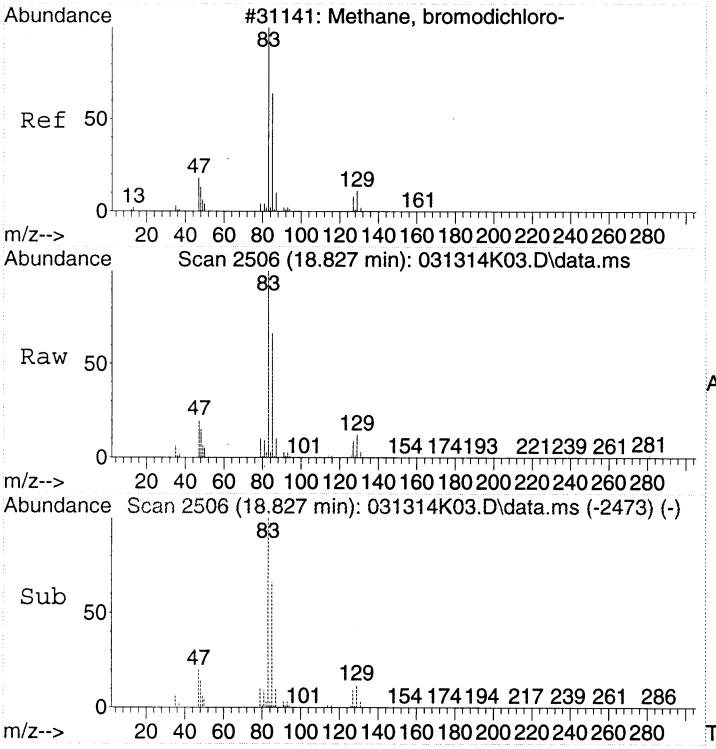


#39
1,4-Dioxane
Concen: 10.70 ppbv
RT: 18.559 min Scan# 2462
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 88 Resp: 165952

Ion	Ratio	Lower	Upper
88	100		
58	69.4	49.4	89.4
43	31.3	11.3	51.3

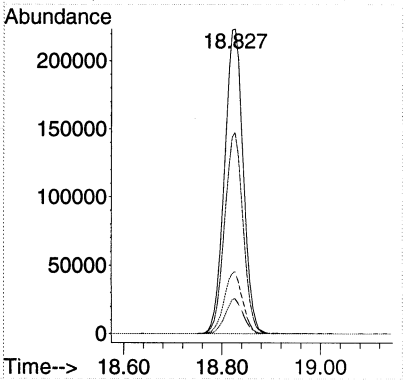


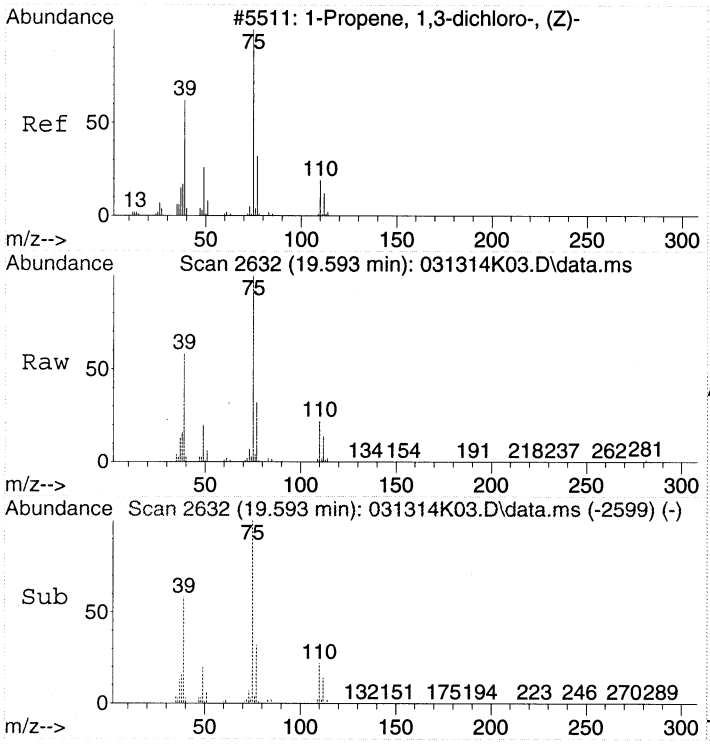


#40
Bromodichloromethane
Concen: 10.43 ppbv
RT: 18.827 min Scan# 2506
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 83 Resp: 589369

Ion	Ratio	Lower	Upper
83	100		
85	65.1	45.1	85.1
47	19.9	0.0	39.9
129	11.2	0.0	31.2

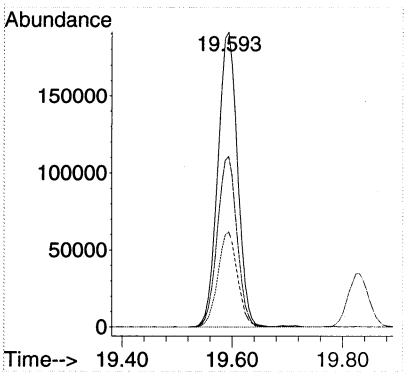


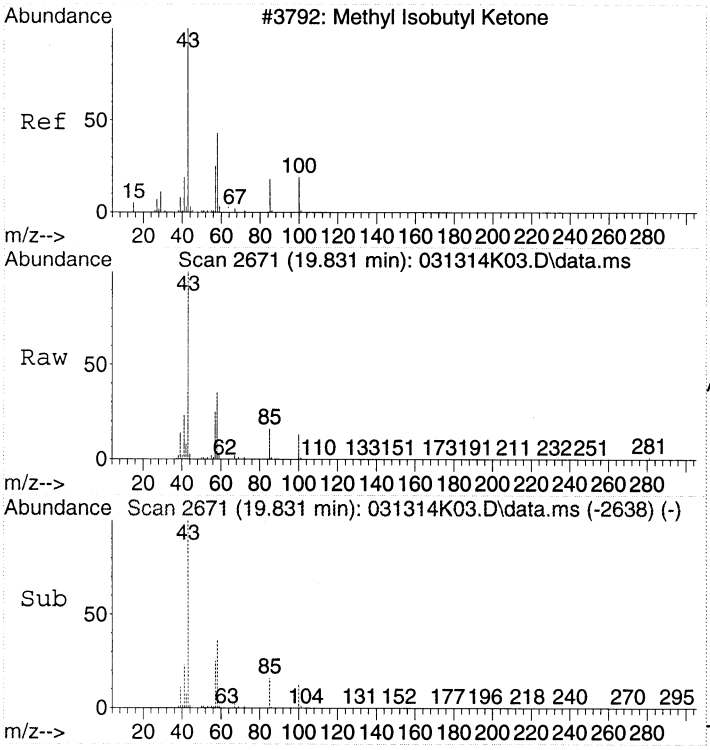


#41
cis-1,3-Dichloropropene
Concen: 10.03 ppbv
RT: 19.593 min Scan# 2632
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 75 Resp: 475157

Ion	Ratio	Lower	Upper
75	100		
39	58.4	38.4	78.4
77	32.1	12.1	52.1

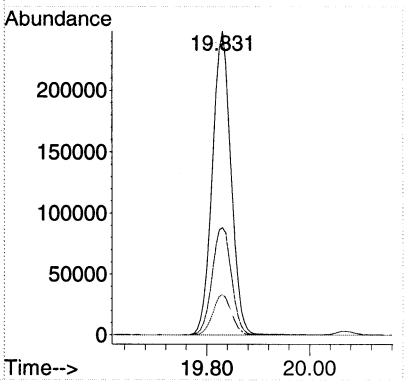


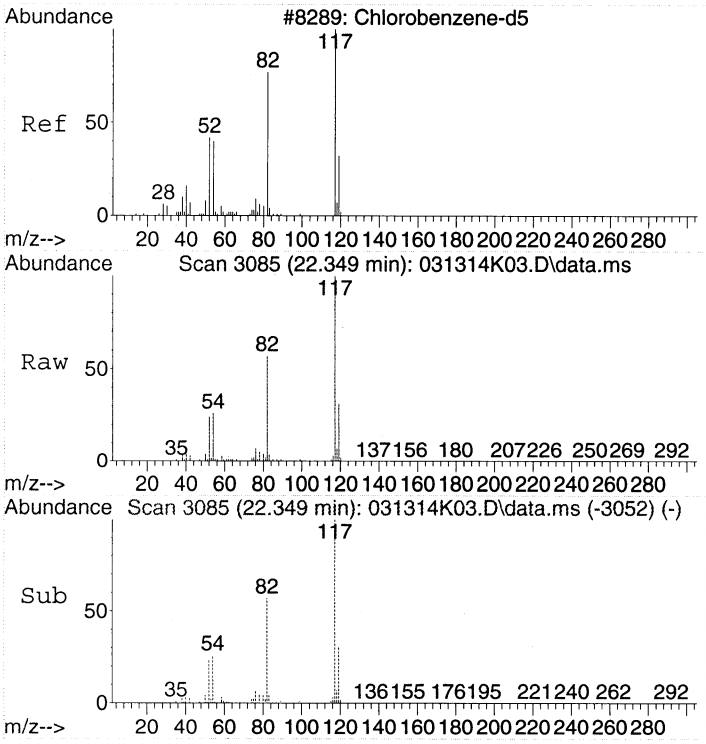


#42
4-Methyl-2-pentanone (MIBK)
Concen: 10.04 ppbv
RT: 19.831 min Scan# 2671
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 43 Resp: 627370

Ion	Ratio	Lower	Upper
43	100		
58	36.9	16.9	56.9
100	13.5	0.0	33.5

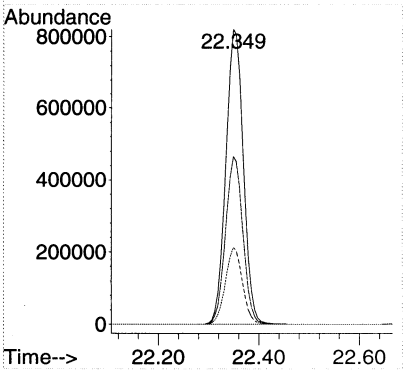


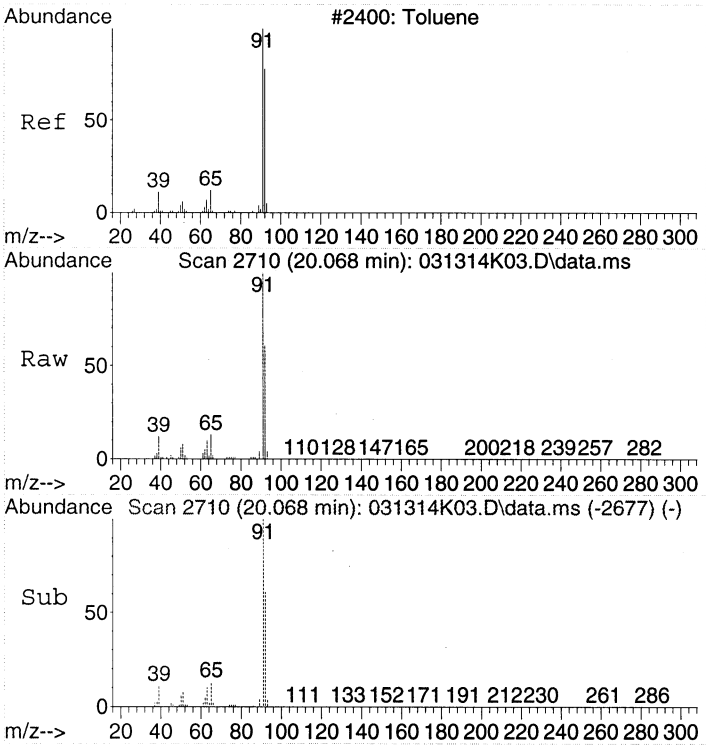


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:117 Resp: 1984797

Ion	Ratio	Lower	Upper
117	100		
82	56.4	36.4	76.4
54	25.4	5.4	45.4

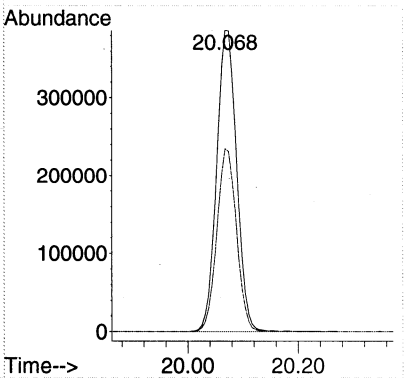


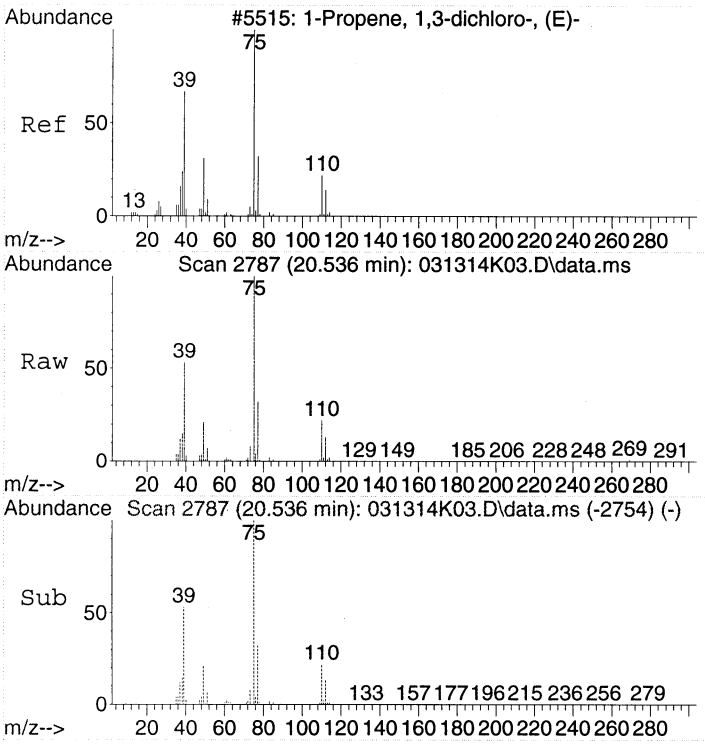


#44
Toluene
Concen: 10.01 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 91 Resp: 973941

Ion	Ratio	Lower	Upper
91	100		
92	59.8	39.8	79.8

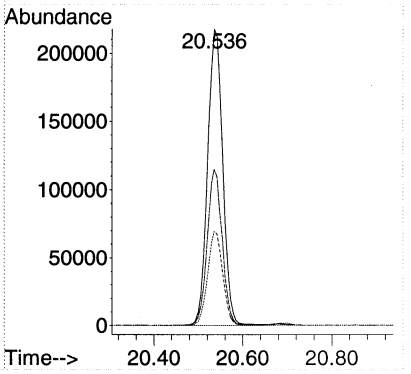


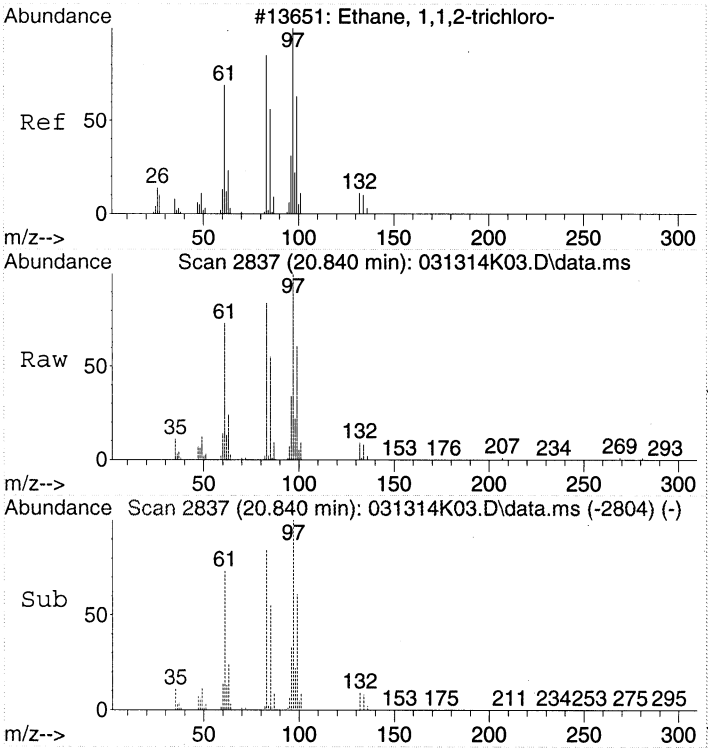


#45
trans-1,3-Dichloropropene
Concen: 10.73 ppbv
RT: 20.536 min Scan# 2787
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 75 Resp: 519188

Ion	Ratio	Lower	Upper
75	100		
39	52.2	32.2	72.2
77	31.6	11.6	51.6

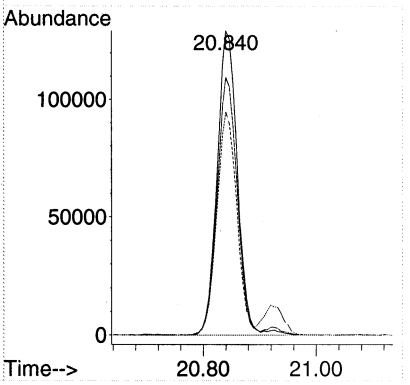


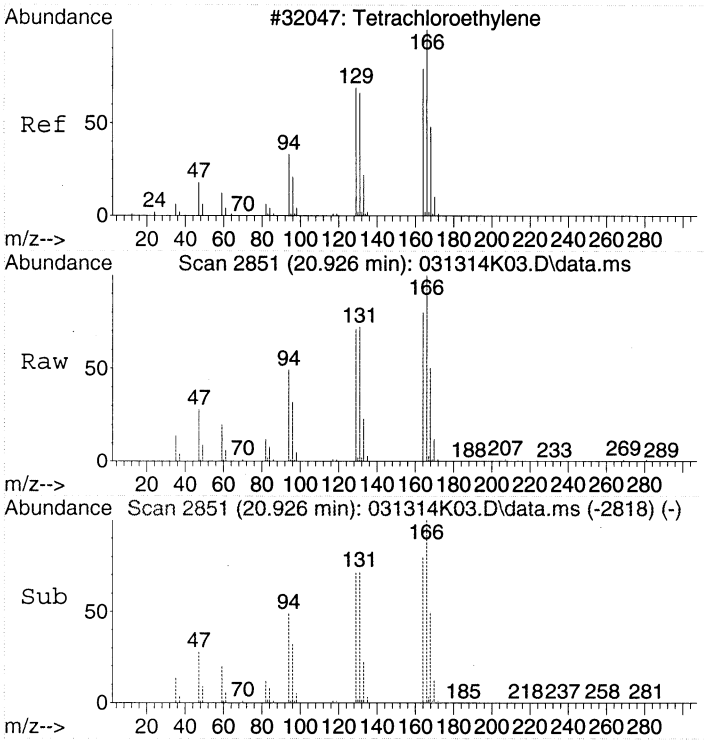


#46
1,1,2-Trichloroethane
Concen: 10.13 ppbv
RT: 20.840 min Scan# 2837
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 97 Resp: 322422

Ion	Ratio	Lower	Upper
97	100		
83	85.8	65.8	105.8
61	72.2	52.2	92.2

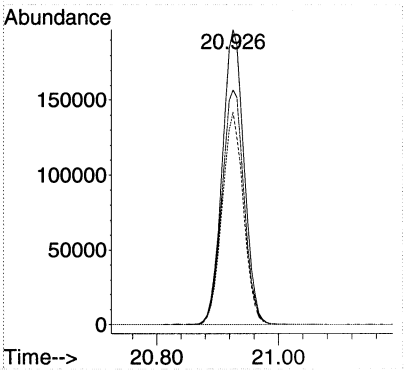


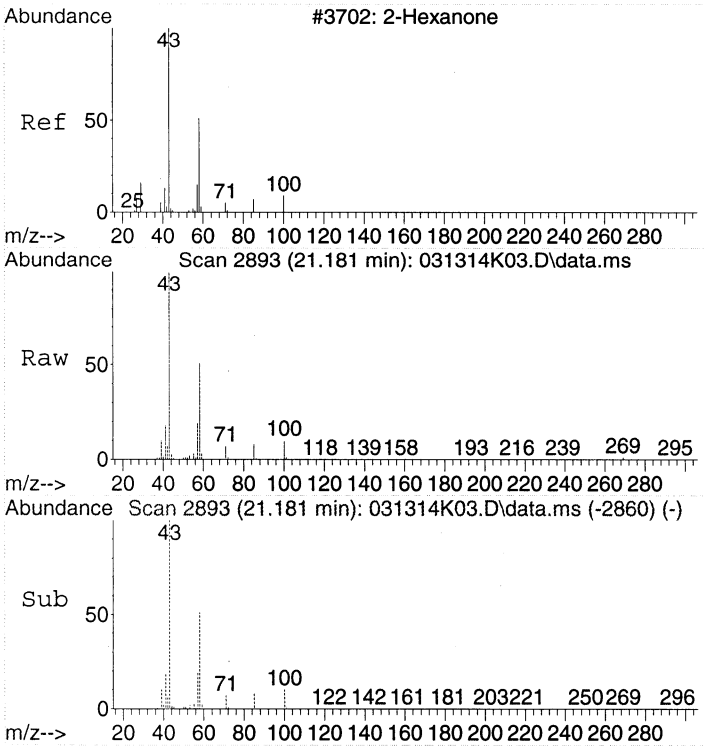


#47
Tetrachloroethene
Concen: 10.26 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:166 Resp: 491061

Ion	Ratio	Lower	Upper
166	100		
164	80.8	60.8	100.8
131	70.5	50.5	90.5

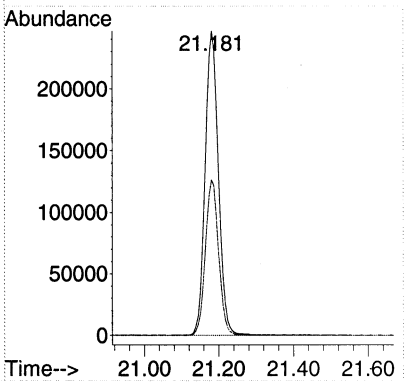


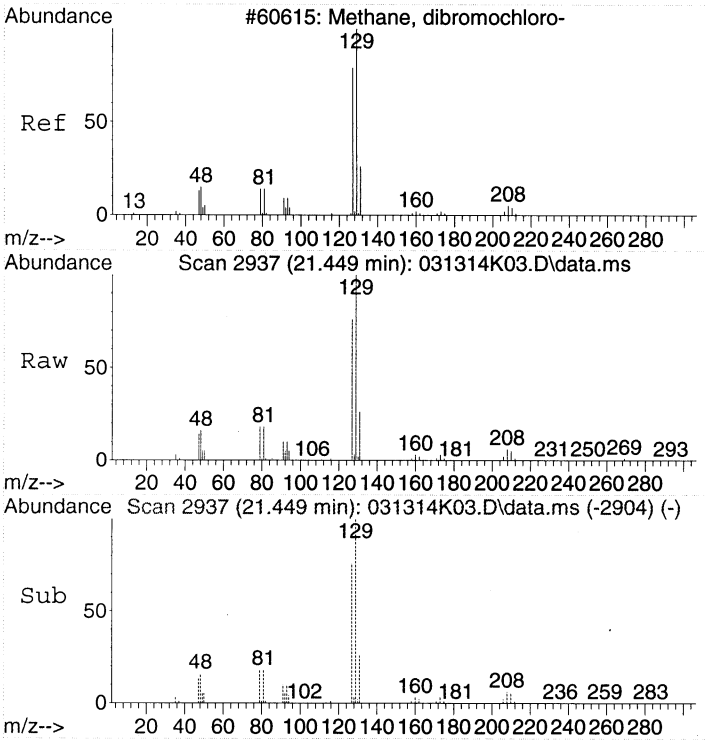


#48
2-Hexanone
Concen: 10.13 ppbv
RT: 21.181 min Scan# 2893
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 43 Resp: 612757

Ion	Ratio	Lower	Upper
43	100		
58	51.0	31.0	71.0

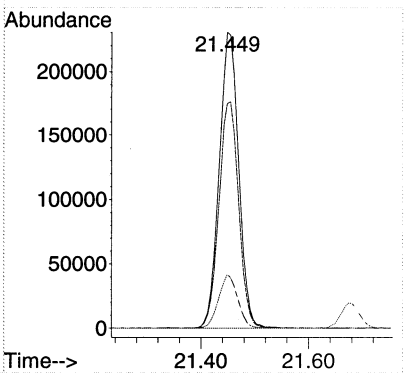


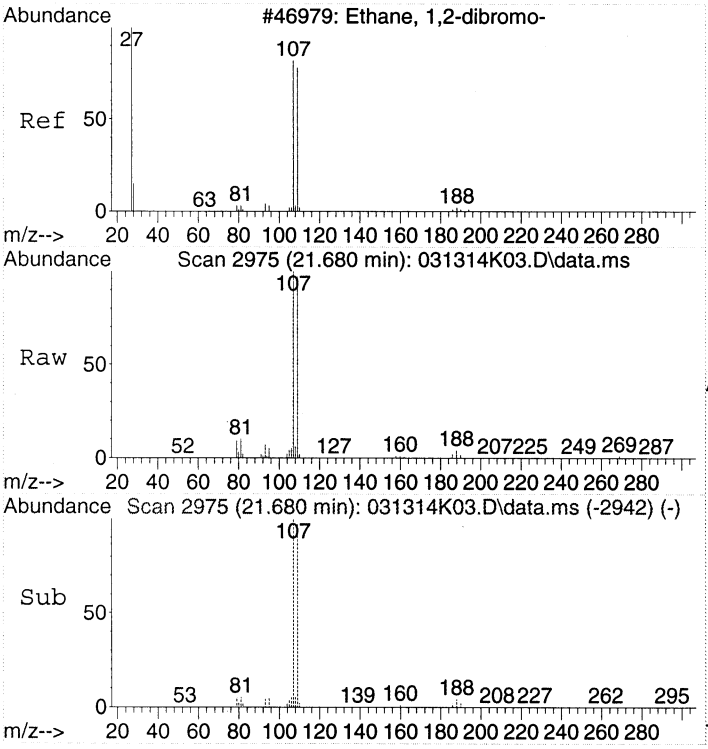


#49
Chlorodibromomethane
Concen: 10.71 ppbv
RT: 21.449 min Scan# 2937
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:129 Resp: 577856

Ion	Ratio	Lower	Upper
129	100		
127	77.6	57.6	97.6
79	17.7	0.0	37.7

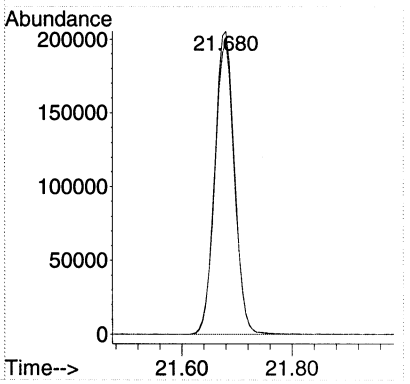


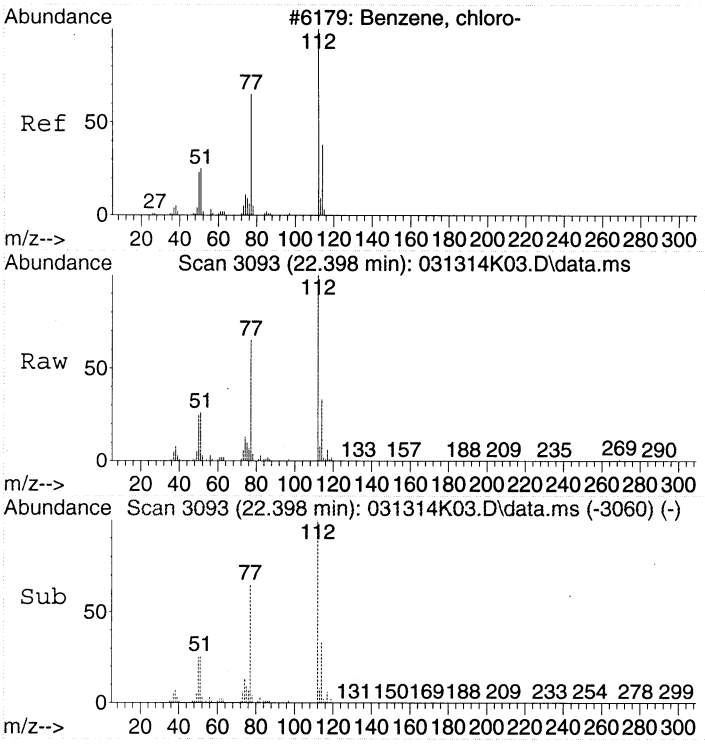


#50
1,2-Dibromoethane (EDB)
Concen: 10.41 ppbv
RT: 21.680 min Scan# 2975
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:107 Resp: 511177

Ion	Ratio	Lower	Upper
107	100		
109	95.8	75.8	115.8

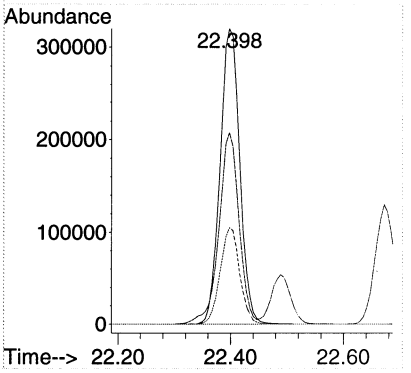


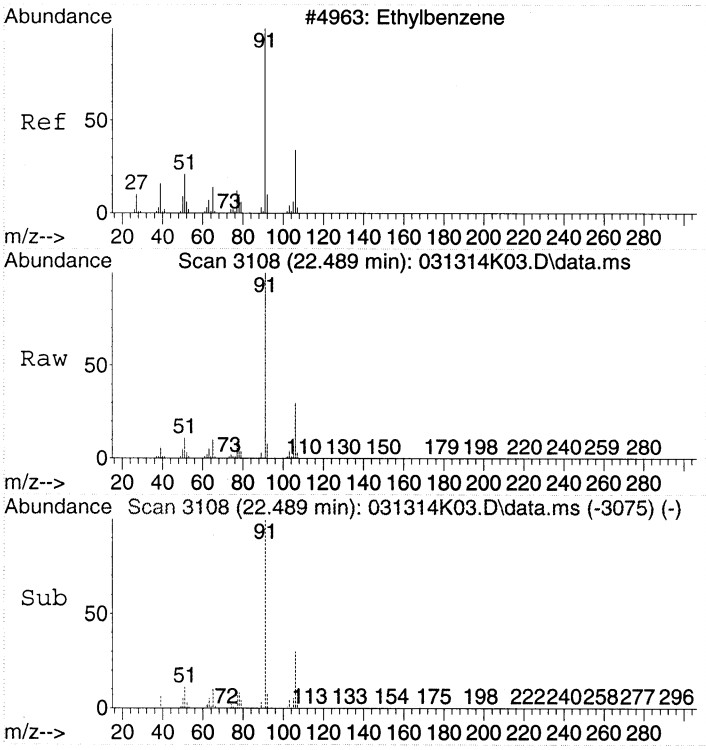


#51
Chlorobenzene
Concen: 10.33 ppbv
RT: 22.398 min Scan# 3093
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:112 Resp: 776324

Ion	Ratio	Lower	Upper
112	100		
77	66.5	46.5	86.5
114	32.7	12.7	52.7

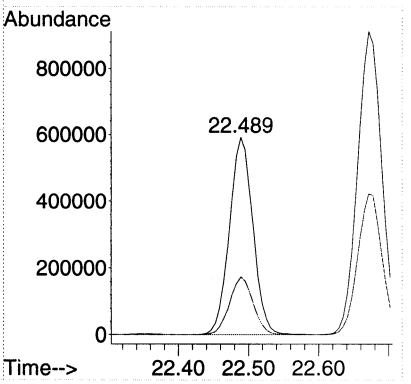


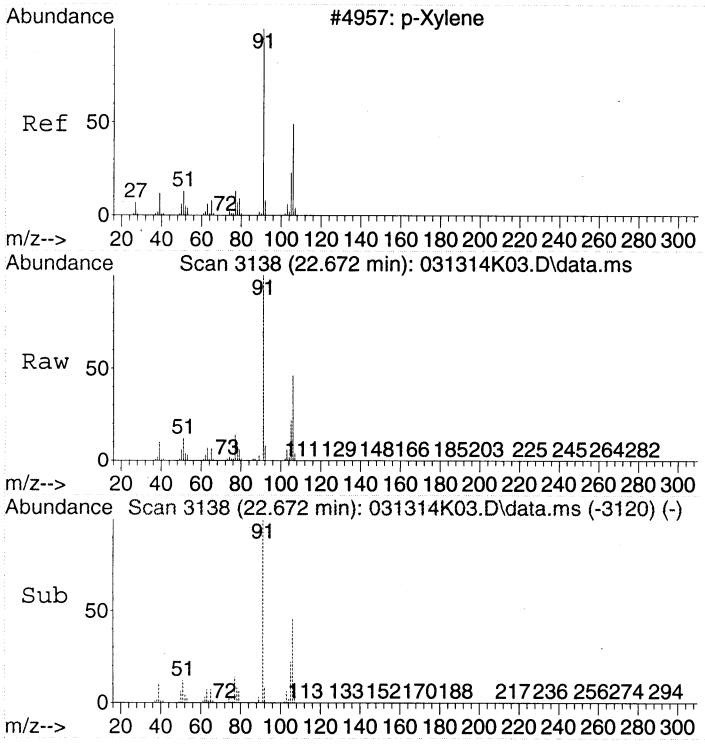


#52
Ethylbenzene
Concen: 10.08 ppbv
RT: 22.489 min Scan# 3108
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 91 Resp: 1379845

Ion	Ratio	Lower	Upper
91	100		
106	29.6	9.6	49.6

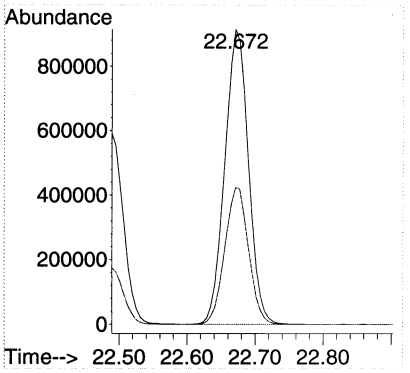


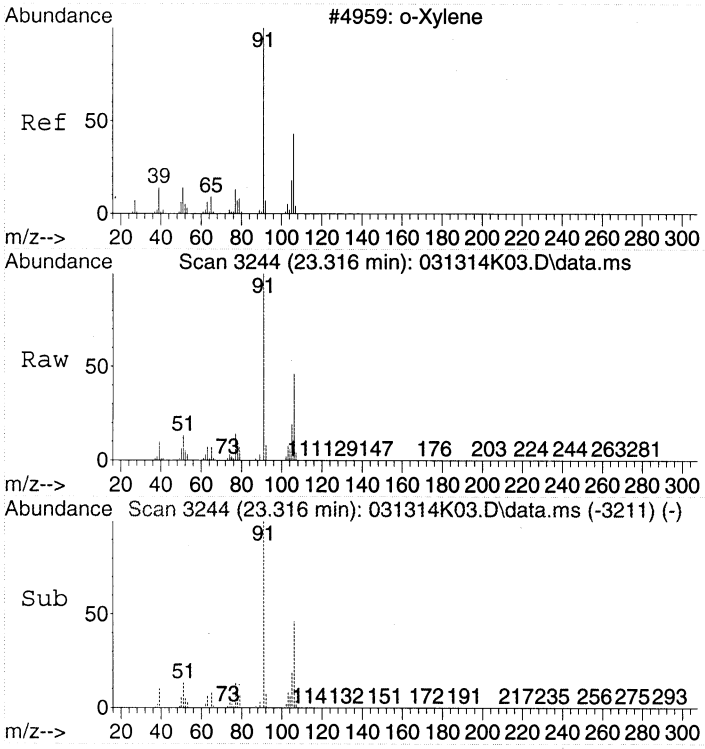


#53
m&p-Xylene
Concen: 20.49 ppbv
RT: 22.672 min Scan# 3138
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 91 Resp: 2195767

Ion	Ratio	Lower	Upper
91	100		
106	46.8	26.8	66.8

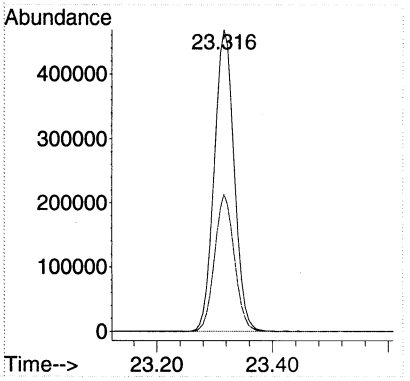


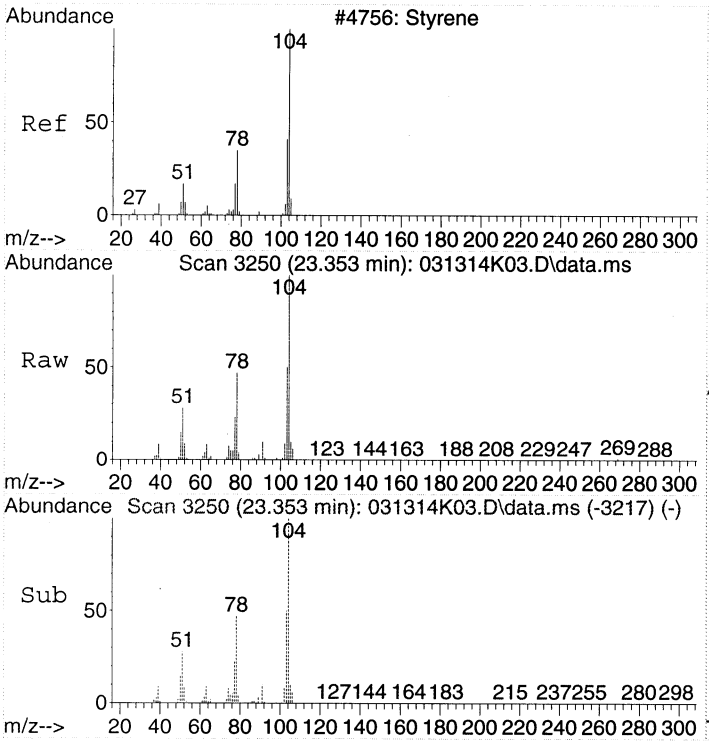


#54
o-Xylene
Concen: 10.27 ppbv
RT: 23.316 min Scan# 3244
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 91 Resp: 1119227

Ion	Ratio	Lower	Upper
91	100		
106	45.2	25.2	65.2

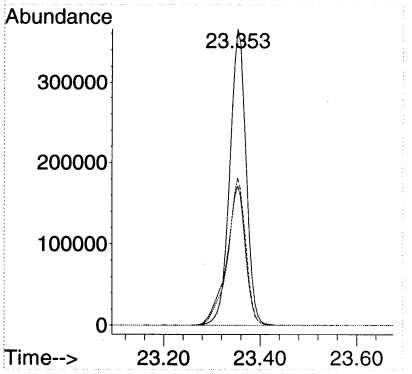


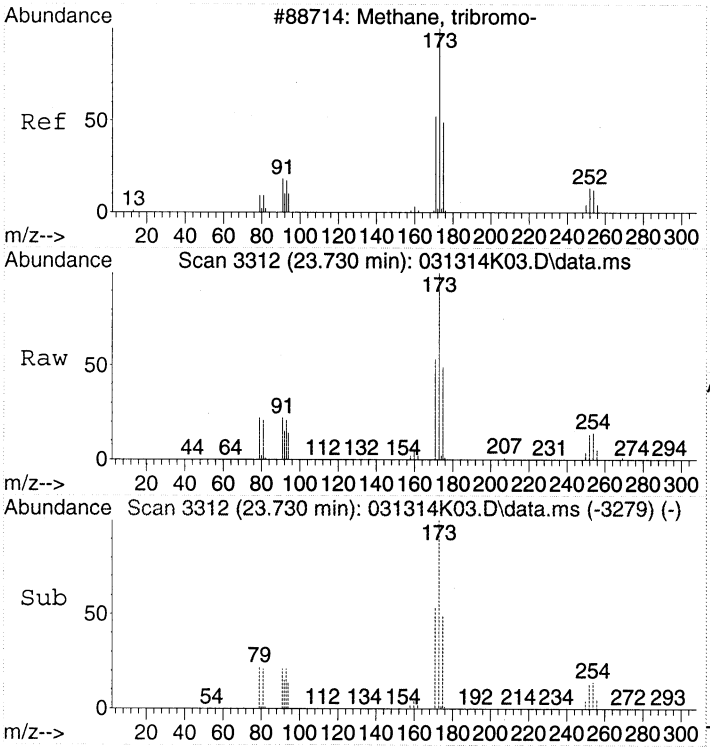


#55
Styrene
Concen: 10.30 ppbv
RT: 23.353 min Scan# 3250
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:104 Resp: 863294

Ion	Ratio	Lower	Upper
104	100		
78	54.4	34.4	74.4
103	54.8	34.8	74.8

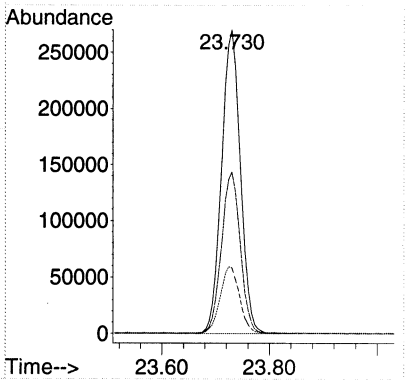


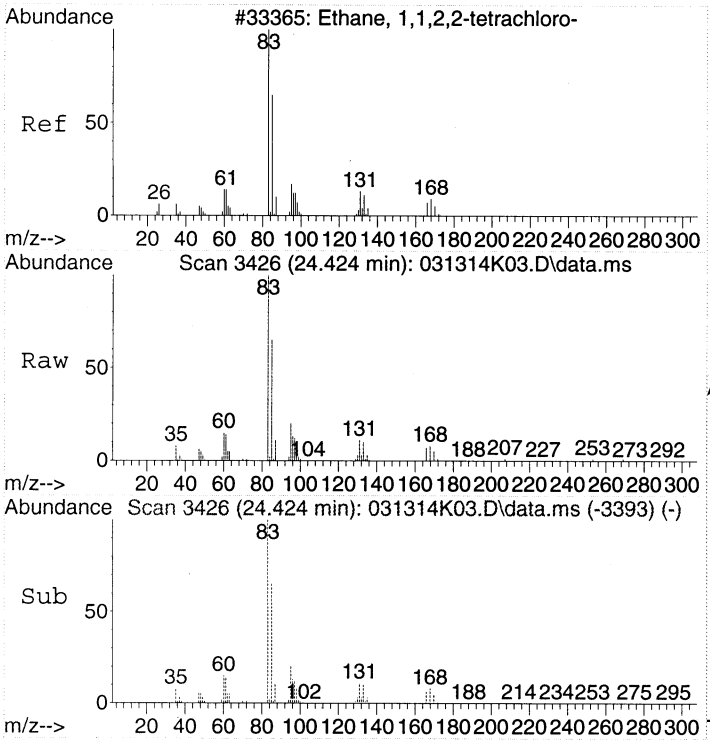


#56
Bromoform
Concen: 11.16 ppbv
RT: 23.730 min Scan# 3312
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:173 Resp: 655961

Ion	Ratio	Lower	Upper
173	100		
171	53.0	33.0	73.0
91	22.3	2.3	42.3

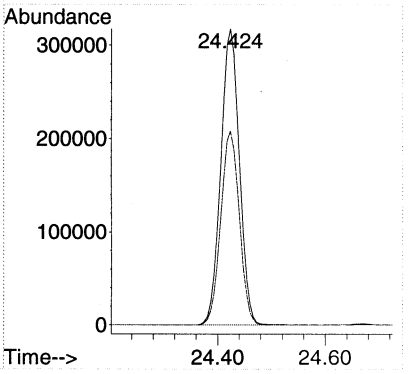


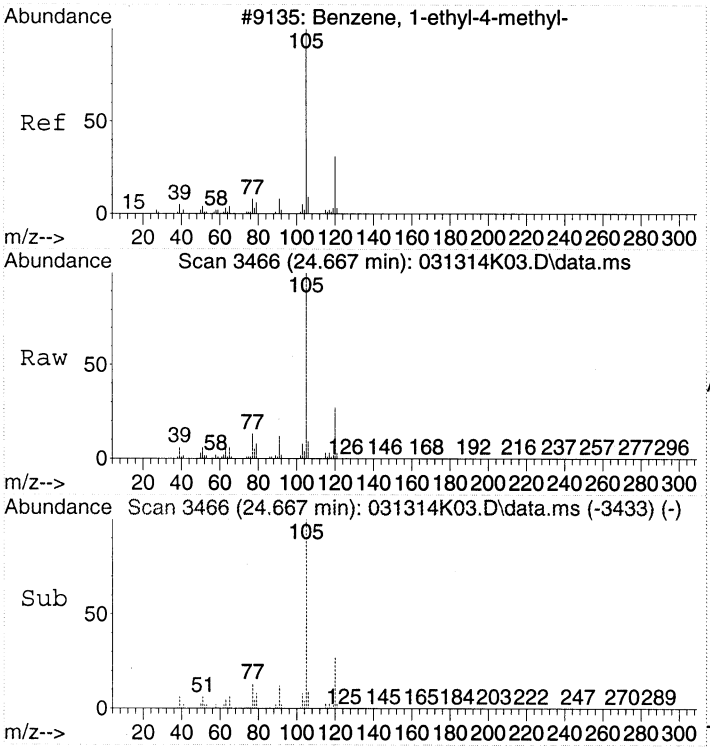


#57
1,1,2,2-Tetrachloroethane
Concen: 9.98 ppbv
RT: 24.424 min Scan# 3426
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 83 Resp: 761230

Ion	Ratio	Lower	Upper
83	100		
85	65.5	45.5	85.5

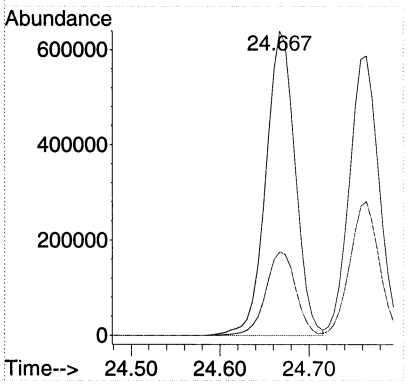


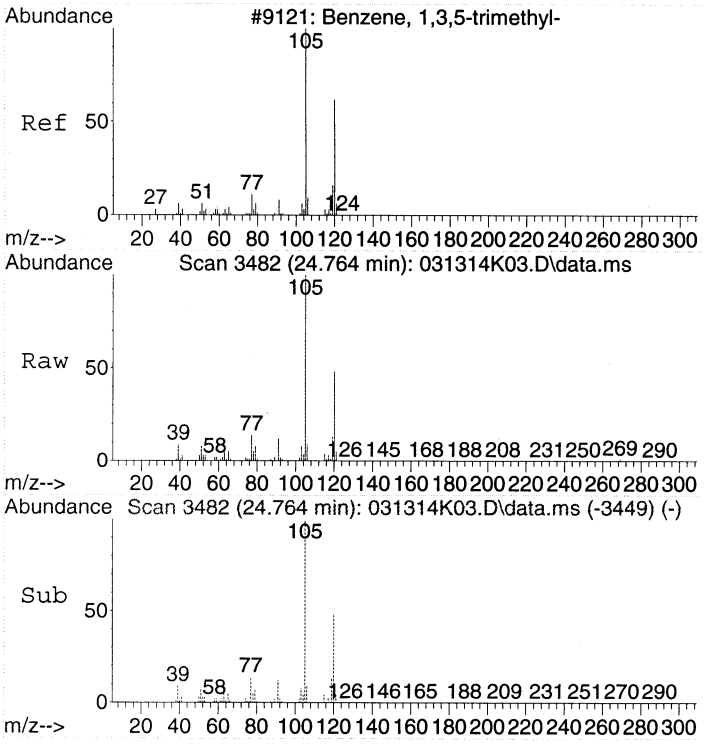


#58
4-Ethyltoluene
Concen: 10.76 ppbv
RT: 24.667 min Scan# 3466
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:105 Resp: 1460553

Ion	Ratio	Lower	Upper
105	100		
120	28.3	8.3	48.3

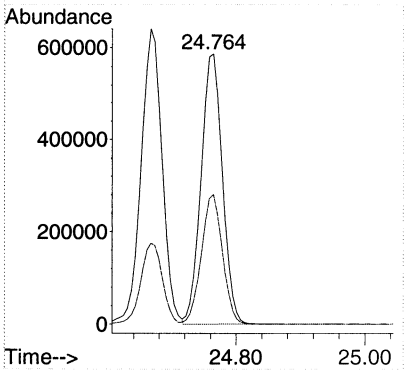


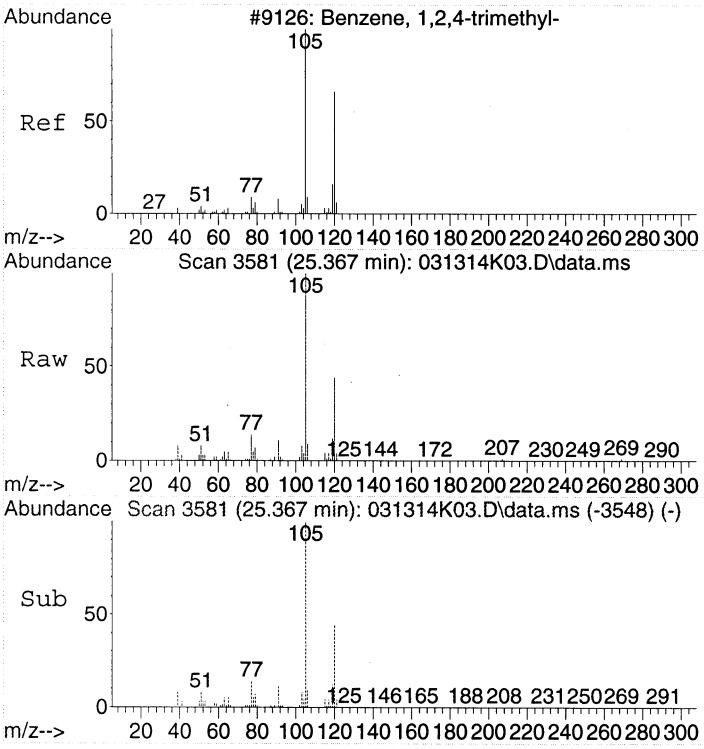


#59
1,3,5-Trimethylbenzene
Concen: 10.47 ppbv
RT: 24.764 min Scan# 3482
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:105 Resp: 1346252

Ion	Ratio	Lower	Upper
105	100		
120	47.5	27.5	67.5

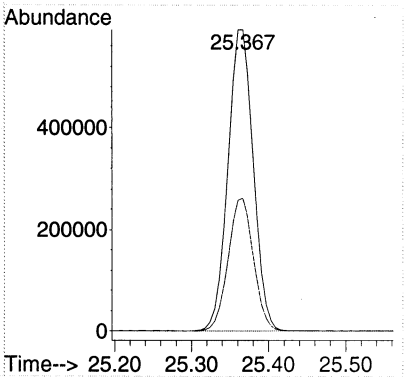


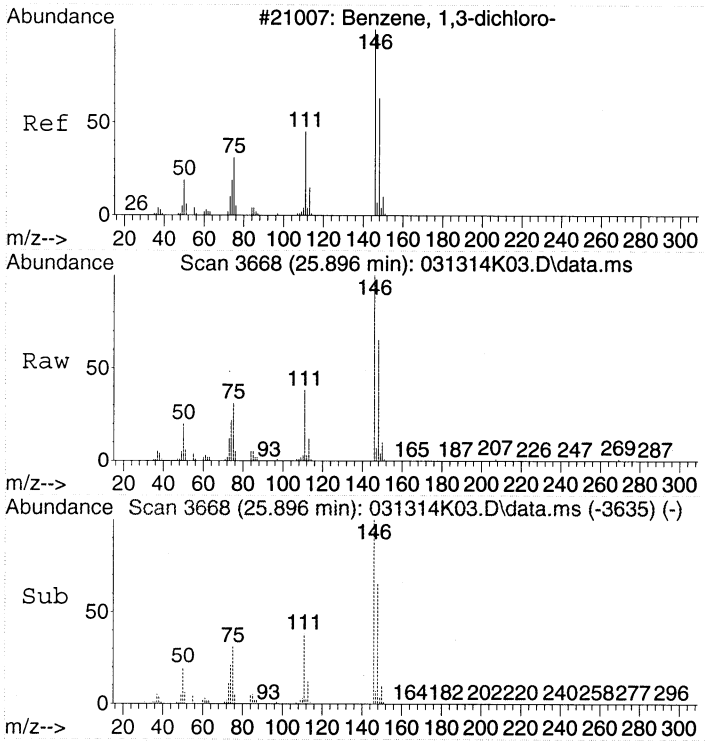


#60
1,2,4-Trimethylbenzene
Concen: 10.19 ppbv
RT: 25.367 min Scan# 3581
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:105 Resp: 1353440

Ion	Ratio	Lower	Upper
105	100		
120	44.3	24.3	64.3

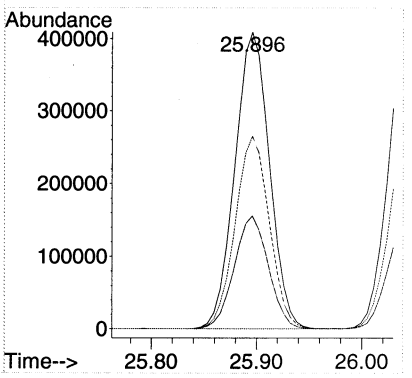


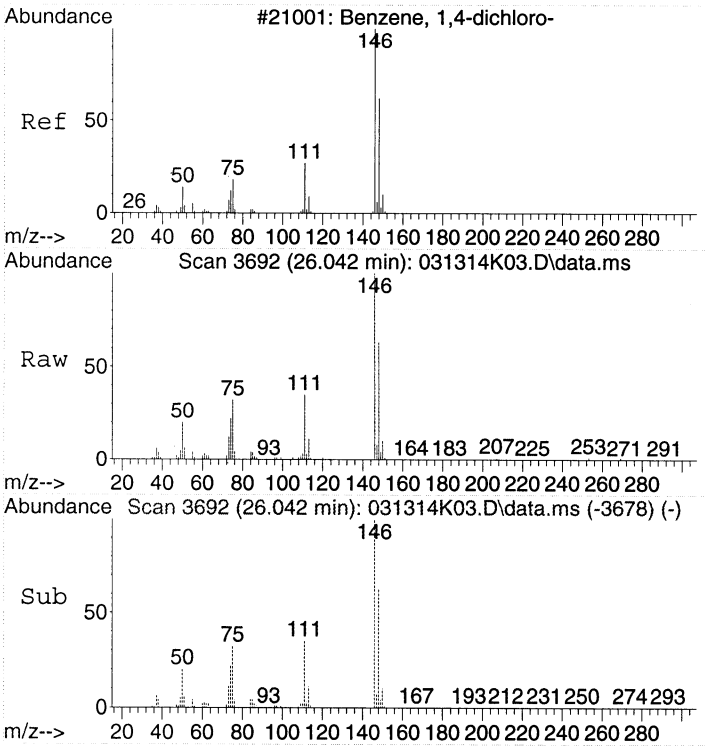


#61
1,3-Dichlorobenzene
Concen: 9.99 ppbv
RT: 25.896 min Scan# 3668
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:146 Resp: 937243

Ion	Ratio	Lower	Upper
146	100		
111	37.6	17.6	57.6
148	64.1	44.1	84.1

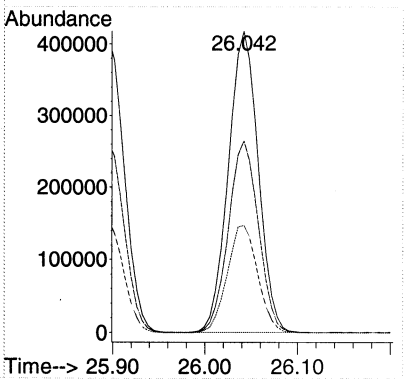


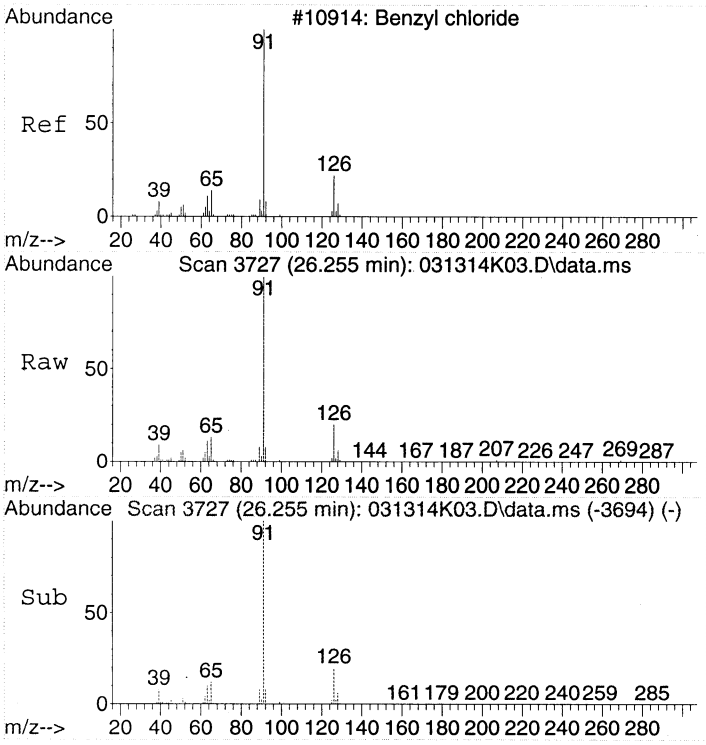


#62
1,4-Dichlorobenzene
Concen: 9.93 ppbv
RT: 26.042 min Scan# 3692
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:146 Resp: 933125

Ion	Ratio	Lower	Upper
146	100		
148	63.7	43.7	83.7
111	35.9	15.9	55.9

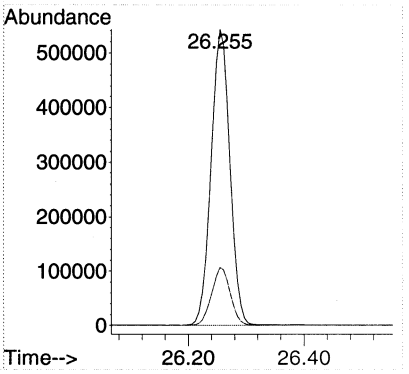


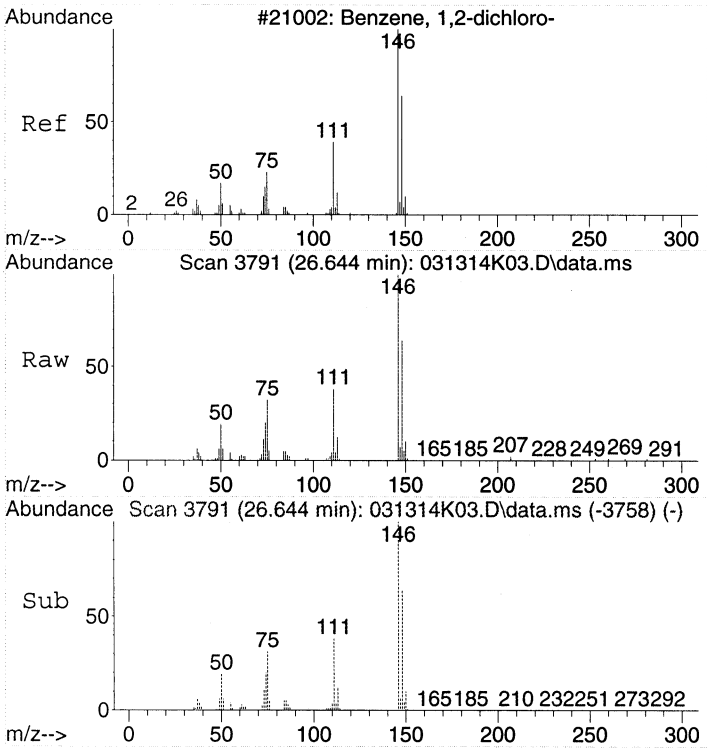


#63
Benzyl chloride
Concen: 10.76 ppbv
RT: 26.255 min Scan# 3727
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion: 91 Resp: 1230785

Ion	Ratio	Lower	Upper
91	100		
126	19.6	0.0	39.6

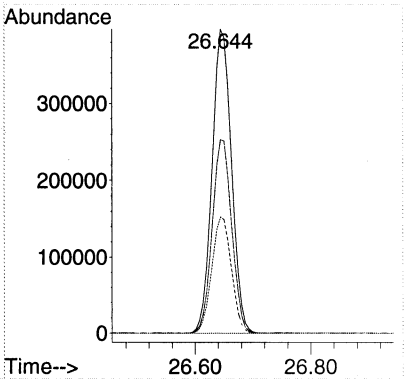


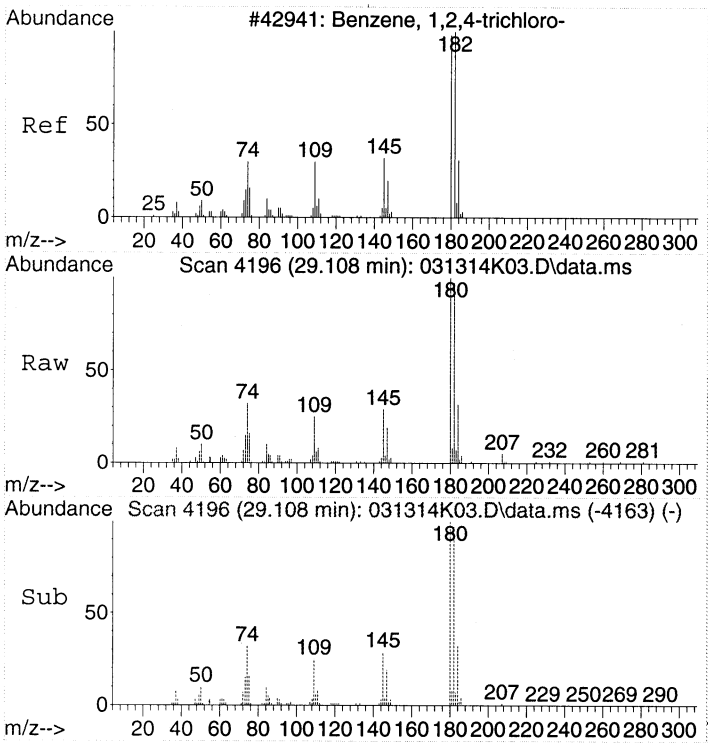


#64
1,2-Dichlorobenzene
Concen: 10.19 ppbv
RT: 26.644 min Scan# 3791
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:146 Resp: 931236

Ion	Ratio	Lower	Upper
146	100		
148	63.9	43.9	83.9
111	38.7	18.7	58.7

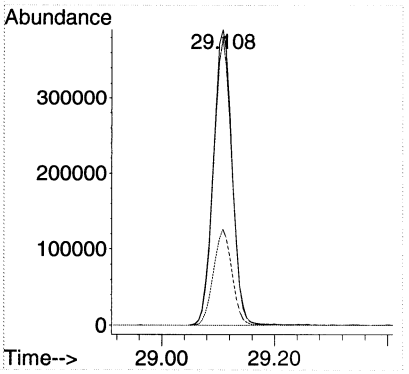


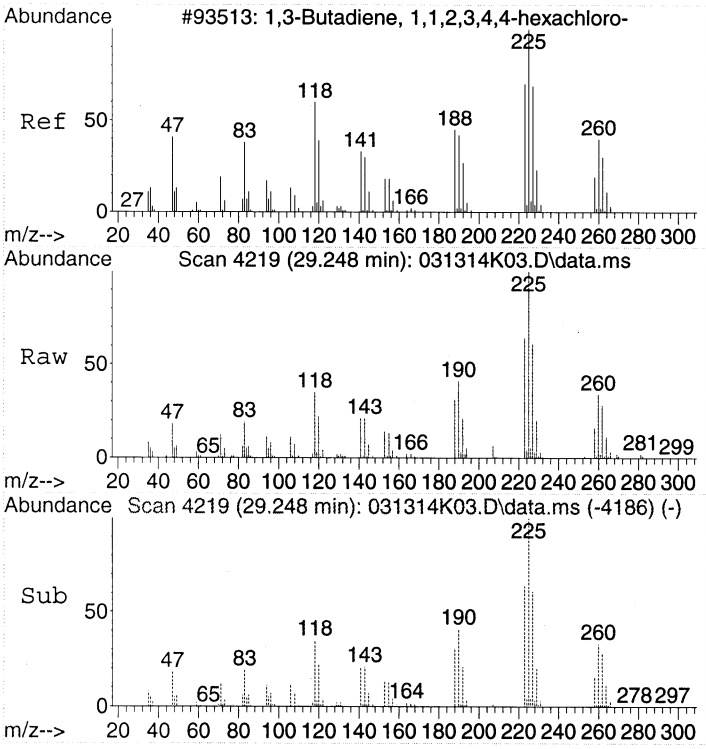


#65
1,2,4-Trichlorobenzene
Concen: 9.73 ppbv
RT: 29.108 min Scan# 4196
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:180 Resp: 904331

Ion	Ratio	Lower	Upper
180	100		
182	95.5	75.5	115.5
184	31.9	11.9	51.9

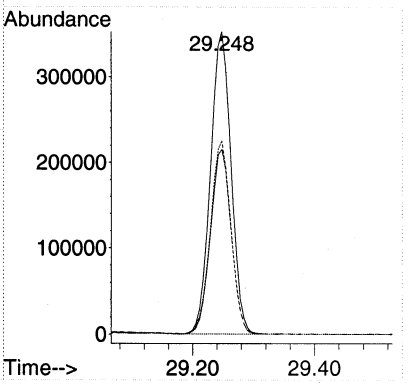




#66
Hexachlorobutadiene
Concen: 10.24 ppbv
RT: 29.248 min Scan# 4219
Delta R.T. 0.000 min
Lab File: 031314K03.D
Acq: 13 Mar 2014 8:29

Tgt Ion:225 Resp: 828362

Ion	Ratio	Lower	Upper
225	100		
227	61.6	41.6	81.6
223	63.5	43.5	83.5



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Title : TO15

Signal : TIC: 031314K03.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.372	120	130	137	rBV	195954	483132	6.94%	0.365%
2	4.463	137	145	156	rVB	518164	1285344	18.47%	0.971%
3	4.816	190	203	221	rBV	730042	2163592	31.08%	1.635%
4	5.011	223	235	246	rVB	111965	315303	4.53%	0.238%
5	5.333	279	288	296	rBV	144126	391915	5.63%	0.296%
6	5.431	296	304	316	rVB	234009	660198	9.48%	0.499%
7	6.362	445	457	470	rBV2	173550	599710	8.62%	0.453%
8	6.696	498	512	527	rBV2	82161	294752	4.23%	0.223%
9	7.262	591	605	615	rBV	138552	516636	7.42%	0.390%
10	7.408	615	629	648	rVB	398781	1739918	25.00%	1.315%
11	9.221	900	927	958	rBV4	414361	3654621	52.50%	2.762%
12	9.817	1008	1025	1042	rBV2	114149	551979	7.93%	0.417%
13	10.012	1042	1057	1076	rVB	165229	777692	11.17%	0.588%
14	10.444	1111	1128	1151	rBV2	105242	579981	8.33%	0.438%
15	10.839	1172	1193	1214	rBV2	184920	855420	12.29%	0.646%
16	11.380	1264	1282	1298	rBV	224243	937262	13.46%	0.708%
17	12.092	1375	1399	1421	rBV3	534849	2600830	37.36%	1.965%
18	12.713	1484	1501	1517	rBV3	375712	1525913	21.92%	1.153%
19	13.443	1607	1621	1635	rBV2	258918	993160	14.27%	0.751%
20	13.595	1635	1646	1662	rVB	243248	811080	11.65%	0.613%
21	14.897	1845	1860	1868	rBV	398158	1233062	17.71%	0.932%
22	14.994	1868	1876	1879	rBV	211502	528797	7.60%	0.400%
23	15.444	1936	1950	1964	rBV2	1166848	3744093	53.79%	2.829%
24	15.596	1964	1975	1991	rVB	473155	1481667	21.29%	1.120%
25	15.876	2000	2021	2038	rVB2	641696	3620241	52.01%	2.736%
26	16.138	2051	2064	2080	rVB	665595	2207852	31.72%	1.668%
27	16.612	2122	2142	2157	rBV2	890273	4394296	63.13%	3.321%
28	16.825	2166	2177	2189	rBV2	339994	955469	13.73%	0.722%
29	16.971	2189	2201	2214	rBV	709806	1980523	28.45%	1.497%
30	17.446	2267	2279	2295	rBV	2051661	5443386	78.20%	4.113%
31	17.859	2335	2347	2360	rBV	764255	2051913	29.48%	1.551%
32	18.358	2418	2429	2440	rBV	578396	1579290	22.69%	1.193%
33	18.553	2452	2461	2475	rBV	151920	450550	6.47%	0.340%
34	18.827	2494	2506	2519	rBV	659680	1732436	24.89%	1.309%
35	19.593	2622	2632	2644	rBV	639108	1587290	22.80%	1.199%
36	19.831	2660	2671	2681	rBV	646841	1649998	23.70%	1.247%
37	20.068	2700	2710	2722	rBV	978518	2457291	35.30%	1.857%
38	20.536	2779	2787	2799	rVB	702569	1668782	23.97%	1.261%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Title : TO15

39	20.840	2827	2837	2844	rBV	772355	1929056	27.71%	1.458%
40	20.926	2844	2851	2863	rVB	1219241	3000929	43.11%	2.268%
41	21.181	2884	2893	2913	rVB	624895	1551222	22.29%	1.172%
42	21.449	2927	2937	2952	rBV	799714	2014587	28.94%	1.522%
43	21.680	2965	2975	2985	rBV	549811	1357178	19.50%	1.026%
44	22.349	3075	3085	3091	rBV	2632970	6960813	100.00%	5.260%
45	22.489	3100	3108	3120	rVB	1382012	3232086	46.43%	2.442%
46	22.672	3128	3138	3155	rBV	2655070	6425120	92.30%	4.855%
47	23.323	3235	3245	3247	rBV	1403413	3298150	47.38%	2.492%
48	23.730	3302	3312	3326	rVB	995673	2443007	35.10%	1.846%
49	24.424	3416	3426	3438	rBV	1151779	2775581	39.87%	2.097%
50	24.667	3453	3466	3474	rBV	1613001	3689267	53.00%	2.788%
51	24.764	3474	3482	3494	rVB	1761157	4010979	57.62%	3.031%
52	25.361	3571	3580	3593	rBV	1719477	3965332	56.97%	2.997%
53	25.896	3659	3668	3680	rVB	1630934	3733160	53.63%	2.821%
54	26.042	3683	3692	3704	rVV	1646841	3711736	53.32%	2.805%
55	26.255	3718	3727	3742	rBV	1227619	2787806	40.05%	2.107%
56	26.644	3781	3791	3802	rBV	1603533	3769595	54.15%	2.849%
57	29.108	4187	4196	4208	rVB	2057675	4699575	67.51%	3.551%
58	29.248	4209	4219	4229	rVB	2707475	6470878	92.96%	4.890%

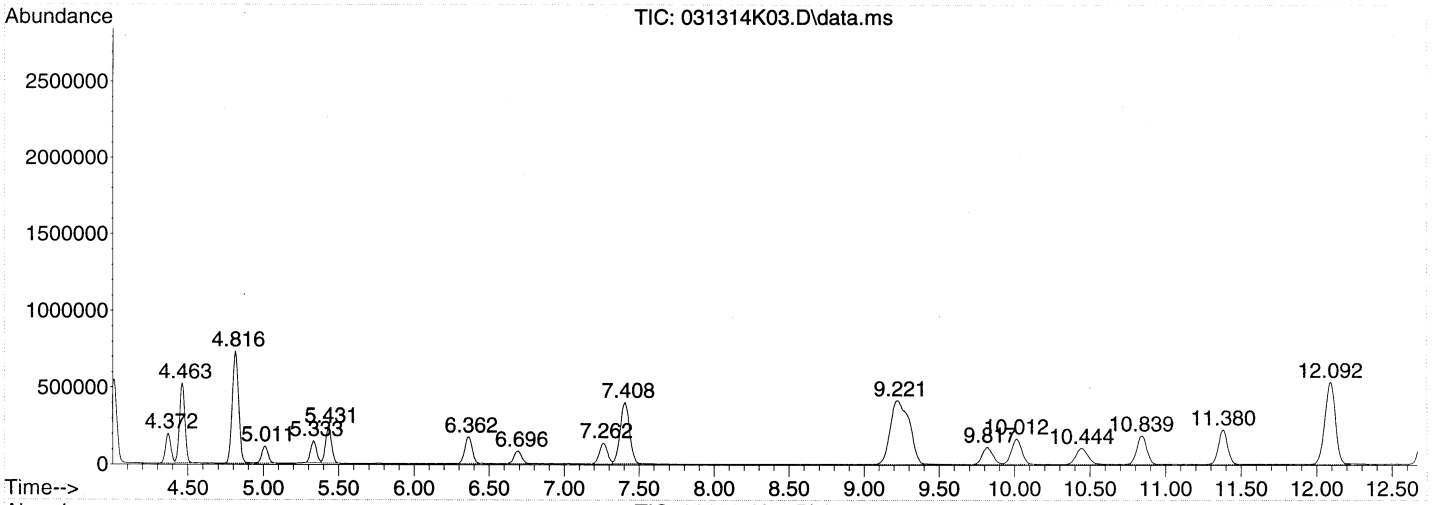
Sum of corrected areas: 132331431

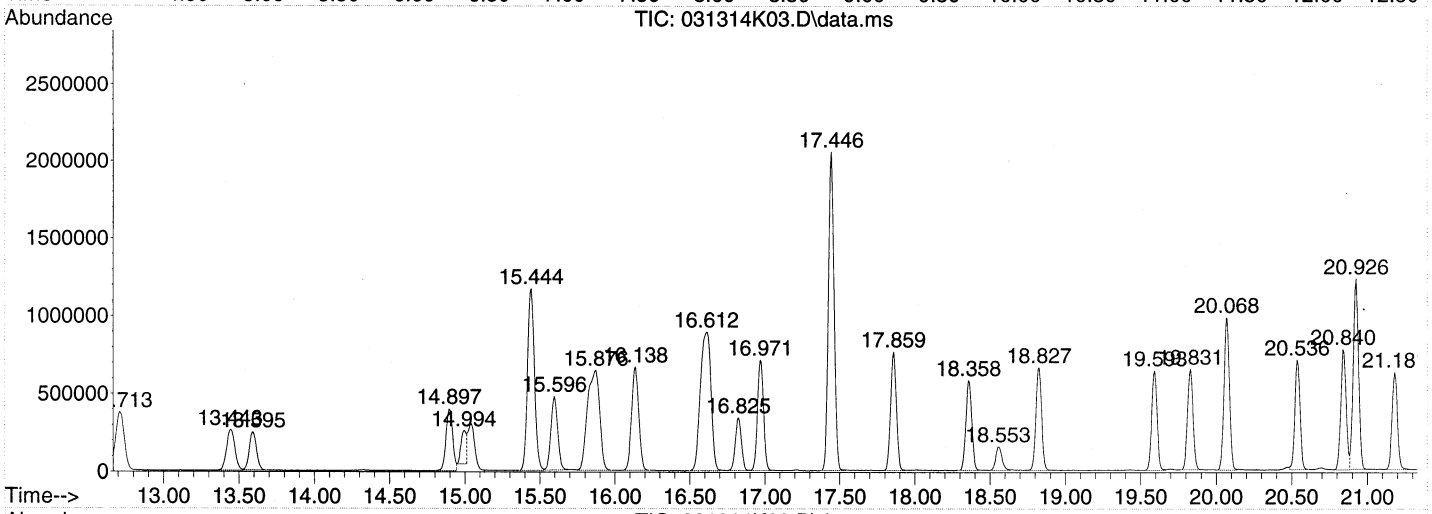
LSC Report - Integrated Chromatogram

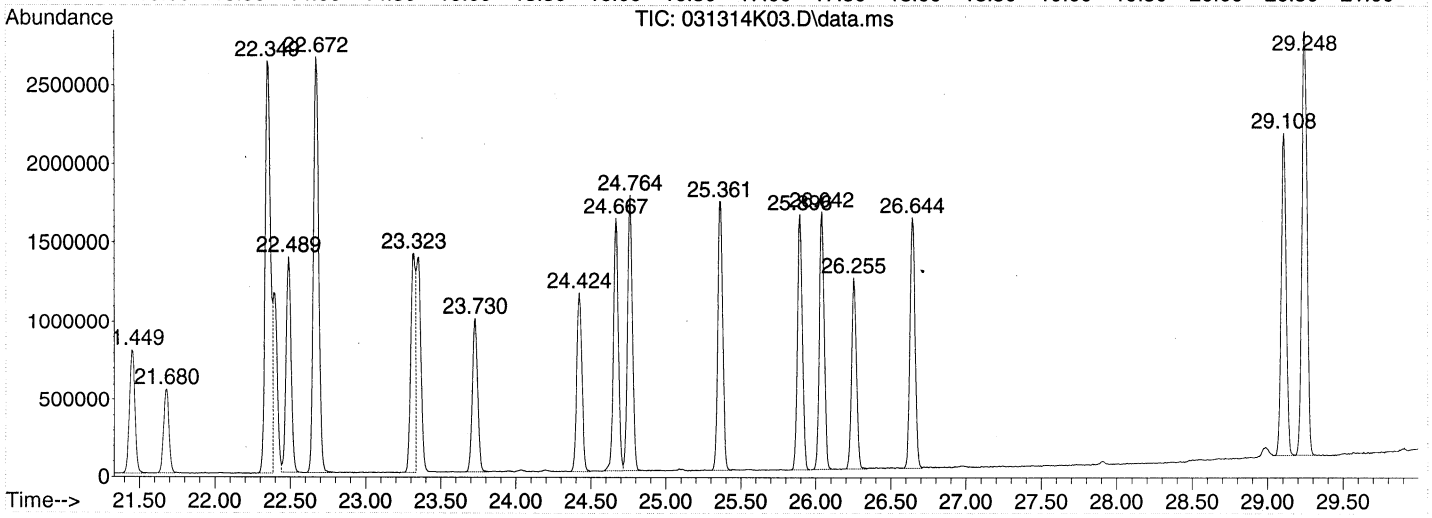
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K03.D
Acq On : 13 Mar 2014 8:29
Operator : EM
Sample : S14C050-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K04.D
Acq On : 13 Mar 2014 9:14
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:04:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	709566	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2162682	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	1933415	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.372	41	19078	1.19	ppbv		98
3) Dichlorodifluoromethane	4.457	85	79872	1.25	ppbv		99
4) 1,2-Dichlorotetrafluor...	4.810	85	66165	1.23	ppbv		98
5) Chloromethane	5.011	50	22302	1.19	ppbv		99
6) Vinyl chloride	5.333	62	26701	1.21	ppbv		99
7) 1,3-Butadiene	5.437	54	18415	1.16	ppbv		98
8) Bromomethane	6.355	94	22843	1.20	ppbv		99
9) Chloroethane	6.684	64	15107	1.20	ppbv		95
10) Bromoethene	7.262	106	19130	1.15	ppbv		97
11) Trichlorofluoromethane	7.402	101	83166	1.24	ppbv		99
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	45739	1.16	ppbv		99
13) 1,1-Dichloroethene	9.288	61	43542	1.07	ppbv		98
14) Acetone	9.860	43	35621	1.07	ppbv		98
15) Carbon disulfide	10.012	76	63913	1.19	ppbv		98
16) 2-Propanol	10.504	45	33072	1.02	ppbv		91
17) Allyl chloride	10.845	41	30824	1.16	ppbv		98
18) Dichloromethane	11.381	49	47908	1.44	ppbv		96
19) tert-Butyl methyl ethe...	12.098	73	67117	1.07	ppbv		96
20) trans-1,2-Dichloroethene	12.104	61	33840	1.12	ppbv		98
21) Hexane	12.713	57	38630	1.11	ppbv		96
22) 1,1-Dichloroethane	13.455	63	53073	1.10	ppbv		98
23) Vinyl acetate	13.601	43	56575	0.99	ppbv		99
24) cis-1,2-Dichloroethene	14.897	61	39069	1.09	ppbv		99
25) 2-Butanone (MEK)	15.006	72	9802	0.98	ppbv	#	95
26) Ethyl acetate	15.061	61	6743	1.03	ppbv	#	96
27) Tetrahydrofuran	15.487	42	27090	1.04	ppbv		98
28) Chloroform	15.596	83	58544	1.12	ppbv		96
29) Cyclohexane	15.834	56	39075	1.10	ppbv		97
30) 1,1,1-Trichloroethane	15.876	97	66561	1.11	ppbv		98
31) Carbon tetrachloride	16.132	117	72596	1.15	ppbv		99
33) Benzene	16.625	78	85532	1.08	ppbv		100
34) 2,2,4-Trimethylpentane	16.588	57	118747	1.05	ppbv		99
35) 1,2-Dichloroethane	16.825	62	45162	1.05	ppbv		98
36) Heptane	16.971	43	44459	1.03	ppbv		98
37) Trichloroethene	17.860	130	36668	1.09	ppbv		99
38) 1,2-Dichloropropane	18.364	63	31321	1.08	ppbv		98
39) 1,4-Dioxane	18.590	88	16009	1.06	ppbv		96
40) Bromodichloromethane	18.827	83	58865	1.07	ppbv		99
41) cis-1,3-Dichloropropene	19.593	75	48891	1.06	ppbv		98
42) 4-Methyl-2-pentanone (...	19.849	43	61222	1.01	ppbv		99
44) Toluene	20.074	91	102288	1.08	ppbv		99
45) trans-1,3-Dichloropropene	20.542	75	49137	1.04	ppbv		93
46) 1,1,2-Trichloroethane	20.840	97	34157	1.10	ppbv		97
47) Tetrachloroethene	20.926	166	49292	1.06	ppbv		98
48) 2-Hexanone	21.193	43	57113	0.97	ppbv		97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K04.D
Acq On : 13 Mar 2014 9:14
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:04:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49)	Chlorodibromomethane	21.449	129	56444	1.07	ppbv		99
50)	1,2-Dibromoethane (EDB)	21.674	107	51619	1.08	ppbv		97
51)	Chlorobenzene	22.392	112	79833	1.09	ppbv	#	78
52)	Ethylbenzene	22.489	91	135834	1.02	ppbv		98
53)	m&p-Xylene	22.672	91	211530	2.03	ppbv		99
54)	o-Xylene	23.317	91	110743	1.04	ppbv		100
55)	Styrene	23.353	104	81041	0.99	ppbv		98
56)	Bromoform	23.730	173	60569	1.06	ppbv		99
57)	1,1,2,2-Tetrachloroethane	24.424	83	79337	1.07	ppbv		99
58)	4-Ethyltoluene	24.667	105	141678	1.07	ppbv		99
59)	1,3,5-Trimethylbenzene	24.758	105	133745	1.07	ppbv		100
60)	1,2,4-Trimethylbenzene	25.367	105	135725	1.05	ppbv		99
61)	1,3-Dichlorobenzene	25.896	146	95386	1.04	ppbv		99
62)	1,4-Dichlorobenzene	26.036	146	97788	1.07	ppbv		98
63)	Benzyl chloride	26.255	91	116445	1.05	ppbv		99
64)	1,2-Dichlorobenzene	26.644	146	95378	1.07	ppbv		99
65)	1,2,4-Trichlorobenzene	29.108	180	92405	1.02	ppbv		98
66)	Hexachlorobutadiene	29.248	225	92897	1.18	ppbv		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

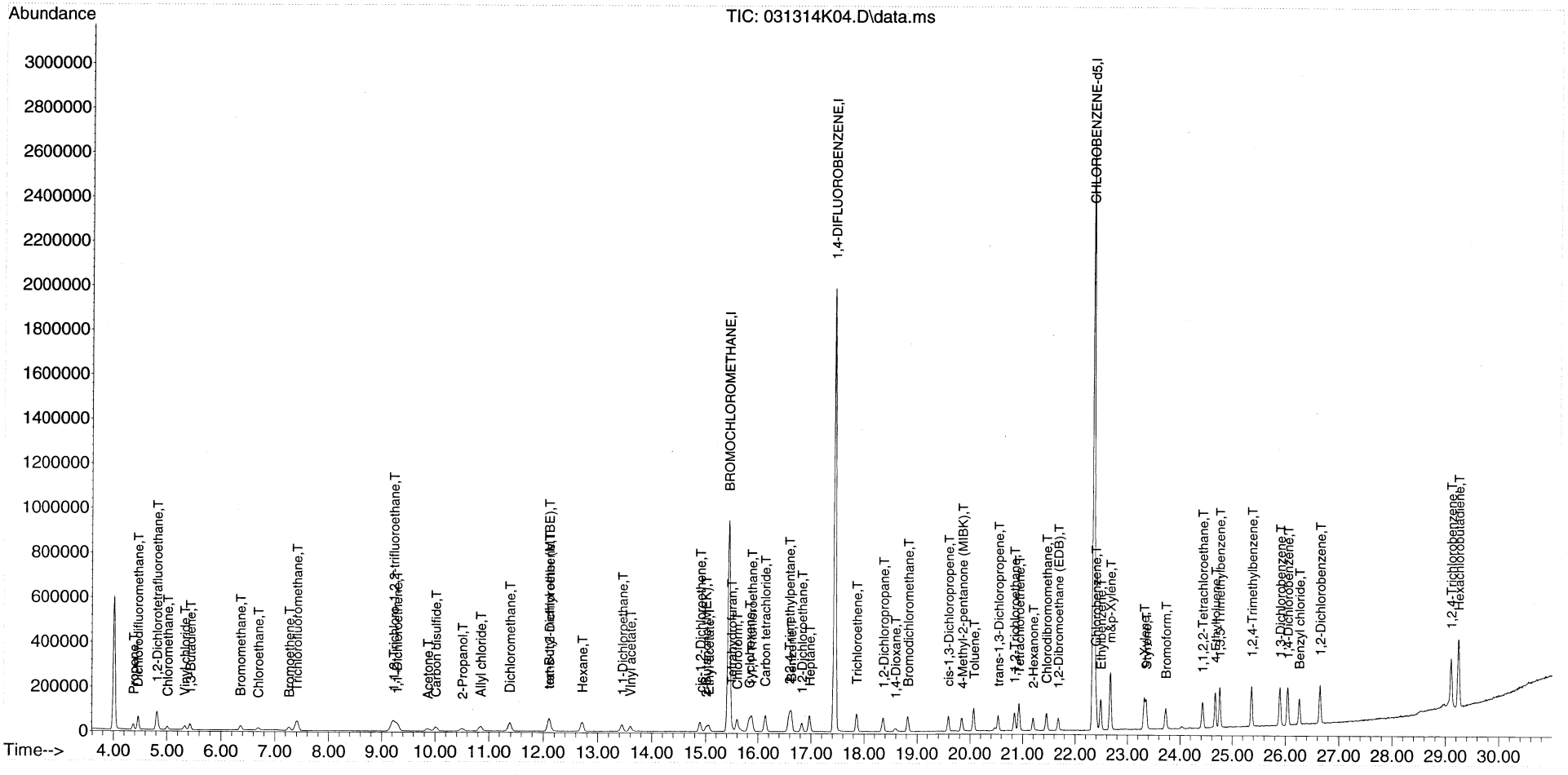
00072

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K04.D
Acq On : 13 Mar 2014 9:14
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:04:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K05.D
Acq On : 13 Mar 2014 10:42
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL2
Misc : 2.0 ppbv 1411091
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:54 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	743665	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2180127	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	2017227	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.372	41	31960	1.91	ppbv		95
3) Dichlorodifluoromethane	4.463	85	128598	1.92	ppbv		98
4) 1,2-Dichlorotetrafluor...	4.816	85	108572	1.93	ppbv		96
5) Chloromethane	5.011	50	38613	1.97	ppbv		99
6) Vinyl chloride	5.333	62	44294	1.92	ppbv		99
7) 1,3-Butadiene	5.437	54	29499	1.77	ppbv		97
8) Bromomethane	6.374	94	39445	1.97	ppbv		99
9) Chloroethane	6.696	64	26573	2.02	ppbv		100
10) Bromoethene	7.274	106	34830	2.00	ppbv		98
11) Trichlorofluoromethane	7.408	101	149684	2.14	ppbv		100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	77859	1.89	ppbv		98
13) 1,1-Dichloroethene	9.288	61	80160	1.88	ppbv		98
14) Acetone	9.859	43	67705	1.95	ppbv	#	47
15) Carbon disulfide	10.012	76	112797	2.01	ppbv	#	88
16) 2-Propanol	10.541	45	63707	1.87	ppbv		95
17) Allyl chloride	10.845	41	55869	2.01	ppbv		95
18) Dichloromethane	11.380	49	74811	2.14	ppbv		94
19) tert-Butyl methyl ethe...	12.116	73	129296	1.96	ppbv		95
20) trans-1,2-Dichloroethene	12.104	61	62387	1.97	ppbv		96
21) Hexane	12.707	57	72758	1.99	ppbv		98
22) 1,1-Dichloroethane	13.449	63	97166	1.93	ppbv		100
23) Vinyl acetate	13.607	43	115718	1.94	ppbv		97
24) cis-1,2-Dichloroethene	14.891	61	74853	2.00	ppbv		99
25) 2-Butanone (MEK)	15.012	72	19369	1.86	ppbv	#	81
26) Ethyl acetate	15.067	61	14067	2.04	ppbv	#	91
27) Tetrahydrofuran	15.499	42	53182	1.94	ppbv		100
28) Chloroform	15.596	83	113847	2.07	ppbv		97
29) Cyclohexane	15.834	56	76728	2.05	ppbv		98
30) 1,1,1-Trichloroethane	15.876	97	130026	2.07	ppbv		99
31) Carbon tetrachloride	16.132	117	138391	2.10	ppbv		98
33) Benzene	16.624	78	165112	2.06	ppbv		99
34) 2,2,4-Trimethylpentane	16.588	57	237668	2.09	ppbv		98
35) 1,2-Dichloroethane	16.825	62	87649	2.02	ppbv		99
36) Heptane	16.977	43	92263	2.12	ppbv		96
37) Trichloroethene	17.859	130	69797	2.06	ppbv		98
38) 1,2-Dichloropropane	18.358	63	61986	2.11	ppbv		99
39) 1,4-Dioxane	18.589	88	31278	2.05	ppbv		98
40) Bromodichloromethane	18.821	83	117525	2.12	ppbv		98
41) cis-1,3-Dichloropropene	19.587	75	97803	2.10	ppbv		98
42) 4-Methyl-2-pentanone (...	19.849	43	126888	2.07	ppbv		99
44) Toluene	20.068	91	203901	2.06	ppbv		99
45) trans-1,3-Dichloropropene	20.536	75	105496	2.14	ppbv		99
46) 1,1,2-Trichloroethane	20.840	97	68409	2.12	ppbv		98
47) Tetrachloroethene	20.932	166	98583	2.03	ppbv		99
48) 2-Hexanone	21.205	43	122190	1.99	ppbv		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K05.D
Acq On : 13 Mar 2014 10:42
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL2
Misc : 2.0 ppbv 1411091
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:54 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	113169	2.06 ppbv	99
50) 1,2-Dibromoethane (EDB)	21.674	107	104473	2.09 ppbv	100
51) Chlorobenzene	22.398	112	161802	2.12 ppbv	90
52) Ethylbenzene	22.489	91	289624	2.08 ppbv	100
53) m&p-Xylene	22.672	91	450501	4.14 ppbv	99
54) o-Xylene	23.316	91	224614	2.03 ppbv	99
55) Styrene	23.353	104	167400	1.97 ppbv	98
56) Bromoform	23.724	173	114182	1.91 ppbv	98
57) 1,1,2,2-Tetrachloroethane	24.424	83	156709	2.02 ppbv	99
58) 4-Ethyltoluene	24.667	105	269301	1.95 ppbv	99
59) 1,3,5-Trimethylbenzene	24.758	105	256817	1.97 ppbv	99
60) 1,2,4-Trimethylbenzene	25.360	105	269265	2.00 ppbv	99
61) 1,3-Dichlorobenzene	25.890	146	185840	1.95 ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	184813	1.93 ppbv	99
63) Benzyl chloride	26.255	91	220416	1.90 ppbv	100
64) 1,2-Dichlorobenzene	26.644	146	181933	1.96 ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	166271	1.76 ppbv	99
66) Hexachlorobutadiene	29.242	225	163105	1.98 ppbv	100

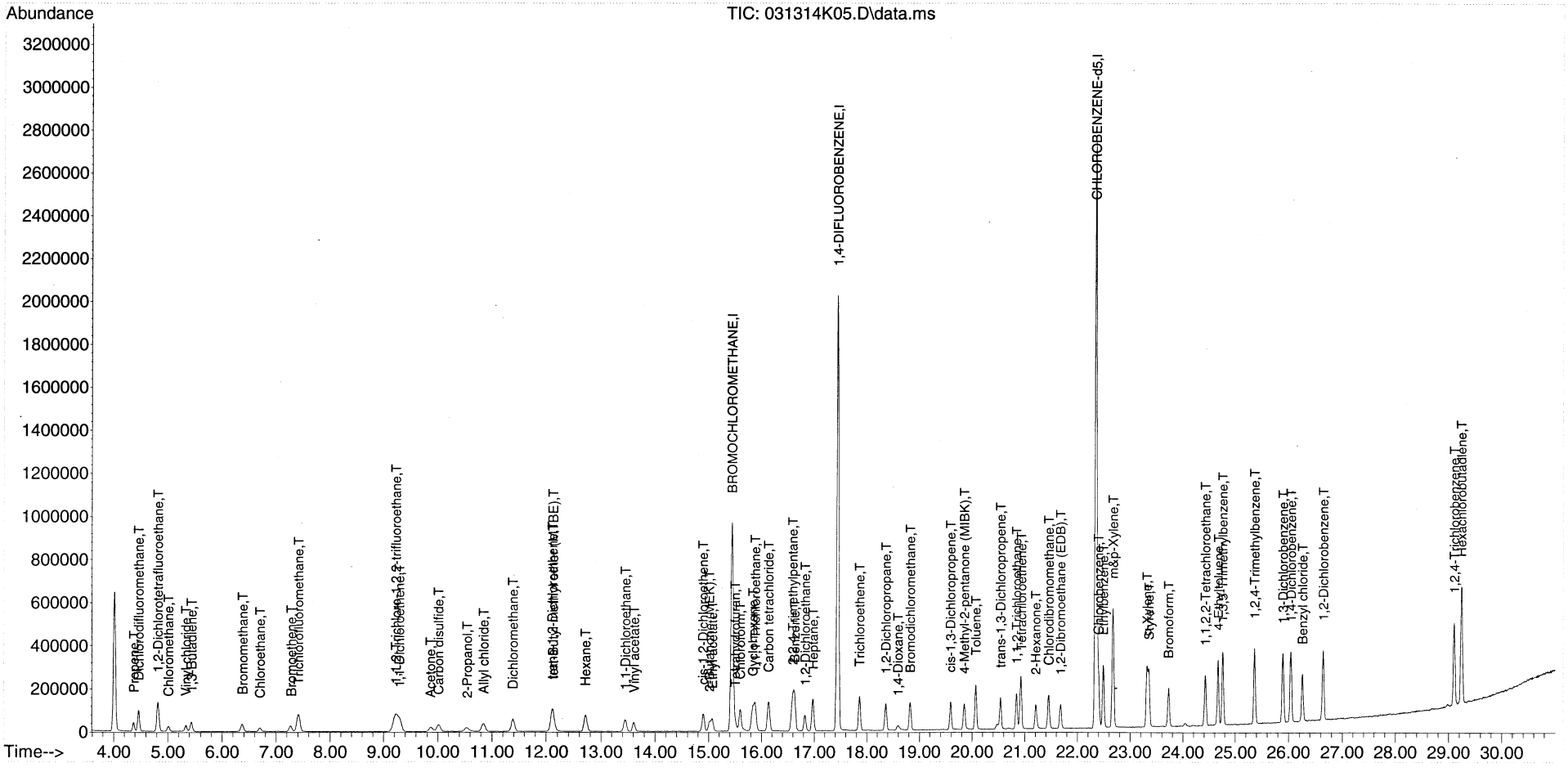
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K05.D
Acq On : 13 Mar 2014 10:42
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL2
Misc : 2.0 ppbv 1411091
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:04:54 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:06:09 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: Date: 4/2/14
Manual integration(s) reviewed by:
Reviewer: Date: 4-2-14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	789402	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2271777	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	2094248	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	84858	4.77	ppbv	98
3) Dichlorodifluoromethane	4.463	85	326674	4.58	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	277288	4.64	ppbv	96
5) Chloromethane	5.011	50	102112	4.90	ppbv	98
6) Vinyl chloride	5.333	62	116178	4.75	ppbv	98
7) 1,3-Butadiene	5.437	54	78736	4.45	ppbv	96
8) Bromomethane	6.368	94	96091	4.53	ppbv	99
9) Chloroethane	6.690	64	65105	4.65	ppbv	98
10) Bromoethene	7.262	106	83694	4.52	ppbv	99
11) Trichlorofluoromethane	7.408	101	358748	4.82	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	187582	4.29	ppbv	95
13) 1,1-Dichloroethene	9.300	61	200000	4.42	ppbv	97
14) Acetone	9.841	43	181410	4.91	ppbv	98
15) Carbon disulfide	10.024	76	282801	4.74	ppbv	98
16) 2-Propanol	10.498	45	175863	4.86	ppbv	97
17) Allyl chloride	10.845	41	146225	4.95	ppbv	96
18) Dichloromethane	11.381	49	161975	4.37	ppbv	93
19) tert-Butyl methyl ethe...	12.098	73	354726	5.06	ppbv	98
20) trans-1,2-Dichloroethene	12.104	61	157092	4.68	ppbv	97
21) Hexane	12.719	57	185223	4.77	ppbv	97
22) 1,1-Dichloroethane	13.449	63	240911	4.50	ppbv	100
23) Vinyl acetate	13.601	43	307817	4.85	ppbv	98
24) cis-1,2-Dichloroethene	14.897	61	189041	4.76	ppbv	96
25) 2-Butanone (MEK)	15.012	72	56698m	5.12	ppbv	
26) Ethyl acetate	15.061	61	35647	4.88	ppbv #	94
27) Tetrahydrofuran	15.475	42	145025	4.99	ppbv	97
28) Chloroform	15.603	83	279965	4.80	ppbv	98
29) Cyclohexane	15.834	56	198346	5.00	ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	313104	4.70	ppbv	99
31) Carbon tetrachloride	16.138	117	331015	4.72	ppbv	99
33) Benzene	16.631	78	409623	4.91	ppbv	99
34) 2,2,4-Trimethylpentane	16.594	57	608257	5.13	ppbv	100
35) 1,2-Dichloroethane	16.825	62	211860	4.69	ppbv	99
36) Heptane	16.977	43	232103	5.12	ppbv	95
37) Trichloroethene	17.860	130	168835	4.78	ppbv	99
38) 1,2-Dichloropropane	18.364	63	153885	5.04	ppbv	98
39) 1,4-Dioxane	18.577	88	78112	4.92	ppbv	96
40) Bromodichloromethane	18.827	83	280738	4.85	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	241243	4.97	ppbv	99
42) 4-Methyl-2-pentanone (...	19.843	43	326597	5.11	ppbv	99
44) Toluene	20.074	91	491883	4.79	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	262463	5.14	ppbv	99
46) 1,1,2-Trichloroethane	20.840	97	162018	4.83	ppbv	98
47) Tetrachloroethene	20.926	166	235773	4.67	ppbv	99
48) 2-Hexanone	21.193	43	316337	4.96	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:06:09 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	269306	4.73	ppbv	99
50)	1,2-Dibromoethane (EDB)	21.680	107	244019	4.71	ppbv	99
51)	Chlorobenzene	22.398	112	397692	5.02	ppbv	96
52)	Ethylbenzene	22.489	91	720145	4.98	ppbv	99
53)	m&p-Xylene	22.672	91	1105779	9.78	ppbv	100
54)	o-Xylene	23.317	91	582010	5.06	ppbv	99
55)	Styrene	23.353	104	433205	4.90	ppbv	99
56)	Bromoform	23.730	173	285863	4.61	ppbv	98
57)	1,1,2,2-Tetrachloroethane	24.424	83	385086	4.78	ppbv	99
58)	4-Ethyltoluene	24.667	105	684901	4.78	ppbv	99
59)	1,3,5-Trimethylbenzene	24.764	105	659480	4.86	ppbv	100
60)	1,2,4-Trimethylbenzene	25.367	105	650472	4.64	ppbv	99
61)	1,3-Dichlorobenzene	25.896	146	451272	4.56	ppbv	99
62)	1,4-Dichlorobenzene	26.042	146	447762	4.51	ppbv	100
63)	Benzyl chloride	26.255	91	554820	4.60	ppbv	99
64)	1,2-Dichlorobenzene	26.650	146	439494	4.56	ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	415272	4.23	ppbv	100
66)	Hexachlorobutadiene	29.248	225	389269	4.56	ppbv	99

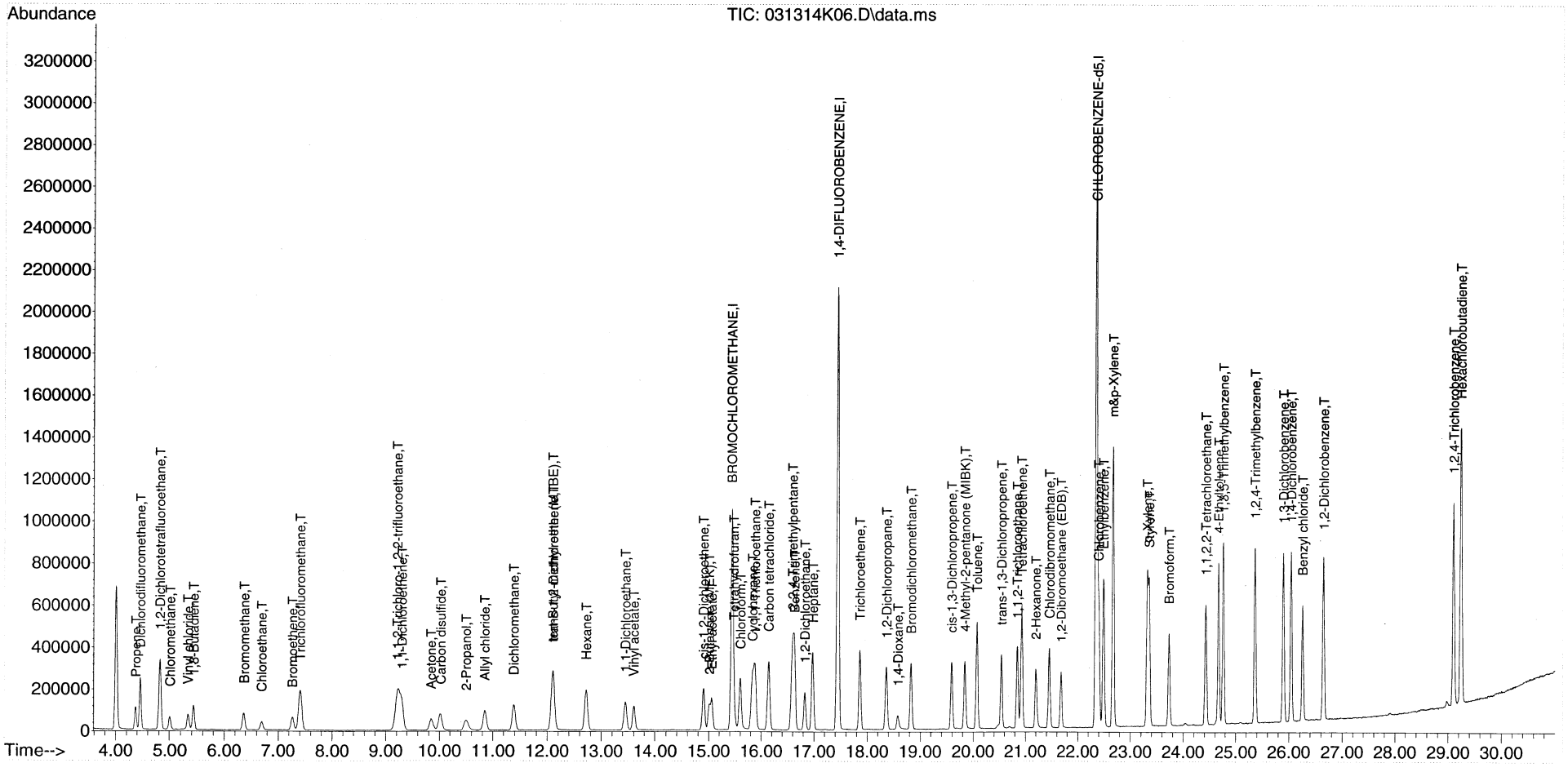
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:06:09 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

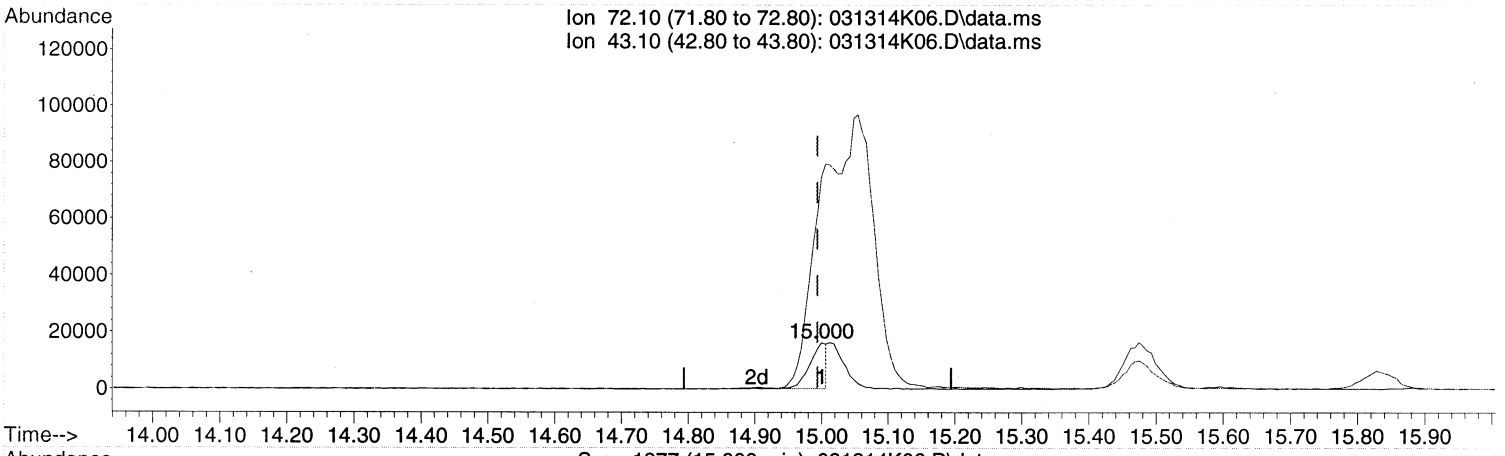


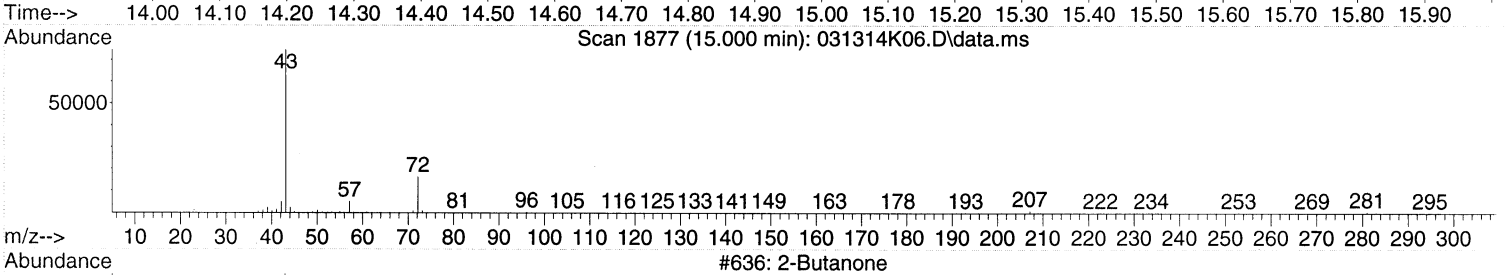
Quantitation Report (Qedit)

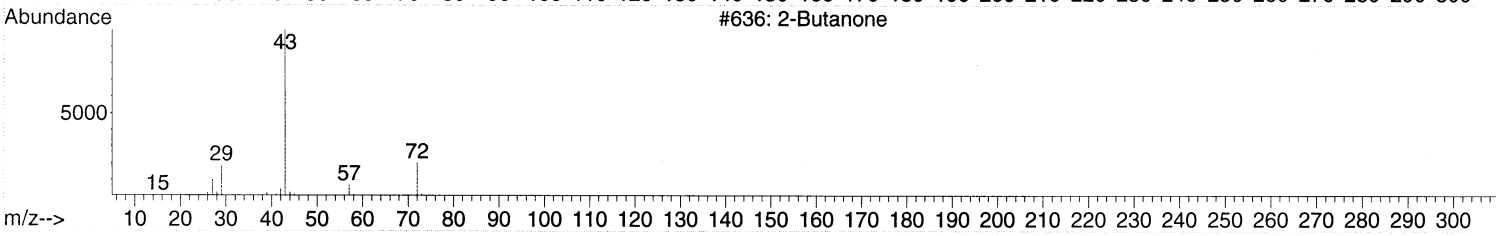
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







TIC: 031314K06.D\data.ms

(25) 2-Butanone (MEK) (T)

15.000min (+0.006) 2.50 ppbv

response 27731

Ion	Exp%	Act%
72.10	100	100
43.10	428.10	881.92#
0.00	0.00	0.00
0.00	0.00	0.00

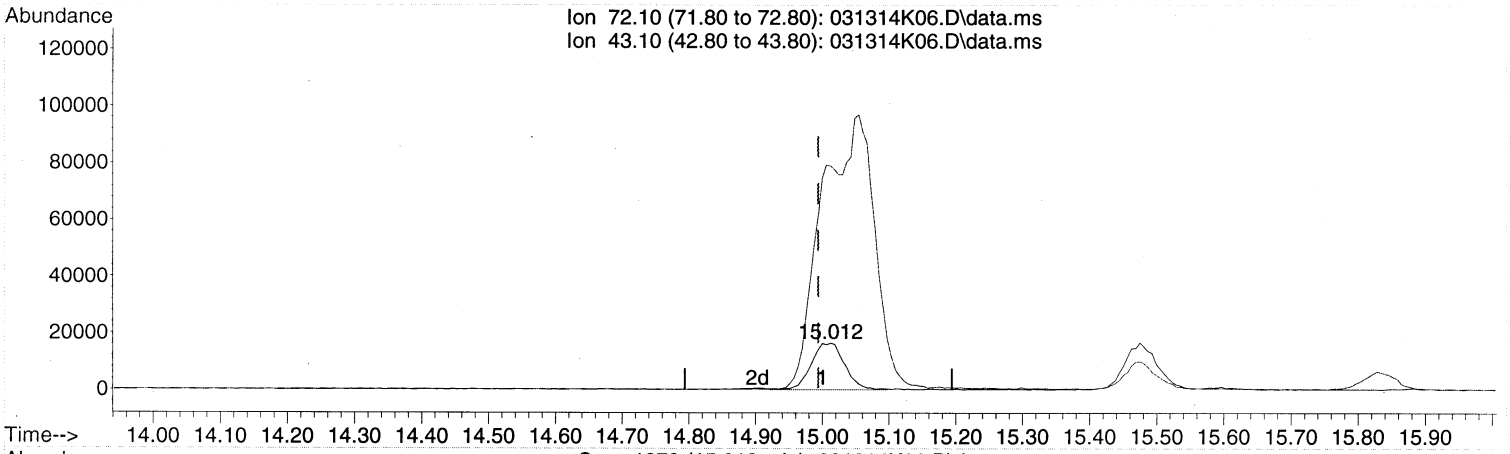
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

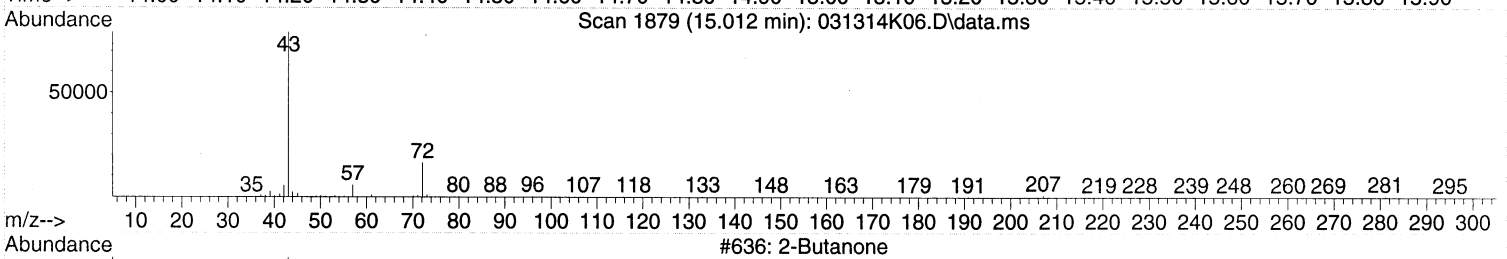
Quantitation Report (Qedit)

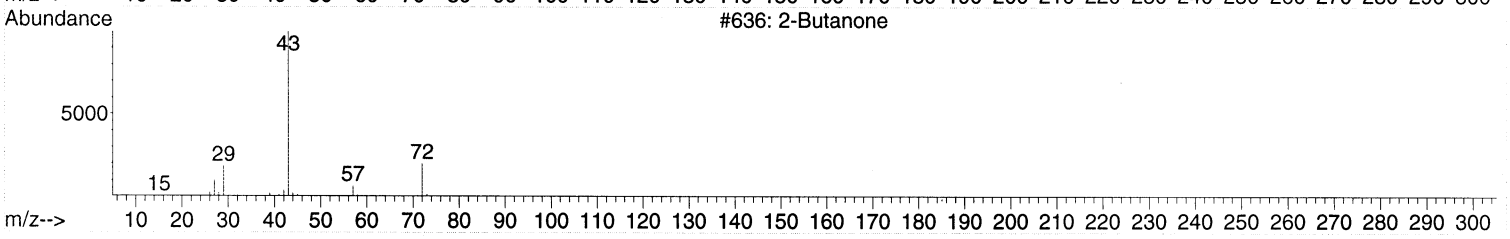
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







TIC: 031314K06.D\data.ms

(25) 2-Butanone (MEK) (T)

15.012min (+0.018) 5.12 ppbv m

response 56698

Ion	Exp%	Act%
72.10	100	100
43.10	428.10	431.35
0.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by

Analyst: EM Date: 4/2/14

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 4-2-14

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

per MI
em 3/14/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	789402	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2271777	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	2094248	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	84858	4.77	ppbv	98
3) Dichlorodifluoromethane	4.463	85	326674	4.58	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	277288	4.64	ppbv	96
5) Chloromethane	5.011	50	102112	4.90	ppbv	98
6) Vinyl chloride	5.333	62	116178	4.75	ppbv	98
7) 1,3-Butadiene	5.437	54	78736	4.45	ppbv	96
8) Bromomethane	6.368	94	96091	4.53	ppbv	99
9) Chloroethane	6.690	64	65105	4.65	ppbv	98
10) Bromoethene	7.262	106	83694	4.52	ppbv	99
11) Trichlorofluoromethane	7.408	101	358748	4.82	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	187582	4.29	ppbv	95
13) 1,1-Dichloroethene	9.300	61	200000	4.42	ppbv	97
14) Acetone	9.841	43	181410	4.91	ppbv	98
15) Carbon disulfide	10.024	76	282801	4.74	ppbv	98
16) 2-Propanol	10.498	45	175863	4.86	ppbv	97
17) Allyl chloride	10.845	41	146225	4.95	ppbv	96
18) Dichloromethane	11.381	49	161975	4.37	ppbv	93
19) tert-Butyl methyl ethe...	12.098	73	354726	5.06	ppbv	98
20) trans-1,2-Dichloroethene	12.104	61	157092	4.68	ppbv	97
21) Hexane	12.719	57	185223	4.77	ppbv	97
22) 1,1-Dichloroethane	13.449	63	240911	4.50	ppbv	100
23) Vinyl acetate	13.601	43	307817	4.85	ppbv	98
24) cis-1,2-Dichloroethene	14.897	61	189041	4.76	ppbv	96
25) 2-Butanone (MEK)	15.000	72	27731	2.50	ppbv #	1
26) Ethyl acetate	15.061	61	35647	4.88	ppbv #	94
27) Tetrahydrofuran	15.475	42	145025	4.99	ppbv	97
28) Chloroform	15.603	83	279965	4.80	ppbv	98
29) Cyclohexane	15.834	56	198346	5.00	ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	313104	4.70	ppbv	99
31) Carbon tetrachloride	16.138	117	331015	4.72	ppbv	99
33) Benzene	16.631	78	409623	4.91	ppbv	99
34) 2,2,4-Trimethylpentane	16.594	57	608257	5.13	ppbv	100
35) 1,2-Dichloroethane	16.825	62	211860	4.69	ppbv	99
36) Heptane	16.977	43	232103	5.12	ppbv	95
37) Trichloroethene	17.860	130	168835	4.78	ppbv	99
38) 1,2-Dichloropropane	18.364	63	153885	5.04	ppbv	98
39) 1,4-Dioxane	18.577	88	78112	4.92	ppbv	96
40) Bromodichloromethane	18.827	83	280738	4.85	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	241243	4.97	ppbv	99
42) 4-Methyl-2-pentanone (...	19.843	43	326597	5.11	ppbv	99
44) Toluene	20.074	91	491883	4.79	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	262463	5.14	ppbv	99
46) 1,1,2-Trichloroethane	20.840	97	162018	4.83	ppbv	98
47) Tetrachloroethene	20.926	166	235773	4.67	ppbv	99
48) 2-Hexanone	21.193	43	316337	4.96	ppbv	98

00072

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	269306	4.73	ppbv	99
50)	1,2-Dibromoethane (EDB)	21.680	107	244019	4.71	ppbv	99
51)	Chlorobenzene	22.398	112	397692	5.02	ppbv	96
52)	Ethylbenzene	22.489	91	720145	4.98	ppbv	99
53)	m&p-Xylene	22.672	91	1105779	9.78	ppbv	100
54)	o-Xylene	23.317	91	582010	5.06	ppbv	99
55)	Styrene	23.353	104	433205	4.90	ppbv	99
56)	Bromoform	23.730	173	285863	4.61	ppbv	98
57)	1,1,2,2-Tetrachloroethane	24.424	83	385086	4.78	ppbv	99
58)	4-Ethyltoluene	24.667	105	684901	4.78	ppbv	99
59)	1,3,5-Trimethylbenzene	24.764	105	659480	4.86	ppbv	100
60)	1,2,4-Trimethylbenzene	25.367	105	650472	4.64	ppbv	99
61)	1,3-Dichlorobenzene	25.896	146	451272	4.56	ppbv	99
62)	1,4-Dichlorobenzene	26.042	146	447762	4.51	ppbv	100
63)	Benzyl chloride	26.255	91	554820	4.60	ppbv	99
64)	1,2-Dichlorobenzene	26.650	146	439494	4.56	ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	415272	4.23	ppbv	100
66)	Hexachlorobutadiene	29.248	225	389269	4.56	ppbv	99

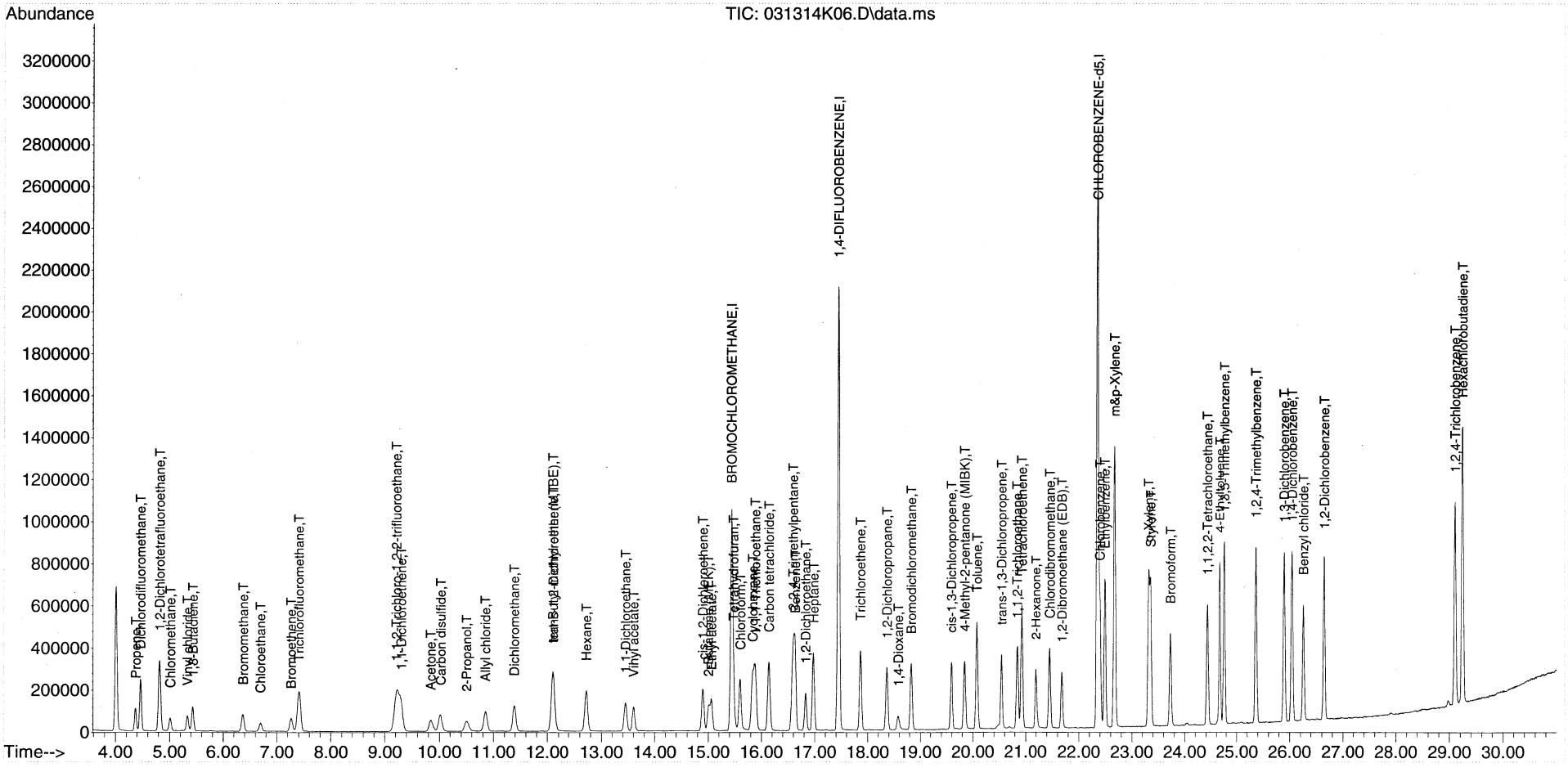
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K06.D
Acq On : 13 Mar 2014 11:30
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 19:05:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:05:26 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K07.D
Acq On : 13 Mar 2014 12:19
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL5
Misc : 15 ppbv 1411094
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:06:56 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:06:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	805176	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	2283718	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.355	117	2005780	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.366	41	283767	15.63	ppbv		98
3) Dichlorodifluoromethane	4.457	85	1057105	14.54	ppbv		99
4) 1,2-Dichlorotetrafluor...	4.810	85	926844	15.21	ppbv		95
5) Chloromethane	5.011	50	342349	16.09	ppbv		99
6) Vinyl chloride	5.333	62	385534	15.44	ppbv		100
7) 1,3-Butadiene	5.431	54	269776	14.95	ppbv		96
8) Bromomethane	6.362	94	308204	14.23	ppbv		99
9) Chloroethane	6.690	64	202462	14.19	ppbv		99
10) Bromoethene	7.262	106	273850	14.51	ppbv		98
11) Trichlorofluoromethane	7.402	101	1098703	14.48	ppbv		100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	569487	12.77	ppbv		94
13) 1,1-Dichloroethene	9.306	61	630480	13.65	ppbv		96
14) Acetone	9.823	43	602762	16.00	ppbv		99
15) Carbon disulfide	10.012	76	897356	14.75	ppbv		98
16) 2-Propanol	10.468	45	625281	16.94	ppbv		98
17) Allyl chloride	10.845	41	487268	16.17	ppbv		95
18) Dichloromethane	11.381	49	463081	12.24	ppbv		92
19) tert-Butyl methyl ethe...	12.080	73	1152236	16.13	ppbv		98
20) trans-1,2-Dichloroethene	12.104	61	511262	14.94	ppbv		94
21) Hexane	12.713	57	603859	15.26	ppbv		97
22) 1,1-Dichloroethane	13.449	63	751319	13.77	ppbv		100
23) Vinyl acetate	13.601	43	1098266	16.97	ppbv		97
24) cis-1,2-Dichloroethene	14.903	61	596146	14.71	ppbv		95
25) 2-Butanone (MEK)	15.000	72	181650	16.12	ppbv	#	95
26) Ethyl acetate	15.049	61	119895	16.08	ppbv	#	92
27) Tetrahydrofuran	15.457	42	475674	16.04	ppbv		97
28) Chloroform	15.603	83	859408	14.45	ppbv		99
29) Cyclohexane	15.834	56	633960	15.68	ppbv		97
30) 1,1,1-Trichloroethane	15.882	97	961901	14.16	ppbv		99
31) Carbon tetrachloride	16.138	117	1025799	14.34	ppbv		100
33) Benzene	16.631	78	1270605	15.14	ppbv		99
34) 2,2,4-Trimethylpentane	16.594	57	1964897	16.47	ppbv		99
35) 1,2-Dichloroethane	16.825	62	662839	14.60	ppbv		99
36) Heptane	16.977	43	761842	16.72	ppbv		95
37) Trichloroethene	17.866	130	528606	14.90	ppbv		99
38) 1,2-Dichloropropane	18.364	63	480565	15.65	ppbv		99
39) 1,4-Dioxane	18.565	88	259400	16.24	ppbv		94
40) Bromodichloromethane	18.827	83	916217	15.75	ppbv		99
41) cis-1,3-Dichloropropene	19.593	75	760423	15.60	ppbv		98
42) 4-Methyl-2-pentanone (...	19.837	43	1084486	16.87	ppbv		99
44) Toluene	20.074	91	1541109	15.67	ppbv		99
45) trans-1,3-Dichloropropene	20.542	75	827549	16.92	ppbv		98
46) 1,1,2-Trichloroethane	20.847	97	500276	15.56	ppbv		96
47) Tetrachloroethene	20.926	166	728856	15.07	ppbv		100
48) 2-Hexanone	21.187	43	1076709	17.62	ppbv		98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K07.D
Acq On : 13 Mar 2014 12:19
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL5
Misc : 15 ppbv 1411094
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:06:56 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:06:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	885743	16.24	ppbv	99
50)	1,2-Dibromoethane (EDB)	21.680	107	784768	15.81	ppbv	100
51)	Chlorobenzene	22.404	112	1180859	15.55	ppbv	99
52)	Ethylbenzene	22.495	91	2152493	15.56	ppbv	99
53)	m&p-Xylene	22.678	91	3399111	31.39	ppbv	100
54)	o-Xylene	23.323	91	1763312	16.01	ppbv	99
55)	Styrene	23.359	104	1344604	15.88	ppbv	99
56)	Bromoform	23.730	173	949016	15.97	ppbv	99
57)	1,1,2,2-Tetrachloroethane	24.424	83	1199407	15.55	ppbv	100
58)	4-Ethyltoluene	24.673	105	2223454	16.20	ppbv	100
59)	1,3,5-Trimethylbenzene	24.764	105	2072554	15.96	ppbv	99
60)	1,2,4-Trimethylbenzene	25.367	105	2139737	15.95	ppbv	99
61)	1,3-Dichlorobenzene	25.896	146	1473509	15.54	ppbv	100
62)	1,4-Dichlorobenzene	26.042	146	1474565	15.52	ppbv	100
63)	Benzyl chloride	26.261	91	2024309	17.51	ppbv	98
64)	1,2-Dichlorobenzene	26.650	146	1383378	14.98	ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	1240474	13.20	ppbv	100
66)	Hexachlorobutadiene	29.248	225	1012491	12.38	ppbv	100

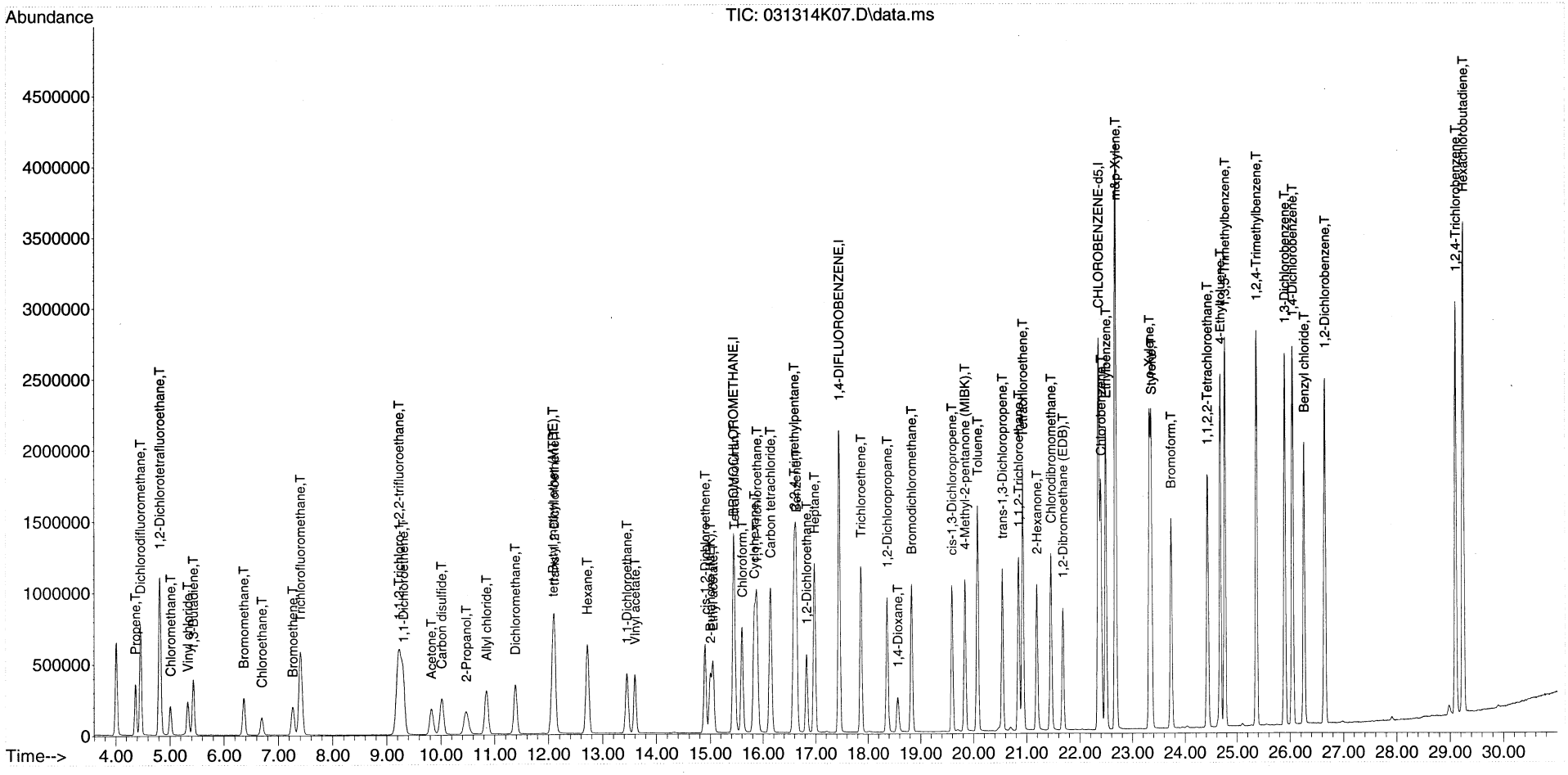
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K07.D
Acq On : 13 Mar 2014 12:19
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL5
Misc : 15 ppbv 1411094
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:06:56 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:06:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K08.D
Acq On : 13 Mar 2014 13:09
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL6
Misc : 20 ppbv 1411095
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:07:21 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:05 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	813362	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	2384523	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	2202262	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.372	41	377812	20.60 ppbv	99
3) Dichlorodifluoromethane	4.463	85	1418259	19.32 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	1275906	20.73 ppbv	96
5) Chloromethane	5.011	50	460058	21.41 ppbv	98
6) Vinyl chloride	5.339	62	524679	20.80 ppbv	99
7) 1,3-Butadiene	5.437	54	369007	20.25 ppbv	100
8) Bromomethane	6.361	94	446235	20.40 ppbv	99
9) Chloroethane	6.702	64	286996	19.91 ppbv	98
10) Bromoethene	7.268	106	405902	21.29 ppbv	100
11) Trichlorofluoromethane	7.414	101	1569217	20.47 ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.233	151	832343	18.48 ppbv	96
13) 1,1-Dichloroethene	9.306	61	896746	19.22 ppbv	97
14) Acetone	9.829	43	829009	21.79 ppbv	99
15) Carbon disulfide	10.018	76	1299738	21.15 ppbv	99
16) 2-Propanol	10.468	45	869872	23.32 ppbv	98
17) Allyl chloride	10.851	41	661504	21.73 ppbv	96
18) Dichloromethane	11.380	49	623623	16.32 ppbv	93
19) tert-Butyl methyl ethe...	12.086	73	1555956	21.56 ppbv	98
20) trans-1,2-Dichloroethene	12.104	61	687618	19.90 ppbv	95
21) Hexane	12.719	57	821150	20.54 ppbv	98
22) 1,1-Dichloroethane	13.455	63	1017573	18.47 ppbv	99
23) Vinyl acetate	13.601	43	1503128	23.00 ppbv	97
24) cis-1,2-Dichloroethene	14.903	61	809333	19.76 ppbv	95
25) 2-Butanone (MEK)	15.000	72	250313	21.99 ppbv #	93
26) Ethyl acetate	15.049	61	162776	21.61 ppbv #	93
27) Tetrahydrofuran	15.456	42	634233	21.17 ppbv	97
28) Chloroform	15.602	83	1167575	19.43 ppbv	98
29) Cyclohexane	15.834	56	861666	21.09 ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	1311029	19.10 ppbv	99
31) Carbon tetrachloride	16.144	117	1411948	19.55 ppbv	99
33) Benzene	16.631	78	1748987	19.96 ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	2677192	21.49 ppbv	100
35) 1,2-Dichloroethane	16.831	62	904614	19.08 ppbv	100
36) Heptane	16.977	43	1040736	21.87 ppbv	95
37) Trichloroethene	17.866	130	717739	19.37 ppbv	99
38) 1,2-Dichloropropane	18.364	63	657034	20.49 ppbv	99
39) 1,4-Dioxane	18.565	88	360598	21.62 ppbv	97
40) Bromodichloromethane	18.827	83	1277217	21.03 ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	1052956	20.68 ppbv	99
42) 4-Methyl-2-pentanone (...	19.837	43	1492434	22.23 ppbv	99
44) Toluene	20.074	91	2176823	20.16 ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	1158071	21.56 ppbv	99
46) 1,1,2-Trichloroethane	20.846	97	710088	20.11 ppbv	98
47) Tetrachloroethene	20.932	166	1025283	19.31 ppbv	100
48) 2-Hexanone	21.193	43	1474323	21.97 ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K08.D
Acq On : 13 Mar 2014 13:09
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL6
Misc : 20 ppbv 1411095
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:07:21 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:05 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	1239626	20.71 ppbv	99
50)	1,2-Dibromoethane (EDB)	21.686	107	1109438	20.36 ppbv	99
51)	Chlorobenzene	22.404	112	1697385	20.36 ppbv	100
52)	Ethylbenzene	22.495	91	3099418	20.40 ppbv	99
53)	m&p-Xylene	22.678	91	4867344	40.94 ppbv	100
54)	o-Xylene	23.322	91	2460726	20.35 ppbv	99
55)	Styrene	23.359	104	1888323	20.31 ppbv	100
56)	Bromoform	23.730	173	1392098	21.34 ppbv	100
57)	1,1,2,2-Tetrachloroethane	24.424	83	1782549	21.05 ppbv	99
58)	4-Ethyltoluene	24.673	105	3262908	21.66 ppbv	99
59)	1,3,5-Trimethylbenzene	24.764	105	2984302	20.93 ppbv	100
60)	1,2,4-Trimethylbenzene	25.367	105	2957427	20.07 ppbv	100
61)	1,3-Dichlorobenzene	25.902	146	2030940	19.51 ppbv	99
62)	1,4-Dichlorobenzene	26.048	146	2036629	19.52 ppbv	100
63)	Benzyl chloride	26.261	91	2753116	21.69 ppbv	99
64)	1,2-Dichlorobenzene	26.650	146	1952276	19.25 ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	1777651	17.23 ppbv	100
66)	Hexachlorobutadiene	29.248	225	1384730	15.42 ppbv	100

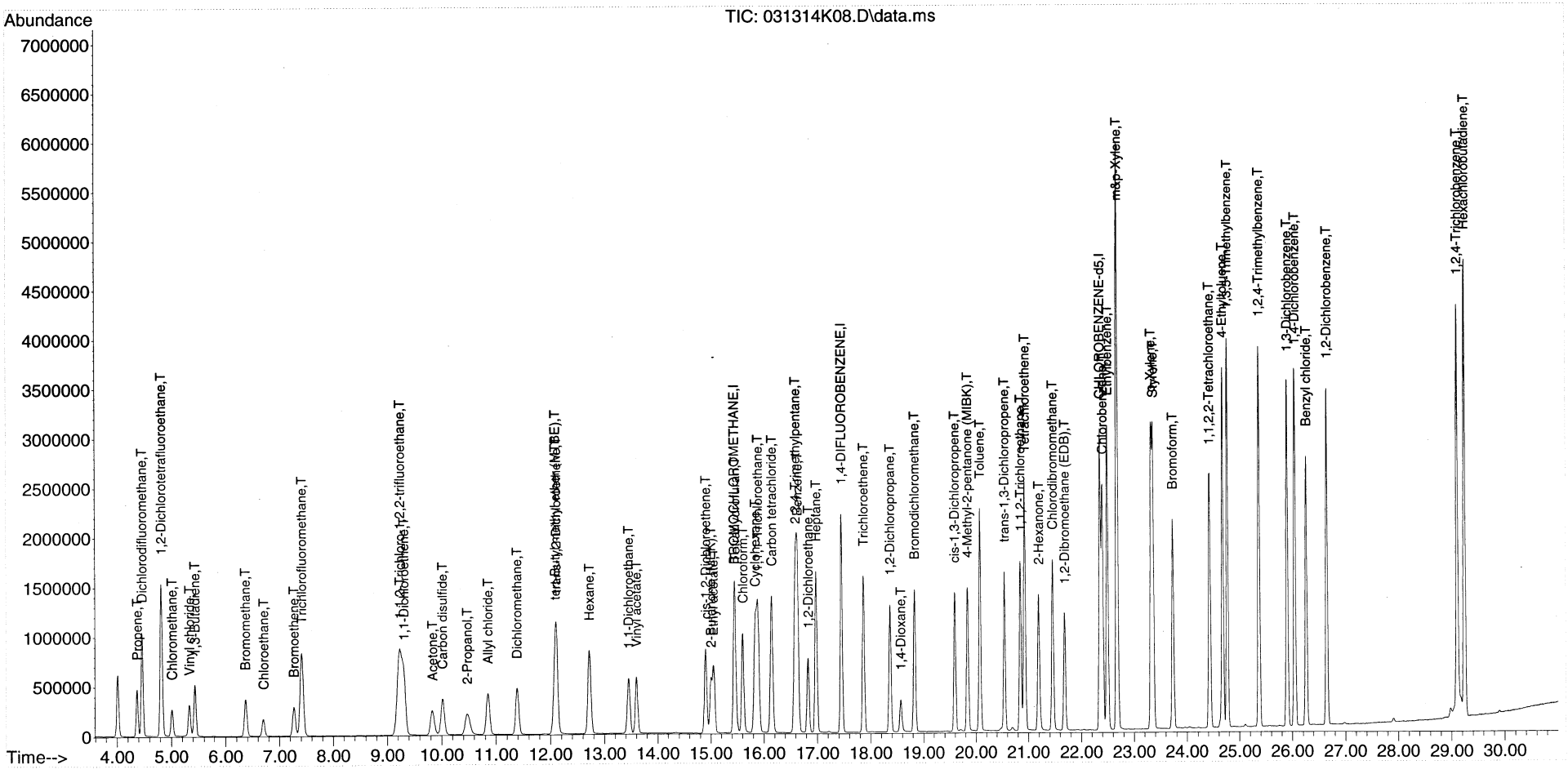
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K08.D
Acq On : 13 Mar 2014 13:09
Instrument: HP5973K
Operator : EM
Sample : S14C050-CAL6
Misc : 20 ppbv 1411095
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:07:21 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:05 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



SCV REPORT

Instrument Name: HP5973K
Sample Name: S14C050-SCV1
Misc Info: 10 ppbv SCV
Date Acquired: 3/13/2014 13:56
QLast Update: Fri Mar 14 19:07:29 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.37	11.00	12.19	111%	70.0	130.0	pass
3)	Dichlorodifluoromethane	4.46	11.00	10.33	94%	70.0	130.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.82	11.00	11.14	101%	70.0	130.0	pass
5)	Chloromethane	5.01	11.00	12.62	115%	70.0	130.0	pass
6)	Vinyl chloride	5.34	12.00	11.87	99%	70.0	130.0	pass
7)	1,3-Butadiene	5.44	22.00	23.18	105%	70.0	130.0	pass
8)	Bromomethane	6.36	11.00	12.02	109%	70.0	130.0	pass
9)	Chloroethane	6.69	11.00	11.92	108%	70.0	130.0	pass
10)	Bromoethene	7.27	11.00	12.28	112%	70.0	130.0	pass
11)	Trichlorofluoromethane	7.41	11.00	10.72	97%	70.0	130.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.23	11.00	10.62	97%	70.0	130.0	pass
13)	1,1-Dichloroethene	9.30	11.00	10.68	97%	70.0	130.0	pass
14)	Acetone	9.84	11.00	12.25	111%	70.0	130.0	pass
15)	Carbon disulfide	10.02	11.00	13.10	119%	70.0	130.0	pass
16)	2-Propanol	10.50	10.00	11.88	119%	70.0	130.0	pass
17)	Allyl chloride	10.85	22.00	26.80	122%	70.0	130.0	pass
18)	Dichloromethane	11.38	11.00	10.28	93%	70.0	130.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.09	11.00	12.35	112%	70.0	130.0	pass
20)	trans-1,2-Dichloroethene	12.11	11.00	12.36	112%	70.0	130.0	pass
21)	Hexane	12.72	11.00	12.13	110%	70.0	130.0	pass
22)	1,1-Dichloroethane	13.45	12.00	10.68	89%	70.0	130.0	pass
23)	Vinyl acetate	13.60	11.00	12.48	113%	70.0	130.0	pass
24)	cis-1,2-Dichloroethene	14.90	11.00	10.46	95%	70.0	130.0	pass
25)	2-Butanone (MEK)	15.01	11.00	12.93	118%	70.0	130.0	pass
26)	Ethyl acetate	15.06	11.00	12.40	113%	70.0	130.0	pass
27)	Tetrahydrofuran	15.46	11.00	11.47	104%	70.0	130.0	pass
28)	Chloroform	15.60	11.00	10.41	95%	70.0	130.0	pass
29)	Cyclohexane	15.83	11.00	11.41	104%	70.0	130.0	pass
30)	1,1,1-Trichloroethane	15.88	11.00	10.11	92%	70.0	130.0	pass
31)	Carbon tetrachloride	16.14	11.00	10.24	93%	70.0	130.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.63	11.00	10.94	99%	70.0	130.0	pass
34)	2,2,4-Trimethylpentane	16.59	11.00	12.13	110%	70.0	130.0	pass
35)	1,2-Dichloroethane	16.83	11.00	10.10	92%	70.0	130.0	pass
36)	Heptane	16.98	11.00	12.15	110%	70.0	130.0	pass
37)	Trichloroethene	17.87	11.00	10.77	98%	70.0	130.0	pass
38)	1,2-Dichloropropane	18.36	11.00	11.41	104%	70.0	130.0	pass
39)	1,4-Dioxane	18.57	9.50	10.07	106%	70.0	130.0	pass
40)	Bromodichloromethane	18.83	11.00	11.38	103%	70.0	130.0	pass
41)	cis-1,3-Dichloropropene	19.59	11.00	11.31	103%	70.0	130.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.84	11.00	12.31	112%	70.0	130.0	pass
43)	CHLOROBENZENE-d5	22.36	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.07	11.00	10.71	97%	70.0	130.0	pass
45)	trans-1,3-Dichloropropene	20.54	11.00	10.38	94%	70.0	130.0	pass
46)	1,1,2-Trichloroethane	20.85	11.00	10.49	95%	70.0	130.0	pass
47)	Tetrachloroethene	20.93	11.00	10.14	92%	70.0	130.0	pass

48)	2-Hexanone	21.19	11.00	11.65	106%	70.0	130.0	pass
49)	Chlorodibromomethane	21.45	11.00	11.05	100%	70.0	130.0	pass
50)	1,2-Dibromoethane (EDB)	21.68	10.00	10.27	103%	70.0	130.0	pass
51)	Chlorobenzene	22.40	11.00	10.73	98%	70.0	130.0	pass
52)	Ethylbenzene	22.49	11.00	10.72	97%	70.0	130.0	pass
53)	m&p-Xylene	22.68	22.00	21.05	96%	70.0	130.0	pass
54)	o-Xylene	23.32	10.00	10.15	101%	70.0	130.0	pass
55)	Styrene	23.36	11.00	9.71	88%	70.0	130.0	pass
56)	Bromoform	23.73	11.00	10.53	96%	70.0	130.0	pass
57)	1,1,2,2-Tetrachloroethane	24.42	10.00	9.74	97%	70.0	130.0	pass
58)	4-Ethyltoluene	24.67	21.00	22.84	109%	70.0	130.0	pass
59)	1,3,5-Trimethylbenzene	24.76	11.00	9.95	90%	70.0	130.0	pass
60)	1,2,4-Trimethylbenzene	25.37	11.00	9.61	87%	70.0	130.0	pass
61)	1,3-Dichlorobenzene	25.90	10.00	8.98	90%	70.0	130.0	pass
62)	1,4-Dichlorobenzene	26.04	11.00	8.82	80%	70.0	130.0	pass
63)	Benzyl chloride	26.25	11.00	10.52	96%	70.0	130.0	pass
64)	1,2-Dichlorobenzene	26.65	11.00	8.93	81%	70.0	130.0	pass
65)	1,2,4-Trichlorobenzene	29.11	9.90	6.46	65%	70.0	130.0	FAIL
66)	Hexachlorobutadiene	29.25	10.00	7.47	75%	70.0	130.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K09.D
Acq On : 13 Mar 2014 13:56
Instrument: HP5973K
Operator : EM
Sample : S14C050-SCV1
Misc : 10 ppbv SCV
ALS Vial : 34
Multiplier: 1

Quant Time: Mar 14 19:12:48 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.444	49	836174	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	2426230	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.355	117	2291283	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.372	41	229882	12.19	ppbv		98
3) Dichlorodifluoromethane	4.464	85	779527	10.33	ppbv		99
4) 1,2-Dichlorotetrafluor...	4.816	85	704822	11.14	ppbv		96
5) Chloromethane	5.011	50	278684	12.62	ppbv		99
6) Vinyl chloride	5.340	62	307807	11.87	ppbv		100
7) 1,3-Butadiene	5.437	54	434199	23.18	ppbv		99
8) Bromomethane	6.362	94	270267	12.02	ppbv		99
9) Chloroethane	6.690	64	176580	11.92	ppbv		99
10) Bromoethene	7.268	106	240645	12.28	ppbv		100
11) Trichlorofluoromethane	7.414	101	845198	10.72	ppbv		99
12) 1,1,2-Trichloro-1,2,2-...	9.227	151	491555	10.62	ppbv		96
13) 1,1-Dichloroethene	9.300	61	512372	10.68	ppbv		98
14) Acetone	9.835	43	479305	12.25	ppbv		99
15) Carbon disulfide	10.018	76	827535	13.10	ppbv		100
16) 2-Propanol	10.498	45	455337	11.88	ppbv	#	55
17) Allyl chloride	10.845	41	838645	26.80	ppbv		97
18) Dichloromethane	11.381	49	403831	10.28	ppbv		94
19) tert-Butyl methyl ethe...	12.086	73	916567	12.35	ppbv		97
20) trans-1,2-Dichloroethene	12.111	61	439097	12.36	ppbv		96
21) Hexane	12.719	57	498520	12.13	ppbv		98
22) 1,1-Dichloroethane	13.449	63	605259	10.68	ppbv		100
23) Vinyl acetate	13.601	43	838471	12.48	ppbv		98
24) cis-1,2-Dichloroethene	14.903	61	440212	10.46	ppbv		98
25) 2-Butanone (MEK)	15.006	72	151313	12.93	ppbv		96
26) Ethyl acetate	15.055	61	96008	12.40	ppbv	#	93
27) Tetrahydrofuran	15.463	42	353196	11.47	ppbv		98
28) Chloroform	15.603	83	643100	10.41	ppbv		99
29) Cyclohexane	15.834	56	478993	11.41	ppbv		98
30) 1,1,1-Trichloroethane	15.882	97	713447	10.11	ppbv		99
31) Carbon tetrachloride	16.144	117	760771	10.24	ppbv		99
33) Benzene	16.631	78	975754	10.94	ppbv		99
34) 2,2,4-Trimethylpentane	16.594	57	1537195	12.13	ppbv		99
35) 1,2-Dichloroethane	16.825	62	487045	10.10	ppbv		100
36) Heptane	16.977	43	588562	12.15	ppbv		95
37) Trichloroethene	17.866	130	406079	10.77	ppbv		100
38) 1,2-Dichloropropane	18.365	63	372400	11.41	ppbv		97
39) 1,4-Dioxane	18.565	88	170847	10.07	ppbv		97
40) Bromodichloromethane	18.827	83	703477	11.38	ppbv		100
41) cis-1,3-Dichloropropene	19.593	75	585986	11.31	ppbv		99
42) 4-Methyl-2-pentanone (...	19.837	43	840947	12.31	ppbv		98
44) Toluene	20.074	91	1203414	10.71	ppbv		100
45) trans-1,3-Dichloropropene	20.542	75	579711	10.38	ppbv		99
46) 1,1,2-Trichloroethane	20.847	97	385147	10.49	ppbv		98
47) Tetrachloroethene	20.926	166	560133	10.14	ppbv		100
48) 2-Hexanone	21.193	43	813632	11.65	ppbv		100

00087

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K09.D
Acq On : 13 Mar 2014 13:56
Instrument: HP5973K
Operator : EM
Sample : S14C050-SCV1
Misc : 10 ppbv SCV
ALS Vial : 34
Multiplier: 1

Quant Time: Mar 14 19:12:48 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	688026	11.05	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.680	107	582409	10.27	ppbv	99
51)	Chlorobenzene	22.404	112	931136	10.73	ppbv	99
52)	Ethylbenzene	22.489	91	1695016	10.72	ppbv	99
53)	m&p-Xylene	22.678	91	2603555	21.05	ppbv	99
54)	o-Xylene	23.323	91	1276606	10.15	ppbv	99
55)	Styrene	23.359	104	939072	9.71	ppbv	99
56)	Bromoform	23.730	173	714466	10.53	ppbv	99
57)	1,1,2,2-Tetrachloroethane	24.424	83	858021	9.74	ppbv	100
58)	4-Ethyltoluene	24.667	105	3579975	22.84	ppbv	99
59)	1,3,5-Trimethylbenzene	24.764	105	1476231	9.95	ppbv	100
60)	1,2,4-Trimethylbenzene	25.367	105	1472833	9.61	ppbv	100
61)	1,3-Dichlorobenzene	25.896	146	972326	8.98	ppbv	99
62)	1,4-Dichlorobenzene	26.042	146	957052	8.82	ppbv	100
63)	Benzyl chloride	26.255	91	1388503	10.52	ppbv	99
64)	1,2-Dichlorobenzene	26.650	146	942407	8.93	ppbv	100
65)	1,2,4-Trichlorobenzene	29.108	180	693651	6.46	ppbv	100
66)	Hexachlorobutadiene	29.248	225	697719	7.47	ppbv	99

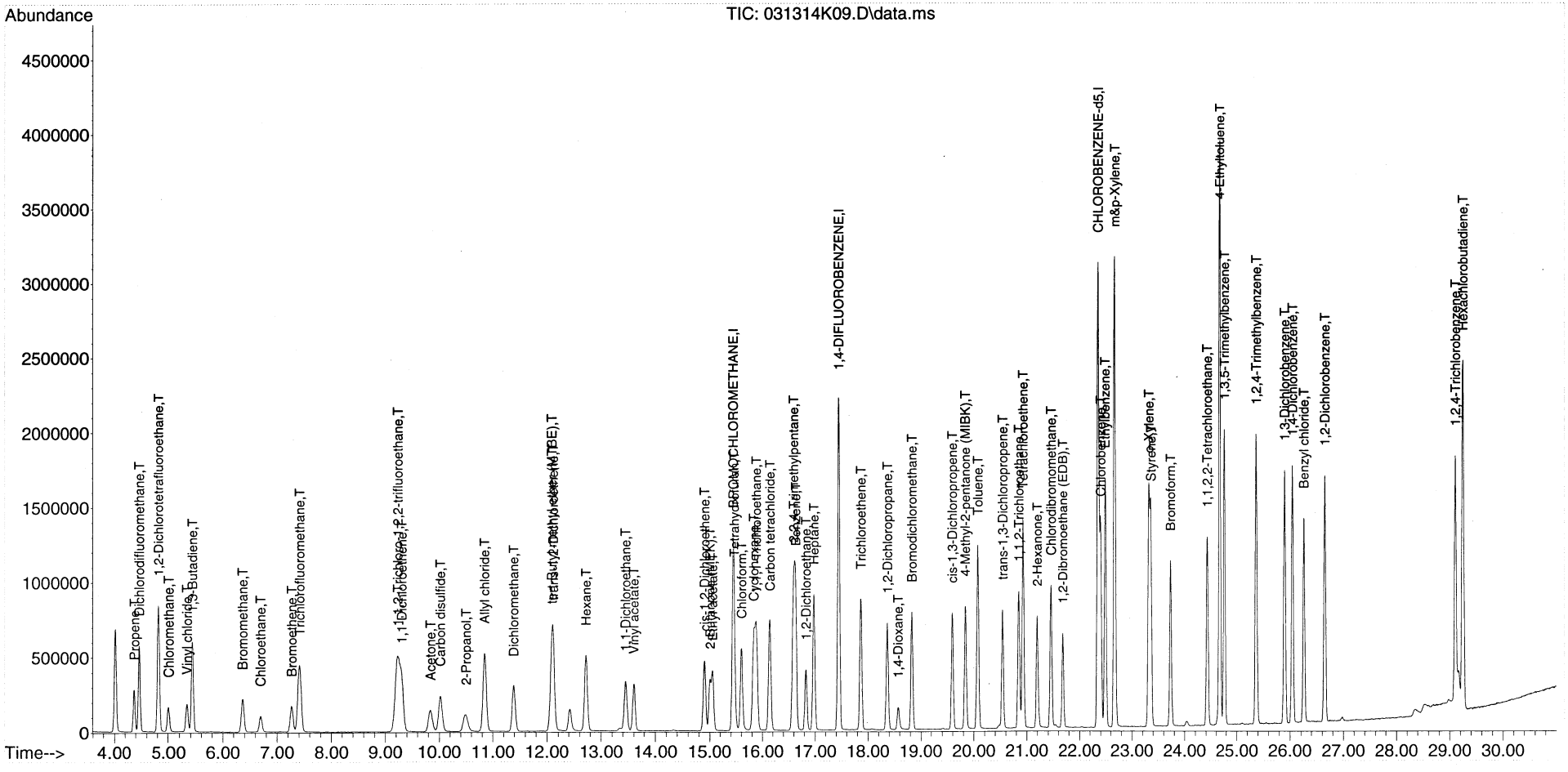
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K09.D
Acq On : 13 Mar 2014 13:56
Instrument: HP5973K
Operator : EM
Sample : S14C050-SCV1
Misc : 10 ppbv SCV
ALS Vial : 34
Multiplier: 1

Quant Time: Mar 14 19:12:48 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Instrument: HP5973K

Analysis Date: 3/14/2014

INITIAL CALIBRATION DATA

ANALYSIS SEQUENCE

S14C061

Instrument: HP5973K

Calibration ID: 1403007

Printed: 3/14/2014 5:54:57PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S14C061-TUN1	QC		1		1410062			
S14C061-CAL1	QC		2		1411090			
S14C061-CAL2	QC		3		1411091			
S14C061-CAL3	QC		4		1411092			
S14C061-CAL4	QC		5		1411093			
S14C061-CAL5	QC		6		1411094			
S14C061-CAL6	QC		7		1411095			
S14C061-SCV1	QC		8		1411087			
B14C068-BS1	QC		9					
B14C068-BLK1	QC		10			1350050		
1403028-02RE1	VOCs, Soil Gas	A	11			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
B14C068-DUP1	QC		12			1350050		
1403028-03RE1	VOCs, Soil Gas	A	13			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-04RE1	VOCs, Soil Gas	A	14			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-05RE1	VOCs, Soil Gas	A	15			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-07RE1	VOCs, Soil Gas	A	16			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-08RE1	VOCs, Soil Gas	A	17			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2014\031414KAA.SEQ
Date: 03-18-2014
Time: 10:43:28
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB 1311118	3	2	100	40	C:\Smart\TO15.CTD	12:00
10 ppbv 1411093	3	2	100	0	C:\Smart\TO15.CTD	12:00
10 ppbv 1411093	3	2	100	0	C:\Smart\TO15.CTD	12:00
1 ppbv 1411090	3	3	20	0	C:\Smart\TO15.CTD	12:00
2 ppbv 1411091	3	3	40	0	C:\Smart\TO15.CTD	12:00
5 ppbv 1411092	3	3	100	0	C:\Smart\TO15.CTD	12:00
15 ppbv 1411094	3	2	150	0	C:\Smart\TO15.CTD	12:00
20 ppbv 1411095	3	2	200	0	C:\Smart\TO15.CTD	12:00
10 ppbv SCV	3	4	100	0	C:\Smart\TO15.CTD	12:00
10 ppbv BS1	3	2	100	0	C:\Smart\TO15.CTD	12:00
CAN 670	3	7	200	0	C:\Smart\TO15.CTD	12:00
CAN 859	3	8	200	0	C:\Smart\TO15.CTD	12:00
CAN 1105	3	9	200	0	C:\Smart\TO15.CTD	12:00
1403028-05RE1	3	10	200	0	C:\Smart\TO15.CTD	12:00
1403028-08RE1	3	11	200	0	C:\Smart\TO15.CTD	12:00
1403028-02RE1	3	12	50	0	C:\Smart\TO15.CTD	12:00
1403028-02DUP1	3	12	50	0	C:\Smart\TO15.CTD	12:00
1403028-03RE1	4	1	50	0	C:\Smart\TO15.CTD	12:00
1403028-04RE1	4	2	50	0	C:\Smart\TO15.CTD	12:00
1403028-07RE1	4	3	20	0	C:\Smart\TO15.CTD	12:00
CAN 636	4	4	200	0	C:\Smart\TO15.CTD	12:00
CAN 648	4	5	200	0	C:\Smart\TO15.CTD	12:00
CAN 870	4	6	200	0	C:\Smart\TO15.CTD	12:00
CAN 1110	4	7	200	0	C:\Smart\TO15.CTD	12:00
CAN 1112	4	8	200	0	C:\Smart\TO15.CTD	12:00
CAN 1114	4	9	200	0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\msdchem\1\DATA\2014\031414KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	031414K01.D	1.	S14C061-TUN1	BFB STD /IS 1350050/10ppbv STD	14 Mar 2014 12:42
2	32	031414K02.D	1.	S14C061-CCV1	10 ppbv	14 Mar 2014 13:29
3	32	031414K03.D	1.	S14C061-CAL4	10 ppbv 1411093	14 Mar 2014 14:16
4	33	031414K04.D	1.	S14C061-CAL1	1.0 ppbv 1411090	14 Mar 2014 15:03
5	33	031414K05.D	1.	S14C061-CAL2	2.0 ppbv 1411091	14 Mar 2014 15:50
6	33	031414K06.D	1.	S14C061-CAL3	5.0 ppbv 1411092	14 Mar 2014 16:37
7	32	031414K07.D	1.	S14C061-CAL5	15 ppbv	14 Mar 2014 17:25
8	32	031414K08.D	1.	S14C061-CAL6	20 ppbv 1411095	14 Mar 2014 18:14
9	34	031414K09.D	1.	S14C061-SCV1	10 ppbv SCV 1411087	14 Mar 2014 19:01
10	32	031414K10.D	1.	B14C068-BS1	10 ppbv BS1 1411096	14 Mar 2014 19:48
11	37	031414K11.D	1.	CAN 670	200mL CAN 670	14 Mar 2014 20:38
12	38	031414K12.D	1.	CAN 859	200mL CAN 859	14 Mar 2014 21:27
13	39	031414K13.D	1.	B14C068-BLK1	200mL CAN 1105	14 Mar 2014 22:17
14	10	031414K14.D	3.66	1403028-05RE1	200mL MH64 CAN 1120	14 Mar 2014 23:07
15	11	031414K15.D	2.98	1403028-08RE1	200mL MH67 CAN 1980	14 Mar 2014 23:57
16	12	031414K16.D	4.39	1403028-02RE1	50mL MH61 CAN 629	15 Mar 2014 00:43
17	12	031414K17.D	4.39	B14C068-DUP1	50mL MH61 CAN 629	15 Mar 2014 01:30
18	41	031414K18.D	4.68	1403028-03RE1	50mL MH62 CAN 1107	15 Mar 2014 02:17
19	42	031414K19.D	4.52	1403028-04RE1	50mL MH63 CAN 1113	15 Mar 2014 03:04
20	43	031414K20.D	3.82	1403028-07RE1	20mL MH66 CAN 626	15 Mar 2014 03:50
21	44	031414K21.D	1.	CAN 636	CAN 636	15 Mar 2014 04:40
22	45	031414K22.D	1.	CAN 648	CAN 648	15 Mar 2014 05:30
23	46	031414K23.D	1.	CAN 870	CAN 870	15 Mar 2014 06:20
24	47	031414K24.D	1.	CAN 1110	CAN 1110	15 Mar 2014 07:09
25	48	031414K25.D	1.	CAN 1112	CAN 1112	15 Mar 2014 07:59
26	49	031414K26.D	1.	CAN 1114	CAN 1114	15 Mar 2014 08:49

18 Mar 2014 10:43

00093

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031414KAA.M
Title : TO15
Last Update : Fri Mar 14 18:45:41 2014
Response Via : Initial Calibration

Calibration Files
1 =031414K04.D 2 =031414K05.D 5 =031414K06.D 10 =031414K03.D 15 =031414K07.D
20 =031414K08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.659	0.576	0.513	0.572	0.502	0.500	0.554	11.17
3)	T	Dichlorodifluo...	2.124	1.741	1.586	1.724	1.501	1.571	1.708	13.12
4)	T	1,2-Dichlorote...	1.796	1.492	1.355	1.477	1.296	1.417	1.472	11.89
5)	T	Chloromethane	0.719	0.622	0.579	0.617	0.539	0.571	0.608	10.31
6)	T	Vinyl chloride	0.796	0.630	0.605	0.660	0.561	0.622	0.646	12.49
7)	T	1,3-Butadiene	0.571	0.479	0.457	0.493	0.426	0.467	0.482	10.13
8)	T	Bromomethane	0.584	0.505	0.469	0.496	0.452	0.462	0.495	9.76
9)	T	Chloroethane	0.428	0.366	0.344	0.352	0.338	0.329	0.359	9.93
10)	T	Bromoethene	0.570	0.453	0.411	0.452	0.418	0.426	0.455	12.92
11)	T	Trichlorofluor...	2.109	1.718	1.570	1.713	1.553	1.620	1.714	12.01
12)	T	1,1,2-Trichlor...	1.099	0.952	0.863	0.942	0.845	0.890	0.932	9.89
13)	T	1,1-Dichloroet...	1.295	1.148	1.093	1.166	1.075	1.089	1.144	7.17
14)	T	Acetone	1.135	1.060	0.959	1.086	1.013	0.992	1.041	6.25
15)	T	Carbon disulfide	1.695	1.514	1.414	1.561	1.431	1.425	1.507	7.25
16)	T	2-Propanol	0.988	0.995	0.962	1.116	1.059	1.038	1.026	5.49
17)	T	Allyl chloride	0.890	0.844	0.802	0.888	0.848	0.805	0.846	4.52
18)	T	Dichloromethane	1.505	1.154	0.929	0.941	0.841	0.821	1.032	25.22
19)	T	tert-Butyl met...	1.761	1.700	1.595	1.803	1.677	1.704	1.707	4.18
20)	T	trans-1,2-Dich...	0.961	0.850	0.799	0.888	0.826	0.813	0.856	7.00
21)	T	Hexane	1.079	1.020	0.963	1.076	1.019	0.976	1.022	4.75
22)	T	1,1-Dichloroet...	1.542	1.382	1.268	1.371	1.272	1.266	1.350	7.99
23)	T	Vinyl acetate	1.772	1.656	1.636	1.968	1.895	1.804	1.788	7.29
24)	T	cis-1,2-Dichlo...	1.177	1.046	0.969	1.054	0.987	0.969	1.034	7.71
25)	T	2-Butanone (MEK)	0.314	0.279	0.258	0.309	0.286	0.283	0.288	7.11
26)	T	Ethyl acetate	0.213	0.195	0.190	0.211	0.206	0.197	0.202	4.72
27)	T	Tetrahydrofuran	0.914	0.871	0.808	0.910	0.875	0.846	0.870	4.59
28)	T	Chloroform	1.669	1.430	1.319	1.440	1.326	1.376	1.427	9.04
29)	T	Cyclohexane	1.210	1.059	1.003	1.116	1.058	1.046	1.082	6.66
30)	T	1,1,1-Trichlor...	1.822	1.536	1.423	1.581	1.425	1.501	1.548	9.55
31)	T	Carbon tetrach...	1.857	1.560	1.419	1.596	1.437	1.548	1.570	10.05
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	1.009	0.936	0.846	0.905	0.854	0.819	0.895	7.83
34)	T	2,2,4-Trimethy...	1.469	1.382	1.284	1.414	1.377	1.292	1.370	5.20
35)	T	1,2-Dichloroet...	0.540	0.481	0.432	0.478	0.451	0.439	0.470	8.46
36)	T	Heptane	0.590	0.563	0.530	0.582	0.584	0.529	0.563	4.90
37)	T	Trichloroethene	0.393	0.350	0.316	0.346	0.325	0.325	0.343	8.16
38)	T	1,2-Dichloropr...	0.392	0.361	0.324	0.345	0.339	0.314	0.346	8.11
39)	T	1,4-Dioxane	0.172	0.166	0.153	0.169	0.166	0.160	0.165	4.19
40)	T	Bromodichlorom...	0.664	0.607	0.551	0.622	0.589	0.573	0.601	6.58
41)	T	cis-1,3-Dichlo...	0.579	0.517	0.475	0.522	0.507	0.484	0.514	7.15
42)	T	4-Methyl-2-pen...	0.837	0.761	0.712	0.810	0.810	0.737	0.778	6.26
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.336	1.184	1.091	1.179	1.148	1.099	1.173	7.58
45)	T	trans-1,3-Dich...	0.625	0.586	0.539	0.601	0.577	0.565	0.582	5.07
46)	T	1,1,2-Trichlor...	0.410	0.402	0.353	0.376	0.366	0.352	0.376	6.51
47)	T	Tetrachloroethene	0.594	0.546	0.486	0.533	0.504	0.506	0.528	7.31
48)	T	2-Hexanone	0.834	0.834	0.796	0.879	0.898	0.820	0.843	4.53
49)	T	Chlorodibromom...	0.643	0.592	0.554	0.634	0.600	0.594	0.603	5.35
50)	T	1,2-Dibromoeth...	0.622	0.579	0.523	0.584	0.548	0.536	0.565	6.51
51)	T	Chlorobenzene	0.984	0.884	0.808	0.898	0.827	0.804	0.867	7.99
52)	T	Ethylbenzene	1.791	1.617	1.495	1.678	1.576	1.524	1.613	6.75
53)	T	m&p-Xylene	1.341	1.205	1.154	1.294	1.223	1.199	1.236	5.56
54)	T	o-Xylene	1.355	1.246	1.151	1.275	1.229	1.206	1.244	5.53
55)	T	Styrene	1.013	0.942	0.887	0.981	0.955	0.943	0.953	4.45
56)	T	Bromoform	0.630	0.606	0.547	0.657	0.621	0.629	0.615	6.04

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031414KAA.M
Title : TO15

57)	T	1,1,2,2-Tetrac...	0.994	0.958	0.849	0.905	0.895	0.855	0.909	6.28
58)	T	4-Ethyltoluene	1.560	1.517	1.392	1.565	1.519	1.502	1.509	4.16
59)	T	1,3,5-Trimethy...	1.509	1.416	1.328	1.461	1.404	1.407	1.421	4.28
60)	T	1,2,4-Trimethy...	1.525	1.453	1.349	1.492	1.442	1.416	1.446	4.24
61)	T	1,3-Dichlorobe...	1.044	0.979	0.902	1.003	0.971	0.989	0.981	4.76
62)	T	1,4-Dichlorobe...	1.068	0.973	0.903	1.005	0.980	0.990	0.987	5.41
63)	T	Benzyl chloride	1.230	1.175	1.112	1.361	1.341	1.326	1.257	8.04
64)	T	1,2-Dichlorobe...	1.003	0.934	0.877	0.968	0.935	0.952	0.945	4.44
65)	T	1,2,4-Trichlor...	1.029	0.951	0.865	0.992	0.957	1.003	0.966	5.96
66)	T	Hexachlorobuta...	0.942	0.872	0.802	0.845	0.759	0.785	0.834	7.99

(#) = Out of Range

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2014\031414KA\031414K01.D
Tune Time : 14 Mar 2014 12:42

Daily Calibration File : C:\msdchem\1\DATA\2014\031414KA\031414K03.D

File	Sample	Surrogate Recovery %	Internal Standard Responses		
			874386	2120840	1927060
031414K02.D	S14C061-CCV1	980697	2378986	2027486	
031414K03.D	S14C061-CAL4	874386	2120842	1927062	
031414K04.D	S14C061-CAL1	886867	2193776	2118293	
031414K05.D	S14C061-CAL2	960089	2274176	2021646	
031414K06.D	S14C061-CAL3	980253	2358221	2084965	
031414K07.D	S14C061-CAL5	1009459	2396399	2110930	
031414K08.D	S14C061-CAL6	926725	2329322	2069944	
031414K09.D	S14C061-SCV1	825821	2208651	2110569	
031414K10.D	B14C068-BS1	866519	2270221	2050912	
031414K11.D	CAN 670	844397	2172360	1936051	
031414K12.D	CAN 859	991407	2473627	2213596	
031414K13.D	B14C068-BLK1	1006151	2323104	2082276	
031414K14.D	1403028-05RE1	1040413	2406406	2094765	
031414K15.D	1403028-08RE1	998663	2311322	2002986	
031414K16.D	1403028-02RE1	989388	2255914	1965244	
031414K17.D	B14C068-DUP1	993155	2338241	2018763	
031414K18.D	1403028-03RE1	955636	2186965	1888801	
031414K19.D	1403028-04RE1	928137	2223823	1932332	
031414K20.D	1403028-07RE1	917910	2219626	1928523	

031414K21.D			
CAN 636	915831	2208243	1962522
031414K22.D			
CAN 648	914786	2206658	1900368
031414K23.D			
CAN 870	898155	2183480	1908891
031414K24.D			
CAN 1110	884500	2121743	1877976
031414K25.D			
CAN 1112	877102	2079015	1821348
031414K26.D			
CAN 1114	890547	2154233	1878633

(fails) - fails 24hr time check * - fails criteria

Created: Tue Mar 18 11:37:47 2014 HP5973K

RT DUPLICATE REPORT

Instrument Name: HP5973K
Sample Name: S14C061-CAL4
Misc Info: 10 ppbv 1411093
Date Acquired: 3/14/2014 14:16
QLast Update: Thu Mar 13 18:10:19 2014
Operator: EM

#	Name	RT	CONC	Qion	
1)	BROMOCHLOROMETHANE	15.438	22.000	49.1	15.043
2)	Propene	4.372	11.762	41.1	
3)	Dichlorodifluoromethane	4.463	9.079	85	
4)	1,2-Dichlorotetrafluoroethane	4.816	9.439	85	
5)	Chloromethane	5.011	11.158	50.1	
6)	Vinyl chloride	5.333	10.276	62.1	
7)	1,3-Butadiene	5.431	10.031	54.1	
8)	Bromomethane	6.362	8.887	94	
9)	Chloroethane	6.690	9.354	64.1	
10)	Bromoethene	7.262	9.361	106	
11)	Trichlorofluoromethane	7.408	9.021	101	
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.221	7.924	151	
13)	1,1-Dichloroethene	9.294	9.181	61.1	
14)	Acetone	9.817	11.418	43.1	
15)	Carbon disulfide	10.012	10.318	76	
16)	2-Propanol	10.450	12.100	45.1	
17)	Allyl chloride	10.839	11.905	41.1	
18)	Dichloromethane	11.380	9.117	49.1	
19)	tert-Butyl methyl ether (MTBE)	12.074	10.376	73.1	
20)	trans-1,2-Dichloroethene	12.098	10.047	61.1	
21)	Hexane	12.713	10.661	57.1	
22)	1,1-Dichloroethane	13.449	9.277	63.1	
23)	Vinyl acetate	13.595	12.211	43.1	
24)	cis-1,2-Dichloroethene	14.897	10.017	61.1	
25)	2-Butanone (MEK)	14.994	12.006	72.1	
26)	Ethyl acetate	15.043	11.096	61.1	
27)	Tetrahydrofuran	15.456	11.852	42.1	
28)	Chloroform	15.596	9.353	83	
29)	Cyclohexane	15.834	10.973	56.1	
30)	1,1,1-Trichloroethane	15.876	8.934	97	
31)	Carbon tetrachloride	16.138	8.741	116.9	
32)	1,4-DIFLUOROBENZENE	17.446	22.000	114.1	16.971
33)	Benzene	16.625	11.555	78.1	16.588
34)	2,2,4-Trimethylpentane	16.588	13.159	57.1	
35)	1,2-Dichloroethane	16.825	10.843	62.1	
36)	Heptane	16.971	13.992	43.1	
37)	Trichloroethene	17.859	10.521	130	
38)	1,2-Dichloropropane	18.358	12.154	63.1	
39)	1,4-Dioxane	18.559	11.692	88.1	
40)	Bromodichloromethane	18.827	11.667	83	
41)	cis-1,3-Dichloropropene	19.593	11.698	75.1	
42)	4-Methyl-2-pentanone (MIBK)	19.831	13.782	43.1	

43)	CHLOROBENZENE-d5	22.349	22.000	117.1	21.680
44)	Toluene	20.068	11.517	91.1	
45)	trans-1,3-Dichloropropene	20.536	12.210	75.1	
46)	1,1,2-Trichloroethane	20.840	11.199	97	
47)	Tetrachloroethene	20.926	10.372	165.9	
48)	2-Hexanone	21.181	13.503	43.1	
49)	Chlorodibromomethane	21.449	11.256	128.9	
50)	1,2-Dibromoethane (EDB)	21.680	11.337	107	
51)	Chlorobenzene	22.398	11.451	112	
52)	Ethylbenzene	22.489	11.520	91.1	
53)	m&p-Xylene	22.672	22.634	91.1	
54)	o-Xylene	23.316	11.049	91.1	
55)	Styrene	23.353	10.836	104.1	
56)	Bromoform	23.730	10.703	172.9	
57)	1,1,2,2-Tetrachloroethane	24.424	11.033	83	
58)	4-Ethyltoluene	24.667	11.059	105.1	
59)	1,3,5-Trimethylbenzene	24.764	10.795	105.1	
60)	1,2,4-Trimethylbenzene	25.367	10.448	105.1	
61)	1,3-Dichlorobenzene	25.896	9.707	146	
62)	1,4-Dichlorobenzene	26.042	9.694	146	
63)	Benzyl chloride	26.255	11.327	91.1	0.000
64)	1,2-Dichlorobenzene	26.650	9.631	146	0.000
65)	1,2,4-Trichlorobenzene	29.108	8.759	180	0.000
66)	Hexachlorobutadiene	29.248	8.847	224.9	0.000

CHEMSTATION CONCENTRATION REPORT

Instrument Name: HP5973K
Sample Name: S14C061-SCV1
Misc Info: 10 ppbv SCV 1411087
Date Acquired: 3/14/2014 19:01
QLast Update: Fri Mar 14 18:45:41 201
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
1)	BROMOCHLOROMETHANE	22.00	22.00	22.00	22.00	22.00	22.00
2)	Propene	1.030	2.06	5.15	10.30	15.45	20.60
3)	Dichlorodifluoromethane	1.03	2.06	5.15	10.30	15.45	20.60
4)	1,2-Dichlorotetrafluoroethane	1.05	2.10	5.25	10.50	15.75	21.00
5)	Chloromethane	1.05	2.10	5.25	10.50	15.75	21.00
6)	Vinyl chloride	1.05	2.10	5.25	10.50	15.75	21.00
7)	1,3-Butadiene	1.00	2.00	5.00	10.00	15.00	20.00
8)	Bromomethane	1.03	2.06	5.15	10.30	15.45	20.60
9)	Chloroethane	1.03	2.06	5.15	10.30	15.45	20.60
10)	Bromoethene	1.04	2.08	5.20	10.40	15.60	20.80
11)	Trichlorofluoromethane	1.07	2.14	5.35	10.70	16.05	21.40
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	0.97	1.94	4.85	9.70	14.55	19.40
13)	1,1-Dichloroethene	0.96	1.92	4.80	9.60	14.40	19.20
14)	Acetone	1.05	2.10	5.25	10.50	15.75	21.00
15)	Carbon disulfide	1.05	2.10	5.25	10.50	15.75	21.00
16)	2-Propanol	1.06	2.12	5.30	10.60	15.90	21.20
17)	Allyl chloride	1.07	2.14	5.35	10.70	16.05	21.40
18)	Dichloromethane	0.98	1.96	4.90	9.80	14.70	19.60
19)	tert-Butyl methyl ether (MTBE)	1.07	2.14	5.35	10.70	16.05	21.40
20)	trans-1,2-Dichloroethene	1.02	2.04	5.10	10.20	15.30	20.40
21)	Hexane	1.03	2.06	5.15	10.30	15.45	20.60
22)	1,1-Dichloroethane	0.97	1.94	4.85	9.70	14.55	19.40
23)	Vinyl acetate	1.06	2.12	5.30	10.60	15.90	21.20
24)	cis-1,2-Dichloroethene	1.01	2.02	5.05	10.10	15.15	20.20
25)	2-Butanone (MEK)	1.05	2.10	5.25	10.50	15.75	21.00
26)	Ethyl acetate	1.04	2.08	5.20	10.40	15.60	20.80
27)	Tetrahydrofuran	1.03	2.06	5.15	10.30	15.45	20.60
28)	Chloroform	1.02	2.04	5.10	10.20	15.30	20.40
29)	Cyclohexane	1.05	2.10	5.25	10.50	15.75	21.00
30)	1,1,1-Trichloroethane	1.01	2.02	5.05	10.10	15.15	20.20
31)	Carbon tetrachloride	1.03	2.06	5.15	10.30	15.45	20.60
32)	1,4-DIFLUOROBENZENE	22.00	22.00	22.00	22.00	22.00	22.00
33)	Benzene	1.01	2.02	5.05	10.10	15.15	20.20
34)	2,2,4-Trimethylpentane	1.05	2.10	5.25	10.50	15.75	21.00
35)	1,2-Dichloroethane	0.98	1.96	4.90	9.80	14.70	19.60
36)	Heptane	1.05	2.10	5.25	10.50	15.75	21.00
37)	Trichloroethene	1.01	2.02	5.05	10.10	15.15	20.20
38)	1,2-Dichloropropane	1.03	2.06	5.15	10.30	15.45	20.60
39)	1,4-Dioxane	1.05	2.10	5.25	10.50	15.75	21.00
40)	Bromodichloromethane	1.04	2.08	5.20	10.40	15.60	20.80
41)	cis-1,3-Dichloropropene	1.03	2.06	5.15	10.30	15.45	20.60
42)	4-Methyl-2-pentanone (MIBK)	1.05	2.10	5.25	10.50	15.75	21.00

43)	CHLOROBENZENE-d5	22.00	22.00	22.00	22.00	22.00	22.00
44)	Toluene	1.02	2.04	5.10	10.20	15.30	20.40
45)	trans-1,3-Dichloropropene	1.07	2.14	5.35	10.70	16.05	21.40
46)	1,1,2-Trichloroethane	1.03	2.06	5.15	10.30	15.45	20.60
47)	Tetrachloroethene	1.00	2.00	5.00	10.00	15.00	20.00
48)	2-Hexanone	1.04	2.08	5.20	10.40	15.60	20.80
49)	Chlorodibromomethane	1.04	2.08	5.20	10.40	15.60	20.80
50)	1,2-Dibromoethane (EDB)	1.03	2.06	5.15	10.30	15.45	20.60
51)	Chlorobenzene	1.04	2.08	5.20	10.40	15.60	20.80
52)	Ethylbenzene	1.02	2.04	5.10	10.20	15.30	20.40
53)	m&p-Xylene	2.04	4.08	10.20	20.40	30.60	40.80
54)	o-Xylene	1.03	2.06	5.15	10.30	15.45	20.60
55)	Styrene	1.01	2.02	5.05	10.10	15.15	20.20
56)	Bromoform	1.03	2.06	5.15	10.30	15.45	20.60
57)	1,1,2,2-Tetrachloroethane	1.02	2.04	5.10	10.20	15.30	20.40
58)	4-Ethyltoluene	1.04	2.08	5.20	10.40	15.60	20.80
59)	1,3,5-Trimethylbenzene	1.03	2.06	5.15	10.30	15.45	20.60
60)	1,2,4-Trimethylbenzene	1.01	2.02	5.05	10.10	15.15	20.20
61)	1,3-Dichlorobenzene	0.99	1.98	4.95	9.90	14.85	19.80
62)	1,4-Dichlorobenzene	0.99	1.98	4.95	9.90	14.85	19.80
63)	Benzyl chloride	1.04	2.08	5.20	10.40	15.60	20.80
64)	1,2-Dichlorobenzene	0.99	1.98	4.95	9.90	14.85	19.80
65)	1,2,4-Trichlorobenzene	0.91	1.82	4.55	9.10	13.65	18.20
66)	Hexachlorobutadiene	0.95	1.90	4.75	9.50	14.25	19.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:18:27 2014
Quant Title : TO15
QLast Update : Thu Mar 13 18:10:19 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	874386	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2120842	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1927062	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.366	41	234213	11.76 ppbv	97
3) Dichlorodifluoromethane	4.457	85	705873	9.08 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	616482	9.44 ppbv	90
5) Chloromethane	5.005	50	257683	11.16 ppbv	99
6) Vinyl chloride	5.327	62	275348	10.28 ppbv	98
7) 1,3-Butadiene	5.425	54	195813	10.03 ppbv	92
8) Bromomethane	6.355	94	203217	8.89 ppbv	99
9) Chloroethane	6.690	64	144174	9.35 ppbv	99
10) Bromoethene	7.256	106	186952	9.36 ppbv	97
11) Trichlorofluoromethane	7.396	101	728841	9.02 ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.202	151	363094	7.92 ppbv	91
13) 1,1-Dichloroethene	9.294	61	445095	9.18 ppbv	94
14) Acetone	9.811	43	453318	11.42 ppbv	98
15) Carbon disulfide	10.005	76	651653	10.32 ppbv	97
16) 2-Propanol	10.437	45	470472	12.10 ppbv	98
17) Allyl chloride	10.833	41	377671	11.91 ppbv	90
18) Dichloromethane	11.374	49	366628	9.12 ppbv	85
19) tert-Butyl methyl ethe...	12.080	73	766780	10.38 ppbv	95
20) trans-1,2-Dichloroethene	12.092	61	359932	10.05 ppbv	90
21) Hexane	12.707	57	440622	10.66 ppbv	93
22) 1,1-Dichloroethane	13.443	63	528776	9.28 ppbv	100
23) Vinyl acetate	13.589	43	829103	12.21 ppbv	94
24) cis-1,2-Dichloroethene	14.897	61	423297	10.02 ppbv	90
25) 2-Butanone (MEK)	14.994	72	128795	12.01 ppbv #	84
26) Ethyl acetate	15.043	61	87429	11.10 ppbv #	85
27) Tetrahydrofuran	15.450	42	372489	11.85 ppbv	87
28) Chloroform	15.596	83	583755	9.35 ppbv	96
29) Cyclohexane	15.827	56	465940	10.97 ppbv	92
30) 1,1,1-Trichloroethane	15.876	97	634978	8.93 ppbv	97
31) Carbon tetrachloride	16.132	117	653636	8.74 ppbv	100
33) Benzene	16.630	78	881475	11.56 ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1431544	13.16 ppbv	99
35) 1,2-Dichloroethane	16.825	62	451996	10.84 ppbv	99
36) Heptane	16.971	43	588819	13.99 ppbv	89
37) Trichloroethene	17.859	130	337166	10.52 ppbv	98
38) 1,2-Dichloropropane	18.358	63	343067	12.15 ppbv	97
39) 1,4-Dioxane	18.559	88	171168	11.69 ppbv	89
40) Bromodichloromethane	18.821	83	623483	11.67 ppbv	97
41) cis-1,3-Dichloropropene	19.593	75	518798	11.70 ppbv	95
42) 4-Methyl-2-pentanone (...	19.830	43	819898	13.78 ppbv	95
44) Toluene	20.068	91	1053665	11.52 ppbv	99
45) trans-1,3-Dichloropropene	20.536	75	563837	12.21 ppbv	93
46) 1,1,2-Trichloroethane	20.840	97	339140	11.20 ppbv	93
47) Tetrachloroethene	20.925	166	467184	10.37 ppbv	100
48) 2-Hexanone	21.181	43	801379	13.50 ppbv	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:18:27 2014
Quant Title : TO15
QLast Update : Thu Mar 13 18:10:19 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	578027	11.26 ppbv	98
50) 1,2-Dibromoethane (EDB)	21.680	107	527035	11.34 ppbv	99
51) Chlorobenzene	22.398	112	818279	11.45 ppbv	98
52) Ethylbenzene	22.489	91	1499237	11.52 ppbv	99
53) m&p-Xylene	22.671	91	2313105	22.63 ppbv	99
54) o-Xylene	23.316	91	1150626	11.05 ppbv	98
55) Styrene	23.353	104	868387	10.84 ppbv	100
56) Bromoform	23.730	173	592626	10.70 ppbv	98
57) 1,1,2,2-Tetrachloroethane	24.424	83	808675	11.03 ppbv	99
58) 4-Ethyltoluene	24.667	105	1426318	11.06 ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1318677	10.79 ppbv	100
60) 1,2,4-Trimethylbenzene	25.366	105	1319880	10.45 ppbv	99
61) 1,3-Dichlorobenzene	25.896	146	869687	9.71 ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	871930	9.69 ppbv	99
63) Benzyl chloride	26.255	91	1239946	11.33 ppbv	98
64) 1,2-Dichlorobenzene	26.650	146	839850	9.63 ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	791064	8.76 ppbv	100
66) Hexachlorobutadiene	29.248	225	703546	8.85 ppbv	99

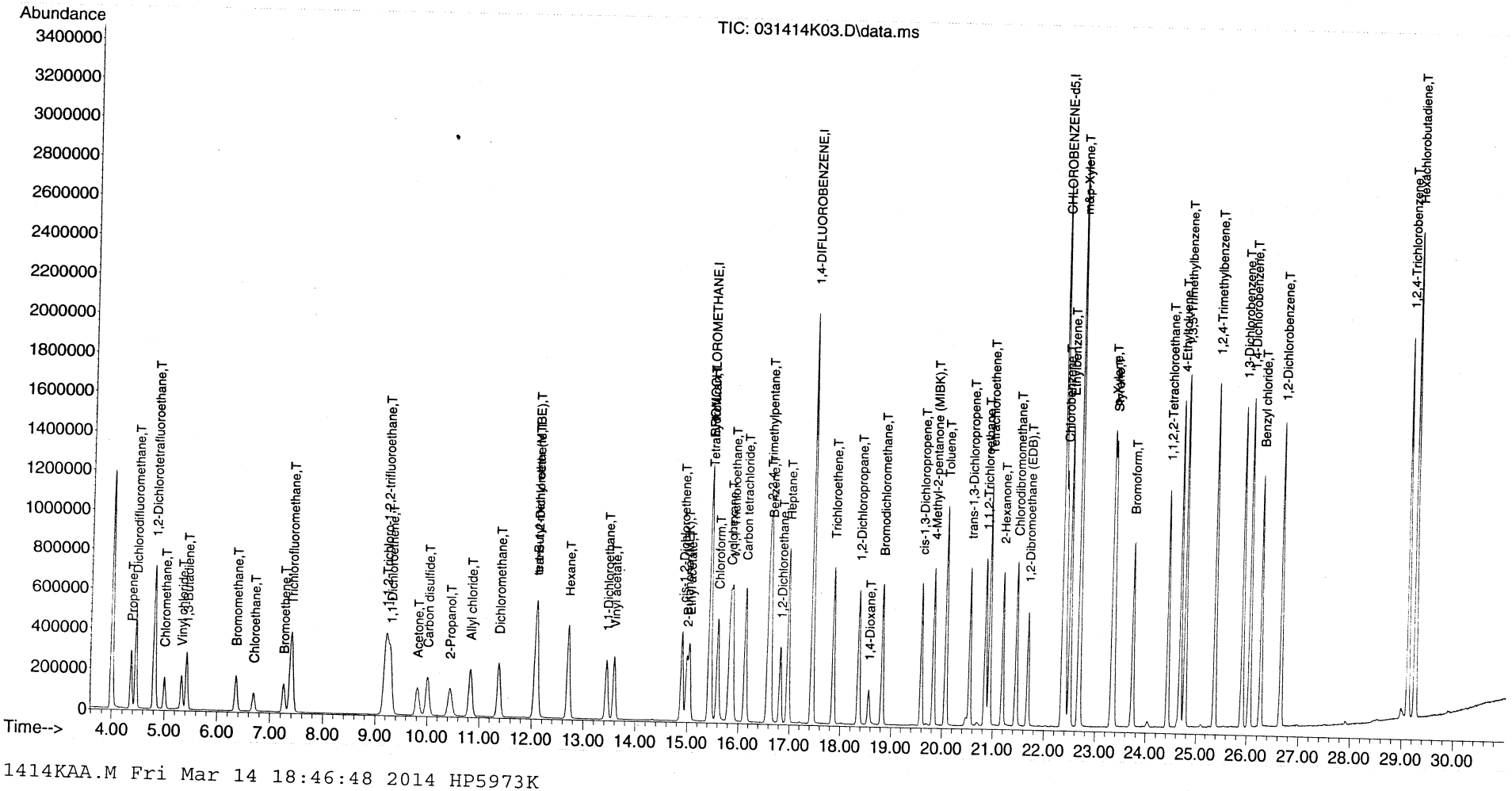
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

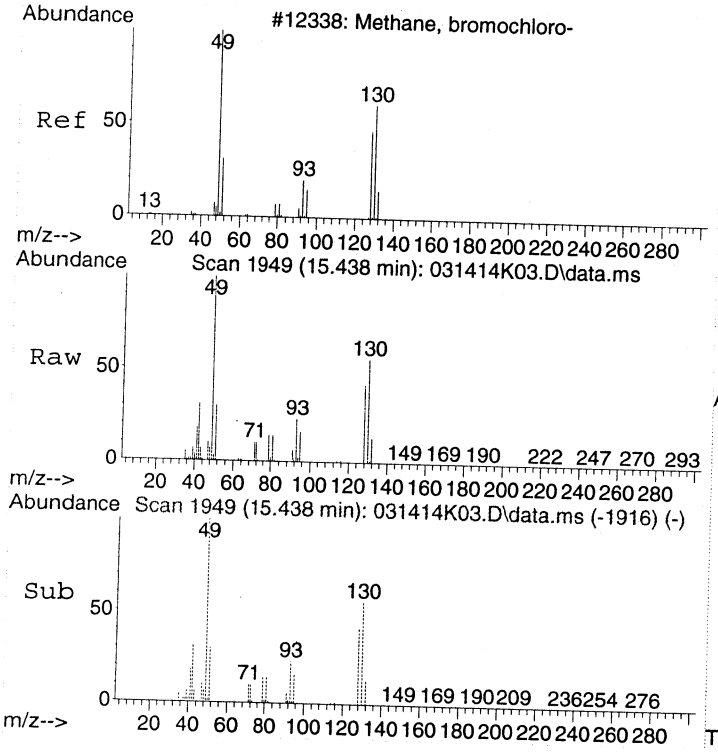
Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:18:27 2014
Quant Title : TO15
QLast Update : Thu Mar 13 18:10:19 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



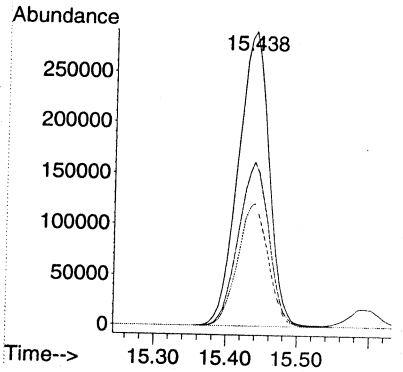
031414KAA.M Fri Mar 14 18:46:48 2014 HP5973K

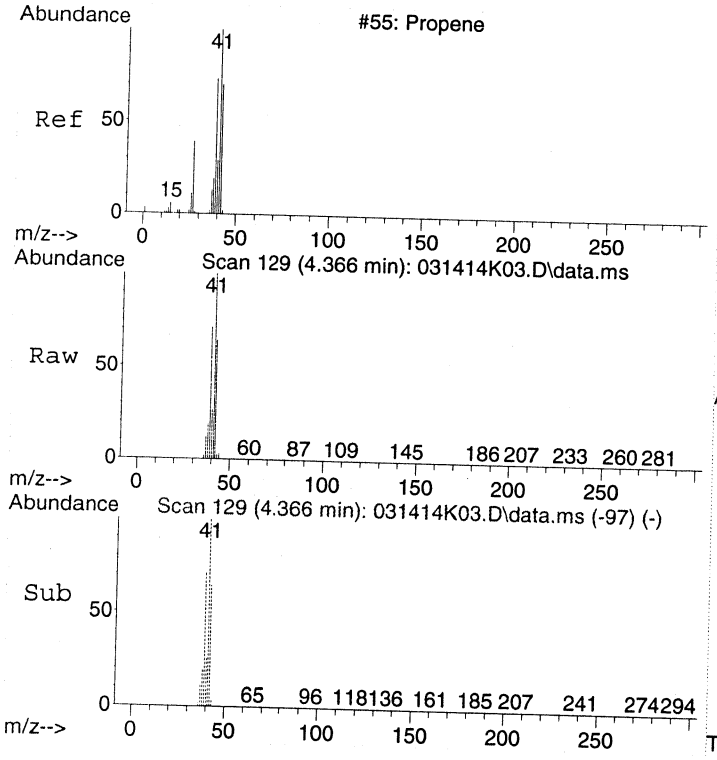


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 49 Resp: 874386

Ion	Ratio	Lower	Upper
49	100		
130	55.4	53.4	93.4
128	41.3	35.1	75.1

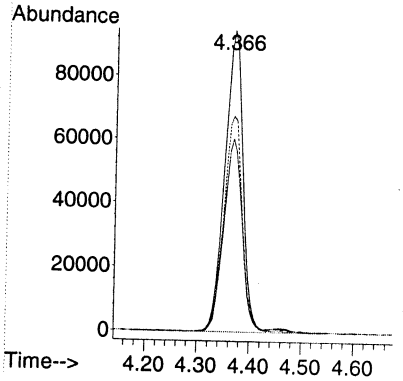


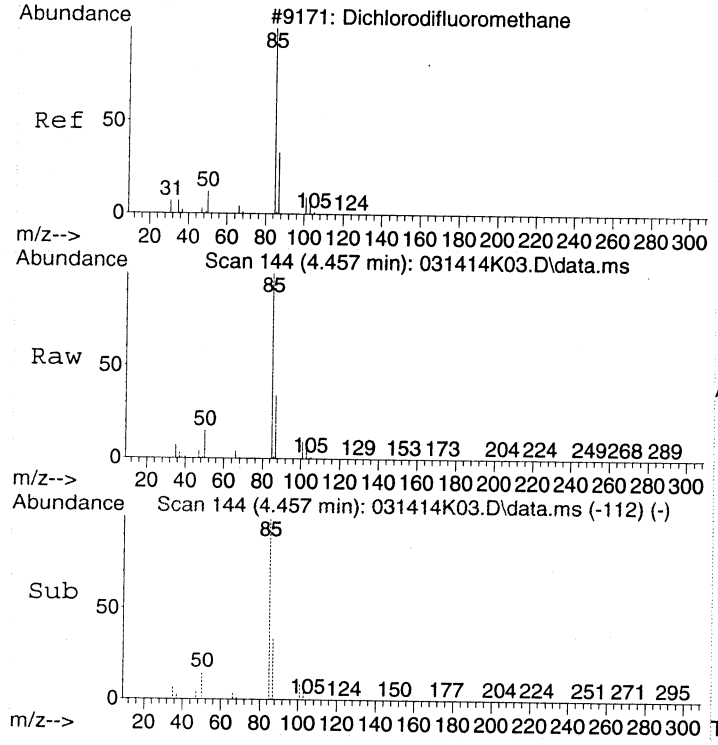


#2
Propene
Concen: 11.76 ppbv
RT: 4.366 min Scan# 129
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 41 Resp: 234213

Ion	Ratio	Lower	Upper
41	100		
42	65.4	46.3	86.3
39	71.7	56.1	96.1

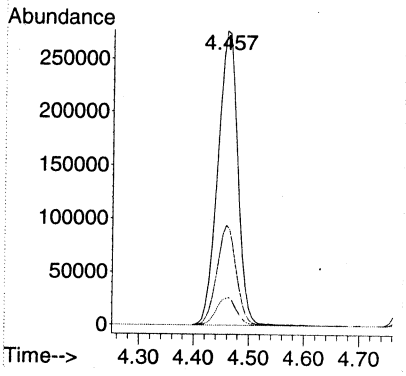


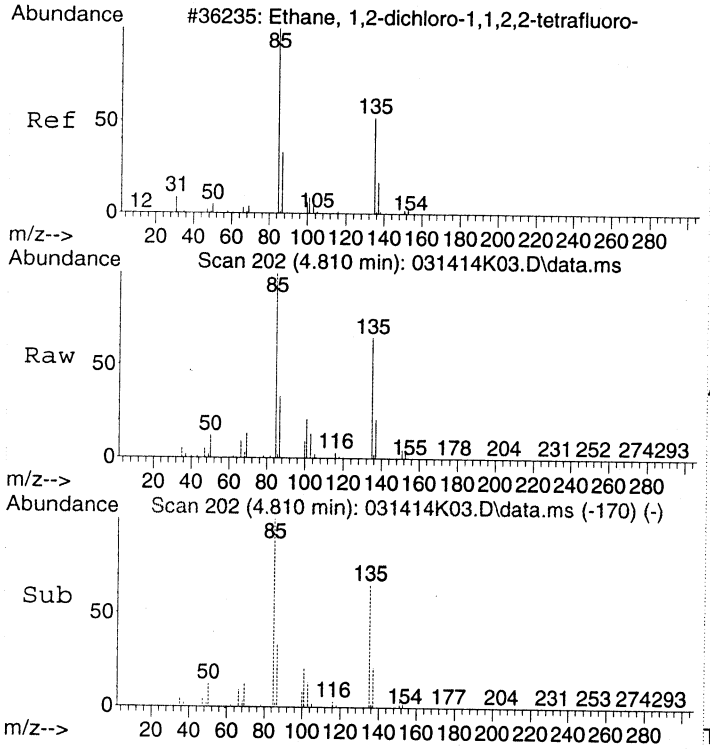


#3
Dichlorodifluoromethane
Concen: 9.08 ppbv
RT: 4.457 min Scan# 144
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 85 Resp: 705873

Ion	Ratio	Lower	Upper
85	100		
87	33.1	12.4	52.4
101	9.5	0.0	30.1

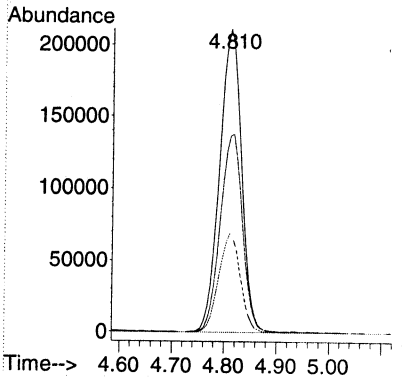


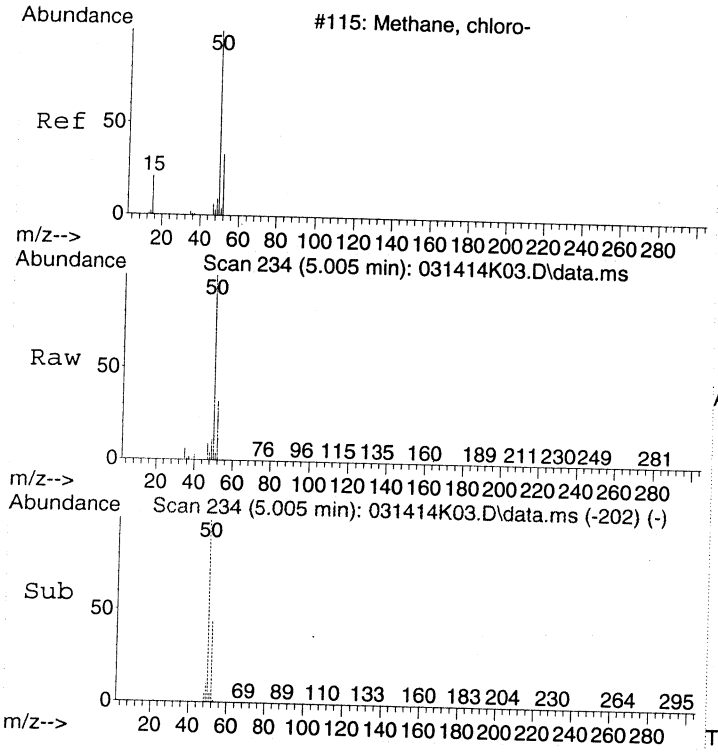


#4
1,2-Dichlorotetrafluoroethane
Concen: 9.44 ppbv
RT: 4.810 min Scan# 202
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 85 Resp: 616482

Ion	Ratio	Lower	Upper
85	100		
135	66.4	58.8	98.8
87	32.1	13.0	53.0

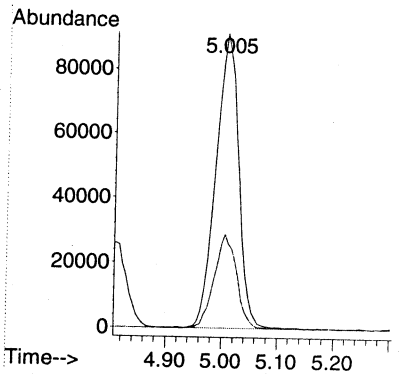


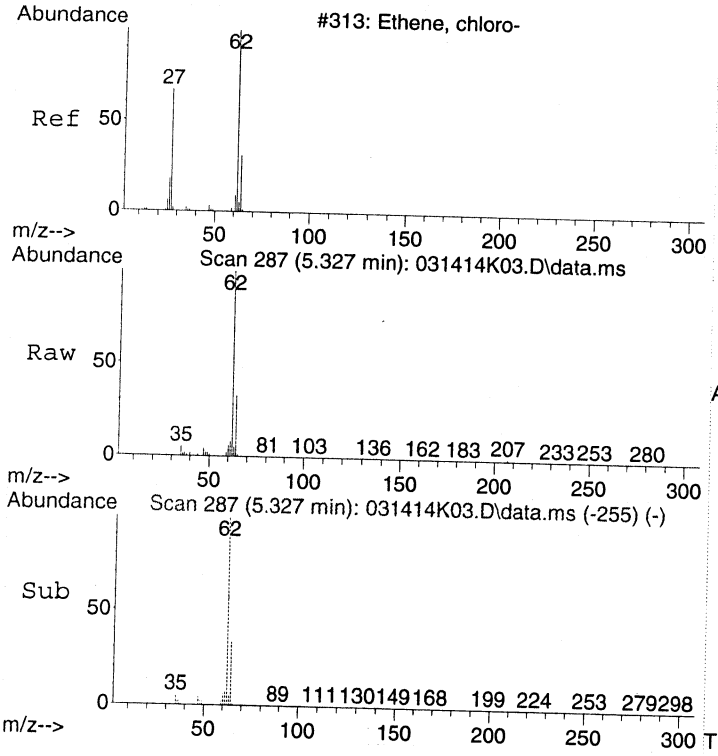


#5
Chloromethane
Concen: 11.16 ppbv
RT: 5.005 min Scan# 234
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 50 Resp: 257683

Ion	Ratio	Lower	Upper
50	100		
52	31.7	12.1	52.1

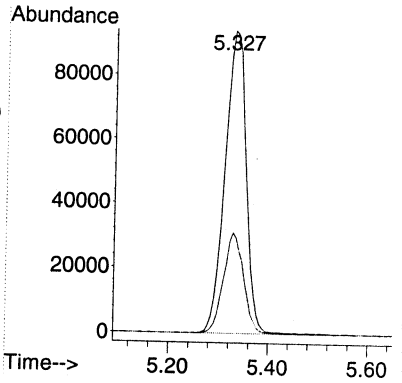


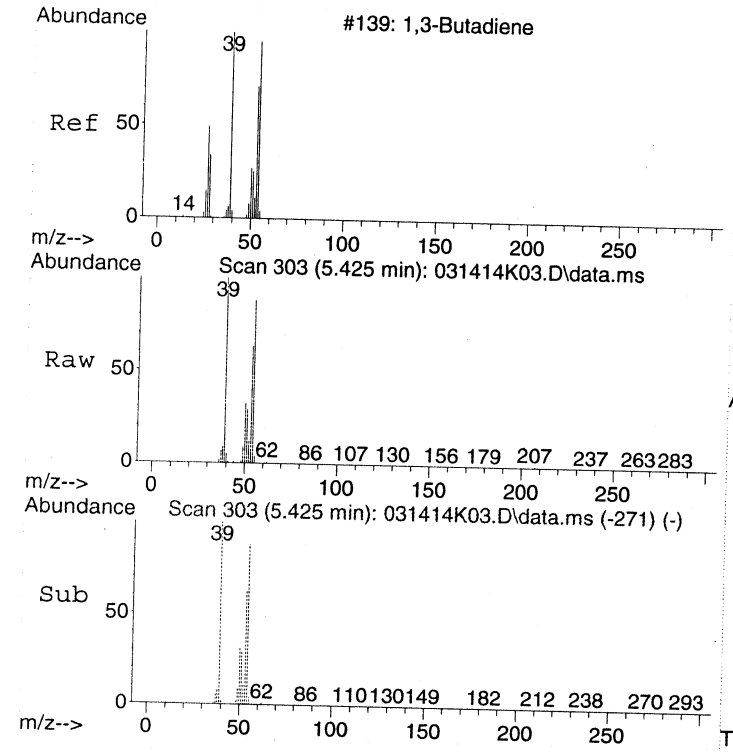


#6
Vinyl chloride
Concen: 10.28 ppbv
RT: 5.327 min Scan# 287
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 62 Resp: 275348

Ion	Ratio	Lower	Upper
62	100		
64	31.5	12.5	52.5

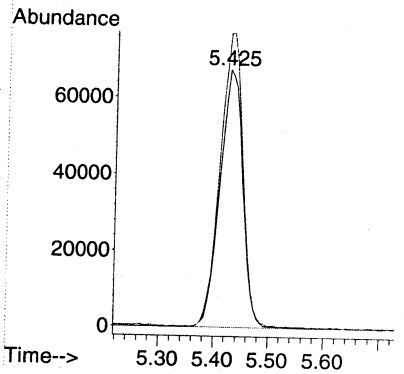


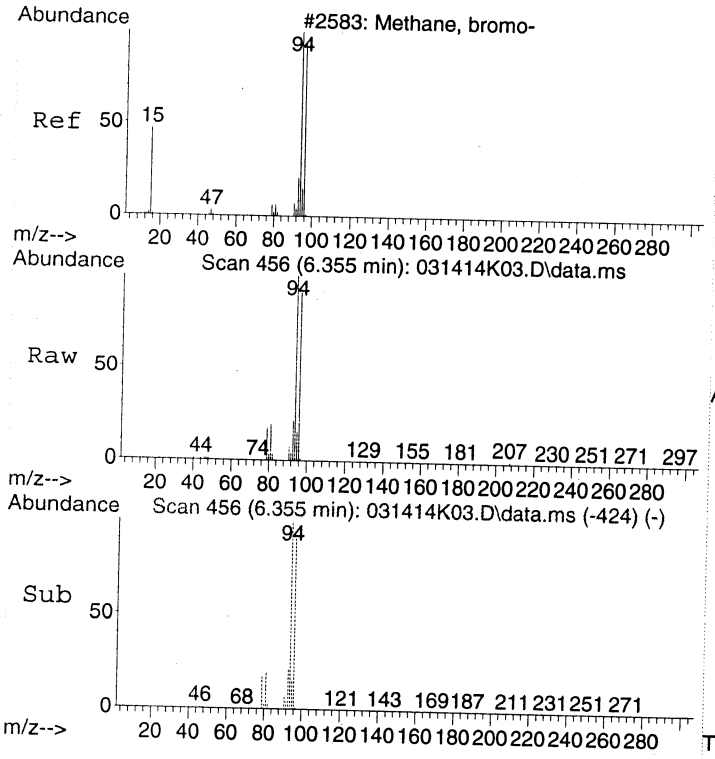


#7
1,3-Butadiene
Concen: 10.03 ppbv
RT: 5.425 min Scan# 303
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 54 Resp: 195813

Ion	Ratio	Lower	Upper
54	100		
39	113.6	85.7	125.7

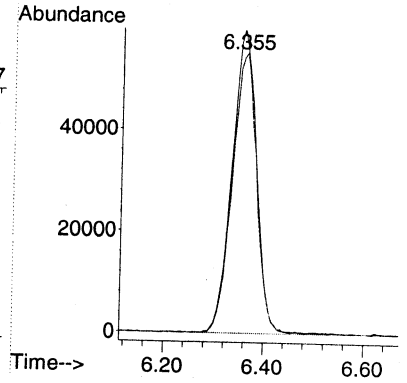


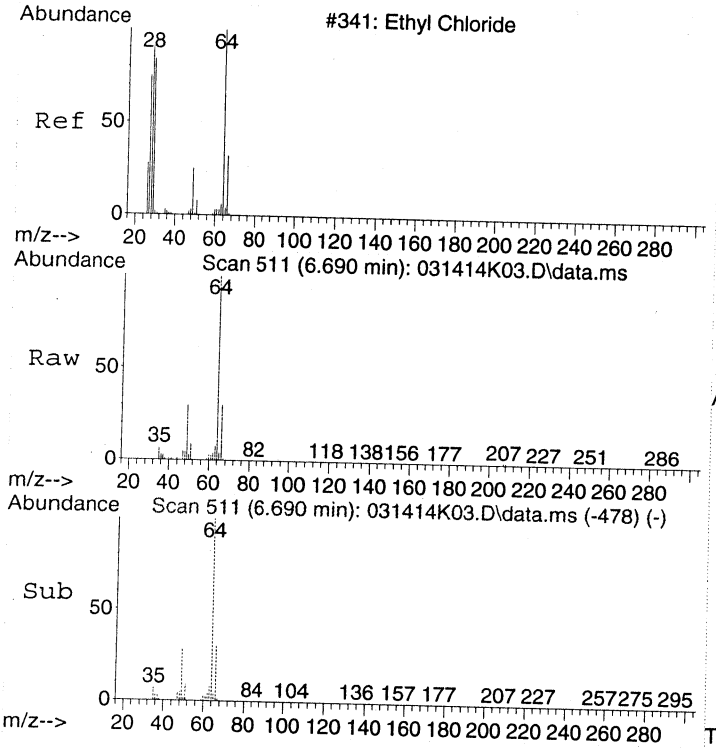


#8
Bromomethane
Concen: 8.89 ppbv
RT: 6.355 min Scan# 456
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 94 Resp: 203217

Ion	Ratio	Lower	Upper
94	100		
96	92.2	73.2	113.2

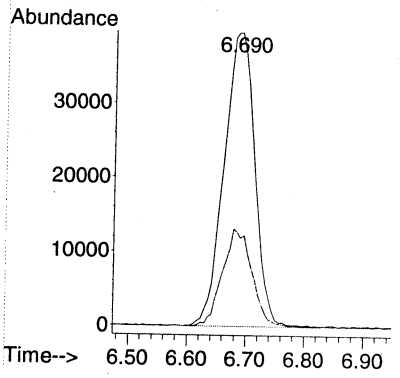


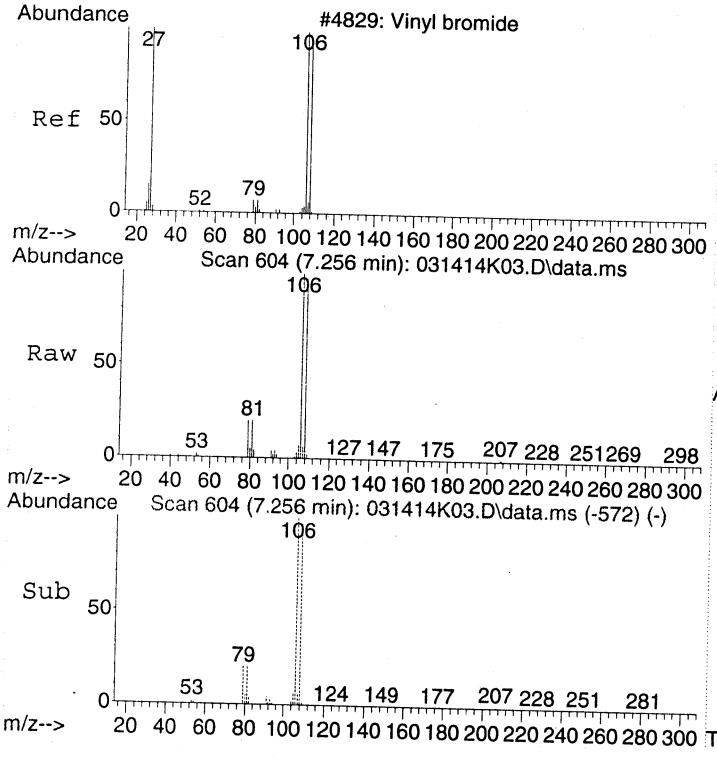


#9
Chloroethane
Concen: 9.35 ppbv
RT: 6.690 min Scan# 511
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 64 Resp: 144174

Ion	Ratio	Lower	Upper
64	100		
66	31.8	11.0	51.0

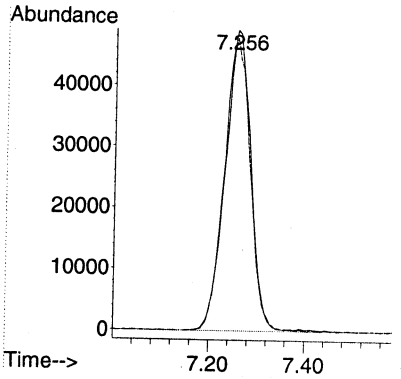


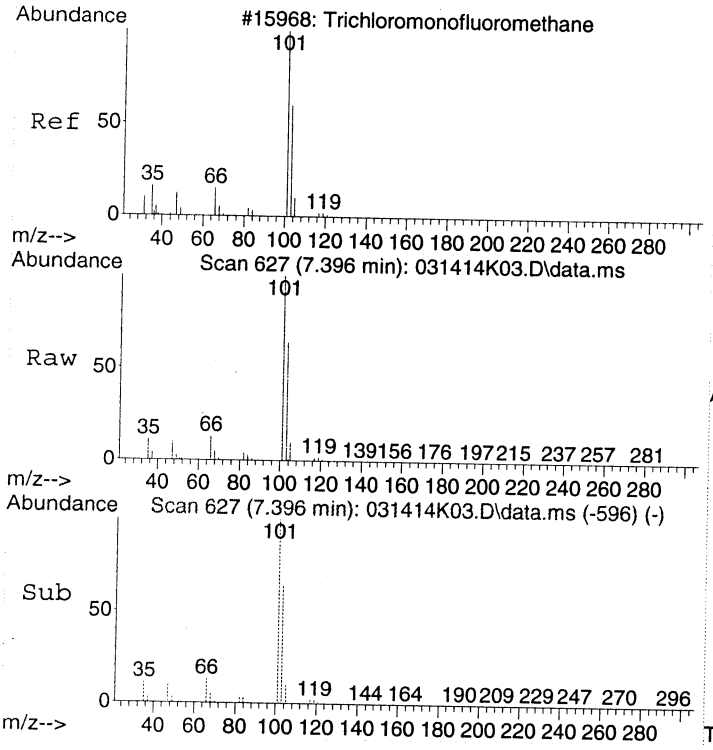


#10
Bromoethene
Concen: 9.36 ppbv
RT: 7.256 min Scan# 604
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:106 Resp: 186952

Ion	Ratio	Lower	Upper
106	100		
108	93.5	0.0	216.9

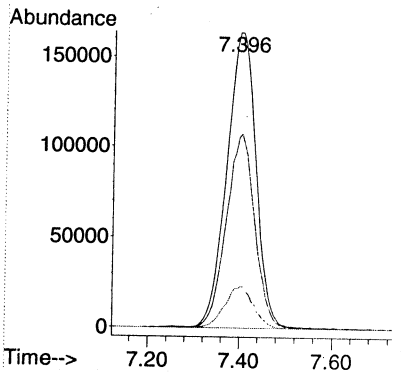


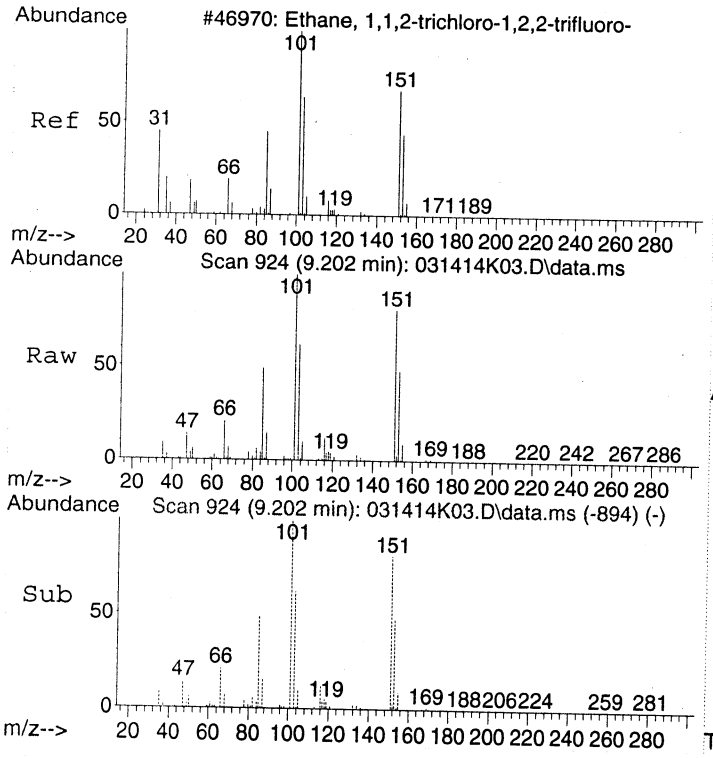


#11
Trichlorofluoromethane
Concen: 9.02 ppbv
RT: 7.396 min Scan# 627
Delta R.T. -0.012 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:101 Resp: 728841

Ion	Ratio	Lower	Upper
101	100		
103	63.7	43.8	83.8
66	13.9	0.0	32.7

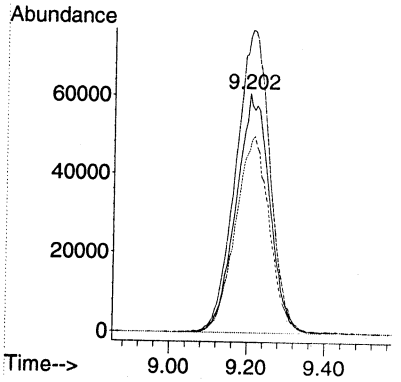


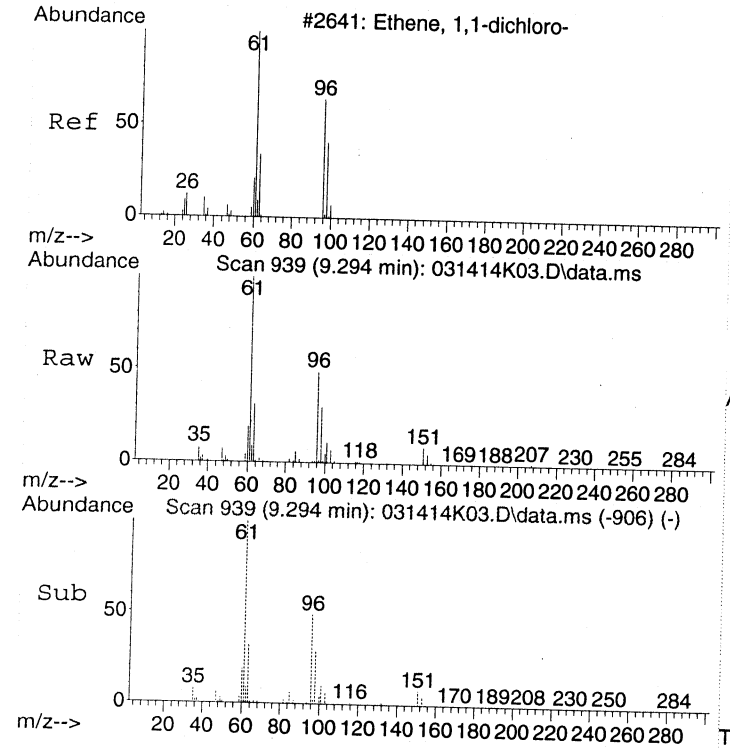


#12
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 7.92 ppbv
RT: 9.202 min Scan# 924
Delta R.T. -0.018 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:151 Resp: 363094

Ion	Ratio	Lower	Upper
151	100		
101	129.8	99.3	139.3
103	82.9	56.3	96.3

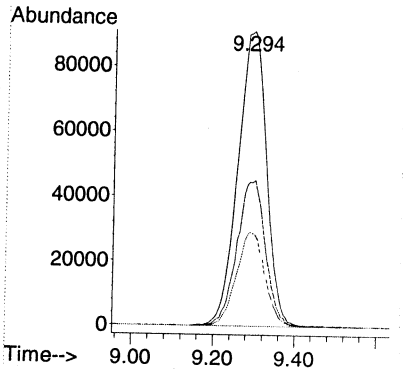


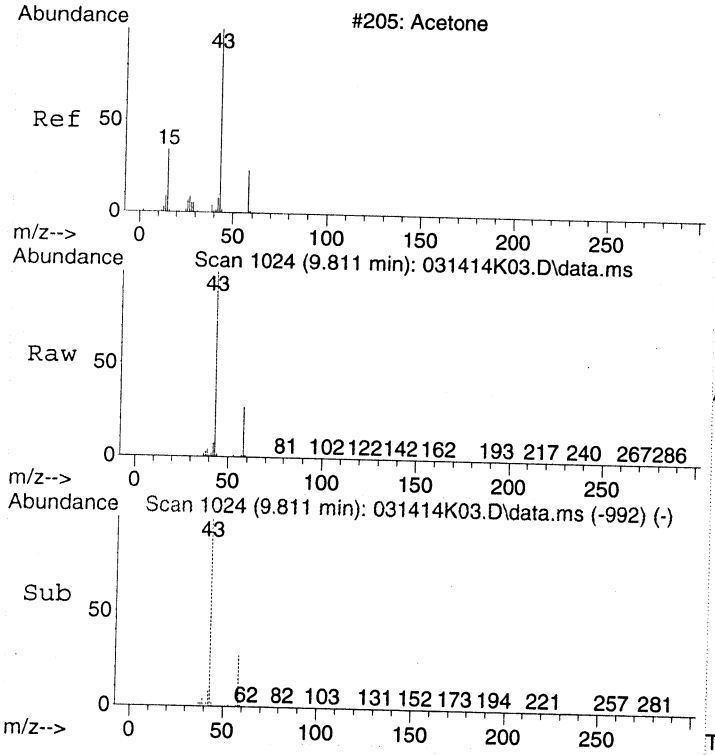


#13
1,1-Dichloroethene
Concen: 9.18 ppbv
RT: 9.294 min Scan# 939
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 61 Resp: 445095

Ion	Ratio	Lower	Upper
61	100		
96	49.4	36.2	76.2
63	31.9	12.7	52.7

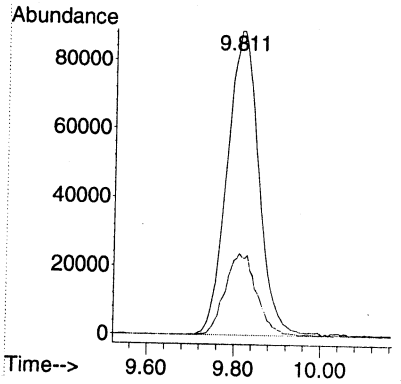


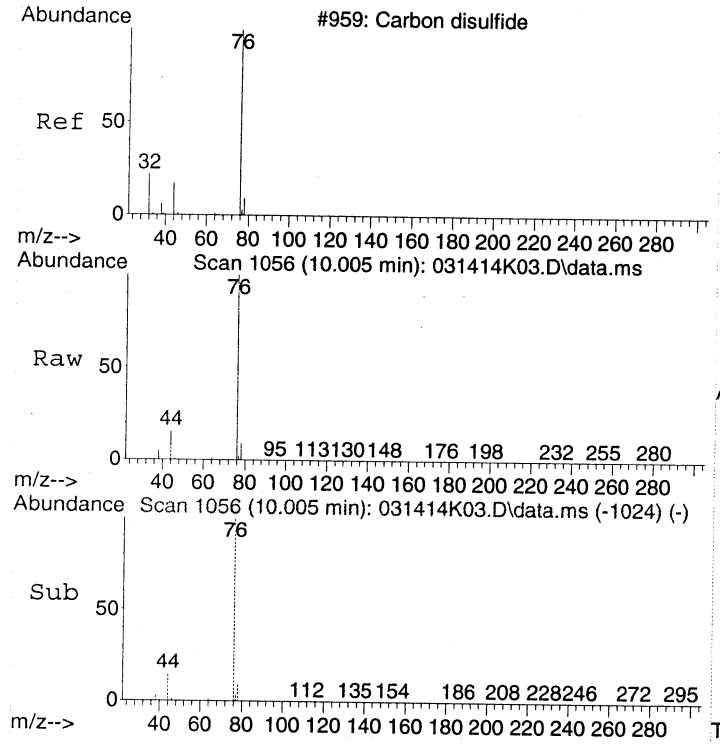


#14
Acetone
Concen: 11.42 ppbv
RT: 9.811 min Scan# 1024
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 43 Resp: 453318

Ion	Ratio	Lower	Upper
43	100		
58	26.9	8.0	48.0

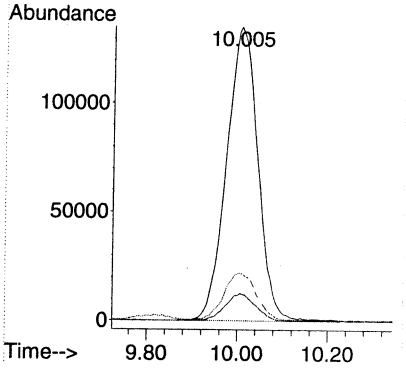


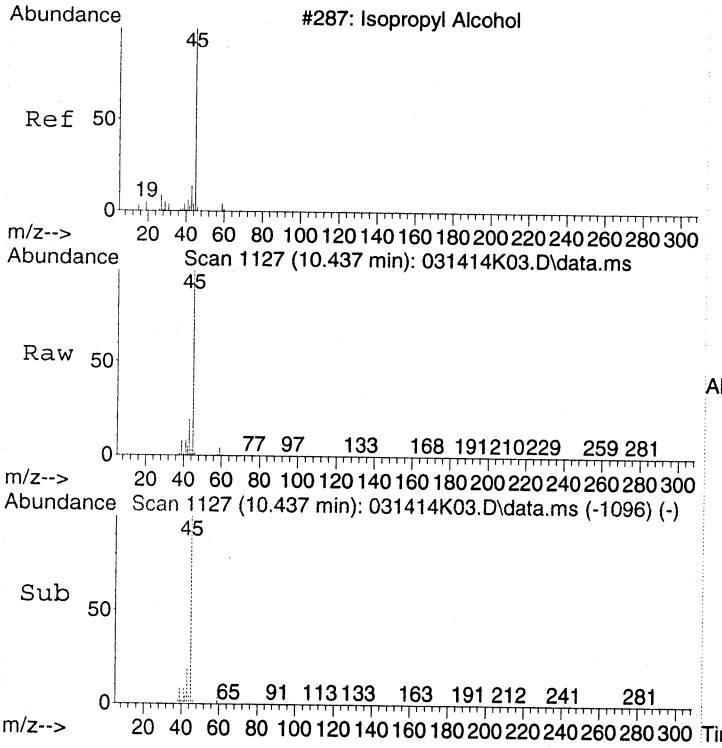


#15
Carbon disulfide
Concen: 10.32 ppbv
RT: 10.005 min Scan# 1056
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 76 Resp: 651653

Ion	Ratio	Lower	Upper
76	100		
78	9.0	0.0	29.5
44	16.3	0.0	34.9

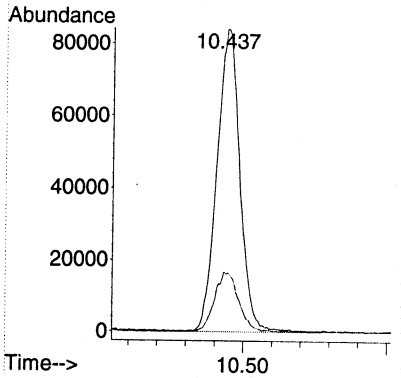


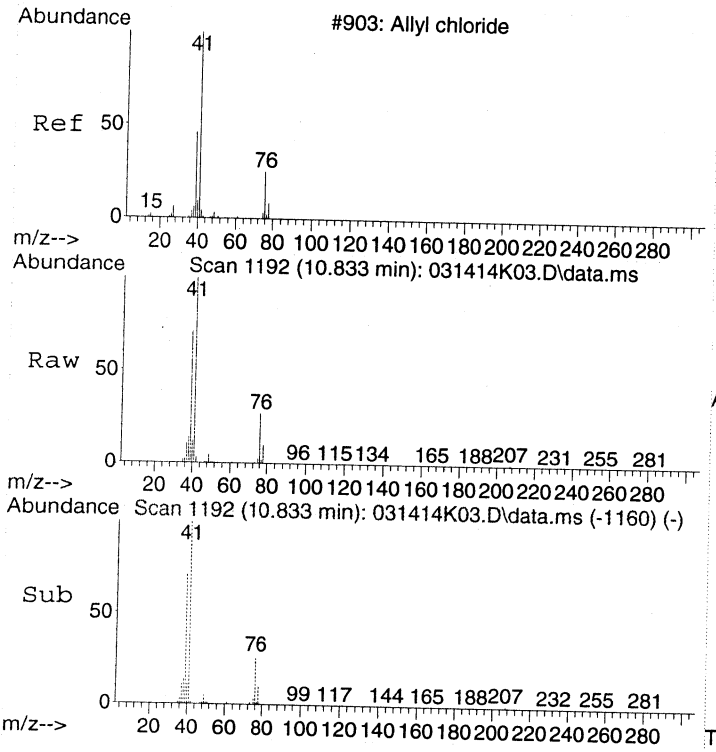


#16
2-Propanol
Concen: 12.10 ppbv
RT: 10.437 min Scan# 1127
Delta R.T. -0.013 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 45 Resp: 470472

Ion	Ratio	Lower	Upper
45	100		
43	20.5	1.3	41.3

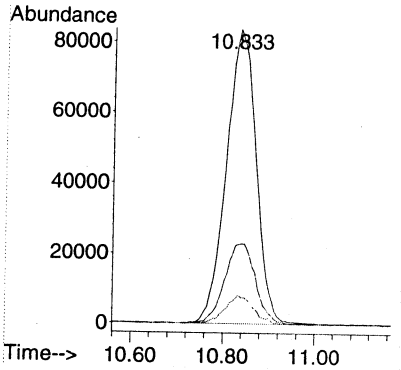


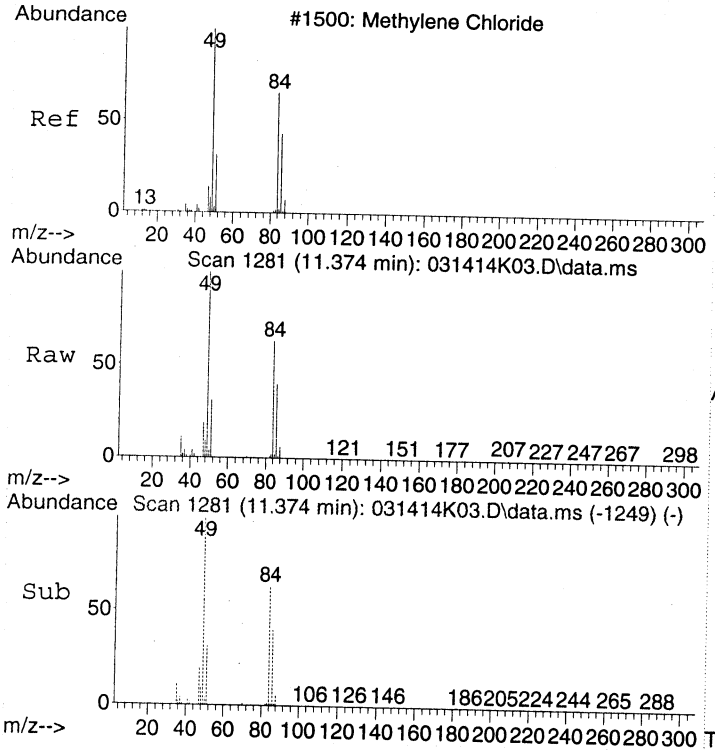


#17
Allyl chloride
Concen: 11.91 ppbv
RT: 10.833 min Scan# 1192
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 41 Resp: 377671

Ion	Ratio	Lower	Upper
41	100		
76	28.3	14.8	54.8
78	9.3	0.0	31.6

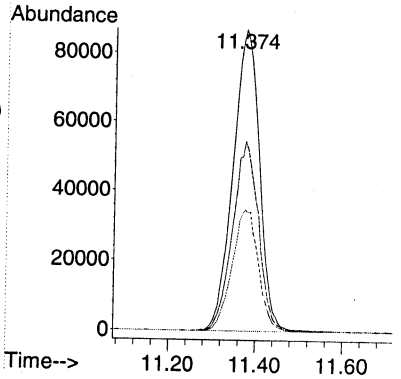


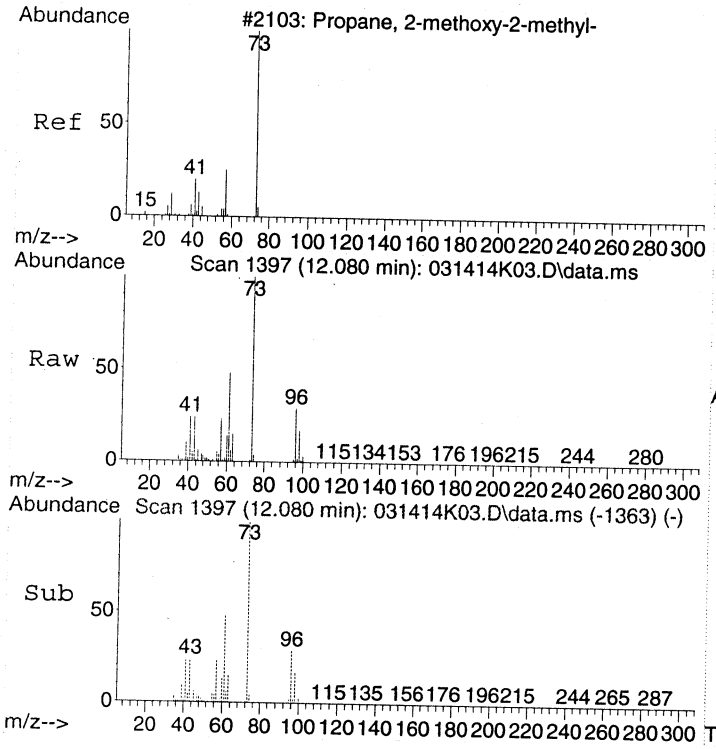


#18
Dichloromethane
Concen: 9.12 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 49 Resp: 366628

Ion	Ratio	Lower	Upper
49	100		
84	61.3	54.7	94.7
86	39.8	29.1	69.1

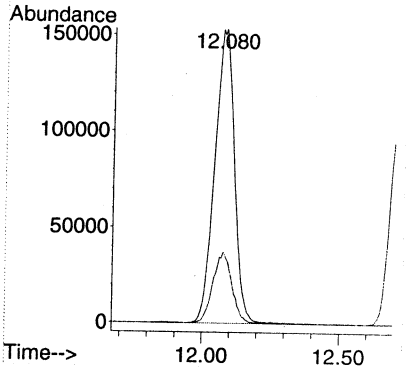


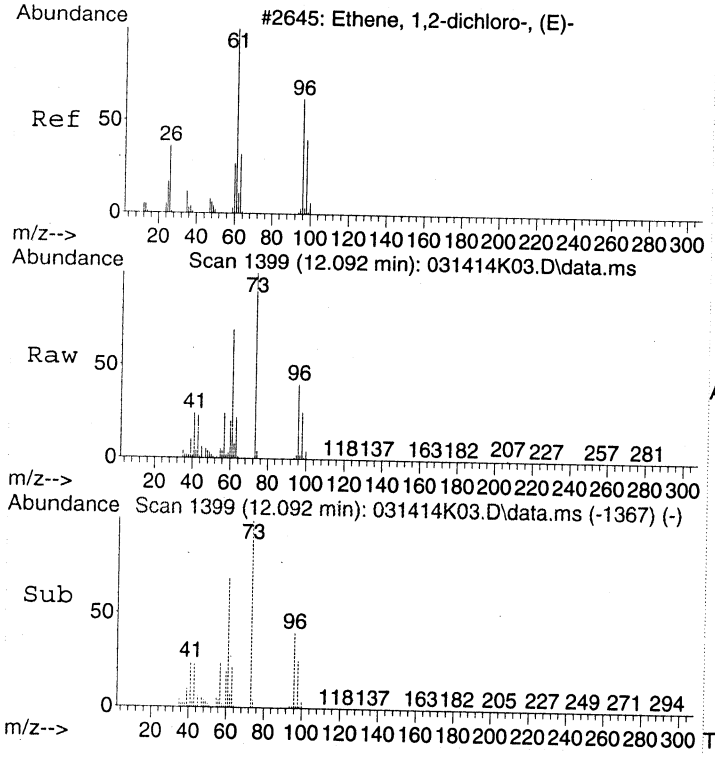


#19
tert-Butyl methyl ether (MTBE)
Concen: 10.38 ppbv
RT: 12.080 min Scan# 1397
Delta R.T. 0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 73 Resp: 766780

Ion	Ratio	Lower	Upper
73	100		
57	23.4	1.2	41.2

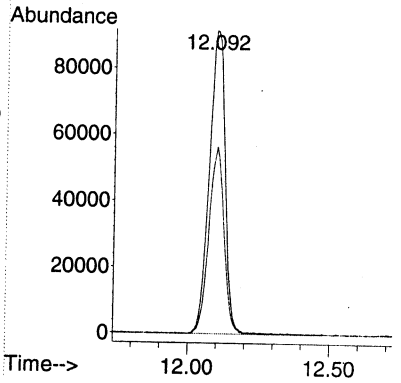


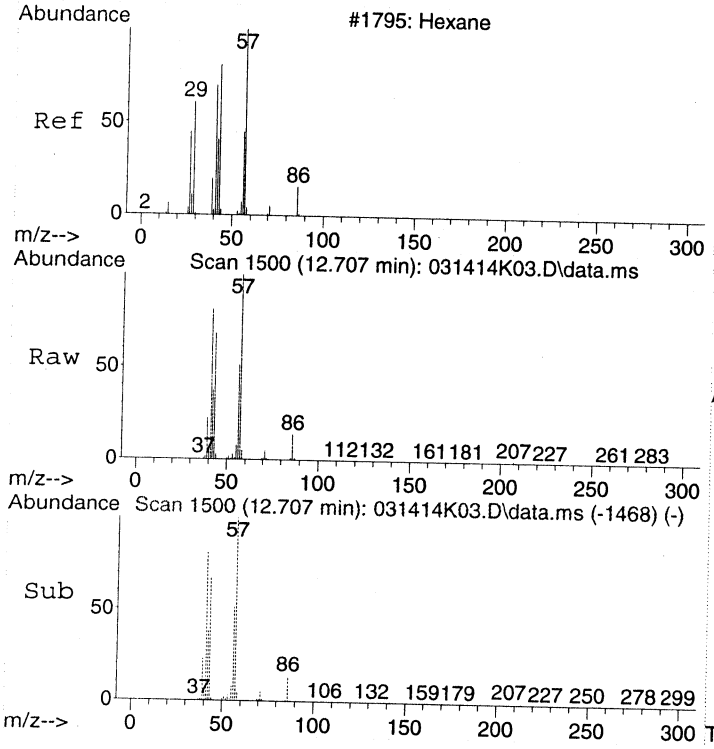


#20
trans-1,2-Dichloroethene
Concen: 10.05 ppbv
RT: 12.092 min Scan# 1399
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 61 Resp: 359932

Ion	Ratio	Lower	Upper
61	100		
96	59.1	46.8	86.8

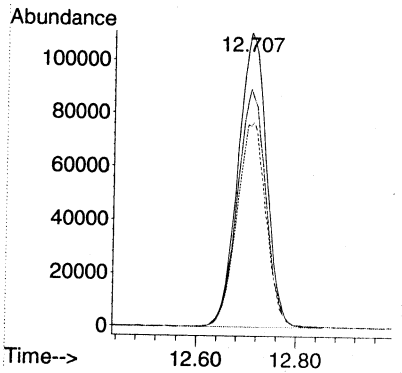


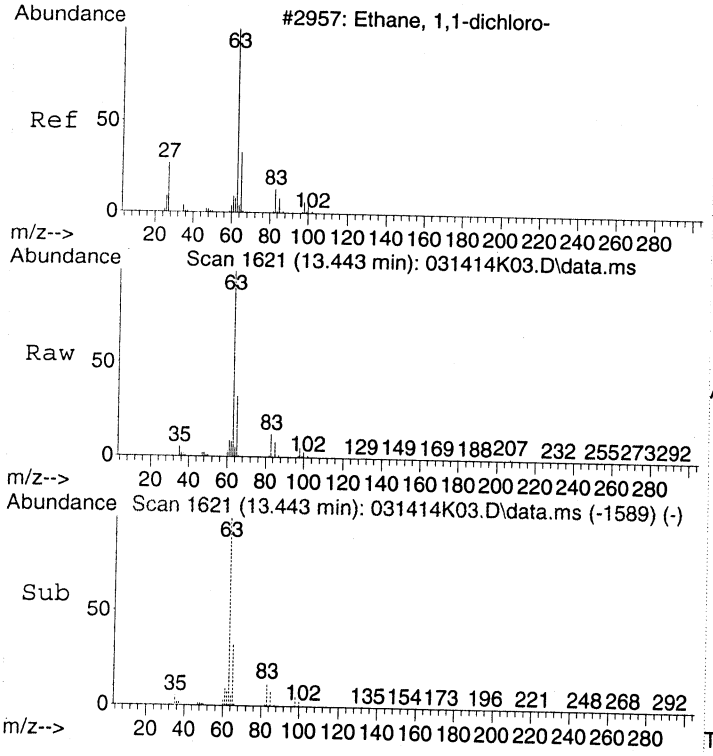


#21
Hexane
Concen: 10.66 ppbv
RT: 12.707 min Scan# 1500
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 57 Resp: 440622

Ion	Ratio	Lower	Upper
57	100		
41	80.7	56.9	96.9
43	70.6	42.9	82.9

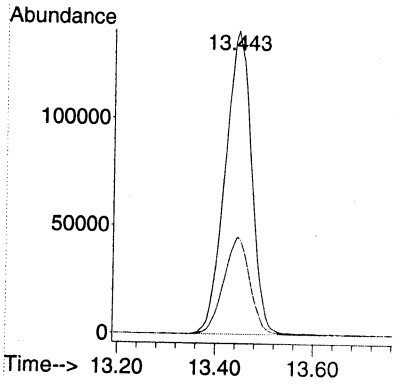


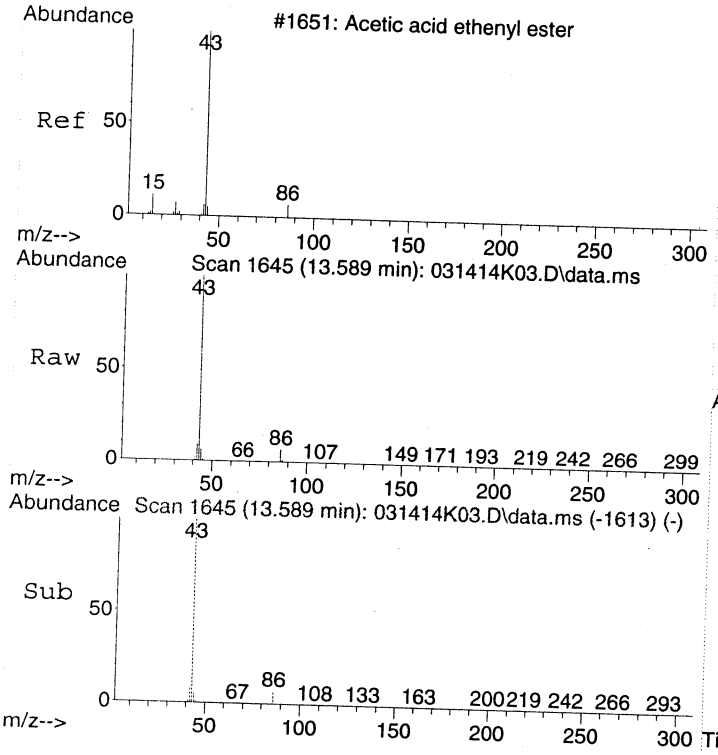


#22
1,1-Dichloroethane
Concen: 9.28 ppbv
RT: 13.443 min Scan# 1621
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 63 Resp: 528776

Ion	Ratio	Lower	Upper
63	100		
65	31.7	11.8	51.8

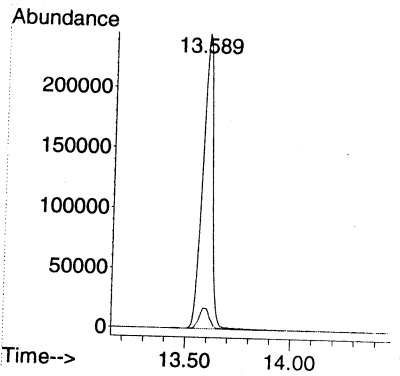


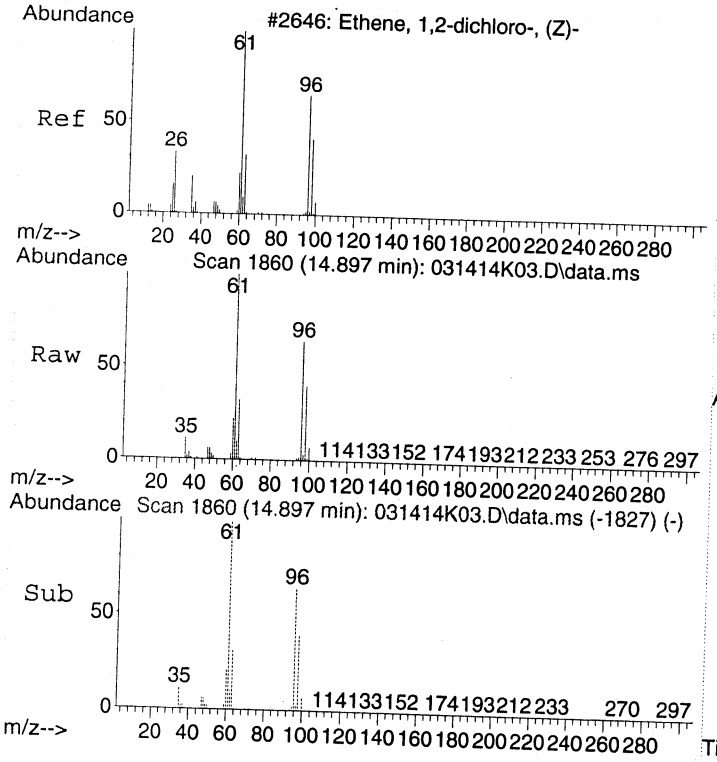


#23
Vinyl acetate
Concen: 12.21 ppbv
RT: 13.589 min Scan# 1645
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 43 Resp: 829103

Ion	Ratio	Lower	Upper
43	100		
86	7.0	0.0	29.2

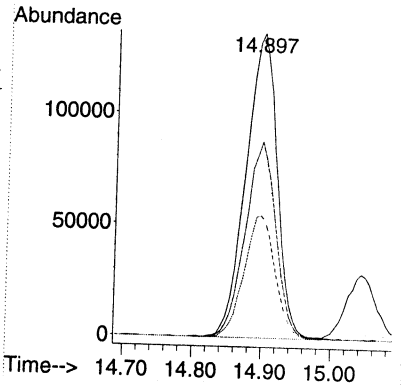


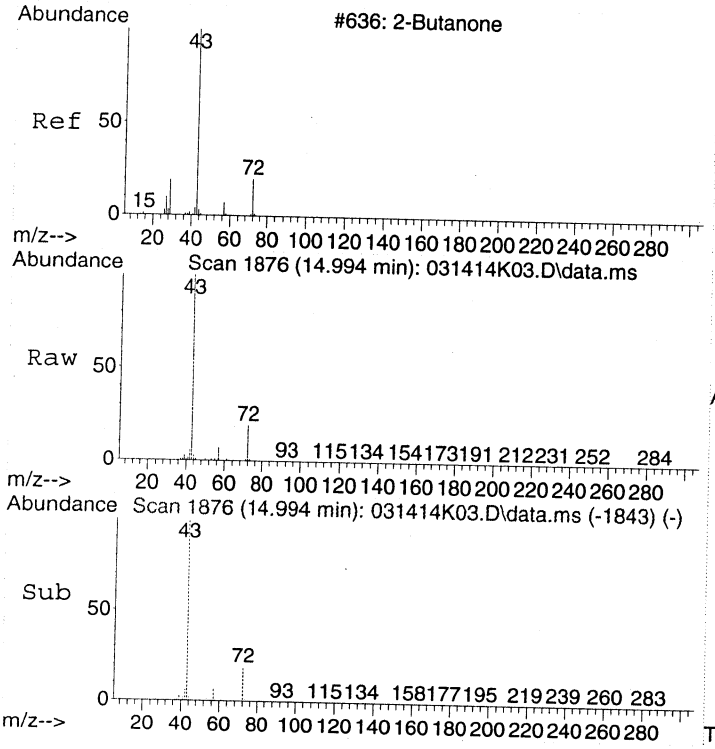


#24
cis-1,2-Dichloroethene
Concen: 10.02 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 61 Resp: 423297

Ion	Ratio	Lower	Upper
61	100		
96	63.6	52.9	92.9
98	40.0	24.5	64.5

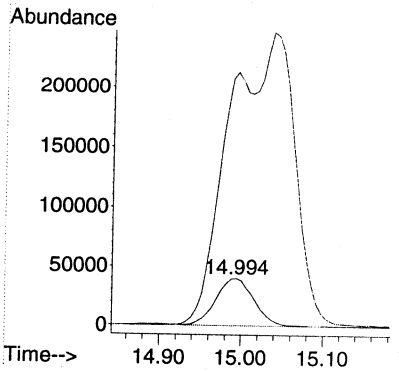


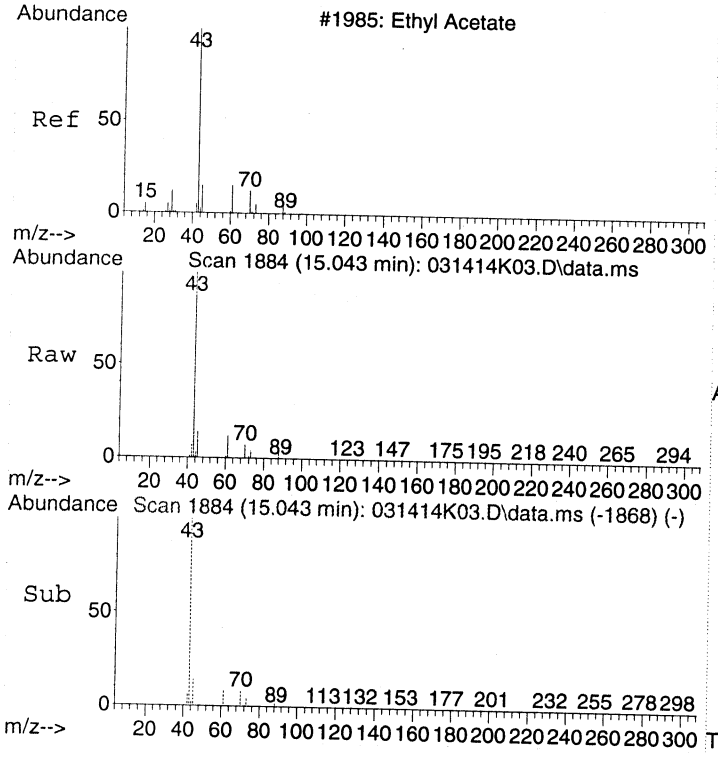


#25
2-Butanone (MEK)
Concen: 12.01 ppbv
RT: 14.994 min Scan# 1876
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 72 Resp: 128795

Ion	Ratio	Lower	Upper
72	100		
43	467.7	418.1	438.1#

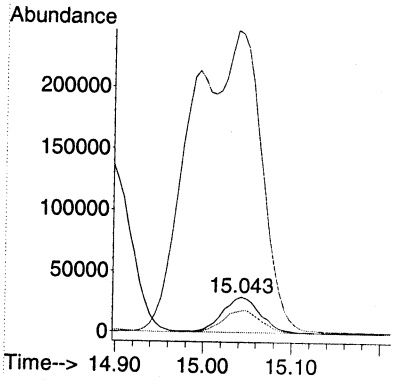


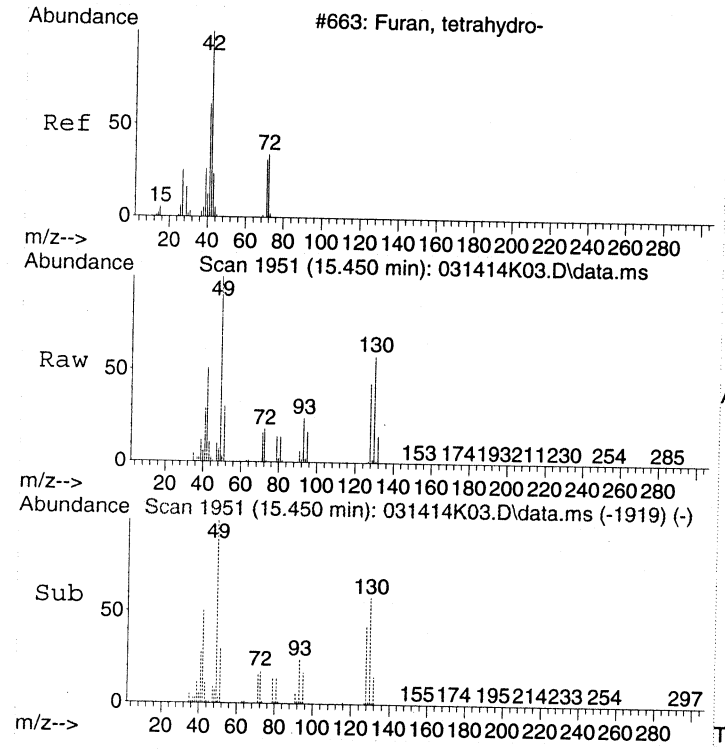


#26
Ethyl acetate
Concen: 11.10 ppbv
RT: 15.043 min Scan# 1884
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 61 Resp: 87429

Ion	Ratio	Lower	Upper
61	100		
43	0.0	0.0	10.0
70	64.4	67.0	87.0#

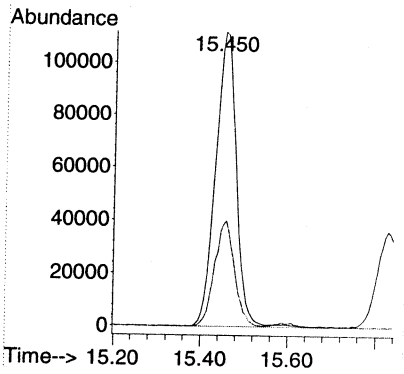


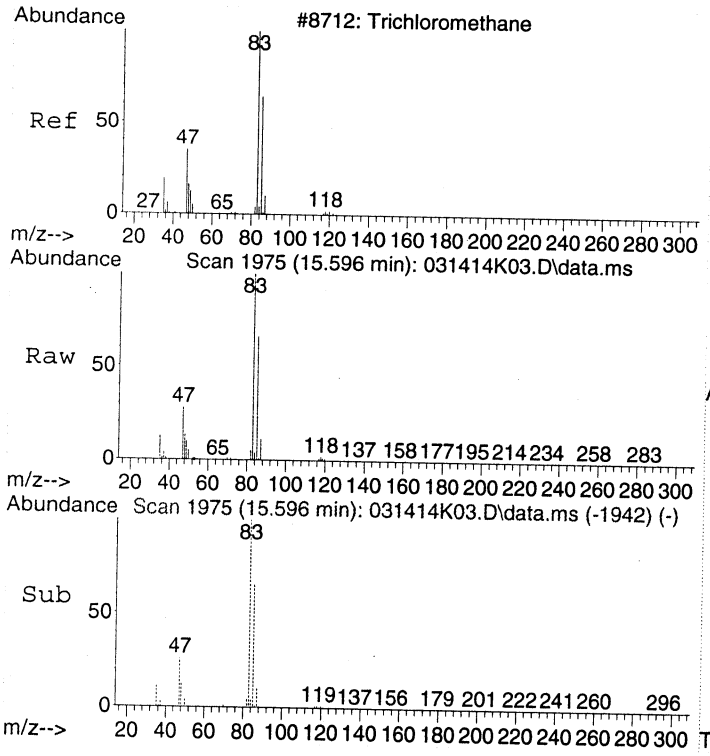


#27
Tetrahydrofuran
Concen: 11.85 ppbv
RT: 15.450 min Scan# 1951
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 42 Resp: 372489

Ion	Ratio	Lower	Upper
42	100		
72	34.4	22.5	62.5

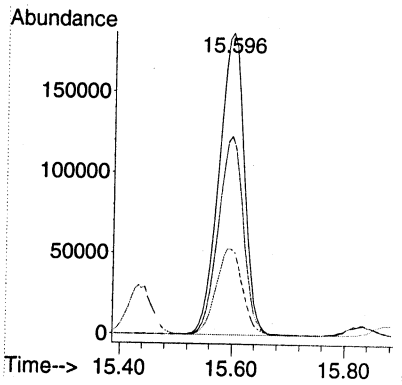


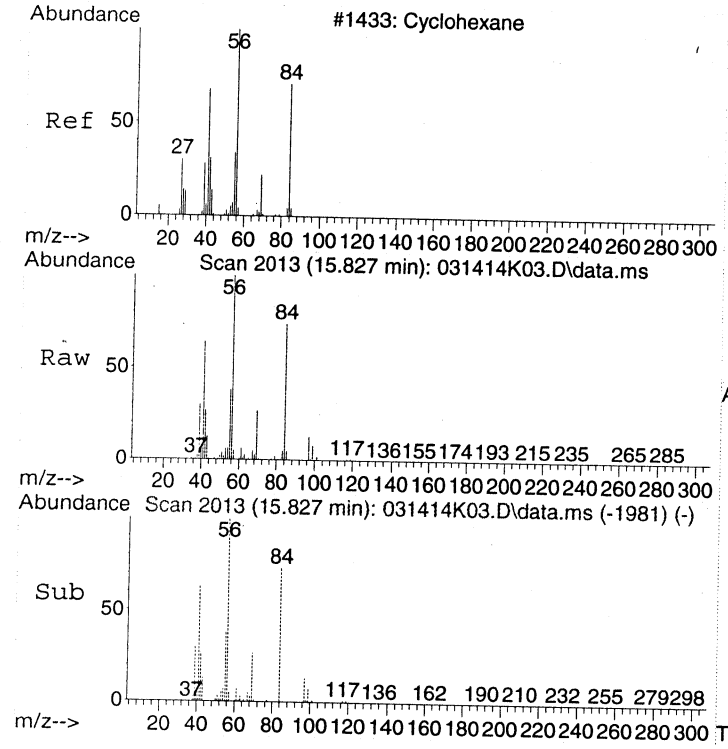


#28
Chloroform
Concen: 9.35 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 83 Resp: 583755

Ion	Ratio	Lower	Upper
83	100		
85	64.8	46.8	86.8
47	29.6	6.3	46.3

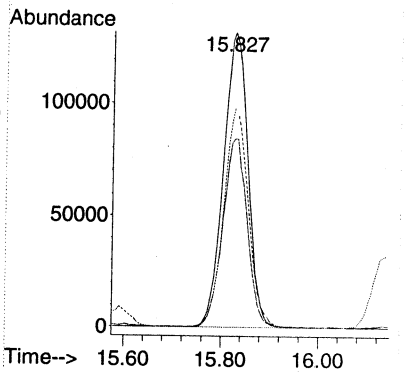


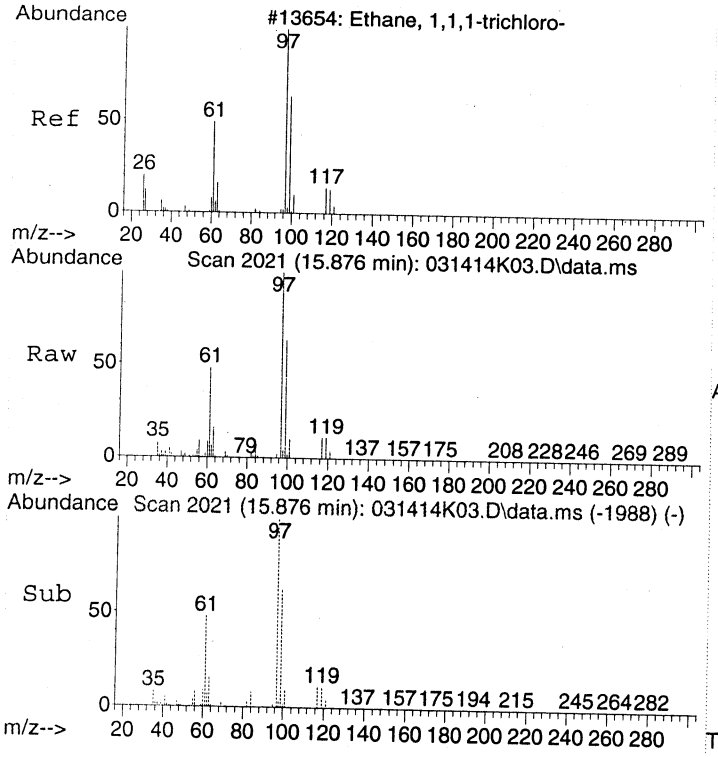


#29
Cyclohexane
Concen: 10.97 ppbv
RT: 15.827 min Scan# 2013
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 56 Resp: 465940

Ion	Ratio	Lower	Upper
56	100		
41	63.5	40.0	80.0
84	74.9	64.7	104.7

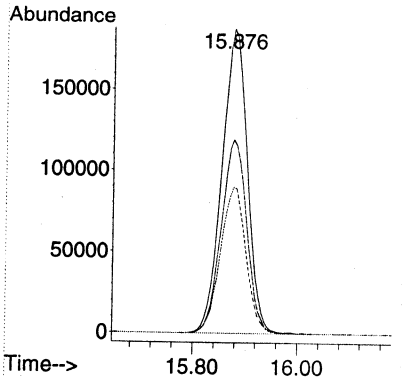


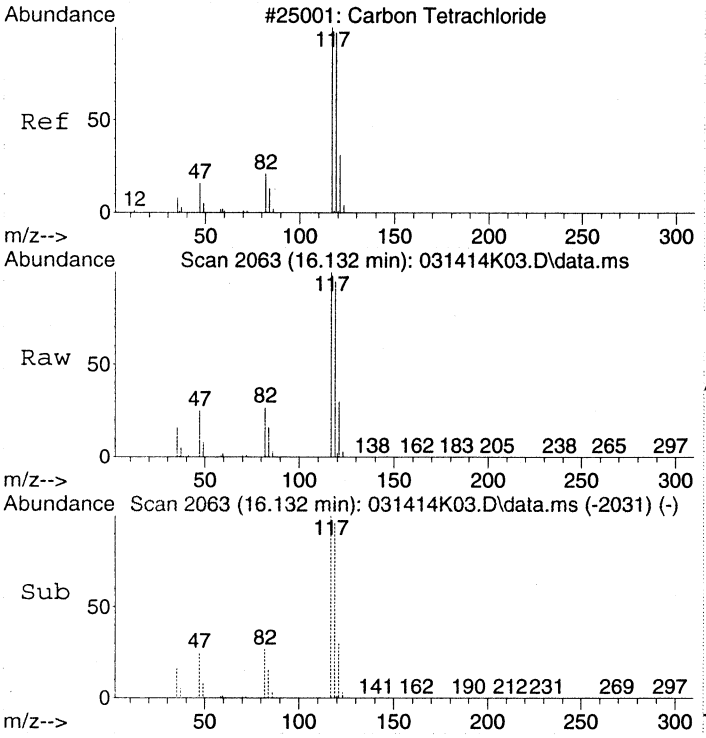


#30
1,1,1-Trichloroethane
Concen: 8.93 ppbv
RT: 15.876 min Scan# 2021
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 97 Resp: 634978

Ion	Ratio	Lower	Upper
97	100		
99	64.0	44.5	84.5
61	48.4	24.3	64.3

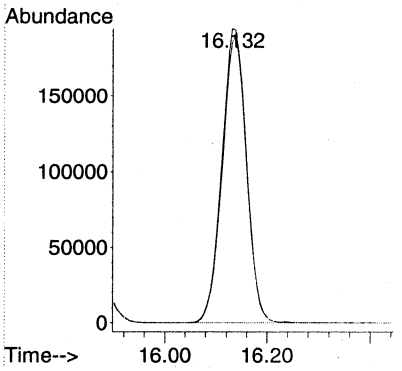


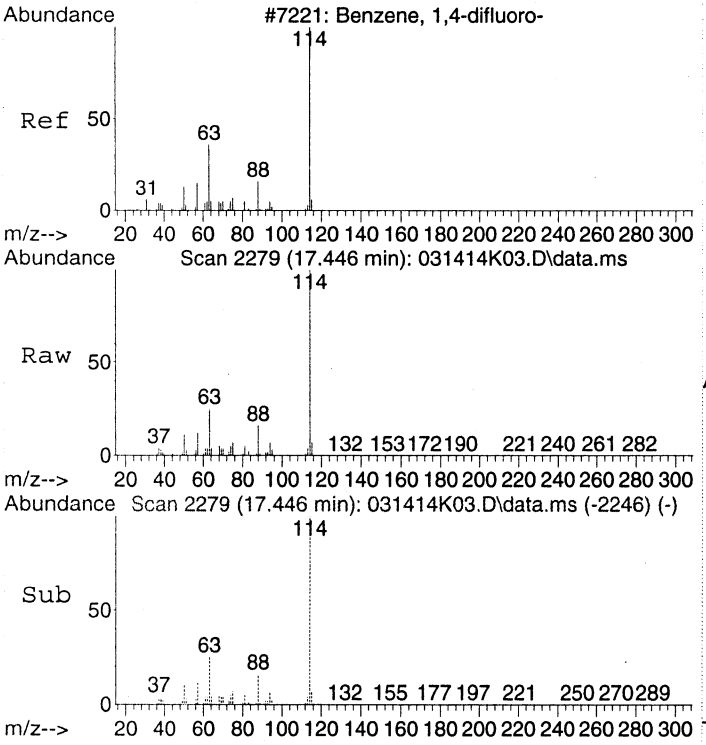


#31
Carbon tetrachloride
Concen: 8.74 ppbv
RT: 16.132 min Scan# 2063
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:117 Resp: 653636

Ion	Ratio	Lower	Upper
117	100		
119	95.7	75.2	115.2

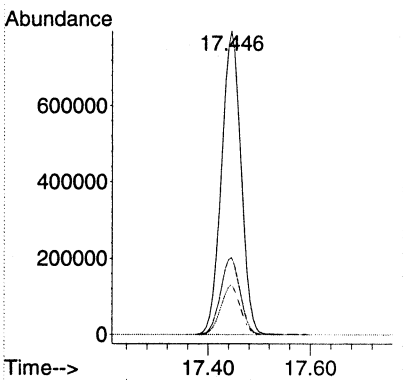


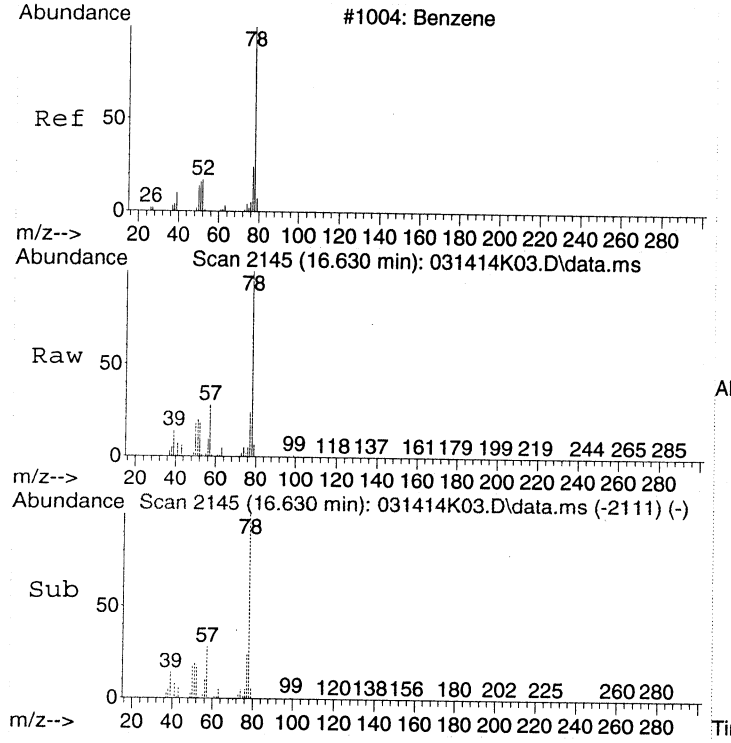


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:114 Resp: 2120842

Ion	Ratio	Lower	Upper
114	100		
63	25.5	2.7	42.7
88	16.2	0.0	36.0

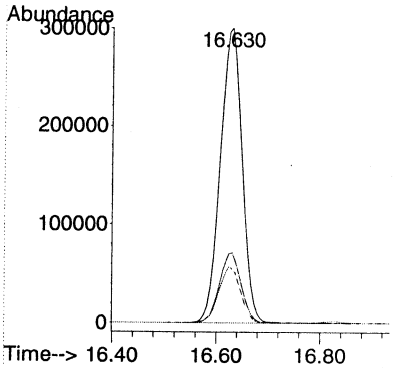


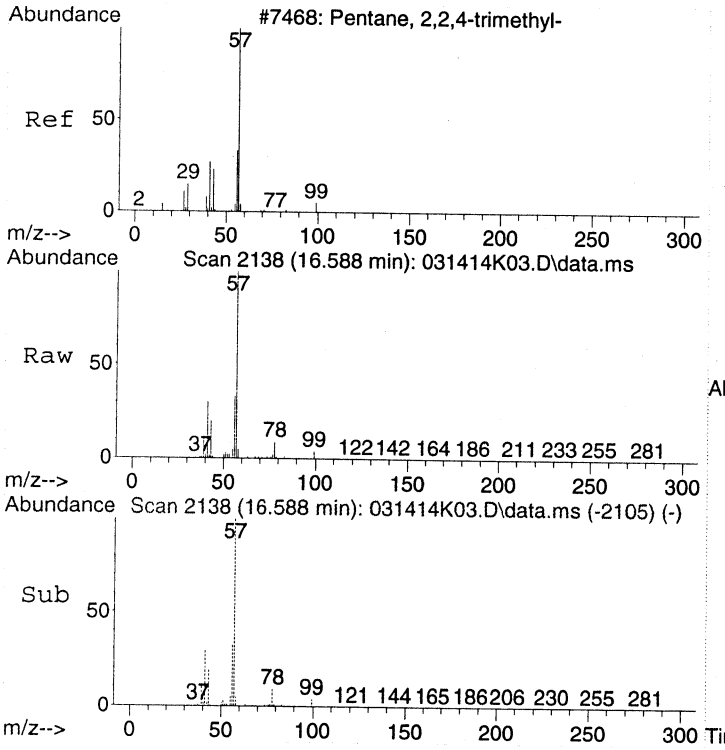


#33
Benzene
Concen: 11.56 ppbv
RT: 16.630 min Scan# 2145
Delta R.T. 0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 78 Resp: 881475

Ion	Ratio	Lower	Upper
78	100		
77	23.9	4.2	44.2
50	19.3	0.0	38.4

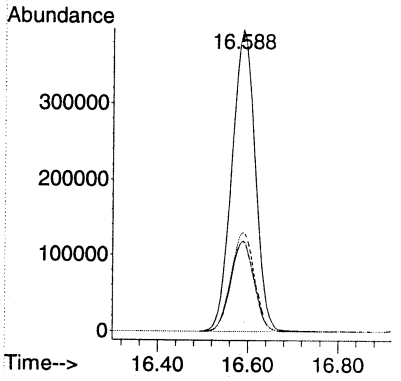


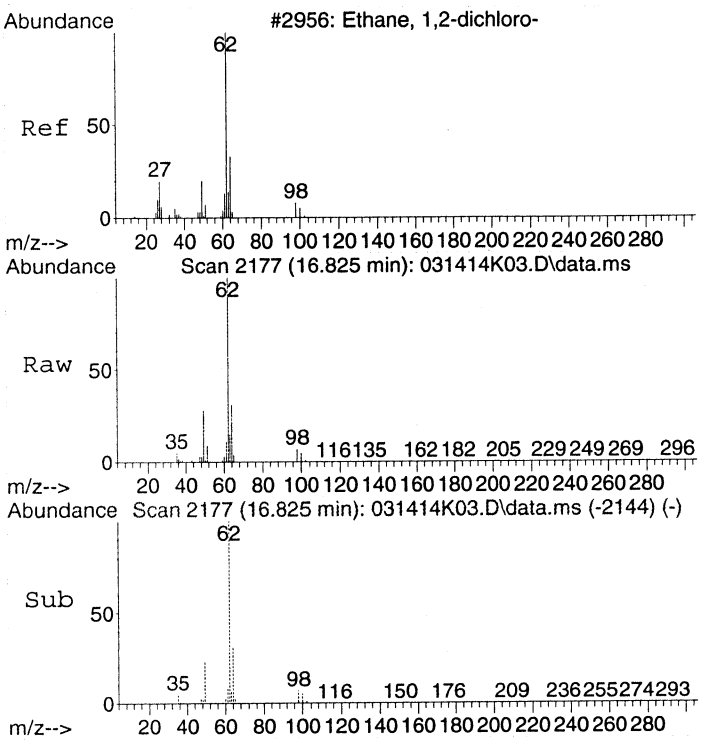


#34
2,2,4-Trimethylpentane
Concen: 13.16 ppbv
RT: 16.588 min Scan# 2138
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 57 Resp: 1431544

Ion	Ratio	Lower	Upper
57	100		
41	29.9	9.2	49.2
56	33.2	12.6	52.6

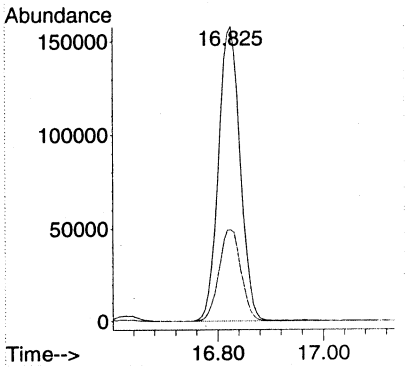


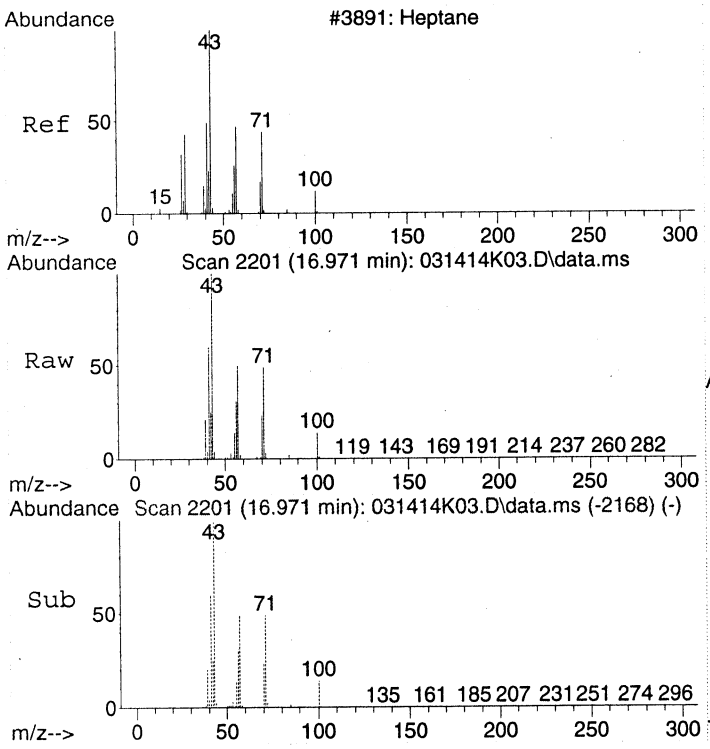


#35
1,2-Dichloroethane
Concen: 10.84 ppbv
RT: 16.825 min Scan# 2177
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 62 Resp: 451996

Ion	Ratio	Lower	Upper
62	100		
64	31.8	12.4	52.4

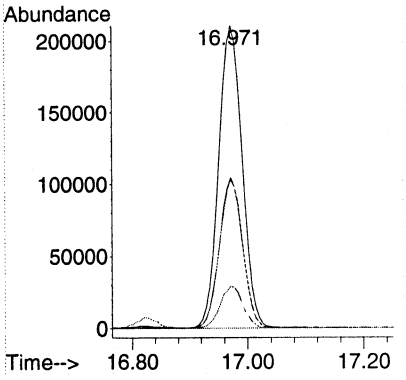


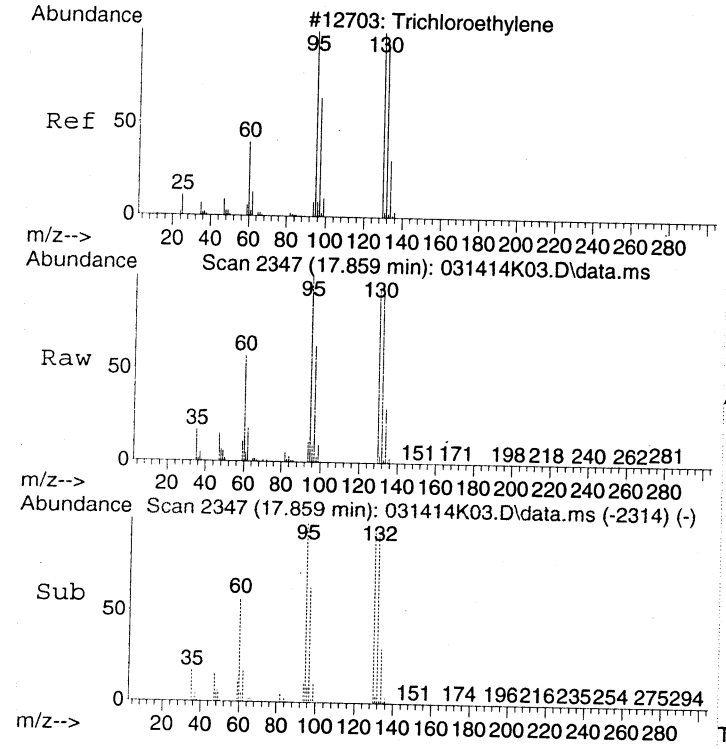


#36
Heptane
Concen: 13.99 ppbv
RT: 16.971 min Scan# 2201
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 43 Resp: 588819

Ion	Ratio	Lower	Upper
43	100		
57	49.1	34.5	74.5
71	48.9	39.5	79.5
100	13.6	0.0	39.0

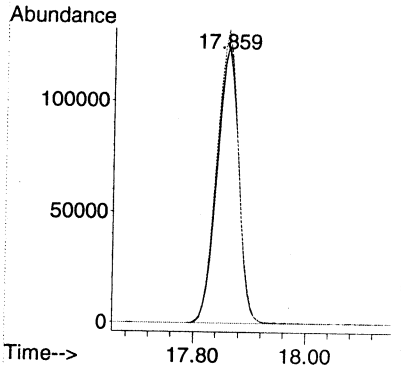


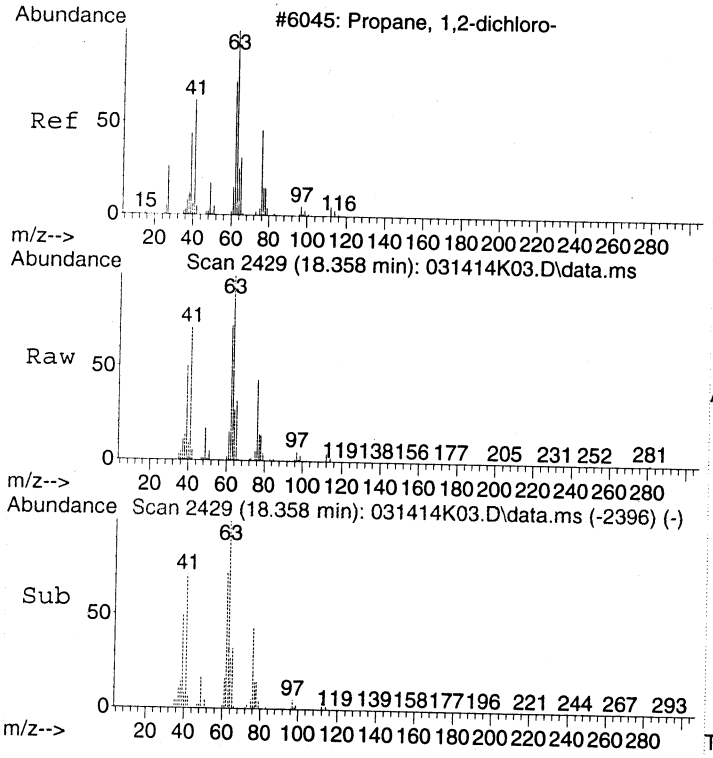


#37
Trichloroethene
Concen: 10.52 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:130 Resp: 337166

Ion	Ratio	Lower	Upper
130	100		
132	97.6	77.7	117.7
95	104.5	80.9	120.9

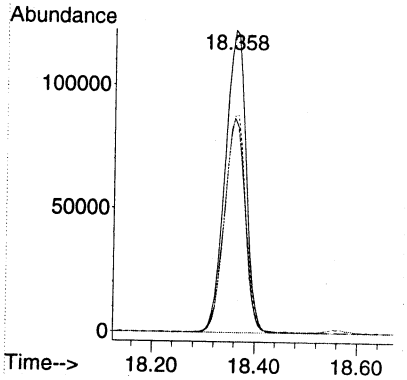


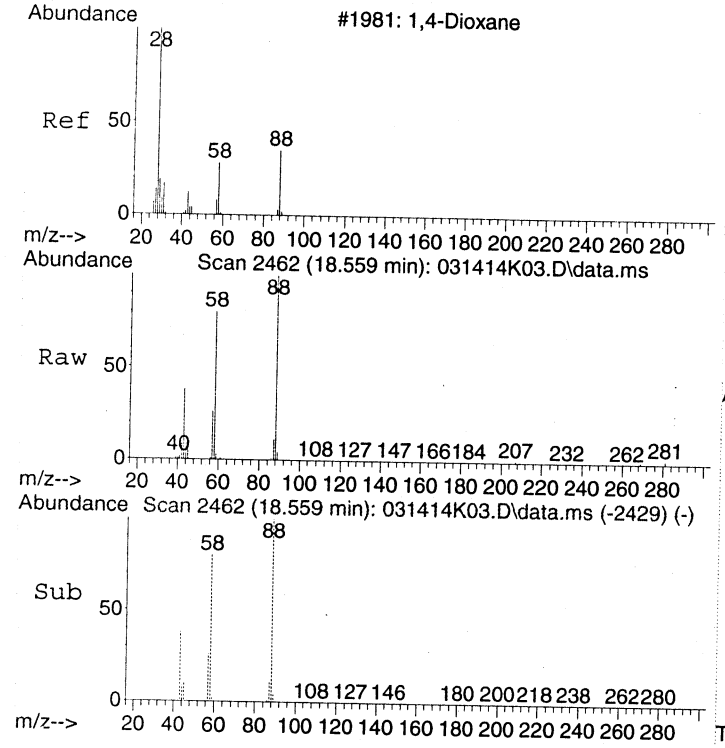


#38
1,2-Dichloropropane
Concen: 12.15 ppbv
RT: 18.358 min Scan# 2429
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 63 Resp: 343067

Ion	Ratio	Lower	Upper
63	100		
41	70.1	48.4	88.4
62	72.0	49.6	89.6

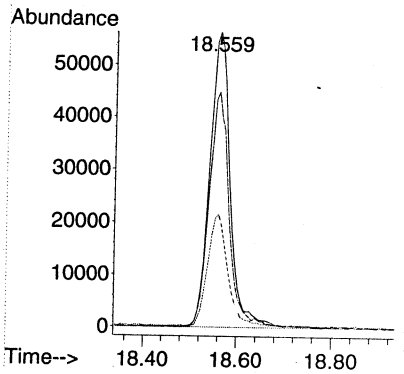


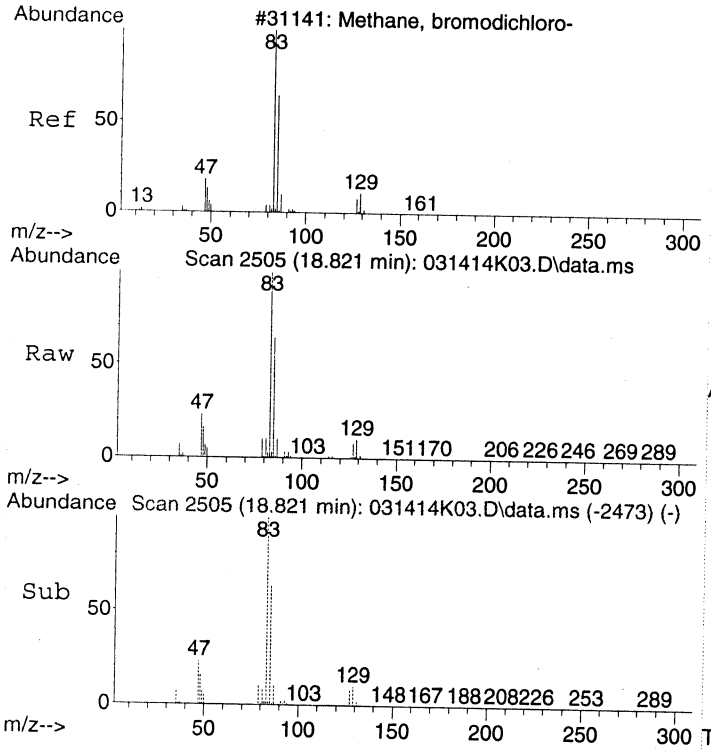


#39
1,4-Dioxane
Concen: 11.69 ppbv
RT: 18.559 min Scan# 2462
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 88 Resp: 171168

Ion	Ratio	Lower	Upper
88	100		
58	79.0	49.4	89.4
43	37.0	11.3	51.3

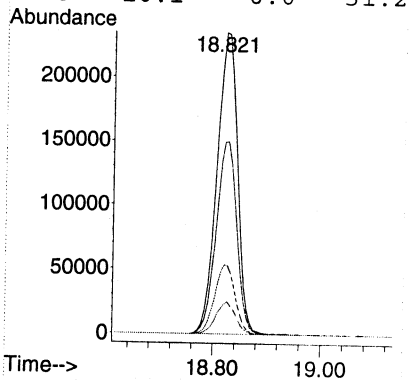


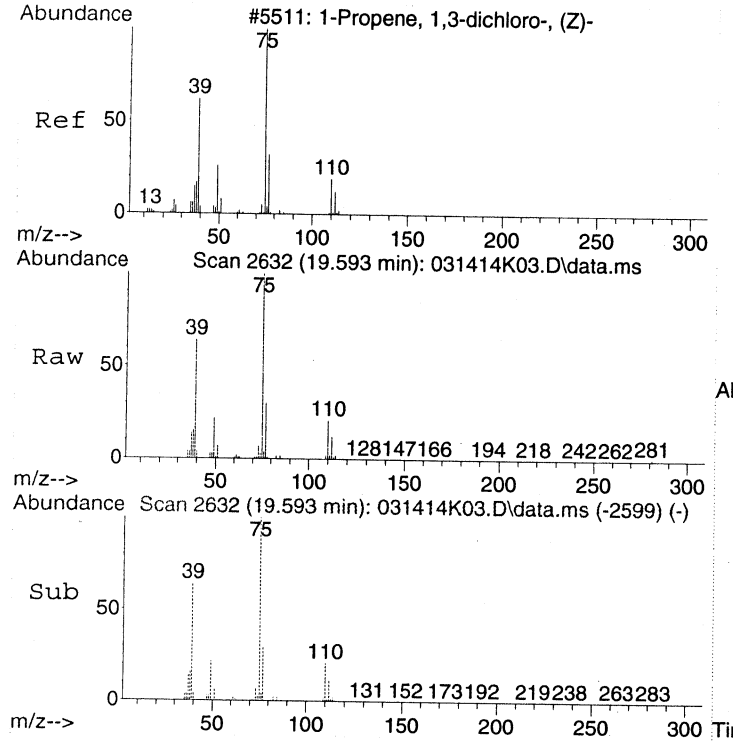


#40
Bromodichloromethane
Concen: 11.67 ppbv
RT: 18.821 min Scan# 2505
Delta R.T. -0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 83 Resp: 623483

Ion	Ratio	Lower	Upper
83	100		
85	63.9	45.1	85.1
47	22.7	0.0	39.9
129	10.1	0.0	31.2

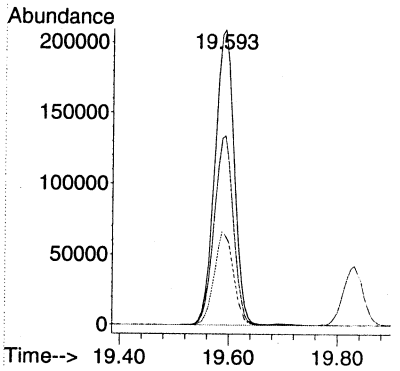


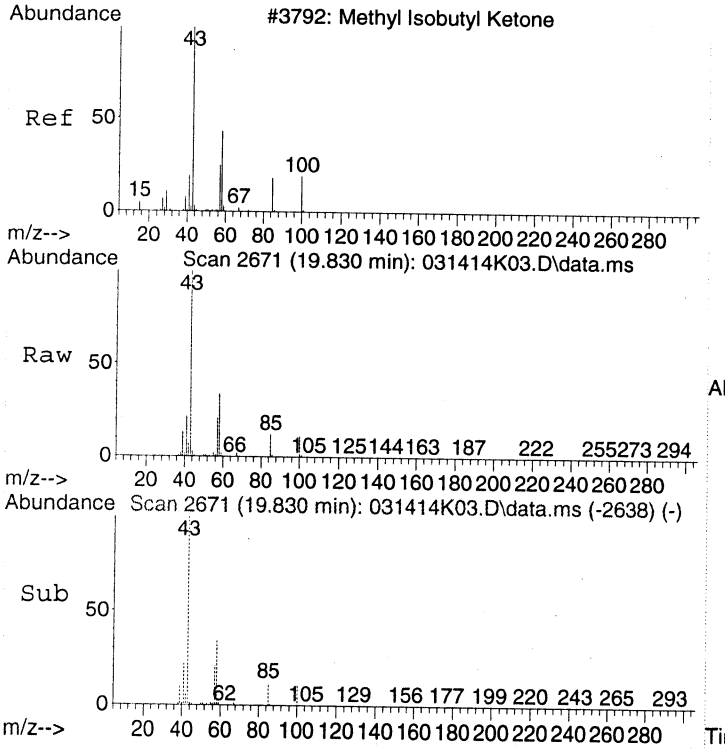


#41
cis-1,3-Dichloropropene
Concen: 11.70 ppbv
RT: 19.593 min Scan# 2632
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 75 Resp: 518798

Ion	Ratio	Lower	Upper
75	100		
39	63.8	38.4	78.4
77	31.3	12.1	52.1

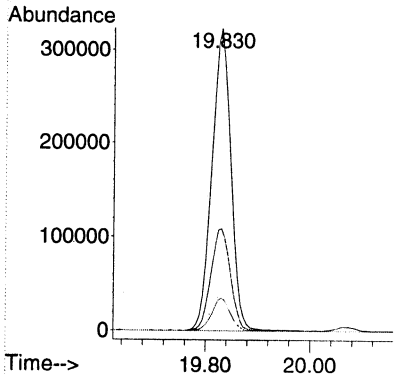


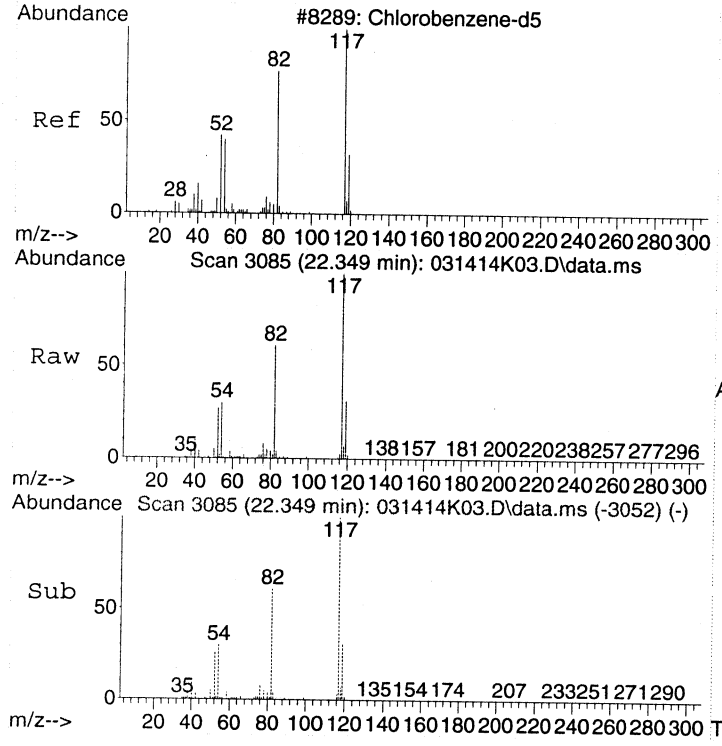


#42
4-Methyl-2-pentanone (MIBK)
Concen: 13.78 ppbv
RT: 19.830 min Scan# 2671
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 43 Resp: 819898

Ion	Ratio	Lower	Upper
43	100		
58	34.8	16.9	56.9
100	10.7	0.0	33.5

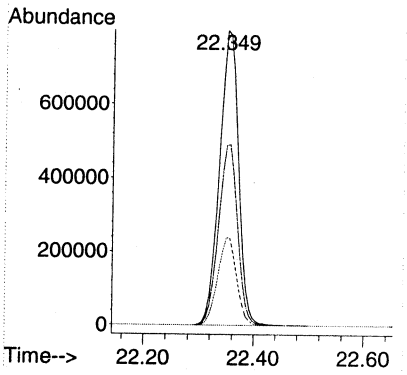


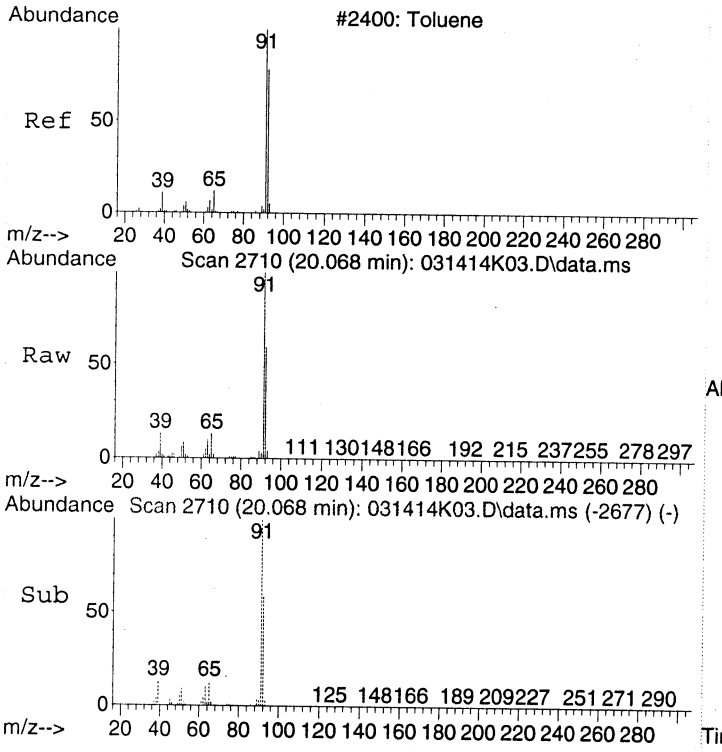


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:117 Resp: 1927062

Ion	Ratio	Lower	Upper
117	100		
82	61.5	36.4	76.4
54	29.8	5.4	45.4

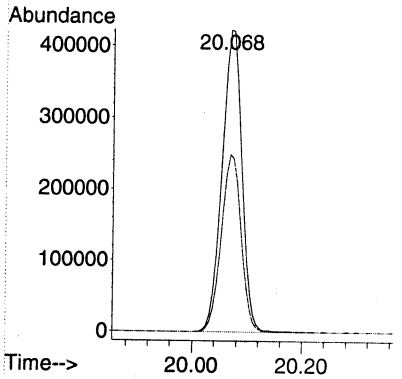


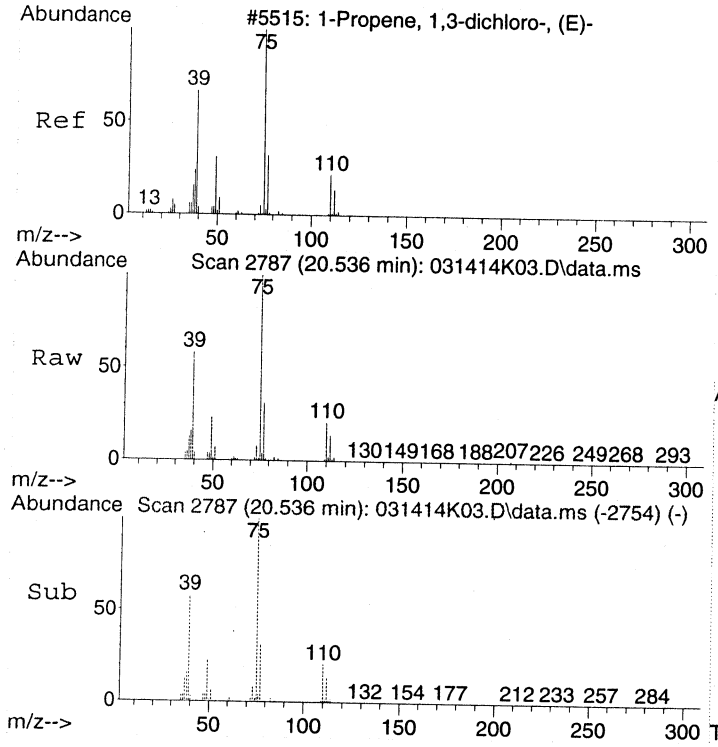


#44
Toluene
Concen: 11.52 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 91 Resp: 1053665

Ion	Ratio	Lower	Upper
91	100		
92	58.9	39.8	79.8

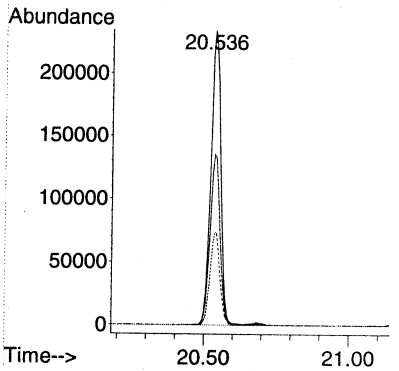


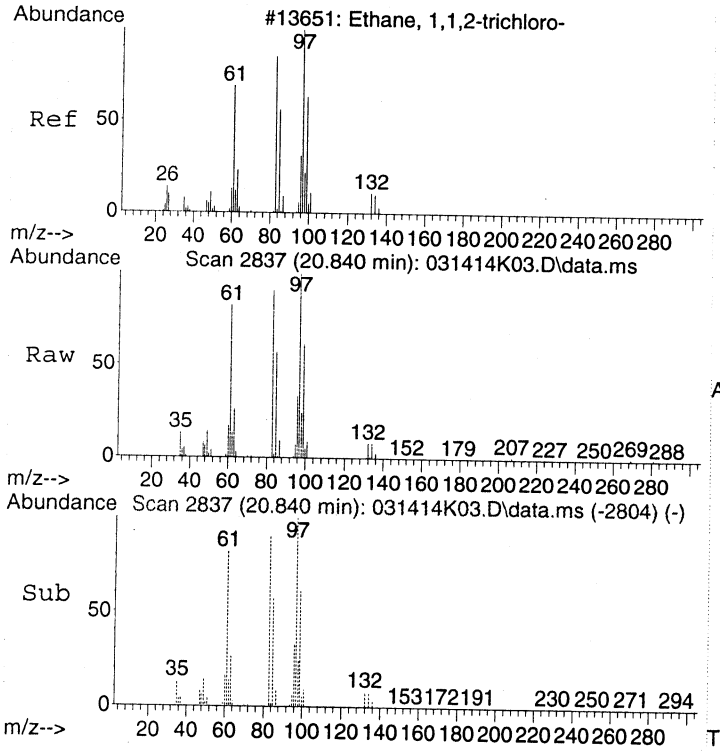


#45
trans-1,3-Dichloropropene
Concen: 12.21 ppbv
RT: 20.536 min Scan# 2787
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 75 Resp: 563837

Ion	Ratio	Lower	Upper
75	100		
39	59.1	32.2	72.2
77	31.1	11.6	51.6

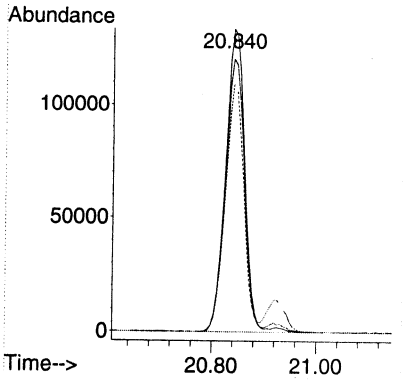


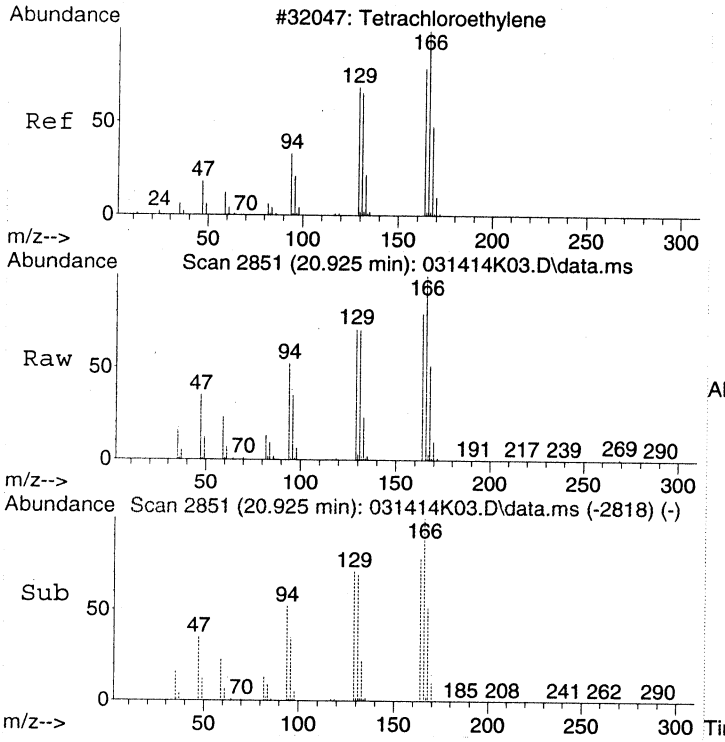


#46
1,1,2-Trichloroethane
Concen: 11.20 ppbv
RT: 20.840 min Scan# 2837
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 97 Resp: 339140

Ion	Ratio	Lower	Upper
97	100		
83	91.3	65.8	105.8
61	78.8	52.2	92.2

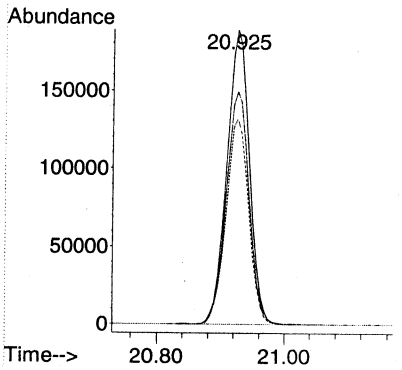


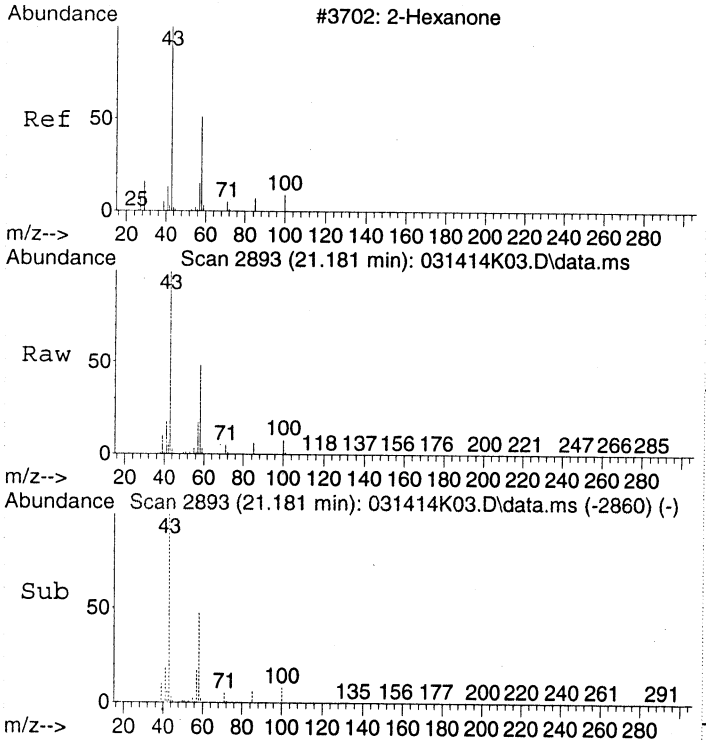


#47
Tetrachloroethene
Concen: 10.37 ppbv
RT: 20.925 min Scan# 2851
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:166 Resp: 467184

Ion	Ratio	Lower	Upper
166	100		
164	80.3	60.8	100.8
131	70.2	50.5	90.5

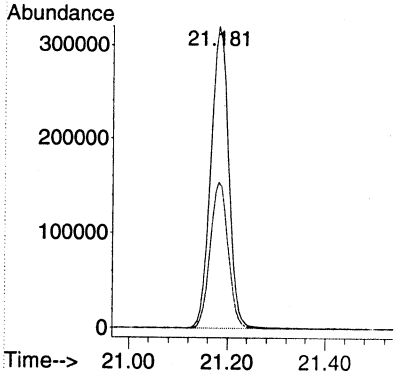


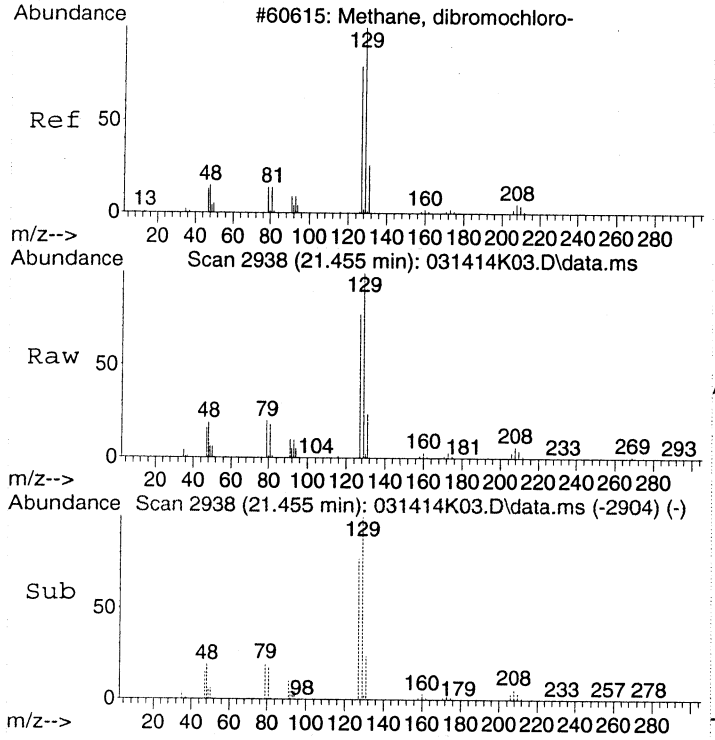


#48
2-Hexanone
Concen: 13.50 ppbv
RT: 21.181 min Scan# 2893
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 43 Resp: 801379

Ion	Ratio	Lower	Upper
43	100		
58	48.6	31.0	71.0

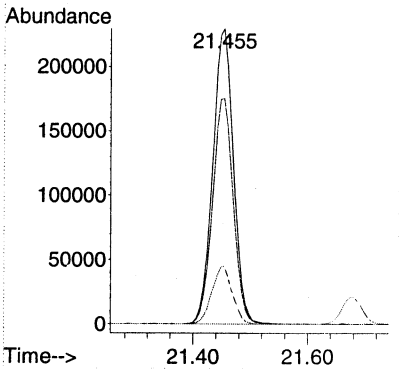


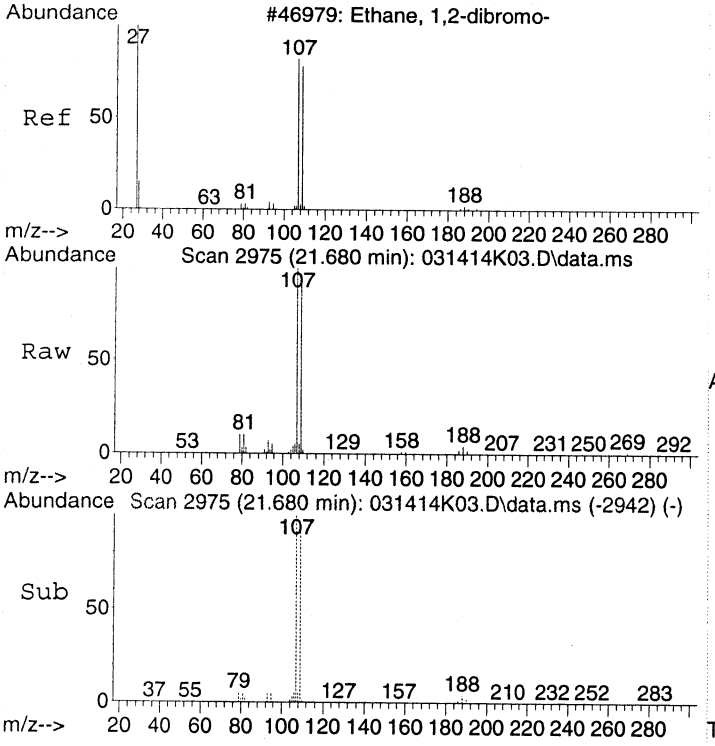


#49
Chlorodibromomethane
Concen: 11.26 ppbv
RT: 21.455 min Scan# 2938
Delta R.T. 0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:129 Resp: 578027

Ion	Ratio	Lower	Upper
129	100		
127	76.4	57.6	97.6
79	19.4	0.0	37.7

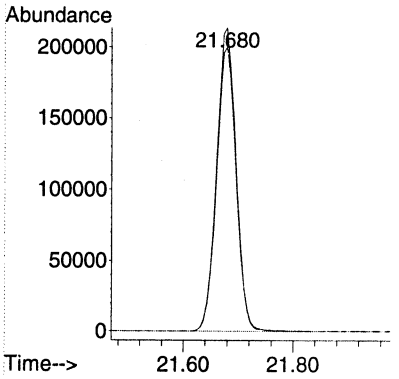


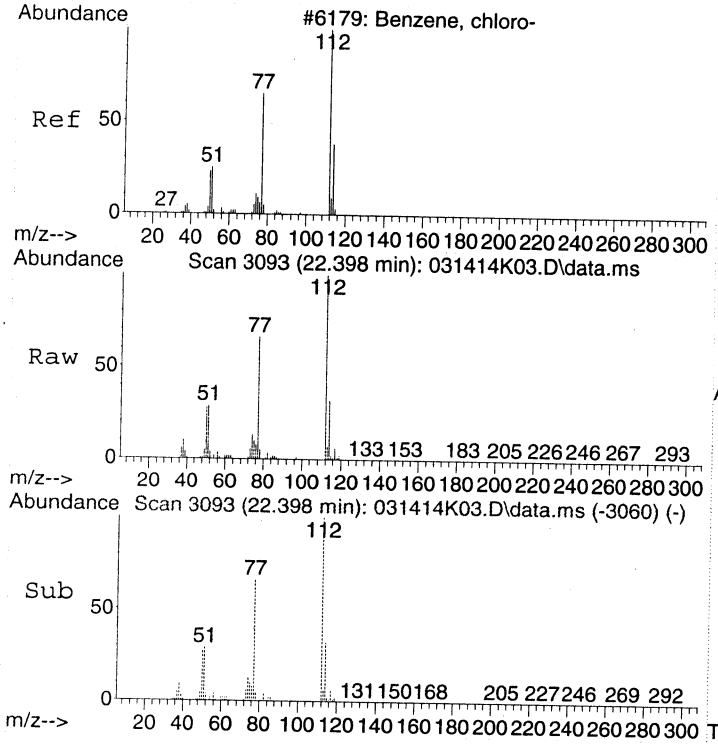


#50
1,2-Dibromoethane (EDB)
Concen: 11.34 ppbv
RT: 21.680 min Scan# 2975
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:107 Resp: 527035

Ion	Ratio	Lower	Upper
107	100		
109	94.6	75.8	115.8

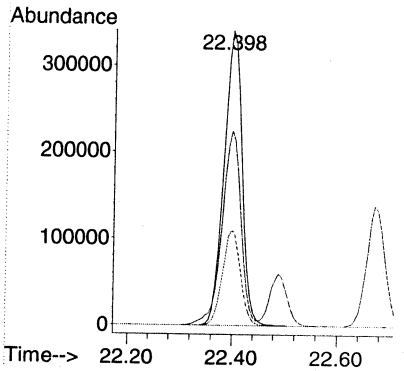


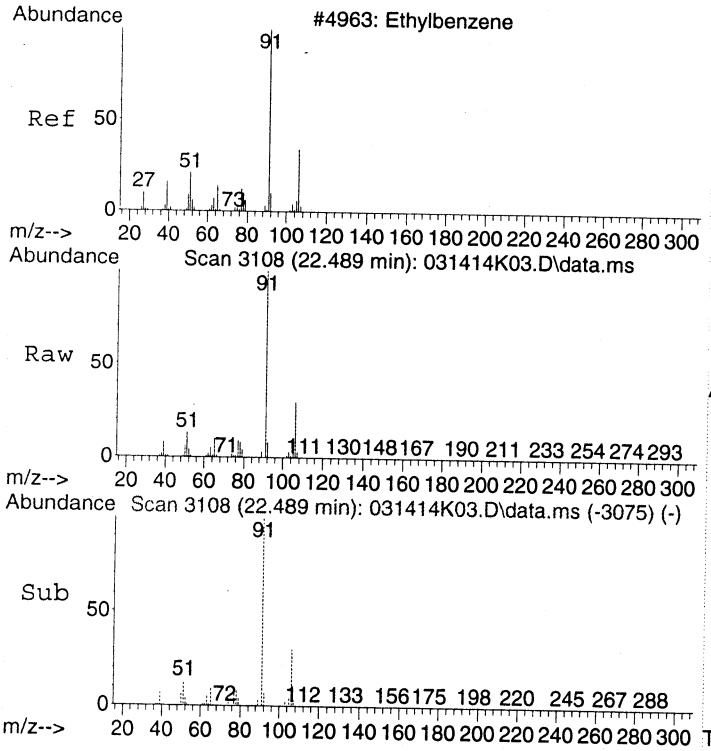


#51
Chlorobenzene
Concen: 11.45 ppbv
RT: 22.398 min Scan# 3093
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:112 Resp: 818279

Ion	Ratio	Lower	Upper
112	100		
77	68.9	46.5	86.5
114	32.3	12.7	52.7

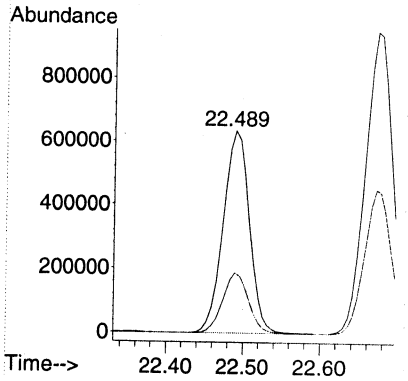


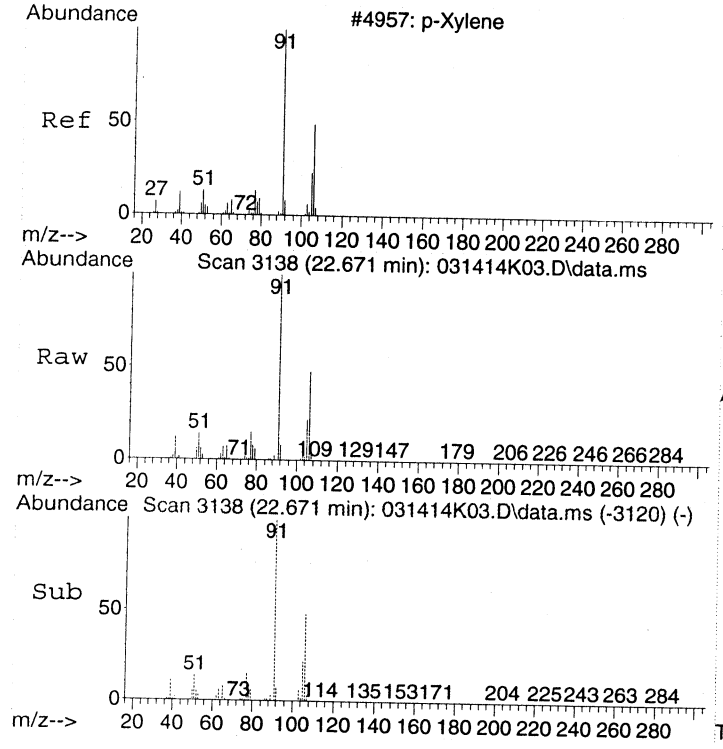


#52
Ethylbenzene
Concen: 11.52 ppbv
RT: 22.489 min Scan# 3108
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 91 Resp: 1499237

Ion	Ratio	Lower	Upper
91	100		
106	29.1	9.6	49.6

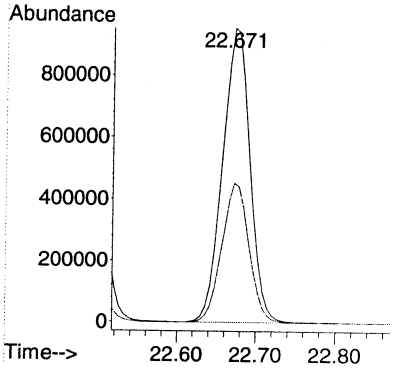


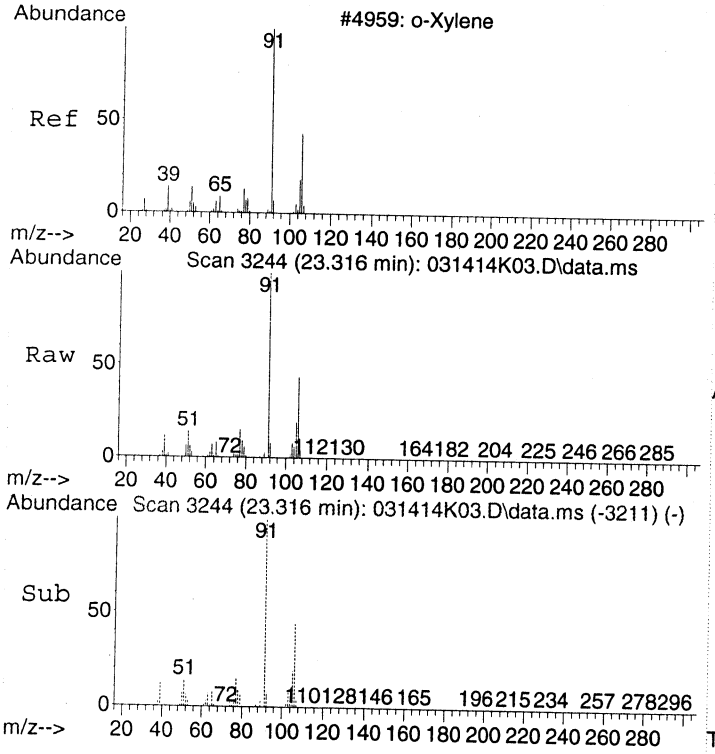


#53
m&p-Xylene
Concen: 22.63 ppbv
RT: 22.671 min Scan# 3138
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 91 Resp: 2313105

Ion	Ratio	Lower	Upper
91	100		
106	47.3	26.8	66.8

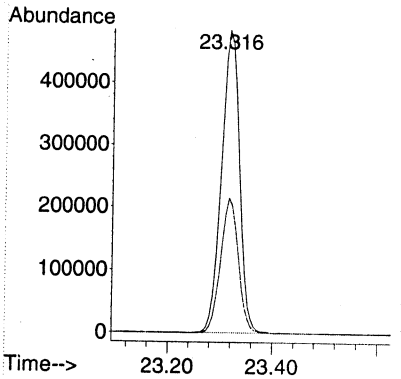


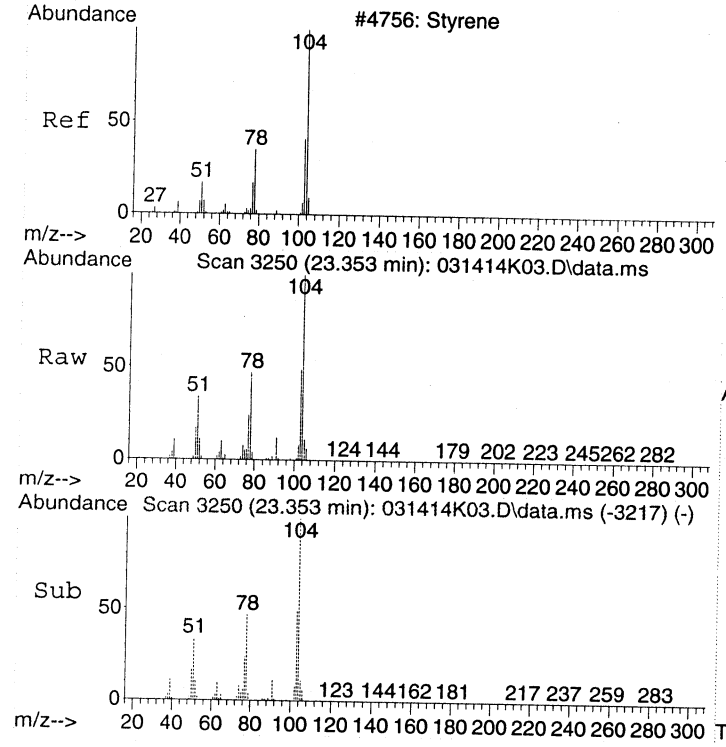


#54
o-Xylene
Concen: 11.05 ppbv
RT: 23.316 min Scan# 3244
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 91 Resp: 1150626

Ion	Ratio	Lower	Upper
91	100		
106	44.0	25.2	65.2

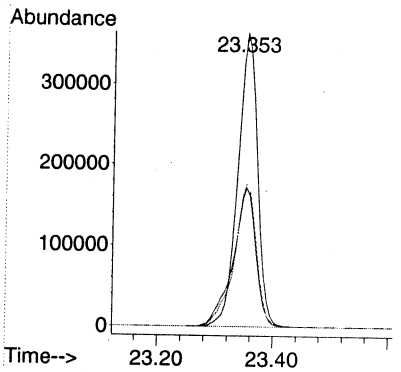


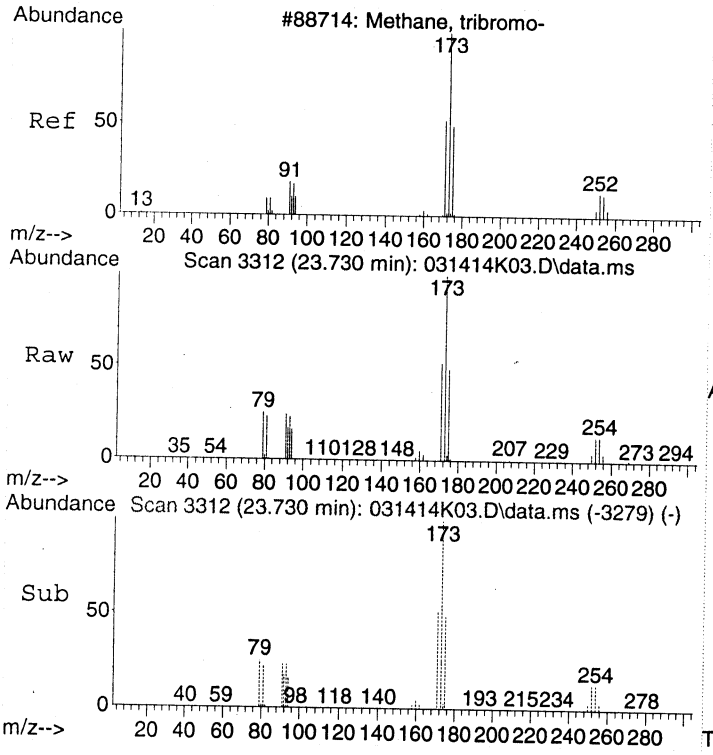


#55
Styrene
Concen: 10.84 ppbv
RT: 23.353 min Scan# 3250
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:104 Resp: 868387

Ion	Ratio	Lower	Upper
104	100		
78	54.8	34.4	74.4
103	54.8	34.9	74.9

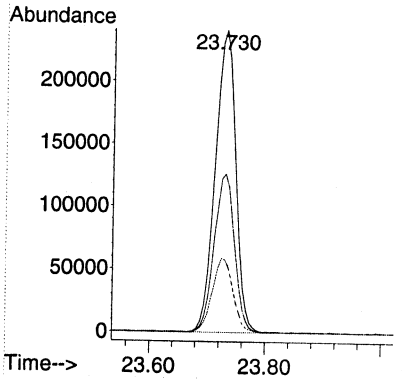


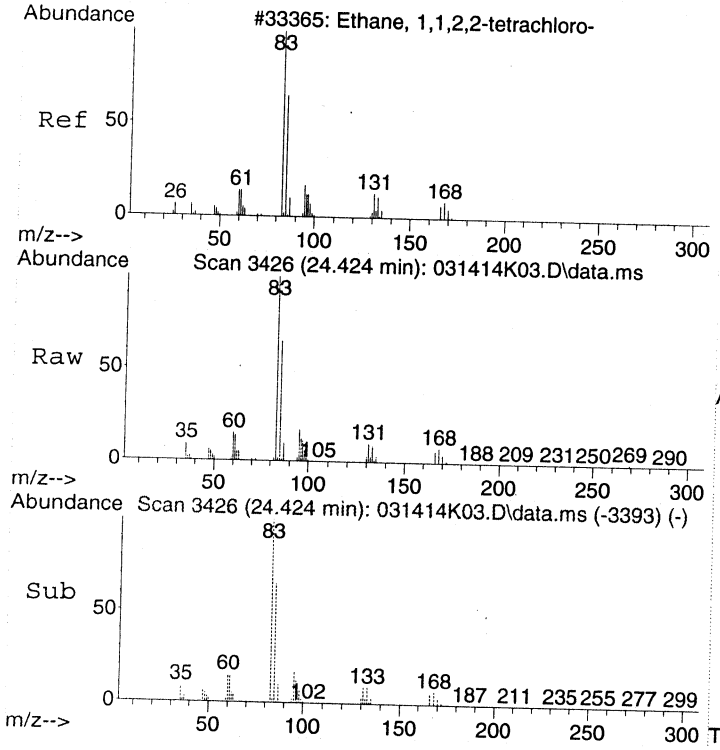


#56
Bromoform
Concen: 10.70 ppbv
RT: 23.730 min Scan# 3312
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:173 Resp: 592626

Ion	Ratio	Lower	Upper
173	100		
171	52.4	33.0	73.0
91	24.7	2.3	42.3

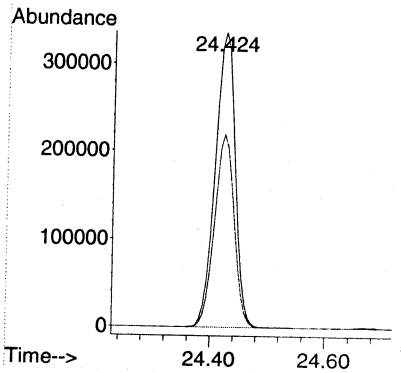


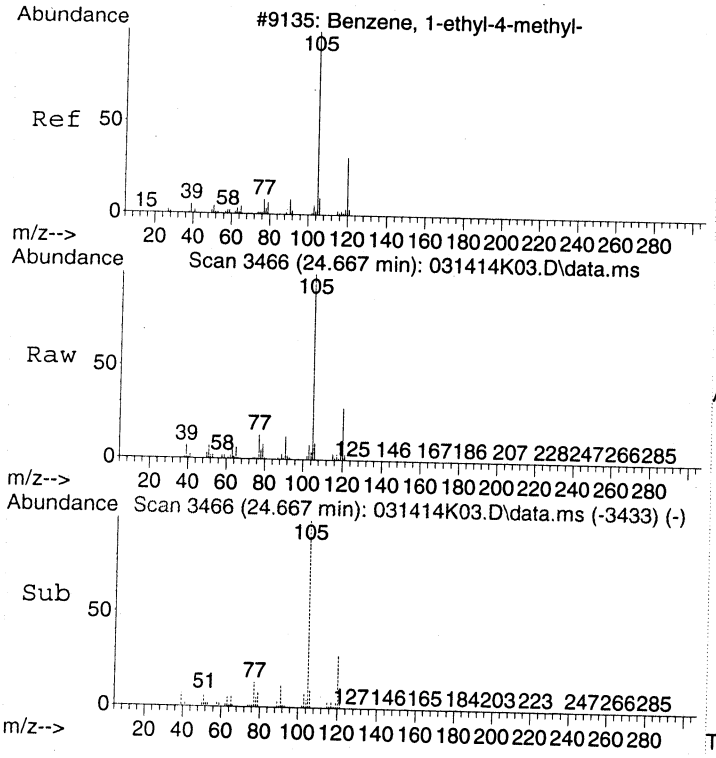


#57
1,1,2,2-Tetrachloroethane
Concen: 11.03 ppbv
RT: 24.424 min Scan# 3426
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 83 Resp: 808675

Ion	Ratio	Lower	Upper
83	100		
85	64.3	45.5	85.5

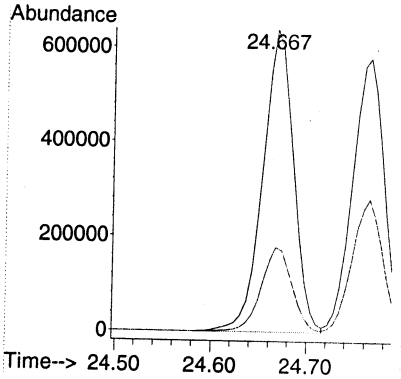


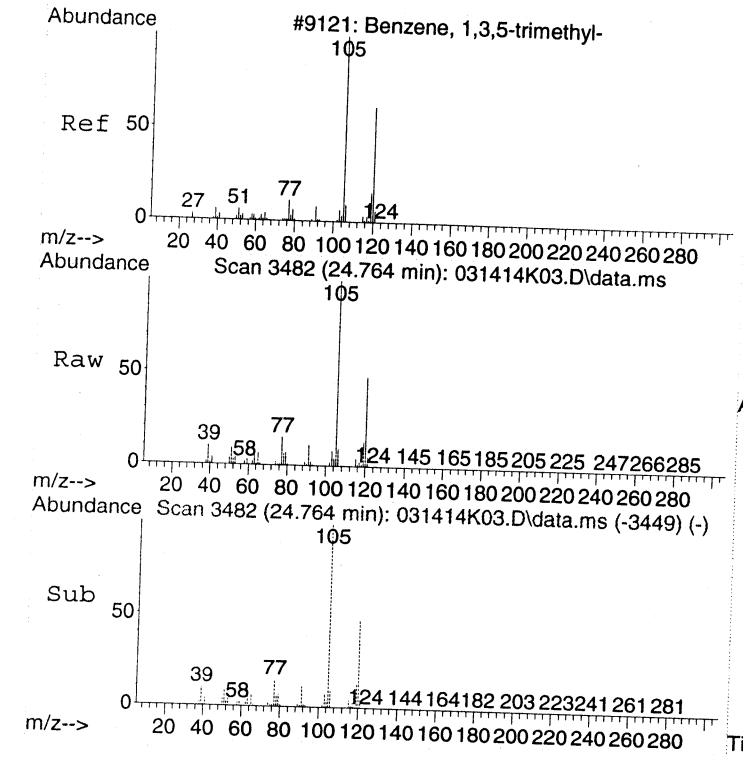


#58
4-Ethyltoluene
Concen: 11.06 ppbv
RT: 24.667 min Scan# 3466
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:105 Resp: 1426318

Ion	Ratio	Lower	Upper
105	100		
120	28.1	8.3	48.3

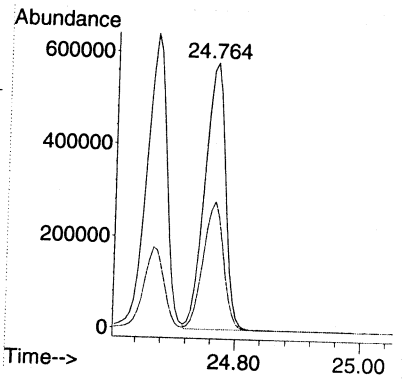


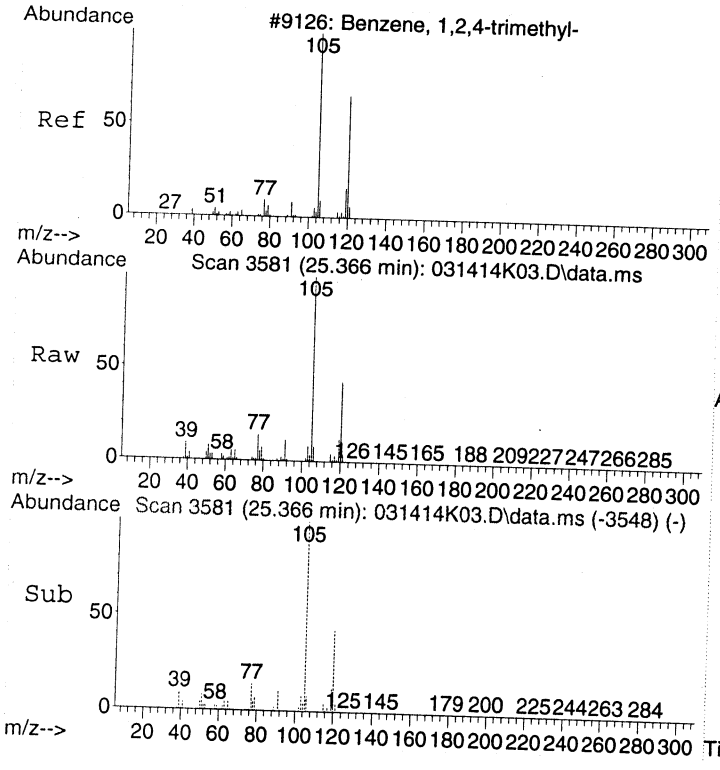


#59
1,3,5-Trimethylbenzene
Concen: 10.79 ppbv
RT: 24.764 min Scan# 3482
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:105 Resp: 1318677

Ion	Ratio	Lower	Upper
105	100		
120	47.5	27.5	67.5

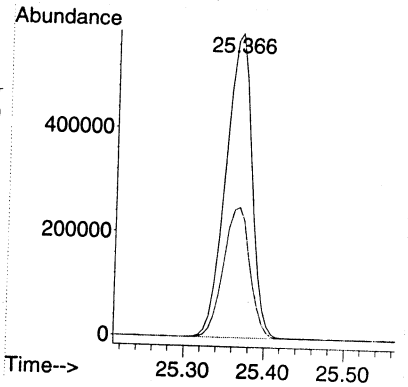


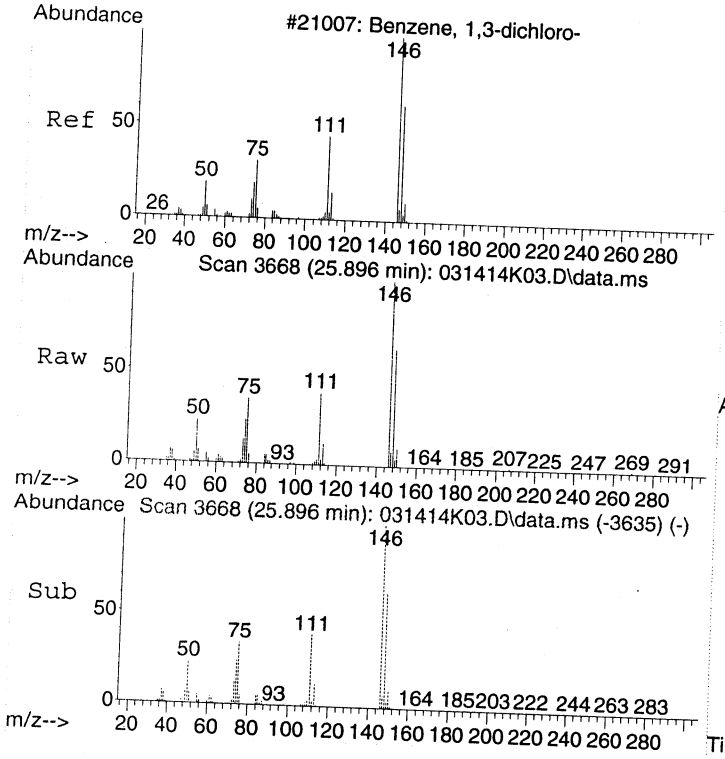


#60
1,2,4-Trimethylbenzene
Concen: 10.45 ppbv
RT: 25.366 min Scan# 3581
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:105 Resp: 1319880

Ion	Ratio	Lower	Upper
105	100		
120	43.7	24.3	64.3

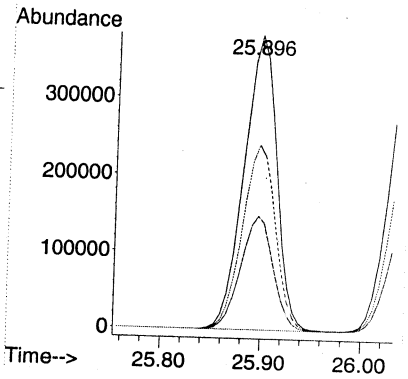


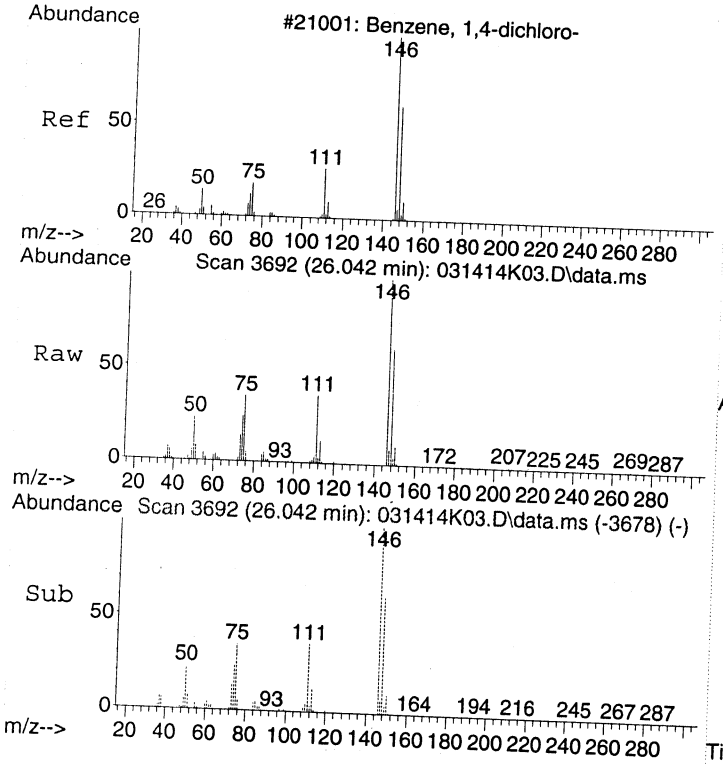


#61
1,3-Dichlorobenzene
Concen: 9.71 ppbv
RT: 25.896 min Scan# 3668
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:146 Resp: 869687

Ion	Ratio	Lower	Upper
146	100		
111	38.5	17.6	57.6
148	63.8	44.1	84.1

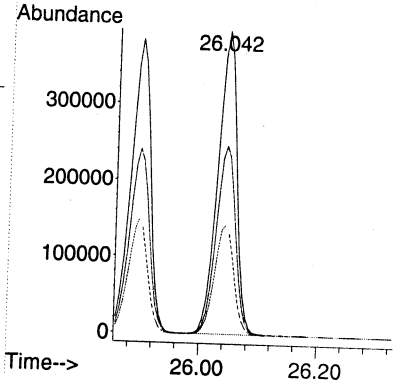


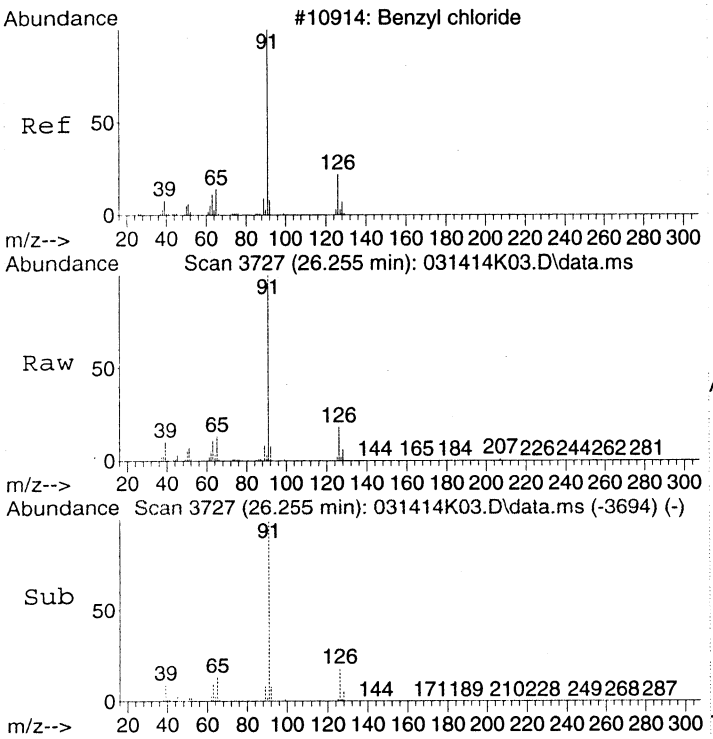


#62
1,4-Dichlorobenzene
Concen: 9.69 ppbv
RT: 26.042 min Scan# 3692
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:146 Resp: 871930

Ion	Ratio	Lower	Upper
146	100		
148	63.6	43.7	83.7
111	36.9	16.0	56.0

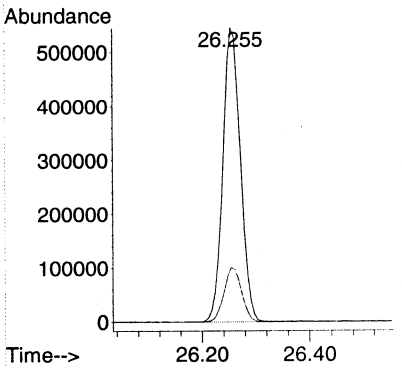


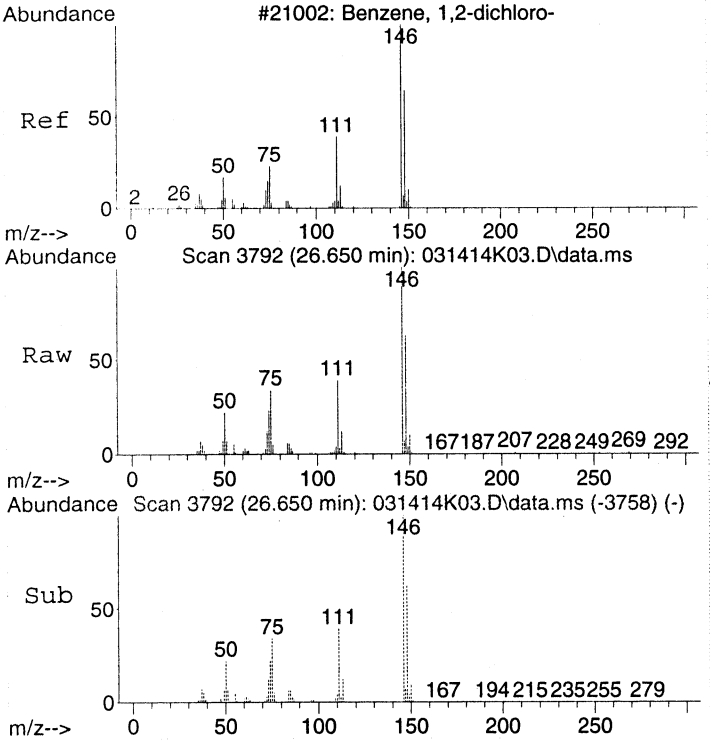


#63
Benzyl chloride
Concen: 11.33 ppbv
RT: 26.255 min Scan# 3727
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion: 91 Resp: 1239946

Ion	Ratio	Lower	Upper
91	100		
126	18.5	0.0	39.6

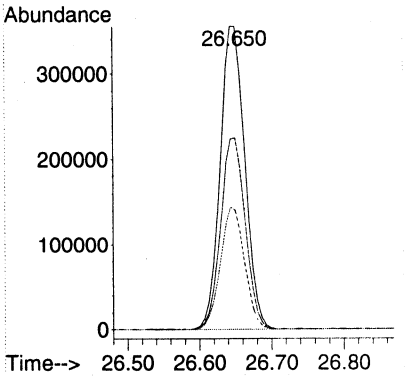


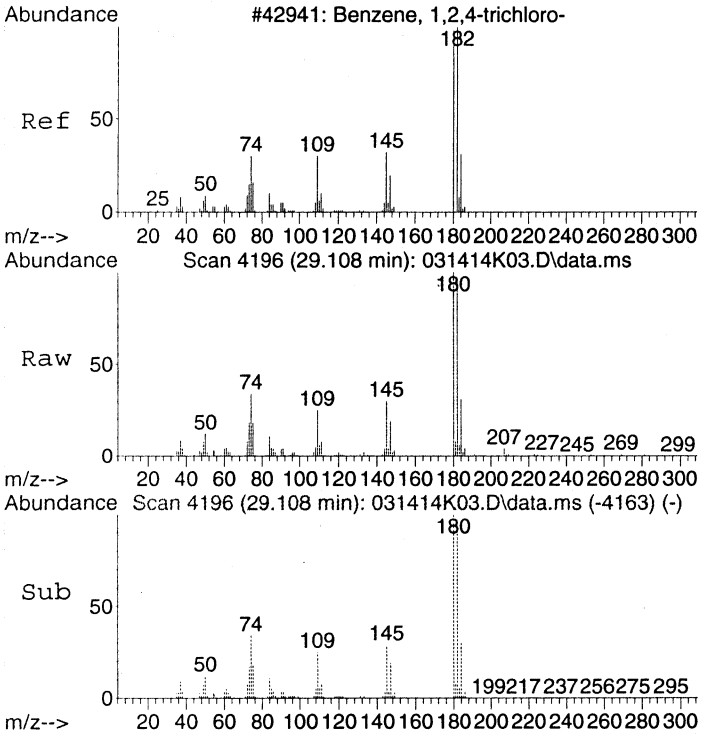


#64
1,2-Dichlorobenzene
Concen: 9.63 ppbv
RT: 26.650 min Scan# 3792
Delta R.T. 0.006 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:146 Resp: 839850

Ion	Ratio	Lower	Upper
146	100		
148	63.3	43.9	83.9
111	39.8	18.7	58.7

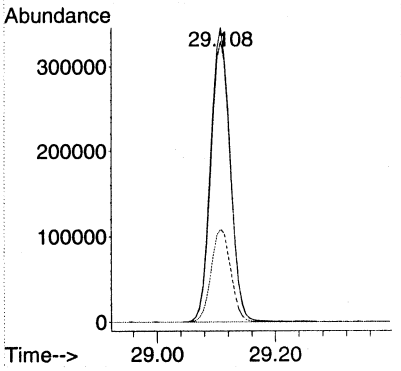


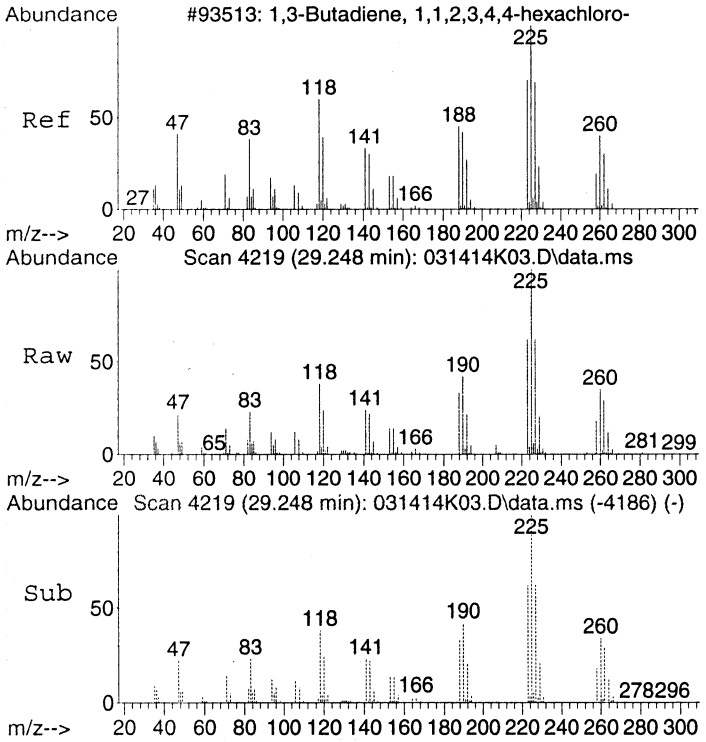


#65
1,2,4-Trichlorobenzene
Concen: 8.76 ppbv
RT: 29.108 min Scan# 4196
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:180 Resp: 791064

Ion	Ratio	Lower	Upper
180	100		
182	95.7	75.5	115.5
184	31.8	11.9	51.9

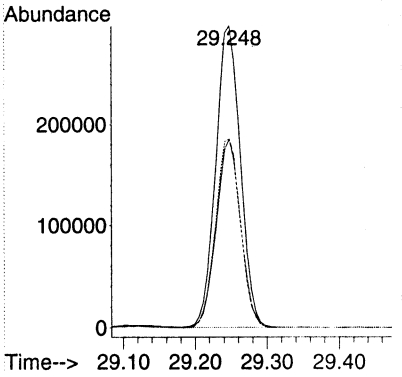




#66
Hexachlorobutadiene
Concen: 8.85 ppbv
RT: 29.248 min Scan# 4219
Delta R.T. -0.000 min
Lab File: 031414K03.D
Acq: 14 Mar 2014 14:16

Tgt Ion:225 Resp: 703546

Ion	Ratio	Lower	Upper
225	100		
227	61.4	41.6	81.6
223	62.8	43.5	83.5



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Title : TO15

Signal : TIC: 031414K03.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.366	118	129	136	rBV2	281997	697380	9.60%	0.508%
2	4.457	136	144	162	rVB	523132	1324330	18.22%	0.966%
3	4.810	189	202	219	rBV	713103	2117162	29.13%	1.544%
4	5.005	225	234	250	rVB	153990	436070	6.00%	0.318%
5	5.327	273	287	295	rBV	160985	469108	6.45%	0.342%
6	5.425	295	303	315	rVB	277359	793998	10.92%	0.579%
7	6.355	443	456	470	rBV3	171023	585951	8.06%	0.427%
8	6.690	495	511	522	rBV2	87913	317342	4.37%	0.231%
9	7.256	590	604	614	rBV	138072	509815	7.01%	0.372%
10	7.402	614	628	649	rVB2	393616	1731896	23.83%	1.263%
11	9.208	902	925	960	rBV6	398365	3628462	49.93%	2.646%
12	9.811	1006	1024	1041	rBV	134904	684686	9.42%	0.499%
13	10.005	1041	1056	1077	rVB	183875	888101	12.22%	0.648%
14	10.437	1109	1127	1148	rBV2	132321	729555	10.04%	0.532%
15	10.833	1174	1192	1210	rBV2	227737	1042890	14.35%	0.760%
16	11.374	1264	1281	1298	rBV	263708	1112490	15.31%	0.811%
17	12.086	1374	1398	1420	rBV3	581684	2808955	38.65%	2.048%
18	12.707	1483	1500	1518	rBV3	461848	1858031	25.57%	1.355%
19	13.443	1605	1621	1633	rBV	290181	1087104	14.96%	0.793%
20	13.589	1634	1645	1661	rVB	306575	1018718	14.02%	0.743%
21	14.897	1846	1860	1868	rBV	441676	1366857	18.81%	0.997%
22	14.994	1868	1876	1879	rBV	270205	707493	9.73%	0.516%
23	15.438	1935	1949	1964	rBV2	1286497	4206549	57.88%	3.067%
24	15.596	1964	1975	1995	rVB	503814	1602446	22.05%	1.168%
25	15.840	1999	2015	2016	rBV	655184	1827105	25.14%	1.332%
26	16.138	2049	2064	2083	rBV	663997	2218979	30.53%	1.618%
27	16.606	2123	2141	2161	rBV2	1060268	5233139	72.00%	3.816%
28	16.825	2165	2177	2187	rBV	368762	1057707	14.55%	0.771%
29	16.971	2188	2201	2213	rBV	870731	2422375	33.33%	1.766%
30	17.446	2265	2279	2293	rBV	2061957	5486443	75.49%	4.000%
31	17.859	2334	2347	2360	rBV	781468	2102745	28.93%	1.533%
32	18.358	2416	2429	2443	rBV	669848	1860323	25.60%	1.356%
33	18.559	2452	2462	2478	rBV	168315	497898	6.85%	0.363%
34	18.821	2494	2505	2519	rBV	696392	1849363	25.45%	1.348%
35	19.593	2621	2632	2642	rBV	705340	1752434	24.11%	1.278%
36	19.830	2660	2671	2688	rBV	781881	2006043	27.60%	1.463%
37	20.068	2700	2710	2725	rBV	1096754	2708257	37.26%	1.975%
38	20.469	2768	2776	2779	rBV2	38421	103245	1.42%	0.075%

00135

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Title : TO15

39	20.536	2779	2787	2803	rVV	786836	1883649	25.92%	1.373%
40	20.840	2827	2837	2844	rBV	833967	2081769	28.64%	1.518%
41	20.925	2844	2851	2865	rVB	1213646	2989322	41.13%	2.180%
42	21.181	2883	2893	2904	rBV	763888	1889563	26.00%	1.378%
43	21.449	2927	2937	2957	rVB	820043	2074192	28.54%	1.512%
44	21.680	2965	2975	2985	rBV	568935	1399839	19.26%	1.021%
45	22.355	3075	3086	3091	rBV	2743024	7267778	100.00%	5.299%
46	22.489	3101	3108	3122	rVB	1516412	3566465	49.07%	2.600%
47	22.671	3128	3138	3158	rVB	2866493	6958342	95.74%	5.074%
48	23.322	3234	3245	3247	rBV	1490410	3407487	46.88%	2.485%
49	23.730	3301	3312	3325	rVB2	919476	2284705	31.44%	1.666%
50	24.028	3355	3361	3371	rVB	27274	83115	1.14%	0.061%
51	24.424	3416	3426	3436	rBV	1190850	2843839	39.13%	2.074%
52	24.667	3453	3466	3474	rBV	1641564	3685987	50.72%	2.688%
53	24.764	3474	3482	3500	rVB	1773036	4049863	55.72%	2.953%
54	25.366	3571	3581	3591	rBV	1728208	3956753	54.44%	2.885%
55	25.896	3659	3668	3679	rVB	1609238	3669285	50.49%	2.675%
56	26.042	3682	3692	3702	rBV	1653783	3698084	50.88%	2.696%
57	26.255	3718	3727	3737	rBV	1257771	2843393	39.12%	2.073%
58	26.644	3782	3791	3802	rBV	1524581	3561653	49.01%	2.597%
59	29.108	4187	4196	4207	rVB	1907577	4320844	59.45%	3.150%
60	29.248	4209	4219	4229	rBV	2442040	5781301	79.55%	4.215%

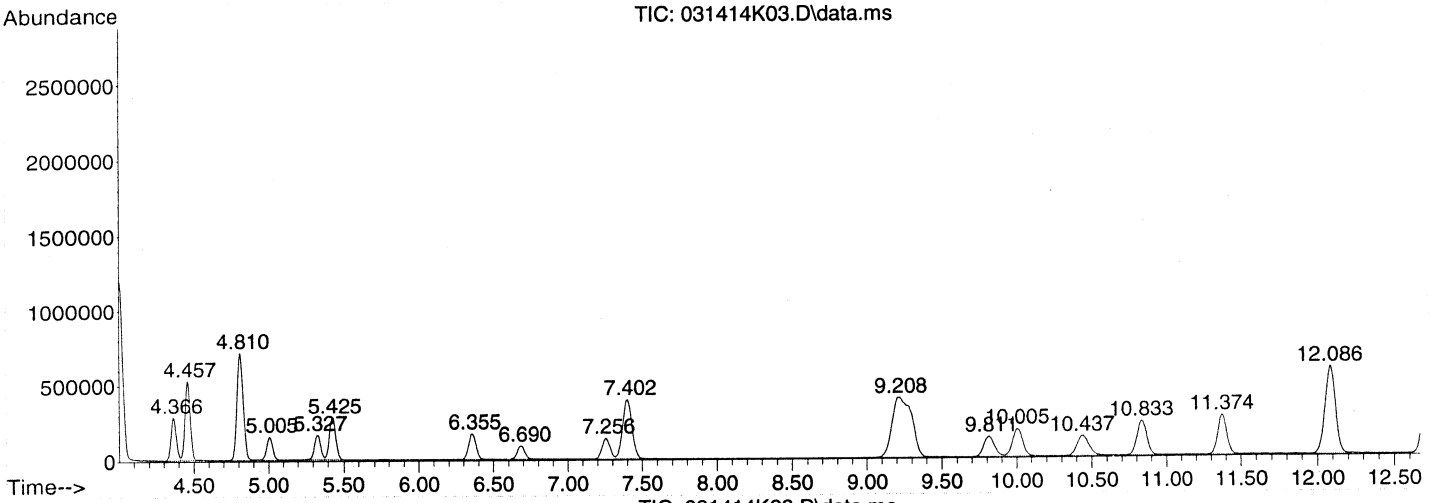
Sum of corrected areas: 137148673

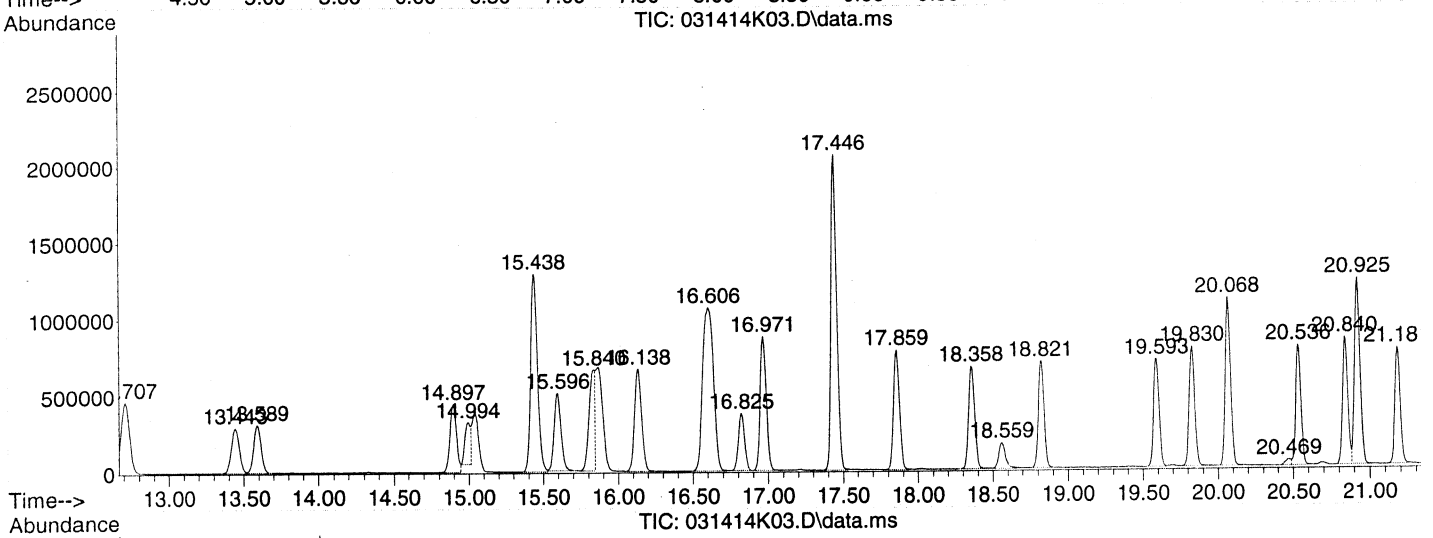
LSC Report - Integrated Chromatogram

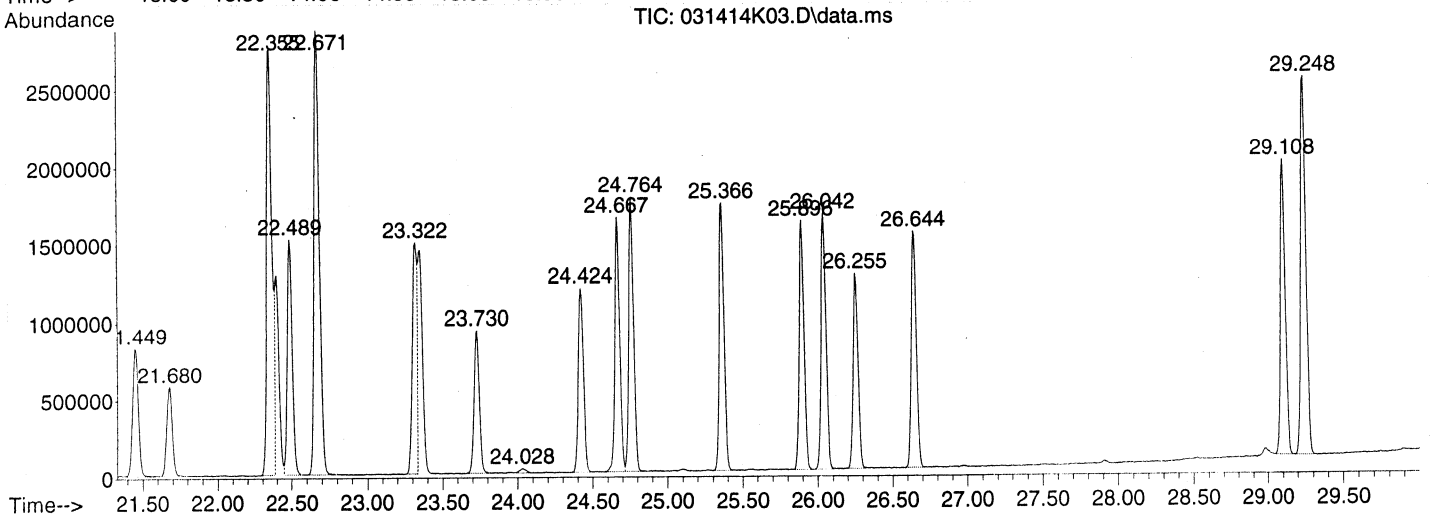
Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:35 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: EM Date: 3/14/14

Manual integration(s) reviewed by:

Reviewer: _____ Date: _____

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	886867	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2193776	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	2118293	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.372	41	27364	1.30	ppbv		100
3) Dichlorodifluoromethane	4.463	85	88217	1.14	ppbv		99
4) 1,2-Dichlorotetrafluor...	4.810	85	76030	1.16	ppbv		90
5) Chloromethane	5.005	50	30459	1.26	ppbv		100
6) Vinyl chloride	5.327	62	33718	1.24	ppbv		99
7) 1,3-Butadiene	5.431	54	23013	1.16	ppbv		92
8) Bromomethane	6.361	94	24260	1.07	ppbv		98
9) Chloroethane	6.690	64	17762	1.15	ppbv		94
10) Bromoethene	7.262	106	23884	1.20	ppbv		96
11) Trichlorofluoromethane	7.396	101	91004	1.14	ppbv		95
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	42976	0.96	ppbv	#	59
13) 1,1-Dichloroethene	9.294	61	50113	1.02	ppbv		96
14) Acetone	9.847	43	48055	1.17	ppbv		97
15) Carbon disulfide	10.012	76	71774	1.12	ppbv	#	78
16) 2-Propanol	10.492	45	42241	1.05	ppbv		96
17) Allyl chloride	10.833	41	38416	1.16	ppbv		95
18) Dichloromethane	11.368	49	59462	1.43	ppbv		87
19) tert-Butyl methyl ethe...	12.110	73	75961	1.03	ppbv		93
20) trans-1,2-Dichloroethene	12.098	61	39508	1.09	ppbv		93
21) Hexane	12.707	57	44823	1.06	ppbv		88
22) 1,1-Dichloroethane	13.443	63	60309	1.04	ppbv		100
23) Vinyl acetate	13.601	43	75735	1.07	ppbv		97
24) cis-1,2-Dichloroethene	14.897	61	47943	1.11	ppbv		93
25) 2-Butanone (MEK)	15.006	72	13288m	1.22	ppbv		
26) Ethyl acetate	15.055	61	8930	1.10	ppbv	#	91
27) Tetrahydrofuran	15.487	42	37946	1.15	ppbv		93
28) Chloroform	15.596	83	68644	1.10	ppbv		94
29) Cyclohexane	15.834	56	51213	1.17	ppbv		92
30) 1,1,1-Trichloroethane	15.876	97	74195	1.05	ppbv		96
31) Carbon tetrachloride	16.132	117	77141	1.04	ppbv		100
33) Benzene	16.624	78	101601	1.23	ppbv		99
34) 2,2,4-Trimethylpentane	16.588	57	153855	1.29	ppbv		97
35) 1,2-Dichloroethane	16.825	62	52814	1.18	ppbv		100
36) Heptane	16.971	43	61831	1.32	ppbv		91
37) Trichloroethene	17.859	130	39576	1.17	ppbv		98
38) 1,2-Dichloropropane	18.364	63	40316	1.31	ppbv		97
39) 1,4-Dioxane	18.589	88	18040	1.15	ppbv		93
40) Bromodichloromethane	18.827	83	68900	1.20	ppbv		97
41) cis-1,3-Dichloropropene	19.587	75	59440	1.25	ppbv		95
42) 4-Methyl-2-pentanone (...	19.849	43	87703	1.33	ppbv		96
44) Toluene	20.068	91	131213	1.26	ppbv		98
45) trans-1,3-Dichloropropene	20.536	75	64374	1.22	ppbv		94
46) 1,1,2-Trichloroethane	20.840	97	40665	1.18	ppbv		97
47) Tetrachloroethene	20.926	166	57186	1.13	ppbv		97
48) 2-Hexanone	21.199	43	83534	1.19	ppbv		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:35 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49)	Chlorodibromomethane	21.449	129	64401	1.11 ppbv	99
50)	1,2-Dibromoethane (EDB)	21.680	107	61739	1.17 ppbv	98
51)	Chlorobenzene	22.398	112	98555	1.21 ppbv #	79
52)	Ethylbenzene	22.489	91	175941	1.18 ppbv	98
53)	m&p-Xylene	22.672	91	263359	2.27 ppbv	99
54)	o-Xylene	23.316	91	134427	1.15 ppbv	98
55)	Styrene	23.353	104	98542	1.10 ppbv	99
56)	Bromoform	23.724	173	62498	1.02 ppbv	96
57)	1,1,2,2-Tetrachloroethane	24.424	83	97617	1.18 ppbv	97
58)	4-Ethyltoluene	24.667	105	156250	1.08 ppbv	100
59)	1,3,5-Trimethylbenzene	24.758	105	149723	1.09 ppbv	99
60)	1,2,4-Trimethylbenzene	25.360	105	148378	1.05 ppbv	99
61)	1,3-Dichlorobenzene	25.896	146	99564	1.01 ppbv	98
62)	1,4-Dichlorobenzene	26.042	146	101826	1.03 ppbv	98
63)	Benzyl chloride	26.255	91	123174	1.01 ppbv	97
64)	1,2-Dichlorobenzene	26.644	146	95675	1.00 ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	90176	0.92 ppbv	99
66)	Hexachlorobutadiene	29.248	225	86197	1.00 ppbv	99

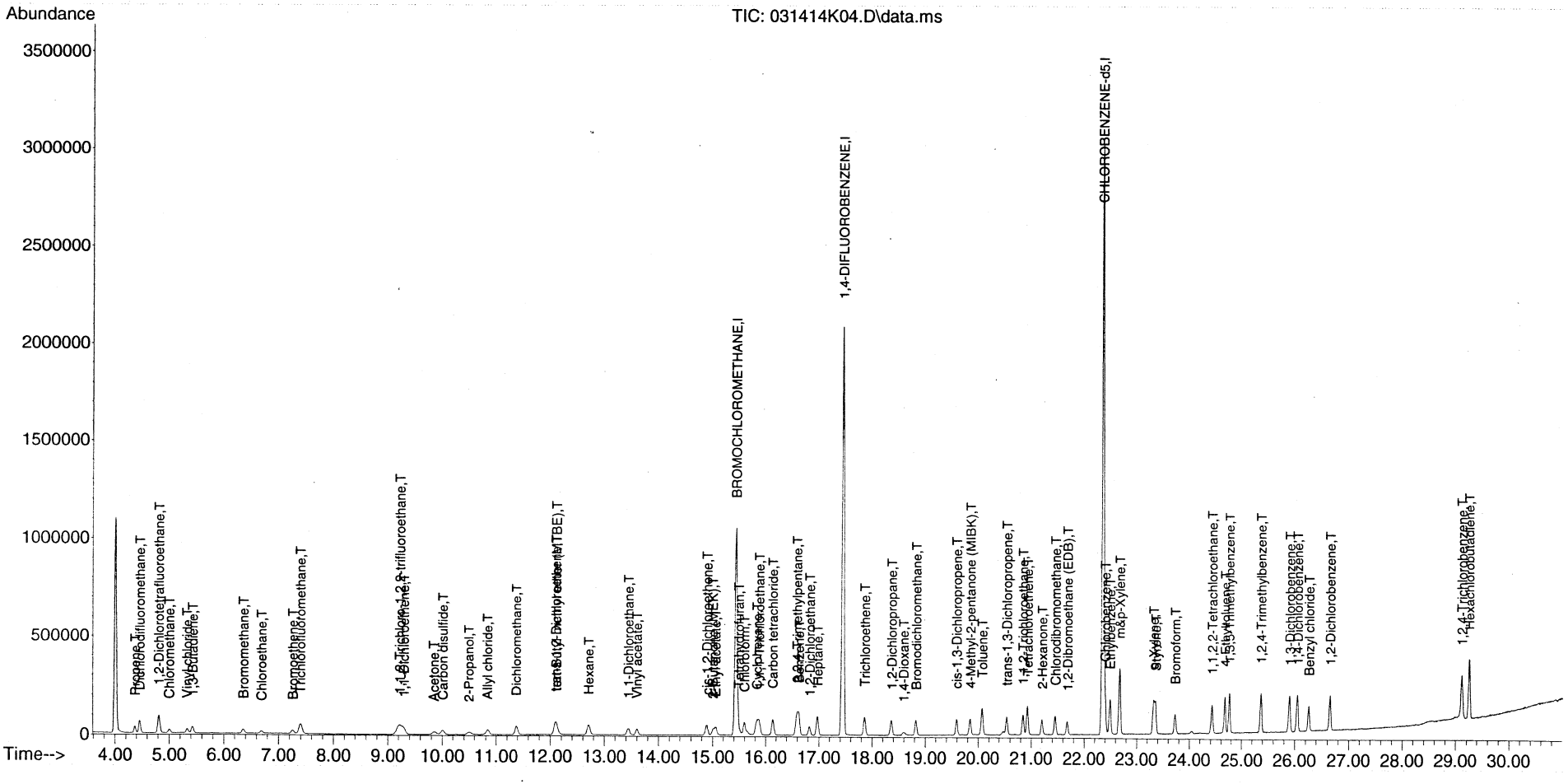
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:35 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

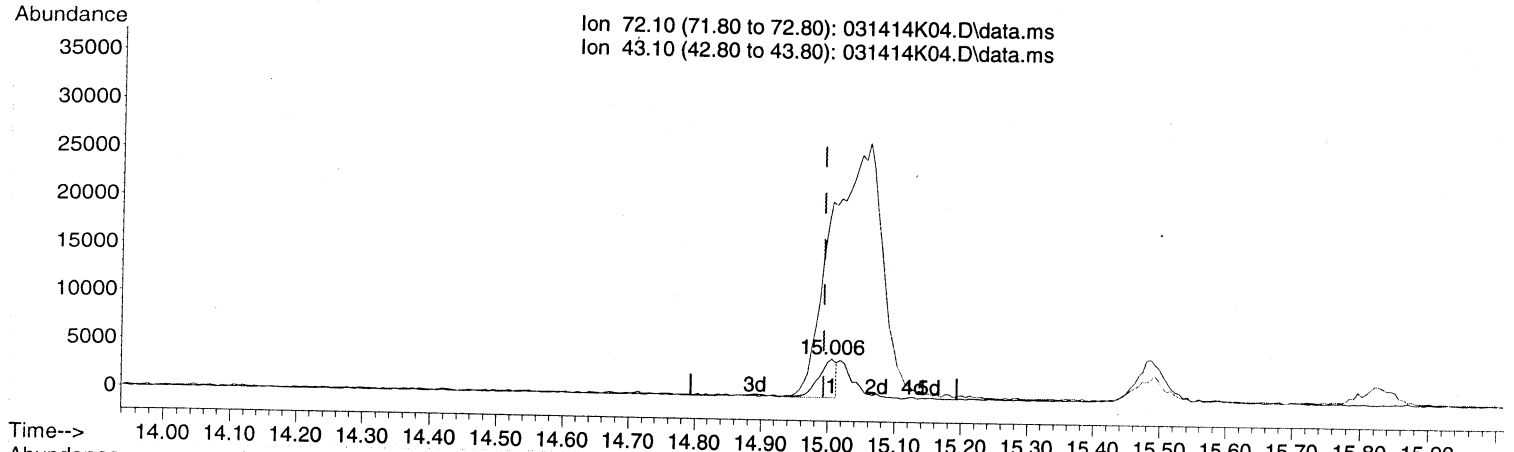


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



TIC: 031414K04.D\data.ms

(25) 2-Butanone (MEK) (T)

15.006min (+0.012) 0.67 ppbv

response 7256

Ion	Exp%	Act%
72.10	100	100
43.10	428.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☑ Improper Baseline

☐ Other: _____

☐ After Manual Integration

Manual integration(s) performed by:

Analyst: _____ Date: _____

Manual integration(s) reviewed by:

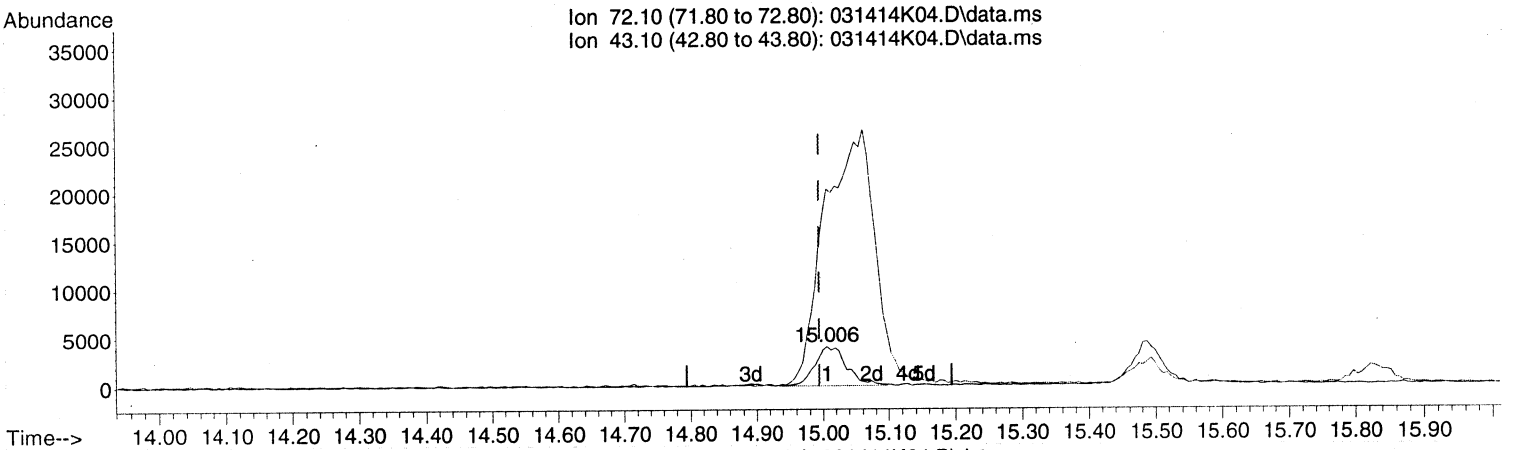
Reviewer: _____ Date: _____

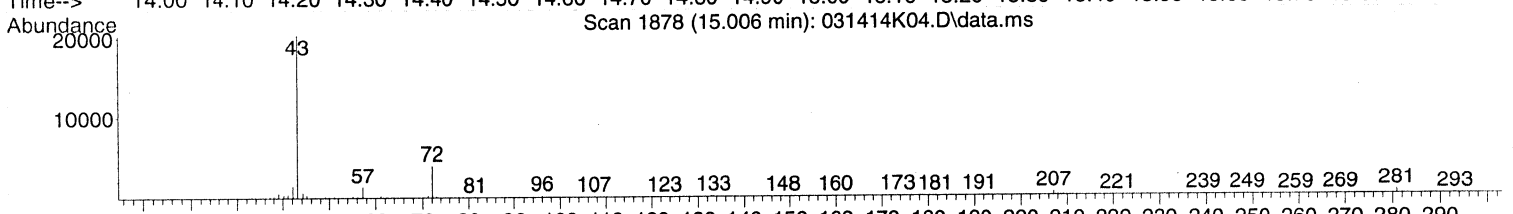
Quantitation Report (Qedit)

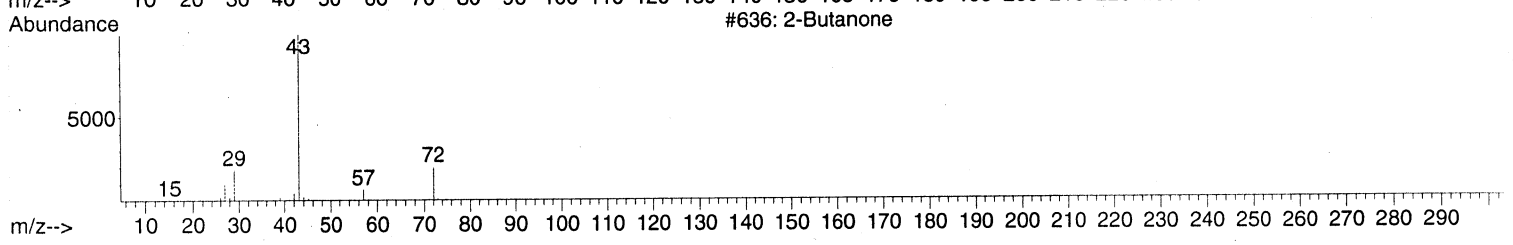
Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M







TIC: 031414K04.D\data.ms

(25) 2-Butanone (MEK) (T)

15.006min (+0.012) 1.22 ppbv m

response 13288

Ion	Exp%	Act%
72.10	100	100
43.10	428.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by
Analyst: [illegible] Date: 3/14/14
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 3/28/14

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

All MT
Jim 3/14/14

Quant Time: Mar 14 18:19:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	886867	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2193776	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2118293	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.372	41	27364	1.30 ppbv	100
3) Dichlorodifluoromethane	4.463	85	88217	1.14 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	76030	1.16 ppbv	90
5) Chloromethane	5.005	50	30459	1.26 ppbv	100
6) Vinyl chloride	5.327	62	33718	1.24 ppbv	99
7) 1,3-Butadiene	5.431	54	23013	1.16 ppbv	92
8) Bromomethane	6.361	94	24260	1.07 ppbv	98
9) Chloroethane	6.690	64	17762	1.15 ppbv	94
10) Bromoethene	7.262	106	23884	1.20 ppbv	96
11) Trichlorofluoromethane	7.396	101	91004	1.14 ppbv	95
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	42976	0.96 ppbv #	59
13) 1,1-Dichloroethene	9.294	61	50113	1.02 ppbv	96
14) Acetone	9.847	43	48055	1.17 ppbv	97
15) Carbon disulfide	10.012	76	71774	1.12 ppbv #	78
16) 2-Propanol	10.492	45	42241	1.05 ppbv	96
17) Allyl chloride	10.833	41	38416	1.16 ppbv	95
18) Dichloromethane	11.368	49	59462	1.43 ppbv	87
19) tert-Butyl methyl ethe...	12.110	73	75961	1.03 ppbv	93
20) trans-1,2-Dichloroethene	12.098	61	39508	1.09 ppbv	93
21) Hexane	12.707	57	44823	1.06 ppbv	88
22) 1,1-Dichloroethane	13.443	63	60309	1.04 ppbv	100
23) Vinyl acetate	13.601	43	75735	1.07 ppbv	97
24) cis-1,2-Dichloroethene	14.897	61	47943	1.11 ppbv	93
25) 2-Butanone (MEK)	15.006	72	7256	0.67 ppbv #	1
26) Ethyl acetate	15.055	61	8930	1.10 ppbv #	91
27) Tetrahydrofuran	15.487	42	37946	1.15 ppbv	93
28) Chloroform	15.596	83	68644	1.10 ppbv	94
29) Cyclohexane	15.834	56	51213	1.17 ppbv	92
30) 1,1,1-Trichloroethane	15.876	97	74195	1.05 ppbv	96
31) Carbon tetrachloride	16.132	117	77141	1.04 ppbv	100
33) Benzene	16.624	78	101601	1.23 ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	153855	1.29 ppbv	97
35) 1,2-Dichloroethane	16.825	62	52814	1.18 ppbv	100
36) Heptane	16.971	43	61831	1.32 ppbv	91
37) Trichloroethene	17.859	130	39576	1.17 ppbv	98
38) 1,2-Dichloropropane	18.364	63	40316	1.31 ppbv	97
39) 1,4-Dioxane	18.589	88	18040	1.15 ppbv	93
40) Bromodichloromethane	18.827	83	68900	1.20 ppbv	97
41) cis-1,3-Dichloropropene	19.587	75	59440	1.25 ppbv	95
42) 4-Methyl-2-pentanone (...	19.849	43	87703	1.33 ppbv	96
44) Toluene	20.068	91	131213	1.26 ppbv	98
45) trans-1,3-Dichloropropene	20.536	75	64374	1.22 ppbv	94
46) 1,1,2-Trichloroethane	20.840	97	40665	1.18 ppbv	97
47) Tetrachloroethene	20.926	166	57186	1.13 ppbv	97
48) 2-Hexanone	21.199	43	83534	1.19 ppbv	94

00145

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
49)	Chlorodibromomethane	21.449	129	64401	1.11 ppbv		99
50)	1,2-Dibromoethane (EDB)	21.680	107	61739	1.17 ppbv		98
51)	Chlorobenzene	22.398	112	98555	1.21 ppbv	#	79
52)	Ethylbenzene	22.489	91	175941	1.18 ppbv		98
53)	m&p-Xylene	22.672	91	263359	2.27 ppbv		99
54)	o-Xylene	23.316	91	134427	1.15 ppbv		98
55)	Styrene	23.353	104	98542	1.10 ppbv		99
56)	Bromoform	23.724	173	62498	1.02 ppbv		96
57)	1,1,2,2-Tetrachloroethane	24.424	83	97617	1.18 ppbv		97
58)	4-Ethyltoluene	24.667	105	156250	1.08 ppbv		100
59)	1,3,5-Trimethylbenzene	24.758	105	149723	1.09 ppbv		99
60)	1,2,4-Trimethylbenzene	25.360	105	148378	1.05 ppbv		99
61)	1,3-Dichlorobenzene	25.896	146	99564	1.01 ppbv		98
62)	1,4-Dichlorobenzene	26.042	146	101826	1.03 ppbv		98
63)	Benzyl chloride	26.255	91	123174	1.01 ppbv		97
64)	1,2-Dichlorobenzene	26.644	146	95675	1.00 ppbv		99
65)	1,2,4-Trichlorobenzene	29.108	180	90176	0.92 ppbv		99
66)	Hexachlorobutadiene	29.248	225	86197	1.00 ppbv		99

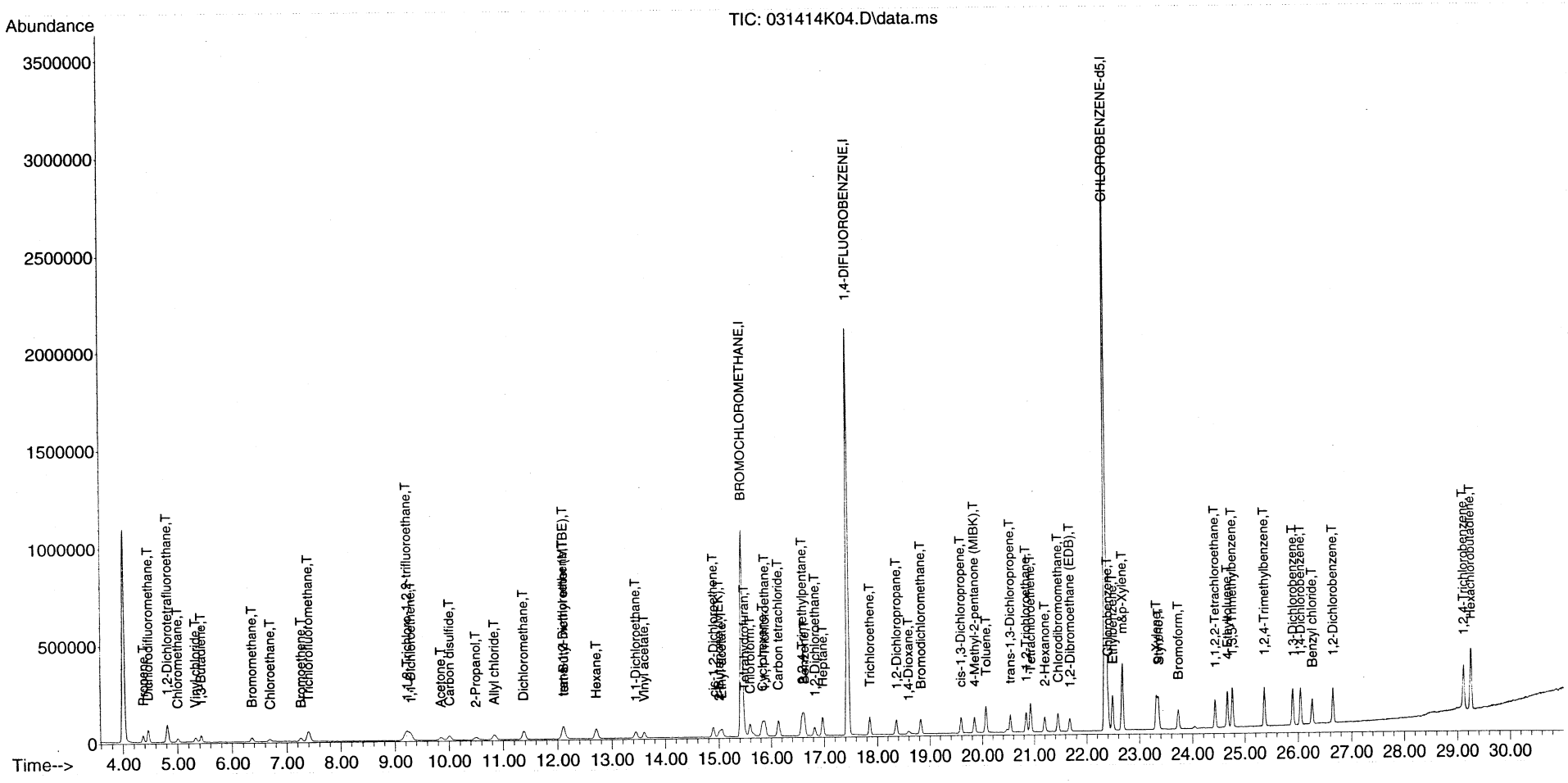
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K04.D
Acq On : 14 Mar 2014 15:03
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL1
Misc : 1.0 ppbv 1411090
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:19:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:18:49 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K05.D
Acq On : 14 Mar 2014 15:50
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL2
Misc : 2.0 ppbv 1411091
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:20:22 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:19:56 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.432	49	960089	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2274176	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2021646	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.366	41	51826	2.21 ppbv	97
3) Dichlorodifluoromethane	4.457	85	156535	1.91 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	136805	1.96 ppbv	88
5) Chloromethane	4.999	50	57015	2.14 ppbv	98
6) Vinyl chloride	5.327	62	57713	1.95 ppbv	98
7) 1,3-Butadiene	5.425	54	41775	1.94 ppbv	96
8) Bromomethane	6.355	94	45435	1.91 ppbv	100
9) Chloroethane	6.690	64	32894	1.98 ppbv	98
10) Bromoethene	7.256	106	41090	1.91 ppbv	98
11) Trichlorofluoromethane	7.396	101	160527	1.90 ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	80643	1.76 ppbv	91
13) 1,1-Dichloroethene	9.294	61	96192	1.84 ppbv	95
14) Acetone	9.841	43	97212	2.16 ppbv	98
15) Carbon disulfide	10.006	76	138821	2.04 ppbv	96
16) 2-Propanol	10.474	45	92065	2.10 ppbv	95
17) Allyl chloride	10.833	41	78819	2.20 ppbv	89
18) Dichloromethane	11.374	49	98710	2.20 ppbv	85
19) tert-Butyl methyl ethe...	12.098	73	158843	2.01 ppbv	95
20) trans-1,2-Dichloroethene	12.098	61	75707	1.95 ppbv	91
21) Hexane	12.707	57	91715	2.02 ppbv	91
22) 1,1-Dichloroethane	13.449	63	117022	1.90 ppbv	100
23) Vinyl acetate	13.595	43	153166	1.98 ppbv	96
24) cis-1,2-Dichloroethene	14.891	61	92275	1.98 ppbv	90
25) 2-Butanone (MEK)	15.006	72	25536	2.13 ppbv #	74
26) Ethyl acetate	15.055	61	17685	1.99 ppbv #	91
27) Tetrahydrofuran	15.469	42	78303	2.15 ppbv	87
28) Chloroform	15.596	83	127307	1.90 ppbv	95
29) Cyclohexane	15.828	56	97094	2.03 ppbv	92
30) 1,1,1-Trichloroethane	15.876	97	135457	1.80 ppbv	97
31) Carbon tetrachloride	16.132	117	140257	1.81 ppbv	98
33) Benzene	16.624	78	195582	2.23 ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	300184	2.32 ppbv	99
35) 1,2-Dichloroethane	16.825	62	97414	2.05 ppbv	99
36) Heptane	16.971	43	122302	2.38 ppbv	89
37) Trichloroethene	17.859	130	73125	2.06 ppbv	97
38) 1,2-Dichloropropane	18.358	63	76806	2.30 ppbv	98
39) 1,4-Dioxane	18.577	88	36126	2.19 ppbv	89
40) Bromodichloromethane	18.821	83	130582	2.15 ppbv	96
41) cis-1,3-Dichloropropene	19.593	75	110186	2.15 ppbv	95
42) 4-Methyl-2-pentanone (...	19.837	43	165234	2.27 ppbv	95
44) Toluene	20.068	91	222050	2.16 ppbv	98
45) trans-1,3-Dichloropropene	20.536	75	115211	2.22 ppbv	95
46) 1,1,2-Trichloroethane	20.840	97	76058	2.28 ppbv	95
47) Tetrachloroethene	20.926	166	100340	2.06 ppbv	99
48) 2-Hexanone	21.193	43	159433	2.27 ppbv	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K05.D
Acq On : 14 Mar 2014 15:50
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL2
Misc : 2.0 ppbv 1411091
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:20:22 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:19:56 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49)	Chlorodibromomethane	21.449	129	113271	2.04 ppbv	99
50)	1,2-Dibromoethane (EDB)	21.674	107	109618	2.14 ppbv	97
51)	Chlorobenzene	22.398	112	168964	2.13 ppbv	89
52)	Ethylbenzene	22.489	91	303272	2.08 ppbv	98
53)	m&p-Xylene	22.672	91	451931	3.99 ppbv	98
54)	o-Xylene	23.316	91	235881	2.07 ppbv	100
55)	Styrene	23.353	104	174828	2.00 ppbv	99
56)	Bromoform	23.724	173	114744	1.98 ppbv	98
57)	1,1,2,2-Tetrachloroethane	24.424	83	179690	2.22 ppbv	98
58)	4-Ethyltoluene	24.667	105	289982	2.10 ppbv	99
59)	1,3,5-Trimethylbenzene	24.758	105	268041	2.04 ppbv	99
60)	1,2,4-Trimethylbenzene	25.360	105	269840	2.00 ppbv	100
61)	1,3-Dichlorobenzene	25.896	146	178194	1.91 ppbv	98
62)	1,4-Dichlorobenzene	26.042	146	177128	1.89 ppbv	97
63)	Benzyl chloride	26.255	91	224572	1.94 ppbv	97
64)	1,2-Dichlorobenzene	26.644	146	169962	1.89 ppbv	98
65)	1,2,4-Trichlorobenzene	29.108	180	159021	1.73 ppbv	98
66)	Hexachlorobutadiene	29.248	225	152200	1.91 ppbv	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

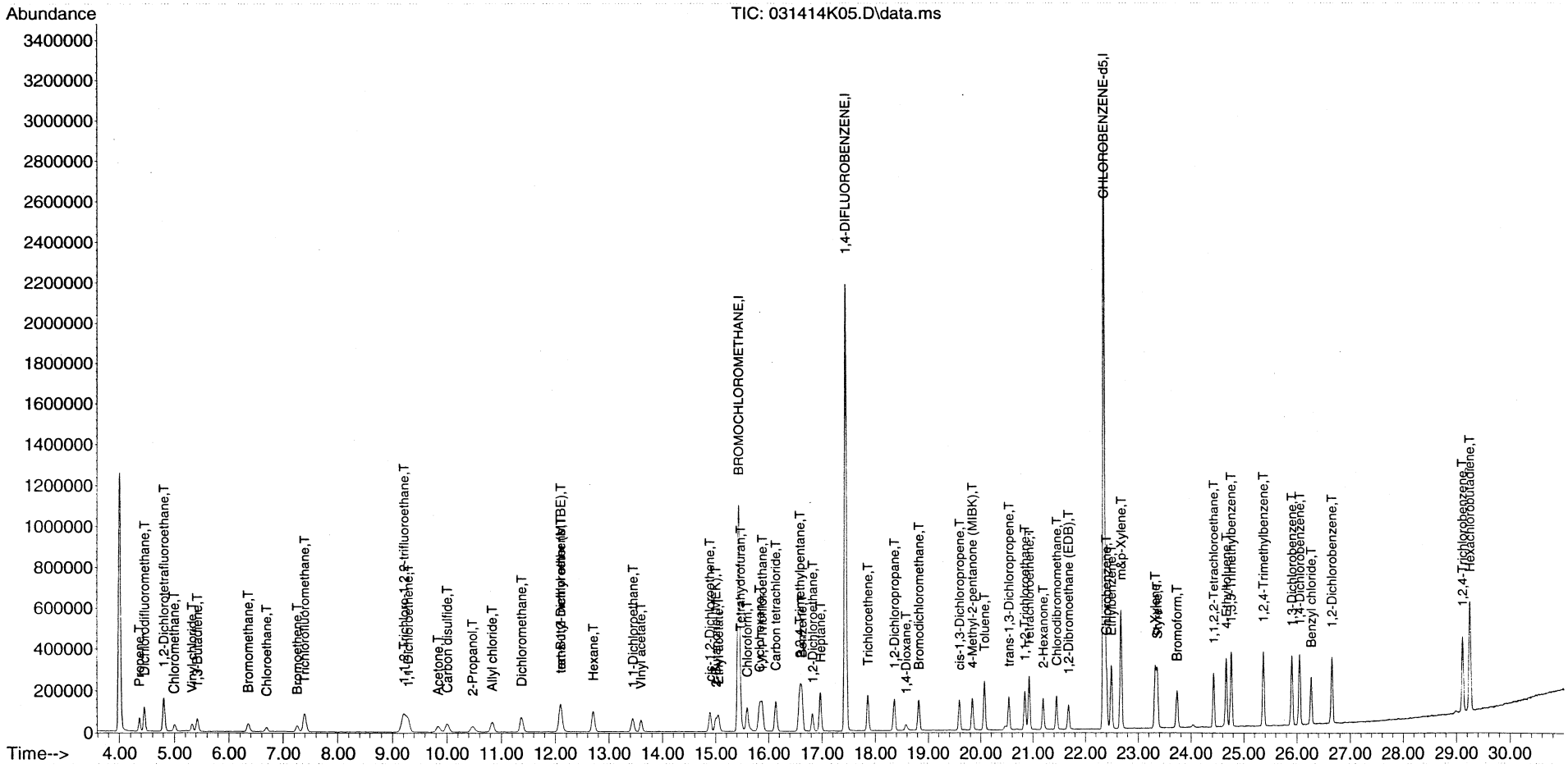
00145

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K05.D
Acq On : 14 Mar 2014 15:50
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL2
Misc : 2.0 ppbv 1411091
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:20:22 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:19:56 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K06.D
Acq On : 14 Mar 2014 16:37
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:21:04 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:20:36 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	980253	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2358221	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2084965	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	117674	4.75	ppbv	97
3) Dichlorodifluoromethane	4.457	85	364108	4.40	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	316943	4.47	ppbv	90
5) Chloromethane	5.011	50	135483	4.88	ppbv	100
6) Vinyl chloride	5.333	62	141611	4.68	ppbv	98
7) 1,3-Butadiene	5.431	54	101936	4.57	ppbv	93
8) Bromomethane	6.355	94	107718	4.51	ppbv	99
9) Chloroethane	6.690	64	78952	4.69	ppbv	99
10) Bromoethene	7.256	106	95270	4.39	ppbv	99
11) Trichlorofluoromethane	7.402	101	374244	4.48	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.209	151	186527	4.15	ppbv	89
13) 1,1-Dichloroethene	9.294	61	233761	4.43	ppbv	93
14) Acetone	9.823	43	224398	4.80	ppbv	99
15) Carbon disulfide	10.012	76	330783	4.81	ppbv	98
16) 2-Propanol	10.450	45	227237	5.00	ppbv	100
17) Allyl chloride	10.839	41	191315	5.15	ppbv	90
18) Dichloromethane	11.374	49	202832	4.40	ppbv	86
19) tert-Butyl methyl ethe...	12.086	73	380347	4.76	ppbv	95
20) trans-1,2-Dichloroethene	12.098	61	181579	4.62	ppbv	89
21) Hexane	12.707	57	221062	4.80	ppbv	92
22) 1,1-Dichloroethane	13.443	63	274051	4.42	ppbv	100
23) Vinyl acetate	13.589	43	386294	4.88	ppbv	95
24) cis-1,2-Dichloroethene	14.897	61	218186	4.63	ppbv	90
25) 2-Butanone (MEK)	15.000	72	60405	4.92	ppbv #	94
26) Ethyl acetate	15.049	61	43958	4.88	ppbv #	89
27) Tetrahydrofuran	15.463	42	185390	4.87	ppbv	89
28) Chloroform	15.596	83	299881	4.49	ppbv	96
29) Cyclohexane	15.828	56	234801	4.83	ppbv	91
30) 1,1,1-Trichloroethane	15.876	97	320314	4.33	ppbv	97
31) Carbon tetrachloride	16.138	117	325733	4.28	ppbv	100
33) Benzene	16.631	78	457927	4.92	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	722854	5.22	ppbv	99
35) 1,2-Dichloroethane	16.819	62	227094	4.56	ppbv	99
36) Heptane	16.971	43	298282	5.37	ppbv	89
37) Trichloroethene	17.859	130	171041	4.64	ppbv	96
38) 1,2-Dichloropropane	18.358	63	178850	5.03	ppbv	99
39) 1,4-Dioxane	18.565	88	86116	4.95	ppbv	90
40) Bromodichloromethane	18.821	83	307409	4.82	ppbv	97
41) cis-1,3-Dichloropropene	19.593	75	262131	4.88	ppbv	96
42) 4-Methyl-2-pentanone (...	19.831	43	400774	5.13	ppbv	95
44) Toluene	20.068	91	527295	4.91	ppbv	100
45) trans-1,3-Dichloropropene	20.536	75	273436	5.03	ppbv	95
46) 1,1,2-Trichloroethane	20.840	97	172338	4.92	ppbv	93
47) Tetrachloroethene	20.926	166	230499	4.58	ppbv	99
48) 2-Hexanone	21.187	43	392196	5.20	ppbv	97

00151

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K06.D
Acq On : 14 Mar 2014 16:37
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:21:04 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:20:36 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	272962	4.77 ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	255133	4.80 ppbv	99
51) Chlorobenzene	22.398	112	398120	4.84 ppbv	95
52) Ethylbenzene	22.489	91	722671	4.76 ppbv	100
53) m&p-Xylene	22.672	91	1115649	9.54 ppbv	99
54) o-Xylene	23.316	91	561744	4.75 ppbv	100
55) Styrene	23.353	104	424568	4.68 ppbv	99
56) Bromoform	23.730	173	267099	4.47 ppbv	98
57) 1,1,2,2-Tetrachloroethane	24.424	83	410578	4.82 ppbv	97
58) 4-Ethyltoluene	24.667	105	686148	4.76 ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	648473	4.76 ppbv	100
60) 1,2,4-Trimethylbenzene	25.361	105	645624	4.64 ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	423203	4.42 ppbv	98
62) 1,4-Dichlorobenzene	26.042	146	423511	4.41 ppbv	99
63) Benzyl chloride	26.255	91	548108	4.59 ppbv	97
64) 1,2-Dichlorobenzene	26.650	146	411659	4.50 ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	372957	3.96 ppbv	99
66) Hexachlorobutadiene	29.248	225	361183	4.44 ppbv	99

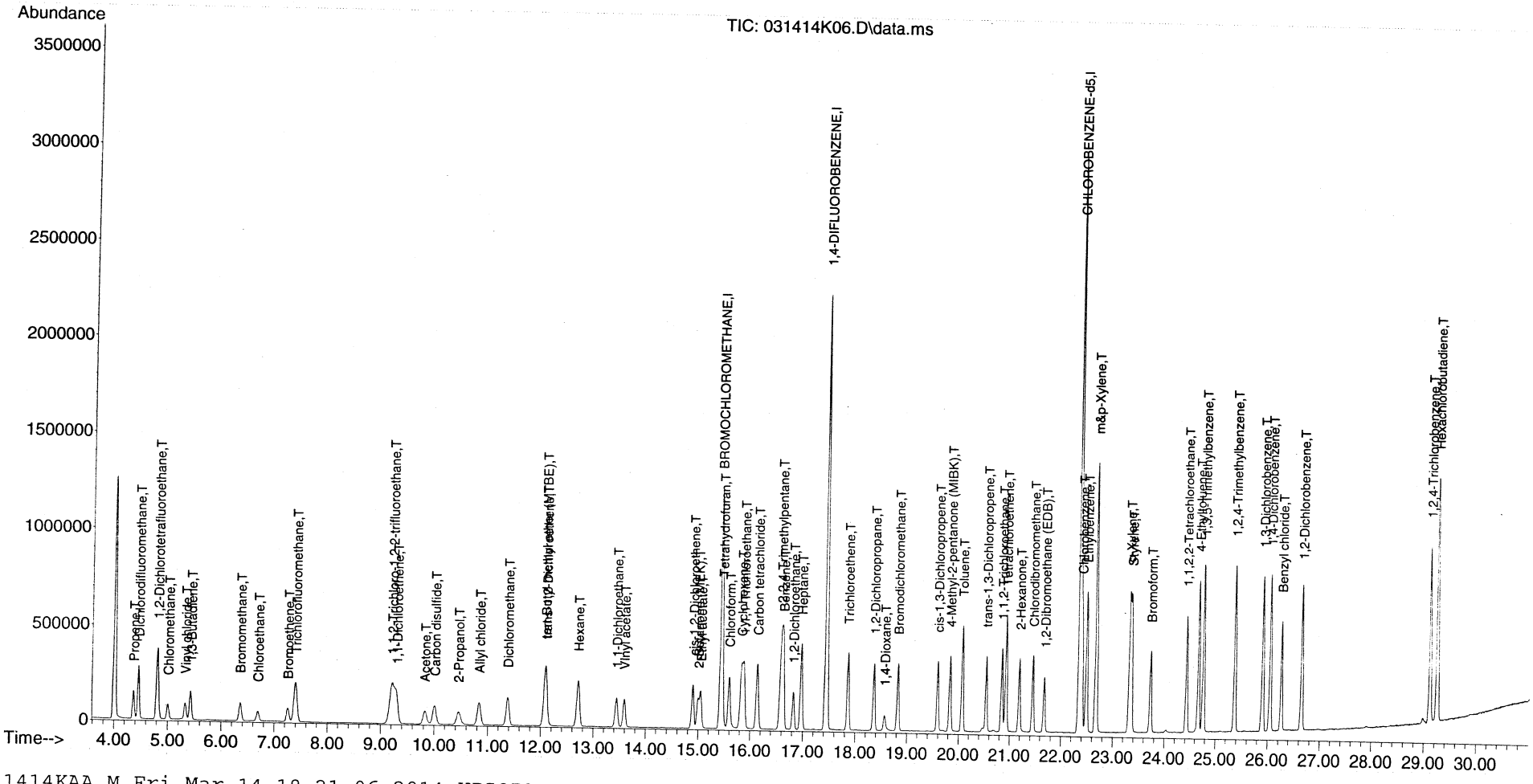
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K06.D
Acq On : 14 Mar 2014 16:37
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL3
Misc : 5.0 ppbv 1411092
ALS Vial : 33
Multiplier: 1

Quant Time: Mar 14 18:21:04 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:20:36 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K07.D
Acq On : 14 Mar 2014 17:25
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL5
Misc : 15 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:21:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:21:14 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	1009459	22.00 ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2396399	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	2110930	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.366	41	355920	13.72 ppbv	97
3) Dichlorodifluoromethane	4.457	85	1064062	12.68 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	936808	12.99 ppbv	89
5) Chloromethane	5.005	50	389727	13.49 ppbv	100
6) Vinyl chloride	5.327	62	405614	13.05 ppbv	99
7) 1,3-Butadiene	5.431	54	293574	12.70 ppbv	94
8) Bromomethane	6.356	94	320281	13.24 ppbv	99
9) Chloroethane	6.684	64	239915	13.91 ppbv	99
10) Bromoethene	7.262	106	299176	13.57 ppbv	98
11) Trichlorofluoromethane	7.402	101	1144169	13.65 ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	564305	12.63 ppbv	90
13) 1,1-Dichloroethene	9.288	61	710232	13.20 ppbv	93
14) Acetone	9.805	43	732183	15.23 ppbv	99
15) Carbon disulfide	10.006	76	1034311	14.73 ppbv	97
16) 2-Propanol	10.432	45	772539	16.40 ppbv	97
17) Allyl chloride	10.839	41	624901	16.19 ppbv	89
18) Dichloromethane	11.381	49	567187	11.94 ppbv	86
19) tert-Butyl methyl ethe...	12.074	73	1235396	15.39 ppbv	94
20) trans-1,2-Dichloroethene	12.098	61	580152	14.49 ppbv	89
21) Hexane	12.707	57	722776	15.33 ppbv	93
22) 1,1-Dichloroethane	13.443	63	849696	13.50 ppbv	99
23) Vinyl acetate	13.589	43	1382409	16.92 ppbv	94
24) cis-1,2-Dichloroethene	14.897	61	686018	14.31 ppbv	90
25) 2-Butanone (MEK)	14.988	72	206593	15.32 ppbv #	73
26) Ethyl acetate	15.043	61	147202	15.87 ppbv #	85
27) Tetrahydrofuran	15.451	42	620735	15.78 ppbv	86
28) Chloroform	15.597	83	931056	13.85 ppbv	95
29) Cyclohexane	15.828	56	765021	15.40 ppbv	91
30) 1,1,1-Trichloroethane	15.876	97	990518	13.42 ppbv	97
31) Carbon tetrachloride	16.138	117	1018718	13.49 ppbv	100
33) Benzene	16.631	78	1409302	14.72 ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	2363002	16.46 ppbv	99
35) 1,2-Dichloroethane	16.825	62	721708	14.19 ppbv	99
36) Heptane	16.971	43	1002360	17.20 ppbv	88
37) Trichloroethene	17.860	130	537068	14.40 ppbv	97
38) 1,2-Dichloropropane	18.358	63	570518	15.51 ppbv	98
39) 1,4-Dioxane	18.553	88	285188	16.00 ppbv	86
40) Bromodichloromethane	18.827	83	1001126	15.33 ppbv	97
41) cis-1,3-Dichloropropene	19.593	75	853430	15.52 ppbv	95
42) 4-Methyl-2-pentanone (...	19.825	43	1390415	17.07 ppbv	95
44) Toluene	20.074	91	1686301	15.34 ppbv	99
45) trans-1,3-Dichloropropene	20.536	75	889175	16.06 ppbv	94
46) 1,1,2-Trichloroethane	20.841	97	542712	15.14 ppbv	93
47) Tetrachloroethene	20.926	166	726125	14.28 ppbv	99
48) 2-Hexanone	21.181	43	1344705	17.06 ppbv	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K07.D
Acq On : 14 Mar 2014 17:25
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL5
Misc : 15 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:21:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:21:14 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	898933	15.46	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	812535	14.99	ppbv	98
51) Chlorobenzene	22.398	112	1238646	14.87	ppbv	98
52) Ethylbenzene	22.489	91	2313621	15.03	ppbv	99
53) m&p-Xylene	22.672	91	3591895	30.28	ppbv	100
54) o-Xylene	23.317	91	1822882	15.30	ppbv	99
55) Styrene	23.353	104	1388060	15.15	ppbv	100
56) Bromoform	23.730	173	921397	15.37	ppbv	98
57) 1,1,2,2-Tetrachloroethane	24.424	83	1314143	15.07	ppbv	98
58) 4-Ethyltoluene	24.667	105	2273803	15.55	ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	2082327	15.12	ppbv	100
60) 1,2,4-Trimethylbenzene	25.367	105	2096759	14.90	ppbv	99
61) 1,3-Dichlorobenzene	25.896	146	1383952	14.41	ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	1397409	14.50	ppbv	99
63) Benzyl chloride	26.255	91	2007290	16.61	ppbv	97
64) 1,2-Dichlorobenzene	26.650	146	1333082	14.52	ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	1253916	13.36	ppbv	100
66) Hexachlorobutadiene	29.248	225	1038149	12.75	ppbv	99

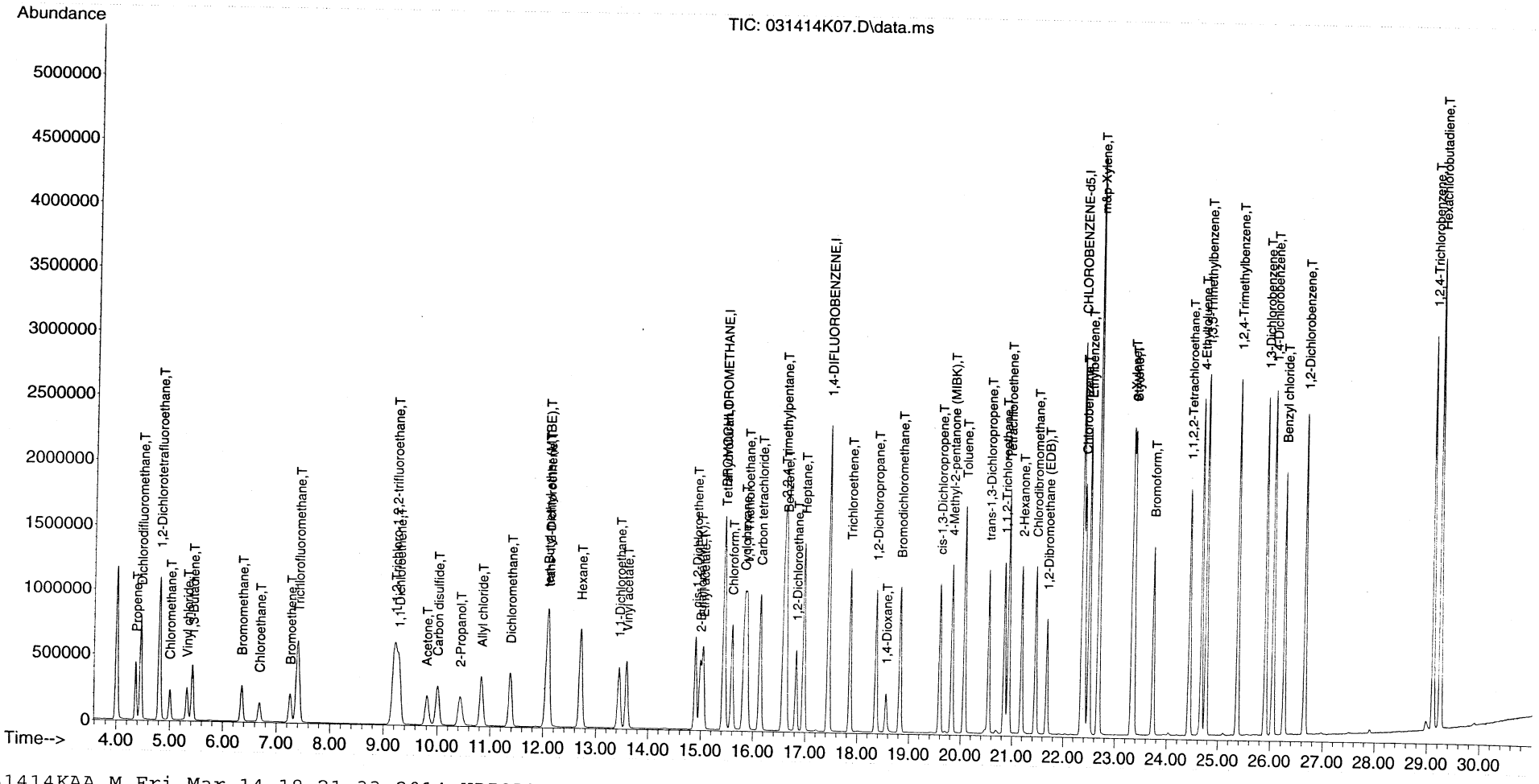
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K07.D
Acq On : 14 Mar 2014 17:25
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL5
Misc : 15 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:21:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:21:14 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



031414KAA.M Fri Mar 14 18:21:33 2014 HP5973K

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K08.D
Acq On : 14 Mar 2014 18:14
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL6
Misc : 20 ppbv 1411095
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:45:35 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:21:50 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	926725	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2329322	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	2069944	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	434038	18.53	ppbv	98
3) Dichlorodifluoromethane	4.457	85	1362958	18.33	ppbv	100
4) 1,2-Dichlorotetrafluor...	4.810	85	1253168	19.65	ppbv	92
5) Chloromethane	5.005	50	505092	19.56	ppbv	99
6) Vinyl chloride	5.327	62	550298	20.01	ppbv	99
7) 1,3-Butadiene	5.431	54	393266	19.21	ppbv	95
8) Bromomethane	6.355	94	400986	18.76	ppbv	99
9) Chloroethane	6.690	64	285351	18.58	ppbv	99
10) Bromoethene	7.256	106	373606	19.13	ppbv	98
11) Trichlorofluoromethane	7.402	101	1460613	19.69	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	727284	18.05	ppbv	92
13) 1,1-Dichloroethene	9.294	61	880998	18.01	ppbv	94
14) Acetone	9.805	43	877348	19.86	ppbv	98
15) Carbon disulfide	10.006	76	1260211	19.62	ppbv	98
16) 2-Propanol	10.431	45	926780	21.39	ppbv	97
17) Allyl chloride	10.839	41	725643	20.32	ppbv	91
18) Dichloromethane	11.374	49	677763	15.54	ppbv	87
19) tert-Butyl methyl ethe...	12.068	73	1536498	21.00	ppbv	96
20) trans-1,2-Dichloroethene	12.098	61	699056	19.09	ppbv	91
21) Hexane	12.713	57	847014	19.51	ppbv	94
22) 1,1-Dichloroethane	13.449	63	1034567	17.97	ppbv	99
23) Vinyl acetate	13.589	43	1611174	21.31	ppbv	95
24) cis-1,2-Dichloroethene	14.897	61	824362	18.76	ppbv	92
25) 2-Butanone (MEK)	14.994	72	250516	20.35	ppbv #	82
26) Ethyl acetate	15.043	61	172452	20.22	ppbv #	88
27) Tetrahydrofuran	15.450	42	733846	20.18	ppbv	88
28) Chloroform	15.596	83	1182320	19.39	ppbv	97
29) Cyclohexane	15.828	56	925217	20.27	ppbv	93
30) 1,1,1-Trichloroethane	15.882	97	1276858	19.16	ppbv	98
31) Carbon tetrachloride	16.138	117	1343632	19.77	ppbv	99
33) Benzene	16.631	78	1752542	18.65	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	2872994	20.19	ppbv	100
35) 1,2-Dichloroethane	16.825	62	910075	18.34	ppbv	99
36) Heptane	16.971	43	1175668	20.19	ppbv	90
37) Trichloroethene	17.859	130	695321	19.17	ppbv	98
38) 1,2-Dichloropropane	18.358	63	684914	18.93	ppbv	99
39) 1,4-Dioxane	18.559	88	356476	20.56	ppbv	90
40) Bromodichloromethane	18.827	83	1262862	19.90	ppbv	98
41) cis-1,3-Dichloropropene	19.593	75	1055330	19.57	ppbv	96
42) 4-Methyl-2-pentanone (...	19.831	43	1639788	20.29	ppbv	96
44) Toluene	20.074	91	2108491	19.24	ppbv	99
45) trans-1,3-Dichloropropene	20.536	75	1137550	20.89	ppbv	96
46) 1,1,2-Trichloroethane	20.846	97	682611	19.33	ppbv	95
47) Tetrachloroethene	20.926	166	952340	19.10	ppbv	100
48) 2-Hexanone	21.181	43	1604353	20.46	ppbv	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K08.D
Acq On : 14 Mar 2014 18:14
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL6
Misc : 20 ppbv 1411095
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:45:35 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:21:50 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	1162326	20.33	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	1038907	19.48	ppbv	99
51) Chlorobenzene	22.398	112	1572692	19.26	ppbv	99
52) Ethylbenzene	22.489	91	2924596	19.31	ppbv	99
53) m&p-Xylene	22.678	91	4600930	39.50	ppbv	100
54) o-Xylene	23.316	91	2338380	19.97	ppbv	99
55) Styrene	23.353	104	1792227	19.94	ppbv	100
56) Bromoform	23.730	173	1219347	20.79	ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	1640616	19.10	ppbv	99
58) 4-Ethyltoluene	24.667	105	2939542	20.49	ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	2726228	20.20	ppbv	100
60) 1,2,4-Trimethylbenzene	25.367	105	2691445	19.51	ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	1842863	19.66	ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	1844025	19.60	ppbv	99
63) Benzyl chloride	26.255	91	2594462	21.92	ppbv	97
64) 1,2-Dichlorobenzene	26.650	146	1773861	19.84	ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	1717400	18.79	ppbv	100
66) Hexachlorobutadiene	29.248	225	1404010	17.75	ppbv	100

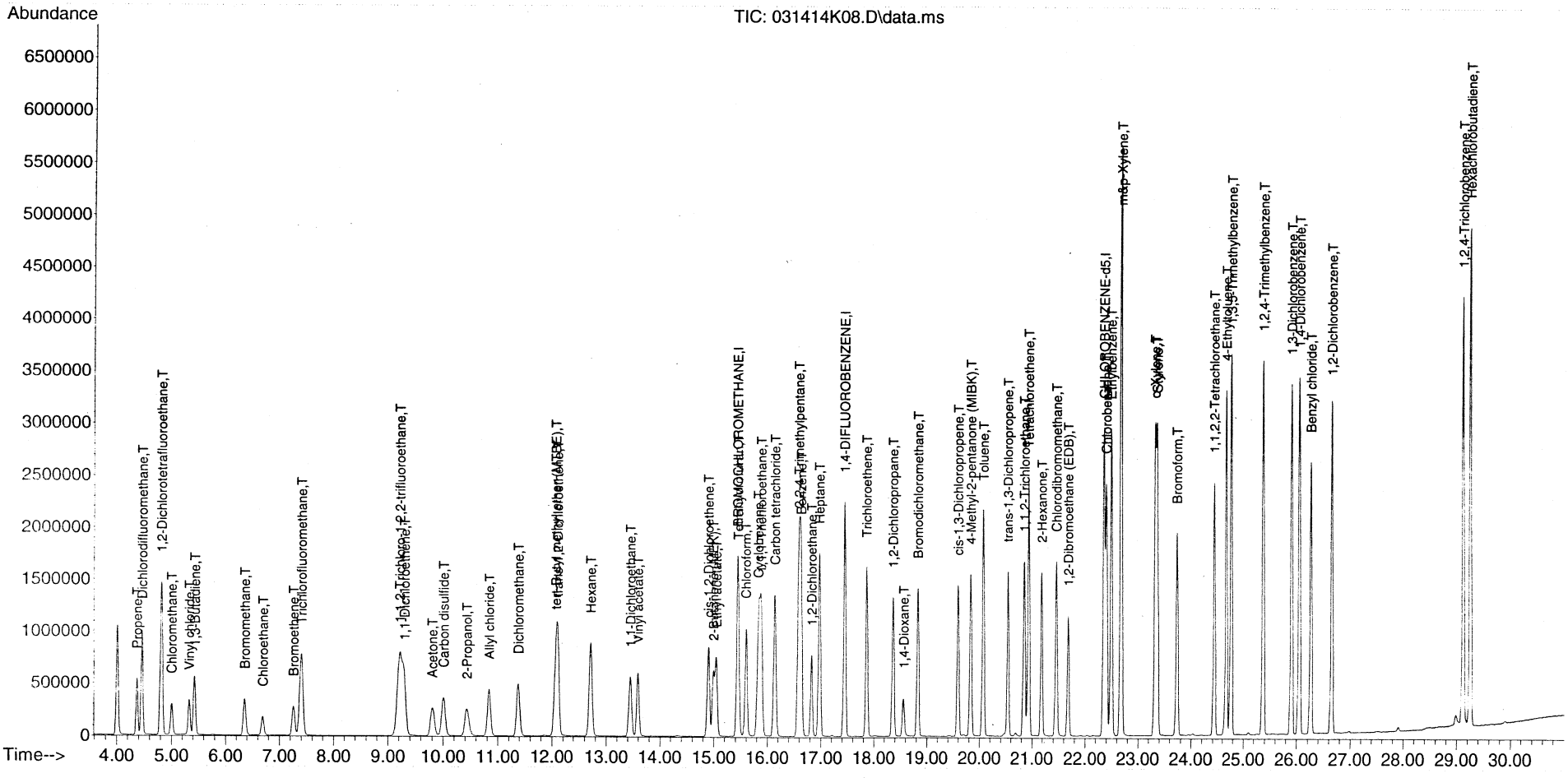
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K08.D
Acq On : 14 Mar 2014 18:14
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL6
Misc : 20 ppbv 1411095
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:45:35 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:21:50 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



SCV REPORT

Instrument Name: HP5973K
Sample Name: S14C061-SCV1
Misc Info: 10 ppbv SCV 1411087
Date Acquired: 3/14/2014 19:01
QLast Update: Fri Mar 14 18:45:41 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.37	11.00	11.49	104%	70.0	130.0	pass
3)	Dichlorodifluoromethane	4.46	11.00	11.44	104%	70.0	130.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.80	11.00	11.81	107%	70.0	130.0	pass
5)	Chloromethane	5.00	11.00	12.26	111%	70.0	130.0	pass
6)	Vinyl chloride	5.33	12.00	12.28	102%	70.0	130.0	pass
7)	1,3-Butadiene	5.42	22.00	23.81	108%	70.0	130.0	pass
8)	Bromomethane	6.36	11.00	12.47	113%	70.0	130.0	pass
9)	Chloroethane	6.68	11.00	11.24	102%	70.0	130.0	pass
10)	Bromoethene	7.26	11.00	11.75	107%	70.0	130.0	pass
11)	Trichlorofluoromethane	7.40	11.00	11.69	106%	70.0	130.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.20	11.00	11.85	108%	70.0	130.0	pass
13)	1,1-Dichloroethene	9.29	11.00	11.22	102%	70.0	130.0	pass
14)	Acetone	9.81	11.00	12.12	110%	70.0	130.0	pass
15)	Carbon disulfide	10.01	11.00	13.41	122%	70.0	130.0	pass
16)	2-Propanol	10.44	10.00	11.46	115%	70.0	130.0	pass
17)	Allyl chloride	10.83	22.00	25.78	117%	70.0	130.0	pass
18)	Dichloromethane	11.37	11.00	9.95	90%	70.0	130.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.07	11.00	13.03	118%	70.0	130.0	pass
20)	trans-1,2-Dichloroethene	12.10	11.00	12.54	114%	70.0	130.0	pass
21)	Hexane	12.71	11.00	11.90	108%	70.0	130.0	pass
22)	1,1-Dichloroethane	13.44	12.00	10.95	91%	70.0	130.0	pass
23)	Vinyl acetate	13.59	11.00	11.81	107%	70.0	130.0	pass
24)	cis-1,2-Dichloroethene	14.90	11.00	10.24	93%	70.0	130.0	pass
25)	2-Butanone (MEK)	14.99	11.00	12.41	113%	70.0	130.0	pass
26)	Ethyl acetate	15.04	11.00	11.54	105%	70.0	130.0	pass
27)	Tetrahydrofuran	15.46	11.00	10.87	99%	70.0	130.0	pass
28)	Chloroform	15.60	11.00	11.25	102%	70.0	130.0	pass
29)	Cyclohexane	15.83	11.00	11.26	102%	70.0	130.0	pass
30)	1,1,1-Trichloroethane	15.88	11.00	11.39	104%	70.0	130.0	pass
31)	Carbon tetrachloride	16.13	11.00	11.87	108%	70.0	130.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.63	11.00	9.84	89%	70.0	130.0	pass
34)	2,2,4-Trimethylpentane	16.59	11.00	10.40	95%	70.0	130.0	pass
35)	1,2-Dichloroethane	16.83	11.00	9.74	89%	70.0	130.0	pass
36)	Heptane	16.97	11.00	9.82	89%	70.0	130.0	pass
37)	Trichloroethene	17.86	11.00	10.43	95%	70.0	130.0	pass
38)	1,2-Dichloropropane	18.36	11.00	9.60	87%	70.0	130.0	pass
39)	1,4-Dioxane	18.56	9.50	9.75	103%	70.0	130.0	pass
40)	Bromodichloromethane	18.82	11.00	10.71	97%	70.0	130.0	pass
41)	cis-1,3-Dichloropropene	19.59	11.00	10.61	96%	70.0	130.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.83	11.00	10.85	99%	70.0	130.0	pass
43)	CHLOROBENZENE-d5	22.35	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.07	11.00	10.06	91%	70.0	130.0	pass
45)	trans-1,3-Dichloropropene	20.54	11.00	10.29	94%	70.0	130.0	pass
46)	1,1,2-Trichloroethane	20.84	11.00	10.22	93%	70.0	130.0	pass
47)	Tetrachloroethene	20.93	11.00	10.23	93%	70.0	130.0	pass

48)	2-Hexanone	21.18	11.00	11.00	100%	70.0	130.0	pass
49)	Chlorodibromomethane	21.45	11.00	11.02	100%	70.0	130.0	pass
50)	1,2-Dibromoethane (EDB)	21.68	10.00	10.03	100%	70.0	130.0	pass
51)	Chlorobenzene	22.40	11.00	10.16	92%	70.0	130.0	pass
52)	Ethylbenzene	22.49	11.00	10.16	92%	70.0	130.0	pass
53)	m&p-Xylene	22.67	22.00	20.27	92%	70.0	130.0	pass
54)	o-Xylene	23.32	10.00	10.01	100%	70.0	130.0	pass
55)	Styrene	23.35	11.00	9.50	86%	70.0	130.0	pass
56)	Bromoform	23.73	11.00	10.94	99%	70.0	130.0	pass
57)	1,1,2,2-Tetrachloroethane	24.42	10.00	9.20	92%	70.0	130.0	pass
58)	4-Ethyltoluene	24.67	21.00	22.50	107%	70.0	130.0	pass
59)	1,3,5-Trimethylbenzene	24.76	11.00	9.97	91%	70.0	130.0	pass
60)	1,2,4-Trimethylbenzene	25.37	11.00	9.42	86%	70.0	130.0	pass
61)	1,3-Dichlorobenzene	25.90	10.00	9.10	91%	70.0	130.0	pass
62)	1,4-Dichlorobenzene	26.04	11.00	8.96	81%	70.0	130.0	pass
63)	Benzyl chloride	26.25	11.00	10.59	96%	70.0	130.0	pass
64)	1,2-Dichlorobenzene	26.64	11.00	9.16	83%	70.0	130.0	pass
65)	1,2,4-Trichlorobenzene	29.11	9.90	7.02	71%	70.0	130.0	pass
66)	Hexachlorobutadiene	29.25	10.00	8.82	88%	70.0	130.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K09.D
Acq On : 14 Mar 2014 19:01
Instrument: HP5973K
Operator : EM
Sample : S14C061-SCV1
Misc : 10 ppbv SCV 1411087
ALS Vial : 34
Multiplier: 1

Quant Time: Mar 14 19:41:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	825821	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2208651	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2110569	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.366	41	238863	11.49 ppbv	98
3) Dichlorodifluoromethane	4.457	85	733504	11.44 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.804	85	652850	11.81 ppbv	93
5) Chloromethane	5.005	50	279900	12.26 ppbv	99
6) Vinyl chloride	5.327	62	297580	12.28 ppbv	99
7) 1,3-Butadiene	5.425	54	430921	23.81 ppbv	98
8) Bromomethane	6.355	94	231692	12.47 ppbv	99
9) Chloroethane	6.684	64	151613	11.24 ppbv	99
10) Bromoethene	7.256	106	200647	11.75 ppbv	100
11) Trichlorofluoromethane	7.396	101	751926	11.69 ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.203	151	414581	11.85 ppbv	92
13) 1,1-Dichloroethene	9.288	61	481946	11.22 ppbv	94
14) Acetone	9.811	43	473379	12.12 ppbv	99
15) Carbon disulfide	10.006	76	758403	13.41 ppbv	98
16) 2-Propanol	10.438	45	441497	11.46 ppbv	99
17) Allyl chloride	10.833	41	818979	25.78 ppbv	92
18) Dichloromethane	11.374	49	385411	9.95 ppbv	89
19) tert-Butyl methyl ethe...	12.074	73	834881	13.03 ppbv	97
20) trans-1,2-Dichloroethene	12.098	61	402989	12.54 ppbv	94
21) Hexane	12.713	57	456606	11.90 ppbv	95
22) 1,1-Dichloroethane	13.443	63	554778	10.95 ppbv	99
23) Vinyl acetate	13.589	43	792972	11.81 ppbv	96
24) cis-1,2-Dichloroethene	14.897	61	397361	10.24 ppbv	93
25) 2-Butanone (MEK)	14.988	72	134206	12.41 ppbv #	93
26) Ethyl acetate	15.043	61	87476	11.54 ppbv #	91
27) Tetrahydrofuran	15.456	42	355298	10.87 ppbv	91
28) Chloroform	15.596	83	602604	11.25 ppbv	98
29) Cyclohexane	15.828	56	457504	11.26 ppbv	95
30) 1,1,1-Trichloroethane	15.876	97	662105	11.39 ppbv	98
31) Carbon tetrachloride	16.132	117	699236	11.87 ppbv	99
33) Benzene	16.631	78	883793	9.84 ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1430454	10.40 ppbv	99
35) 1,2-Dichloroethane	16.825	62	459488	9.74 ppbv	100
36) Heptane	16.971	43	555136	9.82 ppbv	93
37) Trichloroethene	17.859	130	358816	10.43 ppbv	99
38) 1,2-Dichloropropane	18.358	63	333275	9.60 ppbv	99
39) 1,4-Dioxane	18.559	88	160995	9.75 ppbv	93
40) Bromodichloromethane	18.821	83	646617	10.71 ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	547474	10.61 ppbv	97
42) 4-Methyl-2-pentanone (...	19.831	43	847627	10.85 ppbv	97
44) Toluene	20.068	91	1131987	10.06 ppbv	99
45) trans-1,3-Dichloropropene	20.536	75	574747	10.29 ppbv	96
46) 1,1,2-Trichloroethane	20.840	97	369113	10.22 ppbv	95
47) Tetrachloroethene	20.926	166	518246	10.23 ppbv	99
48) 2-Hexanone	21.181	43	890338	11.00 ppbv	97

Conc.
$= \frac{238863 (22)}{825821 (0.554)}$
= 11.49 ppbv
EM 3/14/14

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K09.D
Acq On : 14 Mar 2014 19:01
Instrument: HP5973K
Operator : EM
Sample : S14C061-SCV1
Misc : 10 ppbv SCV 1411087
ALS Vial : 34
Multiplier: 1

Quant Time: Mar 14 19:41:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	637504	11.02 ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	543771	10.03 ppbv	99
51) Chlorobenzene	22.398	112	845463	10.16 ppbv	98
52) Ethylbenzene	22.489	91	1571808	10.16 ppbv	99
53) m&p-Xylene	22.672	91	2403504	20.27 ppbv	100
54) o-Xylene	23.316	91	1193993	10.01 ppbv	98
55) Styrene	23.353	104	869059	9.50 ppbv	99
56) Bromoform	23.730	173	645346	10.94 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	802778	9.20 ppbv	99
58) 4-Ethyltoluene	24.667	105	3257791	22.50 ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	1359567	9.97 ppbv	99
60) 1,2,4-Trimethylbenzene	25.367	105	1307378	9.42 ppbv	99
61) 1,3-Dichlorobenzene	25.896	146	856385	9.10 ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	847582	8.96 ppbv	99
63) Benzyl chloride	26.255	91	1277778	10.59 ppbv	98
64) 1,2-Dichlorobenzene	26.644	146	830091	9.16 ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	650850	7.02 ppbv	100
66) Hexachlorobutadiene	29.248	225	706038	8.82 ppbv	99

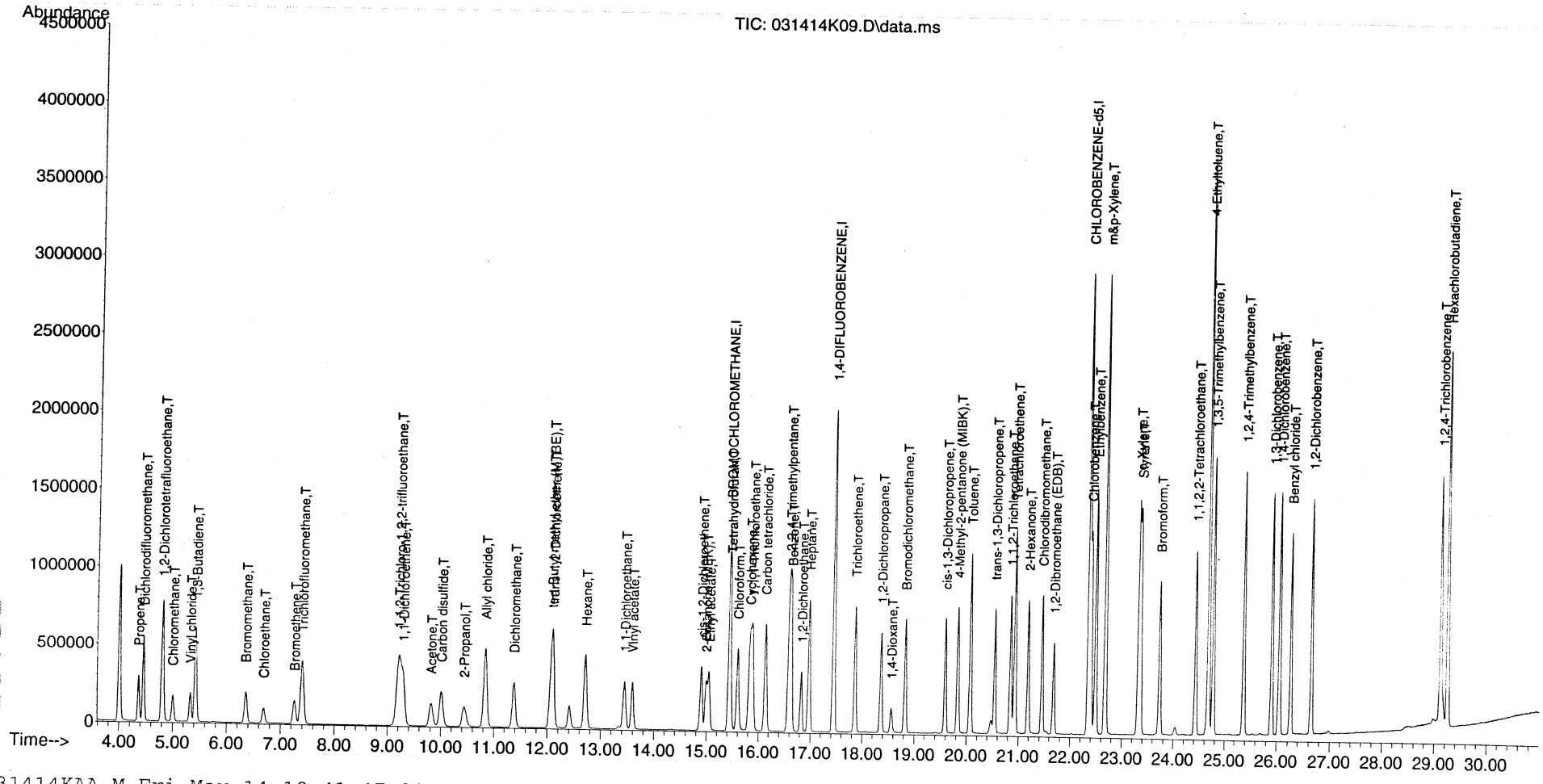
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K09.D
Acq On : 14 Mar 2014 19:01
Instrument: HP5973K
Operator : EM
Sample : S14C061-SCV1
Misc : 10 ppbv SCV 1411087
ALS Vial : 34
Multiplier: 1

Quant Time: Mar 14 19:41:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



031414KAA.M Fri Mar 14 19:41:47 2014 HP5973K

CALIBRATION AREA REPORT

Instrument Name: HP5973K
Sample Name: S14C061-SCV1
Misc Info: 10 ppbv SCV 1411087
Date Acquired: 3/14/2014 19:01
QLast Update: Fri Mar 14 18:45:41 201
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
1)	BROMOCHLOROMETHANE	886867	960089	980253	874386	1009459	926725
2)	Propene	27364	51826	117674	234213	355920	434038
3)	Dichlorodifluoromethane	88217	156535	364108	705873	1064062	1362958
4)	1,2-Dichlorotetrafluoroethane	76030	136805	316943	616482	936808	1253168
5)	Chloromethane	30459	57015	135483	257683	389727	505092
6)	Vinyl chloride	33718	57713	141611	275348	405614	550298
7)	1,3-Butadiene	23013	41775	101936	195813	293574	393266
8)	Bromomethane	24260	45435	107718	203217	320281	400986
9)	Chloroethane	17762	32894	78952	144174	239915	285351
10)	Bromoethene	23884	41090	95270	186952	299176	373606
11)	Trichlorofluoromethane	91004	160527	374244	728841	1144169	1460613
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	42976	80643	186527	363094	564305	727284
13)	1,1-Dichloroethene	50113	96192	233761	445095	710232	880998
14)	Acetone	48055	97212	224398	453318	732183	877348
15)	Carbon disulfide	71774	138821	330783	651653	1034311	1260211
16)	2-Propanol	42241	92065	227237	470472	772539	926780
17)	Allyl chloride	38416	78819	191315	377671	624901	725643
18)	Dichloromethane	59462	98710	202832	366628	567187	677763
19)	tert-Butyl methyl ether (MTBE)	75961	158843	380347	766780	1235396	1536498
20)	trans-1,2-Dichloroethene	39508	75707	181579	359932	580152	699056
21)	Hexane	44823	91715	221062	440622	722776	847014
22)	1,1-Dichloroethane	60309	117022	274051	528776	849696	1034567
23)	Vinyl acetate	75735	153166	386294	829103	1382409	1611174
24)	cis-1,2-Dichloroethene	47943	92275	218186	423297	686018	824362
25)	2-Butanone (MEK)	13288	25536	60405	128795	206593	250516
26)	Ethyl acetate	8930	17685	43958	87429	147202	172452
27)	Tetrahydrofuran	37946	78303	185390	372489	620735	733846
28)	Chloroform	68644	127307	299881	583755	931056	1182320
29)	Cyclohexane	51213	97094	234801	465940	765021	925217
30)	1,1,1-Trichloroethane	74195	135457	320314	634978	990518	1276858
31)	Carbon tetrachloride	77141	140257	325733	653636	1018718	1343632
32)	1,4-DIFLUOROBENZENE	2193776	2274176	2358221	2120842	2396399	2329322
33)	Benzene	101601	195582	457927	881475	1409302	1752542
34)	2,2,4-Trimethylpentane	153855	300184	722854	1431544	2363002	2872994
35)	1,2-Dichloroethane	52814	97414	227094	451996	721708	910075
36)	Heptane	61831	122302	298282	588819	1002360	1175668
37)	Trichloroethene	39576	73125	171041	337166	537068	695321
38)	1,2-Dichloropropane	40316	76806	178850	343067	570518	684914
39)	1,4-Dioxane	18040	36126	86116	171168	285188	356476
40)	Bromodichloromethane	68900	130582	307409	623483	1001126	1262862
41)	cis-1,3-Dichloropropene	59440	110186	262131	518798	853430	1055330
42)	4-Methyl-2-pentanone (MIBK)	87703	165234	400774	819898	1390415	1639788

43)	CHLOROBENZENE-d5	2118293	2021646	2084965	1927062	2110930	2069944
44)	Toluene	131213	222050	527295	1053665	1686301	2108491
45)	trans-1,3-Dichloropropene	64374	115211	273436	563837	889175	1137550
46)	1,1,2-Trichloroethane	40665	76058	172338	339140	542712	682611
47)	Tetrachloroethene	57186	100340	230499	467184	726125	952340
48)	2-Hexanone	83534	159433	392196	801379	1344705	1604353
49)	Chlorodibromomethane	64401	113271	272962	578027	898933	1162326
50)	1,2-Dibromoethane (EDB)	61739	109618	255133	527035	812535	1038907
51)	Chlorobenzene	98555	168964	398120	818279	1238646	1572692
52)	Ethylbenzene	175941	303272	722671	1499237	2313621	2924596
53)	m&p-Xylene	263359	451931	1115649	2313105	3591895	4600930
54)	o-Xylene	134427	235881	561744	1150626	1822882	2338380
55)	Styrene	98542	174828	424568	868387	1388060	1792227
56)	Bromoform	62498	114744	267099	592626	921397	1219347
57)	1,1,2,2-Tetrachloroethane	97617	179690	410578	808675	1314143	1640616
58)	4-Ethyltoluene	156250	289982	686148	1426318	2273803	2939542
59)	1,3,5-Trimethylbenzene	149723	268041	648473	1318677	2082327	2726228
60)	1,2,4-Trimethylbenzene	148378	269840	645624	1319880	2096759	2691445
61)	1,3-Dichlorobenzene	99564	178194	423203	869687	1383952	1842863
62)	1,4-Dichlorobenzene	101826	177128	423511	871930	1397409	1844025
63)	Benzyl chloride	123174	224572	548108	1239946	2007290	2594462
64)	1,2-Dichlorobenzene	95675	169962	411659	839850	1333082	1773861
65)	1,2,4-Trichlorobenzene	90176	159021	372957	791064	1253916	1717400
66)	Hexachlorobutadiene	86197	152200	361183	703546	1038149	1404010

CHEMSTATION VS LIMS CONCENTRATION REPORT

Instrument Name: HP5973K
Sample Name: S14C061-SCV1
Misc Info: 10 ppbv SCV 1411087
Date Acquired: 3/14/2014 19:01
QLast Update: Fri Mar 14 18:45:41 2C
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
		1	2	5	10	15	20
1)	BROMOCHLOROMETHANE						
2)	Propene	OK	OK	OK	OK	OK	OK
3)	Dichlorodifluoromethane	OK	OK	OK	OK	OK	OK
4)	1,2-Dichlorotetrafluoroethane	OK	OK	OK	OK	OK	OK
5)	Chloromethane	OK	OK	OK	OK	OK	OK
6)	Vinyl chloride	OK	OK	OK	OK	OK	OK
7)	1,3-Butadiene	OK	OK	OK	OK	OK	OK
8)	Bromomethane	OK	OK	OK	OK	OK	OK
9)	Chloroethane	OK	OK	OK	OK	OK	OK
10)	Bromoethene	OK	OK	OK	OK	OK	OK
11)	Trichlorofluoromethane	OK	OK	OK	OK	OK	OK
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	OK	OK	OK	OK	OK	OK
13)	1,1-Dichloroethene	OK	OK	OK	OK	OK	OK
14)	Acetone	OK	OK	OK	OK	OK	OK
15)	Carbon disulfide	OK	OK	OK	OK	OK	OK
16)	2-Propanol	OK	OK	OK	OK	OK	OK
17)	Allyl chloride	OK	OK	OK	OK	OK	OK
18)	Dichloromethane	OK	OK	OK	OK	OK	OK
19)	tert-Butyl methyl ether (MTBE)	OK	OK	OK	OK	OK	OK
20)	trans-1,2-Dichloroethene	OK	OK	OK	OK	OK	OK
21)	Hexane	OK	OK	OK	OK	OK	OK
22)	1,1-Dichloroethane	OK	OK	OK	OK	OK	OK
23)	Vinyl acetate	OK	OK	OK	OK	OK	OK
24)	cis-1,2-Dichloroethene	OK	OK	OK	OK	OK	OK
25)	2-Butanone (MEK)	OK	OK	OK	OK	OK	OK
26)	Ethyl acetate	OK	OK	OK	OK	OK	OK
27)	Tetrahydrofuran	OK	OK	OK	OK	OK	OK
28)	Chloroform	OK	OK	OK	OK	OK	OK
29)	Cyclohexane	OK	OK	OK	OK	OK	OK
30)	1,1,1-Trichloroethane	OK	OK	OK	OK	OK	OK
31)	Carbon tetrachloride	OK	OK	OK	OK	OK	OK
32)	1,4-DIFLUOROBENZENE						
33)	Benzene	OK	OK	OK	OK	OK	OK
34)	2,2,4-Trimethylpentane	OK	OK	OK	OK	OK	OK
35)	1,2-Dichloroethane	OK	OK	OK	OK	OK	OK
36)	Heptane	OK	OK	OK	OK	OK	OK
37)	Trichloroethene	OK	OK	OK	OK	OK	OK
38)	1,2-Dichloropropane	OK	OK	OK	OK	OK	OK
39)	1,4-Dioxane	OK	OK	OK	OK	OK	OK
40)	Bromodichloromethane	OK	OK	OK	OK	OK	OK
41)	cis-1,3-Dichloropropene	OK	OK	OK	OK	OK	OK
42)	4-Methyl-2-pentanone (MIBK)	OK	OK	OK	OK	OK	OK
43)	CHLOROBENZENE-d5						

44)	Toluene	OK	OK	OK	OK	OK	OK
45)	trans-1,3-Dichloropropene	OK	OK	OK	OK	OK	OK
46)	1,1,2-Trichloroethane	OK	OK	OK	OK	OK	OK
47)	Tetrachloroethene	OK	OK	OK	OK	OK	OK
48)	2-Hexanone	OK	OK	OK	OK	OK	OK
49)	Chlorodibromomethane	OK	OK	OK	OK	OK	OK
50)	1,2-Dibromoethane (EDB)	OK	OK	OK	OK	OK	OK
51)	Chlorobenzene	OK	OK	OK	OK	OK	OK
52)	Ethylbenzene	OK	OK	OK	OK	OK	OK
53)	m&p-Xylene	OK	OK	OK	OK	OK	OK
54)	o-Xylene	OK	OK	OK	OK	OK	OK
55)	Styrene	OK	OK	OK	OK	OK	OK
56)	Bromoform	OK	OK	OK	OK	OK	OK
57)	1,1,2,2-Tetrachloroethane	OK	OK	OK	OK	OK	OK
58)	4-Ethyltoluene	OK	OK	OK	OK	OK	OK
59)	1,3,5-Trimethylbenzene	OK	OK	OK	OK	OK	OK
60)	1,2,4-Trimethylbenzene	OK	OK	OK	OK	OK	OK
61)	1,3-Dichlorobenzene	OK	OK	OK	OK	OK	OK
62)	1,4-Dichlorobenzene	OK	OK	OK	OK	OK	OK
63)	Benzyl chloride	OK	OK	OK	OK	OK	OK
64)	1,2-Dichlorobenzene	OK	OK	OK	OK	OK	OK
65)	1,2,4-Trichlorobenzene	OK	OK	OK	OK	OK	OK
66)	Hexachlorobutadiene	OK	OK	OK	OK	OK	OK

LIMS CONCENTRATION REPORT

Instrument Name: HP5973K
Sample Name: S14C061-SCV1
Misc Info: 10 ppbv SCV 1411087
Date Acquired: 3/14/2014 19:01
QLast Update: Fri Mar 14 18:45:41 20
Operator: EM

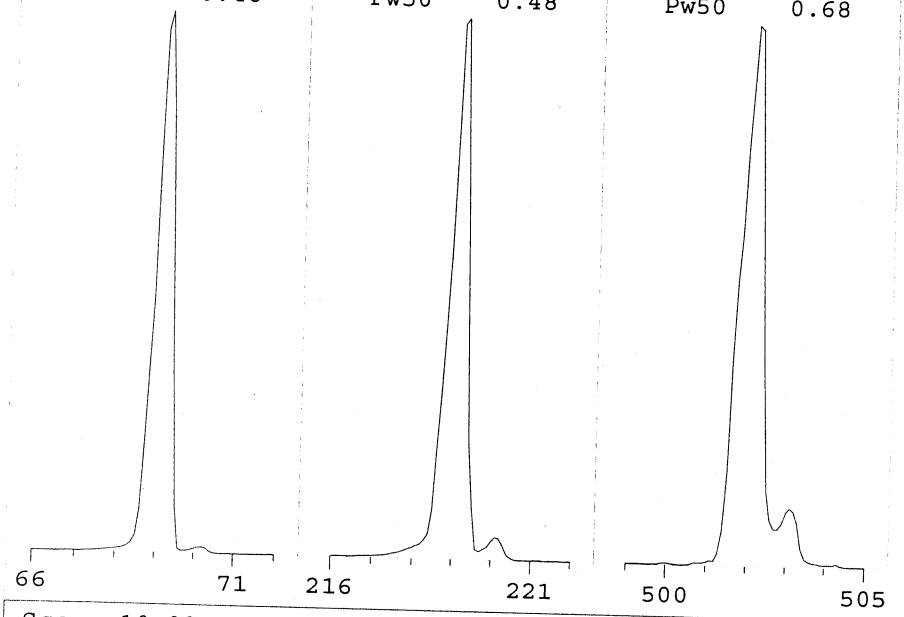
#	Name	Amount	L1	L2	L3	L4	L5	L6
			1	2	5	10	15	20
1)	BROMOCHLOROMETHANE	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
2)	Propene	0.0206	1.030	2.06	5.15	10.3	15.45	20.6
3)	Dichlorodifluoromethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
4)	1,2-Dichlorotetrafluoroethane	0.021	1.05	2.1	5.25	10.5	15.75	21
5)	Chloromethane	0.021	1.05	2.1	5.25	10.5	15.75	21
6)	Vinyl chloride	0.021	1.05	2.1	5.25	10.5	15.75	21
7)	1,3-Butadiene	0.02	1	2	5	10	15	20
8)	Bromomethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
9)	Chloroethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
10)	Bromoethene	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
11)	Trichlorofluoromethane	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0194	0.97	1.94	4.85	9.7	14.55	19.4
13)	1,1-Dichloroethene	0.0192	0.96	1.92	4.8	9.6	14.4	19.2
14)	Acetone	0.021	1.05	2.1	5.25	10.5	15.75	21
15)	Carbon disulfide	0.021	1.05	2.1	5.25	10.5	15.75	21
16)	2-Propanol	0.0212	1.06	2.12	5.3	10.6	15.9	21.2
17)	Allyl chloride	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
18)	Dichloromethane	0.0196	0.98	1.96	4.9	9.8	14.7	19.6
19)	tert-Butyl methyl ether (MTBE)	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
20)	trans-1,2-Dichloroethene	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
21)	Hexane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
22)	1,1-Dichloroethane	0.0194	0.97	1.94	4.85	9.7	14.55	19.4
23)	Vinyl acetate	0.0212	1.06	2.12	5.3	10.6	15.9	21.2
24)	cis-1,2-Dichloroethene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
25)	2-Butanone (MEK)	0.021	1.05	2.1	5.25	10.5	15.75	21
26)	Ethyl acetate	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
27)	Tetrahydrofuran	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
28)	Chloroform	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
29)	Cyclohexane	0.021	1.05	2.1	5.25	10.5	15.75	21
30)	1,1,1-Trichloroethane	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
31)	Carbon tetrachloride	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
32)	1,4-DIFLUOROBENZENE	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
33)	Benzene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
34)	2,2,4-Trimethylpentane	0.021	1.05	2.1	5.25	10.5	15.75	21
35)	1,2-Dichloroethane	0.0196	0.98	1.96	4.9	9.8	14.7	19.6
36)	Heptane	0.021	1.05	2.1	5.25	10.5	15.75	21
37)	Trichloroethene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
38)	1,2-Dichloropropane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
39)	1,4-Dioxane	0.021	1.05	2.1	5.25	10.5	15.75	21
40)	Bromodichloromethane	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
41)	cis-1,3-Dichloropropene	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
42)	4-Methyl-2-pentanone (MIBK)	0.021	1.05	2.1	5.25	10.5	15.75	21
43)	CHLOROBENZENE-d5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
44)	Toluene	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
45)	trans-1,3-Dichloropropene	0.0214	1.07	2.14	5.35	10.7	16.05	21.4
46)	1,1,2-Trichloroethane	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
47)	Tetrachloroethene	0.02	1	2	5	10	15	20
48)	2-Hexanone	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
49)	Chlorodibromomethane	0.0208	1.04	2.08	5.2	10.4	15.6	20.8

50)	1,2-Dibromoethane (EDB)	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
51)	Chlorobenzene	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
52)	Ethylbenzene	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
53)	m&p-Xylene	0.0408	2.04	4.08	10.2	20.4	30.6	40.8
54)	o-Xylene	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
55)	Styrene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
56)	Bromoform	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
57)	1,1,2,2-Tetrachloroethane	0.0204	1.02	2.04	5.1	10.2	15.3	20.4
58)	4-Ethyltoluene	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
59)	1,3,5-Trimethylbenzene	0.0206	1.03	2.06	5.15	10.3	15.45	20.6
60)	1,2,4-Trimethylbenzene	0.0202	1.01	2.02	5.05	10.1	15.15	20.2
61)	1,3-Dichlorobenzene	0.0198	0.99	1.98	4.95	9.9	14.85	19.8
62)	1,4-Dichlorobenzene	0.0198	0.99	1.98	4.95	9.9	14.85	19.8
63)	Benzyl chloride	0.0208	1.04	2.08	5.2	10.4	15.6	20.8
64)	1,2-Dichlorobenzene	0.0198	0.99	1.98	4.95	9.9	14.85	19.8
65)	1,2,4-Trichlorobenzene	0.0182	0.91	1.82	4.55	9.1	13.65	18.2
66)	Hexachlorobutadiene	0.019	0.95	1.9	4.75	9.5	14.25	19

Fri Mar 14 11:51:57 2014 5973N
C:\msdchem\1\5973N\BFB031414KA.u

Instrument: HP5973K
US03960556

Mass	69.20	Mass	219.20	Mass	502.10
Ab	251864	Ab	105818	Ab	11586
Pw50	0.46	Pw50	0.48	Pw50	0.68

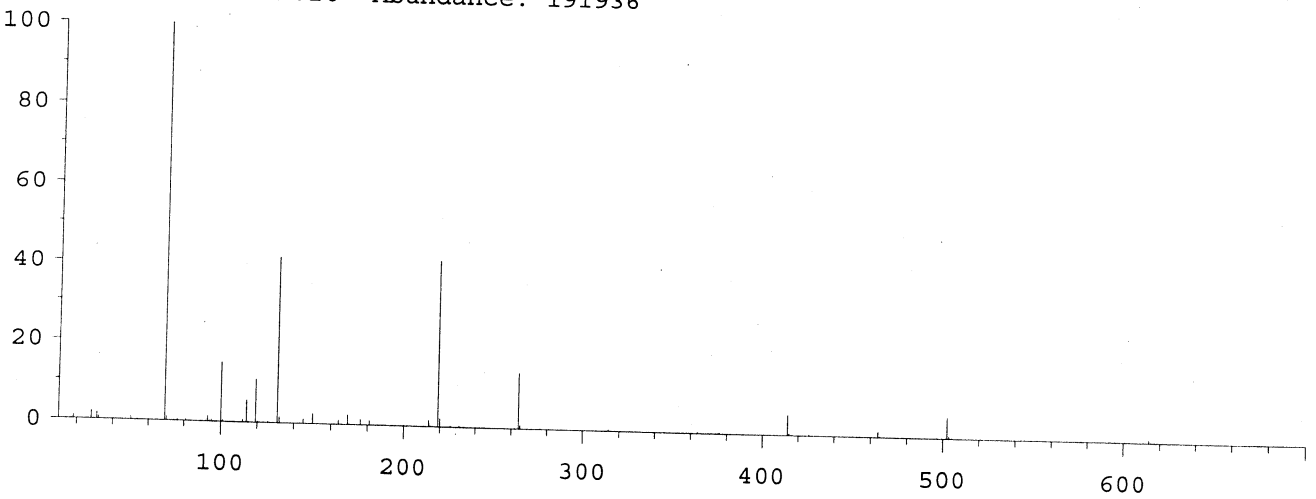


Ion Pol	Pos	MassGain	99
		MassOffs	-8
Emission	34.6	AmuGain	2003
EIEnrgy	69.9	AmuOffs	125
Filament	1	Wid219	-0.016
		DC Pol	Pos
Repeller	32.97		
IonFcus	86.4	HEDEnab	On
EntLens	16.5	EMVolts	1482
EntOffs	19.07		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
84 peaks Base: 69.20 Abundance: 191936



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.20	191936	100.00	70.20	2108	1.10
219.10	79952	41.66	220.10	3718	4.65
502.10	9993	5.21	503.10	1177	11.78

Air/Water Check: H20~1.03% N2~1.99% O2~0.76% CO2~0.08% N2/H2O~193.32%

Column Flow: Front: 1.499 Back: 0 ml/min. Interface Temp: 260

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 47258
Repeller Maximum 35 volts using ion 219; Gain Factor 0.47

MassGain Values(Samples): 99(3) 99(2) 99(1) 99(0) 99(FS)

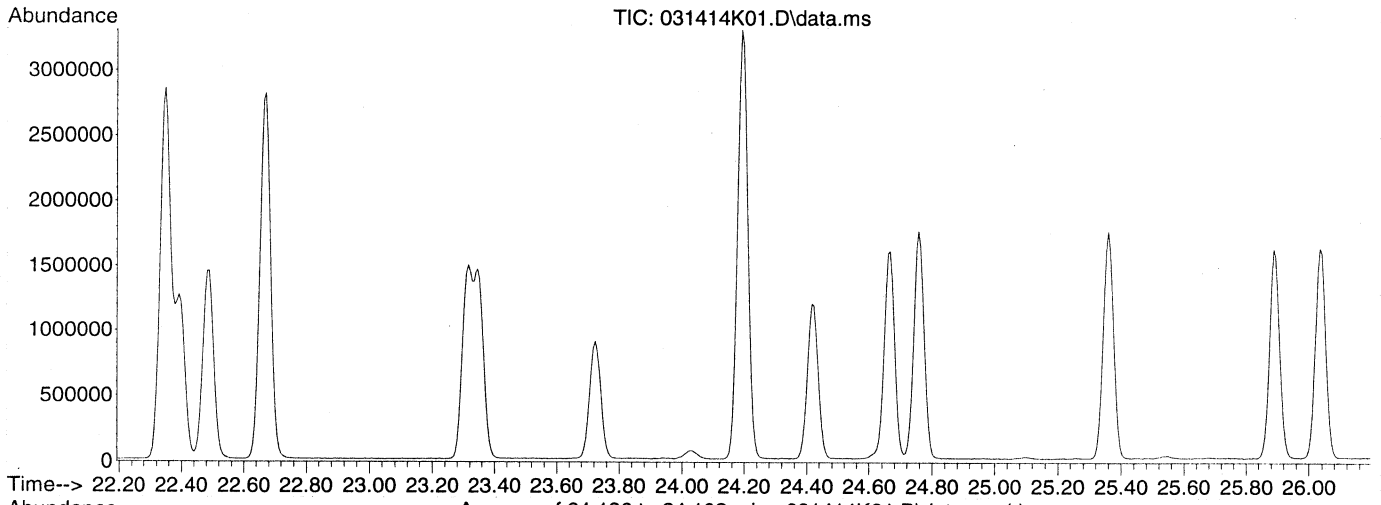
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	125.0	125.0	125.0	125.0	125.0	125.0	125.0
Entrance Lens Offset:	19.1	19.1	19.1	19.1	19.1	19.1	19.1

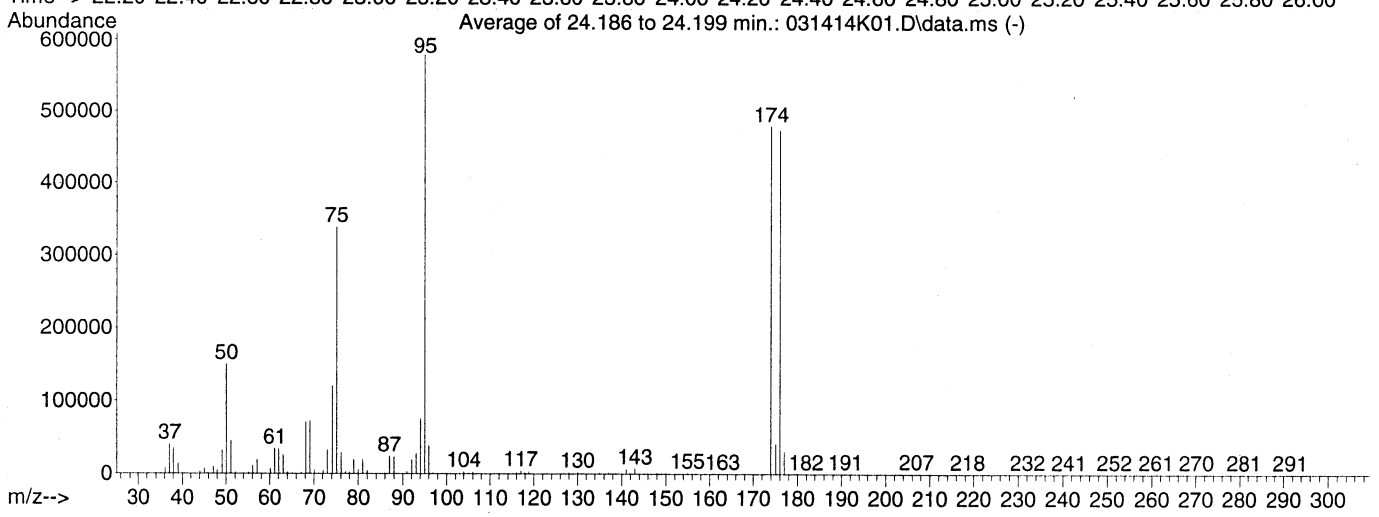
BFB

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K01.D
Acq On : 14 Mar 2014 12:42
Operator : EM
Sample : S14C061-TUN1
Misc : BFB STD /IS 1350050/10ppbv STD•
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Title : TO15
Last Update : Thu Mar 13 18:10:19 2014





AutoFind: Scans 3387, 3388, 3389; Background Corrected with Scan 3373

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	25.9	149916	PASS
75	95	30	66	58.5	338910	PASS
95	95	100	100	100.0	579614	PASS
96	95	5	9	6.6	38501	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.8	480007	PASS
175	174	4	9	8.5	40970	PASS
176	174	93	101	98.8	474143	PASS
177	176	5	9	6.5	31034	PASS

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	73	46.05	414	56.10	11013	65.90	83
36.10	7563	46.30	218	57.10	19374	67.05	2132
37.10	40715	47.10	9866	58.00	160	68.10	70723
38.05	35013	48.00	4953	58.15	607	69.05	72575
39.05	13710	49.10	32451	59.00	17	70.10	5228
40.10	386	50.05	149916	60.10	7223	71.00	132
41.00	136	51.10	45331	61.10	34410	71.30	42
42.10	159	52.10	1788	62.05	34120	72.10	4101
43.05	164	53.05	141	63.10	25593	73.05	32803
44.10	3665	54.15	133	64.00	2516	74.10	119992
45.10	6788	55.10	1752	65.05	808	75.10	338910

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.10	28997	87.00	24081	97.95	156	105.00	1033
77.05	3362	88.00	22612	98.95	60	106.00	2854
77.95	2248	89.20	6	99.30	10	106.95	570
79.00	19470	89.80	30	99.70	15	107.75	56
80.00	5541	91.00	2701	100.30	30	108.30	74
81.00	19725	92.05	19239	100.60	27	108.50	19
82.00	4436	93.05	28059	101.50	17	108.95	110
83.05	421	94.05	76083	102.20	72	109.95	394
84.00	37	95.10	579614	103.00	117	110.90	578
84.75	58	96.05	38501	103.20	150	112.00	534
85.95	638	97.00	1140	104.00	2969	113.00	705

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
114.95	693	124.00	411	132.30	44	139.90	225
115.95	2332	124.95	285	133.00	107	140.20	260
117.00	4342	125.90	41	133.20	120	141.00	6755
117.90	2357	126.10	207	133.95	239	141.85	1010
118.90	3545	126.85	138	135.00	1454	143.00	7206
120.05	136	128.00	1877	135.90	218	143.95	480
120.60	19	128.95	1057	137.00	1346	145.05	657
121.20	42	130.00	2350	137.90	48	145.90	793
121.40	16	130.85	978	138.20	72	147.00	432
121.90	189	131.70	53	138.70	56	147.95	1558
122.95	202	131.90	90	139.05	284	148.95	386

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
150.05	632	157.90	44	166.70	15	173.95	480007
150.85	138	158.20	70	167.30	12	175.00	40970
151.20	20	159.00	805	167.85	79	175.95	474143
151.80	115	159.85	119	168.10	34	177.00	31034
152.05	182	160.95	863	168.40	26	177.90	877
152.95	489	162.05	28	169.10	88	179.85	32
153.90	294	162.95	127	170.00	108	180.60	10
154.95	1602	163.70	25	170.30	104	181.20	8
155.80	76	164.70	28	170.50	142	181.60	7
156.00	196	164.95	14	171.00	126	182.00	15
156.90	1274	166.50	15	171.90	619	183.10	17

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.55	22	197.10	26	207.05	655	222.50	32
187.95	98	198.00	8	209.10	67	223.20	56
188.95	10	199.60	8	210.10	56	224.10	10
189.55	29	200.80	48	210.25	64	224.70	13
190.90	113	201.80	15	213.00	28	225.40	13
191.80	83	202.10	33	215.10	41	226.95	38
192.30	78	202.90	11	215.90	35	227.80	16
193.15	49	203.20	22	218.60	56	228.20	8
194.90	70	203.50	21	219.20	19	229.60	9

196.05	3	203.70	19	219.80	15	230.00	34
196.40	16	204.60	8	220.95	32	230.40	12

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.00	28	242.60	7	250.90	66	257.50	11
231.40	28	243.35	17	251.65	71	259.20	20
232.10	114	244.80	16	253.05	101	259.95	70
233.10	16	246.05	25	253.80	132	261.00	173
235.00	11	246.30	10	254.20	69	261.90	67
236.00	30	246.80	37	254.40	29	262.40	8
237.50	26	249.20	45	255.00	94	263.15	50
238.90	37	249.50	24	255.90	23	263.90	8
239.20	14	249.80	1	256.20	9	264.45	33
239.95	73	250.10	20	256.70	14	264.80	30
241.35	20	250.50	31	257.10	11	265.40	17

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.60	20	274.20	19	292.50	15		
266.95	67	275.20	14	292.90	7		
268.20	80	277.20	16	293.10	12		
269.05	152	280.20	9	293.70	2		
270.00	177	281.05	130	294.20	10		
270.15	226	284.70	12	294.95	6		
270.90	88	285.10	29	295.80	31		
272.30	10	286.05	31	296.65	21		
272.90	7	287.05	18	297.25	30		
273.20	33	288.85	27	299.20	7		
273.40	19	291.50	42				

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K02.D
Acq On : 14 Mar 2014 13:29
Instrument: HP5973K
Operator : EM
Sample : S14C061-CCV1
Misc : 10 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 26 19:12:29 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

RR ICAL
NU
em 3/26/14

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	141#	0.00
2	T	Propene	0.496	0.544	-9.7	158#	0.00
3	T	Dichlorodifluoromethane	1.986	1.687	15.1	109	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.665	1.448	13.0	114	0.00
5	T	Chloromethane	0.581	0.594	-2.2	150#	0.00
6	T	Vinyl chloride	0.682	0.606	11.1	118	0.00
7	T	1,3-Butadiene	0.493	0.445	9.7	120	0.00
8	T	Bromomethane	0.592	0.447	24.5	97	0.00
9	T	Chloroethane	0.390	0.355	9.0	120	0.00
10	T	Bromoethene	0.516	0.463	10.3	114	-0.01
11	T	Trichlorofluoromethane	2.074	1.683	18.9	106	-0.01
12	T	1,1,2-Trichloro-1,2,2-trifl	1.218	0.910	25.3	95	-0.02
13	T	1,1-Dichloroethene	1.262	1.169	7.4	125	-0.01
14	T	Acetone	1.029	1.050	-2.0	135	-0.01
15	T	Carbon disulfide	1.662	1.507	9.3	120	0.00
16	T	2-Propanol	1.009	1.096	-8.6	142#	0.00
17	T	Allyl chloride	0.823	0.892	-8.4	148#	0.00
18	T	Dichloromethane	1.034	0.936	9.5	144#	0.00
19	T	tert-Butyl methyl ether (MT	1.952	1.784	8.6	114	0.00
20	T	trans-1,2-Dichloroethene	0.935	0.888	5.0	126	0.00
21	T	Hexane	1.082	1.083	-0.1	134	0.00
22	T	1,1-Dichloroethane	1.491	1.334	10.5	121	0.00
23	T	Vinyl acetate	1.768	1.938	-9.6	142#	0.00
24	T	cis-1,2-Dichloroethene	1.108	1.049	5.3	128	0.00
25	T	2-Butanone (MEK)	0.308	0.303	1.6	123	0.00
26	T	Ethyl acetate	0.204	0.213	-4.4	144#	0.00
27	T	Tetrahydrofuran	0.810	0.921	-13.7	157#	0.00
28	T	Chloroform	1.625	1.410	13.2	116	0.00
29	T	Cyclohexane	1.105	1.122	-1.5	139	0.00
30	T	1,1,1-Trichloroethane	1.856	1.508	18.8	108	0.00
31	T	Carbon tetrachloride	1.954	1.512	22.6	102	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	107	0.00
33	T	Benzene	0.808	0.894	-10.6	124	0.00
34	T	2,2,4-Trimethylpentane	1.149	1.423	-23.8	138	0.00
35	T	1,2-Dichloroethane	0.437	0.458	-4.8	115	0.00
36	T	Heptane	0.439	0.590	-34.4#	154#	0.00
37	T	Trichloroethene	0.342	0.338	1.2	105	0.00
38	T	1,2-Dichloropropane	0.296	0.349	-17.9	134	0.00
39	T	1,4-Dioxane	0.154	0.169	-9.7	116	0.00
40	T	Bromodichloromethane	0.560	0.597	-6.6	114	0.00
41	T	cis-1,3-Dichloropropene	0.470	0.515	-9.6	121	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.619	0.813	-31.3#	147#	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	102	0.00
44	T	Toluene	1.079	1.232	-14.2	119	0.00
45	T	trans-1,3-Dichloropropene	0.536	0.604	-12.7	115	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K02.D
Acq On : 14 Mar 2014 13:29
Instrument: HP5973K
Operator : EM
Sample : S14C061-CCV1
Misc : 10 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 26 19:12:29 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 T	1,1,2-Trichloroethane	0.353	0.393	-11.3	116	0.00
47 T	Tetrachloroethene	0.530	0.537	-1.3	101	0.00
48 T	2-Hexanone	0.670	0.941	-40.4#	147#	0.00
49 T	Chlorodibromomethane	0.598	0.626	-4.7	104	0.00
50 T	1,2-Dibromoethane (EDB)	0.544	0.569	-4.6	106	0.00
51 T	Chlorobenzene	0.833	0.893	-7.2	110	0.00
52 T	Ethylbenzene	1.518	1.659	-9.3	113	0.00
53 T	m&p-Xylene	1.188	1.281	-7.8	110	0.00
54 T	o-Xylene	1.208	1.287	-6.5	109	0.00
55 T	Styrene	0.929	1.002	-7.9	108	0.00
56 T	Bromoform	0.652	0.652	0.0	94	0.00
57 T	1,1,2,2-Tetrachloroethane	0.846	0.933	-10.3	115	0.00
58 T	4-Ethyltoluene	1.505	1.577	-4.8	103	0.00
59 T	1,3,5-Trimethylbenzene	1.425	1.455	-2.1	103	0.00
60 T	1,2,4-Trimethylbenzene	1.472	1.491	-1.3	103	0.00
61 T	1,3-Dichlorobenzene	1.040	1.017	2.2	99	0.00
62 T	1,4-Dichlorobenzene	1.042	1.013	2.8	99	0.00
63 T	Benzyl chloride	1.268	1.386	-9.3	108	0.00
64 T	1,2-Dichlorobenzene	1.013	0.980	3.3	96	0.00
65 T	1,2,4-Trichlorobenzene	1.031	0.993	3.7	92	0.00
66 T	Hexachlorobutadiene	0.897	0.842	6.1	89	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K02.D
Acq On : 14 Mar 2014 13:29
Instrument: HP5973K
Operator : EM
Sample : S14C061-CCV1
Misc : 10 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 26 19:12:29 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	980697	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2378986	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2027486	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	249994	11.31	ppbv	98
3) Dichlorodifluoromethane	4.457	85	774704	8.75	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	677786	9.13	ppbv	90
5) Chloromethane	5.005	50	278232	10.74	ppbv	99
6) Vinyl chloride	5.327	62	283525	9.32	ppbv	99
7) 1,3-Butadiene	5.425	54	198365	9.03	ppbv	92
8) Bromomethane	6.356	94	205172	7.78	ppbv	99
9) Chloroethane	6.684	64	162986	9.38	ppbv	98
10) Bromoethene	7.250	106	214515	9.33	ppbv	96
11) Trichlorofluoromethane	7.396	101	802809	8.68	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.203	151	393497	7.25	ppbv	89
13) 1,1-Dichloroethene	9.282	61	500180	8.89	ppbv	93
14) Acetone	9.805	43	491398	10.71	ppbv	99
15) Carbon disulfide	10.006	76	705439	9.52	ppbv	98
16) 2-Propanol	10.444	45	518191	11.52	ppbv	99
17) Allyl chloride	10.839	41	425474	11.59	ppbv	90
18) Dichloromethane	11.374	49	409157	8.88	ppbv	86
19) tert-Butyl methyl ethe...	12.074	73	851336	9.78	ppbv	94
20) trans-1,2-Dichloroethene	12.092	61	403684	9.69	ppbv	90
21) Hexane	12.707	57	497408	10.32	ppbv	93
22) 1,1-Dichloroethane	13.443	63	576845	8.68	ppbv	99
23) Vinyl acetate	13.589	43	915843	11.62	ppbv	94
24) cis-1,2-Dichloroethene	14.897	61	472243	9.56	ppbv	90
25) 2-Butanone (MEK)	14.988	72	141713	10.32	ppbv #	72
26) Ethyl acetate	15.043	61	98995	10.90	ppbv #	87
27) Tetrahydrofuran	15.450	42	422871	11.71	ppbv	86
28) Chloroform	15.596	83	641402	8.85	ppbv	95
29) Cyclohexane	15.828	56	525111	10.66	ppbv	91
30) 1,1,1-Trichloroethane	15.876	97	679334	8.21	ppbv	97
31) Carbon tetrachloride	16.132	117	694338	7.97	ppbv	99
33) Benzene	16.631	78	977162	11.18	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1615954	13.00	ppbv	99
35) 1,2-Dichloroethane	16.819	62	485581	10.27	ppbv	99
36) Heptane	16.971	43	669685	14.10	ppbv	89
37) Trichloroethene	17.860	130	369181	9.99	ppbv	98
38) 1,2-Dichloropropane	18.358	63	389291	12.17	ppbv	98
39) 1,4-Dioxane	18.559	88	192143	11.55	ppbv	88
40) Bromodichloromethane	18.821	83	671147	11.08	ppbv	97
41) cis-1,3-Dichloropropene	19.587	75	574092	11.30	ppbv	97
42) 4-Methyl-2-pentanone (...	19.825	43	923412	13.79	ppbv	95
44) Toluene	20.068	91	1158167	11.65	ppbv	98
45) trans-1,3-Dichloropropene	20.536	75	595972	12.05	ppbv	94
46) 1,1,2-Trichloroethane	20.840	97	373611	11.50	ppbv	95
47) Tetrachloroethene	20.926	166	495172	10.13	ppbv	99
48) 2-Hexanone	21.181	43	902381	14.61	ppbv	95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K02.D
Acq On : 14 Mar 2014 13:29
Instrument: HP5973K
Operator : EM
Sample : S14C061-CCV1
Misc : 10 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 26 19:12:29 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	599719	10.88	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.674	107	540118	10.77	ppbv	99
51) Chlorobenzene	22.398	112	855804	11.15	ppbv	98
52) Ethylbenzene	22.489	91	1559692	11.15	ppbv	99
53) m&p-Xylene	22.672	91	2409194	22.01	ppbv	99
54) o-Xylene	23.317	91	1221833	10.98	ppbv	100
55) Styrene	23.353	104	932471	10.90	ppbv	99
56) Bromoform	23.724	173	619489	10.31	ppbv	98
57) 1,1,2,2-Tetrachloroethane	24.424	83	876890	11.25	ppbv	97
58) 4-Ethyltoluene	24.667	105	1511377	10.90	ppbv	99
59) 1,3,5-Trimethylbenzene	24.758	105	1381224	10.52	ppbv	100
60) 1,2,4-Trimethylbenzene	25.361	105	1388063	10.23	ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	928452	9.69	ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	924896	9.63	ppbv	99
63) Benzyl chloride	26.255	91	1328739	11.37	ppbv	97
64) 1,2-Dichlorobenzene	26.644	146	894278	9.58	ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	833385	8.77	ppbv	99
66) Hexachlorobutadiene	29.248	225	737380	8.92	ppbv	99

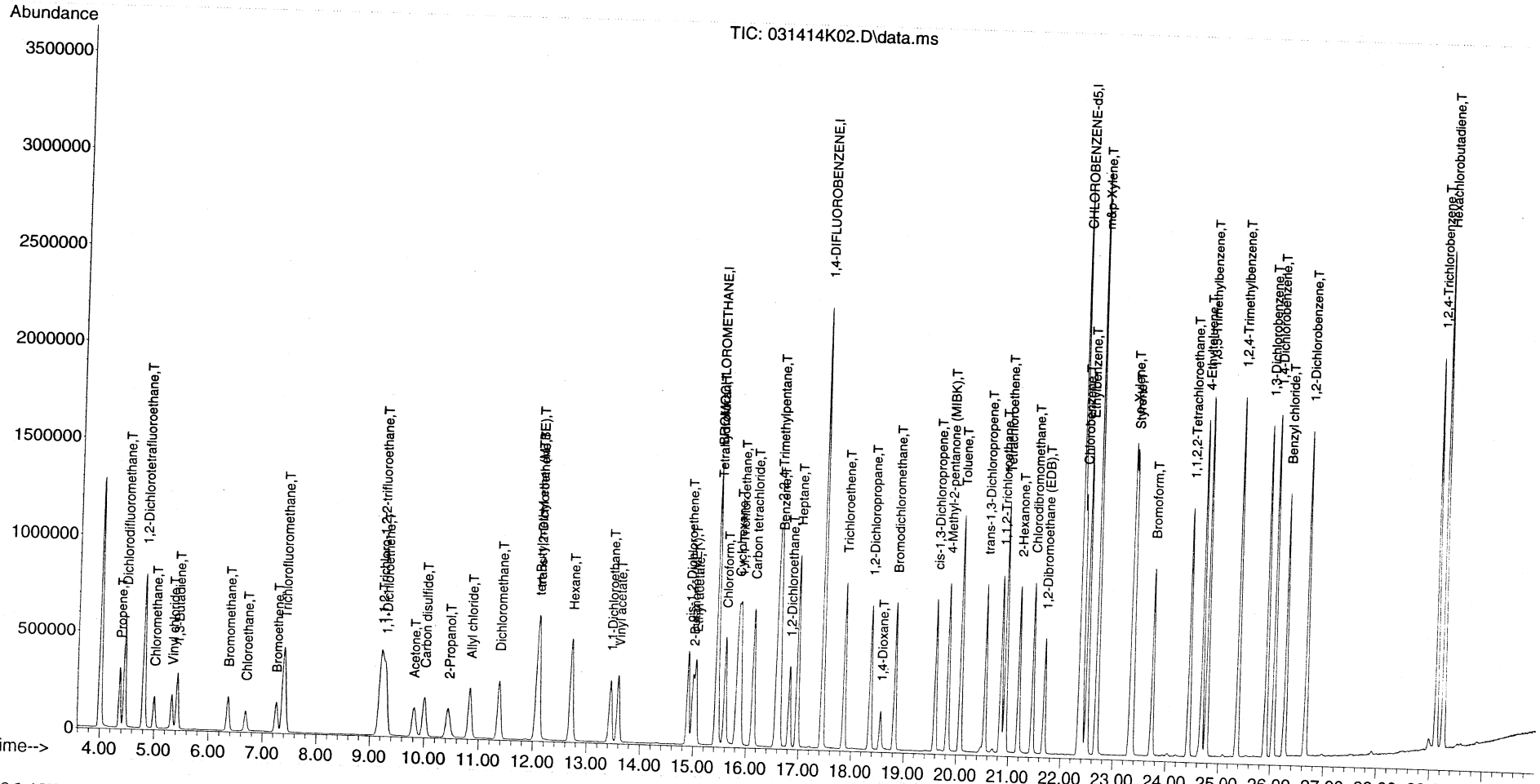
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K02.D
Acq On : 14 Mar 2014 13:29
Instrument: HP5973K
Operator : EM
Sample : S14C061-CCV1
Misc : 10 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 26 19:12:29 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:40:54 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



031314KAA.M Wed Mar 26 19:12:30 2014 HP5973K

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:18:27 2014
Quant Title : TO15
QLast Update : Thu Mar 13 18:10:19 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	100	0.00
2	T	Propene	0.554	0.572	-3.2	100	0.00
3	T	Dichlorodifluoromethane	1.708	1.724	-0.9	100	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.472	1.477	-0.3	100	0.00
5	T	Chloromethane	0.608	0.617	-1.5	100	0.00
6	T	Vinyl chloride	0.646	0.660	-2.2	100	0.00
7	T	1,3-Butadiene	0.482	0.493	-2.3	100	0.00
8	T	Bromomethane	0.495	0.496	-0.2	100	0.00
9	T	Chloroethane	0.359	0.352	1.9	100	0.00
10	T	Bromoethene	0.455	0.452	0.7	100	0.00
11	T	Trichlorofluoromethane	1.714	1.713	0.1	100	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	0.932	0.942	-1.1	100	0.00
13	T	1,1-Dichloroethene	1.144	1.166	-1.9	100	0.00
14	T	Acetone	1.041	1.086	-4.3	100	0.00
15	T	Carbon disulfide	1.507	1.561	-3.6	100	0.00
16	T	2-Propanol	1.026	1.116	-8.8	100	0.00
17	T	Allyl chloride	0.846	0.888	-5.0	100	0.00
18	T	Dichloromethane	1.032	0.941	8.8	100	0.00
19	T	tert-Butyl methyl ether (MT	1.707	1.803	-5.6	100	0.00
20	T	trans-1,2-Dichloroethene	0.856	0.888	-3.7	100	0.00
21	T	Hexane	1.022	1.076	-5.3	100	0.00
22	T	1,1-Dichloroethane	1.350	1.371	-1.6	100	0.00
23	T	Vinyl acetate	1.788	1.968	-10.1	100	0.00
24	T	cis-1,2-Dichloroethene	1.034	1.054	-1.9	100	0.00
25	T	2-Butanone (MEK)	0.288	0.309	-7.3	100	0.00
26	T	Ethyl acetate	0.202	0.211	-4.5	100	0.00
27	T	Tetrahydrofuran	0.870	0.910	-4.6	100	0.00
28	T	Chloroform	1.427	1.440	-0.9	100	0.00
29	T	Cyclohexane	1.082	1.116	-3.1	100	0.00
30	T	1,1,1-Trichloroethane	1.548	1.581	-2.1	100	0.00
31	T	Carbon tetrachloride	1.570	1.596	-1.7	100	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	100	0.00
33	T	Benzene	0.895	0.905	-1.1	100	0.00
34	T	2,2,4-Trimethylpentane	1.370	1.414	-3.2	100	0.00
35	T	1,2-Dichloroethane	0.470	0.478	-1.7	100	0.00
36	T	Heptane	0.563	0.582	-3.4	100	0.00
37	T	Trichloroethene	0.343	0.346	-0.9	100	0.00
38	T	1,2-Dichloropropane	0.346	0.345	0.3	100	0.00
39	T	1,4-Dioxane	0.165	0.169	-2.4	100	0.00
40	T	Bromodichloromethane	0.601	0.622	-3.5	100	0.00
41	T	cis-1,3-Dichloropropene	0.514	0.522	-1.6	100	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.778	0.810	-4.1	100	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	100	0.00
44	T	Toluene	1.173	1.179	-0.5	100	0.00
45	T	trans-1,3-Dichloropropene	0.582	0.601	-3.3	100	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K03.D
Acq On : 14 Mar 2014 14:16
Instrument: HP5973K
Operator : EM
Sample : S14C061-CAL4
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 18:18:27 2014
Quant Title : TO15
QLast Update : Thu Mar 13 18:10:19 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	1,1,2-Trichloroethane	0.376	0.376	0.0	100	0.00
47	T	Tetrachloroethene	0.528	0.533	-0.9	100	0.00
48	T	2-Hexanone	0.843	0.879	-4.3	100	0.00
49	T	Chlorodibromomethane	0.603	0.634	-5.1	100	0.00
50	T	1,2-Dibromoethane (EDB)	0.565	0.584	-3.4	100	0.00
51	T	Chlorobenzene	0.867	0.898	-3.6	100	0.00
52	T	Ethylbenzene	1.613	1.678	-4.0	100	0.00
53	T	m&p-Xylene	1.236	1.294	-4.7	100	0.00
54	T	o-Xylene	1.244	1.275	-2.5	100	0.00
55	T	Styrene	0.953	0.981	-2.9	100	0.00
56	T	Bromoform	0.615	0.657	-6.8	100	0.00
57	T	1,1,2,2-Tetrachloroethane	0.909	0.905	0.4	100	0.00
58	T	4-Ethyltoluene	1.509	1.565	-3.7	100	0.00
59	T	1,3,5-Trimethylbenzene	1.421	1.461	-2.8	100	0.00
60	T	1,2,4-Trimethylbenzene	1.446	1.492	-3.2	100	0.00
61	T	1,3-Dichlorobenzene	0.981	1.003	-2.2	100	0.00
62	T	1,4-Dichlorobenzene	0.987	1.005	-1.8	100	0.00
63	T	Benzyl chloride	1.257	1.361	-8.3	100	0.00
64	T	1,2-Dichlorobenzene	0.945	0.968	-2.4	100	0.00
65	T	1,2,4-Trichlorobenzene	0.966	0.992	-2.7	100	0.00
66	T	Hexachlorobutadiene	0.834	0.845	-1.3	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

$$\%\,Dev_{HCB} = \frac{0.834 - 0.845}{0.834} \times 100 = 1.5\% \checkmark$$

$$RF_{HCB} = \frac{703546\ (22)}{1927062\ (9.50)} = 0.845 \checkmark$$

EM 3/14/14

SDG: 14072D

Instrument: HP5973K

Analysis Date: 3/13/14

SAMPLE DATA

ANALYSIS SEQUENCE

S14C050

Instrument: HP5973K

Calibration ID: 1403006

Printed: 3/25/2014 1:38:24PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S14C050-TUN1	QC		1		1410062			
S14C050-CAL1	QC		2		1411090			
S14C050-CAL2	QC		3		1411091			
S14C050-CAL3	QC		4		1411092			
S14C050-CAL4	QC		5		1411093			
S14C050-CAL5	QC		6		1411094			
S14C050-CAL6	QC		7		1411095			
S14C050-SCV1	QC		8		1411087			
S14C050-CCV1	QC		9		1411093			
B14C056-BS1	QC		10					
B14C056-BLK1	QC		11			1350050		
1403028-01	VOCs, Soil Gas	A	12			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-02	VOCs, Soil Gas	A	13			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-03	VOCs, Soil Gas	A	14			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-04	VOCs, Soil Gas	A	15			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-05	VOCs, Soil Gas	A	16			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-06	VOCs, Soil Gas	A	17			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-07	VOCs, Soil Gas	A	18			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-08	VOCs, Soil Gas	A	19			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-09	VOCs, Soil Gas	A	20			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-10	VOCs, Soil Gas	A	21			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-11	VOCs, Soil Gas	A	22			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-12	VOCs, Soil Gas	A	23			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2014\031314KAA.SEQ
Date: 03-25-2014
Time: 13:34:34
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
PRIME	3	2	100	40	C:\Smart\TO15.CTD	12:00
BFB 1311118	3	2	100	40	C:\Smart\TO15.CTD	12:00
10 ppbv 1408111	3	2	100	0	C:\Smart\TO15.CTD	12:00
1 ppbv 1408112	3	3	20	0	C:\Smart\TO15.CTD	12:00
2 ppbv 1408112	3	3	40	0	C:\Smart\TO15.CTD	12:00
5ppbv 1408112	3	3	100	0	C:\Smart\TO15.CTD	12:00
15 ppbv 1408111	3	2	150	0	C:\Smart\TO15.CTD	12:00
20 ppbv 1408111	3	2	200	0	C:\Smart\TO15.CTD	12:00
10 ppbv1408115 SCV	3	4	100	0	C:\Smart\TO15.CTD	12:00
10 ppbv 1408111	3	2	100	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1555E	3	5	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 7339	3	6	200	0	C:\Smart\TO15.CTD	12:00
1403028-01	3	6	200	0	C:\Smart\TO15.CTD	12:00
1403028-02	3	7	200	0	C:\Smart\TO15.CTD	12:00
1403028-03	3	8	200	0	C:\Smart\TO15.CTD	12:00
IBL	3	9	200	0	C:\Smart\TO15.CTD	12:00
1403028-04	3	10	200	0	C:\Smart\TO15.CTD	12:00
1403028-05	3	11	200	0	C:\Smart\TO15.CTD	12:00
1403028-06	3	12	200	0	C:\Smart\TO15.CTD	12:00
IBL	4	1	200	0	C:\Smart\TO15.CTD	12:00
1403028-07	4	2	200	0	C:\Smart\TO15.CTD	12:00
1403028-08	4	3	200	0	C:\Smart\TO15.CTD	12:00
1403028-09	4	4	200	0	C:\Smart\TO15.CTD	12:00
IBL	4	5	200	0	C:\Smart\TO15.CTD	12:00
1403028-10	4	6	200	0	C:\Smart\TO15.CTD	12:00
1403028-11	4	7	200	0	C:\Smart\TO15.CTD	12:00
1403028-12	4	8	200	0	C:\Smart\TO15.CTD	12:00
IBL	4	9	200	0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\msdchem\1\DATA\2014\031314KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	33	031314K01.D	1.	S14C050-PRM1	BFB STD /IS 1350050/10ppbv STD	13 Mar 2014 06:54
2	32	031314K02.D	1.	S14C050-TUN1	BFB STD/IS 150050/10ppbv STD	13 Mar 2014 07:42
3	32	031314K03.D	1.	S14C050-CAL4	10 ppbv 1411093	13 Mar 2014 08:29
4	33	031314K04.D	1.	S14C050-CAL1	1.0 ppbv 1411090	13 Mar 2014 09:14
5	33	031314K05.D	1.	S14C050-CAL2	2.0 ppbv 1411091	13 Mar 2014 10:42
6	33	031314K06.D	1.	S14C050-CAL3	5.0 ppbv 1411092	13 Mar 2014 11:30
7	32	031314K07.D	1.	S14C050-CAL5	15 ppbv 1411094	13 Mar 2014 12:19
8	32	031314K08.D	1.	S14C050-CAL6	20 ppbv 1411095	13 Mar 2014 13:09
9	34	031314K09.D	1.	S14C050-SCV1	10 ppbv SCV	13 Mar 2014 13:56
10	32	031314K10.D	1.	S14C050-CCV1@B14C056-BS1	10 ppbv 1411093	13 Mar 2014 14:43
11	35	031314K11.D	1.	CAN 1555E	200mL CAN 1555E	13 Mar 2014 16:01
12	35	031314K12.D	1.	B14C056-BLK1	200mL CAN 7339	13 Mar 2014 16:50
13	36	031314K13.D	2.09	1403028-01	200mL MH60 CAN 1988	13 Mar 2014 17:39
14	37	031314K14.D	2.11	1403028-02	200mL MH61 CAN 629	13 Mar 2014 18:28
15	38	031314K15.D	2.1	1403028-03	200mL MH62 CAN 1107	13 Mar 2014 19:16
16	39	031314K16.D	1.	IBL	IBL	13 Mar 2014 20:05
17	10	031314K17.D	2.11	1403028-04	200mL MH63 CAN 1113	13 Mar 2014 20:54
18	11	031314K18.D	2.09	1403028-05	200mL MH64 CAN 1120	13 Mar 2014 21:43
19	12	031314K19.D	2.11	1403028-06	200mL MH65 CAN 1986	13 Mar 2014 22:32
20	41	031314K20.D	1.	IBL	IBL	13 Mar 2014 23:21
21	42	031314K21.D	2.11	1403028-07	200mL MH66 CAN 626	14 Mar 2014 00:10
22	43	031314K22.D	2.1	1403028-08	200mL MH67 CAN 1980	14 Mar 2014 00:58
23	44	031314K23.D	1.97	1403028-09	200mL MH68 CAN 1983	14 Mar 2014 01:47
24	45	031314K24.D	1.	IBL	IBL	14 Mar 2014 02:36
25	46	031314K25.D	1.98	1403028-10	200mL MH69 CAN 1994	14 Mar 2014 03:25
26	47	031314K26.D	2.1	1403028-11	200mL MH70 CAN 1118	14 Mar 2014 04:13
27	48	031314K27.D	2.1	1403028-12	200mL MH71 CAN 1100	14 Mar 2014 05:02
28	49	031314K28.D	1.	IBL	IBL	14 Mar 2014 05:51

25 Mar 2014 13:35

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031314KAA.M
Title : TO15
Last Update : Fri Mar 14 19:40:54 2014
Response Via : Initial Calibration

Calibration Files
1 =031314K04.D 2 =031314K05.D 5 =031314K06.D 10 =031314K03.D 15 =031314K07.D
20 =031314K08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.574	0.459	0.459	0.486	0.502	0.496	0.496	8.54
3)	T	Dichlorodifluo...	2.404	1.846	1.767	2.167	1.869	1.862	1.986	12.41
4)	T	1,2-Dichlorote...	1.953	1.529	1.472	1.784	1.607	1.643	1.665	10.64
5)	T	Chloromethane	0.658	0.544	0.542	0.557	0.594	0.593	0.581	7.61
6)	T	Vinyl chloride	0.788	0.624	0.617	0.720	0.669	0.676	0.682	9.41
7)	T	1,3-Butadiene	0.571	0.436	0.439	0.521	0.491	0.499	0.493	10.37
8)	T	Bromomethane	0.687	0.566	0.520	0.646	0.545	0.586	0.592	10.72
9)	T	Chloroethane	0.455	0.382	0.352	0.416	0.358	0.377	0.390	9.96
10)	T	Bromoethene	0.570	0.495	0.448	0.572	0.480	0.528	0.516	9.72
11)	T	Trichlorofluor...	2.409	2.069	1.868	2.243	1.870	1.983	2.074	10.41
12)	T	1,1,2-Trichlor...	1.462	1.187	1.078	1.354	1.069	1.160	1.218	12.92
13)	T	1,1-Dichloroet...	1.406	1.235	1.161	1.312	1.196	1.263	1.262	6.95
14)	T	Acetone	1.052	0.954	0.963	1.094	1.045	1.068	1.029	5.59
15)	T	Carbon disulfide	1.887	1.589	1.501	1.767	1.556	1.674	1.662	8.68
16)	T	2-Propanol	0.967	0.889	0.925	1.088	1.074	1.110	1.009	9.30
17)	T	Allyl chloride	0.893	0.772	0.762	0.848	0.829	0.836	0.823	5.98
18)	T	Dichloromethane	1.515	1.129	0.921	0.915	0.861	0.861	1.034	24.77
19)	T	tert-Butyl met...	1.944	1.787	1.847	2.206	1.961	1.967	1.952	7.36
20)	T	trans-1,2-Dich...	1.028	0.904	0.858	0.993	0.913	0.912	0.935	6.76
21)	T	Hexane	1.163	1.045	1.002	1.134	1.068	1.078	1.082	5.43
22)	T	1,1-Dichloroet...	1.696	1.481	1.384	1.553	1.411	1.419	1.491	7.88
23)	T	Vinyl acetate	1.655	1.615	1.619	1.915	1.887	1.918	1.768	8.64
24)	T	cis-1,2-Dichlo...	1.199	1.096	1.043	1.149	1.075	1.084	1.108	5.11
25)	T	2-Butanone (MEK)	0.289	0.273	0.301	0.347	0.315	0.322	0.308	8.50
26)	T	Ethyl acetate	0.201	0.200	0.191	0.209	0.210	0.212	0.204	3.88
27)	T	Tetrahydrofuran	0.815	0.764	0.785	0.825	0.841	0.833	0.810	3.71
28)	T	Chloroform	1.779	1.651	1.529	1.708	1.534	1.548	1.625	6.43
29)	T	Cyclohexane	1.154	1.081	1.053	1.133	1.100	1.110	1.105	3.27
30)	T	1,1,1-Trichlor...	2.043	1.904	1.727	1.973	1.734	1.755	1.856	7.32
31)	T	Carbon tetrach...	2.185	1.987	1.791	2.094	1.814	1.854	1.954	8.26
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.861	0.825	0.785	0.773	0.808	0.799	0.808	3.89
34)	T	2,2,4-Trimethy...	1.150	1.142	1.122	1.104	1.202	1.176	1.149	3.09
35)	T	1,2-Dichloroet...	0.469	0.451	0.419	0.426	0.434	0.426	0.437	4.33
36)	T	Heptane	0.431	0.443	0.428	0.409	0.466	0.457	0.439	4.71
37)	T	Trichloroethene	0.369	0.349	0.324	0.346	0.336	0.328	0.342	4.84
38)	T	1,2-Dichloropr...	0.309	0.304	0.289	0.279	0.300	0.294	0.296	3.60
39)	T	1,4-Dioxane	0.155	0.150	0.144	0.157	0.159	0.158	0.154	3.70
40)	T	Bromodichlorom...	0.576	0.570	0.523	0.562	0.566	0.567	0.560	3.40
41)	T	cis-1,3-Dichlo...	0.483	0.479	0.454	0.457	0.474	0.472	0.470	2.51
42)	T	4-Methyl-2-pen...	0.593	0.610	0.602	0.592	0.663	0.656	0.619	5.13
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.141	1.090	1.013	1.058	1.105	1.066	1.079	4.05
45)	T	trans-1,3-Dich...	0.522	0.538	0.515	0.538	0.565	0.541	0.536	3.23
46)	T	1,1,2-Trichlor...	0.377	0.362	0.330	0.347	0.355	0.344	0.353	4.57
47)	T	Tetrachloroethene	0.561	0.537	0.495	0.544	0.533	0.512	0.530	4.41
48)	T	2-Hexanone	0.625	0.641	0.639	0.653	0.757	0.708	0.670	7.66
49)	T	Chlorodibromom...	0.617	0.593	0.544	0.616	0.623	0.595	0.598	4.88
50)	T	1,2-Dibromoeth...	0.570	0.553	0.498	0.550	0.557	0.538	0.544	4.61
51)	T	Chlorobenzene	0.873	0.848	0.803	0.827	0.830	0.815	0.833	2.99
52)	T	Ethylbenzene	1.515	1.548	1.483	1.499	1.543	1.518	1.518	1.64
53)	T	m&p-Xylene	1.180	1.204	1.139	1.193	1.218	1.192	1.188	2.29
54)	T	o-Xylene	1.223	1.189	1.187	1.204	1.252	1.193	1.208	2.08
55)	T	Styrene	0.913	0.904	0.901	0.947	0.973	0.934	0.929	3.05
56)	T	Bromoform	0.669	0.604	0.583	0.706	0.674	0.675	0.652	7.26

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031314KAA.M
Title : TO15

57)	T	1,1,2,2-Tetrac...	0.885	0.838	0.793	0.827	0.860	0.873	0.846	3.98
58)	T	4-Ethyltoluene	1.550	1.412	1.383	1.556	1.563	1.567	1.505	5.59
59)	T	1,3,5-Trimethy...	1.477	1.359	1.345	1.448	1.471	1.447	1.425	4.05
60)	T	1,2,4-Trimethy...	1.529	1.453	1.353	1.485	1.549	1.463	1.472	4.70
61)	T	1,3-Dichlorobe...	1.096	1.023	0.957	1.049	1.088	1.025	1.040	4.88
62)	T	1,4-Dichlorobe...	1.124	1.018	0.950	1.044	1.089	1.028	1.042	5.78
63)	T	Benzyl chloride	1.274	1.155	1.121	1.311	1.423	1.322	1.268	8.87
64)	T	1,2-Dichlorobe...	1.096	1.002	0.932	1.042	1.022	0.985	1.013	5.44
65)	T	1,2,4-Trichlor...	1.155	0.996	0.959	1.101	0.997	0.976	1.031	7.65
66)	T	Hexachlorobuta...	1.112	0.936	0.861	0.966	0.779	0.728	0.897	15.48

(#) = Out of Range

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2014\031314KA\031314K02.D
Tune Time : 13 Mar 2014 7:42

Daily Calibration File : C:\msdchem\1\DATA\2014\031314KA\031314K10.D

File	Sample	Surrogate Recovery %	Internal Standard Responses		
			906167	2546180	2361090
031314K03.D	S14C050-CA	697232	2218665	1984797	
031314K04.D	S14C050-CA	709566	2162682	1933415	
031314K05.D	S14C050-CA	743665	2180127	2017227	
031314K06.D	S14C050-CA	789402	2271777	2094248	
031314K07.D	S14C050-CA	805176	2283718	2005780	
031314K08.D	S14C050-CA	813362	2384523	2202262	
031314K09.D	S14C050-SC	836174	2426230	2291283	
031314K10.D	S14C050-CC	906167	2546178	2361090	
031314K11.D	CAN 1555E	895157	2381395	2134189	
031314K12.D	B14C056-BL	1051151	2669818	2312920	
031314K13.D	1403028-01	1099540	2699310	2399643	
031314K14.D	1403028-02	1097048	2609671	2313066	
031314K15.D	1403028-03	1085121	2597083	2256358	
031314K16.D	IBL	1060494	2503024	2233115	
031314K17.D	1403028-04	1069209	2510110	2193707	
031314K18.D	1403028-05	1092952	2536700	2206858	
031314K19.D	1403028-06	1082249	2559892	2248979	
031314K20.D	IBL	1070272	2530178	2185031	
031314K21.D	1403028-07	1086488	2535447	2177162	

031314K22.D				
	1403028-08	1048305	2450556	2137560
031314K23.D				
	1403028-09	1037706	2432056	2114173
031314K24.D				
	IBL	1034757	2402191	2086438
031314K25.D				
	1403028-10	1039640	2409713	2103124
031314K26.D				
	1403028-11	1038632	2465612	2106019
031314K27.D				
	1403028-12	1016598	2407345	2056382
031314K28.D				
	IBL	994959	2296701	1958616

(fails) - fails 24hr time check * - fails criteria

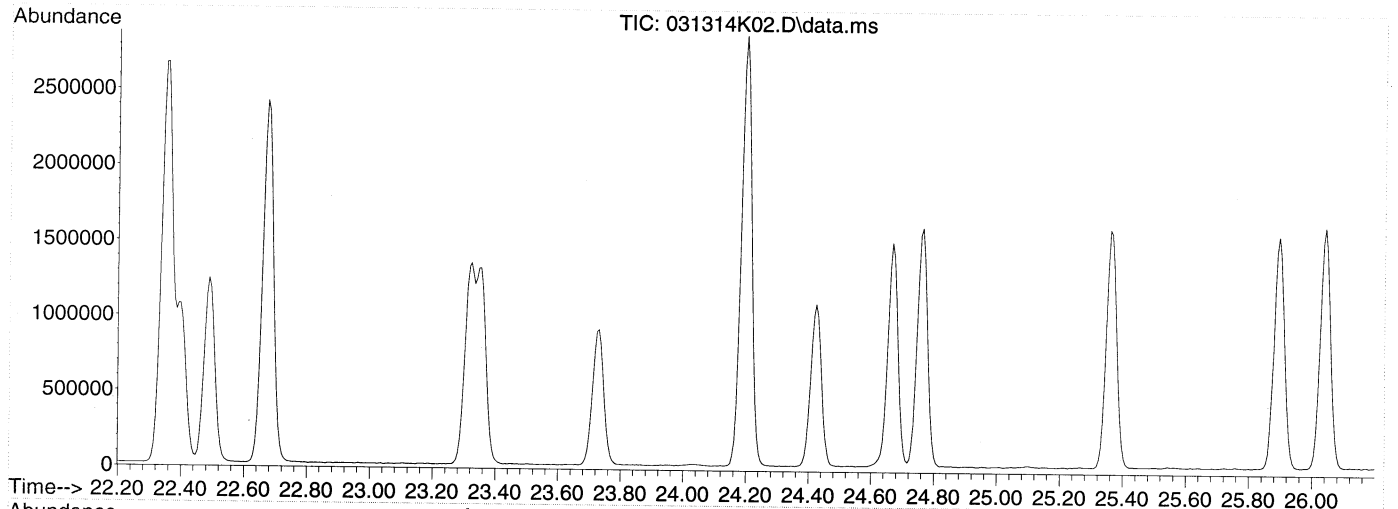
Created: Tue Mar 25 13:36:59 2014 HP5973K

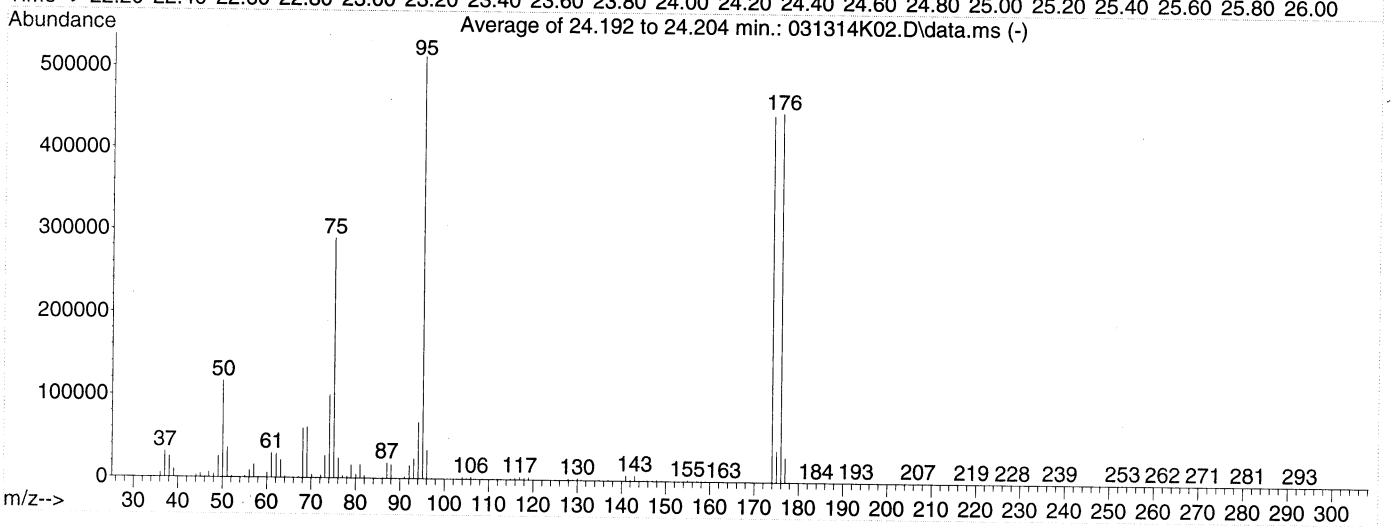
BFB

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K02.D
Acq On : 13 Mar 2014 7:42
Operator : EM
Sample : S14C050-TUN1
Misc : BFB STD/IS 150050/10ppbv STD
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\2014\031314KAA.M
Title : TO15
Last Update : Fri Mar 14 19:40:54 2014





AutoFind: Scans 3388, 3389, 3390; Background Corrected with Scan 3373

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.7	116445	PASS
75	95	30	66	56.4	289361	PASS
95	95	100	100	100.0	512832	PASS
96	95	5	9	6.6	33619	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.5	443456	PASS
175	174	4	9	8.3	36737	PASS
176	174	93	101	100.9	447249	PASS
177	176	5	9	6.6	29346	PASS

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.15	11	45.05	4828	56.10	8875	67.00	543
36.05	5816	46.10	416	57.10	15703	67.20	525
37.10	30452	47.00	6304	58.10	721	68.10	59288
38.10	24955	48.05	4227	58.90	67	69.05	60799
39.10	9728	49.10	25410	60.05	6184	70.10	4241
40.10	364	50.10	116445	61.05	28894	71.05	294
41.20	152	51.10	35070	62.10	28549	72.10	3378
41.95	79	52.10	1428	63.10	21237	73.10	26798
42.40	22	53.05	189	64.10	1700	74.05	100191
43.05	317	54.15	16	65.10	265	75.10	289361
44.10	2996	55.10	1683	66.15	141	76.10	23776

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.05	3011	88.00	16607	98.60	9	107.00	573
78.00	2083	89.70	26	99.50	7	108.65	183
78.95	15786	91.00	2229	99.80	7	109.30	41
80.05	4916	92.10	15568	100.40	8	109.95	306
81.00	15988	93.10	23795	101.35	76	110.95	457
81.95	3236	94.10	67301	102.15	44	111.20	139
83.05	316	95.10	512832	102.85	162	111.95	425
84.10	40	96.05	33619	103.10	277	112.70	67
85.20	25	97.10	774	104.00	2220	112.95	334
86.10	700	97.80	31	105.00	909	113.80	11
87.00	18499	98.15	32	106.00	2498	114.90	826

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.90	1909	124.95	199	133.95	280	141.95	1015
117.00	3466	125.85	220	135.00	987	142.95	6368
118.00	2055	126.05	49	135.85	196	144.00	440
119.00	2991	127.05	218	137.00	1009	144.95	485
120.00	186	127.95	1884	137.90	9	145.80	862
121.20	30	128.95	1183	138.30	46	147.05	451
121.40	31	130.00	2153	138.60	29	147.95	1495
121.95	131	130.90	867	138.85	91	149.00	421
122.90	127	131.90	111	140.00	413	149.90	229
123.10	85	132.10	19	140.20	200	150.10	314
124.00	390	133.05	66	141.00	6249	150.70	23

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
151.05	75	160.95	762	169.60	33	178.10	320
151.90	62	161.75	0	169.80	35	179.10	108
152.05	188	162.20	96	170.15	143	179.90	20
152.90	290	163.05	138	170.55	136	181.15	51
154.00	383	165.20	58	171.10	92	182.10	27
154.95	1291	165.80	11	171.95	295	182.80	10
156.00	107	166.80	19	174.00	443456	184.00	24
157.00	998	167.25	30	175.00	36737	184.70	8
157.90	144	168.60	35	176.00	447249	188.00	49
158.95	789	169.00	24	177.00	29346	188.80	24
160.05	50	169.30	44	177.90	586	189.20	15

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
189.80	17	199.10	31	216.80	23	225.70	37
191.00	152	201.60	7	217.20	31	228.30	11
191.60	59	202.20	27	218.00	46	229.60	7
192.20	90	207.05	605	219.10	141	230.90	7
193.05	414	210.25	80	220.10	35	233.20	75
193.80	17	210.70	9	220.90	18	233.80	22
194.15	79	211.70	8	221.40	15	234.30	13
194.90	12	212.90	7	221.90	29	235.00	44
196.30	22	213.60	31	223.15	82	236.10	53

196.80	22	215.65	27	224.00	46	237.05	10
197.85	37	216.15	36	225.10	79	238.10	32

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
238.95	156	251.30	34	263.05	7	273.05	87
240.10	22	251.60	31	263.30	23	274.00	12
240.60	13	253.05	484	263.70	9	274.70	11
240.90	14	253.80	125	263.90	16	275.40	29
241.20	39	255.05	120	265.10	59	276.20	11
244.40	15	255.70	23	265.30	18	280.30	20
245.90	14	256.30	25	266.05	35	281.15	107
248.00	39	258.10	9	268.15	142	281.90	41
249.05	5	258.30	10	269.10	75	282.10	98
249.80	60	260.90	92	271.15	404	282.80	38
250.10	7	262.10	141	271.85	86	285.40	12

Average of 24.192 to 24.204 min.: 031314K02.D\data.ms
S14C050-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
286.20	10	294.75	15				
286.85	18	296.20	28				
287.40	29	298.20	10				
289.85	19						
291.30	17						
291.95	35						
292.80	45						
293.00	13						
293.30	20						
294.00	12						
294.20	40						

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : S14C050-CCV1@B14C056-BS1
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	130	0.00
2	T	Propene	0.496	0.518	-4.4	138	0.00
3	T	Dichlorodifluoromethane	1.986	1.880	5.3	113	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.665	1.643	1.3	120	0.00
5	T	Chloromethane	0.581	0.610	-5.0	142#	0.00
6	T	Vinyl chloride	0.682	0.708	-3.8	128	0.00
7	T	1,3-Butadiene	0.493	0.522	-5.9	130	0.00
8	T	Bromomethane	0.592	0.577	2.5	116	0.00
9	T	Chloroethane	0.390	0.377	3.3	118	0.00
10	T	Bromoethene	0.516	0.532	-3.1	121	0.00
11	T	Trichlorofluoromethane	2.074	1.914	7.7	111	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	1.218	1.136	6.7	109	0.00
13	T	1,1-Dichloroethene	1.262	1.255	0.6	124	0.00
14	T	Acetone	1.029	1.082	-5.2	129	0.00
15	T	Carbon disulfide	1.662	1.697	-2.1	125	0.00
16	T	2-Propanol	1.009	1.132	-12.2	135	-0.01
17	T	Allyl chloride	0.823	0.898	-9.1	138	0.00
18	T	Dichloromethane	1.034	0.952	7.9	135	0.00
19	T	tert-Butyl methyl ether (MT	1.952	1.997	-2.3	118	0.00
20	T	trans-1,2-Dichloroethene	0.935	0.948	-1.4	124	0.00
21	T	Hexane	1.082	1.153	-6.6	132	0.00
22	T	1,1-Dichloroethane	1.491	1.494	-0.2	125	0.00
23	T	Vinyl acetate	1.768	2.015	-14.0	137	0.00
24	T	cis-1,2-Dichloroethene	1.108	1.101	0.6	125	0.00
25	T	2-Butanone (MEK)	0.308	0.329	-6.8	123	0.00
26	T	Ethyl acetate	0.204	0.220	-7.8	137	0.00
27	T	Tetrahydrofuran	0.810	0.874	-7.9	138	0.00
28	T	Chloroform	1.625	1.522	6.3	116	0.00
29	T	Cyclohexane	1.105	1.146	-3.7	131	0.00
30	T	1,1,1-Trichloroethane	1.856	1.681	9.4	111	0.00
31	T	Carbon tetrachloride	1.954	1.754	10.2	109	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	115	0.00
33	T	Benzene	0.808	0.848	-5.0	126	0.00
34	T	2,2,4-Trimethylpentane	1.149	1.286	-11.9	134	0.00
35	T	1,2-Dichloroethane	0.437	0.433	0.9	117	0.00
36	T	Heptane	0.439	0.503	-14.6	141#	0.00
37	T	Trichloroethene	0.342	0.342	0.0	113	0.00
38	T	1,2-Dichloropropane	0.296	0.319	-7.8	131	0.00
39	T	1,4-Dioxane	0.154	0.164	-6.5	120	0.00
40	T	Bromodichloromethane	0.560	0.572	-2.1	117	0.00
41	T	cis-1,3-Dichloropropene	0.470	0.496	-5.5	124	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.619	0.703	-13.6	136	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	119	0.00
44	T	Toluene	1.079	1.095	-1.5	123	0.00
45	T	trans-1,3-Dichloropropene	0.536	0.551	-2.8	122	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : S14C050-CCV1@B14C056-BS1
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46 T	1,1,2-Trichloroethane	0.353	0.367	-4.0	126	0.00
47 T	Tetrachloroethene	0.530	0.530	0.0	116	0.00
48 T	2-Hexanone	0.670	0.771	-15.1	140#	0.00
49 T	Chlorodibromomethane	0.598	0.617	-3.2	119	0.00
50 T	1,2-Dibromoethane (EDB)	0.544	0.563	-3.5	122	0.00
51 T	Chlorobenzene	0.833	0.855	-2.6	123	0.00
52 T	Ethylbenzene	1.518	1.570	-3.4	125	0.00
53 T	m&p-Xylene	1.188	1.221	-2.8	122	0.00
54 T	o-Xylene	1.208	1.220	-1.0	121	0.00
55 T	Styrene	0.929	0.946	-1.8	119	0.00
56 T	Bromoform	0.652	0.635	2.6	107	0.00
57 T	1,1,2,2-Tetrachloroethane	0.846	0.851	-0.6	122	0.00
58 T	4-Ethyltoluene	1.505	1.502	0.2	115	0.00
59 T	1,3,5-Trimethylbenzene	1.425	1.383	2.9	114	0.00
60 T	1,2,4-Trimethylbenzene	1.472	1.417	3.7	114	0.00
61 T	1,3-Dichlorobenzene	1.040	0.999	3.9	113	0.00
62 T	1,4-Dichlorobenzene	1.042	1.009	3.2	115	0.00
63 T	Benzyl chloride	1.268	1.312	-3.5	119	0.00
64 T	1,2-Dichlorobenzene	1.013	0.977	3.6	111	0.00
65 T	1,2,4-Trichlorobenzene	1.031	1.055	-2.3	114	0.00
66 T	Hexachlorobutadiene	0.897	0.844	5.9	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : S14C050-CCV1@B14C056-BS1
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	906167	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2546178	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2361090	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	219757	10.76	ppbv	98
3) Dichlorodifluoromethane	4.463	85	797779	9.75	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	710623	10.36	ppbv	95
5) Chloromethane	5.005	50	264001	11.03	ppbv	100
6) Vinyl chloride	5.333	62	306076	10.89	ppbv	100
7) 1,3-Butadiene	5.431	54	215208	10.60	ppbv	99
8) Bromomethane	6.361	94	244781	10.04	ppbv	99
9) Chloroethane	6.690	64	159862	9.96	ppbv	99
10) Bromoethene	7.262	106	228120	10.74	ppbv	100
11) Trichlorofluoromethane	7.408	101	843572	9.88	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	453851	9.04	ppbv	95
13) 1,1-Dichloroethene	9.300	61	496272	9.55	ppbv	97
14) Acetone	9.811	43	468126	11.04	ppbv	99
15) Carbon disulfide	10.012	76	734225	10.72	ppbv	100
16) 2-Propanol	10.437	45	494476	11.90	ppbv	98
17) Allyl chloride	10.845	41	395867	11.67	ppbv	95
18) Dichloromethane	11.380	49	384392	9.03	ppbv	92
19) tert-Butyl methyl ethe...	12.074	73	880268	10.95	ppbv	96
20) trans-1,2-Dichloroethene	12.098	61	398433	10.35	ppbv	95
21) Hexane	12.713	57	489339	10.98	ppbv	97
22) 1,1-Dichloroethane	13.449	63	597122	9.73	ppbv	100
23) Vinyl acetate	13.589	43	879619	12.08	ppbv	97
24) cis-1,2-Dichloroethene	14.897	61	458329	10.05	ppbv	94
25) 2-Butanone (MEK)	14.994	72	142188	11.21	ppbv	96
26) Ethyl acetate	15.043	61	94095	11.21	ppbv #	92
27) Tetrahydrofuran	15.450	42	370967	11.11	ppbv	94
28) Chloroform	15.596	83	639665	9.56	ppbv	98
29) Cyclohexane	15.834	56	495763	10.89	ppbv	96
30) 1,1,1-Trichloroethane	15.876	97	699649	9.15	ppbv	99
31) Carbon tetrachloride	16.132	117	744229	9.25	ppbv	99
33) Benzene	16.631	78	991241	10.59	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1562994	11.75	ppbv	99
35) 1,2-Dichloroethane	16.825	62	491725	9.71	ppbv	100
36) Heptane	16.971	43	611565	12.03	ppbv	93
37) Trichloroethene	17.859	130	399325	10.09	ppbv	99
38) 1,2-Dichloropropane	18.358	63	380723	11.12	ppbv	97
39) 1,4-Dioxane	18.559	88	198893	11.17	ppbv	93
40) Bromodichloromethane	18.827	83	688662	10.62	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	591405	10.88	ppbv	99
42) 4-Methyl-2-pentanone (...	19.824	43	854581	11.92	ppbv	99
44) Toluene	20.068	91	1199017	10.36	ppbv	100
45) trans-1,3-Dichloropropene	20.536	75	632670	10.99	ppbv	98
46) 1,1,2-Trichloroethane	20.840	97	405494	10.71	ppbv	97
47) Tetrachloroethene	20.926	166	569193	10.00	ppbv	100
48) 2-Hexanone	21.181	43	860512	11.96	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : S14C050-CCV1@B14C056-BS1
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	688604	10.73	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	622362	10.65	ppbv	99
51) Chlorobenzene	22.398	112	954260	10.68	ppbv	99
52) Ethylbenzene	22.489	91	1719261	10.56	ppbv	99
53) m&p-Xylene	22.672	91	2672283	20.96	ppbv	99
54) o-Xylene	23.316	91	1349176	10.41	ppbv	100
55) Styrene	23.353	104	1026143	10.30	ppbv	99
56) Bromoform	23.730	173	701868	10.03	ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	932237	10.27	ppbv	99
58) 4-Ethyltoluene	24.667	105	1677331	10.38	ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	1529559	10.00	ppbv	99
60) 1,2,4-Trimethylbenzene	25.367	105	1536236	9.73	ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	1061608	9.51	ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	1071858	9.58	ppbv	99
63) Benzyl chloride	26.255	91	1464500	10.76	ppbv	99
64) 1,2-Dichlorobenzene	26.644	146	1037810	9.54	ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	1030999	9.32	ppbv	99
66) Hexachlorobutadiene	29.248	225	860268	8.94	ppbv	99

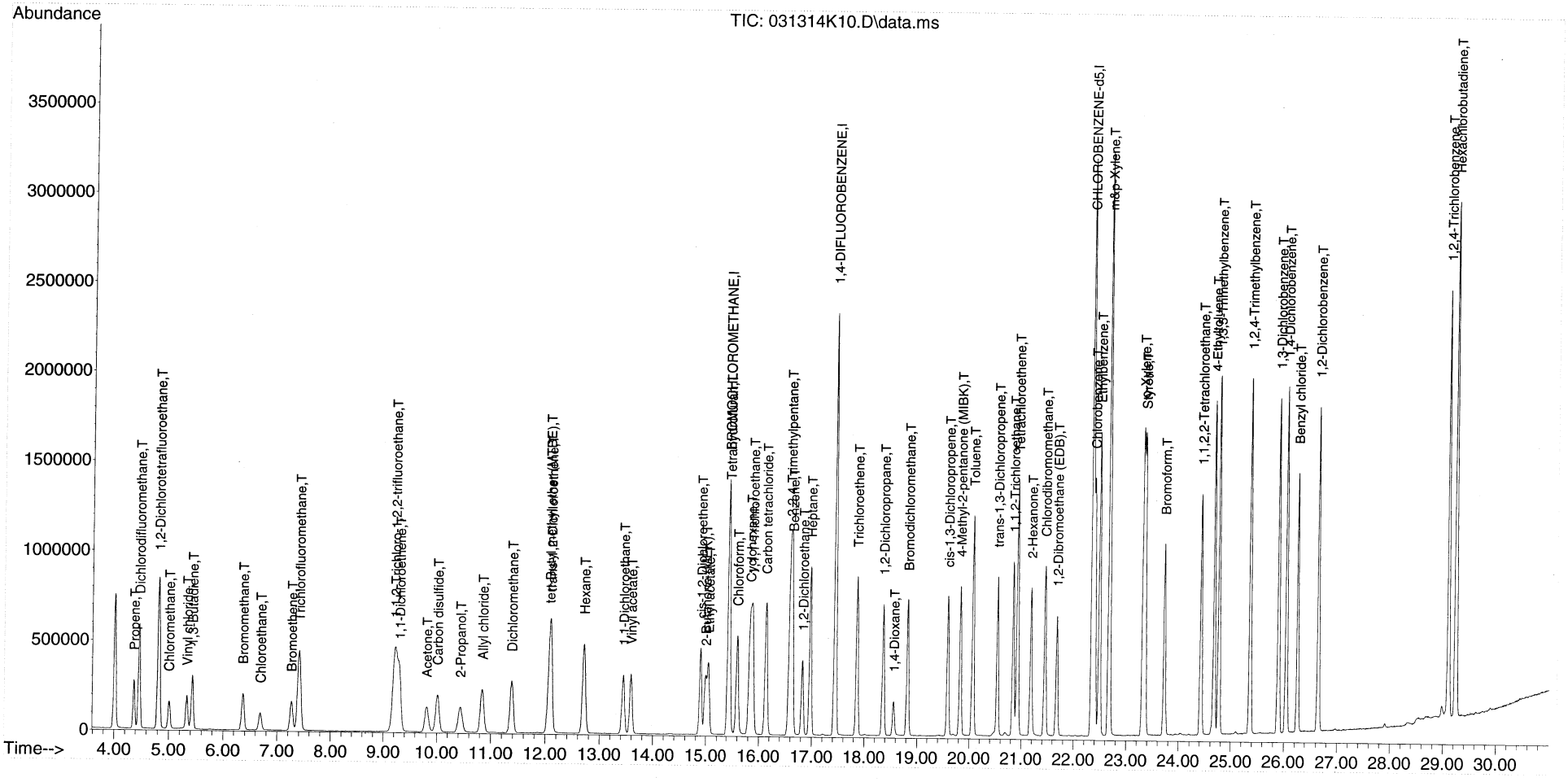
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : S14C050-CCV1@B14C056-BS1
Misc : 10 ppbv 1411093
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



LCS REPORT

Instrument Name: HP5973K
Sample Name: B14C056-BS1
Misc Info: 10 ppbv LCS
Date Acquired: 3/13/2014 14:43
QLast Update: Fri Mar 14 19:07:29 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.37	10.30	10.76	104%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.46	10.30	9.75	95%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.81	10.50	10.36	99%	68.0	147.0	pass
5)	Chloromethane	5.00	10.50	11.03	105%	64.0	141.0	pass
6)	Vinyl chloride	5.33	10.50	10.89	104%	65.0	141.0	pass
7)	1,3-Butadiene	5.43	10.00	10.60	106%	61.0	154.0	pass
8)	Bromomethane	6.36	10.30	10.04	98%	71.0	132.0	pass
9)	Chloroethane	6.69	10.30	9.96	97%	70.0	134.0	pass
10)	Bromoethene	7.26	10.40	10.74	103%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.41	10.70	9.88	92%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.21	9.70	9.04	93%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.30	9.60	9.55	99%	81.0	127.0	pass
14)	Acetone	9.81	10.50	11.04	105%	77.0	150.0	pass
15)	Carbon disulfide	10.01	10.50	10.72	102%	75.0	138.0	pass
16)	2-Propanol	10.44	10.60	11.90	112%	71.0	142.0	pass
17)	Allyl chloride	10.85	10.70	11.67	109%	84.0	143.0	pass
18)	Dichloromethane	11.38	9.80	9.03	92%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.07	10.70	10.95	102%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	12.10	10.20	10.35	101%	82.0	136.0	pass
21)	Hexane	12.71	10.30	10.98	107%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.45	9.70	9.73	100%	82.0	123.0	pass
23)	Vinyl acetate	13.59	10.60	12.08	114%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.90	10.10	10.05	99%	83.0	126.0	pass
25)	2-Butanone (MEK)	14.99	10.50	11.21	107%	76.0	138.0	pass
26)	Ethyl acetate	15.04	10.40	11.21	108%	83.0	136.0	pass
27)	Tetrahydrofuran	15.45	10.30	11.11	108%	74.0	132.0	pass
28)	Chloroform	15.60	10.20	9.56	94%	81.0	127.0	pass
29)	Cyclohexane	15.83	10.50	10.89	104%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.88	10.10	9.15	91%	80.0	131.0	pass
31)	Carbon tetrachloride	16.13	10.30	9.25	90%	77.0	136.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.63	10.10	10.59	105%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.59	10.50	11.75	112%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.83	9.80	9.71	99%	70.0	149.0	pass
36)	Heptane	16.97	10.50	12.03	115%	62.0	159.0	pass
37)	Trichloroethene	17.86	10.10	10.09	100%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.36	10.30	11.12	108%	74.0	135.0	pass
39)	1,4-Dioxane	18.56	10.50	11.17	106%	67.0	134.0	pass
40)	Bromodichloromethane	18.83	10.40	10.62	102%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.59	10.30	10.88	106%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.82	10.50	11.92	114%	59.0	147.0	pass
43)	CHLOROBENZENE-d5	22.35	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.07	10.20	10.36	102%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.54	10.70	10.99	103%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.84	10.30	10.71	104%	76.0	124.0	pass
47)	Tetrachloroethene	20.93	10.00	10.00	100%	80.0	122.0	pass

48)	2-Hexanone	21.18	10.40	11.96	115%	55.0	149.0	pass
49)	Chlorodibromomethane	21.45	10.40	10.73	103%	76.0	145.0	pass
50)	1,2-Dibromoethane (EDB)	21.68	10.30	10.65	103%	78.0	124.0	pass
51)	Chlorobenzene	22.40	10.40	10.68	103%	76.0	120.0	pass
52)	Ethylbenzene	22.49	10.20	10.56	103%	75.0	125.0	pass
53)	m&p-Xylene	22.67	20.40	20.96	103%	75.0	128.0	pass
54)	o-Xylene	23.32	10.30	10.41	101%	74.0	128.0	pass
55)	Styrene	23.35	10.10	10.30	102%	69.0	122.0	pass
56)	Bromoform	23.73	10.30	10.03	97%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.42	10.20	10.27	101%	70.0	130.0	pass
58)	4-Ethyltoluene	24.67	10.40	10.38	100%	69.0	138.0	pass
59)	1,3,5-Trimethylbenzene	24.76	10.30	10.00	97%	70.0	134.0	pass
60)	1,2,4-Trimethylbenzene	25.37	10.10	9.73	96%	65.0	129.0	pass
61)	1,3-Dichlorobenzene	25.90	9.90	9.51	96%	62.0	130.0	pass
62)	1,4-Dichlorobenzene	26.04	9.90	9.58	97%	61.0	131.0	pass
63)	Benzyl chloride	26.25	10.40	10.76	104%	61.0	153.0	pass
64)	1,2-Dichlorobenzene	26.64	9.90	9.54	96%	60.0	130.0	pass
65)	1,2,4-Trichlorobenzene	29.11	9.10	9.32	102%	38.0	128.0	pass
66)	Hexachlorobutadiene	29.25	9.50	8.94	94%	37.0	124.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : B14C056-BS1
Misc : 10 ppbv LCS
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	906167	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2546178	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2361090	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	219757	10.76	ppbv	98
3) Dichlorodifluoromethane	4.463	85	797779	9.75	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	710623	10.36	ppbv	95
5) Chloromethane	5.005	50	264001	11.03	ppbv	100
6) Vinyl chloride	5.333	62	306076	10.89	ppbv	100
7) 1,3-Butadiene	5.431	54	215208	10.60	ppbv	99
8) Bromomethane	6.361	94	244781	10.04	ppbv	99
9) Chloroethane	6.690	64	159862	9.96	ppbv	99
10) Bromoethene	7.262	106	228120	10.74	ppbv	100
11) Trichlorofluoromethane	7.408	101	843572	9.88	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	453851	9.04	ppbv	95
13) 1,1-Dichloroethene	9.300	61	496272	9.55	ppbv	97
14) Acetone	9.811	43	468126	11.04	ppbv	99
15) Carbon disulfide	10.012	76	734225	10.72	ppbv	100
16) 2-Propanol	10.437	45	494476	11.90	ppbv	98
17) Allyl chloride	10.845	41	395867	11.67	ppbv	95
18) Dichloromethane	11.380	49	384392	9.03	ppbv	92
19) tert-Butyl methyl ethe...	12.074	73	880268	10.95	ppbv	96
20) trans-1,2-Dichloroethene	12.098	61	398433	10.35	ppbv	95
21) Hexane	12.713	57	489339	10.98	ppbv	97
22) 1,1-Dichloroethane	13.449	63	597122	9.73	ppbv	100
23) Vinyl acetate	13.589	43	879619	12.08	ppbv	97
24) cis-1,2-Dichloroethene	14.897	61	458329	10.05	ppbv	94
25) 2-Butanone (MEK)	14.994	72	142188	11.21	ppbv	96
26) Ethyl acetate	15.043	61	94095	11.21	ppbv #	92
27) Tetrahydrofuran	15.450	42	370967	11.11	ppbv	94
28) Chloroform	15.596	83	639665	9.56	ppbv	98
29) Cyclohexane	15.834	56	495763	10.89	ppbv	96
30) 1,1,1-Trichloroethane	15.876	97	699649	9.15	ppbv	99
31) Carbon tetrachloride	16.132	117	744229	9.25	ppbv	99
33) Benzene	16.631	78	991241	10.59	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1562994	11.75	ppbv	99
35) 1,2-Dichloroethane	16.825	62	491725	9.71	ppbv	100
36) Heptane	16.971	43	611565	12.03	ppbv	93
37) Trichloroethene	17.859	130	399325	10.09	ppbv	99
38) 1,2-Dichloropropane	18.358	63	380723	11.12	ppbv	97
39) 1,4-Dioxane	18.559	88	198893	11.17	ppbv	93
40) Bromodichloromethane	18.827	83	688662	10.62	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	591405	10.88	ppbv	99
42) 4-Methyl-2-pentanone (...	19.824	43	854581	11.92	ppbv	99
44) Toluene	20.068	91	1199017	10.36	ppbv	100
45) trans-1,3-Dichloropropene	20.536	75	632670	10.99	ppbv	98
46) 1,1,2-Trichloroethane	20.840	97	405494	10.71	ppbv	97
47) Tetrachloroethene	20.926	166	569193	10.00	ppbv	100
48) 2-Hexanone	21.181	43	860512	11.96	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : B14C056-BS1
Misc : 10 ppbv LCS
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.449	129	688604	10.73	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	622362	10.65	ppbv	99
51) Chlorobenzene	22.398	112	954260	10.68	ppbv	99
52) Ethylbenzene	22.489	91	1719261	10.56	ppbv	99
53) m&p-Xylene	22.672	91	2672283	20.96	ppbv	99
54) o-Xylene	23.316	91	1349176	10.41	ppbv	100
55) Styrene	23.353	104	1026143	10.30	ppbv	99
56) Bromoform	23.730	173	701868	10.03	ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	932237	10.27	ppbv	99
58) 4-Ethyltoluene	24.667	105	1677331	10.38	ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	1529559	10.00	ppbv	99
60) 1,2,4-Trimethylbenzene	25.367	105	1536236	9.73	ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	1061608	9.51	ppbv	99
62) 1,4-Dichlorobenzene	26.042	146	1071858	9.58	ppbv	99
63) Benzyl chloride	26.255	91	1464500	10.76	ppbv	99
64) 1,2-Dichlorobenzene	26.644	146	1037810	9.54	ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	1030999	9.32	ppbv	99
66) Hexachlorobutadiene	29.248	225	860268	8.94	ppbv	99

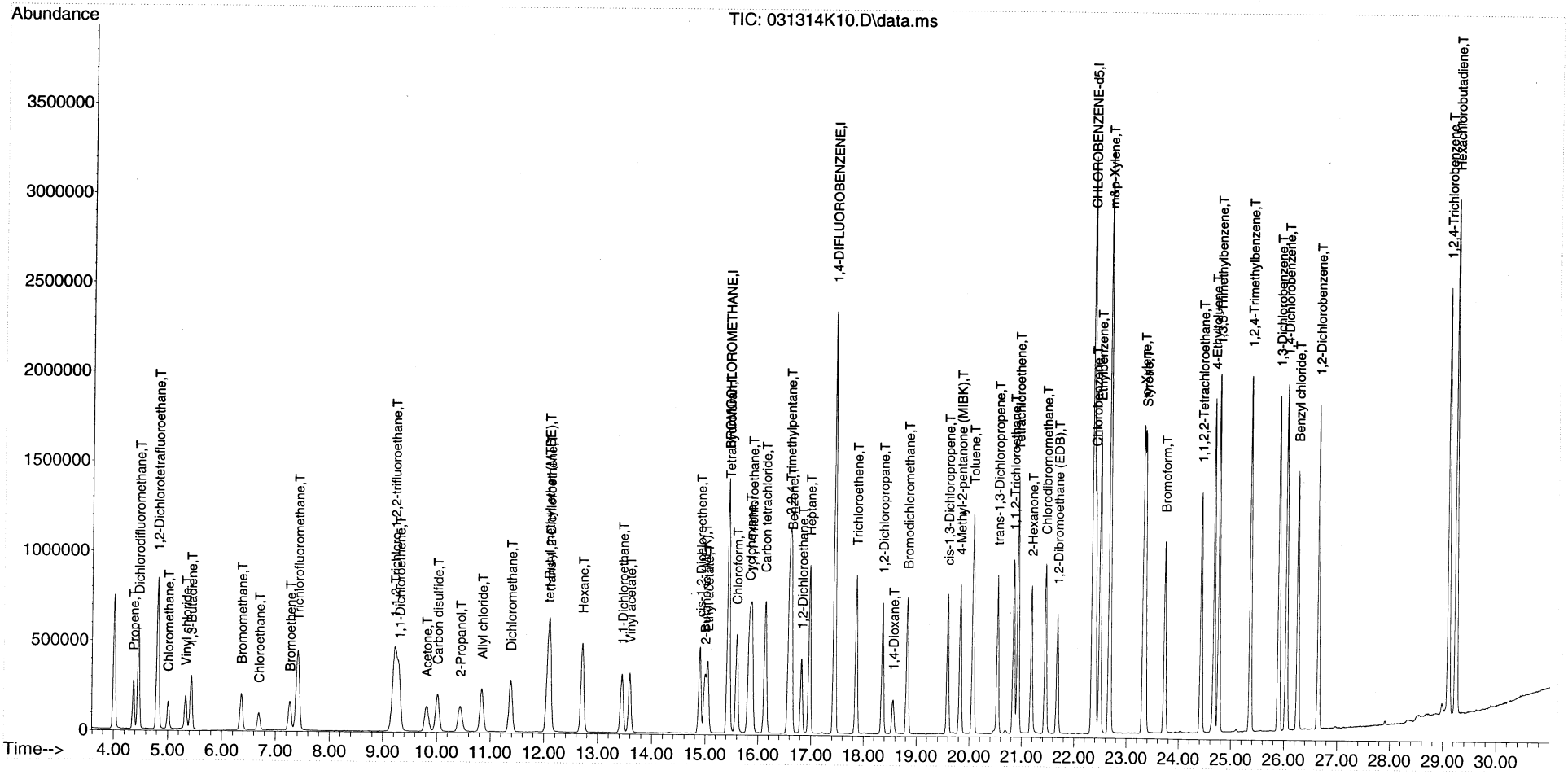
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K10.D
Acq On : 13 Mar 2014 14:43
Instrument: HP5973K
Operator : EM
Sample : B14C056-BS1
Misc : 10 ppbv LCS
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 14 19:14:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K11.D
Acq On : 13 Mar 2014 16:01
Instrument: HP5973K
Operator : EM
Sample : CAN 1555E
Misc : 200mL CAN 1555E
ALS Vial : 35
Multiplier: 1

Nil

Quant Time: Mar 14 19:19:36 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	895157	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2381395	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2134189	22.00 ppbv	0.00
Target Compounds					Qvalue
14) Acetone	9.890	43	20968	0.50 ppbv	99
18) Dichloromethane	11.368	49	25269	0.60 ppbv	92

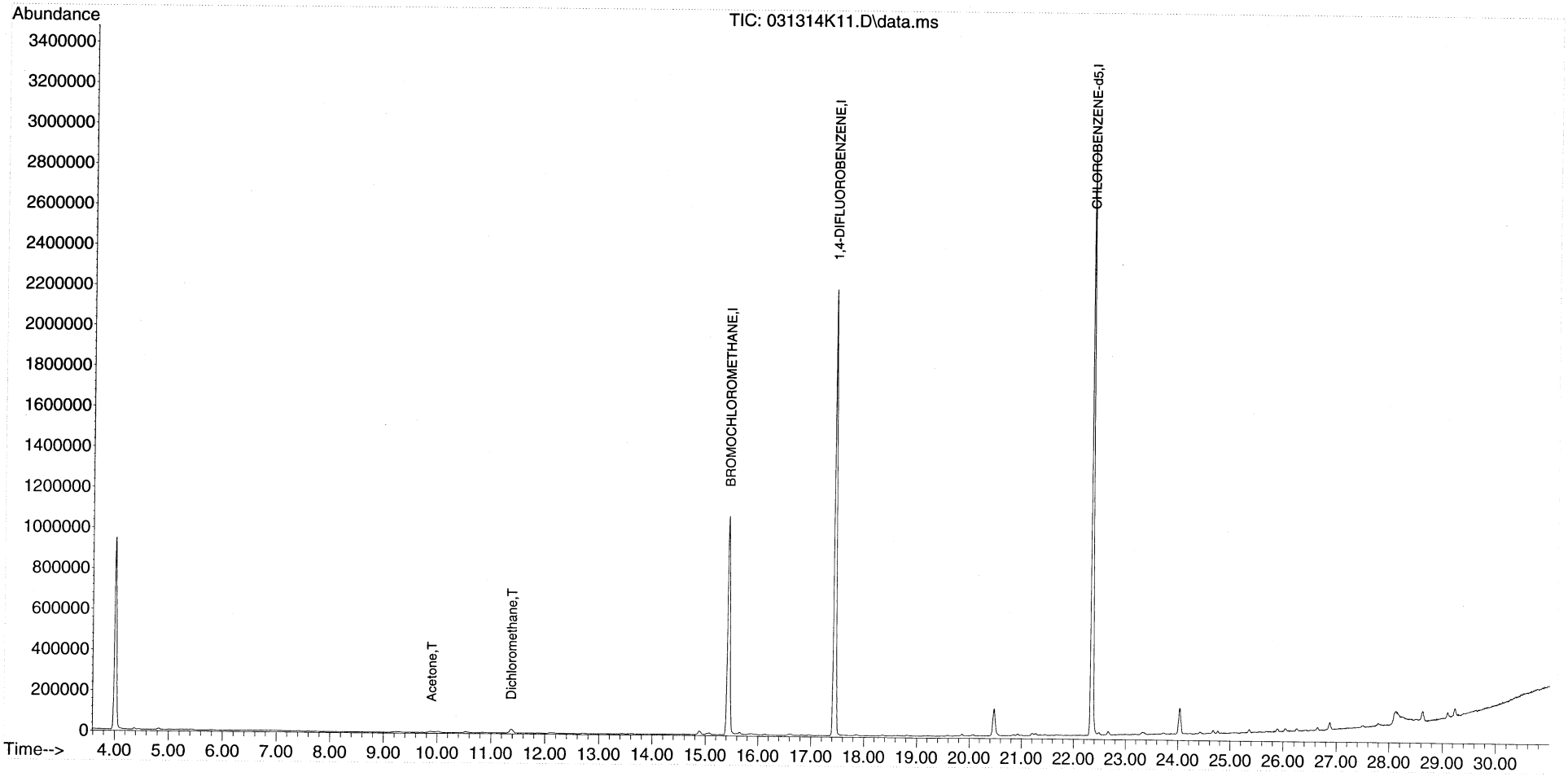
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K11.D
Acq On : 13 Mar 2014 16:01
Instrument: HP5973K
Operator : EM
Sample : CAN 1555E
Misc : 200mL CAN 1555E
ALS Vial : 35
Multiplier: 1

Quant Time: Mar 14 19:19:36 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K12.D
Acq On : 13 Mar 2014 16:50
Instrument: HP5973K
Operator : EM
Sample : B14C056-BLK1
Misc : 200mL CAN 7339
ALS Vial : 35
Multiplier: 1

Quant Time: Mar 14 19:19:47 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	1051151	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2669818	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2312920	22.00 ppbv	0.00
Target Compounds					Qvalue
18) Dichloromethane	11.386	49	26432	0.54 ppbv	88

B flag

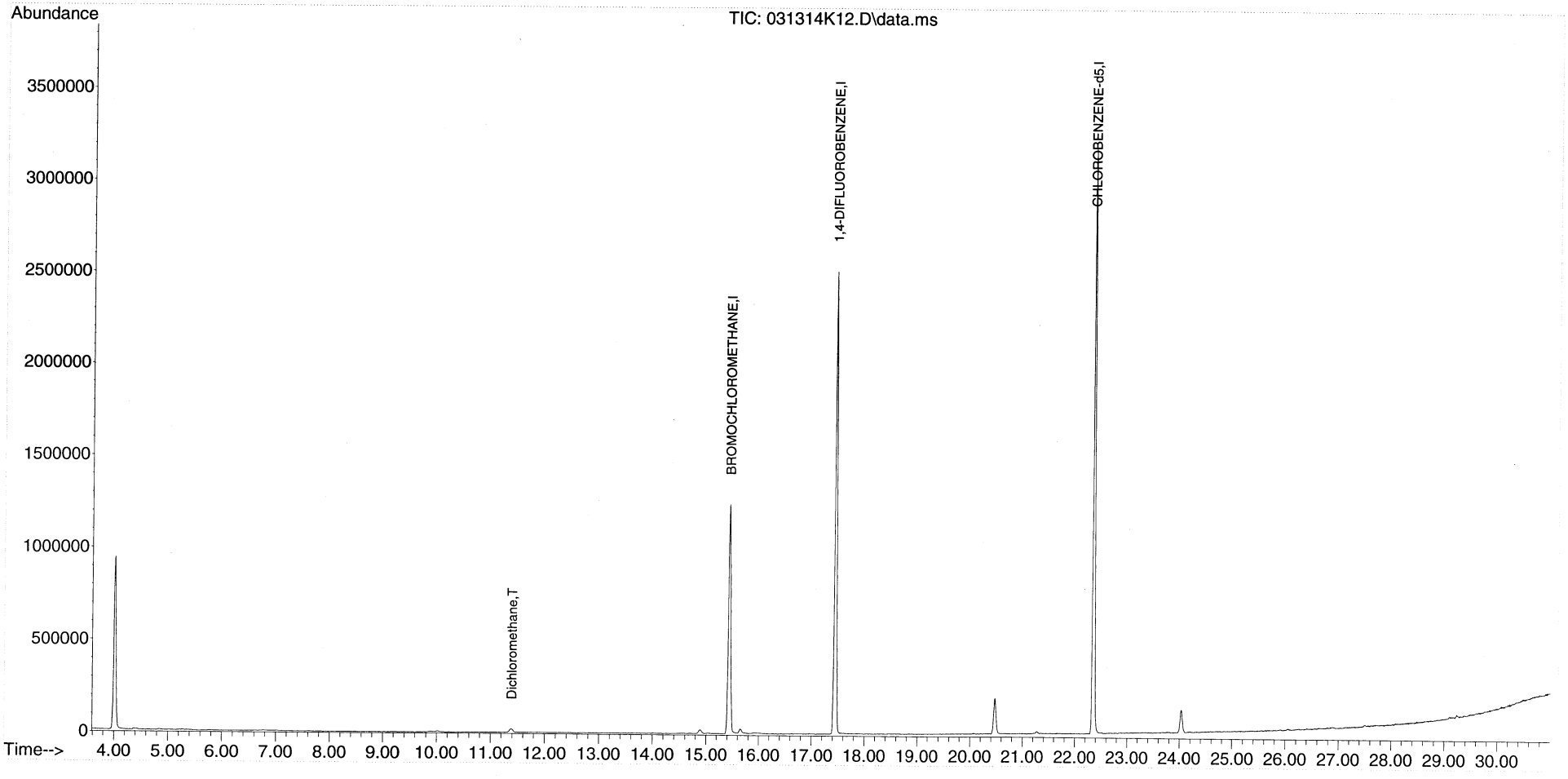
(#) = qualifier out of range (m) = manual integration (+) = signals summed

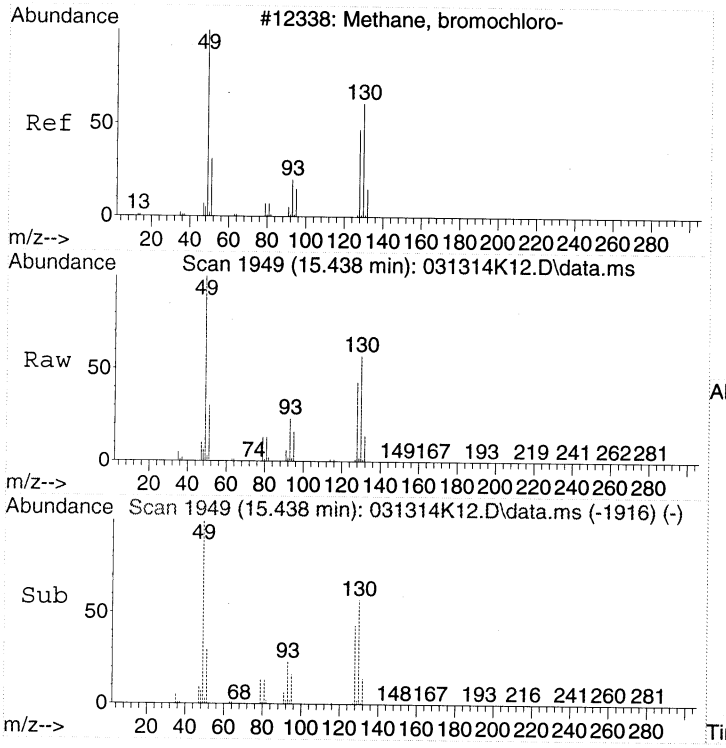
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K12.D
Acq On : 13 Mar 2014 16:50
Instrument: HP5973K
Operator : EM
Sample : B14C056-BLK1
Misc : 200mL CAN 7339
ALS Vial : 35
Multiplier: 1

Quant Time: Mar 14 19:19:47 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

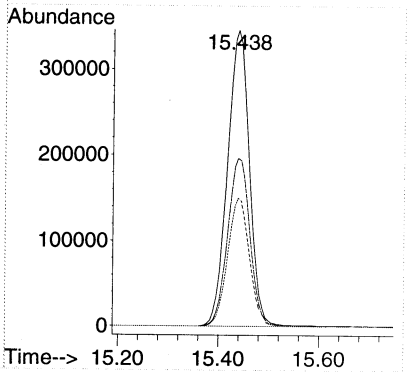


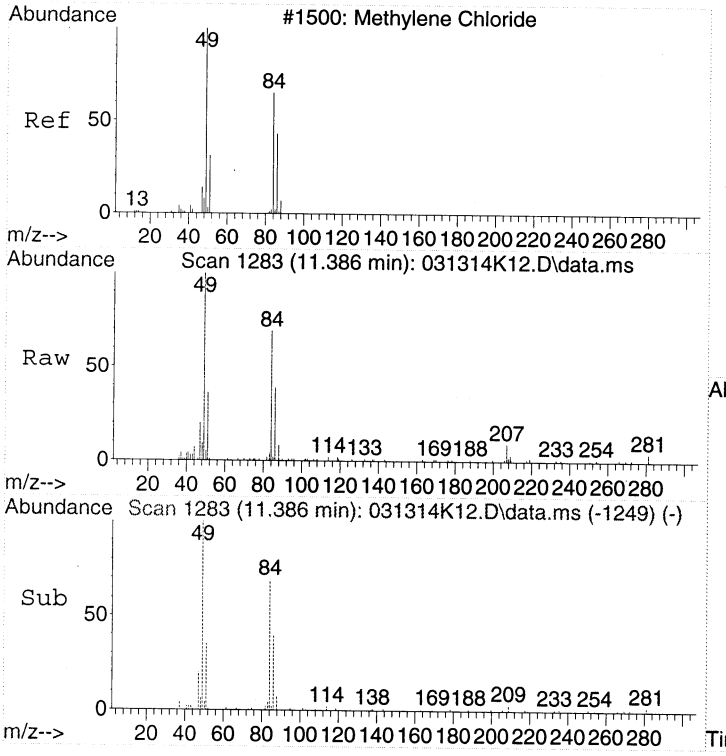


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K12.D
Acq: 13 Mar 2014 16:50

Tgt Ion: 49 Resp: 1051151

Ion	Ratio	Lower	Upper
49	100		
130	57.9	53.4	93.4
128	43.3	35.1	75.1

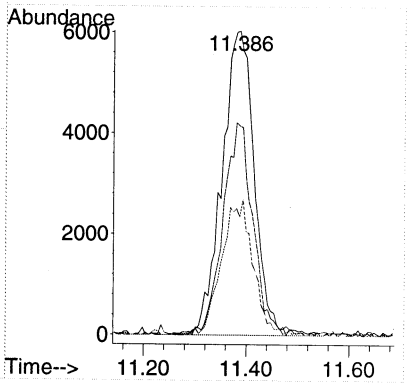


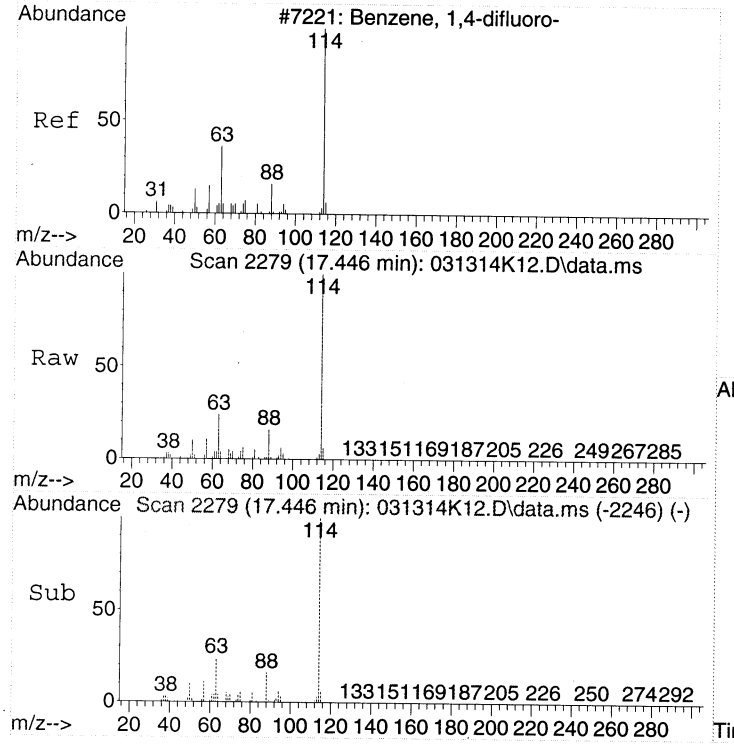


#18
Dichloromethane
Concen: 0.54 ppbv
RT: 11.386 min Scan# 1283
Delta R.T. 0.006 min
Lab File: 031314K12.D
Acq: 13 Mar 2014 16:50

Tgt Ion: 49 Resp: 26432

Ion	Ratio	Lower	Upper
49	100		
84	63.9	54.7	94.7
86	41.6	29.1	69.1

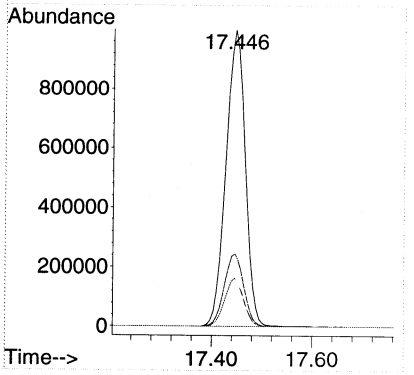


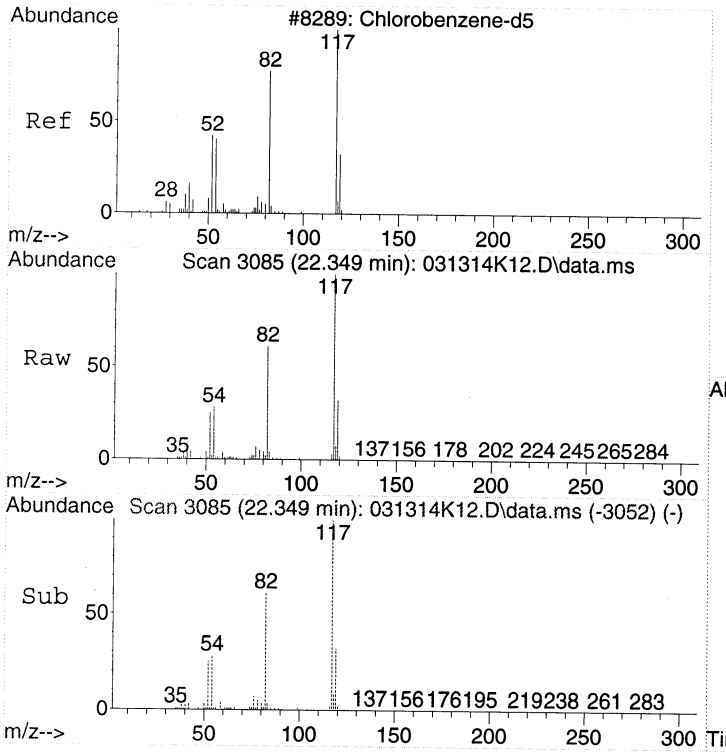


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K12.D
Acq: 13 Mar 2014 16:50

Tgt Ion:114 Resp: 2669818

Ion	Ratio	Lower	Upper
114	100		
63	24.7	2.7	42.7
88	16.0	0.0	36.0

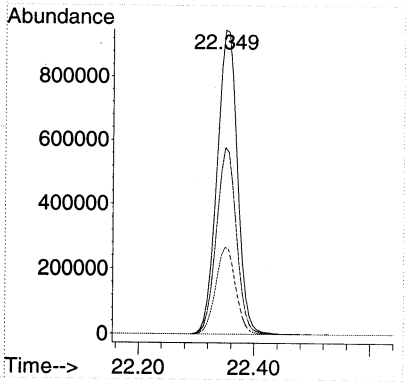




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K12.D
Acq: 13 Mar 2014 16:50

Tgt Ion:117 Resp: 2312920

Ion	Ratio	Lower	Upper
117	100		
82	60.0	36.4	76.4
54	27.8	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K13.D
Acq On : 13 Mar 2014 17:39
Instrument: HP5973K
Operator : EM
Sample : 1403028-01
Misc : 200mL MH60 CAN 1988
ALS Vial : 36
Multiplier: 2.09

Quant Time: Mar 14 19:23:47 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	1099540	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2699310	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2399643	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.847	43	115162	2.24	ppbv	98
18) Dichloromethane	11.381	49	29963	0.58	ppbv	85
24) cis-1,2-Dichloroethene	14.903	61	50181	0.91	ppbv	91
28) Chloroform	15.603	83	126792	1.56	ppbv	95
37) Trichloroethene	17.860	130	139519	3.33	ppbv	98

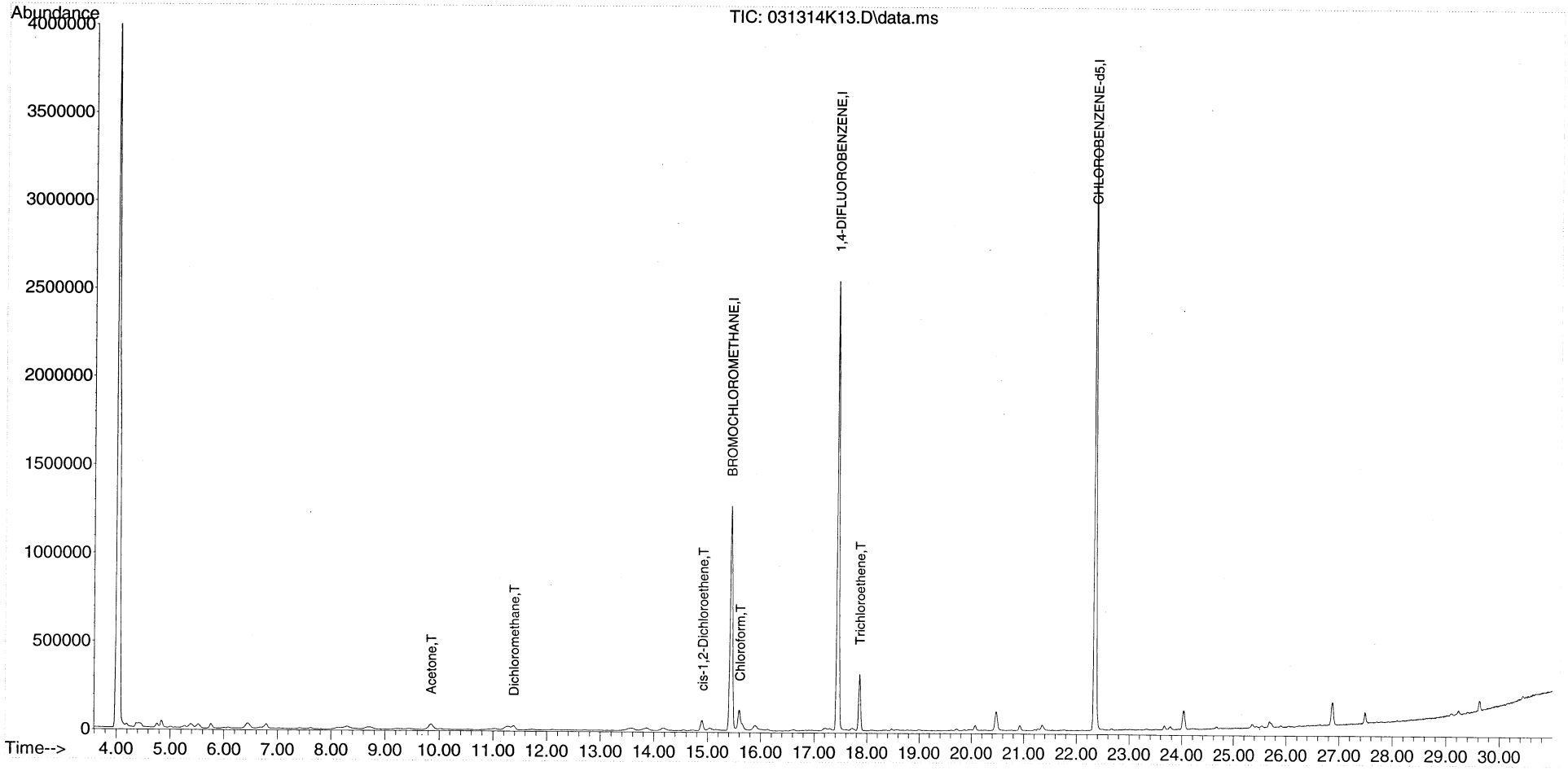
(#) = qualifier out of range (m) = manual integration (+) = signals summed

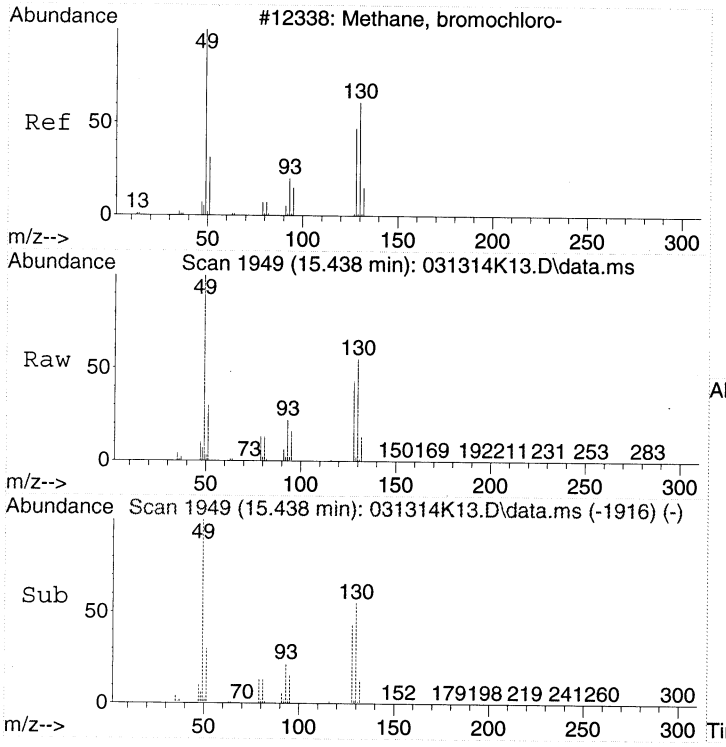
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K13.D
Acq On : 13 Mar 2014 17:39
Instrument: HP5973K
Operator : EM
Sample : 1403028-01
Misc : 200mL MH60 CAN 1988
ALS Vial : 36
Multiplier: 2.09

Quant Time: Mar 14 19:23:47 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

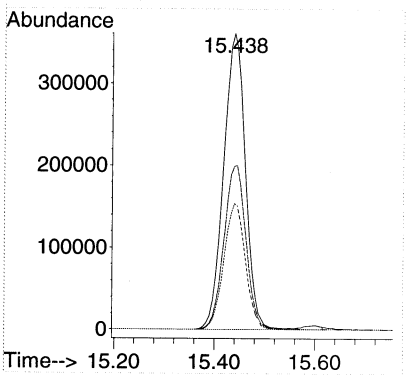


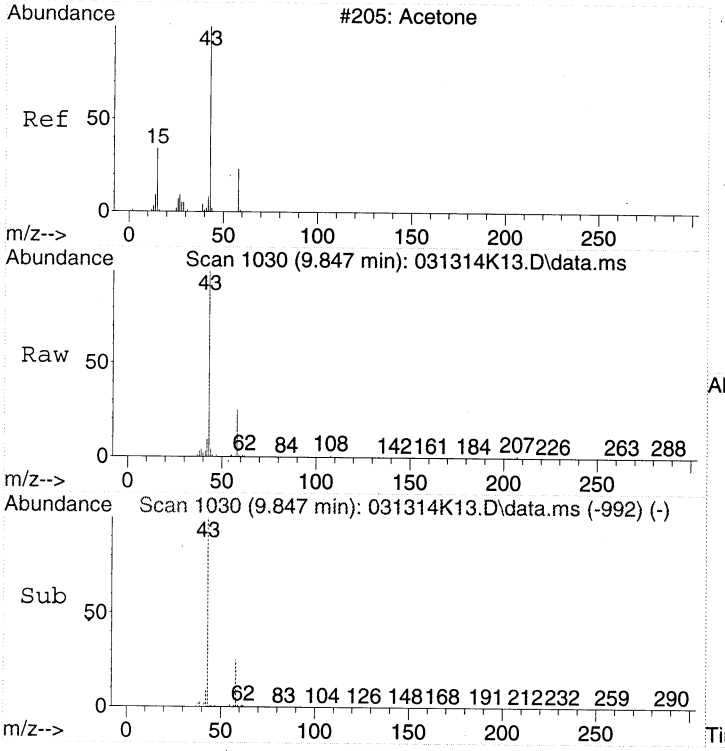


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion: 49 Resp: 1099540

Ion	Ratio	Lower	Upper
49	100		
130	55.8	53.4	93.4
128	42.1	35.1	75.1

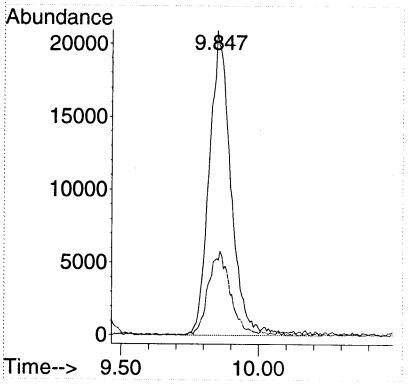


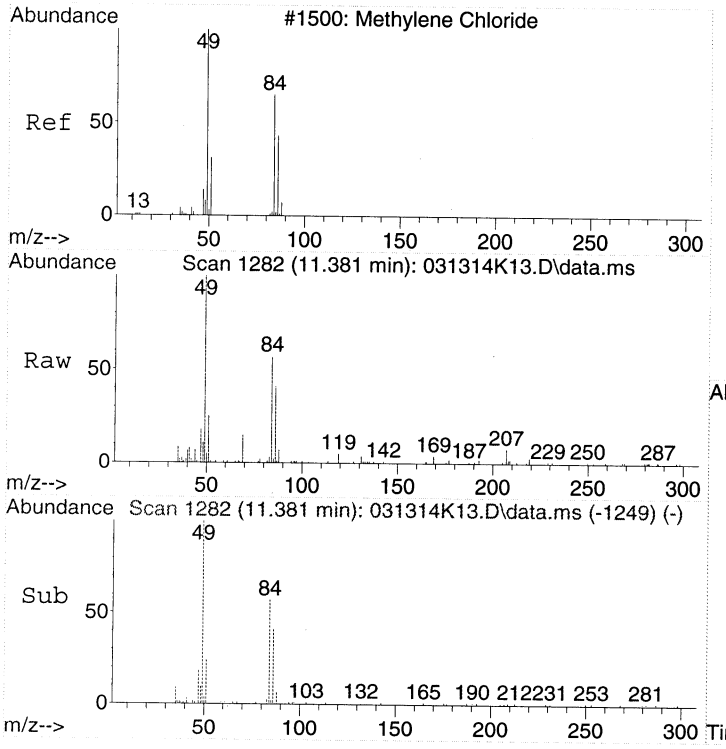


#14
Acetone
Concen: 2.24 ppbv
RT: 9.847 min Scan# 1030
Delta R.T. 0.030 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion: 43 Resp: 115162

Ion	Ratio	Lower	Upper
43	100		
58	28.8	8.0	48.0

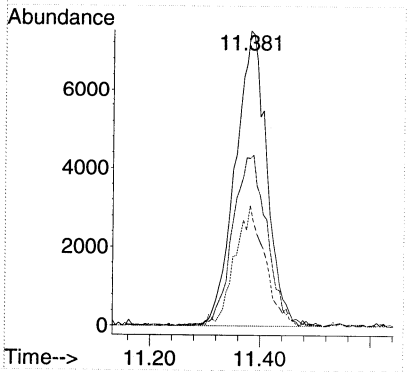


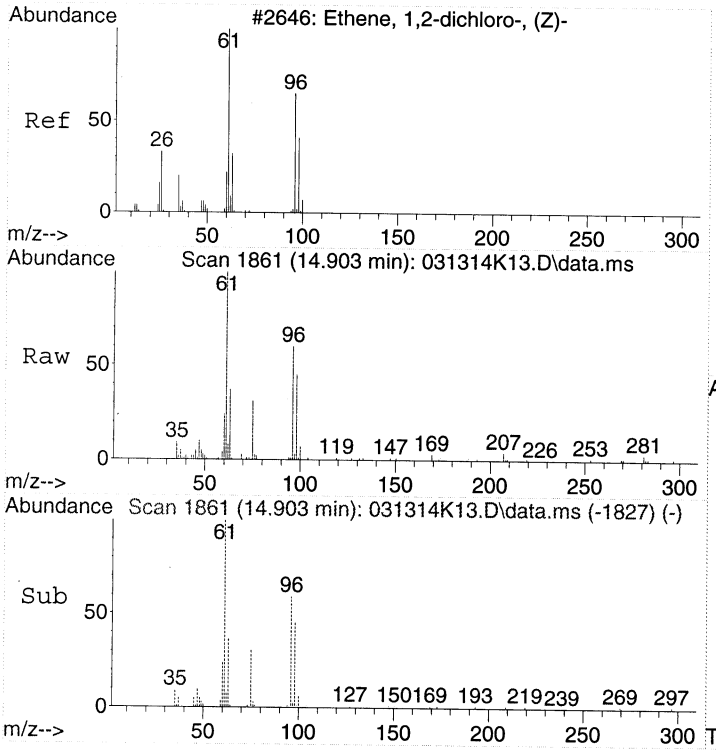


#18
Dichloromethane
Concen: 0.58 ppbv
RT: 11.381 min Scan# 1282
Delta R.T. 0.000 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion: 49 Resp: 29963

Ion	Ratio	Lower	Upper
49	100		
84	62.0	54.7	94.7
86	38.3	29.1	69.1

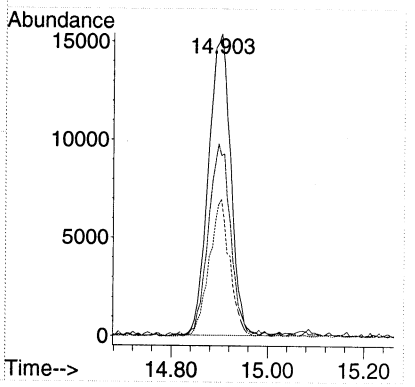


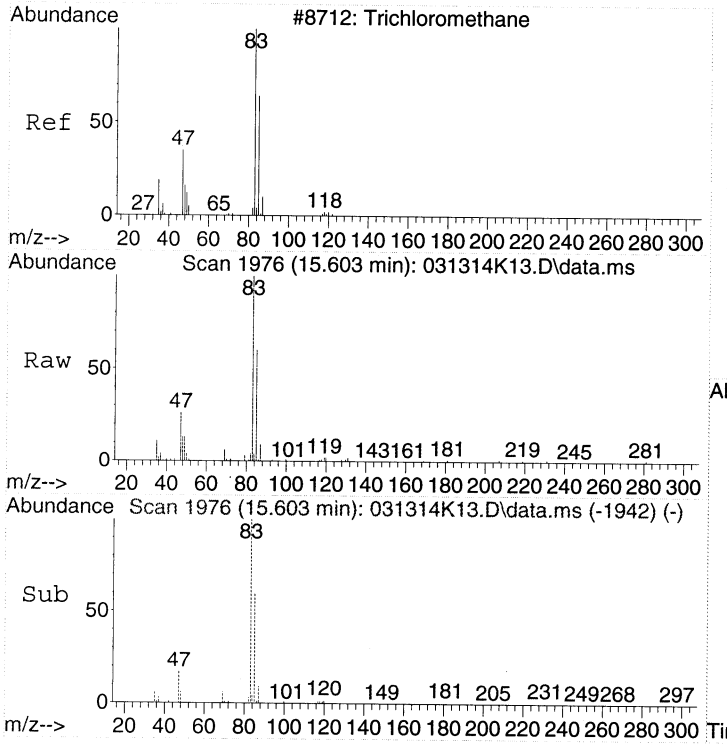


#24
cis-1,2-Dichloroethene
Concen: 0.91 ppbv
RT: 14.903 min Scan# 1861
Delta R.T. 0.006 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion: 61 Resp: 50181

Ion	Ratio	Lower	Upper
61	100		
96	63.1	52.9	92.9
98	41.3	24.5	64.5

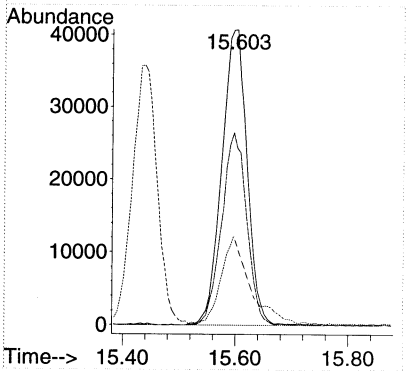


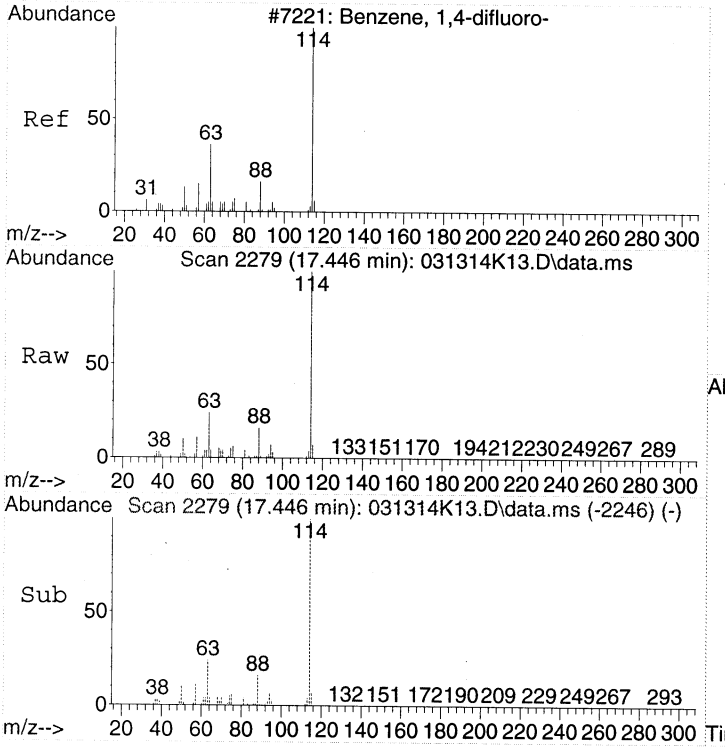


#28
Chloroform
Concen: 1.56 ppbv
RT: 15.603 min Scan# 1976
Delta R.T. 0.006 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion: 83 Resp: 126792

Ion	Ratio	Lower	Upper
83	100		
85	64.3	46.8	86.8
47	32.2	6.3	46.3

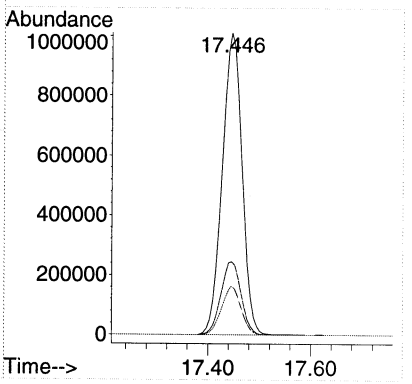


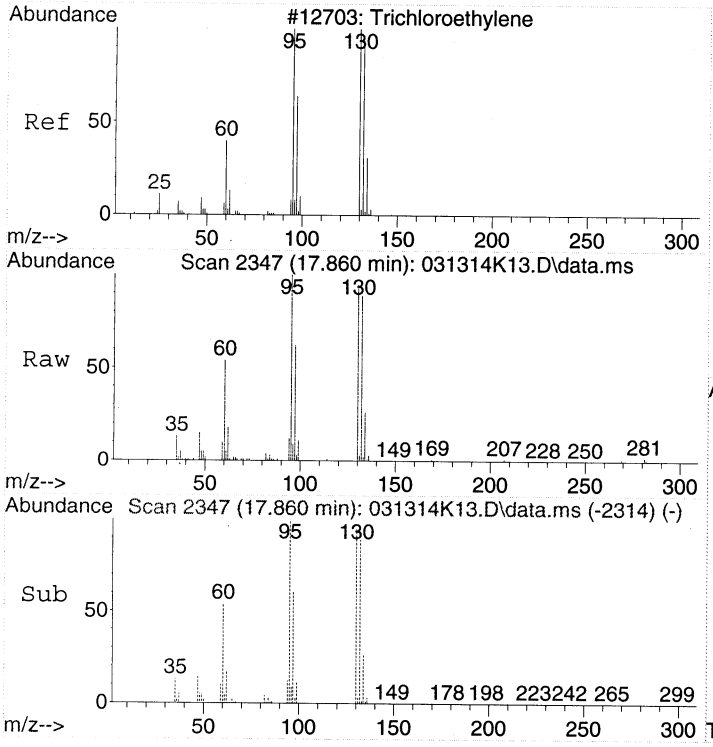


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion:114 Resp: 2699310

Ion	Ratio	Lower	Upper
114	100		
63	24.8	2.7	42.7
88	15.8	0.0	36.0

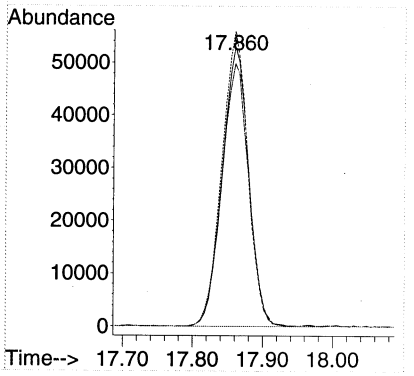


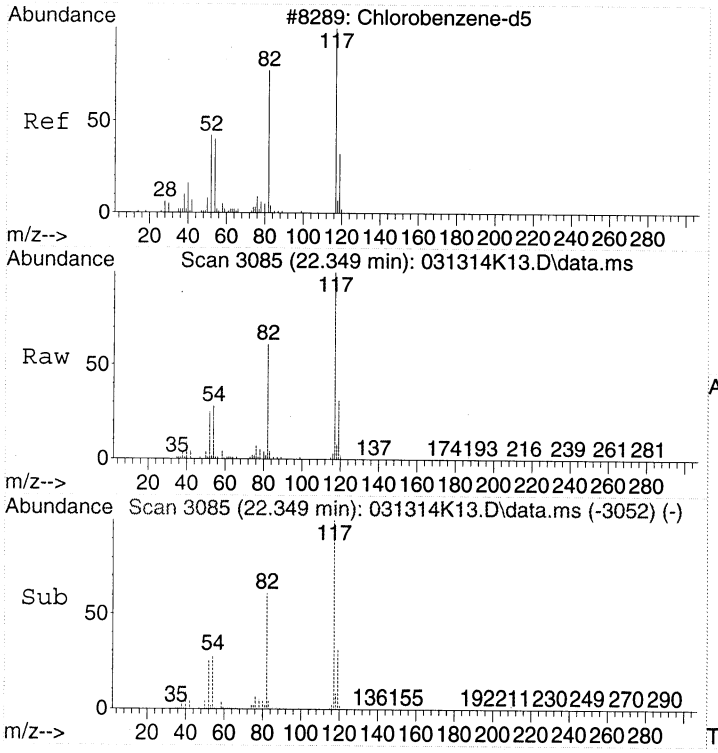


#37
Trichloroethene
Concen: 3.33 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion:130 Resp: 139519

Ion	Ratio	Lower	Upper
130	100		
132	96.0	77.7	117.7
95	103.8	80.9	120.9

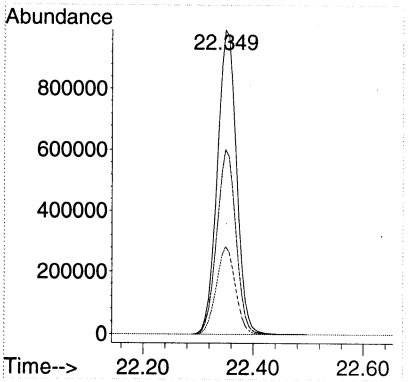




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K13.D
Acq: 13 Mar 2014 17:39

Tgt Ion:117 Resp: 2399643

Ion	Ratio	Lower	Upper
117	100		
82	60.2	36.4	76.4
54	28.2	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K14.D
Acq On : 13 Mar 2014 18:28
Instrument: HP5973K
Operator : EM
Sample : 1403028-02
Misc : 200mL MH61 CAN 629
ALS Vial : 37
Multiplier: 2.11

Quant Time: Mar 14 19:23:59 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	1097048	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2609671	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	2313066	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.372	41	63378	2.56	ppbv	#	68
6) Vinyl chloride	5.339	62	25126	0.74	ppbv		99
13) 1,1-Dichloroethene	9.294	61	82949	1.32	ppbv		93
14) Acetone	9.841	43	267654	5.22	ppbv		95
15) Carbon disulfide	10.024	76	73076	0.88	ppbv		97
16) 2-Propanol	10.498	45	61254	1.22	ppbv		99
18) Dichloromethane	11.374	49	54246	1.05	ppbv		85
20) trans-1,2-Dichloroethene	12.098	61	53694	1.15	ppbv		93
21) Hexane	12.719	57	37439	0.69	ppbv		94
22) 1,1-Dichloroethane	13.443	63	67576	0.91	ppbv		100
24) cis-1,2-Dichloroethene	14.897	61	931797	16.87	ppbv		90
27) Tetrahydrofuran	15.487	42	69787	1.73	ppbv		89
28) Chloroform	15.596	83	1950372	24.07	ppbv	E	97
37) Trichloroethene	17.859	130	2497808	61.60	ppbv	E	97
44) Toluene	20.068	91	171012	1.51	ppbv		99
47) Tetrachloroethene	20.925	166	182927	3.28	ppbv		100

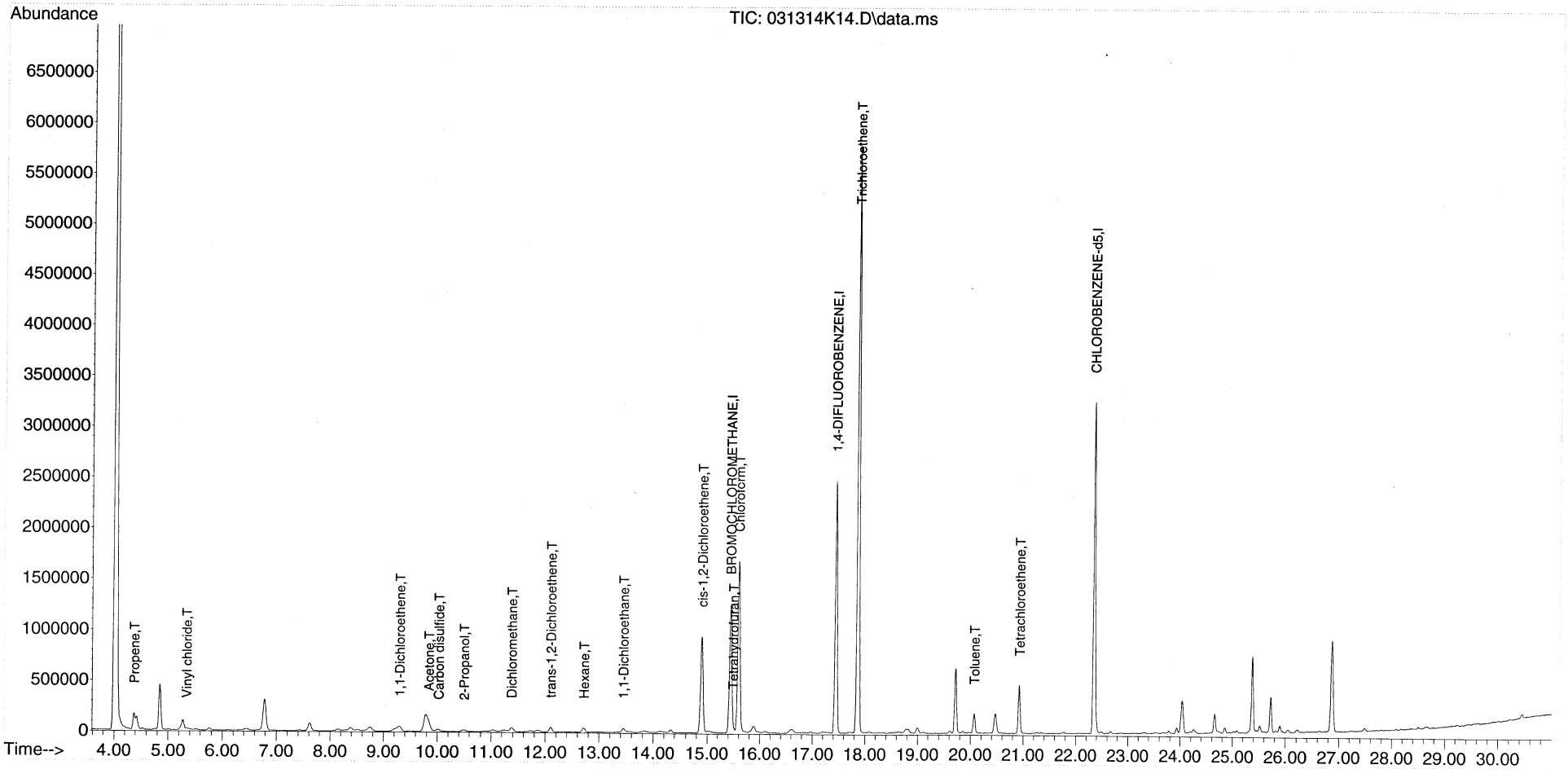
(#) = qualifier out of range (m) = manual integration (+) = signals summed

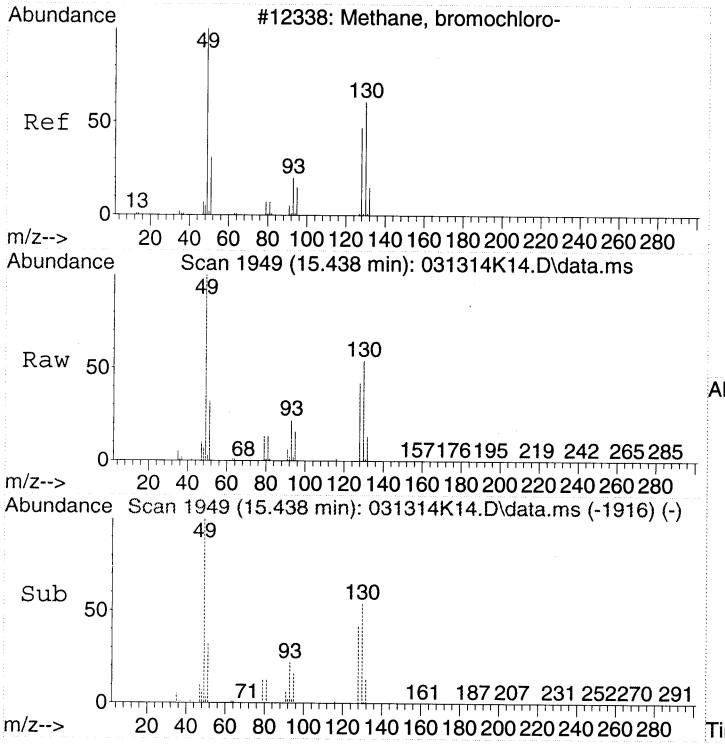
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K14.D
Acq On : 13 Mar 2014 18:28
Instrument: HP5973K
Operator : EM
Sample : 1403028-02
Misc : 200mL MH61 CAN 629
ALS Vial : 37
Multiplier: 2.11

Quant Time: Mar 14 19:23:59 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

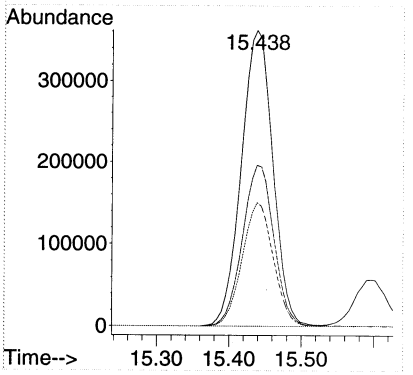


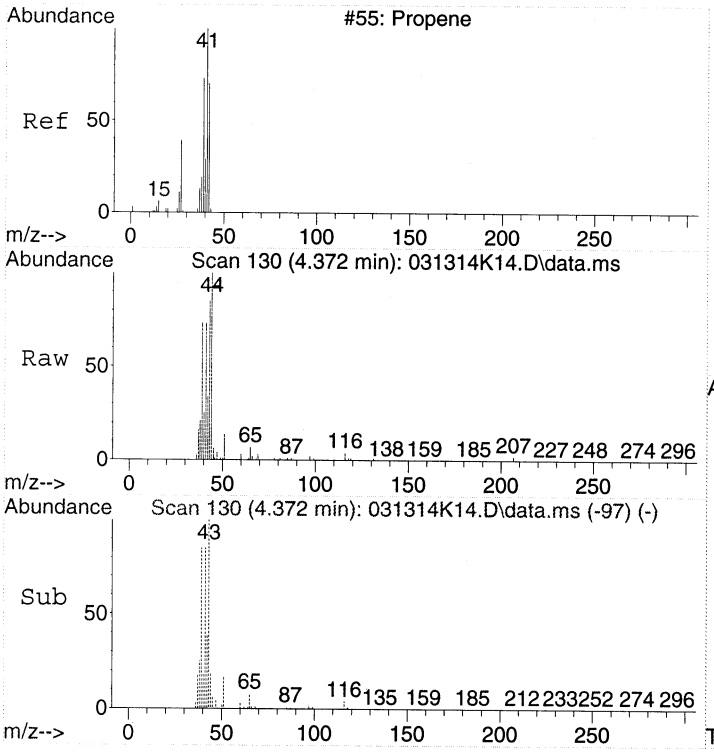


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 49 Resp: 1097048

Ion	Ratio	Lower	Upper
49	100		
130	54.1	53.4	93.4
128	41.1	35.1	75.1

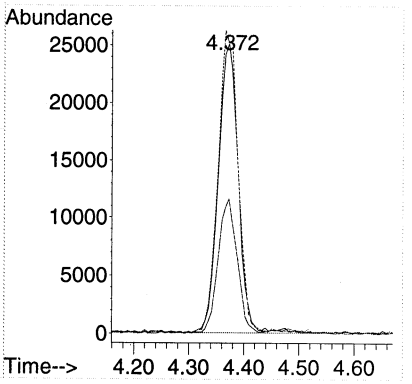


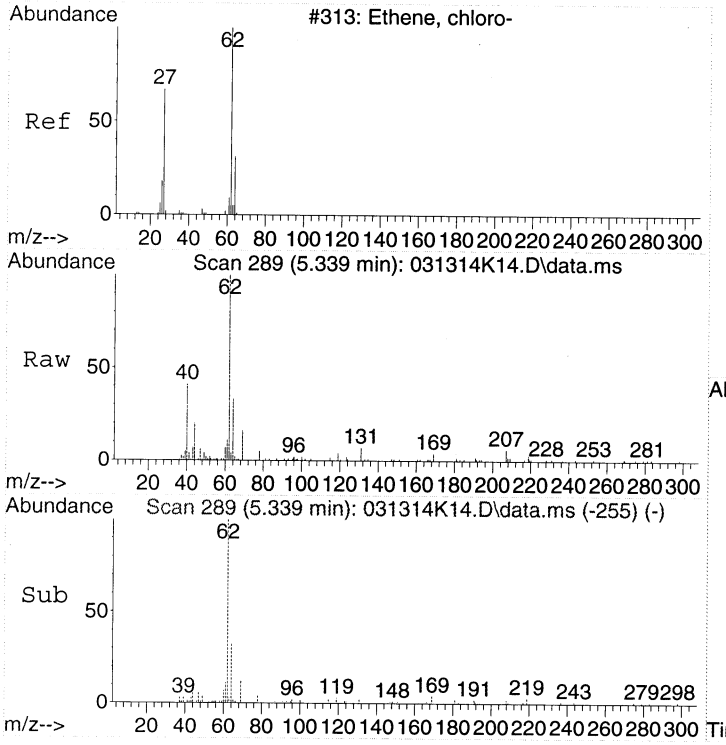


#2
Propene
Concen: 2.56 ppbv
RT: 4.372 min Scan# 130
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 41 Resp: 63378

Ion	Ratio	Lower	Upper
41	100		
42	43.3	46.3	86.3#
39	105.8	56.1	96.1#

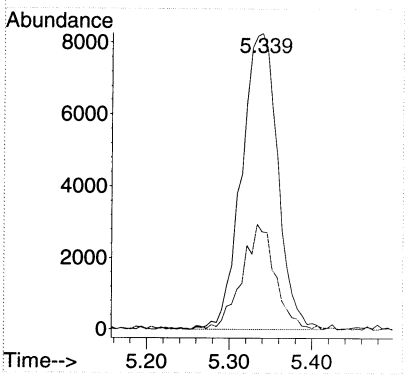


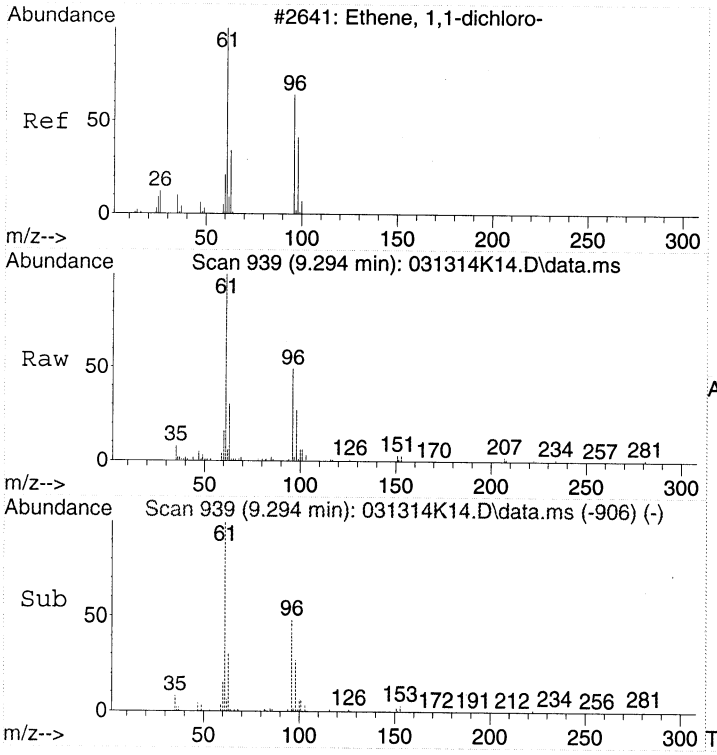


#6
Vinyl chloride
Concen: 0.74 ppbv
RT: 5.339 min Scan# 289
Delta R.T. 0.006 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 62 Resp: 25126

Ion	Ratio	Lower	Upper
62	100		
64	33.0	12.5	52.5

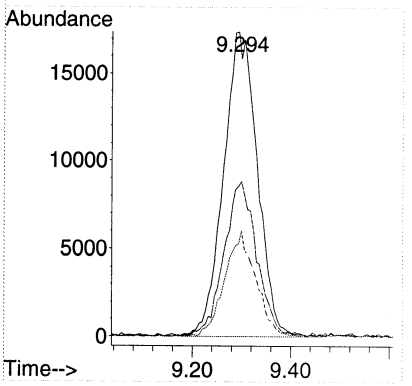


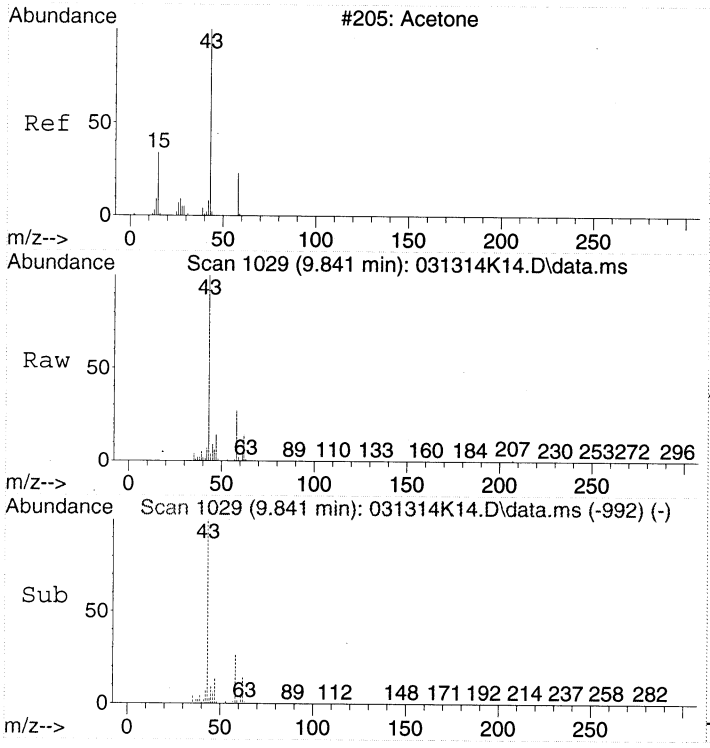


#13
1,1-Dichloroethene
Concen: 1.32 ppbv
RT: 9.294 min Scan# 939
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 61 Resp: 82949

Ion	Ratio	Lower	Upper
61	100		
96	49.6	36.1	76.1
63	31.1	12.7	52.7

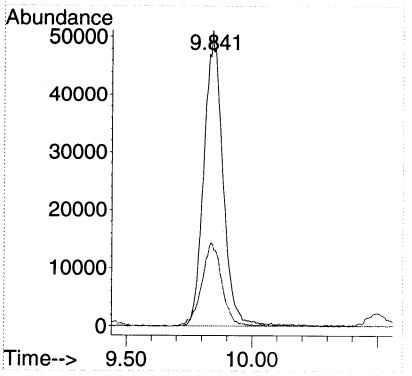


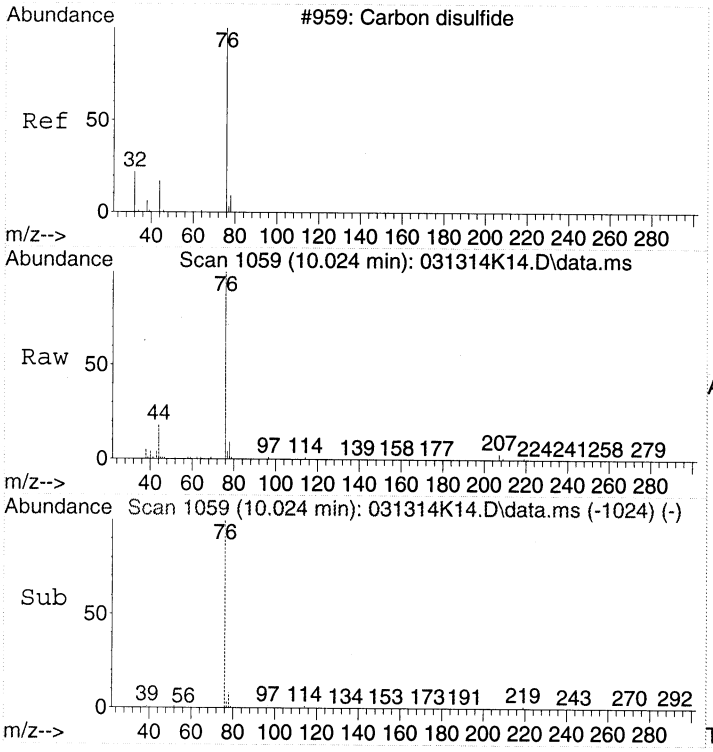


#14
Acetone
Concen: 5.22 ppbv
RT: 9.841 min Scan# 1029
Delta R.T. 0.024 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 43 Resp: 267654

Ion	Ratio	Lower	Upper
43	100		
58	30.6	8.0	48.0

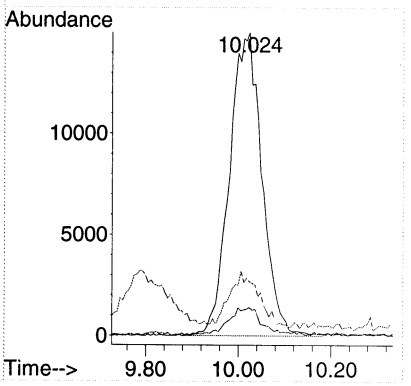


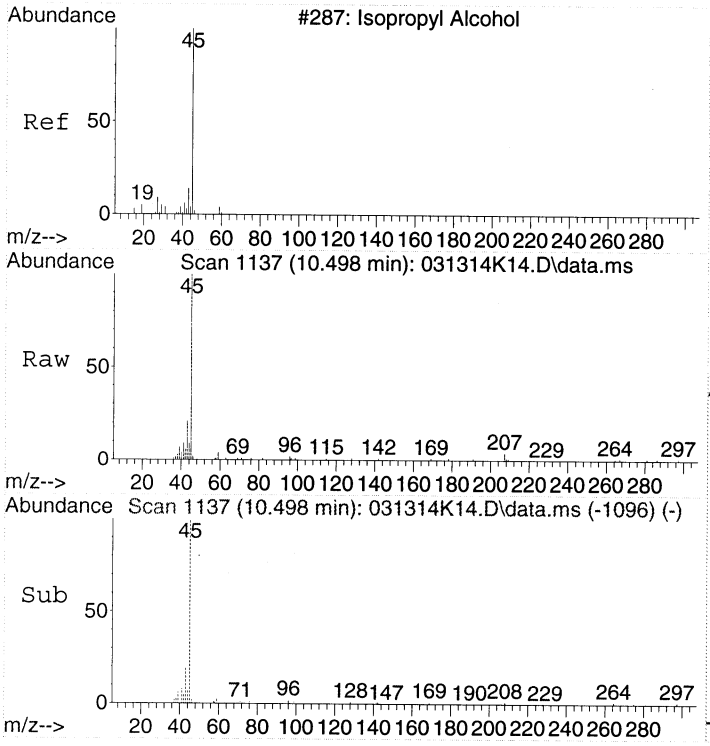


#15
Carbon disulfide
Concen: 0.88 ppbv
RT: 10.024 min Scan# 1059
Delta R.T. 0.012 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 76 Resp: 73076

Ion	Ratio	Lower	Upper
76	100		
78	10.2	0.0	29.5
44	16.6	0.0	34.9

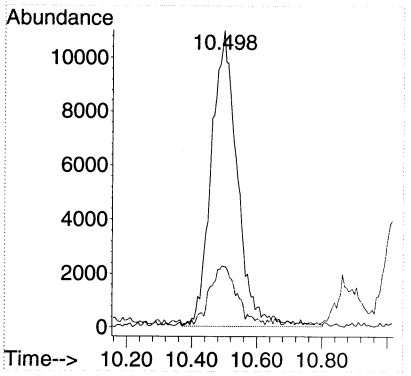


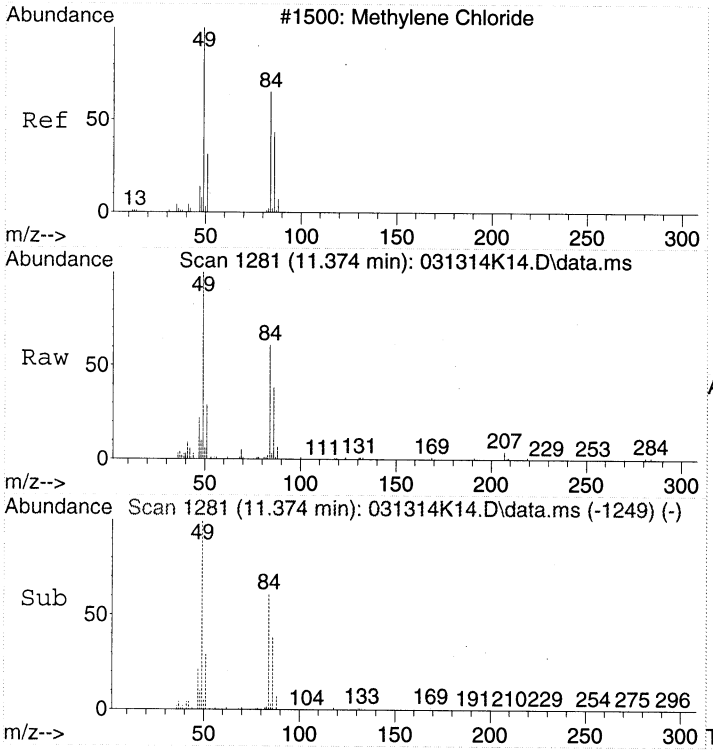


#16
2-Propanol
Concen: 1.22 ppbv
RT: 10.498 min Scan# 1137
Delta R.T. 0.049 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 45 Resp: 61254

Ion	Ratio	Lower	Upper
45	100		
43	20.9	1.3	41.3

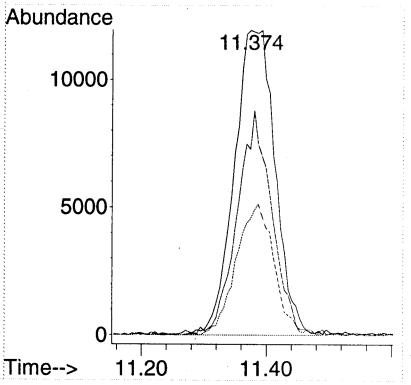


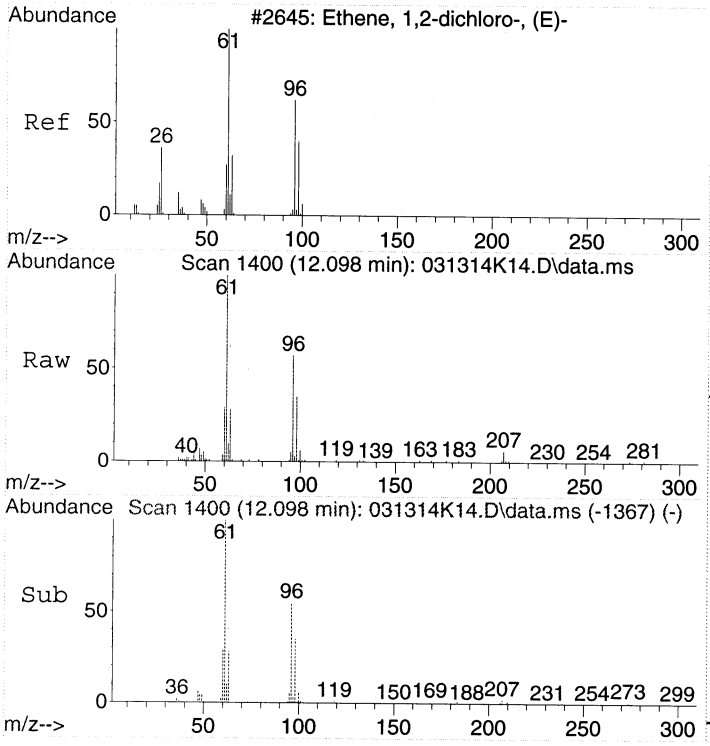


#18
Dichloromethane
Concen: 1.05 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. -0.006 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 49 Resp: 54246

Ion	Ratio	Lower	Upper
49	100		
84	61.6	54.7	94.7
86	39.4	29.1	69.1

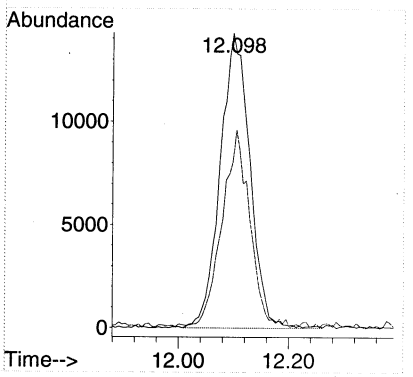


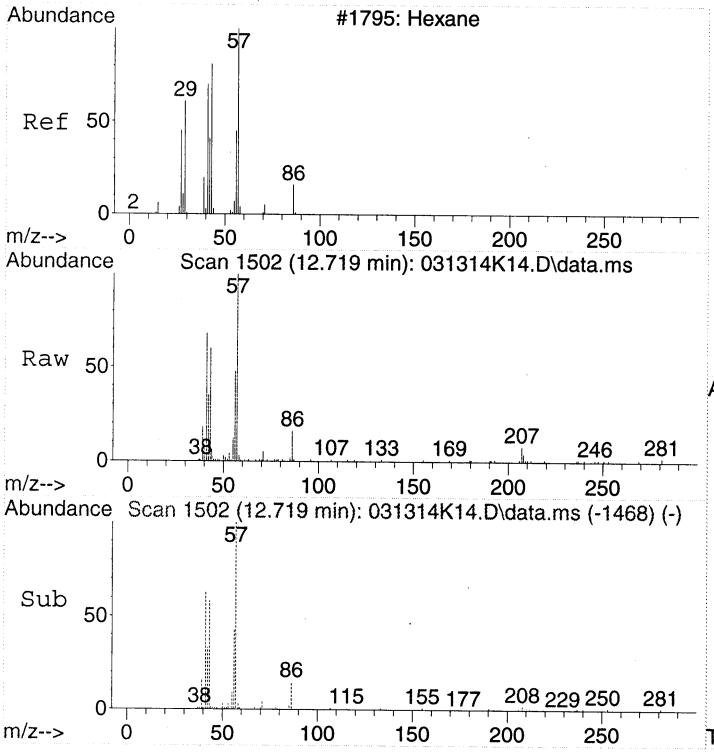


#20
trans-1,2-Dichloroethene
Concen: 1.15 ppbv
RT: 12.098 min Scan# 1400
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 61 Resp: 53694

Ion	Ratio	Lower	Upper
61	100		
96	61.0	46.8	86.8

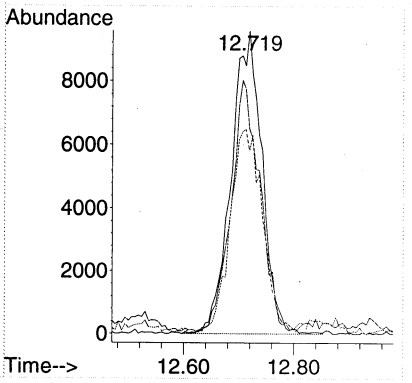


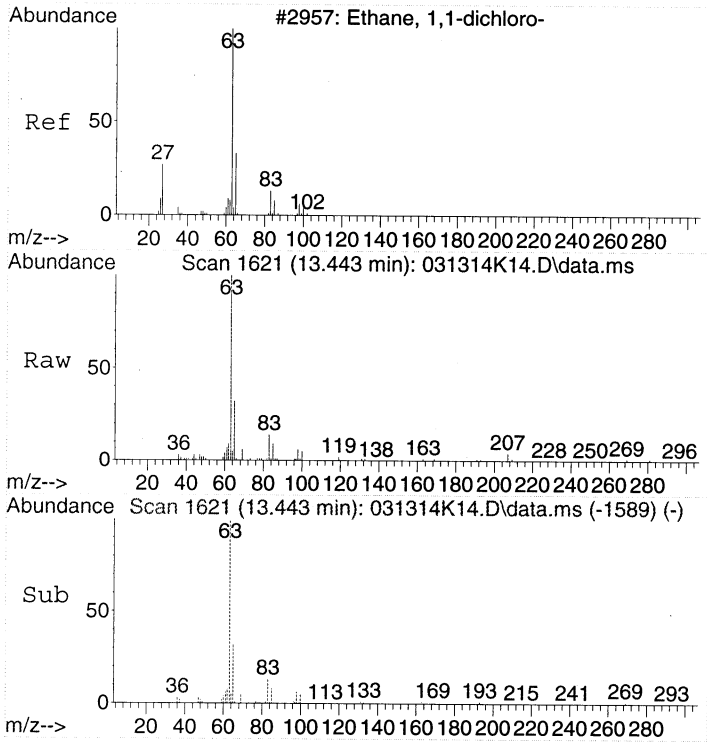


#21
Hexane
Concen: 0.69 ppbv
RT: 12.719 min Scan# 1502
Delta R.T. 0.006 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 57 Resp: 37439

Ion	Ratio	Lower	Upper
57	100		
41	78.5	56.9	96.9
43	71.7	42.9	82.9

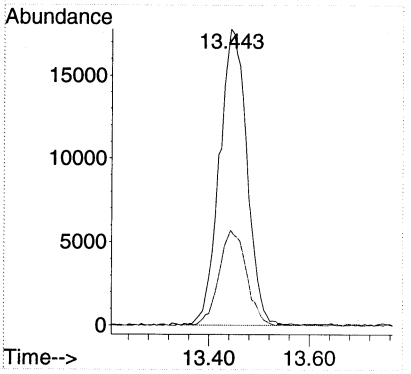


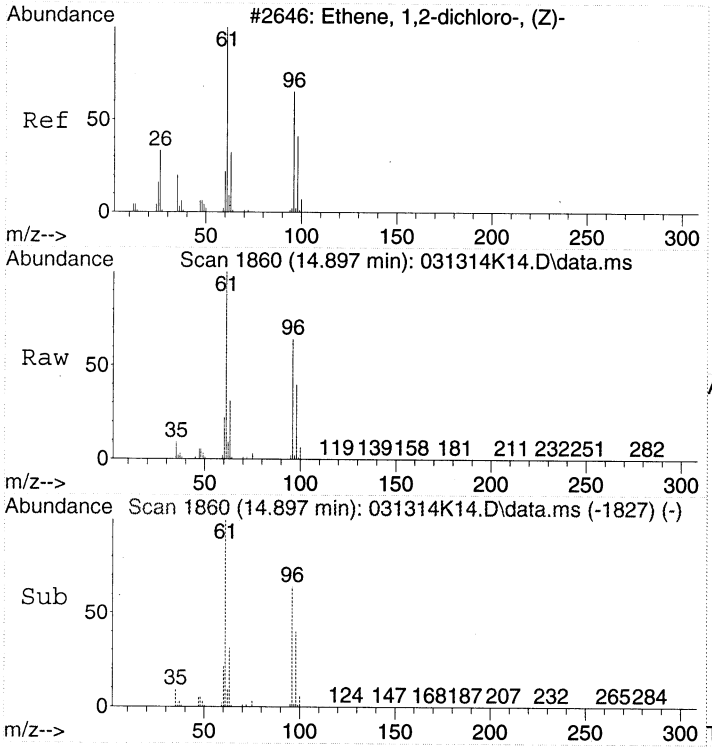


#22
1,1-Dichloroethane
Concen: 0.91 ppbv
RT: 13.443 min Scan# 1621
Delta R.T. -0.006 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 63 Resp: 67576

Ion	Ratio	Lower	Upper
63	100		
65	31.9	11.8	51.8

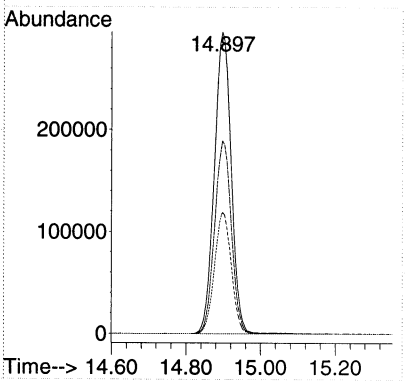


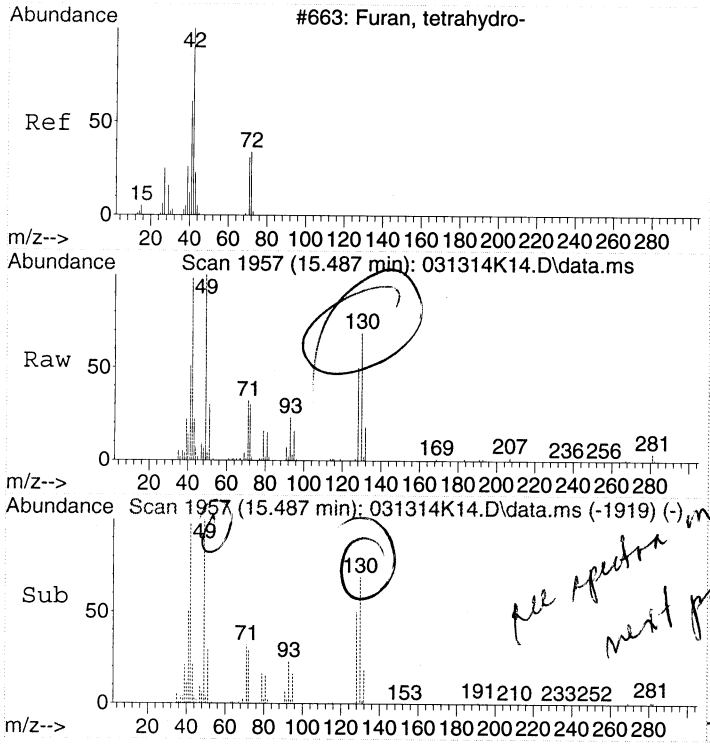


#24
cis-1,2-Dichloroethene
Concen: 16.87 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 61 Resp: 931797

Ion	Ratio	Lower	Upper
61	100		
96	63.6	52.9	92.9
98	40.0	24.5	64.5

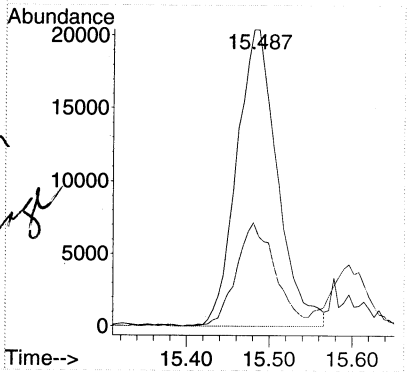


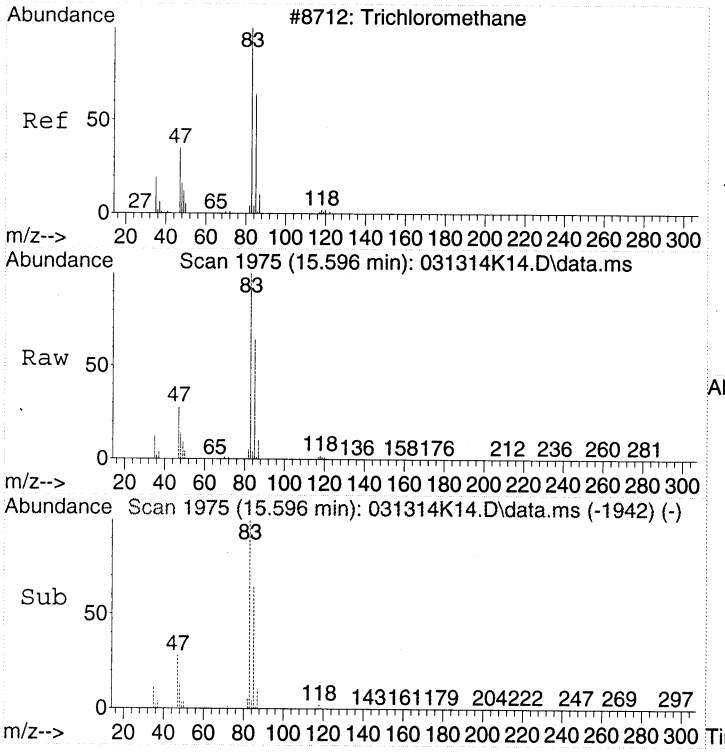


#27
Tetrahydrofuran
Concen: 1.73 ppbv
RT: 15.487 min Scan# 1957
Delta R.T. 0.030 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 42 Resp: 69787

Ion	Ratio	Lower	Upper
42	100		
72	35.7	22.5	62.5

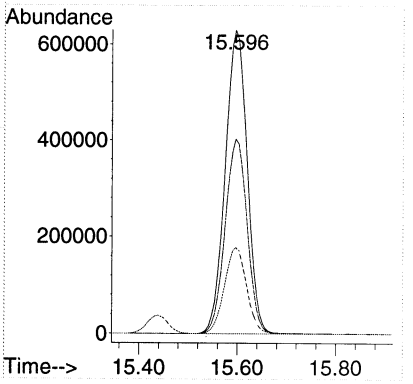




#28
Chloroform
Concen: 24.07 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 83 Resp: 1950372

Ion	Ratio	Lower	Upper
83	100		
85	64.3	46.8	86.8
47	28.6	6.3	46.3

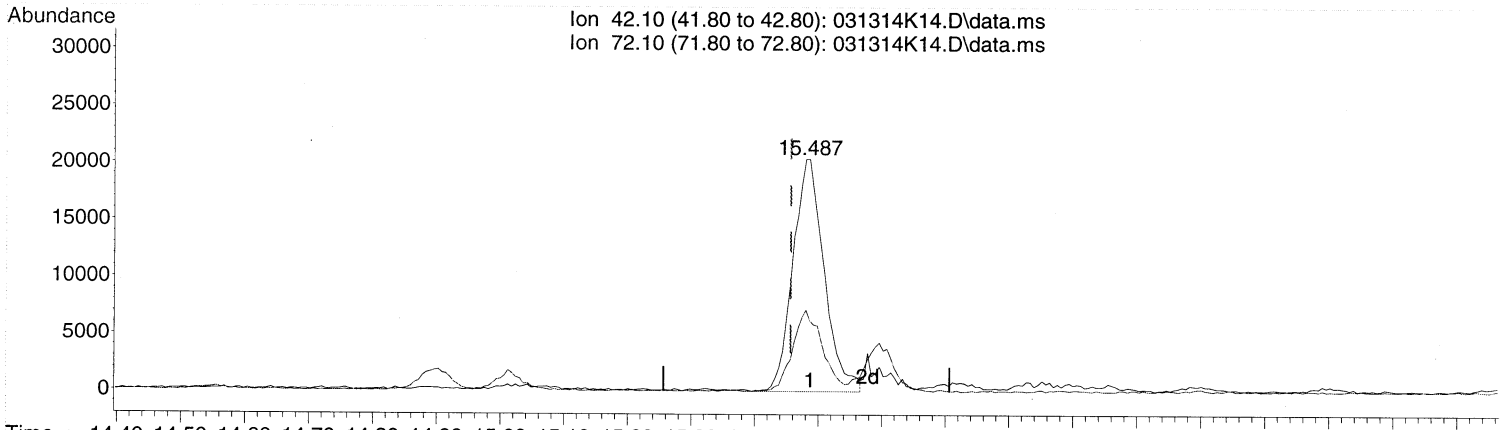


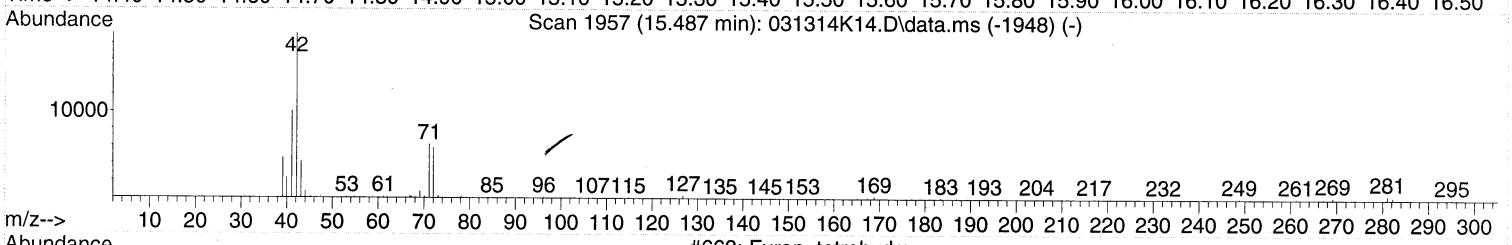
Quantitation Report (Qedit)

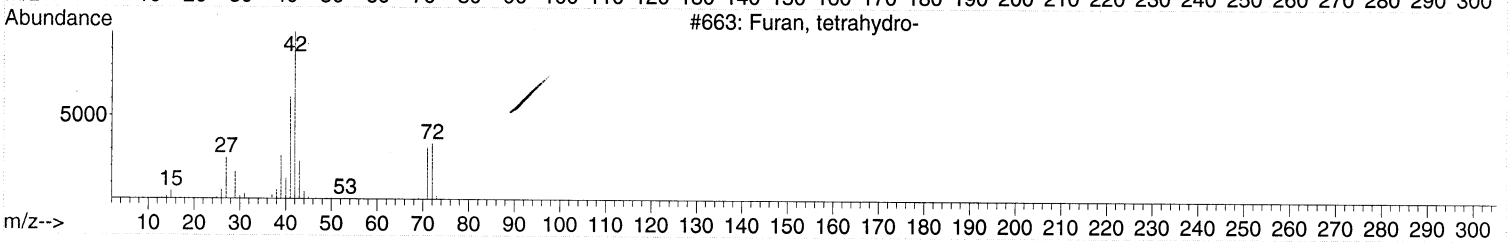
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K14.D
Acq On : 13 Mar 2014 18:28
Instrument: HP5973K
Operator : EM
Sample : 1403028-02
Misc : 200mL MH61 CAN 629
ALS Vial : 37
Multiplier: 2.11

Quant Time: Mar 14 19:23:59 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







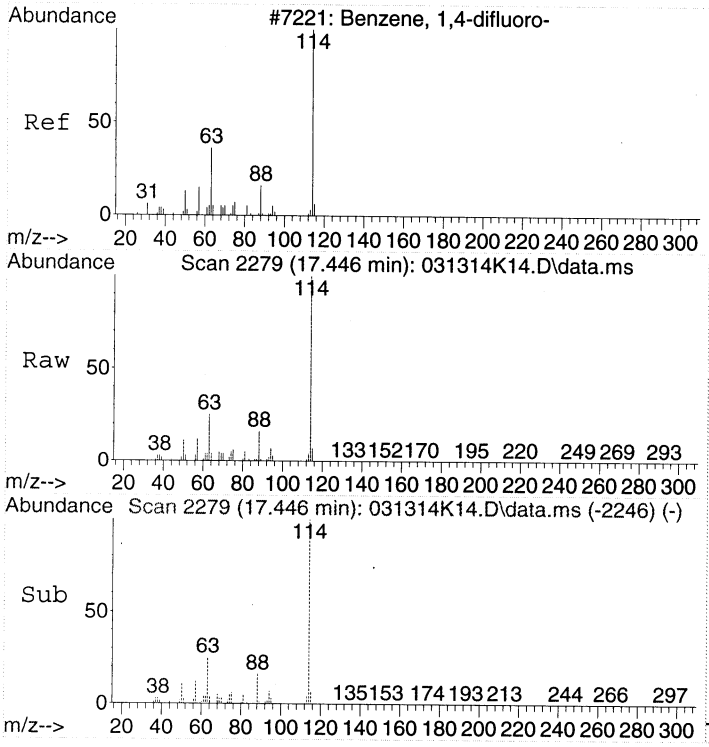
TIC: 031314K14.D\data.ms

(27) Tetrahydrofuran (T)

15.487min (+0.030) 1.73 ppbv

response 69787

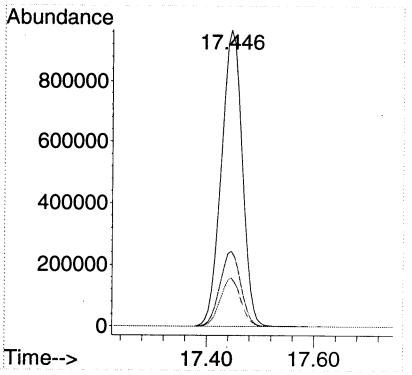
Ion	Exp%	Act%
42.10	100	100
72.10	42.50	35.66
0.00	0.00	0.00
0.00	0.00	0.00

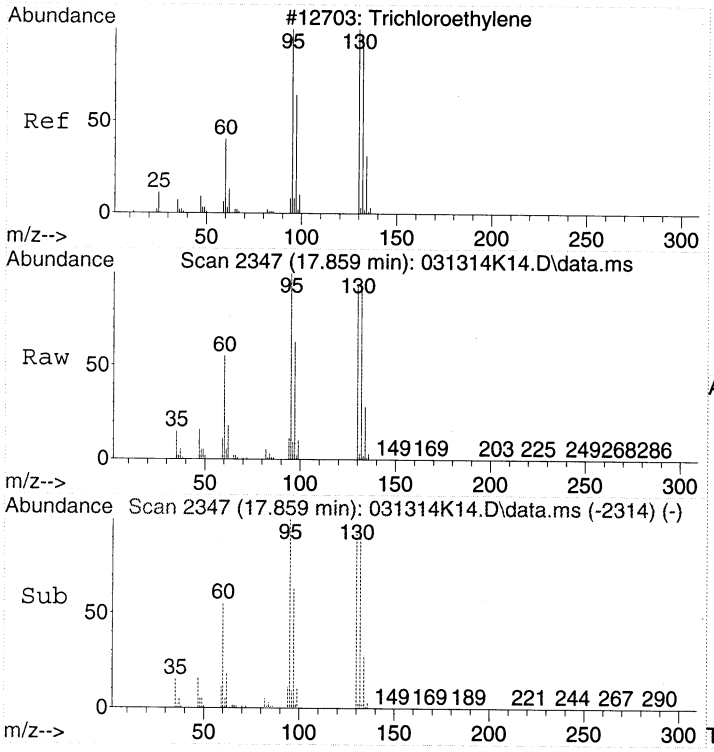


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion:114 Resp: 2609671

Ion	Ratio	Lower	Upper
114	100		
63	25.3	2.7	42.7
88	16.1	0.0	36.0

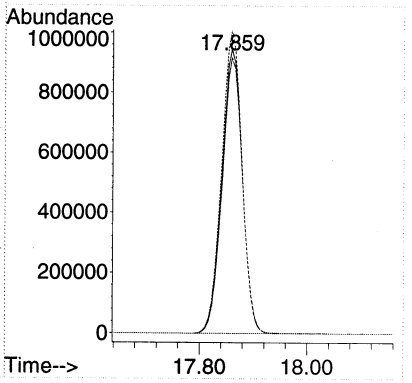


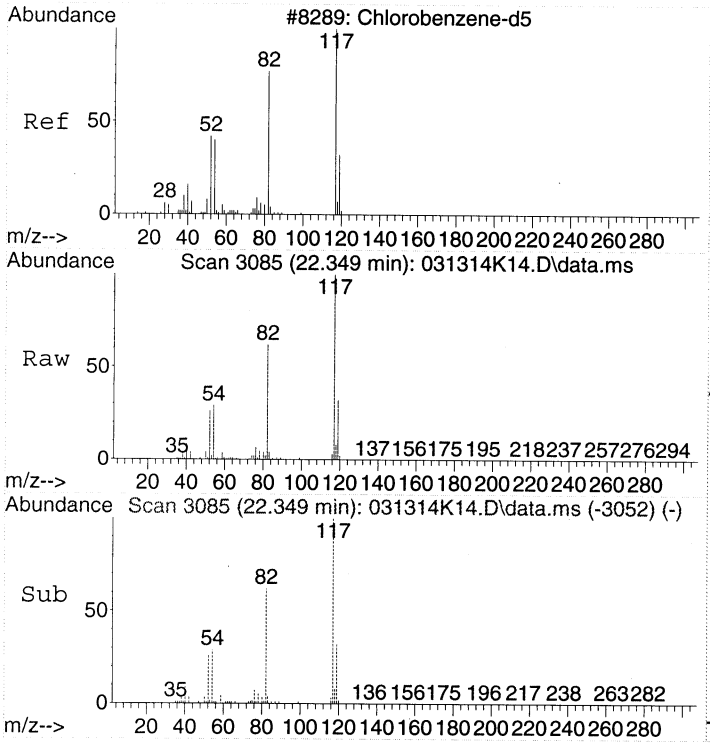


#37
Trichloroethene
Concen: 61.60 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion:130 Resp: 2497808

Ion	Ratio	Lower	Upper
130	100		
132	96.8	77.7	117.7
95	106.1	80.9	120.9

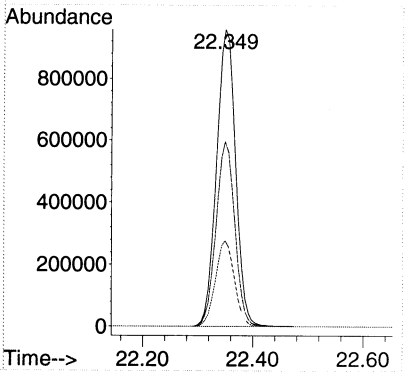


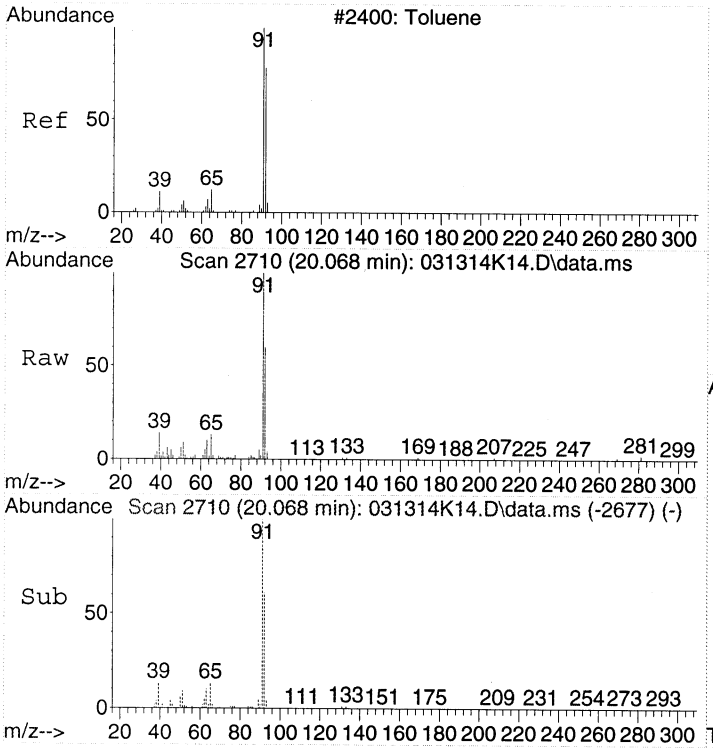


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion:117 Resp: 2313066

Ion	Ratio	Lower	Upper
117	100		
82	61.2	36.4	76.4
54	28.7	5.4	45.4

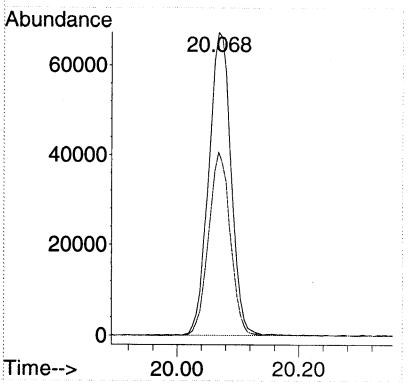


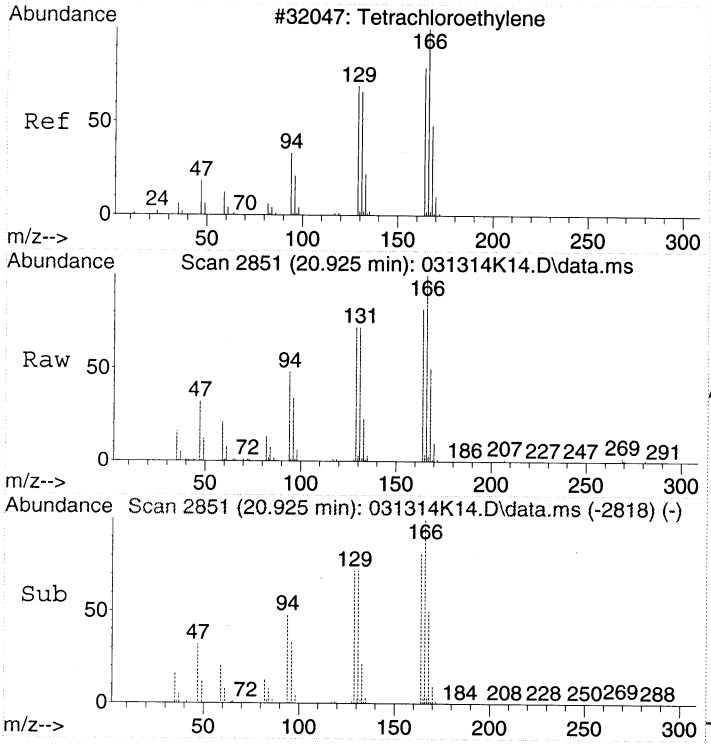


#44
Toluene
Concen: 1.51 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion: 91 Resp: 171012

Ion	Ratio	Lower	Upper
91	100		
92	59.1	39.8	79.8

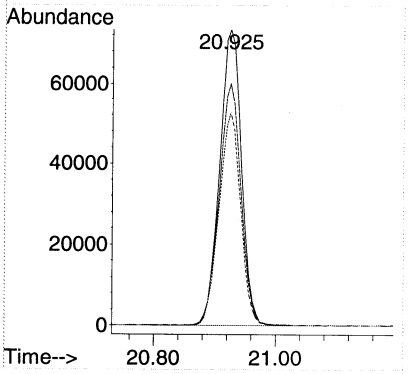




#47
Tetrachloroethene
Concen: 3.28 ppbv
RT: 20.925 min Scan# 2851
Delta R.T. -0.000 min
Lab File: 031314K14.D
Acq: 13 Mar 2014 18:28

Tgt Ion:166 Resp: 182927

Ion	Ratio	Lower	Upper
166	100		
164	81.2	60.8	100.8
131	71.0	50.5	90.5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K15.D
Acq On : 13 Mar 2014 19:16
Instrument: HP5973K
Operator : EM
Sample : 1403028-03
Misc : 200mL MH62 CAN 1107
ALS Vial : 38
Multiplier: 2.1

Quant Time: Mar 14 19:24:23 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	1085121	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2597083	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2256358	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	71866	2.94	ppbv #	71
6) Vinyl chloride	5.339	62	35001	1.04	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.209	151	30603	0.51	ppbv	91
13) 1,1-Dichloroethene	9.306	61	113906	1.83	ppbv	94
14) Acetone	9.841	43	149486	2.94	ppbv	84
15) Carbon disulfide	10.018	76	92706	1.13	ppbv #	78
16) 2-Propanol	10.486	45	77667	1.56	ppbv	100
18) Dichloromethane	11.380	49	61751	1.21	ppbv	84
20) trans-1,2-Dichloroethene	12.104	61	73422	1.59	ppbv	90
21) Hexane	12.719	57	34117	0.64	ppbv	84
22) 1,1-Dichloroethane	13.449	63	95187	1.29	ppbv	99
24) cis-1,2-Dichloroethene	14.897	61	1262991	23.12	ppbv E	90
27) Tetrahydrofuran	15.475	42	105330	2.64	ppbv	86
28) Chloroform	15.596	83	2607914	32.54	ppbv E	97
30) 1,1,1-Trichloroethane	15.882	97	53206	0.58	ppbv	96
37) Trichloroethene	17.859	130	3584555	88.83	ppbv E	97
40) Bromodichloromethane	18.827	83	40611	0.61	ppbv	94
42) 4-Methyl-2-pentanone (...	19.843	43	226288	3.10	ppbv	96
44) Toluene	20.068	91	92752	0.84	ppbv	97
47) Tetrachloroethene	20.926	166	263494	4.84	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

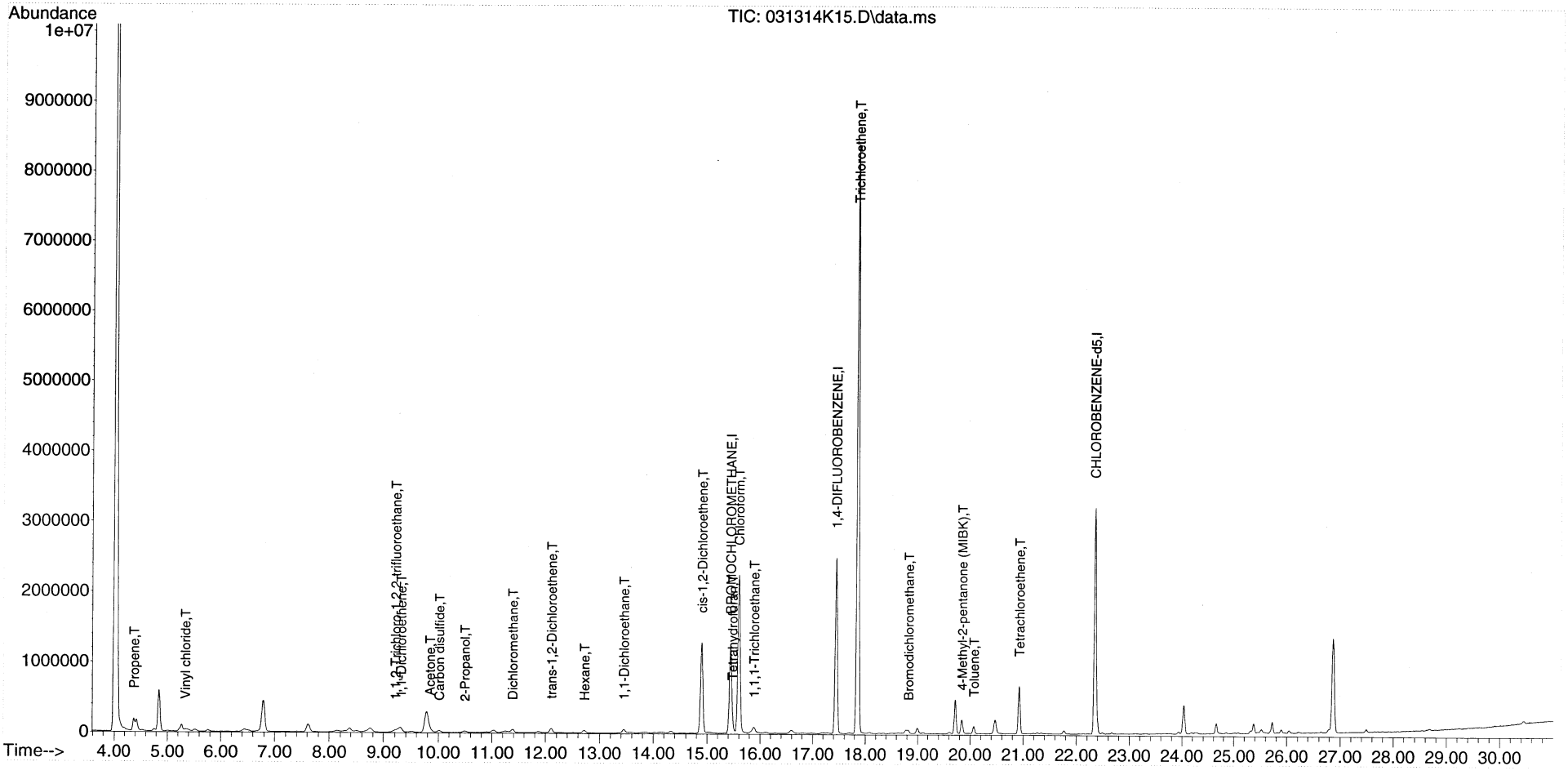
00216

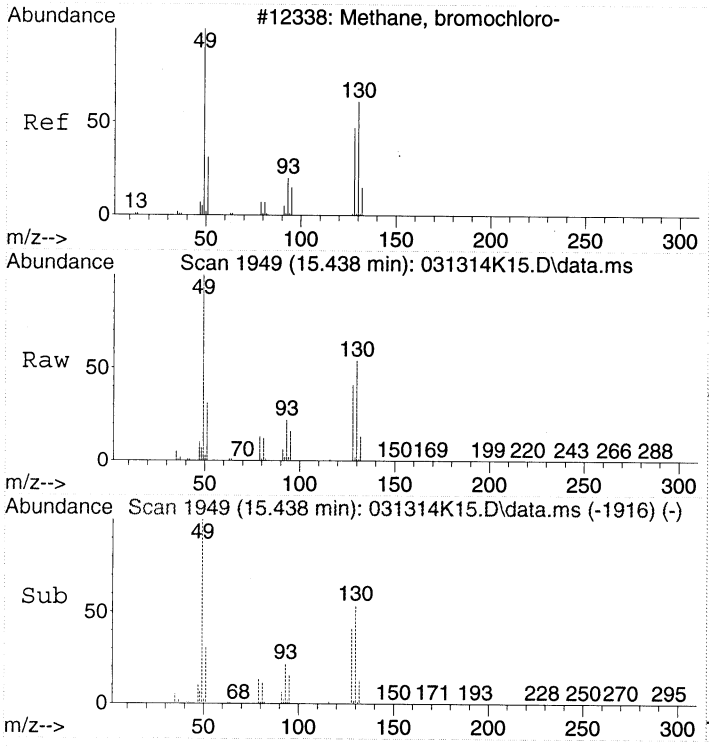
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K15.D
Acq On : 13 Mar 2014 19:16
Instrument: HP5973K
Operator : EM
Sample : 1403028-03
Misc : 200mL MH62 CAN 1107
ALS Vial : 38
Multiplier: 2.1

Quant Time: Mar 14 19:24:23 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

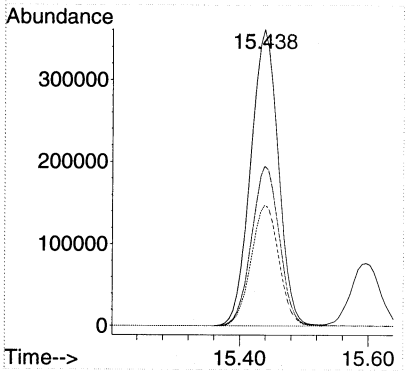


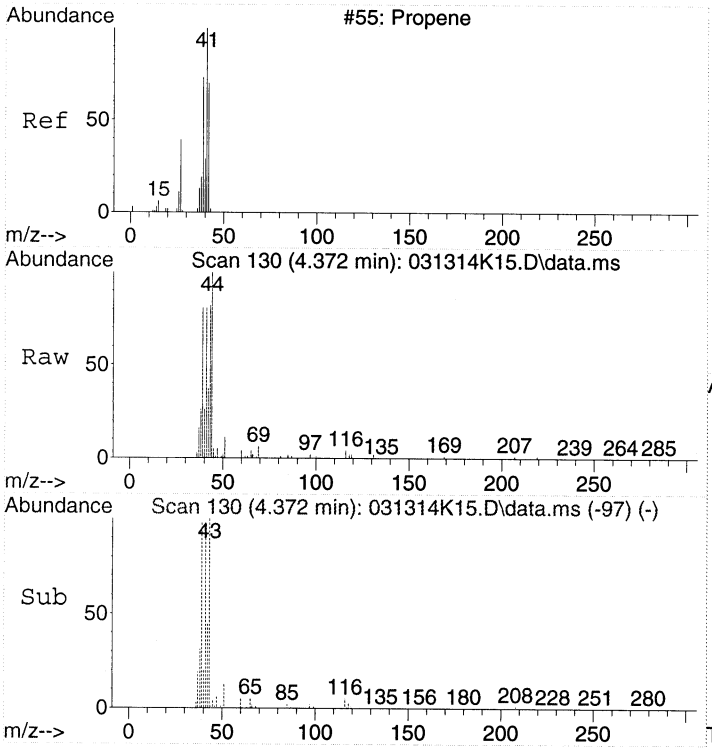


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 49 Resp: 1085121

Ion	Ratio	Lower	Upper
49	100		
130	54.4	53.4	93.4
128	41.3	35.1	75.1

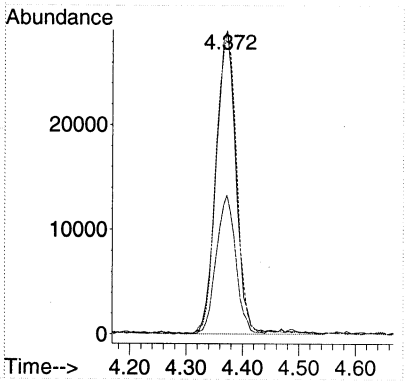


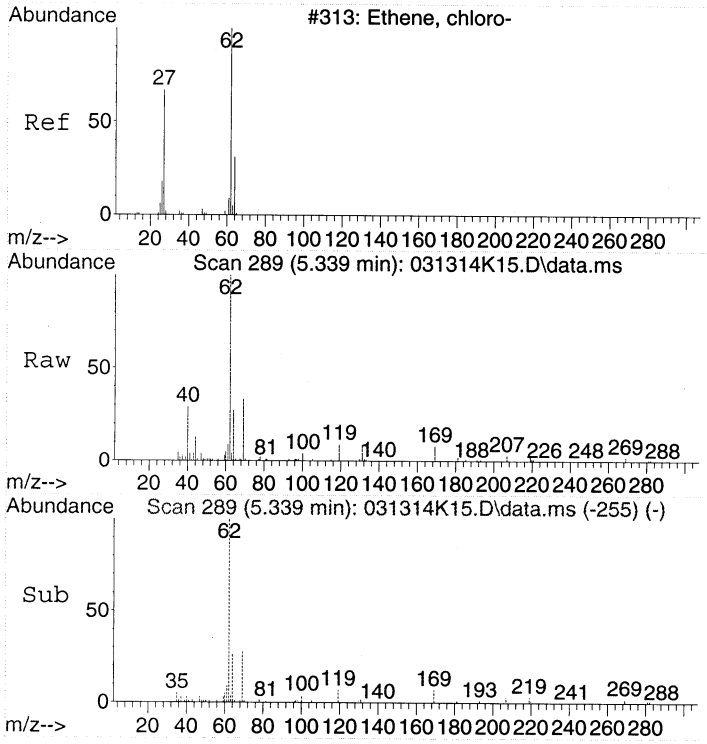


#2
Propene
Concen: 2.94 ppbv
RT: 4.372 min Scan# 130
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 41 Resp: 71866

Ion	Ratio	Lower	Upper
41	100		
42	44.7	46.3	86.3#
39	102.0	56.1	96.1#

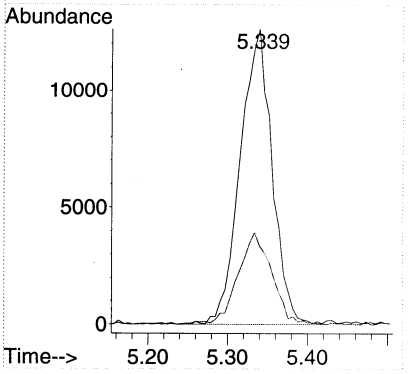


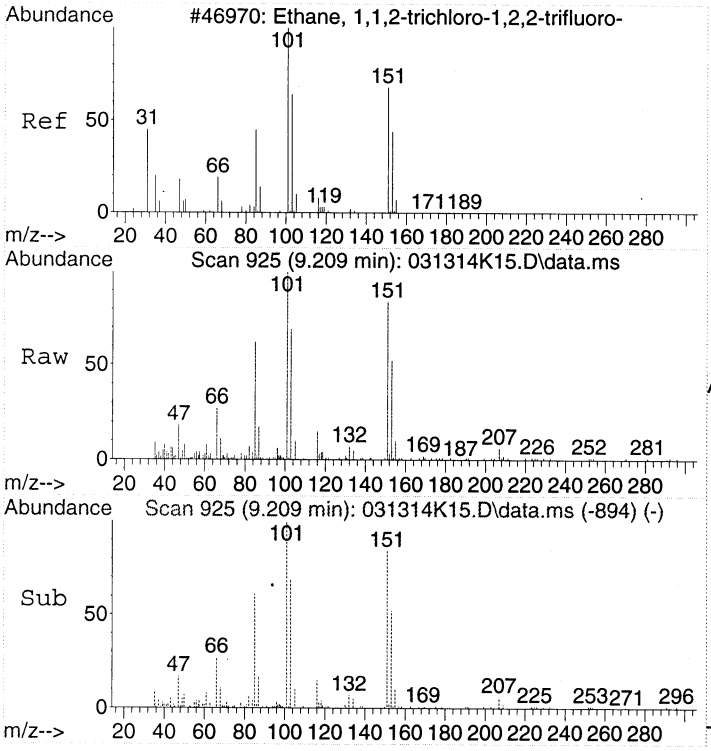


#6
Vinyl chloride
Concen: 1.04 ppbv
RT: 5.339 min Scan# 289
Delta R.T. 0.006 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 62 Resp: 35001

Ion	Ratio	Lower	Upper
62	100		
64	33.0	12.5	52.5

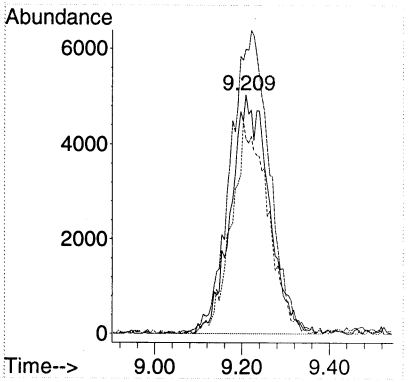


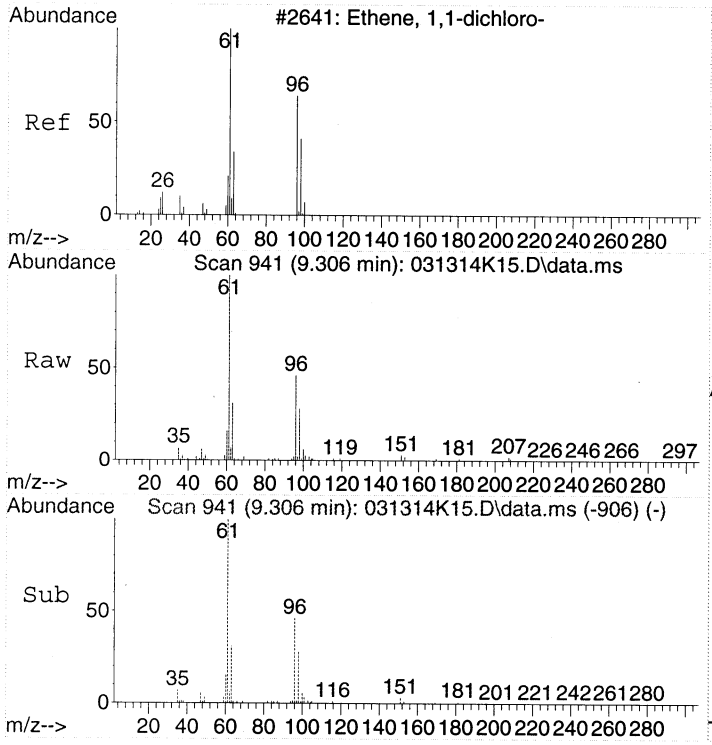


#12
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.51 ppbv
RT: 9.209 min Scan# 925
Delta R.T. -0.012 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion:151 Resp: 30603

Ion	Ratio	Lower	Upper
151	100		
101	128.7	99.3	139.3
103	85.5	56.4	96.4

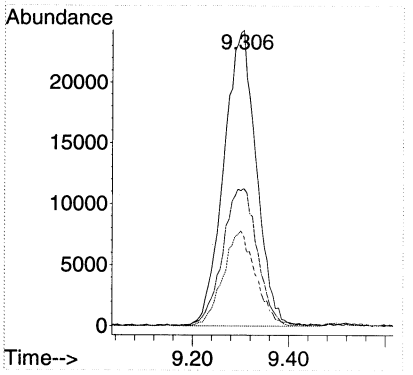


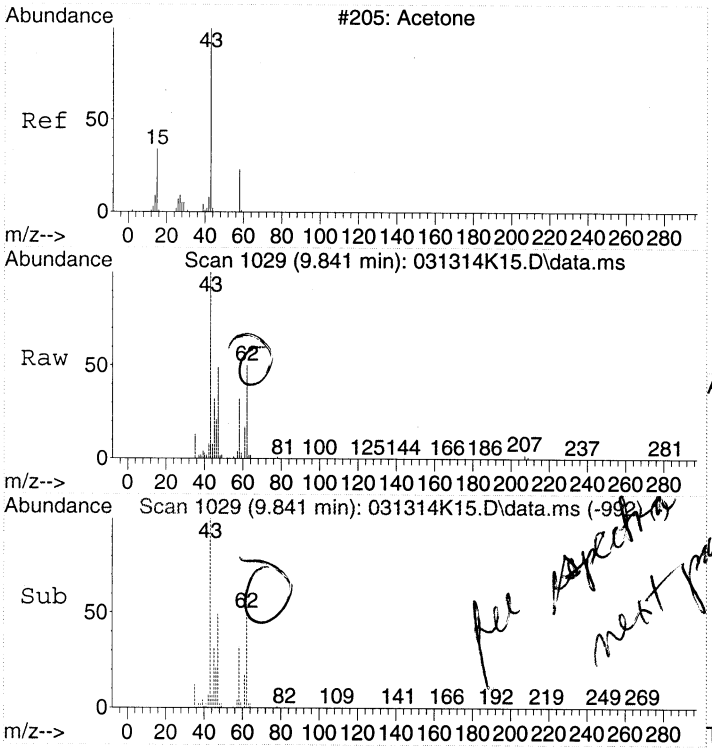


#13
1,1-Dichloroethene
Concen: 1.83 ppbv
RT: 9.306 min Scan# 941
Delta R.T. 0.012 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 61 Resp: 113906

Ion	Ratio	Lower	Upper
61	100		
96	49.6	36.1	76.1
63	32.2	12.7	52.7

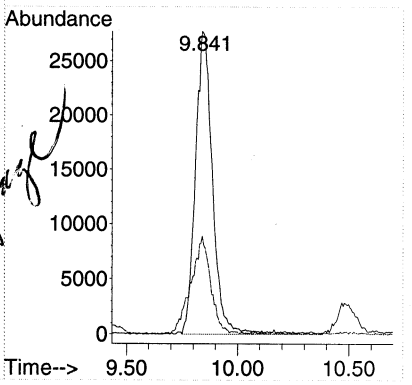




#14
Acetone
Concen: 2.94 ppbv
RT: 9.841 min Scan# 1029
Delta R.T. 0.024 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 43 Resp: 149486

Ion	Ratio	Lower	Upper
43	100		
58	36.4	8.0	48.0



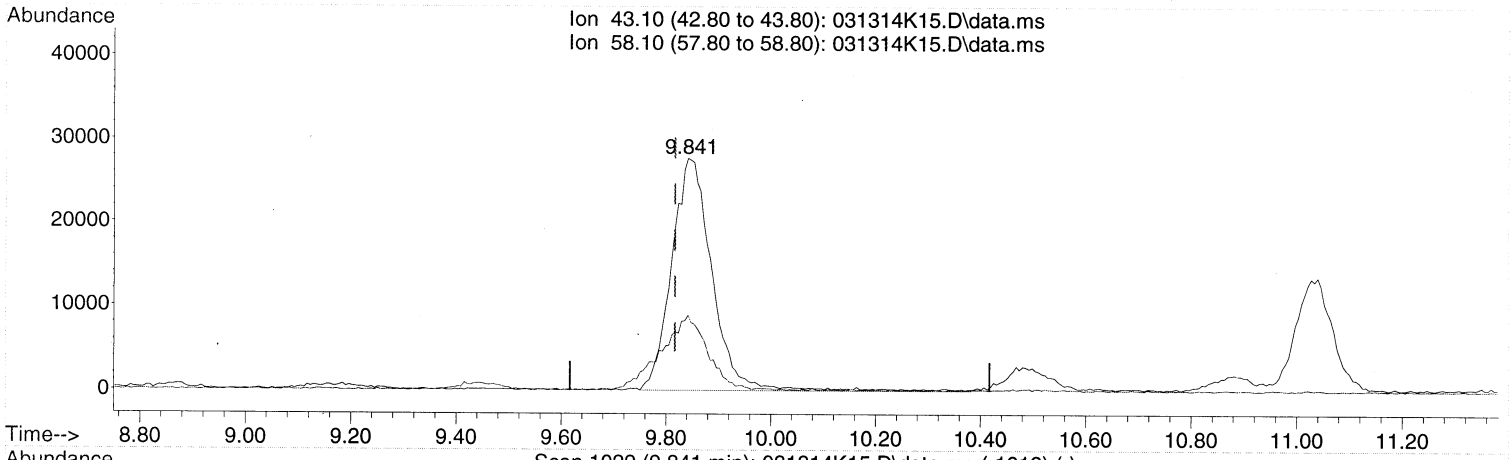
See spectra next page

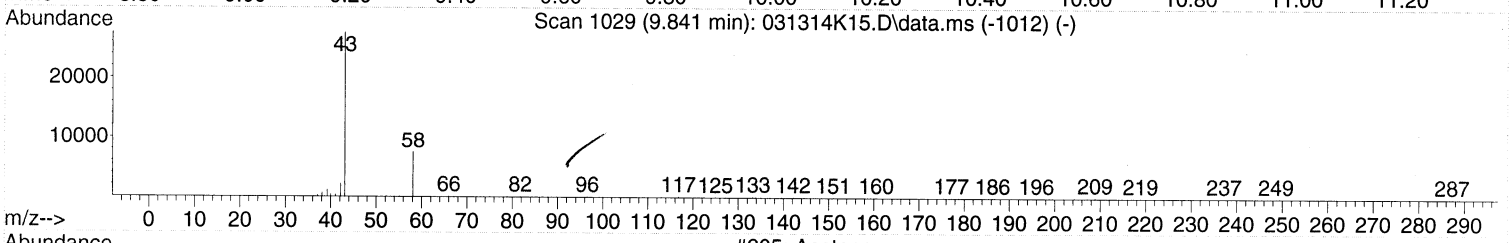
Quantitation Report (Qedit)

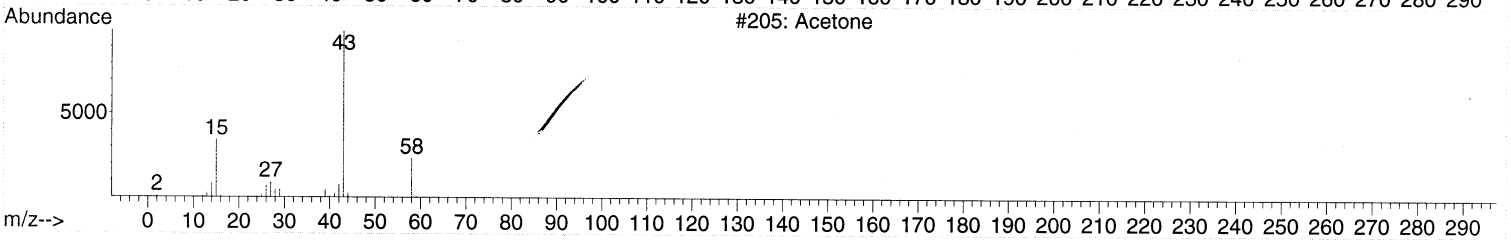
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K15.D
Acq On : 13 Mar 2014 19:16
Instrument: HP5973K
Operator : EM
Sample : 1403028-03
Misc : 200mL MH62 CAN 1107
ALS Vial : 38
Multiplier: 2.1

Quant Time: Mar 14 19:24:23 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







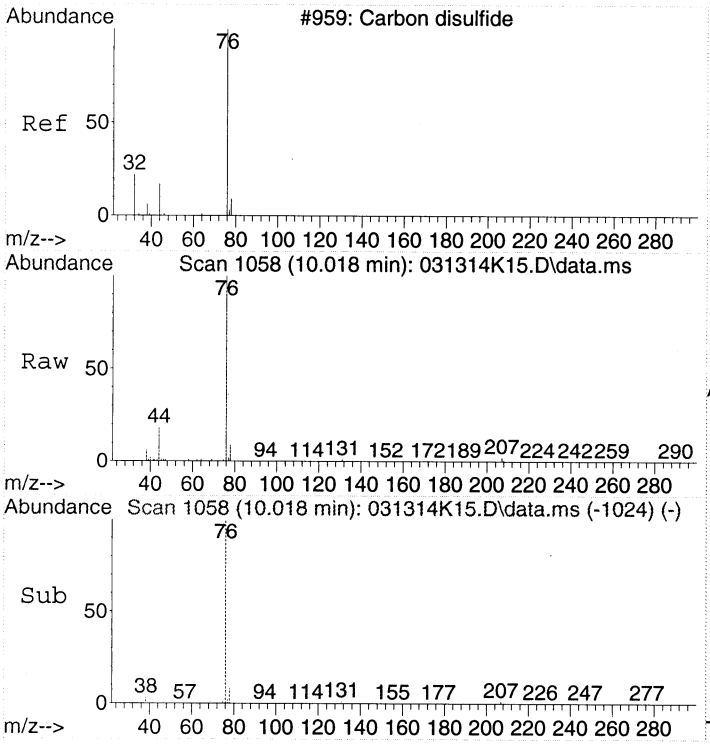
TIC: 031314K15.D\data.ms

(14) Acetone (T)

9.841min (+0.024) 2.94 ppbv

response 149486

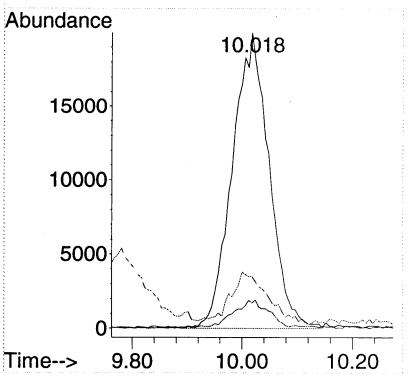
Ion	Exp%	Act%
43.10	100	100
58.10	28.00	36.43
0.00	0.00	0.00
0.00	0.00	0.00

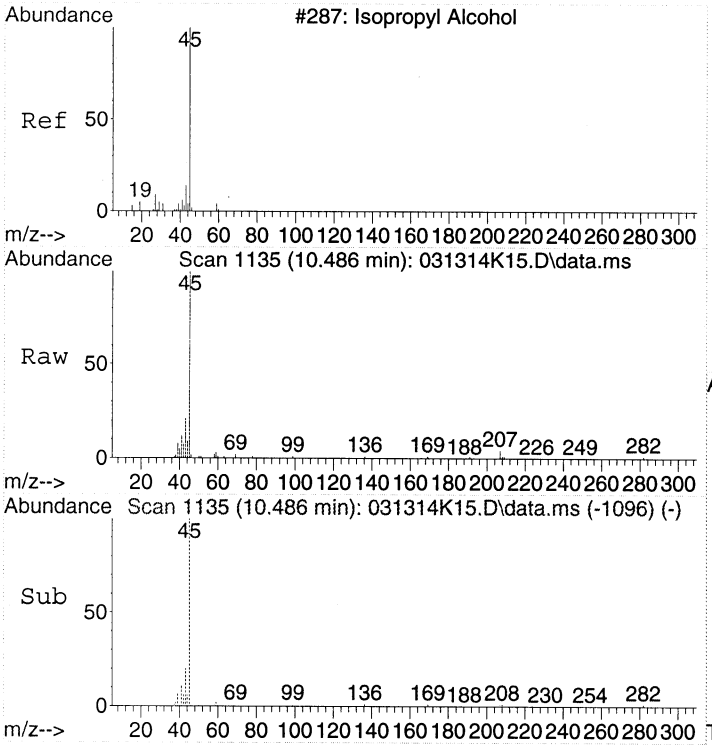


#15
Carbon disulfide
Concen: 1.13 ppbv
RT: 10.018 min Scan# 1058
Delta R.T. 0.006 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 76 Resp: 92706

Ion	Ratio	Lower	Upper
76	100		
78	9.5	0.0	29.5
44	0.0	0.0	34.9

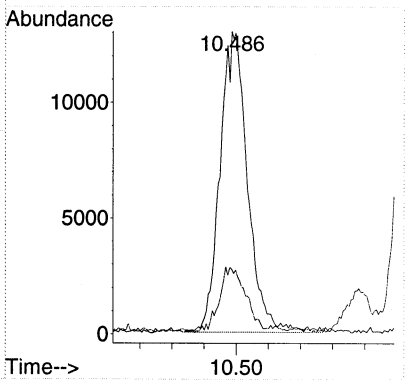


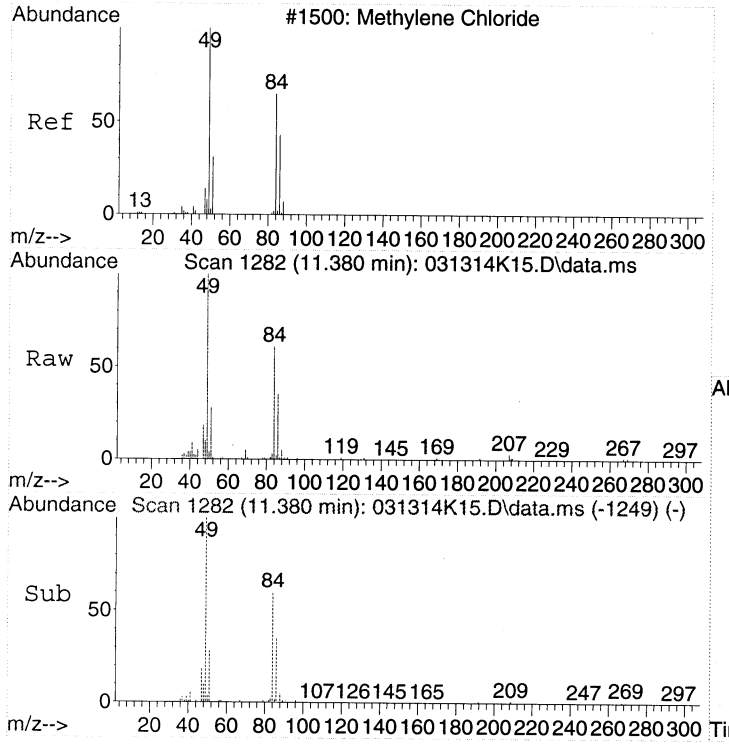


#16
2-Propanol
Concen: 1.56 ppbv
RT: 10.486 min Scan# 1135
Delta R.T. 0.037 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 45 Resp: 77667

Ion	Ratio	Lower	Upper
45	100		
43	21.2	1.3	41.3

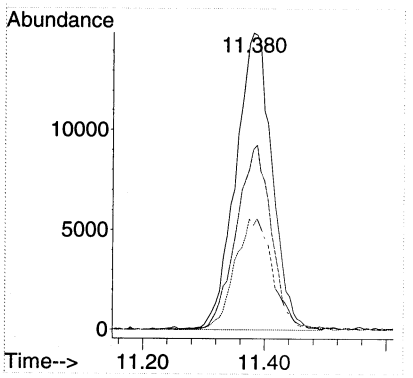


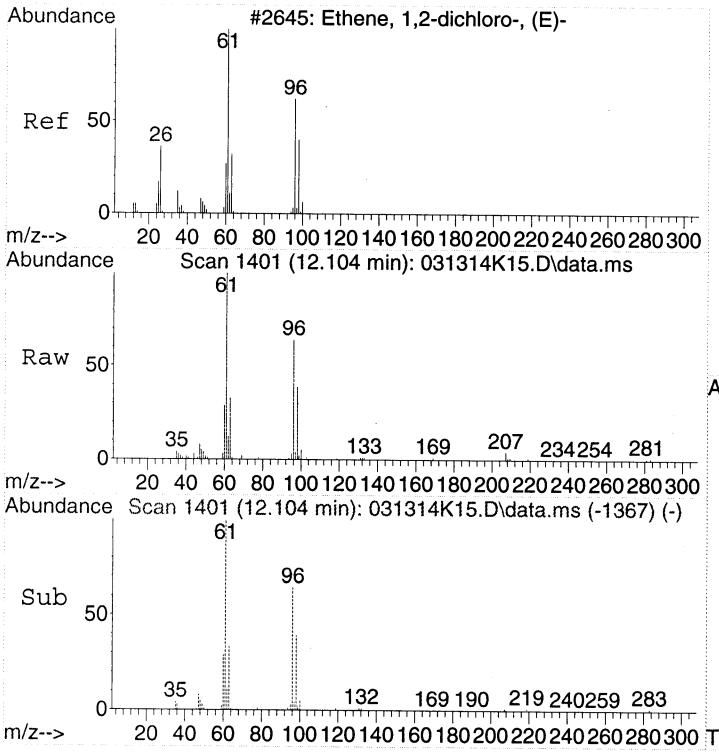


#18
Dichloromethane
Concen: 1.21 ppbv
RT: 11.380 min Scan# 1282
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 49 Resp: 61751

Ion	Ratio	Lower	Upper
49	100		
84	60.0	54.7	94.7
86	38.8	29.1	69.1

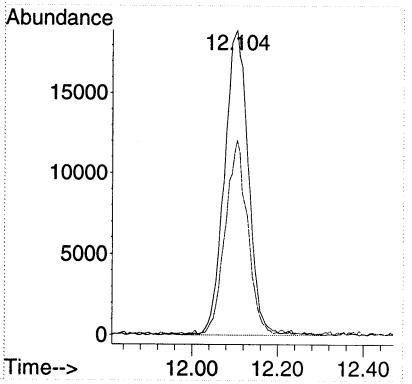


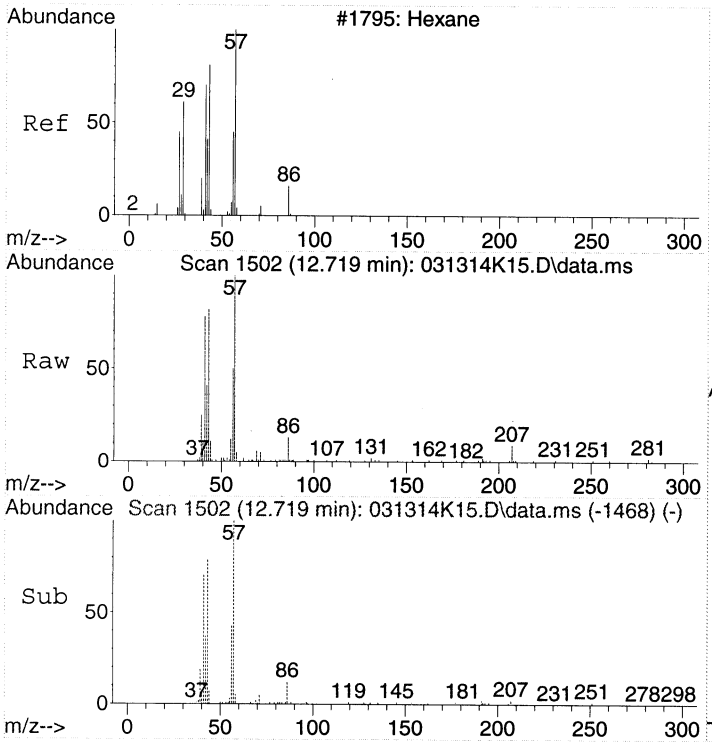


#20
trans-1,2-Dichloroethene
Concen: 1.59 ppbv
RT: 12.104 min Scan# 1401
Delta R.T. 0.006 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 61 Resp: 73422

Ion	Ratio	Lower	Upper
61	100		
96	58.7	46.8	86.8

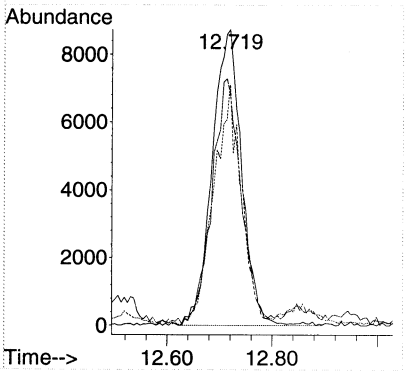


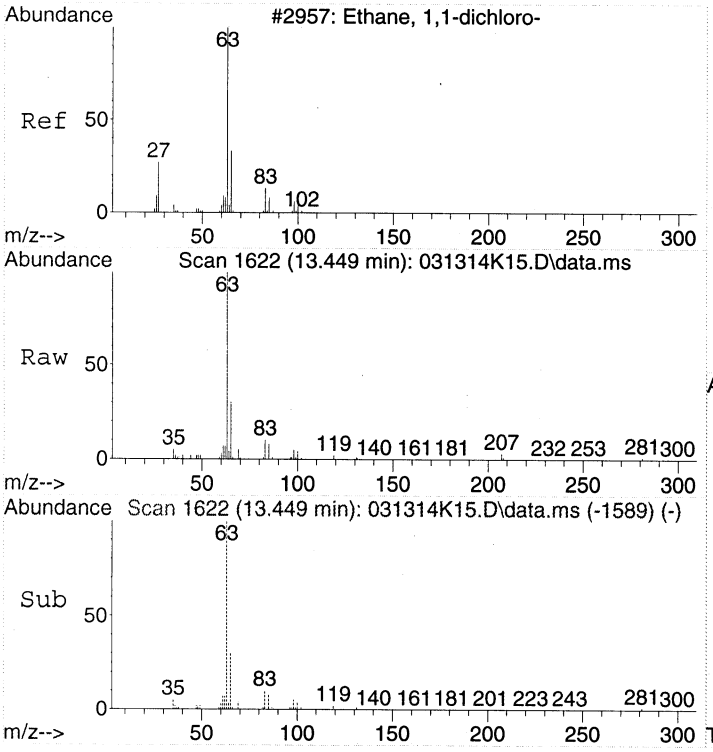


#21
Hexane
Concen: 0.64 ppbv
RT: 12.719 min Scan# 1502
Delta R.T. 0.006 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 57 Resp: 34117

Ion	Ratio	Lower	Upper
57	100		
41	89.9	56.9	96.9
43	77.0	42.9	82.9

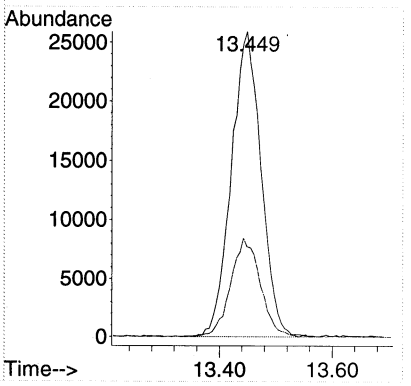


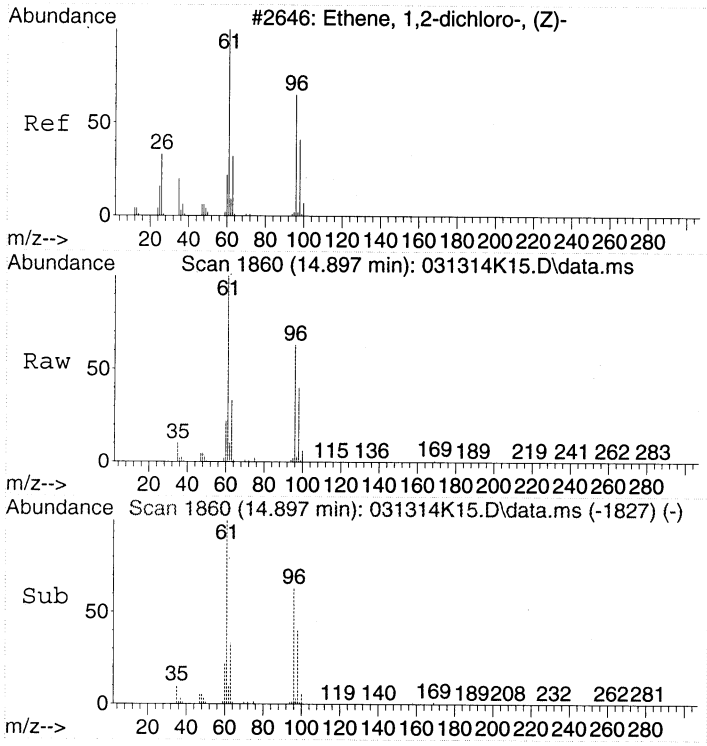


#22
1,1-Dichloroethane
Concen: 1.29 ppbv
RT: 13.449 min Scan# 1622
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 63 Resp: 95187

Ion	Ratio	Lower	Upper
63	100		
65	32.3	11.8	51.8

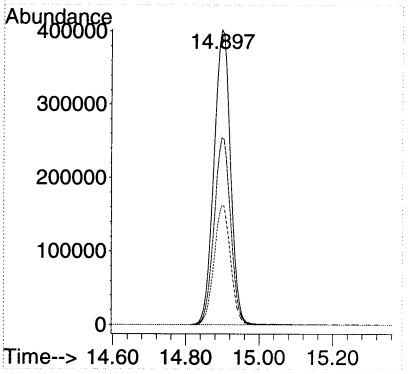


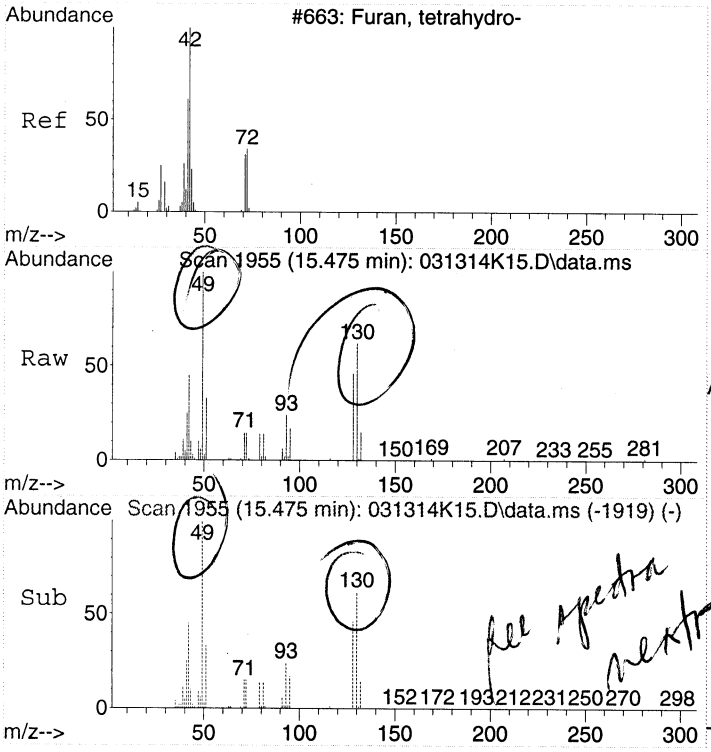


#24
cis-1,2-Dichloroethene
Concen: 23.12 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 61 Resp: 1262991

Ion	Ratio	Lower	Upper
61	100		
96	63.1	52.9	92.9
98	40.1	24.5	64.5

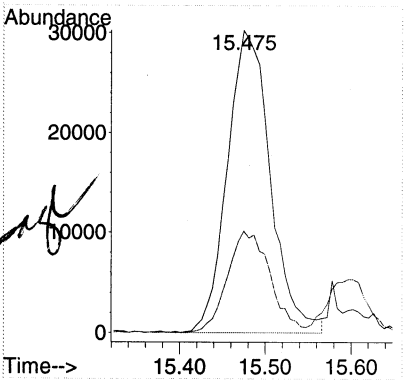




#27
Tetrahydrofuran
Concen: 2.64 ppbv
RT: 15.475 min Scan# 1955
Delta R.T. 0.018 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 42 Resp: 105330

Ion	Ratio	Lower	Upper
42	100		
72	33.4	22.5	62.5



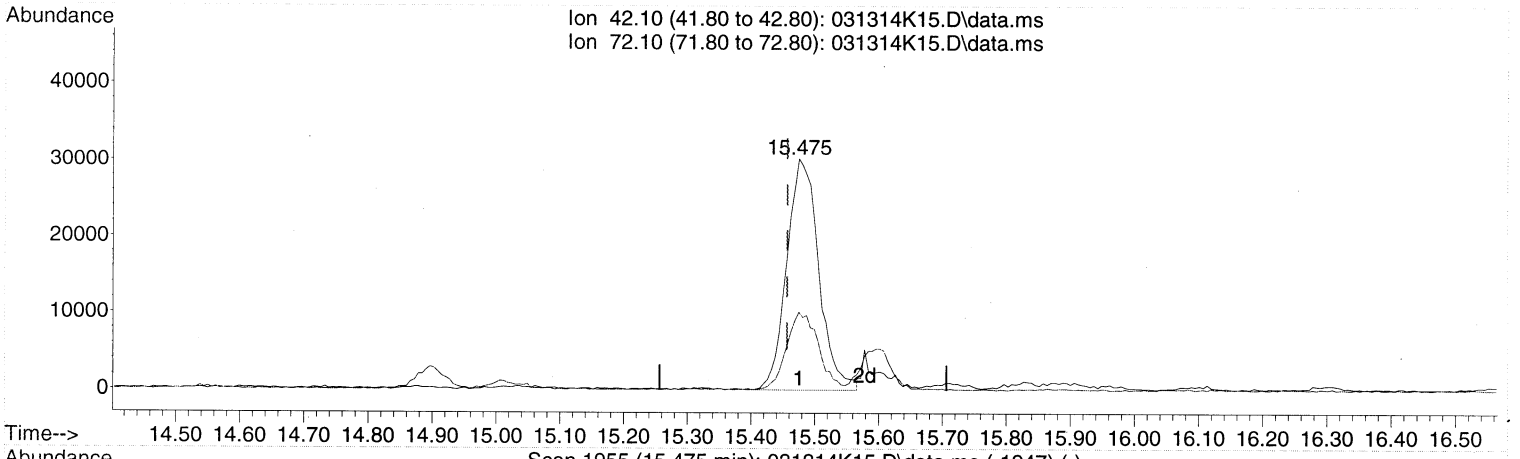
See spectra next page

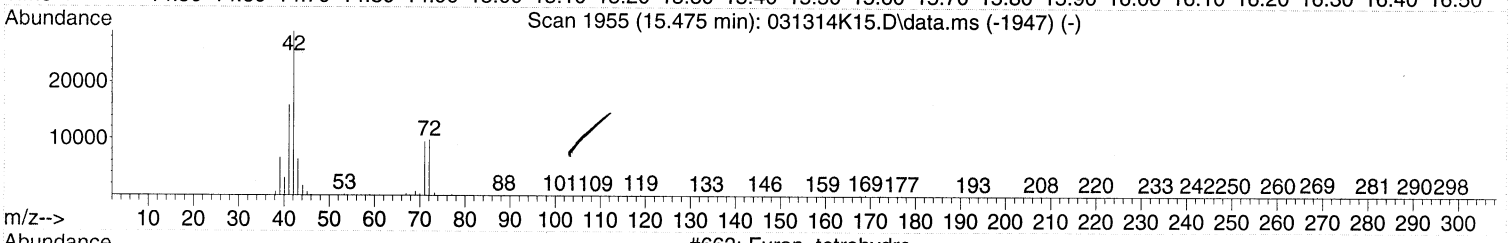
Quantitation Report (Qedit)

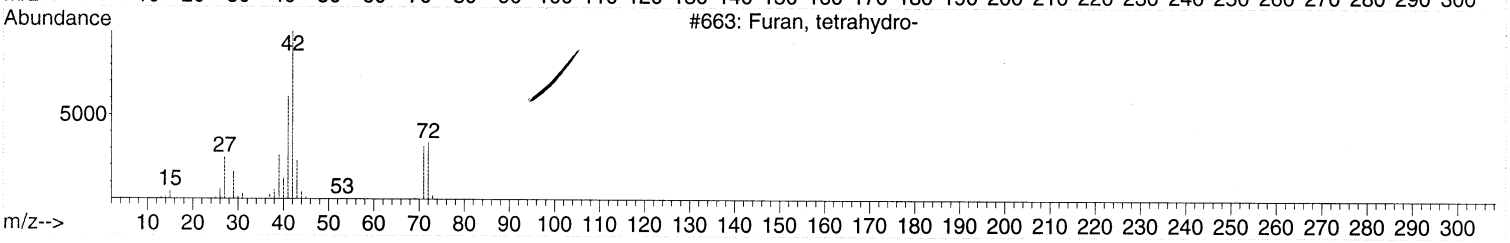
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K15.D
Acq On : 13 Mar 2014 19:16
Instrument: HP5973K
Operator : EM
Sample : 1403028-03
Misc : 200mL MH62 CAN 1107
ALS Vial : 38
Multiplier: 2.1

Quant Time: Mar 14 19:24:23 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







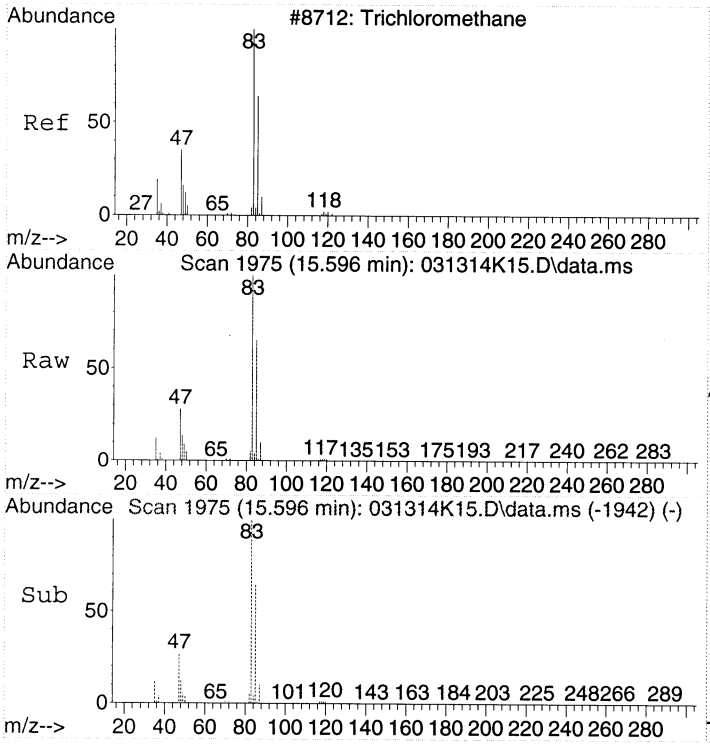
TIC: 031314K15.D\data.ms

(27) Tetrahydrofuran (T)

15.475min (+0.018) 2.64 ppbv

response 105330

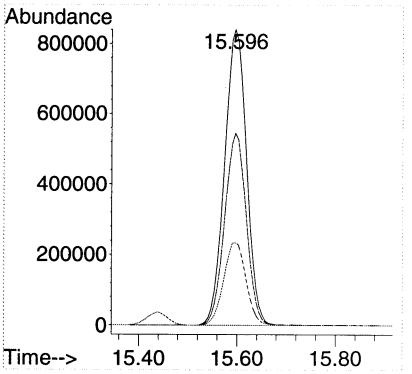
Ion	Exp%	Act%
42.10	100	100
72.10	42.50	33.41
0.00	0.00	0.00
0.00	0.00	0.00

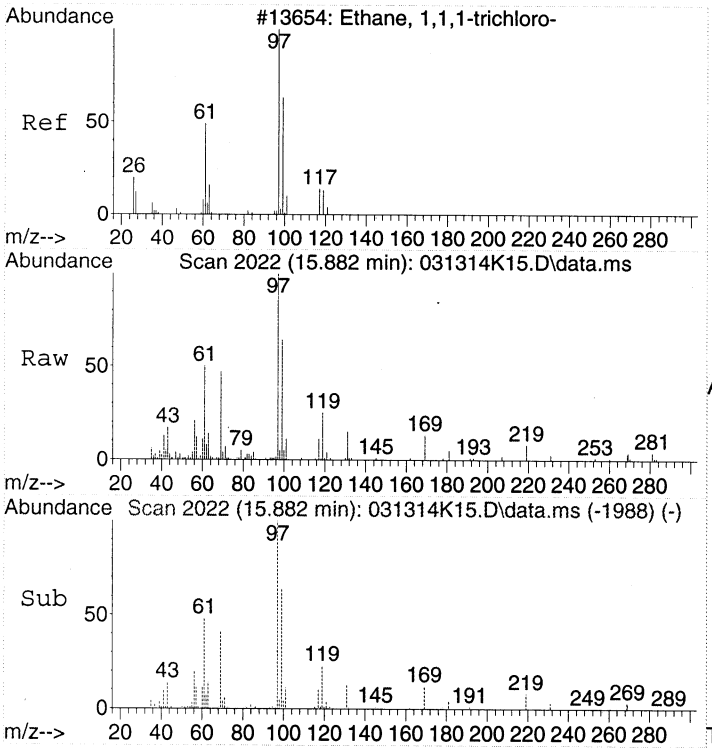


#28
Chloroform
Concen: 32.54 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 83 Resp: 2607914

Ion	Ratio	Lower	Upper
83	100		
85	64.3	46.8	86.8
47	28.4	6.3	46.3

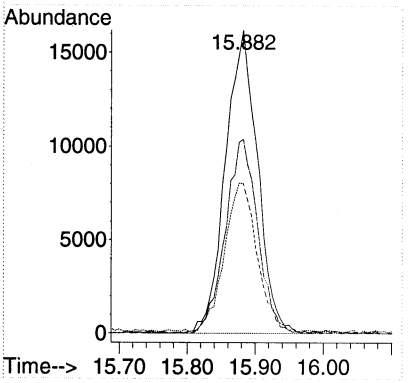


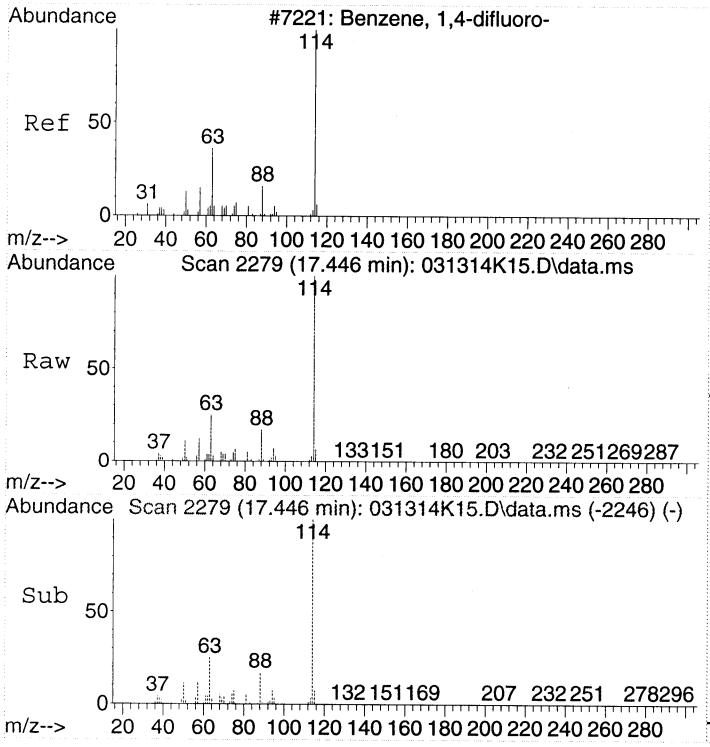


#30
1,1,1-Trichloroethane
Concen: 0.58 ppbv
RT: 15.882 min Scan# 2022
Delta R.T. 0.006 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 97 Resp: 53206

Ion	Ratio	Lower	Upper
97	100		
99	64.2	44.5	84.5
61	49.8	24.3	64.3

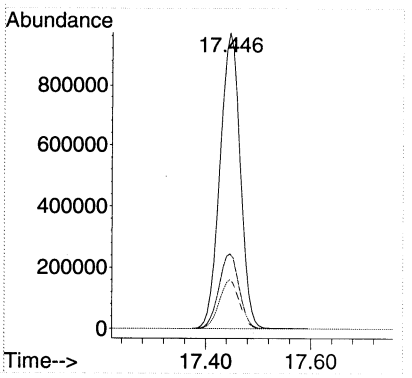


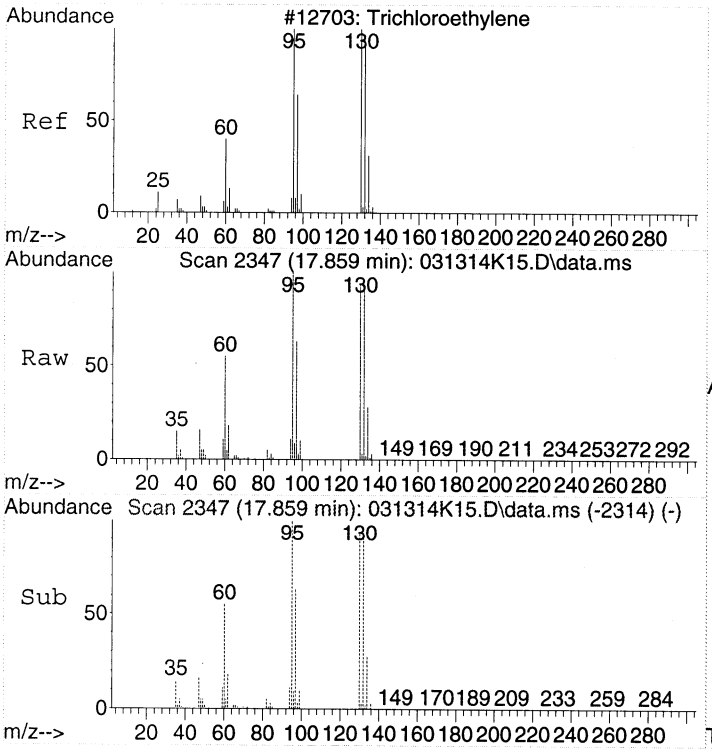


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion:114 Resp: 2597083

Ion	Ratio	Lower	Upper
114	100		
63	25.3	2.7	42.7
88	16.3	0.0	36.0

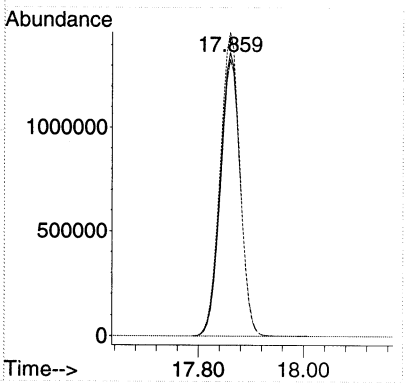


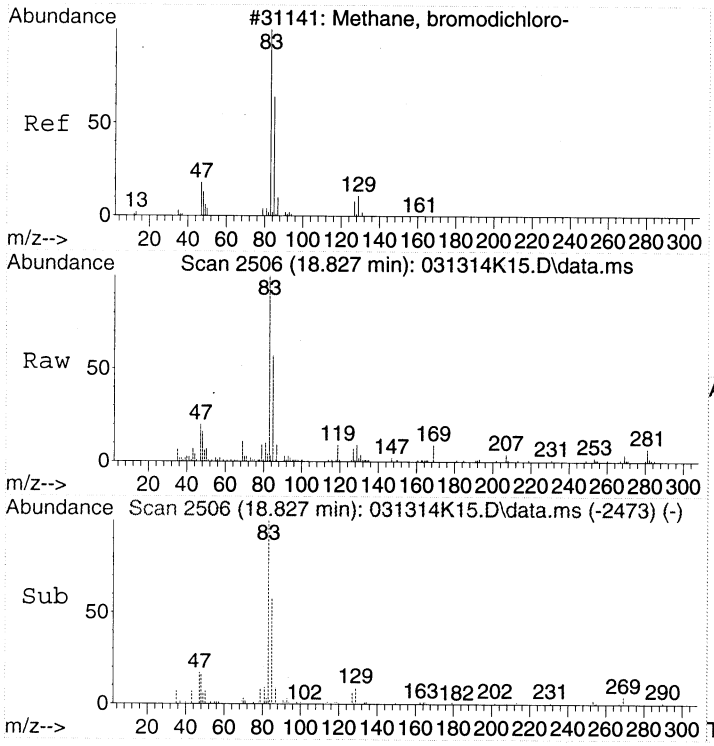


#37
Trichloroethene
Concen: 88.83 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion:130 Resp: 3584555

Ion	Ratio	Lower	Upper
130	100		
132	97.3	77.7	117.7
95	106.6	80.9	120.9

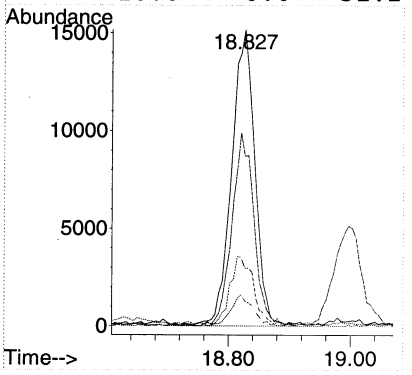


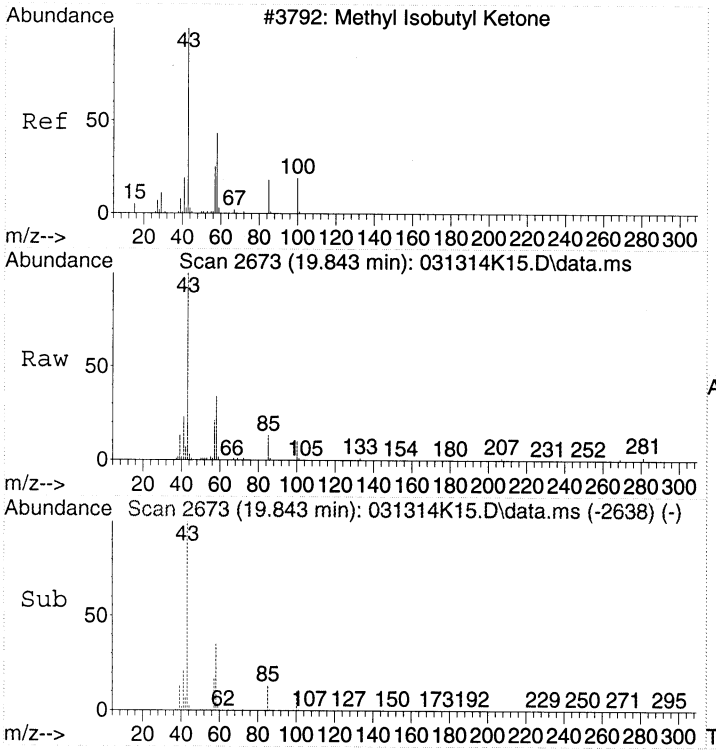


#40
Bromodichloromethane
Concen: 0.61 ppbv
RT: 18.827 min Scan# 2506
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 83 Resp: 40611

Ion	Ratio	Lower	Upper
83	100		
85	60.8	45.1	85.1
47	23.6	0.0	39.9
129	10.0	0.0	31.2

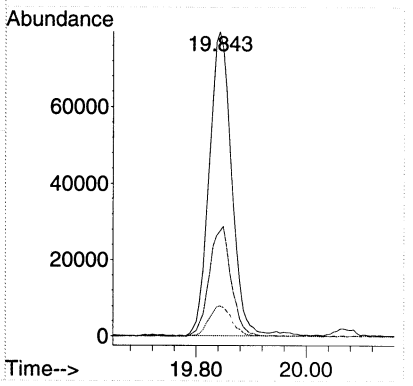


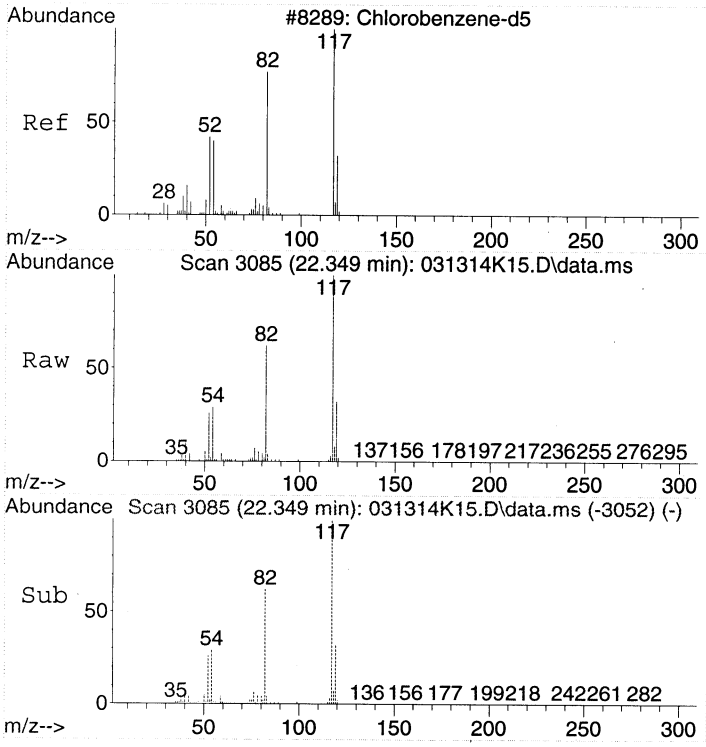


#42
4-Methyl-2-pentanone (MIBK)
Concen: 3.10 ppbv
RT: 19.843 min Scan# 2673
Delta R.T. 0.012 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 43 Resp: 226288

Ion	Ratio	Lower	Upper
43	100		
58	35.5	16.9	56.9
100	10.4	0.0	33.5

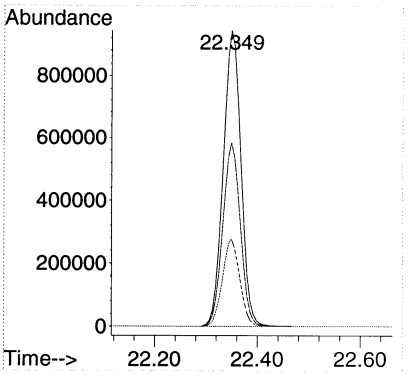


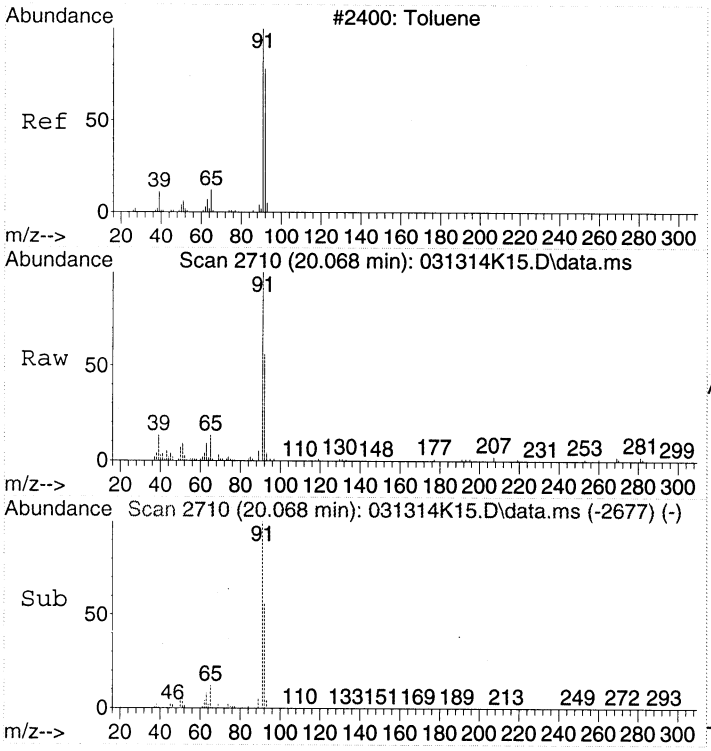


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion:117 Resp: 2256358

Ion	Ratio	Lower	Upper
117	100		
82	61.5	36.4	76.4
54	29.0	5.4	45.4

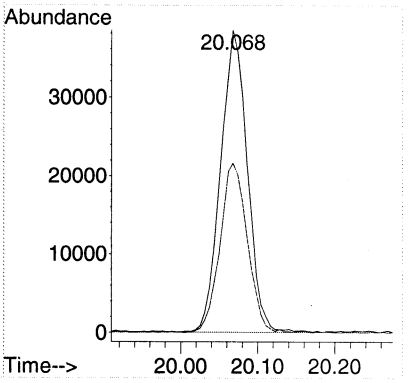


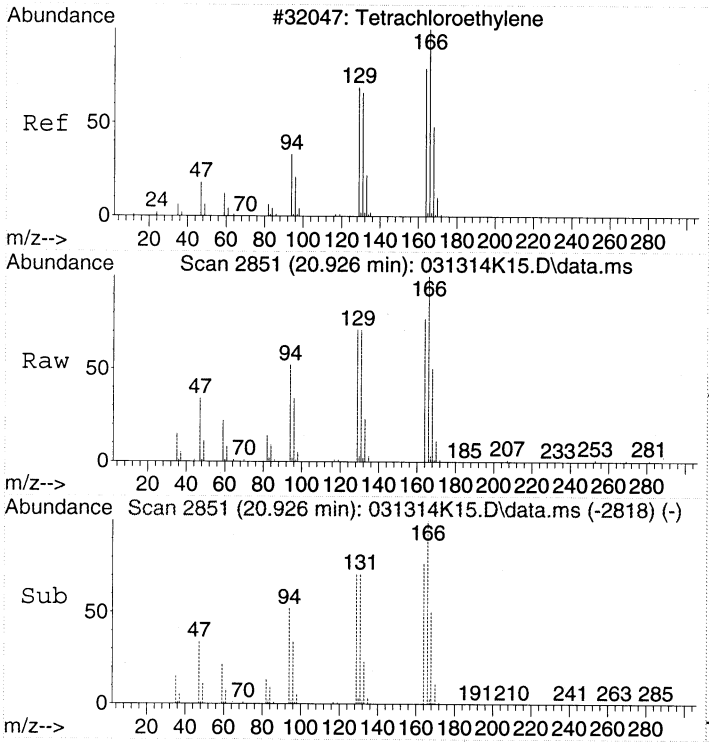


#44
Toluene
Concen: 0.84 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion: 91 Resp: 92752

Ion	Ratio	Lower	Upper
91	100		
92	57.2	39.8	79.8

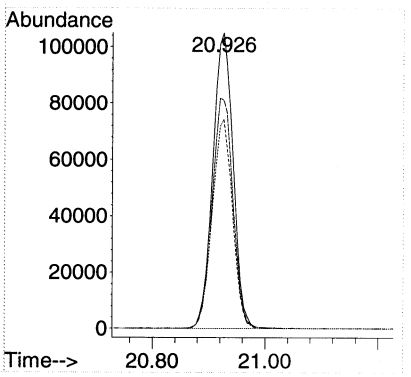




#47
Tetrachloroethene
Concen: 4.84 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. 0.000 min
Lab File: 031314K15.D
Acq: 13 Mar 2014 19:16

Tgt Ion:166 Resp: 263494

Ion	Ratio	Lower	Upper
166	100		
164	79.7	60.8	100.8
131	70.9	50.5	90.5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K16.D
Acq On : 13 Mar 2014 20:05
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 39
Multiplier: 1

Quant Time: Mar 14 19:24:51 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	1060494	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2503024	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2233115	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.374	49	27622	0.55	ppbv	89
37) Trichloroethene	17.859	130	19508	0.50	ppbv	97

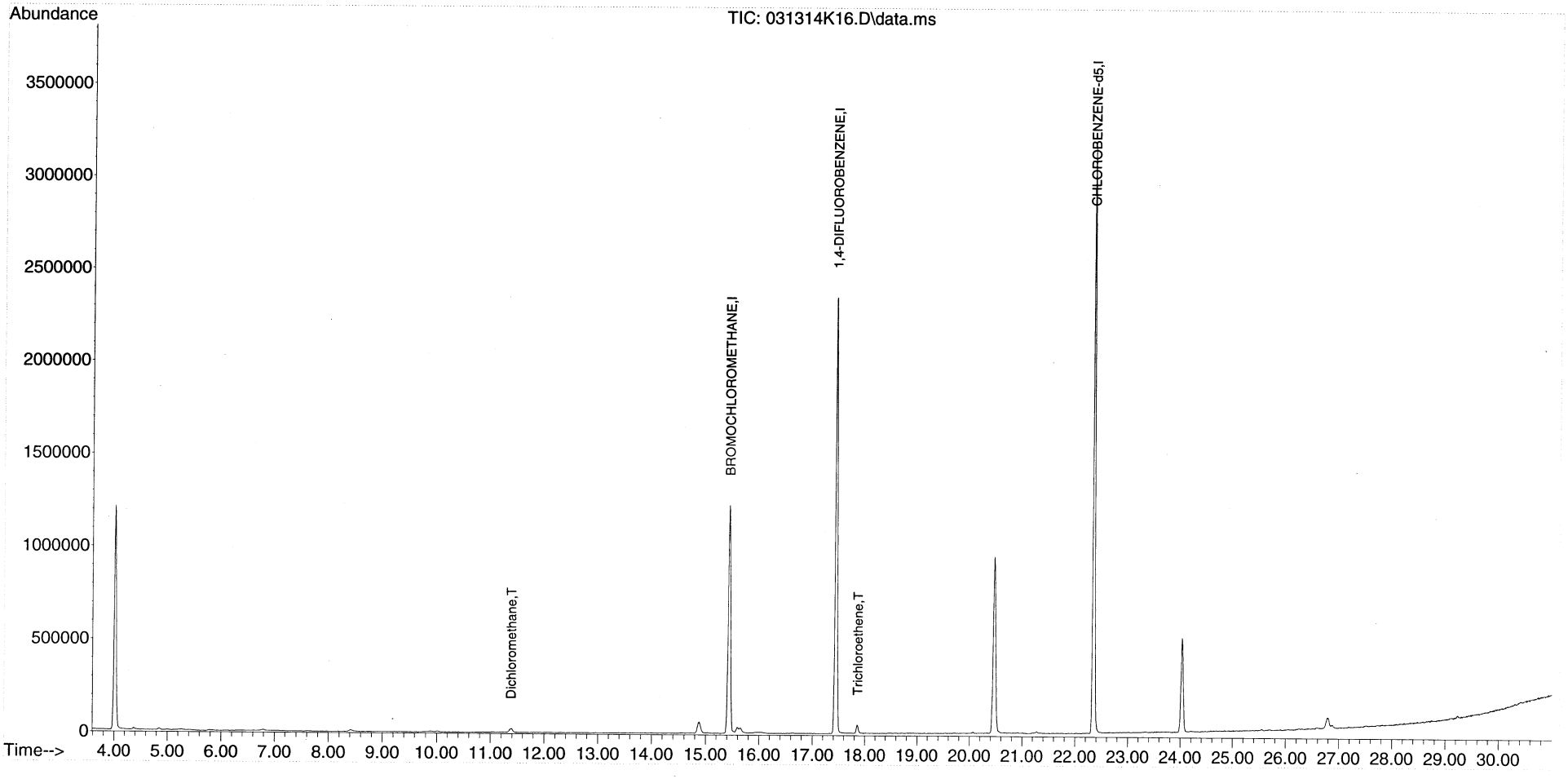
(#) = qualifier out of range (m) = manual integration (+) = signals summed

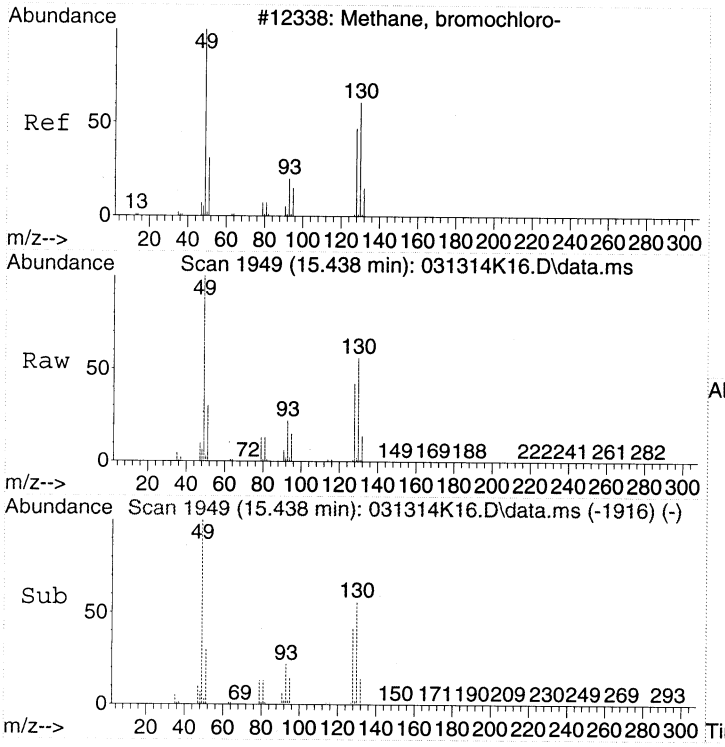
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K16.D
Acq On : 13 Mar 2014 20:05
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 39
Multiplier: 1

Quant Time: Mar 14 19:24:51 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

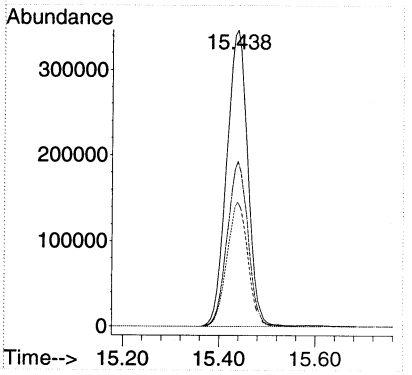


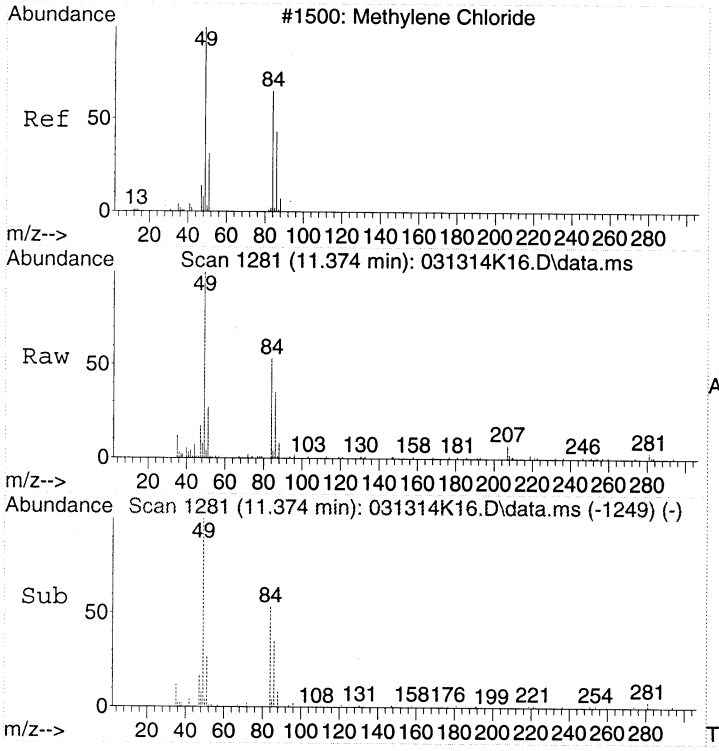


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K16.D
Acq: 13 Mar 2014 20:05

Tgt Ion: 49 Resp: 1060494

Ion	Ratio	Lower	Upper
49	100		
130	54.9	53.4	93.4
128	41.8	35.1	75.1

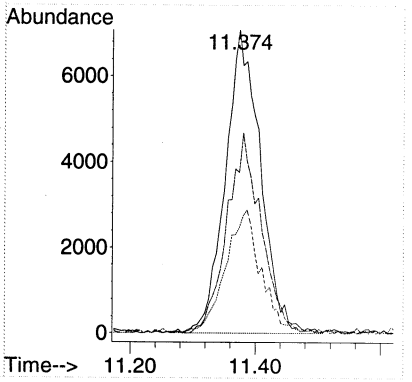


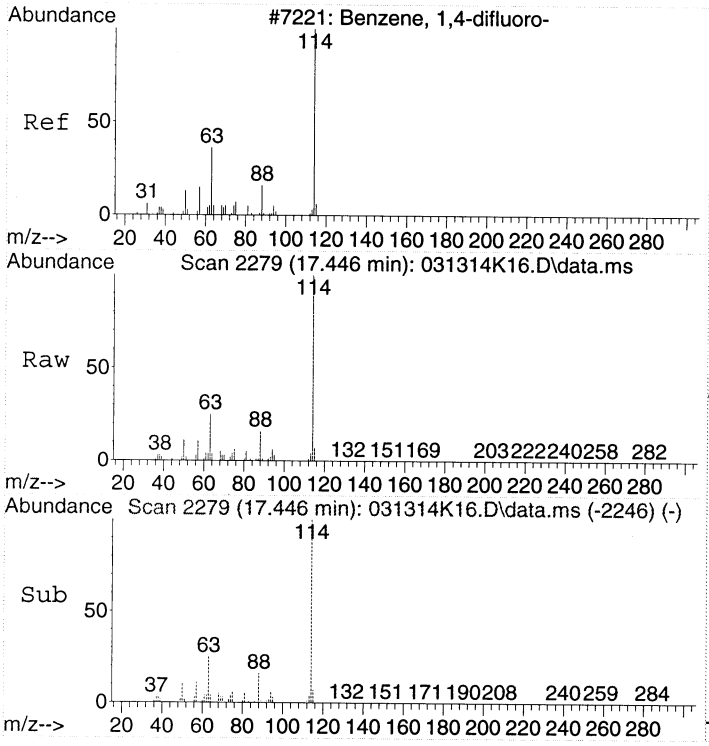


#18
Dichloromethane
Concen: 0.55 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. -0.006 min
Lab File: 031314K16.D
Acq: 13 Mar 2014 20:05

Tgt Ion: 49 Resp: 27622

Ion	Ratio	Lower	Upper
49	100		
84	64.9	54.7	94.7
86	41.6	29.1	69.1

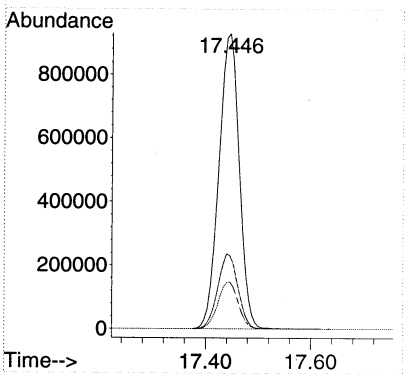


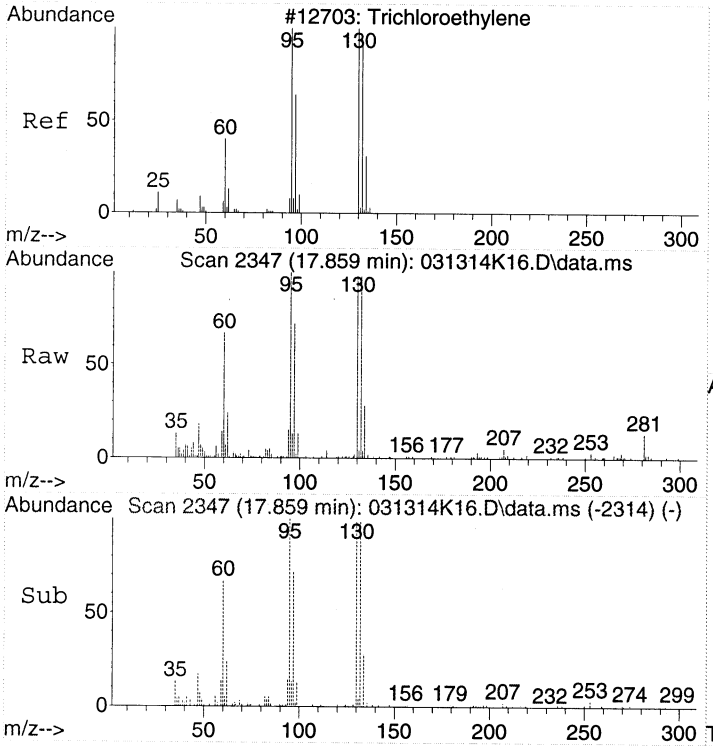


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K16.D
Acq: 13 Mar 2014 20:05

Tgt Ion:114 Resp: 2503024

Ion	Ratio	Lower	Upper
114	100		
63	25.3	2.7	42.7
88	15.9	0.0	36.0

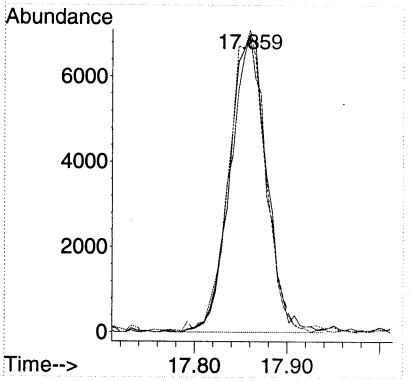


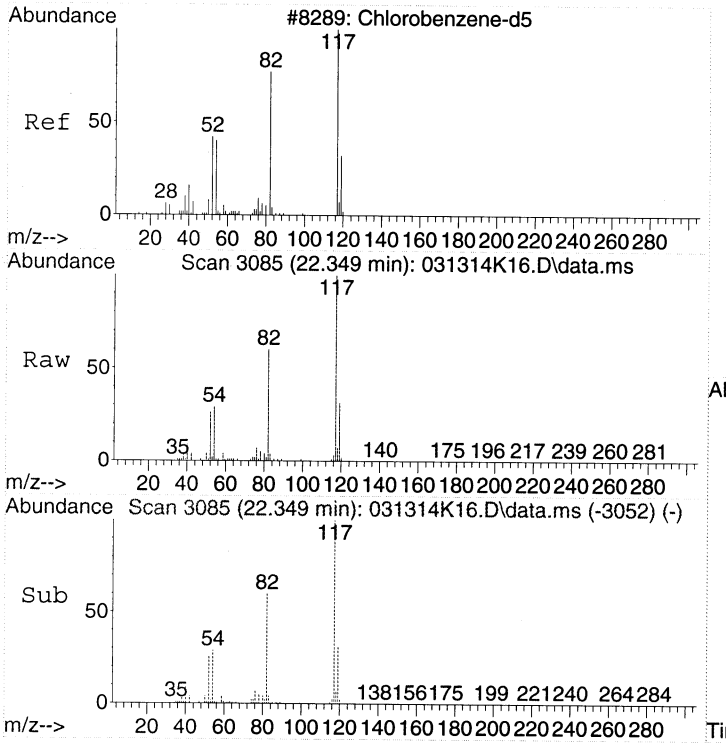


#37
Trichloroethene
Concen: 0.50 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. -0.000 min
Lab File: 031314K16.D
Acq: 13 Mar 2014 20:05

Tgt Ion:130 Resp: 19508

Ion	Ratio	Lower	Upper
130	100		
132	94.9	77.7	117.7
95	98.5	80.9	120.9

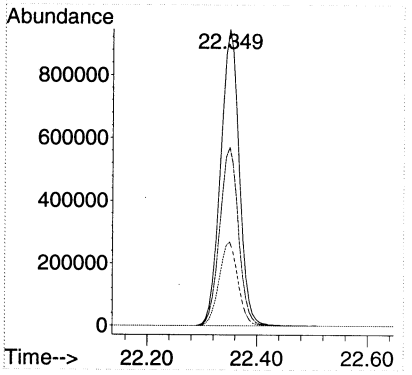




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K16.D
Acq: 13 Mar 2014 20:05

Tgt Ion:117 Resp: 2233115

Ion	Ratio	Lower	Upper
117	100		
82	60.7	36.4	76.4
54	28.6	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K17.D
Acq On : 13 Mar 2014 20:54
Instrument: HP5973K
Operator : EM
Sample : 1403028-04
Misc : 200mL MH63 CAN 1113
ALS Vial : 10
Multiplier: 2.11

Quant Time: Mar 14 19:25:01 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.438	49	1069209	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2510110	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	2193707	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.366	41	25284	1.05	ppbv	#	78
6) Vinyl chloride	5.333	62	58310	1.76	ppbv		100
14) Acetone	9.896	43	34608	0.69	ppbv	#	52
18) Dichloromethane	11.374	49	39468	0.79	ppbv		89
20) trans-1,2-Dichloroethene	12.105	61	50190	1.10	ppbv		89
24) cis-1,2-Dichloroethene	14.897	61	816284	15.16	ppbv		90
28) Chloroform	15.596	83	4769305	60.39	ppbv	E	96
37) Trichloroethene	17.860	130	2262333	58.01	ppbv	E	97
47) Tetrachloroethene	20.926	166	46894	0.89	ppbv		99

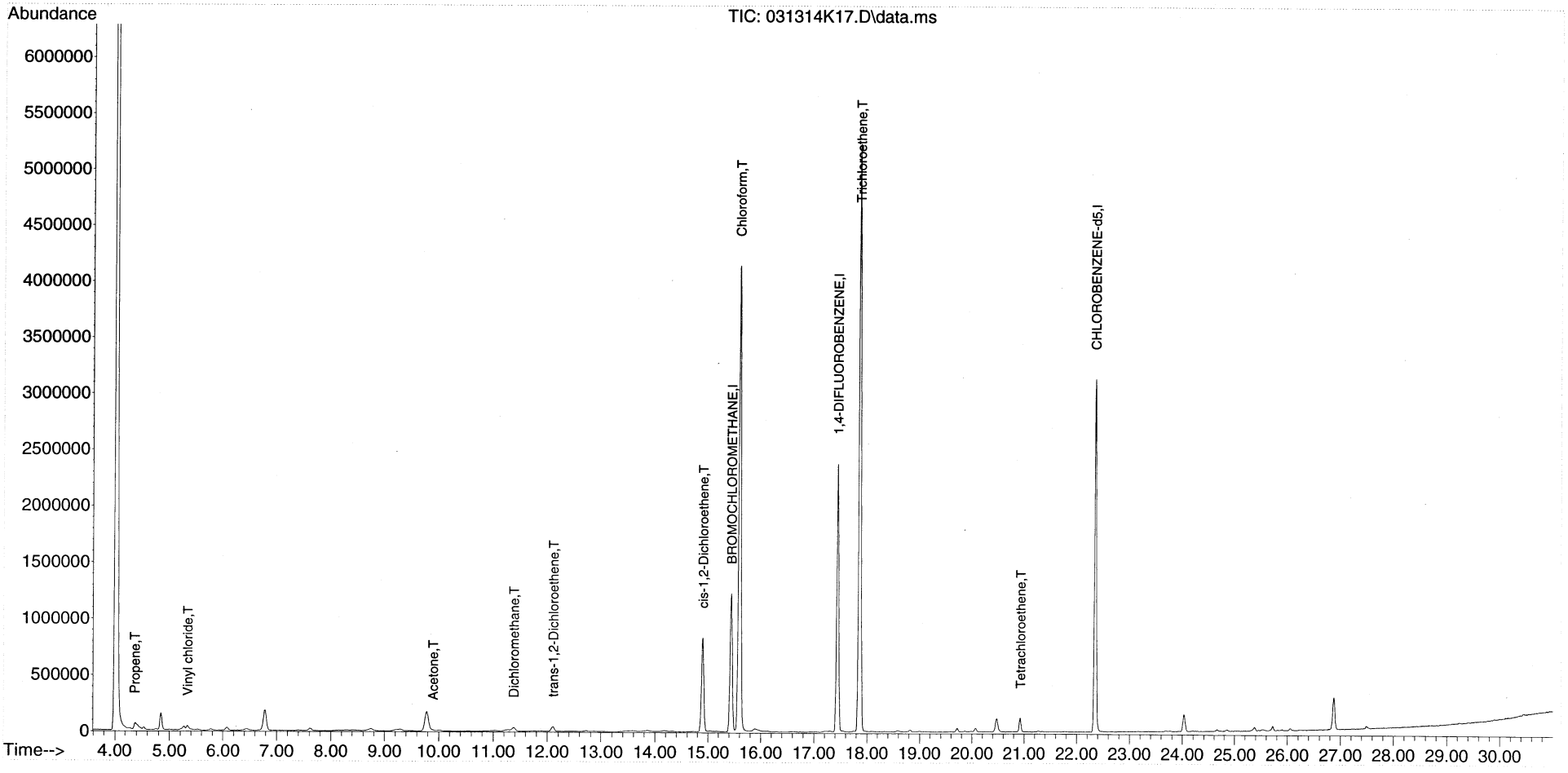
(#) = qualifier out of range (m) = manual integration (+) = signals summed

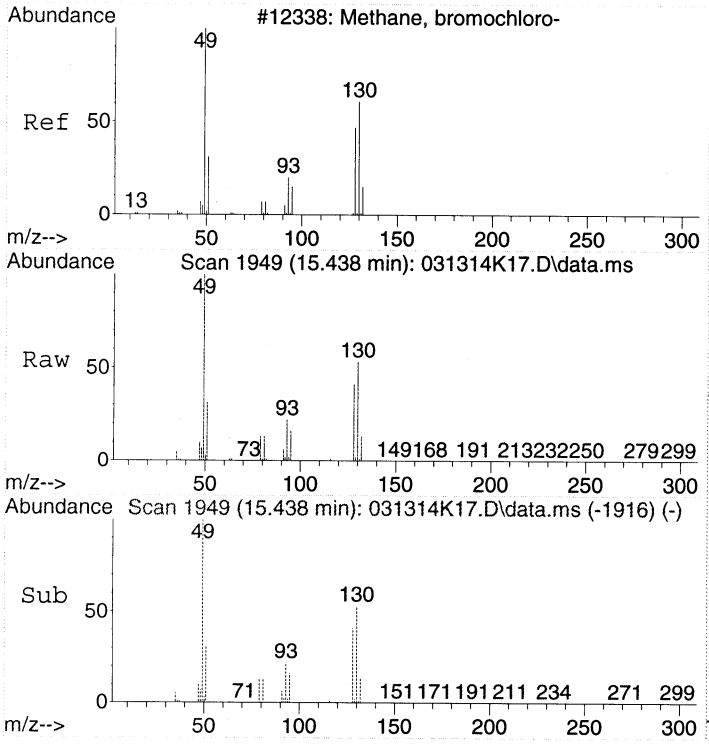
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K17.D
Acq On : 13 Mar 2014 20:54
Instrument: HP5973K
Operator : EM
Sample : 1403028-04
Misc : 200mL MH63 CAN 1113
ALS Vial : 10
Multiplier: 2.11

Quant Time: Mar 14 19:25:01 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

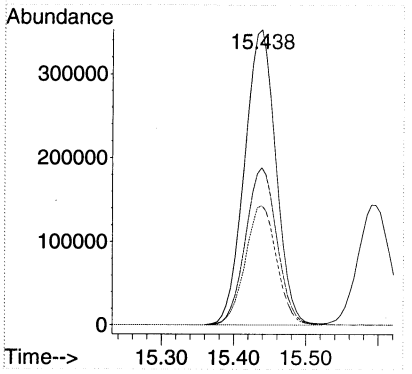


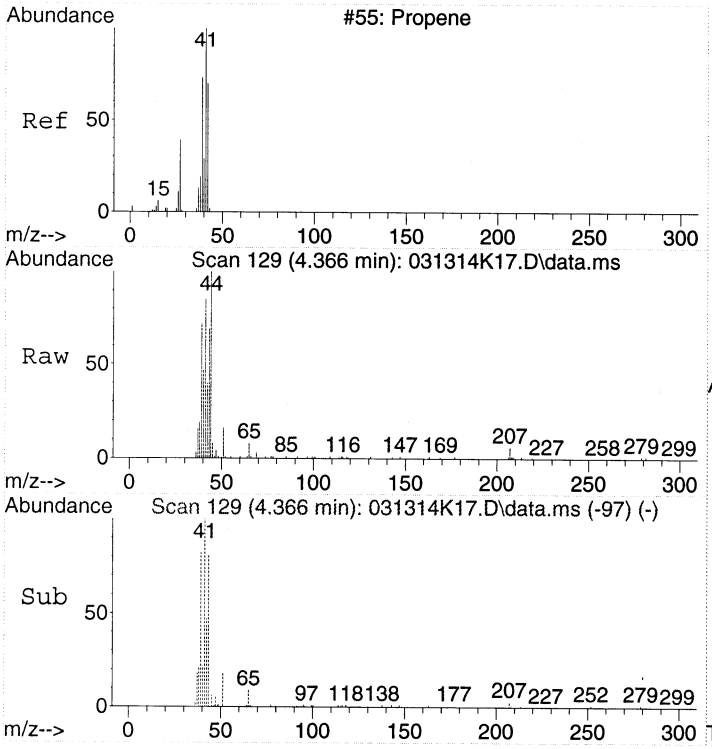


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 49 Resp: 1069209

Ion	Ratio	Lower	Upper
49	100		
130	53.7	53.4	93.4
128	40.7	35.1	75.1

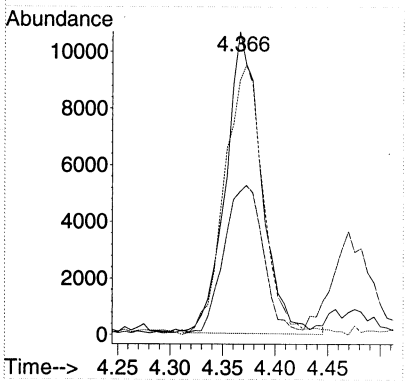


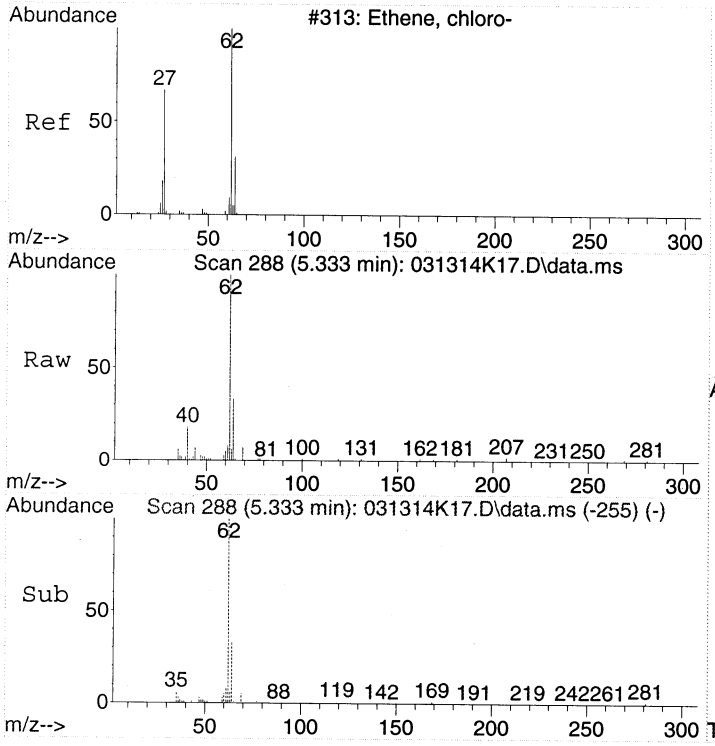


#2
Propene
Concen: 1.05 ppbv
RT: 4.366 min Scan# 129
Delta R.T. -0.006 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 41 Resp: 25284

Ion	Ratio	Lower	Upper
41	100		
42	52.6	46.3	86.3
39	97.9	56.1	96.1#

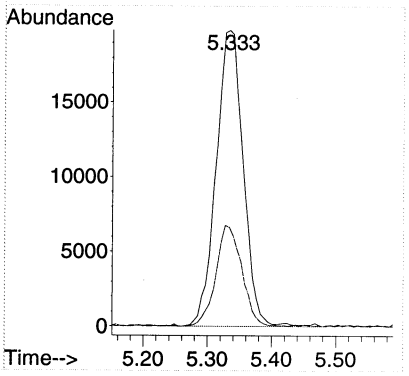


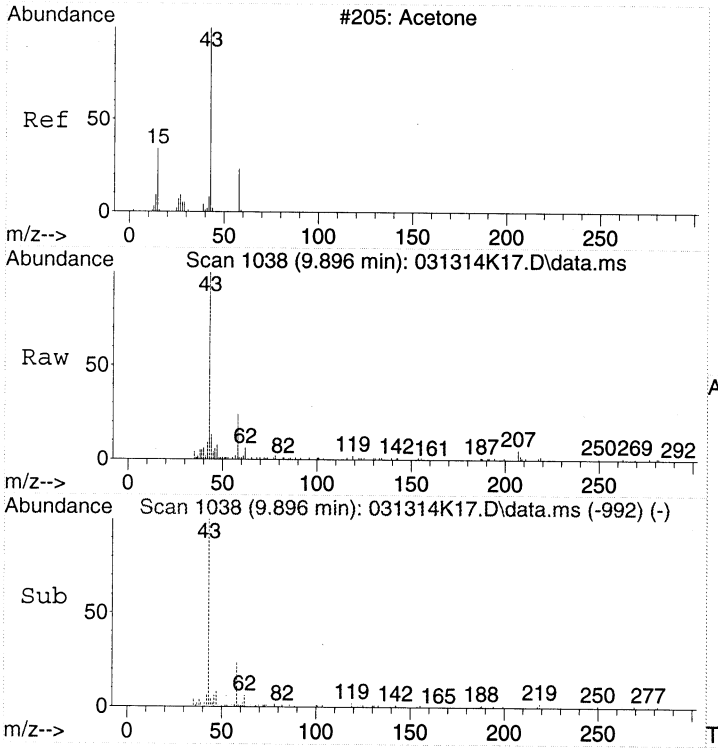


#6
Vinyl chloride
Concen: 1.76 ppbv
RT: 5.333 min Scan# 288
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 62 Resp: 58310

Ion	Ratio	Lower	Upper
62	100		
64	32.8	12.5	52.5

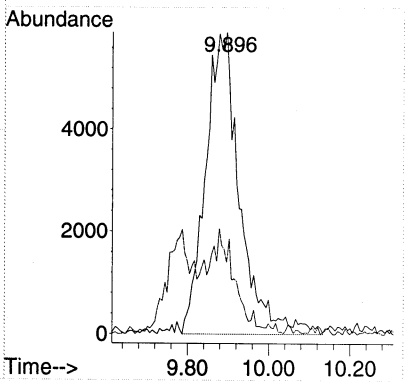


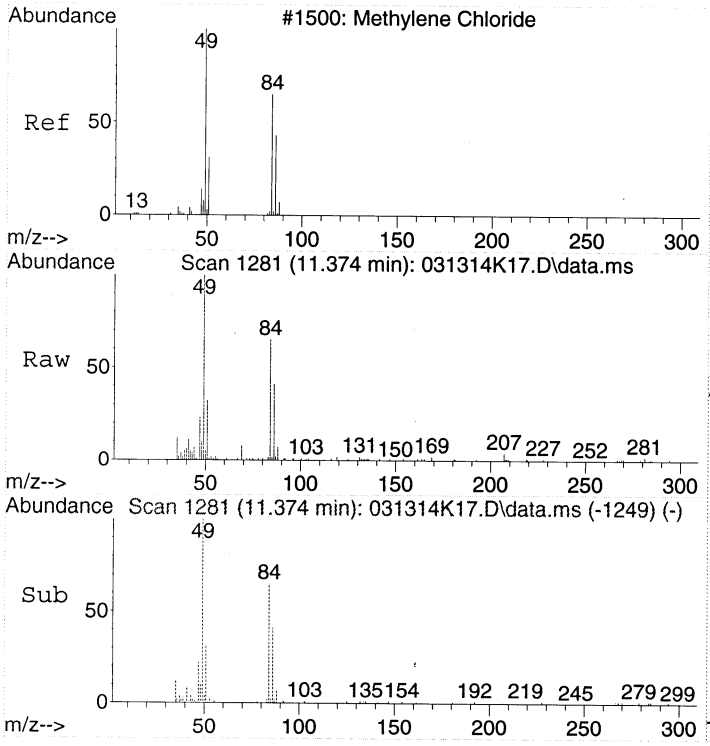


#14
Acetone
Concen: 0.69 ppbv
RT: 9.896 min Scan# 1038
Delta R.T. 0.079 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 43 Resp: 34608

Ion	Ratio	Lower	Upper
43	100		
58	53.5	8.0	48.0#

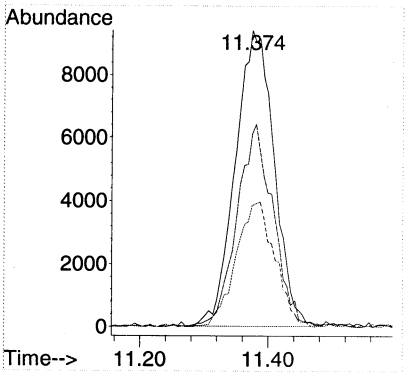


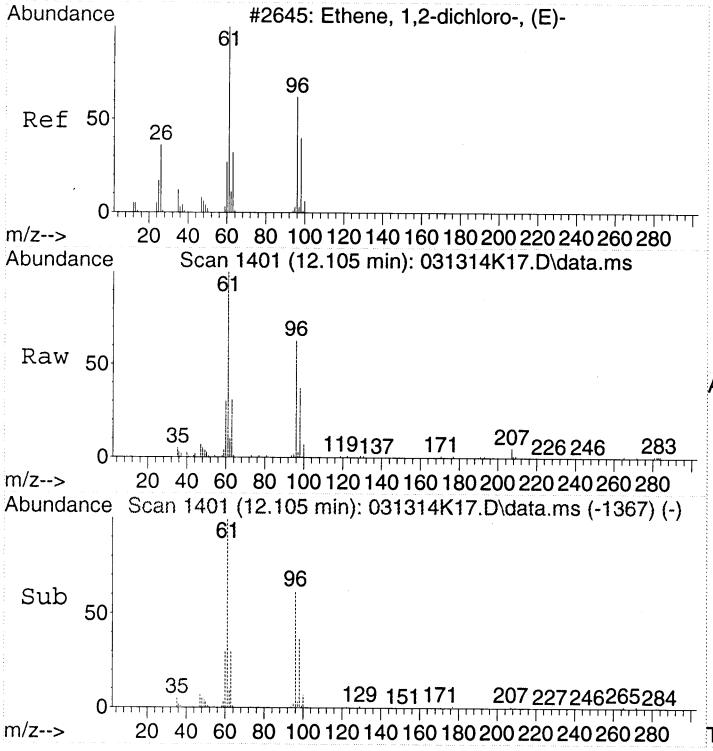


#18
Dichloromethane
Concen: 0.79 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. -0.006 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 49 Resp: 39468

Ion	Ratio	Lower	Upper
49	100		
84	64.5	54.7	94.7
86	42.4	29.1	69.1

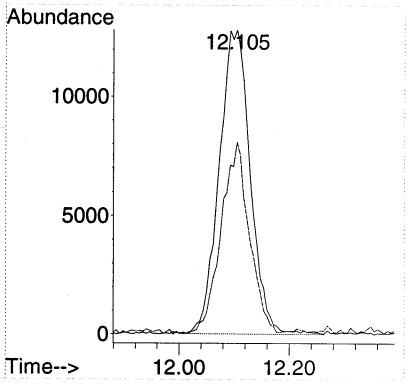


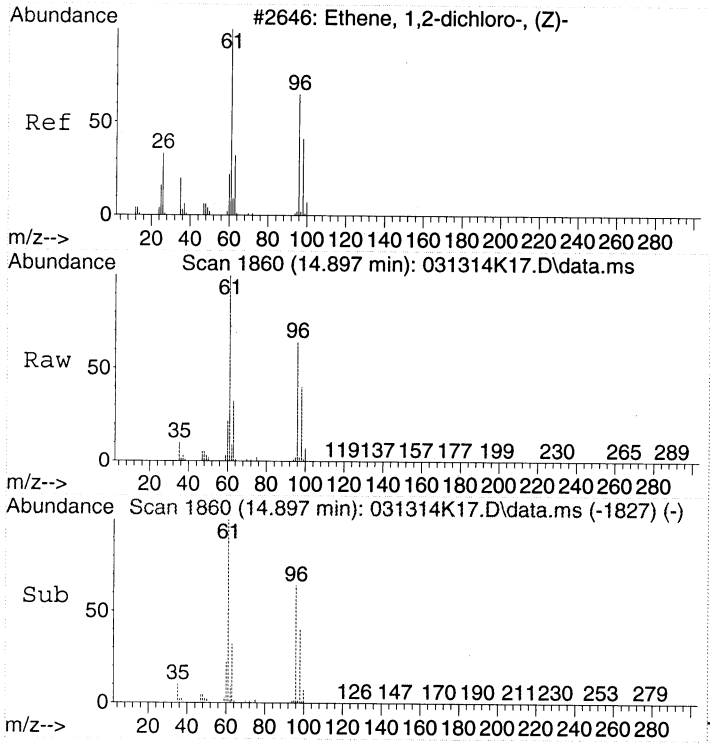


#20
trans-1,2-Dichloroethene
Concen: 1.10 ppbv
RT: 12.105 min Scan# 1401
Delta R.T. 0.006 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 61 Resp: 50190

Ion	Ratio	Lower	Upper
61	100		
96	58.1	46.8	86.8

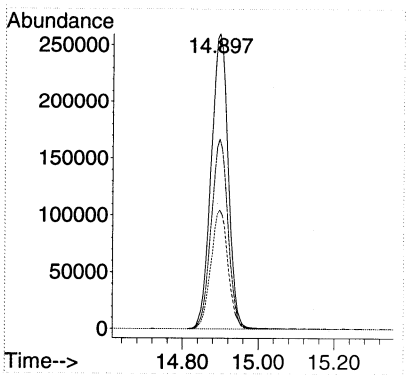


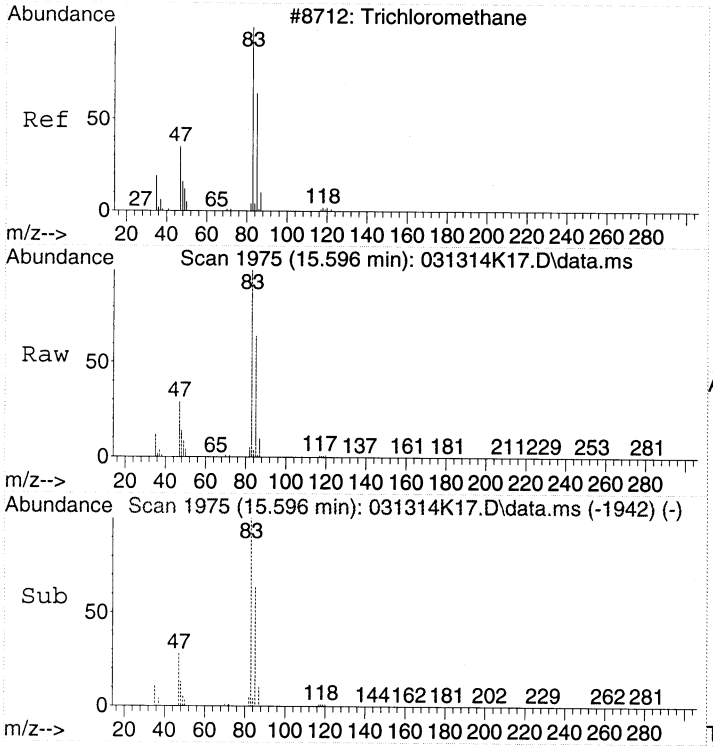


#24
cis-1,2-Dichloroethene
Concen: 15.16 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 61 Resp: 816284

Ion	Ratio	Lower	Upper
61	100		
96	63.3	52.9	92.9
98	40.2	24.5	64.5

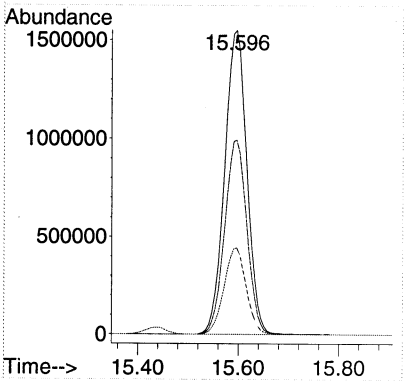


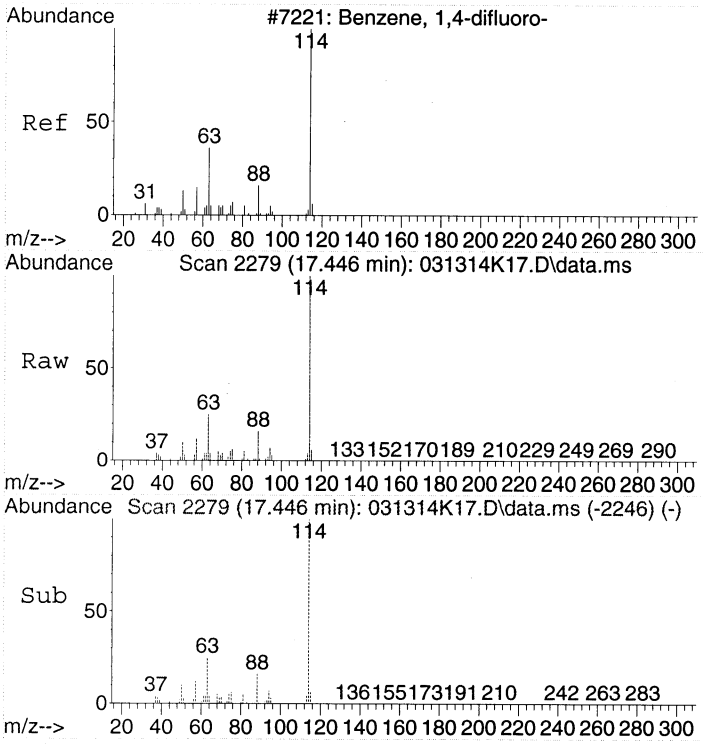


#28
Chloroform
Concen: 60.39 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion: 83 Resp: 4769305

Ion	Ratio	Lower	Upper
83	100		
85	64.2	46.8	86.8
47	28.6	6.3	46.3

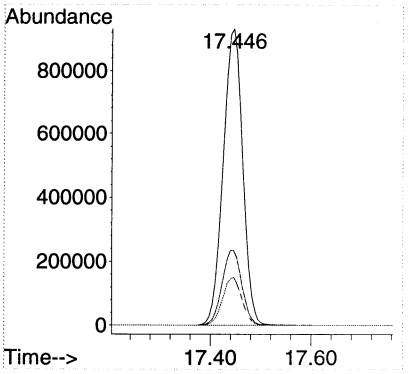


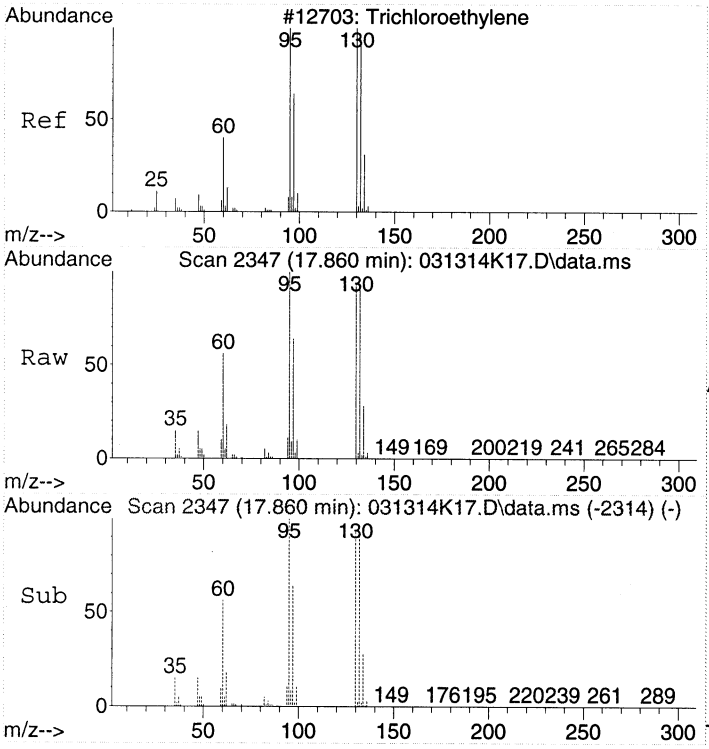


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion:114 Resp: 2510110

Ion	Ratio	Lower	Upper
114	100		
63	25.6	2.7	42.7
88	16.0	0.0	36.0

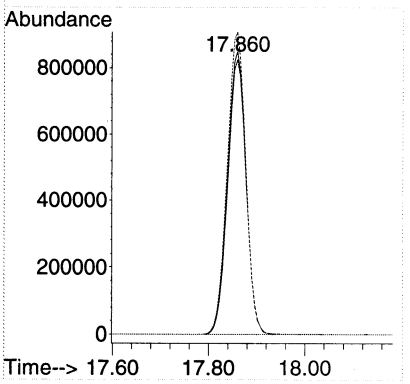


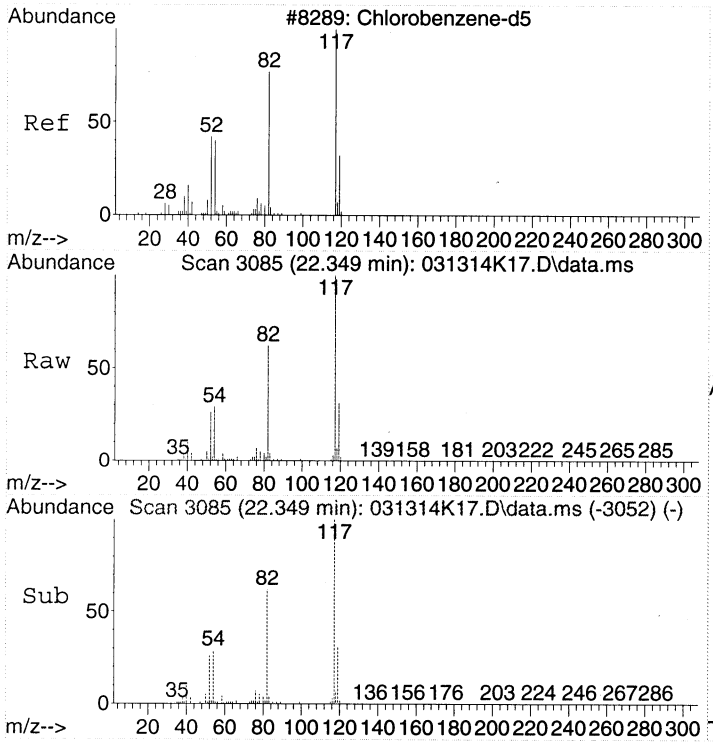


#37
Trichloroethene
Concen: 58.01 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion:130 Resp: 2262333

Ion	Ratio	Lower	Upper
130	100		
132	96.8	77.7	117.7
95	106.9	80.9	120.9

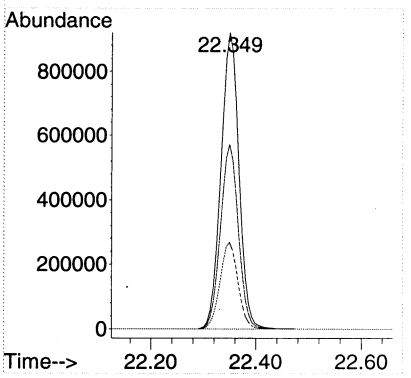


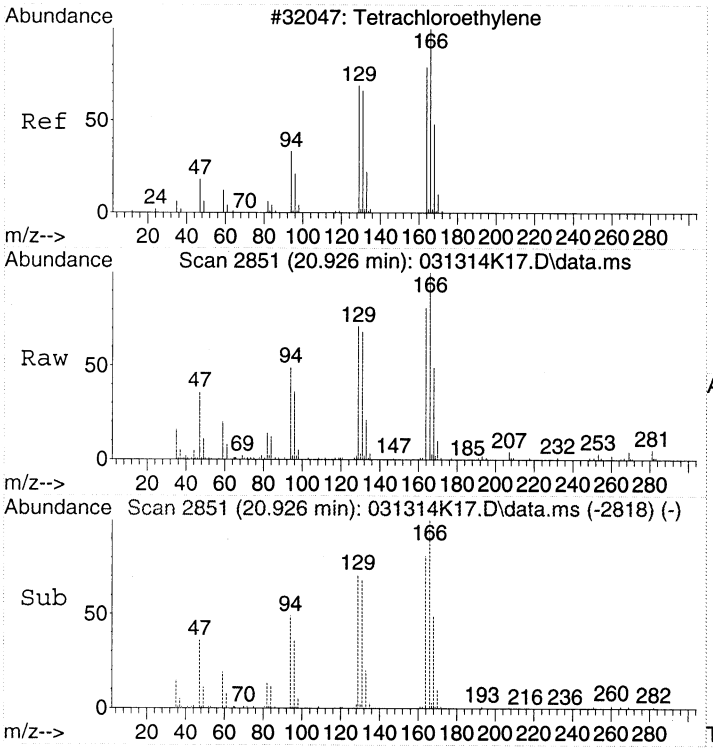


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion:117 Resp: 2193707

Ion	Ratio	Lower	Upper
117	100		
82	61.9	36.4	76.4
54	29.2	5.4	45.4

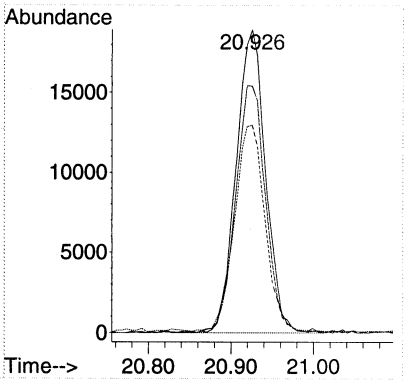




#47
Tetrachloroethene
Concen: 0.89 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. 0.000 min
Lab File: 031314K17.D
Acq: 13 Mar 2014 20:54

Tgt Ion:166 Resp: 46894

Ion	Ratio	Lower	Upper
166	100		
164	83.0	60.8	100.8
131	70.5	50.5	90.5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K18.D
Acq On : 13 Mar 2014 21:43
Instrument: HP5973K
Operator : EM
Sample : 1403028-05
Misc : 200mL MH64 CAN 1120
ALS Vial : 11
Multiplier: 2.09

Rpt this run
EM 3/20/14
Rerun to check for
Carryover

Quant Time: Mar 14 19:25:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	1092952	22.00 ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2536700	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2206858	22.00 ppbv	0.00
Target Compounds					Qvalue
18) Dichloromethane	11.387	49	28132	0.55 ppbv	84
24) cis-1,2-Dichloroethene	14.897	61	294045	5.34 ppbv	90
28) Chloroform	15.596	83	236060	2.92 ppbv -	96
37) Trichloroethene	17.859	130	142837	3.62 ppbv -	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

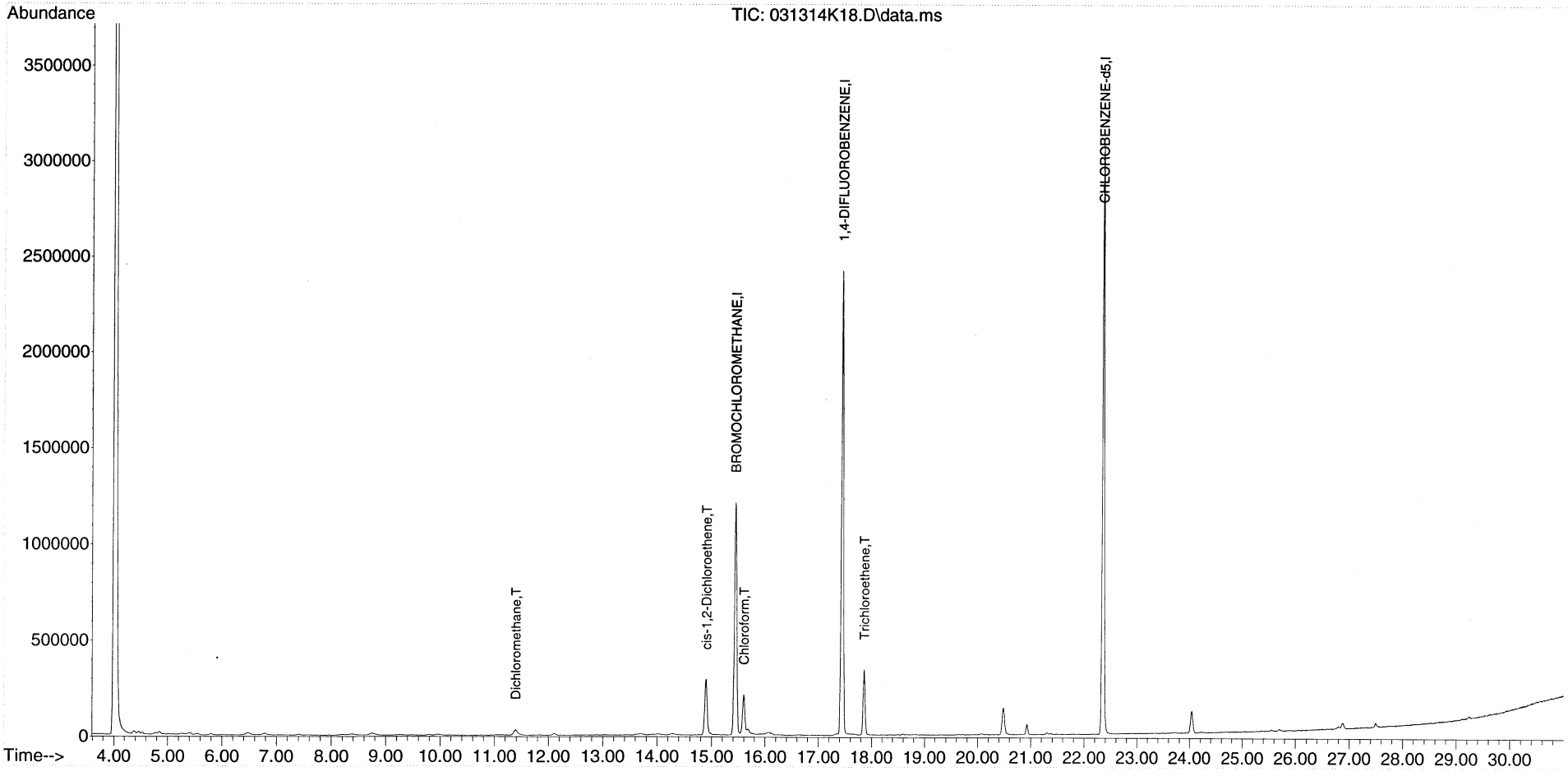
00241

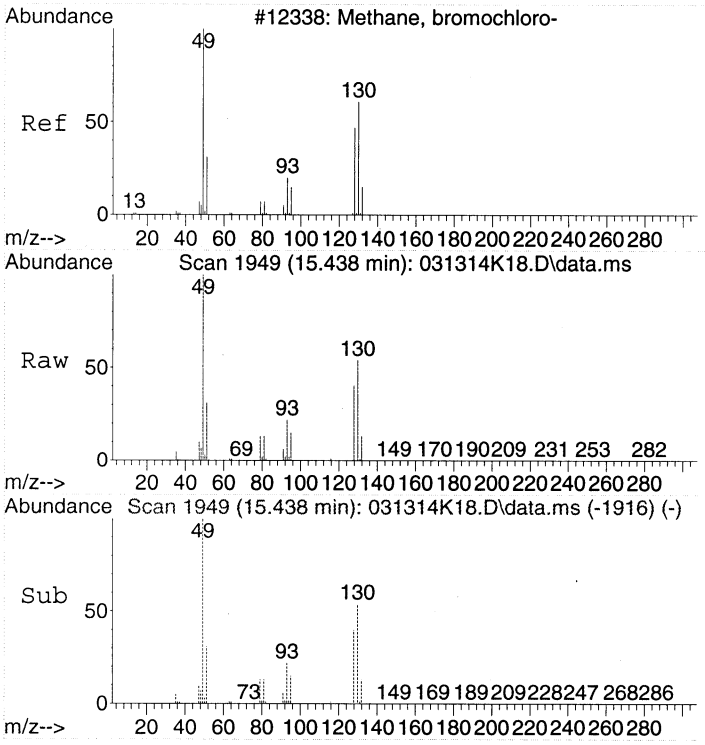
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K18.D
Acq On : 13 Mar 2014 21:43
Instrument: HP5973K
Operator : EM
Sample : 1403028-05
Misc : 200mL MH64 CAN 1120
ALS Vial : 11
Multiplier: 2.09

Quant Time: Mar 14 19:25:18 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

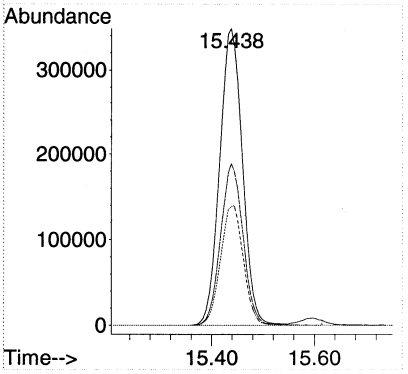


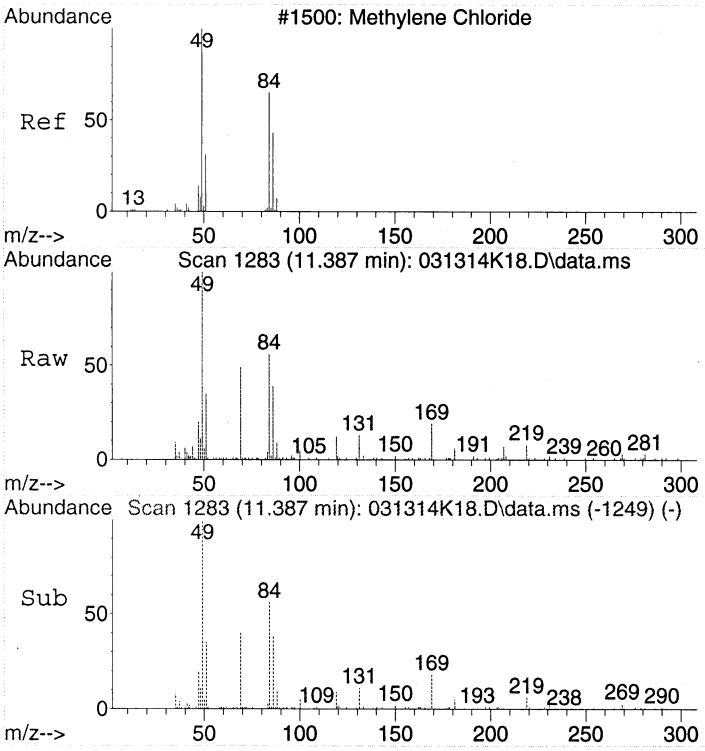


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion: 49 Resp: 1092952

Ion	Ratio	Lower	Upper
49	100		
130	52.5	53.4	93.4#
128	39.5	35.1	75.1

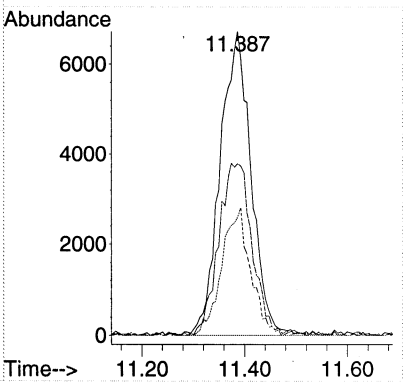


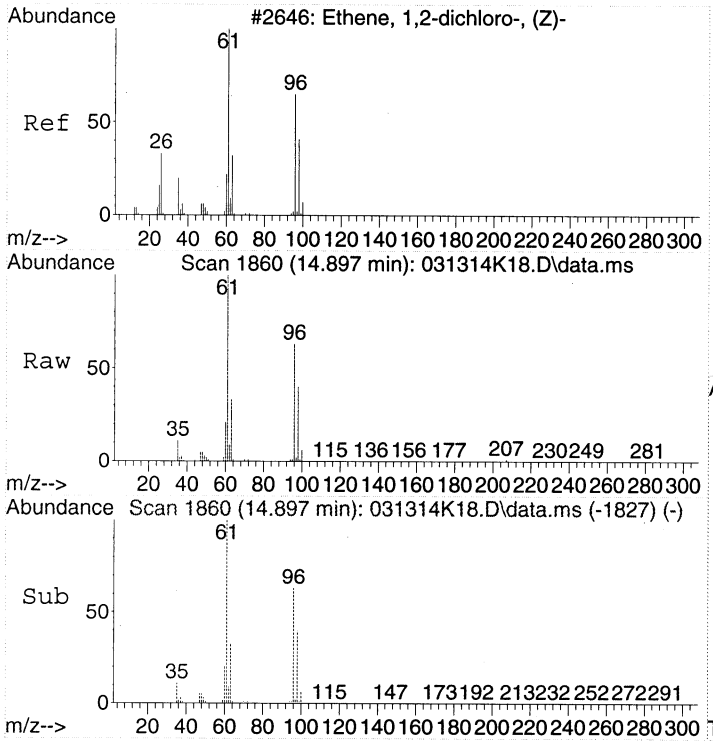


#18
Dichloromethane
Concen: 0.55 ppbv
RT: 11.387 min Scan# 1283
Delta R.T. 0.006 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion: 49 Resp: 28132

Ion	Ratio	Lower	Upper
49	100		
84	60.5	54.7	94.7
86	38.5	29.1	69.1

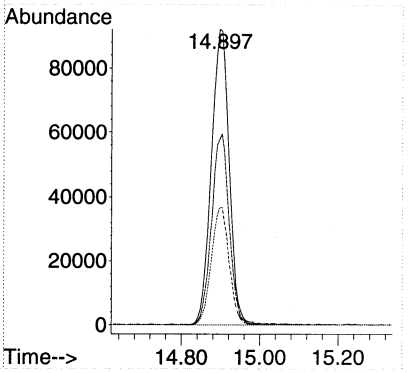


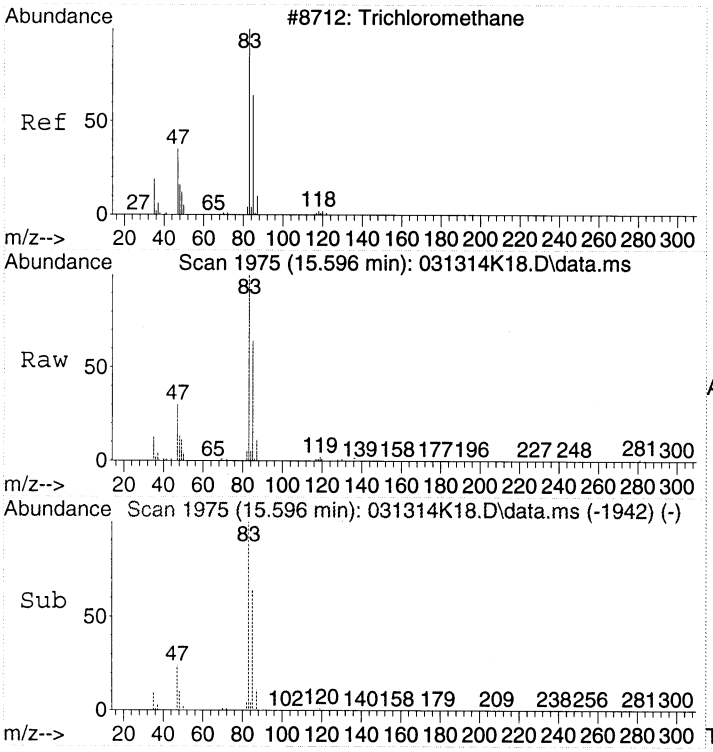


#24
cis-1,2-Dichloroethene
Concen: 5.34 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. -0.000 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion: 61 Resp: 294045

Ion	Ratio	Lower	Upper
61	100		
96	63.0	52.9	92.9
98	39.5	24.5	64.5

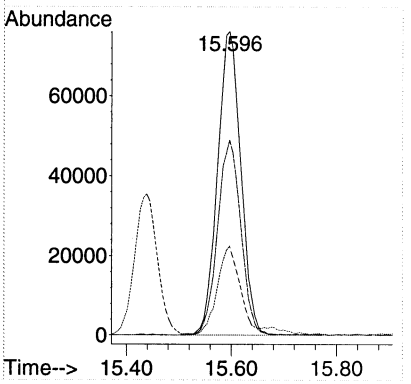


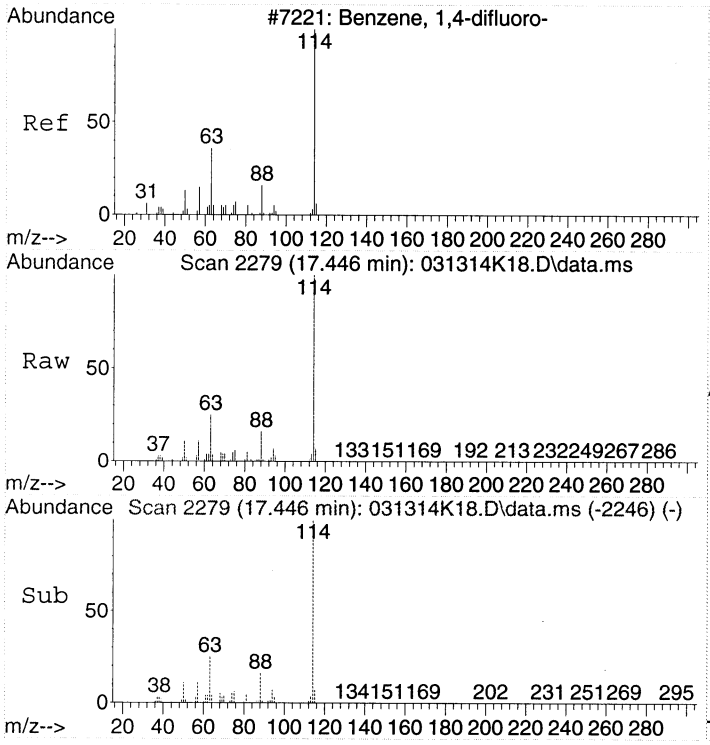


#28
Chloroform
Concen: 2.92 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. -0.000 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion: 83 Resp: 236060

Ion	Ratio	Lower	Upper
83	100		
85	64.0	46.8	86.8
47	28.4	6.3	46.3

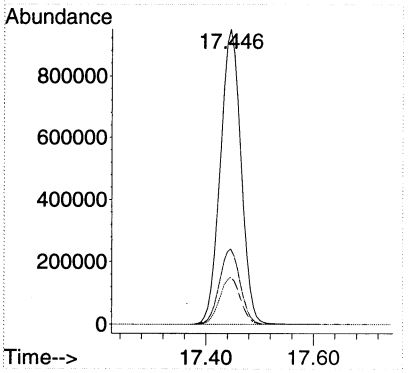


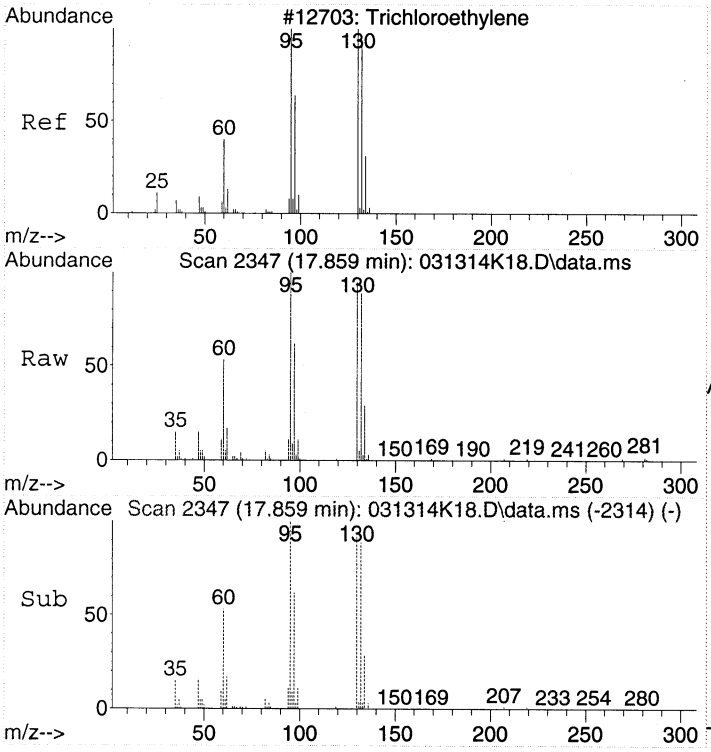


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion:114 Resp: 2536700

Ion	Ratio	Lower	Upper
114	100		
63	25.5	2.7	42.7
88	16.0	0.0	36.0

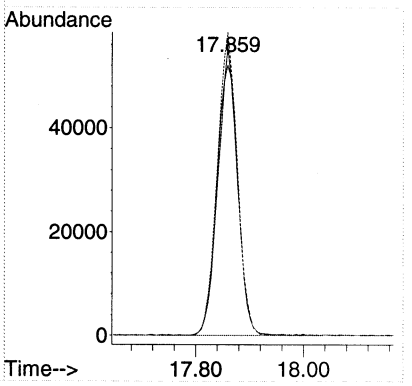




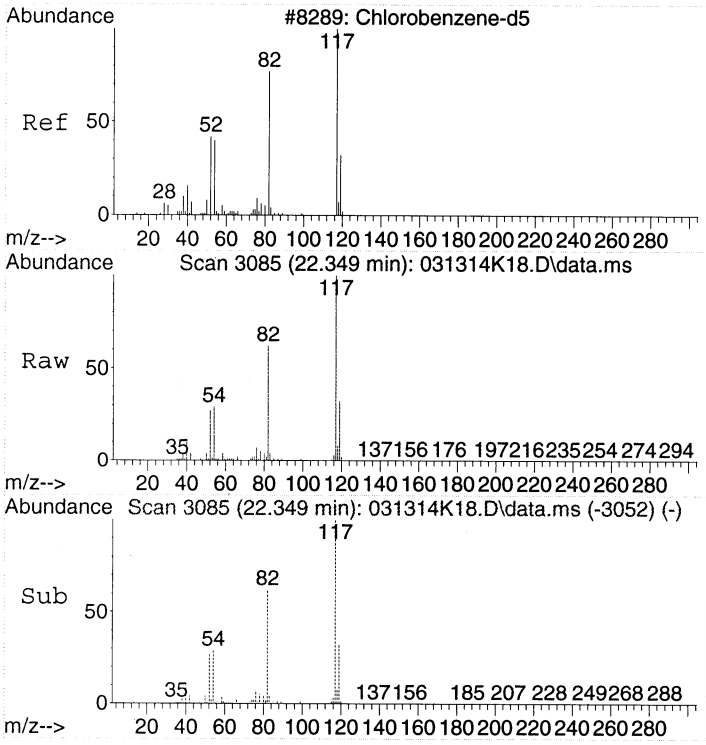
#37
Trichloroethene
Concen: 3.62 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. -0.000 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion:130 Resp: 142837

Ion	Ratio	Lower	Upper
130	100		
132	97.4	77.7	117.7
95	106.1	80.9	120.9



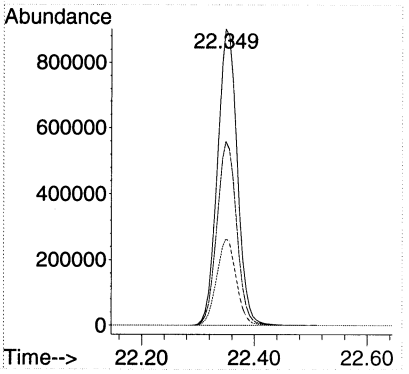
00245



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K18.D
Acq: 13 Mar 2014 21:43

Tgt Ion:117 Resp: 2206858

Ion	Ratio	Lower	Upper
117	100		
82	61.7	36.4	76.4
54	29.1	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K19.D
Acq On : 13 Mar 2014 22:32
Instrument: HP5973K
Operator : EM
Sample : 1403028-06
Misc : 200mL MH65 CAN 1986
ALS Vial : 12
Multiplier: 2.11

Quant Time: Mar 14 19:25:30 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	1082249	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2559892	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2248979	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	16446	0.67	ppbv #	76
14) Acetone	9.866	43	87689	1.73	ppbv	98
18) Dichloromethane	11.380	49	31176	0.61	ppbv	83
24) cis-1,2-Dichloroethene	14.891	61	143189	2.63	ppbv	90
28) Chloroform	15.596	83	286079	3.58	ppbv	95
37) Trichloroethene	17.853	130	437011	10.99	ppbv	98
47) Tetrachloroethene	20.926	166	34831	0.64	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

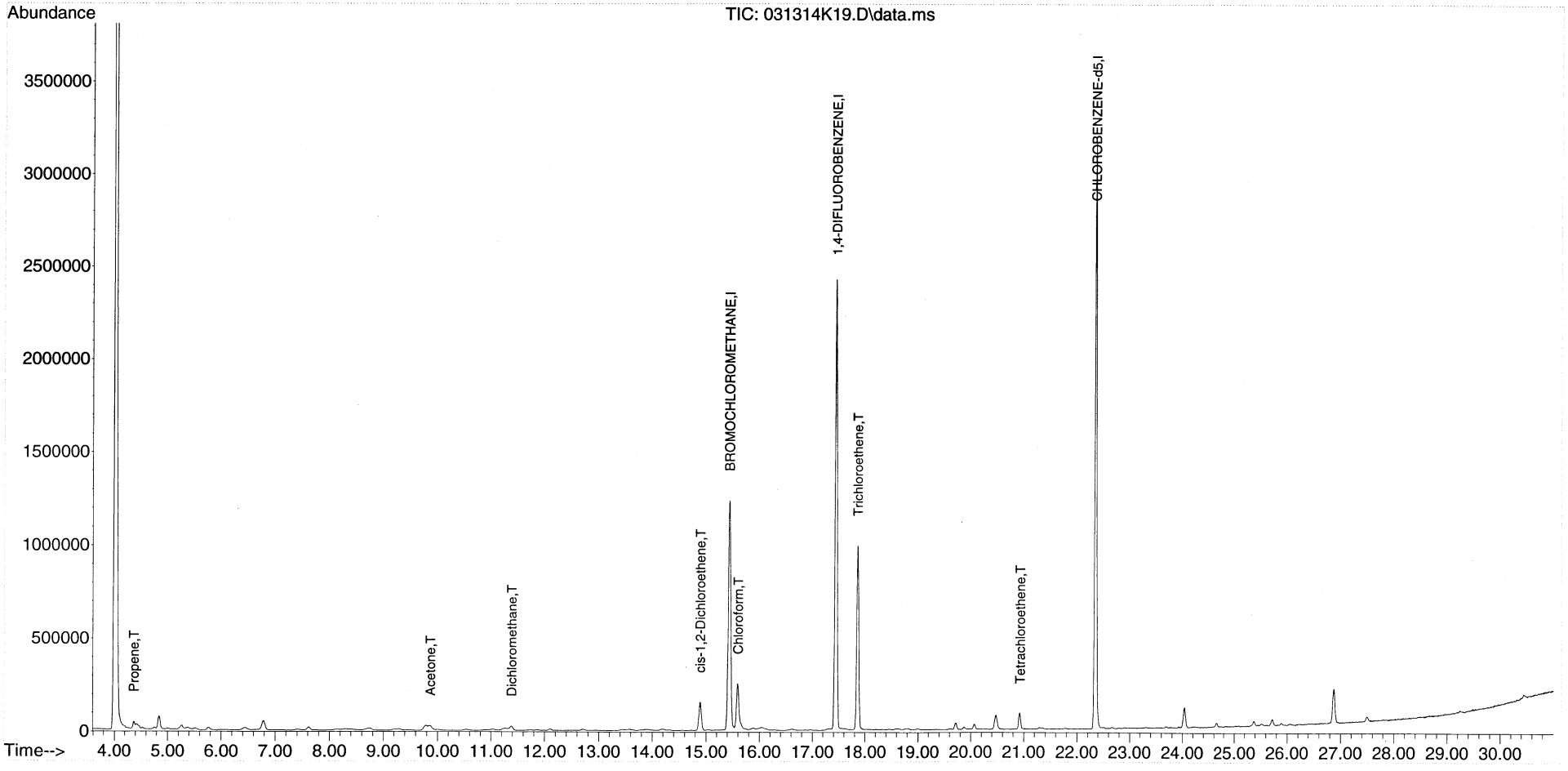
000246

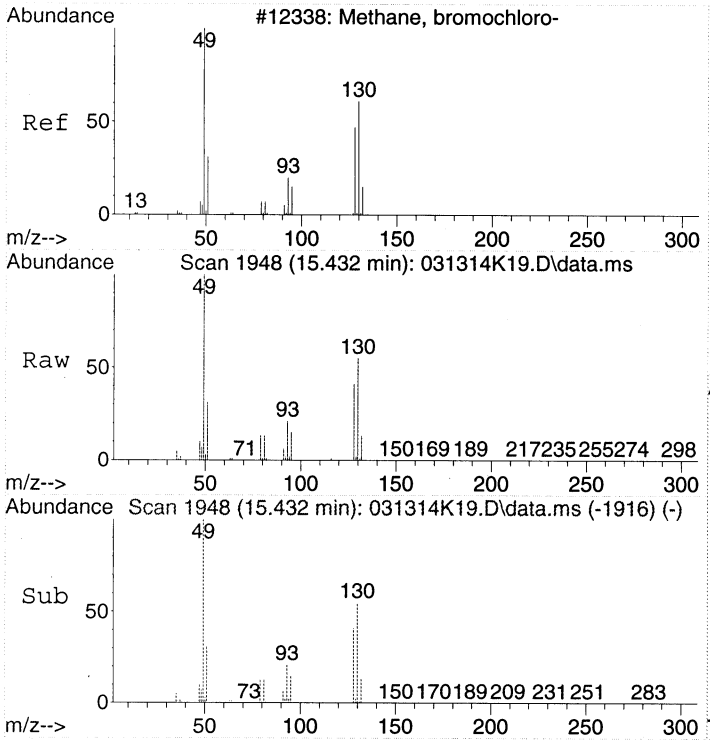
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K19.D
Acq On : 13 Mar 2014 22:32
Instrument: HP5973K
Operator : EM
Sample : 1403028-06
Misc : 200mL MH65 CAN 1986
ALS Vial : 12
Multiplier: 2.11

Quant Time: Mar 14 19:25:30 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

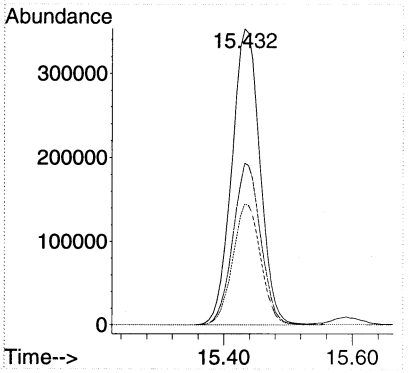


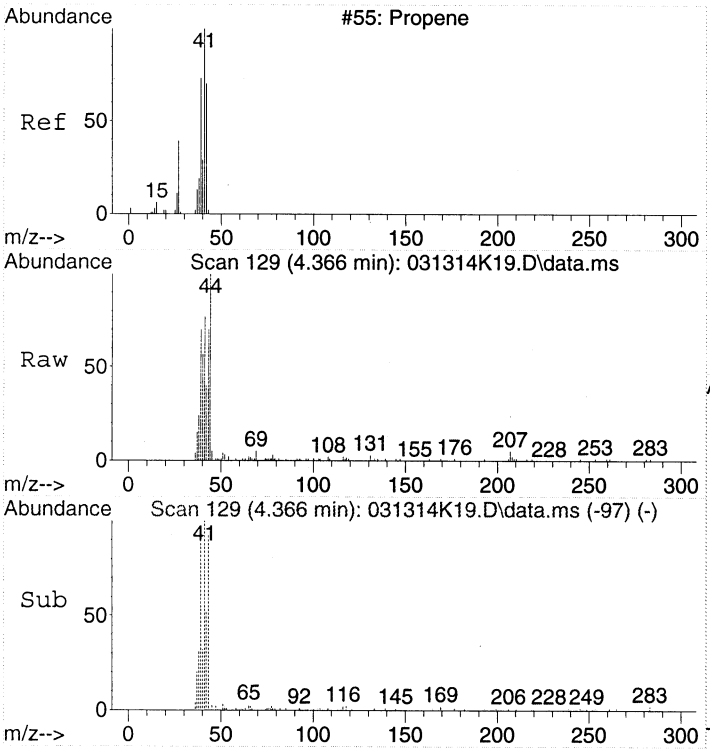


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion: 49 Resp: 1082249

Ion	Ratio	Lower	Upper
49	100		
130	53.9	53.4	93.4
128	40.7	35.1	75.1

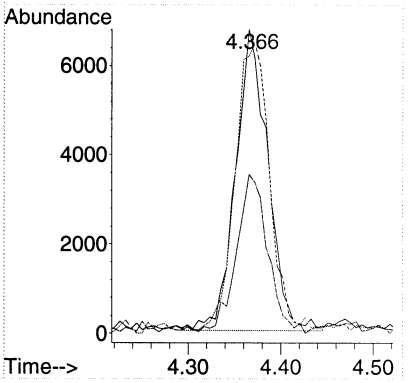


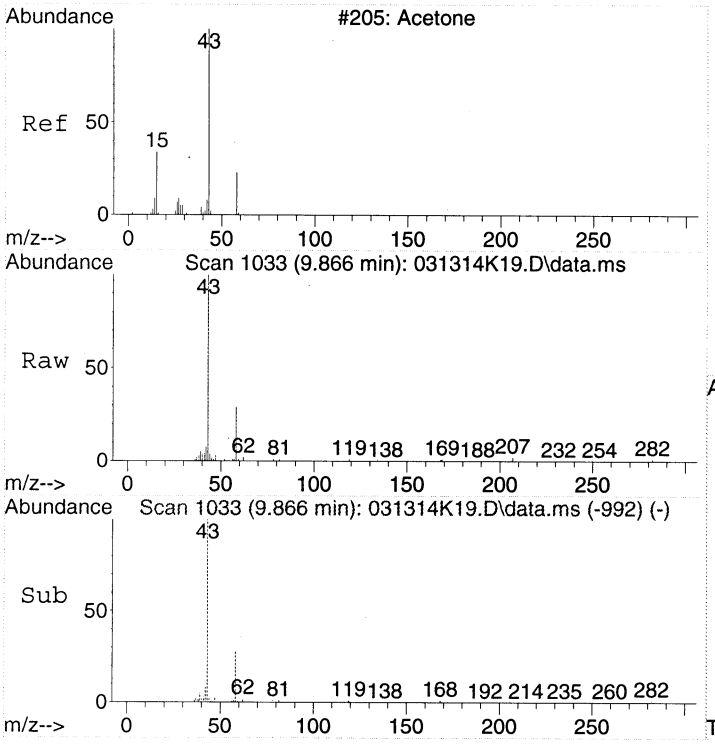


#2
Propene
Concen: 0.67 ppbv
RT: 4.366 min Scan# 129
Delta R.T. -0.006 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion: 41 Resp: 16446

Ion	Ratio	Lower	Upper
41	100		
42	51.2	46.3	86.3
39	99.7	56.1	96.1#

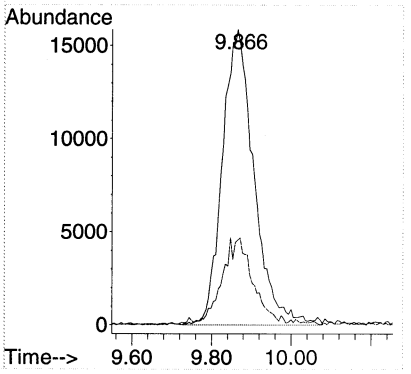


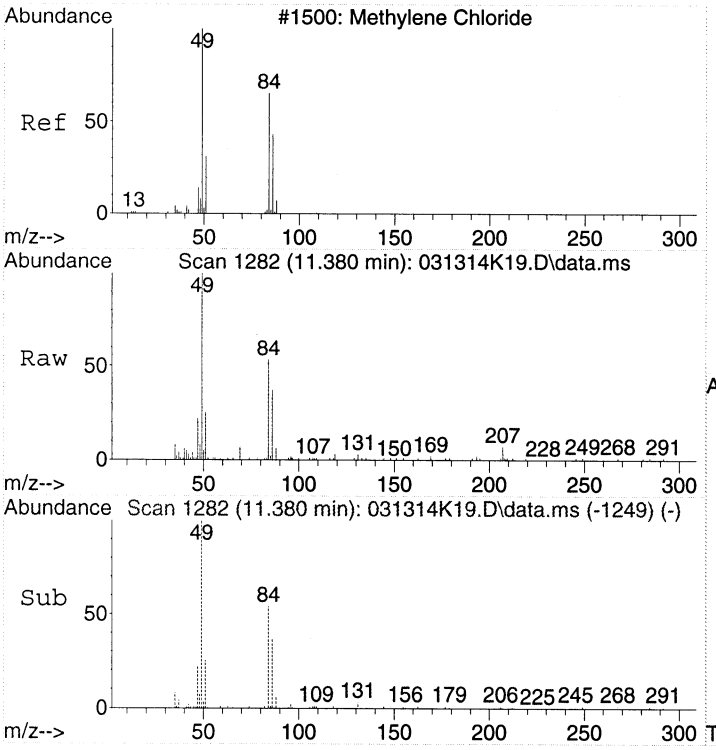


#14
Acetone
Concen: 1.73 ppbv
RT: 9.866 min Scan# 1033
Delta R.T. 0.049 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion: 43 Resp: 87689

Ion	Ratio	Lower	Upper
43	100		
58	28.9	8.0	48.0

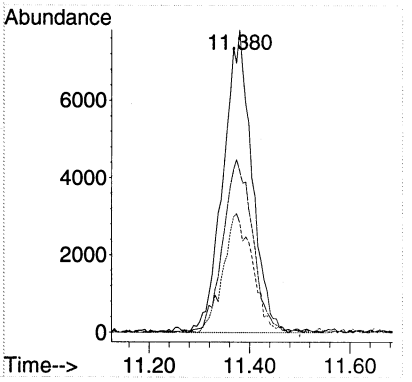


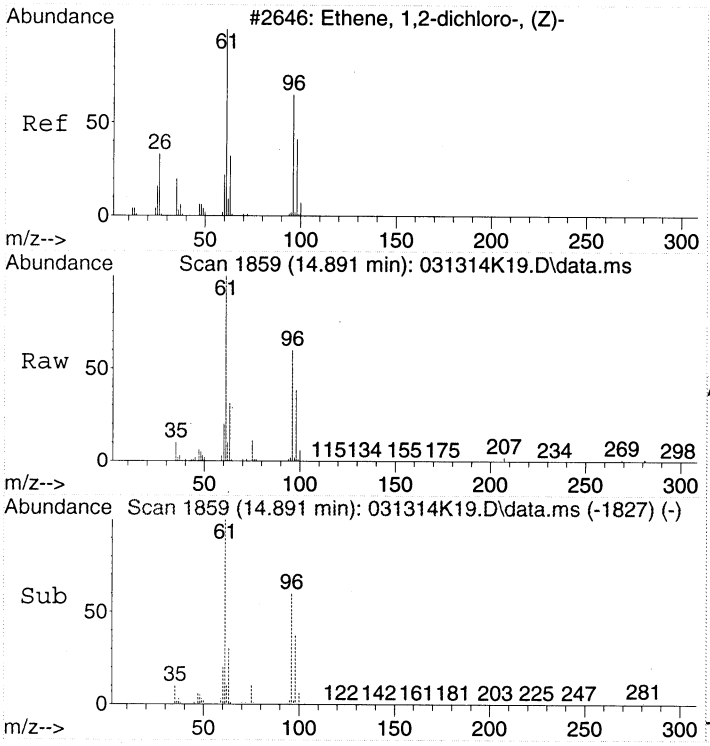


#18
Dichloromethane
Concen: 0.61 ppbv
RT: 11.380 min Scan# 1282
Delta R.T. -0.000 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion: 49 Resp: 31176

Ion	Ratio	Lower	Upper
49	100		
84	58.4	54.7	94.7
86	40.2	29.1	69.1

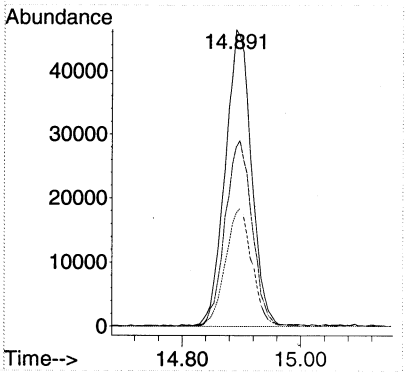


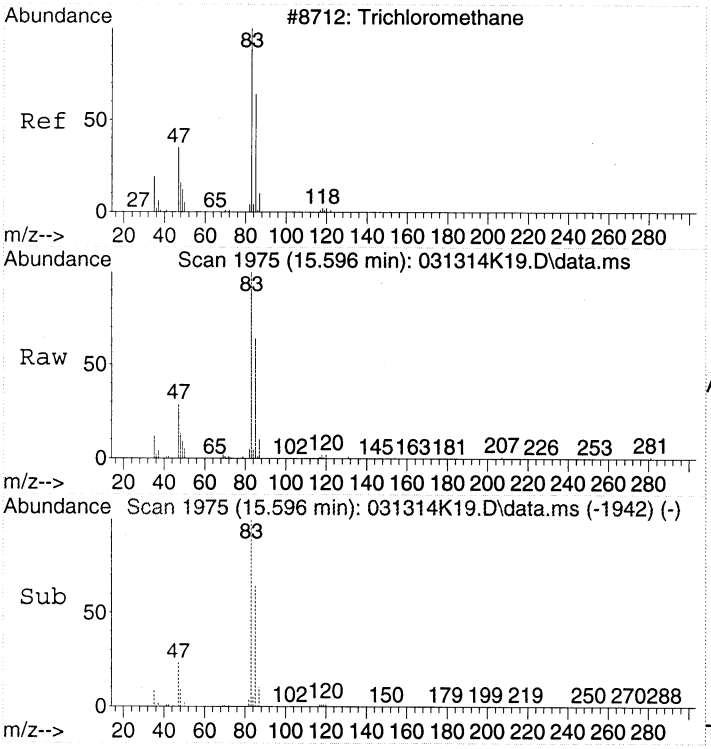


#24
cis-1,2-Dichloroethene
Concen: 2.63 ppbv
RT: 14.891 min Scan# 1859
Delta R.T. -0.006 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion: 61 Resp: 143189

Ion	Ratio	Lower	Upper
61	100		
96	63.6	52.9	92.9
98	39.9	24.5	64.5

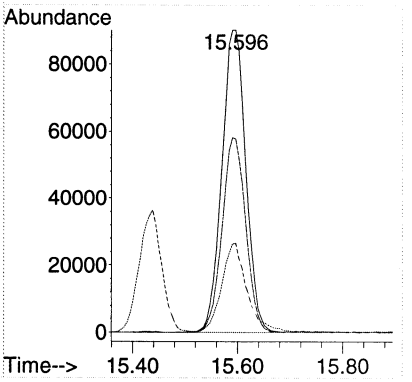


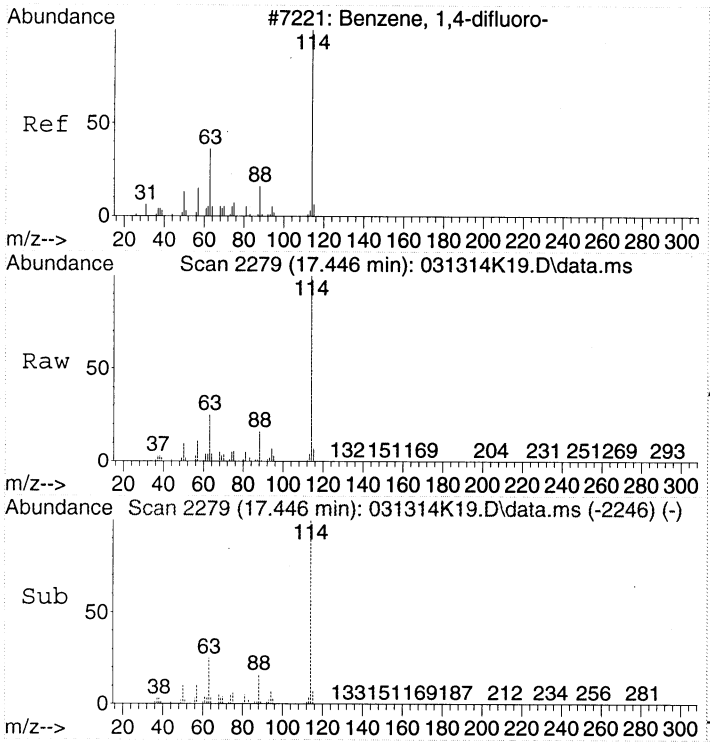


#28
Chloroform
Concen: 3.58 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. -0.000 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion: 83 Resp: 286079

Ion	Ratio	Lower	Upper
83	100		
85	63.8	46.8	86.8
47	29.8	6.3	46.3

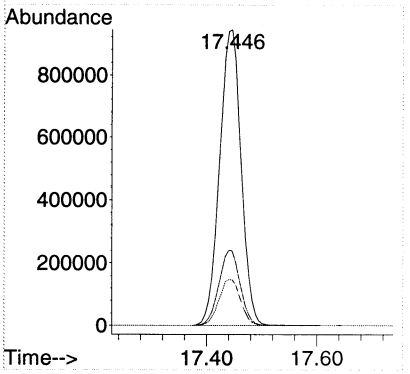


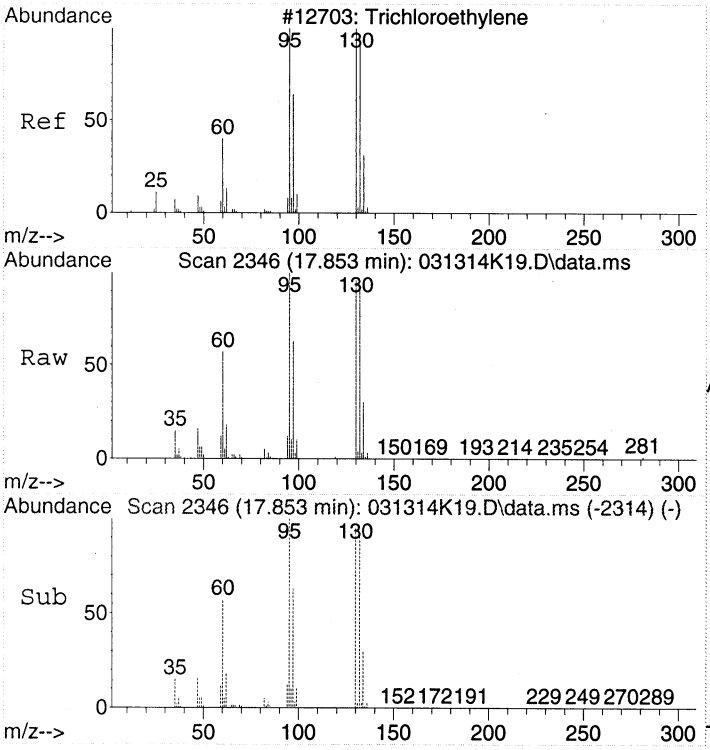


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion:114 Resp: 2559892

Ion	Ratio	Lower	Upper
114	100		
63	25.3	2.7	42.7
88	16.0	0.0	36.0

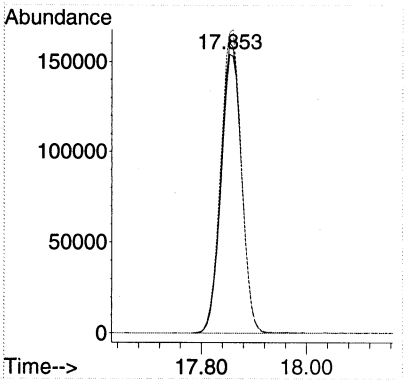


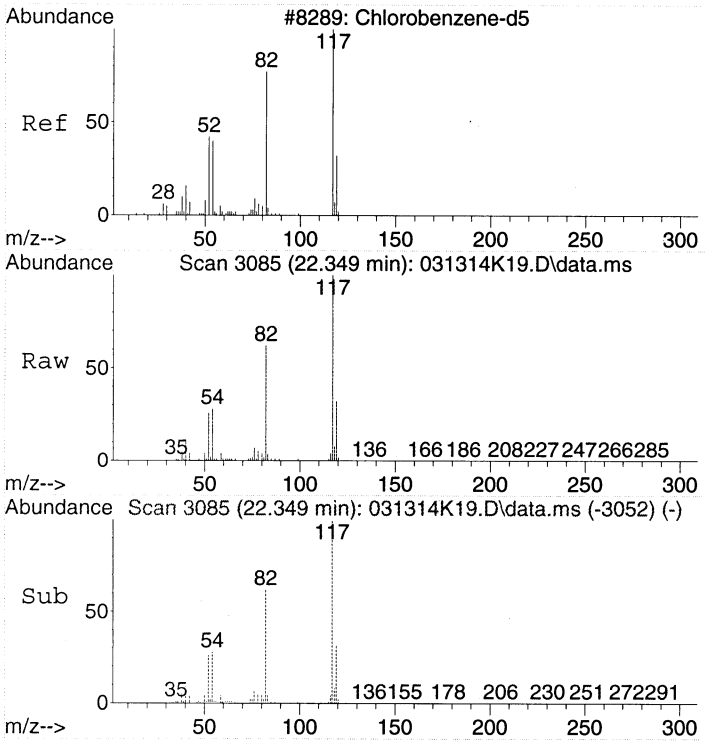


#37
Trichloroethene
Concen: 10.99 ppbv
RT: 17.853 min Scan# 2346
Delta R.T. -0.006 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion:130 Resp: 437011

Ion	Ratio	Lower	Upper
130	100		
132	96.4	77.7	117.7
95	104.2	80.9	120.9

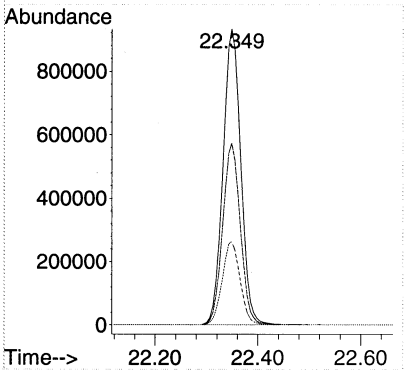


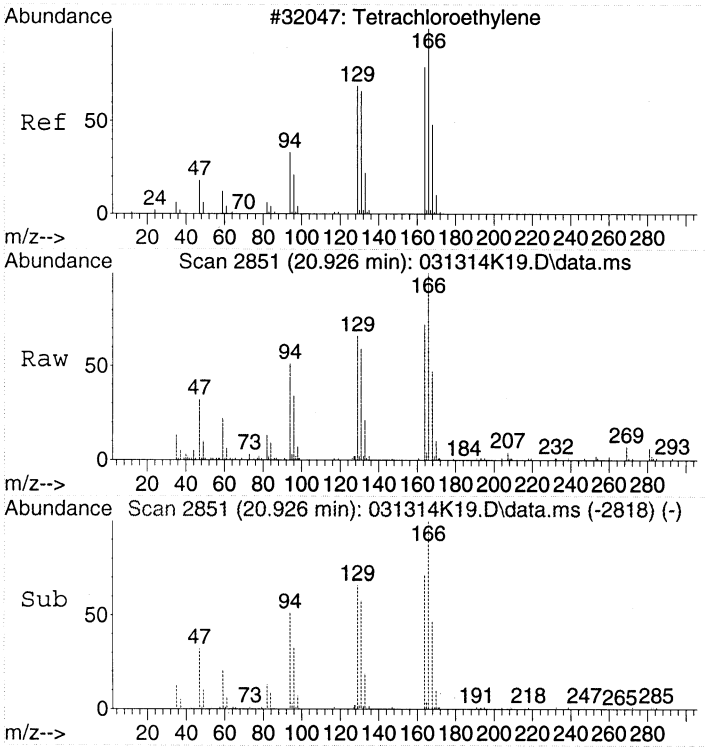


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion:117 Resp: 2248979

Ion	Ratio	Lower	Upper
117	100		
82	61.1	36.4	76.4
54	28.4	5.4	45.4

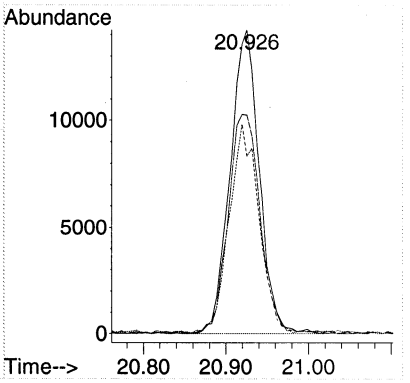




#47
Tetrachloroethene
Concen: 0.64 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. -0.000 min
Lab File: 031314K19.D
Acq: 13 Mar 2014 22:32

Tgt Ion:166 Resp: 34831

Ion	Ratio	Lower	Upper
166	100		
164	79.7	60.8	100.8
131	70.4	50.5	90.5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K20.D
Acq On : 13 Mar 2014 23:21
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 41
Multiplier: 1

Quant Time: Mar 14 19:25:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	1070272	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2530178	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2185031	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.381	49	27344	0.54	ppbv	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

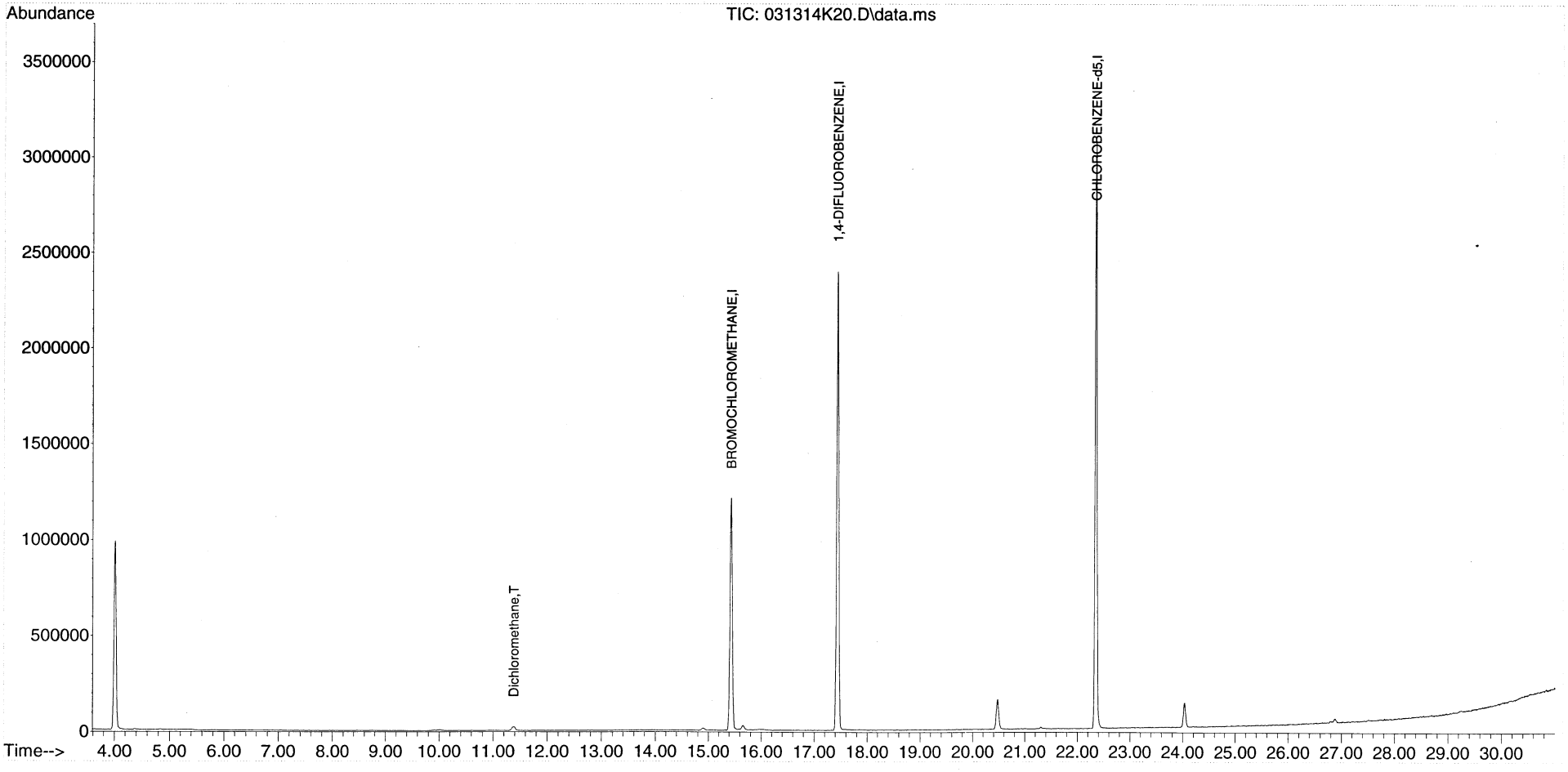
00258

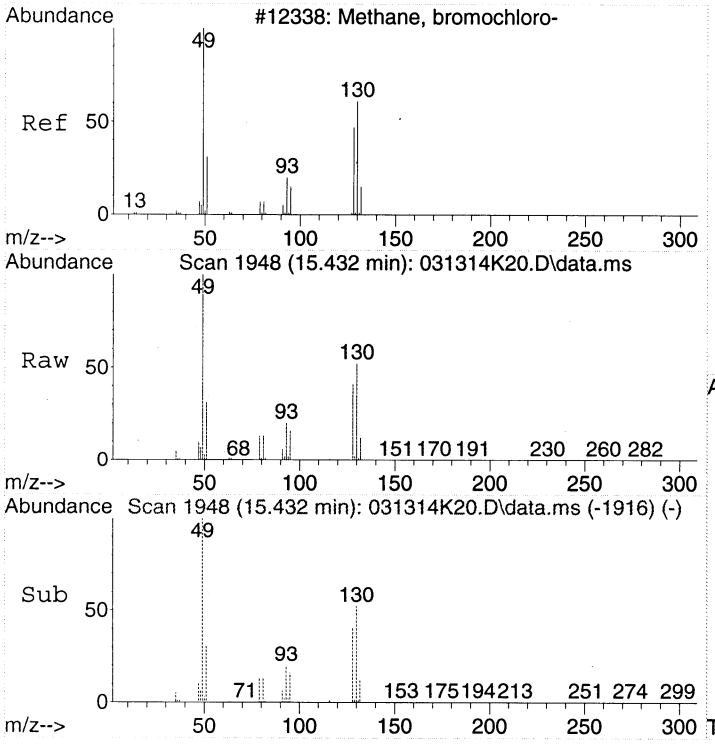
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K20.D
Acq On : 13 Mar 2014 23:21
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 41
Multiplier: 1

Quant Time: Mar 14 19:25:45 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

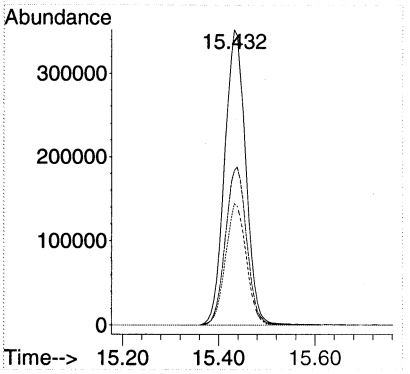


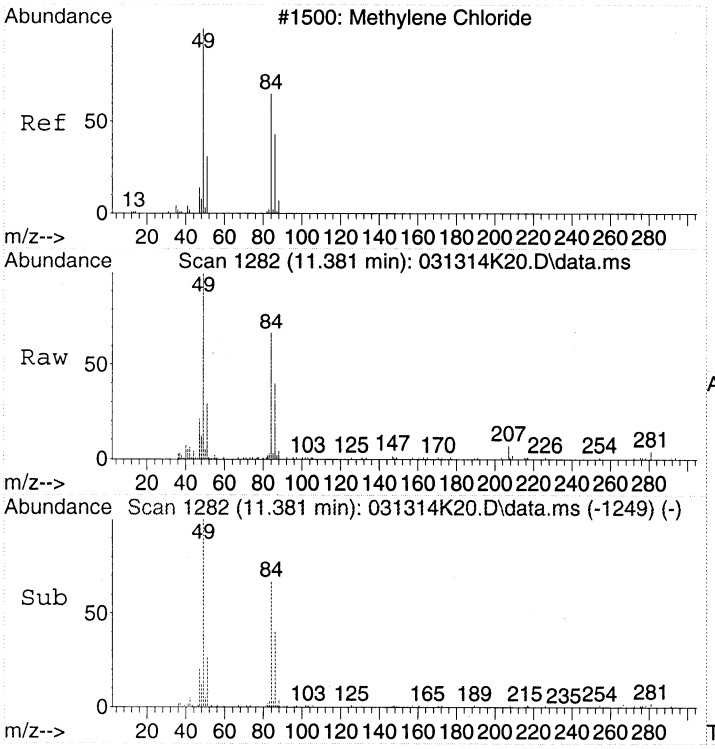


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031314K20.D
Acq: 13 Mar 2014 23:21

Tgt Ion: 49 Resp: 1070272

Ion	Ratio	Lower	Upper
49	100		
130	53.7	53.4	93.4
128	40.6	35.1	75.1

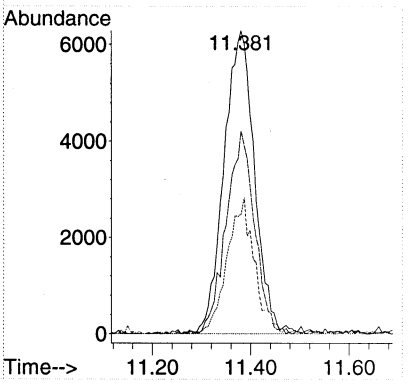


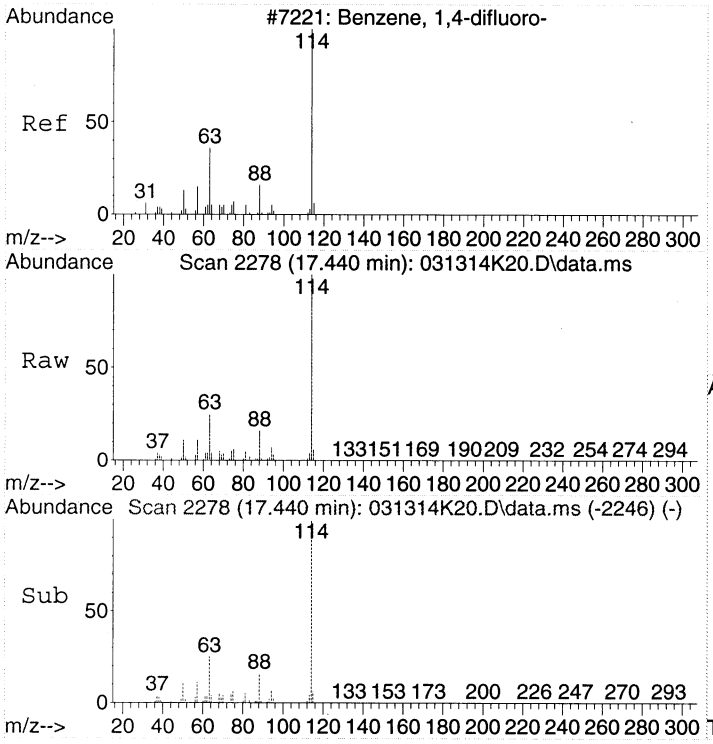


#18
Dichloromethane
Concen: 0.54 ppbv
RT: 11.381 min Scan# 1282
Delta R.T. 0.000 min
Lab File: 031314K20.D
Acq: 13 Mar 2014 23:21

Tgt Ion: 49 Resp: 27344

Ion	Ratio	Lower	Upper
49	100		
84	61.5	54.7	94.7
86	38.0	29.1	69.1

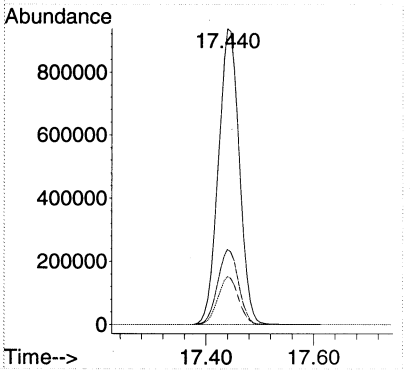


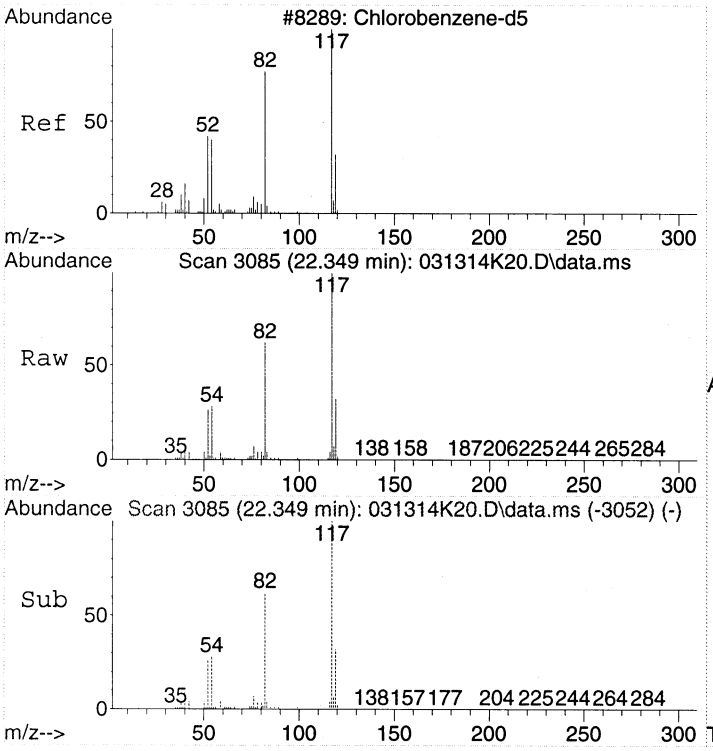


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031314K20.D
Acq: 13 Mar 2014 23:21

Tgt Ion:114 Resp: 2530178

Ion	Ratio	Lower	Upper
114	100		
63	25.3	2.7	42.7
88	16.1	0.0	36.0

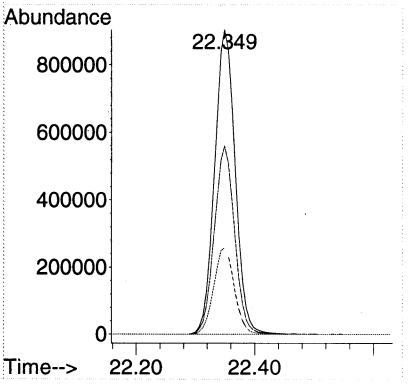




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K20.D
Acq: 13 Mar 2014 23:21

Tgt Ion:117 Resp: 2185031

Ion	Ratio	Lower	Upper
117	100		
82	61.2	36.4	76.4
54	28.7	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K21.D
Acq On : 14 Mar 2014 00:10
Instrument: HP5973K
Operator : EM
Sample : 1403028-07
Misc : 200mL MH66 CAN 626
ALS Vial : 42
Multiplier: 2.11

Quant Time: Mar 14 19:25:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) BROMOCHLOROMETHANE	15.432	49	1086488	22.00	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2535447	22.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.349	117	2177162	22.00	ppbv		0.00
Target Compounds							Qvalue
2) Propene	4.366	41	82018	3.35	ppbv	#	75
5) Chloromethane	5.005	50	33141	1.15	ppbv		99
6) Vinyl chloride	5.333	62	58233	1.73	ppbv		98
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	38774	0.64	ppbv		88
13) 1,1-Dichloroethene	9.294	61	154516	2.48	ppbv		93
14) Acetone	9.835	43	213397	4.20	ppbv		87
15) Carbon disulfide	10.012	76	126856	1.55	ppbv	#	78
16) 2-Propanol	10.474	45	63136	1.27	ppbv		96
18) Dichloromethane	11.381	49	72920	1.43	ppbv		85
20) trans-1,2-Dichloroethene	12.104	61	100148	2.17	ppbv		92
21) Hexane	12.707	57	32147	0.60	ppbv		89
22) 1,1-Dichloroethane	13.443	63	122943	1.67	ppbv		100
24) cis-1,2-Dichloroethene	14.897	61	1669326	30.52	ppbv	E	90
27) Tetrahydrofuran	15.475	42	91127	2.28	ppbv		87
28) Chloroform	15.590	83	3996901	49.80	ppbv	E	96
29) ~~Cyclohexane~~	~~15.901~~	~~56~~	~~29666~~	~~0.54~~	~~ppbv~~	~~#~~	~~35~~
30) 1,1,1-Trichloroethane	15.876	97	69230	0.76	ppbv		95
34) 2,2,4-Trimethylpentane	16.582	57	95169	0.72	ppbv		93
37) Trichloroethene	17.860	130	4913605	124.73	ppbv	E	97
40) Bromodichloromethane	18.821	83	50747	0.79	ppbv		97
44) Toluene	20.068	91	164122	1.54	ppbv		98
47) Tetrachloroethene	20.926	166	356956	6.80	ppbv		100

ND after MI
em 3/14/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

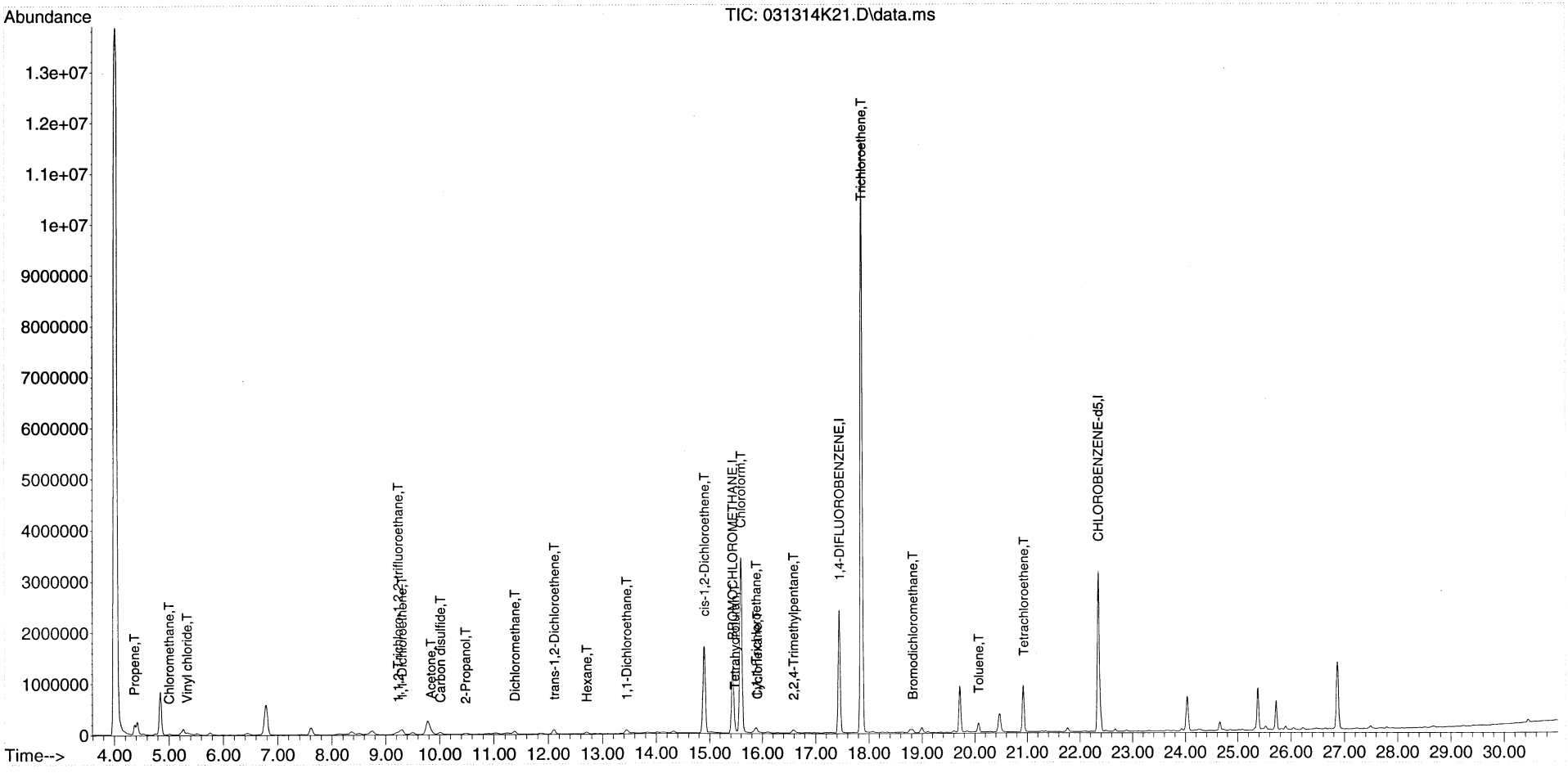
00256

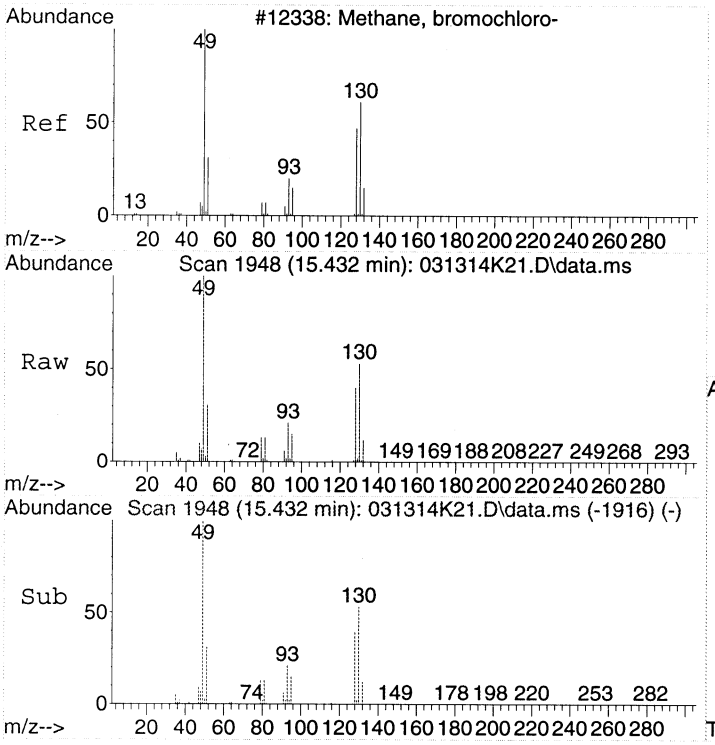
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K21.D
Acq On : 14 Mar 2014 00:10
Instrument: HP5973K
Operator : EM
Sample : 1403028-07
Misc : 200mL MH66 CAN 626
ALS Vial : 42
Multiplier: 2.11

Quant Time: Mar 14 19:25:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

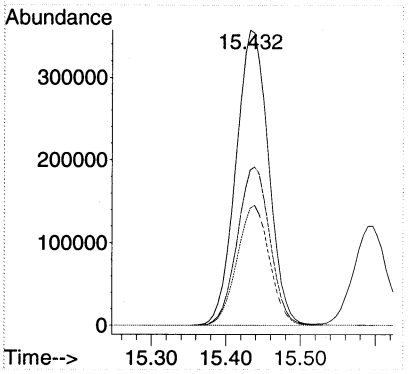


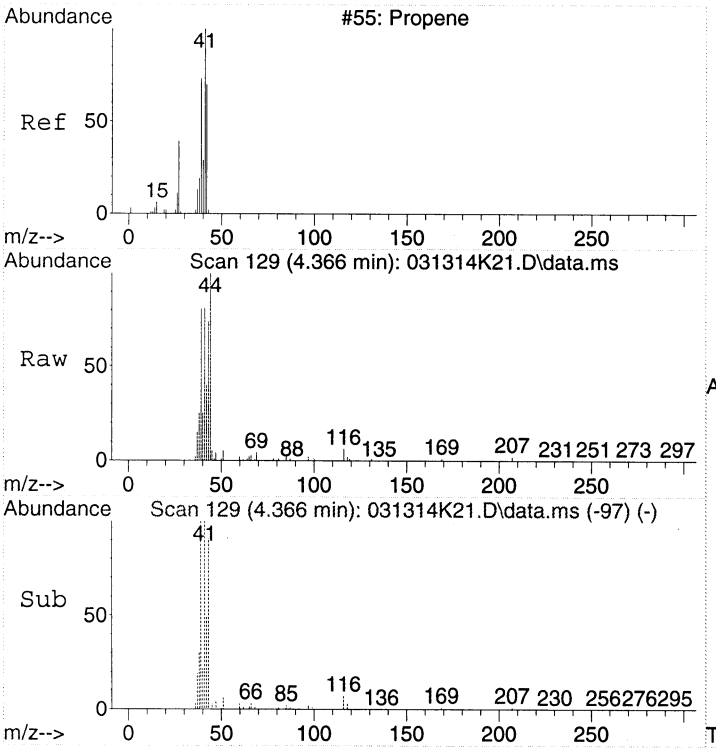


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 49 Resp: 1086488

Ion	Ratio	Lower	Upper
49	100		
130	53.8	53.4	93.4
128	40.5	35.1	75.1

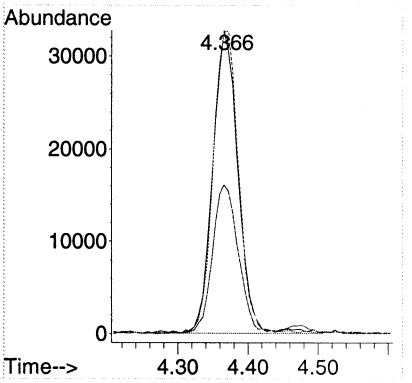


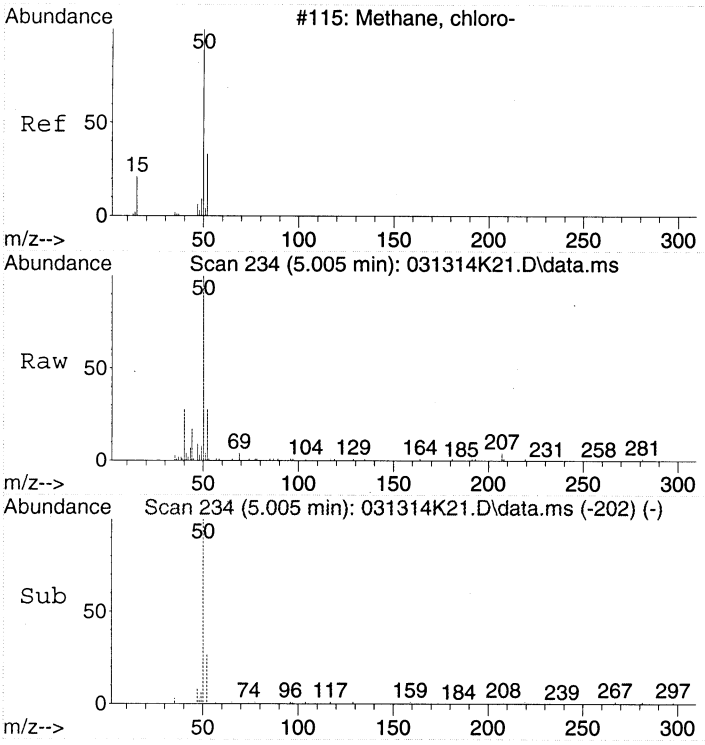


#2
Propene
Concen: 3.35 ppbv
RT: 4.366 min Scan# 129
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 41 Resp: 82018

Ion	Ratio	Lower	Upper
41	100		
42	50.1	46.3	86.3
39	101.2	56.1	96.1#

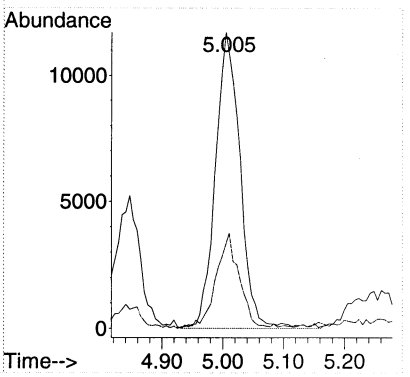


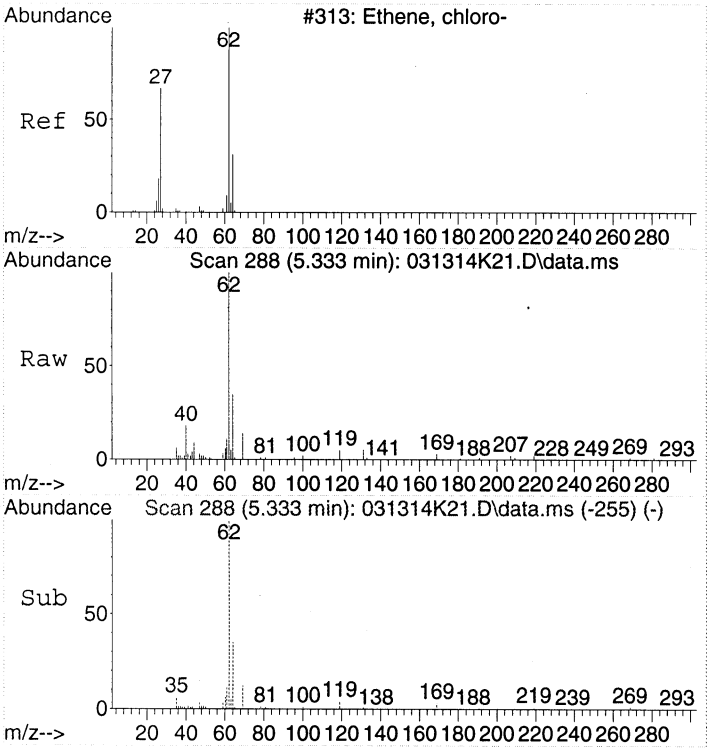


#5
Chloromethane
Concen: 1.15 ppbv
RT: 5.005 min Scan# 234
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 50 Resp: 33141

Ion	Ratio	Lower	Upper
50	100		
52	31.4	12.1	52.1

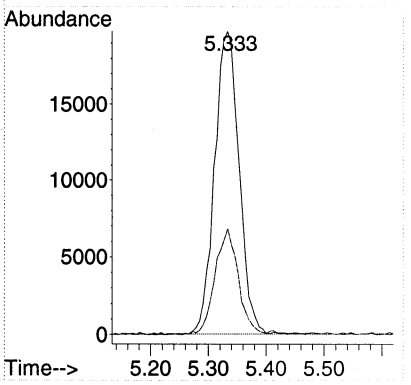


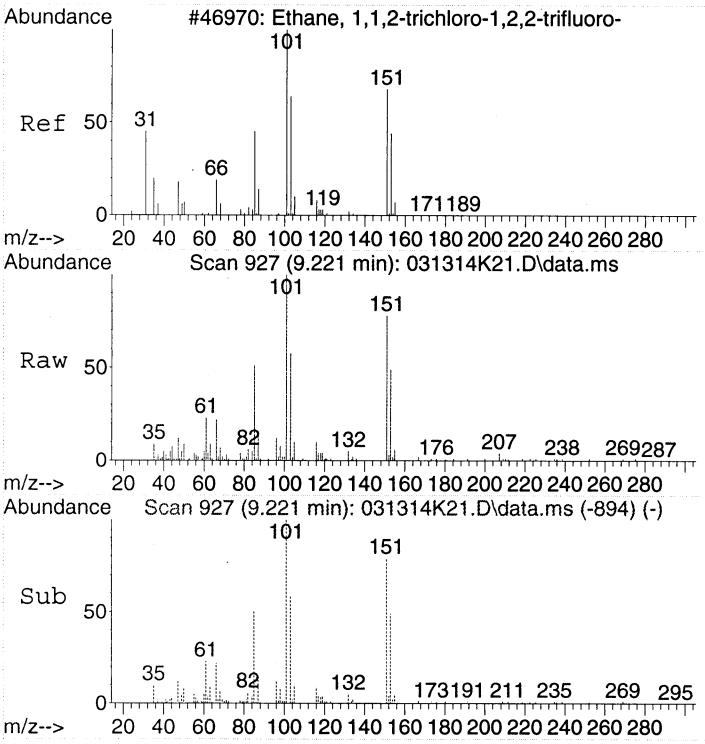


#6
Vinyl chloride
Concen: 1.73 ppbv
RT: 5.333 min Scan# 288
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 62 Resp: 58233

Ion	Ratio	Lower	Upper
62	100		
64	33.4	12.5	52.5

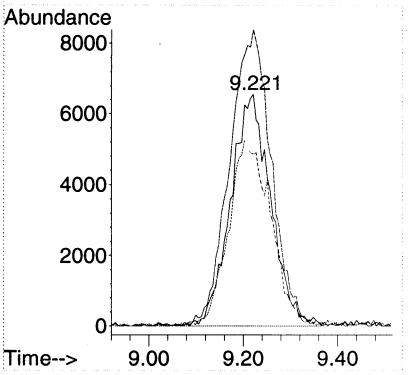


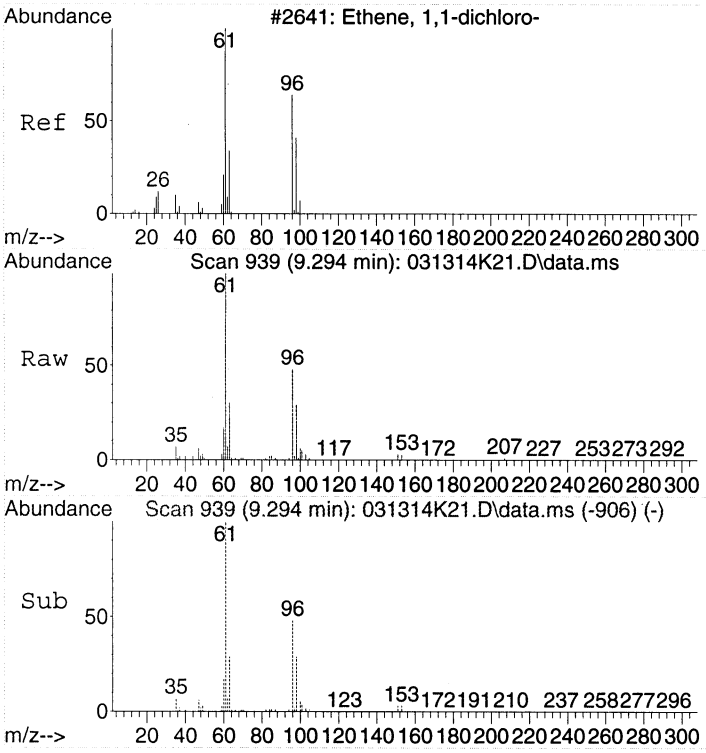


#12
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.64 ppbv
RT: 9.221 min Scan# 927
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion:151 Resp: 38774

Ion	Ratio	Lower	Upper
151	100		
101	134.1	99.3	139.3
103	84.9	56.4	96.4

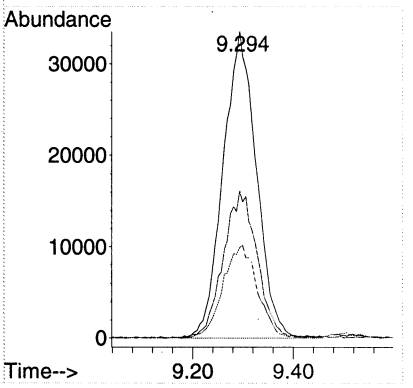


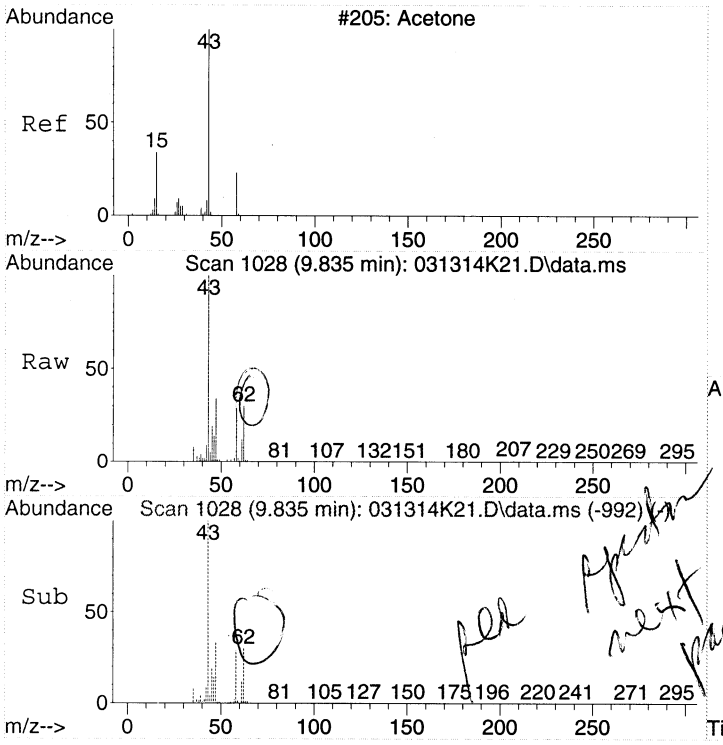


#13
1,1-Dichloroethene
Concen: 2.48 ppbv
RT: 9.294 min Scan# 939
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 61 Resp: 154516

Ion	Ratio	Lower	Upper
61	100		
96	49.0	36.1	76.1
63	31.2	12.7	52.7

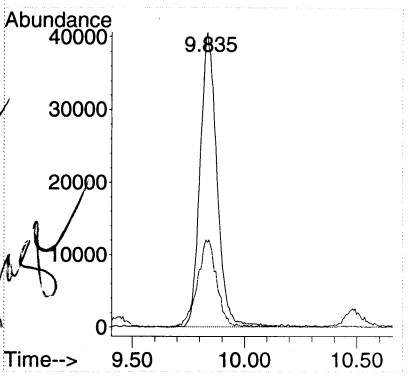


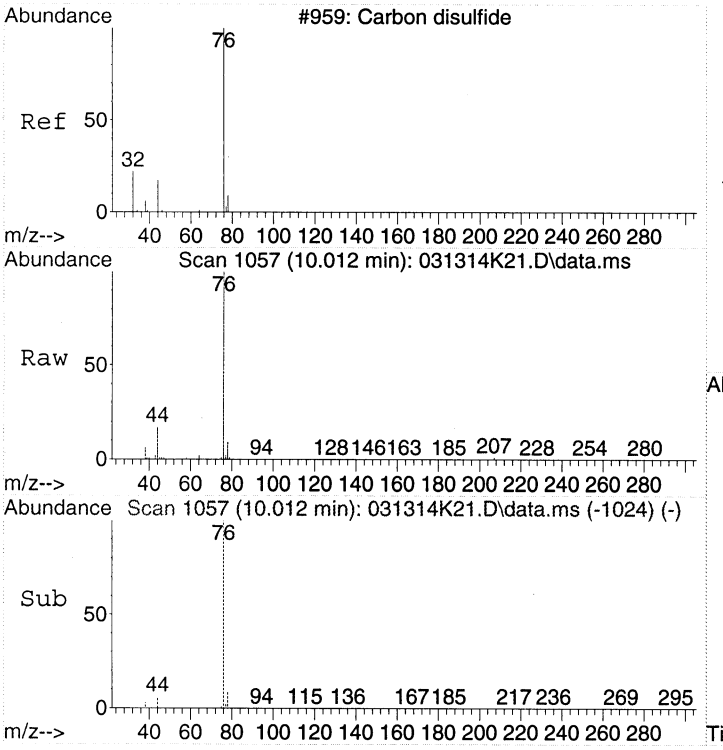


#14
Acetone
Concen: 4.20 ppbv
RT: 9.835 min Scan# 1028
Delta R.T. 0.018 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 43 Resp: 213397

Ion	Ratio	Lower	Upper
43	100		
58	34.8	8.0	48.0

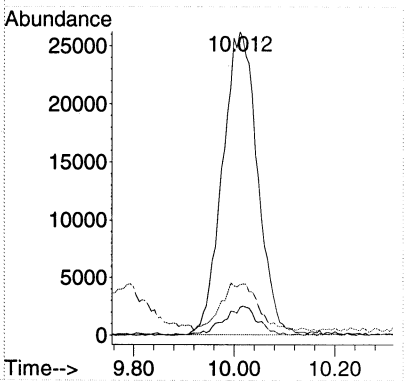




#15
Carbon disulfide
Concen: 1.55 ppbv
RT: 10.012 min Scan# 1057
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 76 Resp: 126856

Ion	Ratio	Lower	Upper
76	100		
78	9.7	0.0	29.5
44	0.0	0.0	34.9

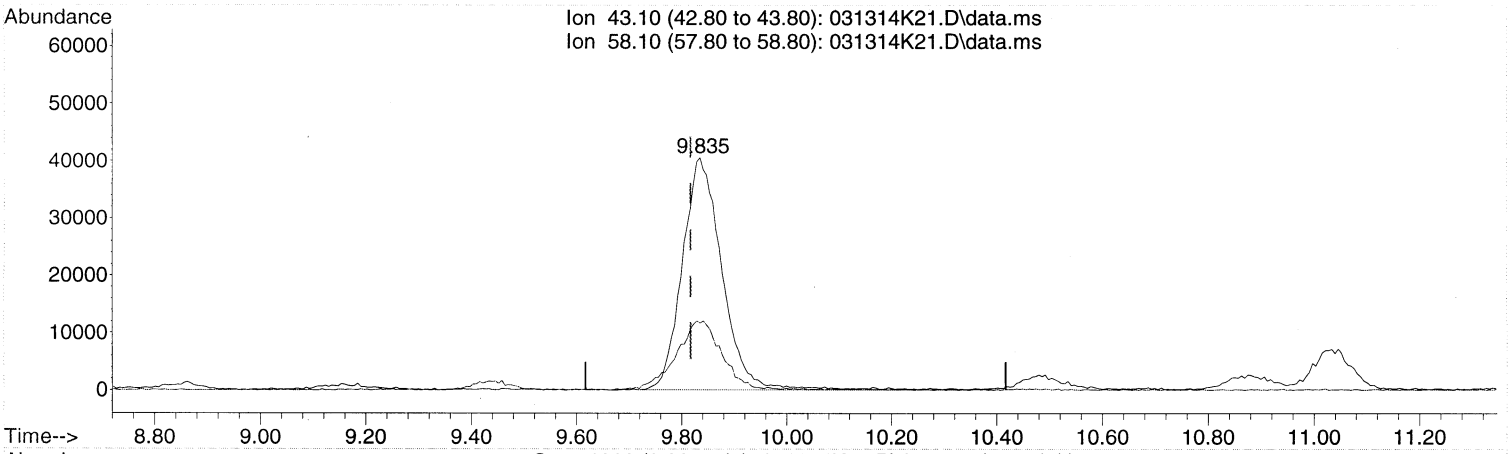


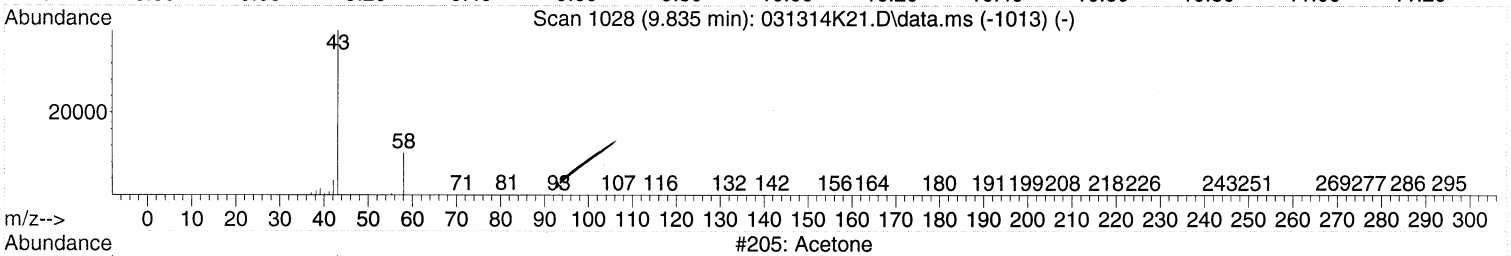
Quantitation Report (Qedit)

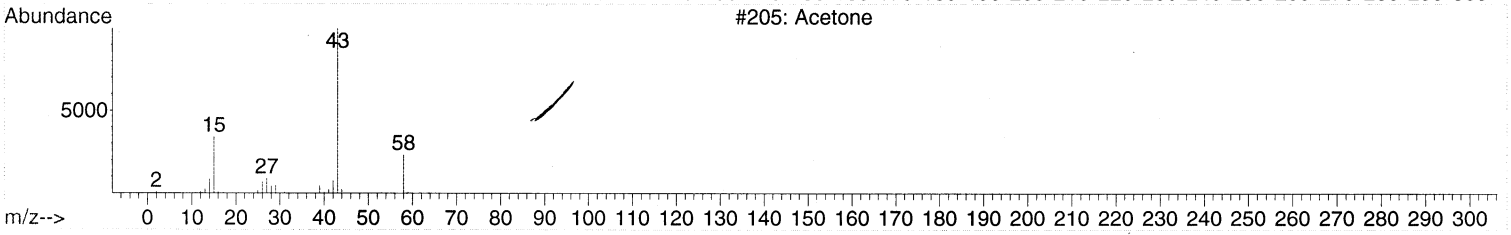
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K21.D
Acq On : 14 Mar 2014 00:10
Instrument: HP5973K
Operator : EM
Sample : 1403028-07
Misc : 200mL MH66 CAN 626
ALS Vial : 42
Multiplier: 2.11

Quant Time: Mar 14 19:25:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







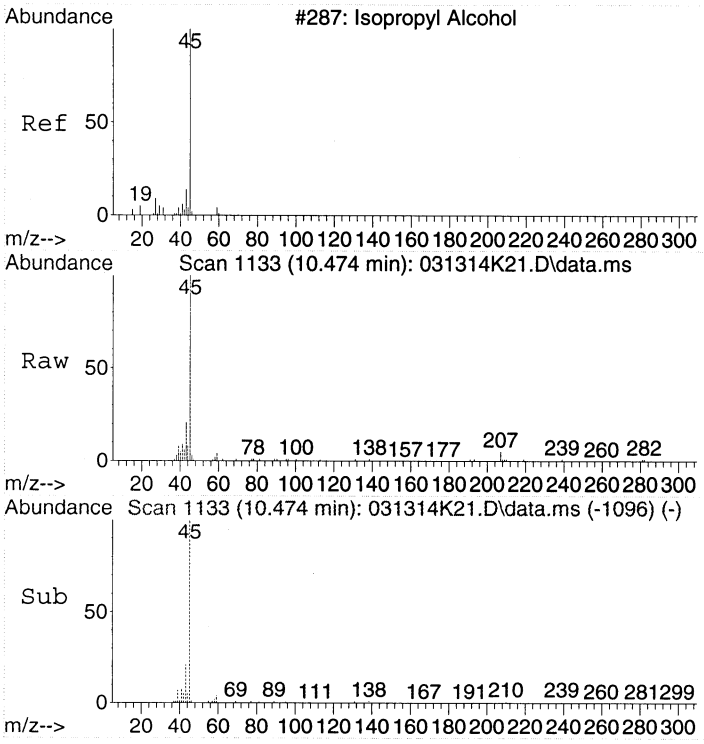
TIC: 031314K21.D\data.ms

(14) Acetone (T)

9.835min (+0.018) 4.20 ppbv

response 213397

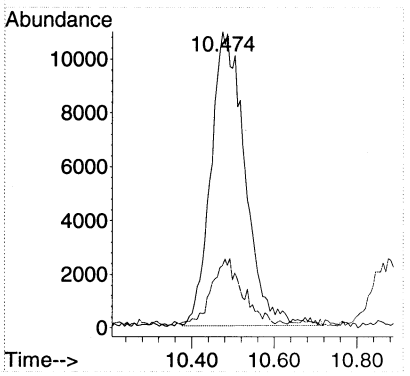
Ion	Exp%	Act%
43.10	100	100
58.10	28.00	34.82
0.00	0.00	0.00
0.00	0.00	0.00

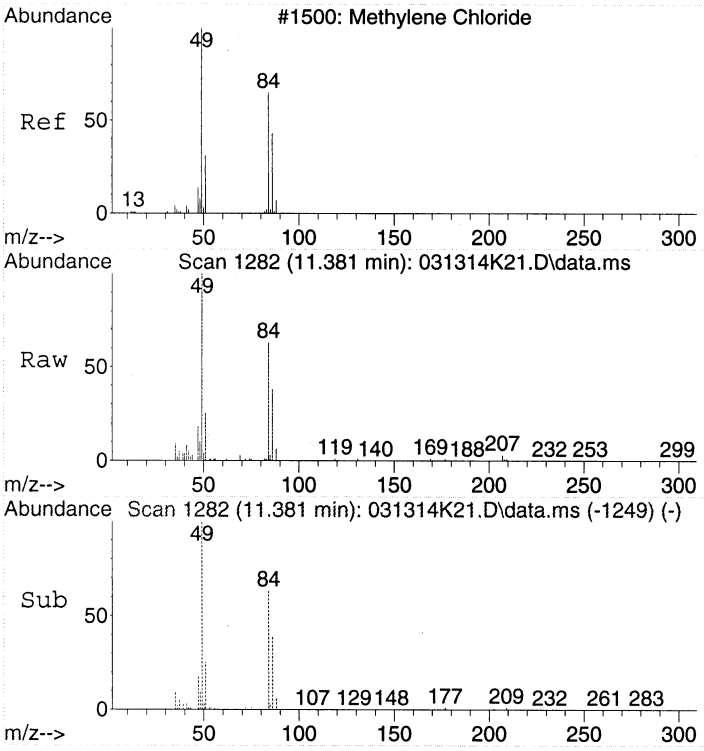


#16
2-Propanol
Concen: 1.27 ppbv
RT: 10.474 min Scan# 1133
Delta R.T. 0.024 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 45 Resp: 63136

Ion	Ratio	Lower	Upper
45	100		
43	19.5	1.3	41.3

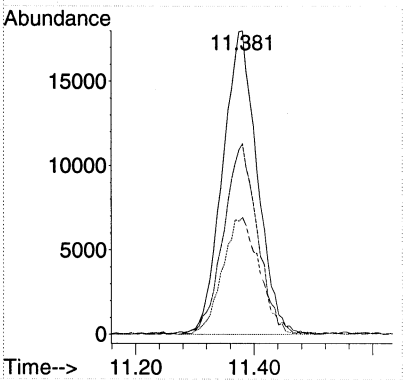


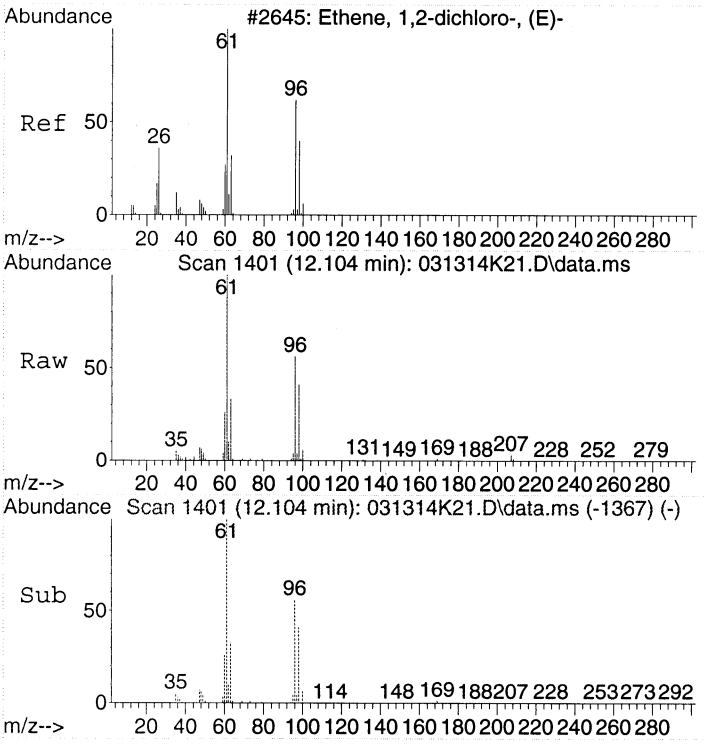


#18
Dichloromethane
Concen: 1.43 ppbv
RT: 11.381 min Scan# 1282
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 49 Resp: 72920

Ion	Ratio	Lower	Upper
49	100		
84	60.7	54.7	94.7
86	41.0	29.1	69.1

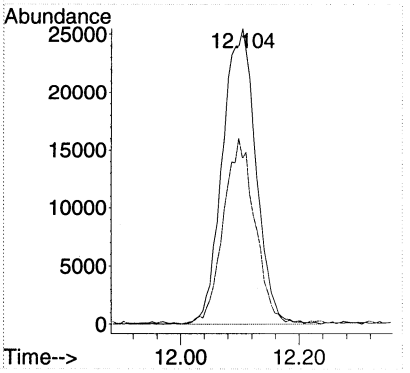


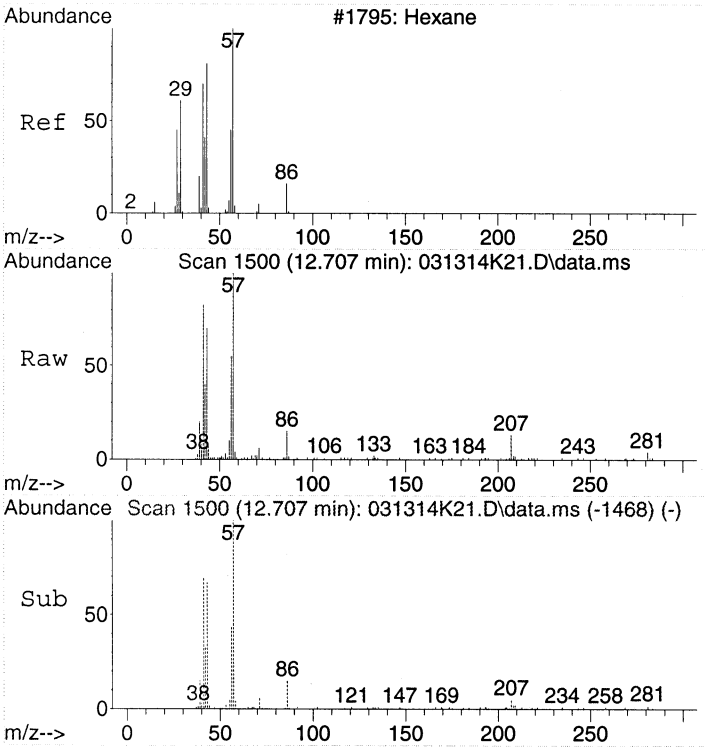


#20
trans-1,2-Dichloroethene
Concen: 2.17 ppbv
RT: 12.104 min Scan# 1401
Delta R.T. 0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 61 Resp: 100148

Ion	Ratio	Lower	Upper
61	100		
96	60.1	46.8	86.8

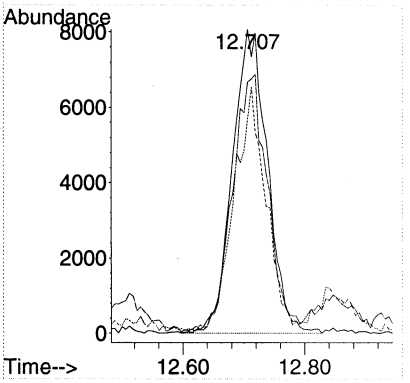


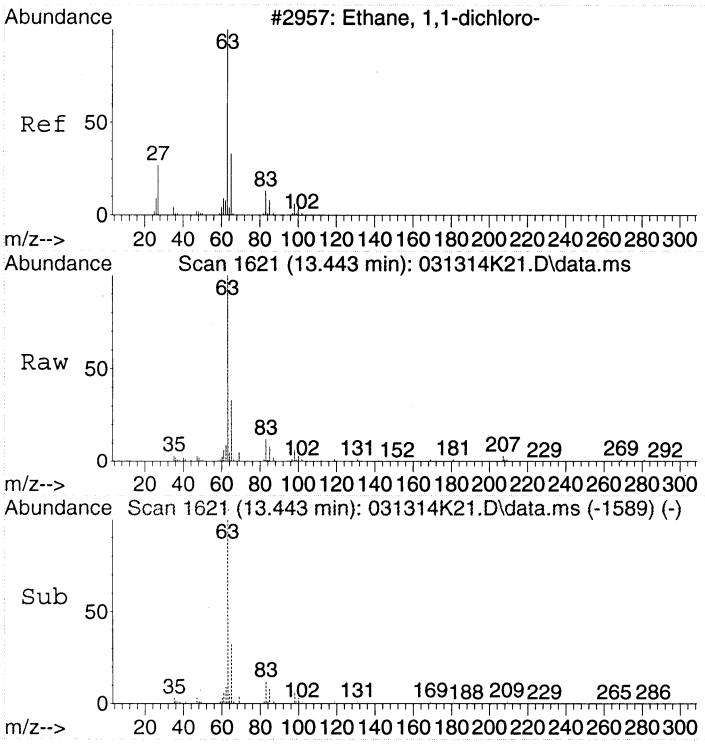


#21
Hexane
Concen: 0.60 ppbv
RT: 12.707 min Scan# 1500
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 57 Resp: 32147

Ion	Ratio	Lower	Upper
57	100		
41	84.8	56.9	96.9
43	73.6	42.9	82.9

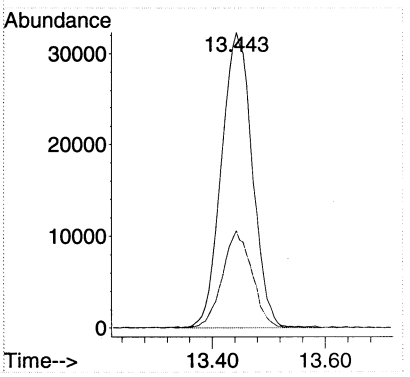


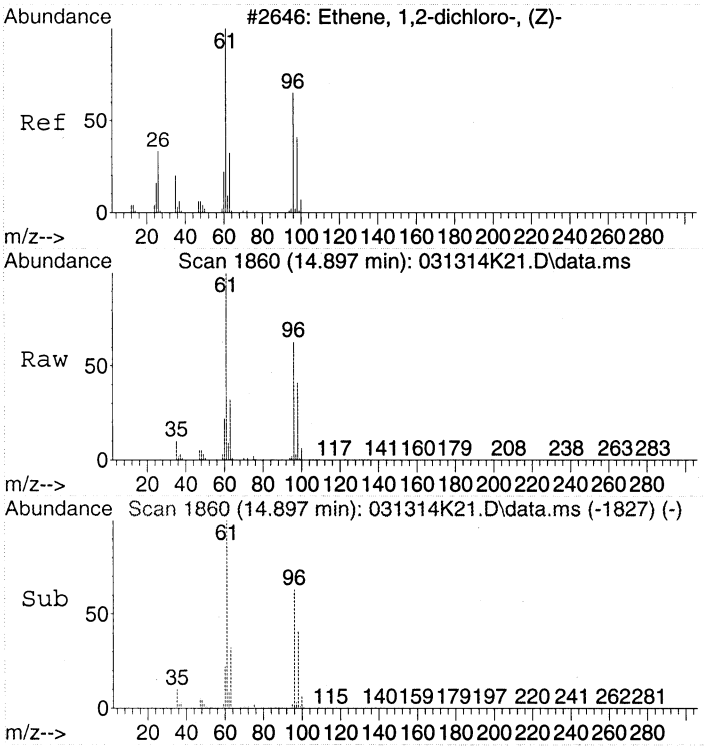


#22
1,1-Dichloroethane
Concen: 1.67 ppbv
RT: 13.443 min Scan# 1621
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 63 Resp: 122943

Ion	Ratio	Lower	Upper
63	100		
65	31.8	11.8	51.8

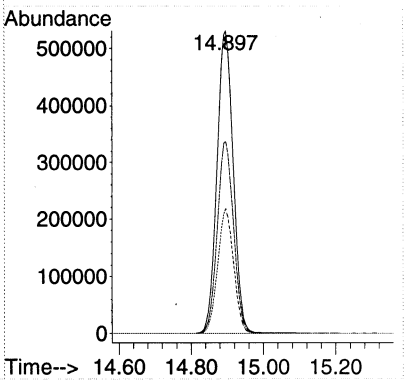


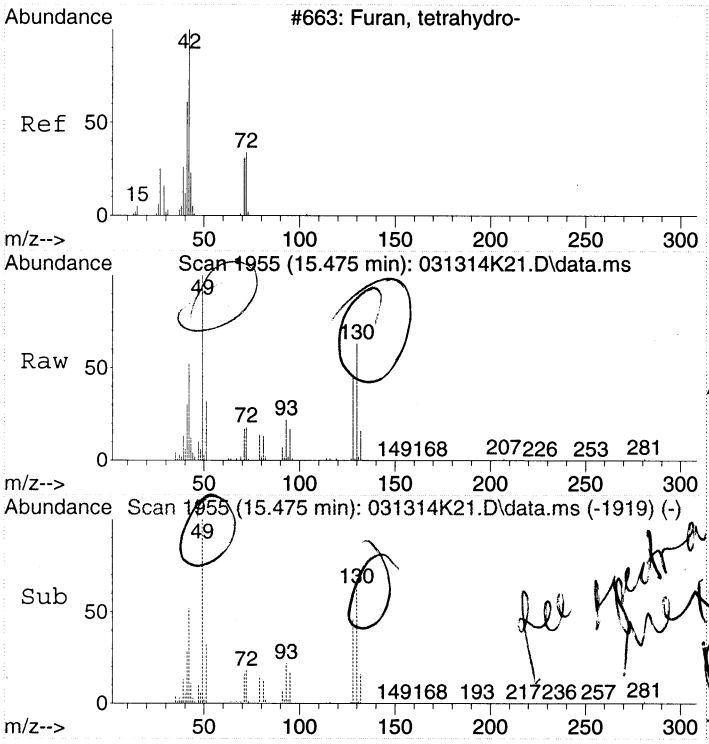


#24
cis-1,2-Dichloroethene
Concen: 30.52 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 61 Resp: 1669326

Ion	Ratio	Lower	Upper
61	100		
96	63.3	52.9	92.9
98	40.2	24.5	64.5

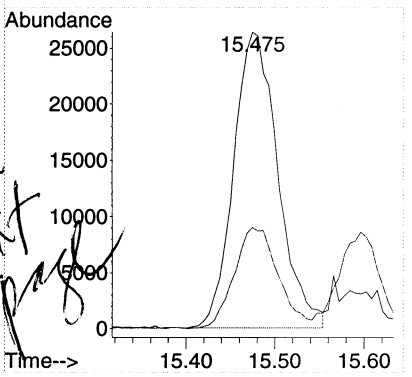




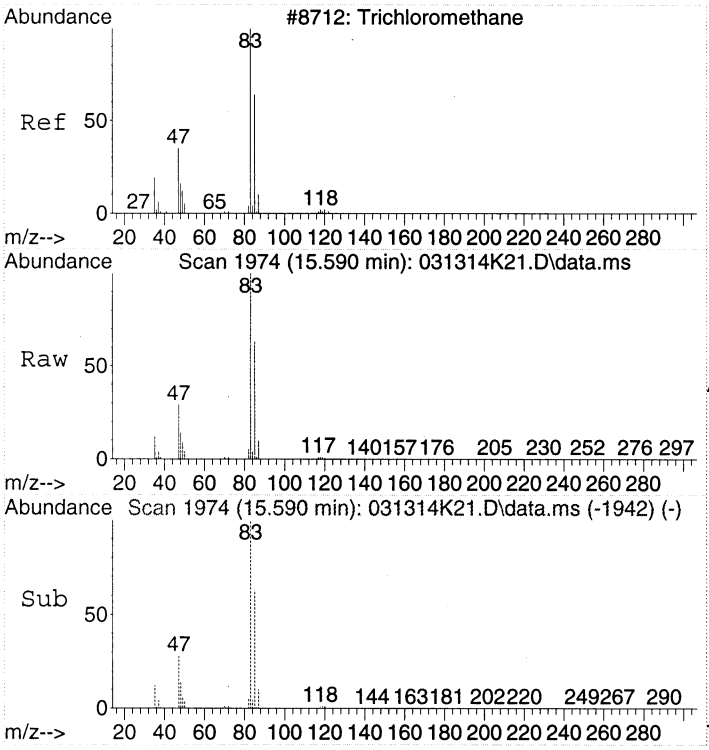
#27
Tetrahydrofuran
Concen: 2.28 ppbv
RT: 15.475 min Scan# 1955
Delta R.T. 0.018 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 42 Resp: 91127

Ion	Ratio	Lower	Upper
42	100		
72	34.1	22.5	62.5



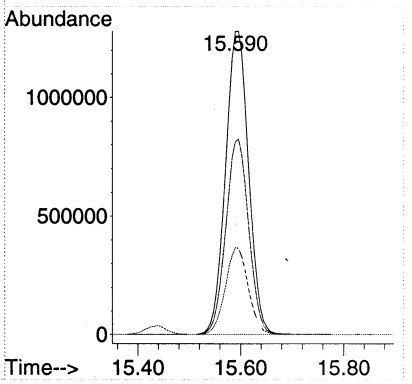
See spectra next page



#28
Chloroform
Concen: 49.80 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 83 Resp: 3996901

Ion	Ratio	Lower	Upper
83	100		
85	64.1	46.8	86.8
47	28.7	6.3	46.3

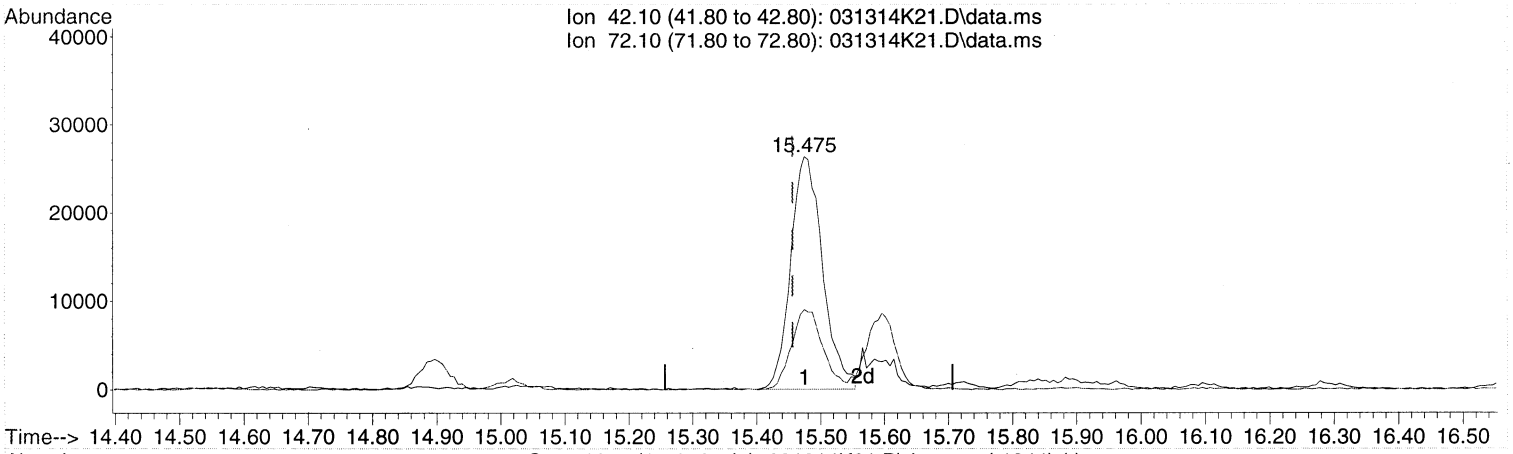


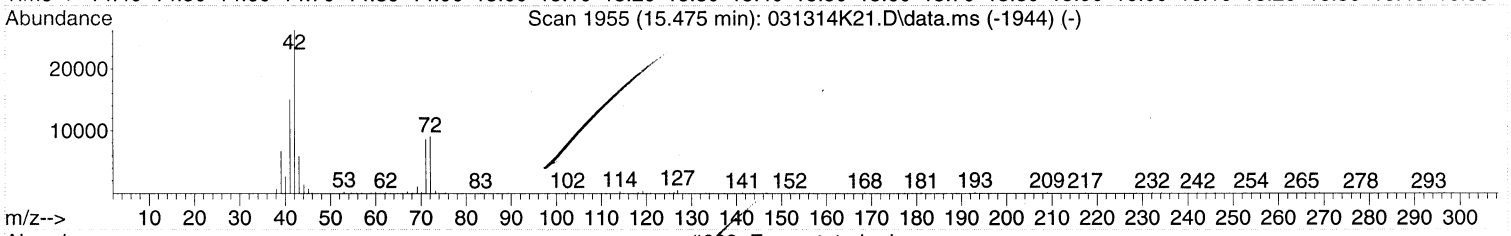
Quantitation Report (Qedit)

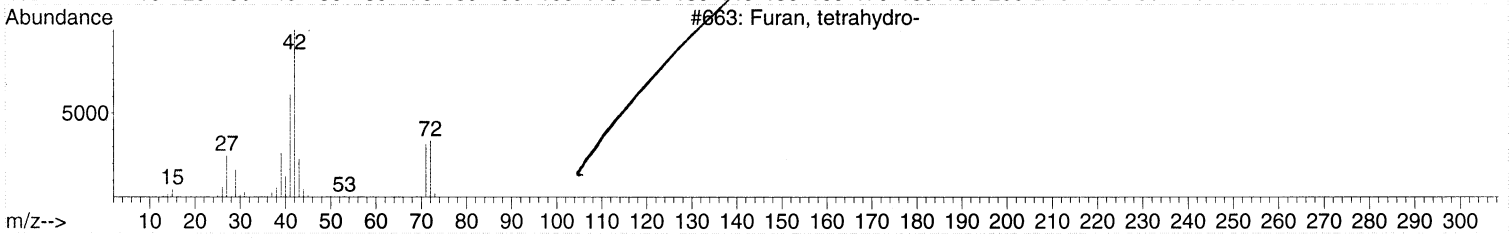
Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K21.D
Acq On : 14 Mar 2014 00:10
Instrument: HP5973K
Operator : EM
Sample : 1403028-07
Misc : 200mL MH66 CAN 626
ALS Vial : 42
Multiplier: 2.11

Quant Time: Mar 14 19:25:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M







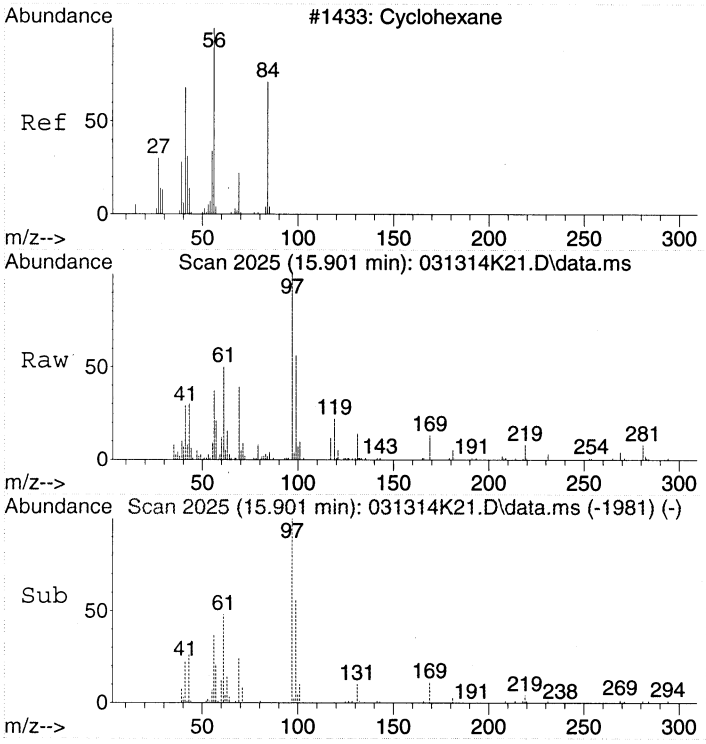
TIC: 031314K21.D\data.ms

(27) Tetrahydrofuran (T)

15.475min (+0.018) 2.28 ppbv

response 91127

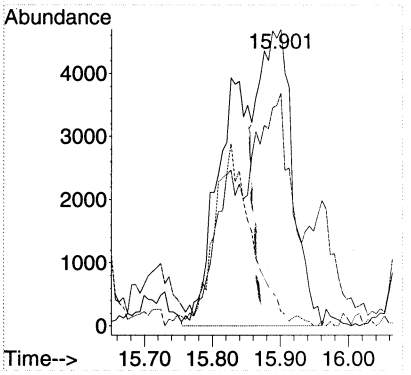
Ion	Exp%	Act%
42.10	100	100
72.10	42.50	34.06
0.00	0.00	0.00
0.00	0.00	0.00



#29
Cyclohexane
Concen: 0.54 ppbv
RT: 15.901 min Scan# 2025
Delta R.T. 0.067 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

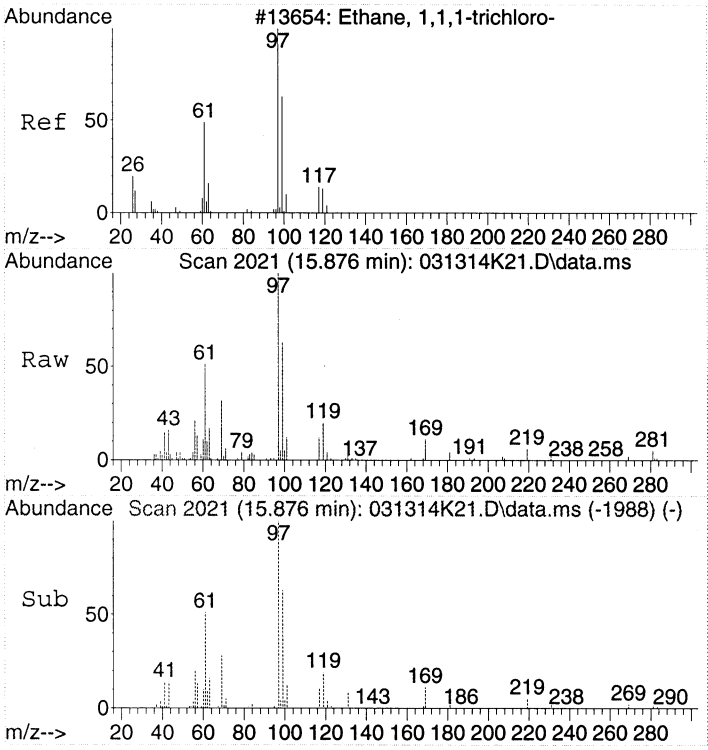
Tgt Ion: 56 Resp: 29666

Ion	Ratio	Lower	Upper
56	100		
41	78.7	40.0	80.0
84	0.0	64.7	104.7#



2 peaks

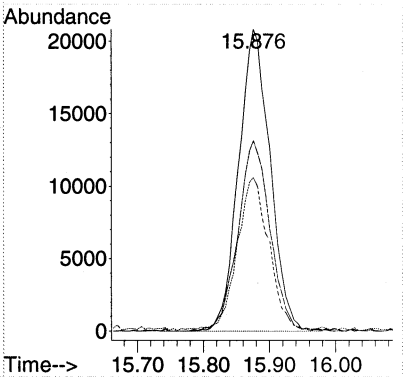
ND after MT
cm 3/13/14

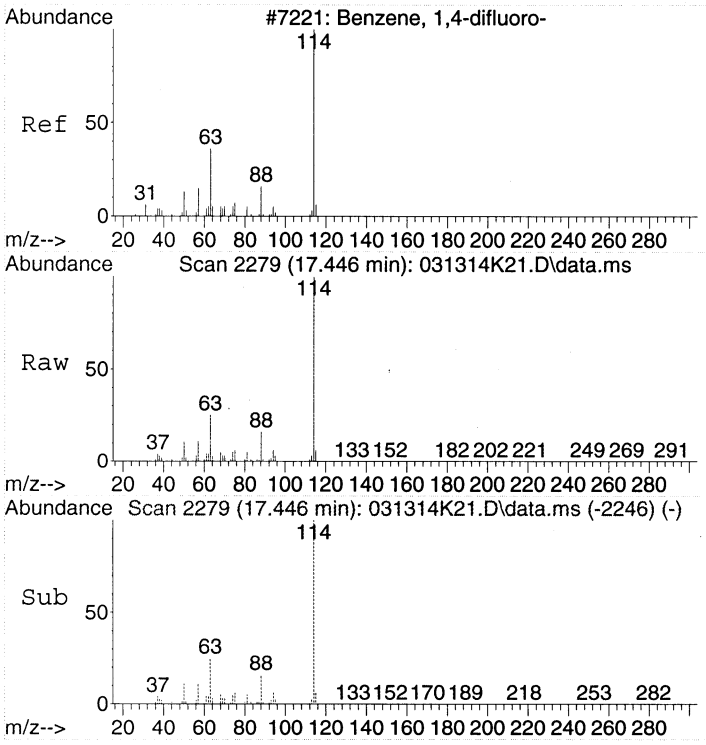


#30
1,1,1-Trichloroethane
Concen: 0.76 ppbv
RT: 15.876 min Scan# 2021
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 97 Resp: 69230

Ion	Ratio	Lower	Upper
97	100		
99	63.6	44.5	84.5
61	51.1	24.3	64.3

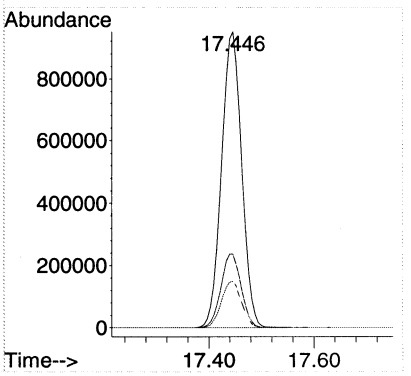


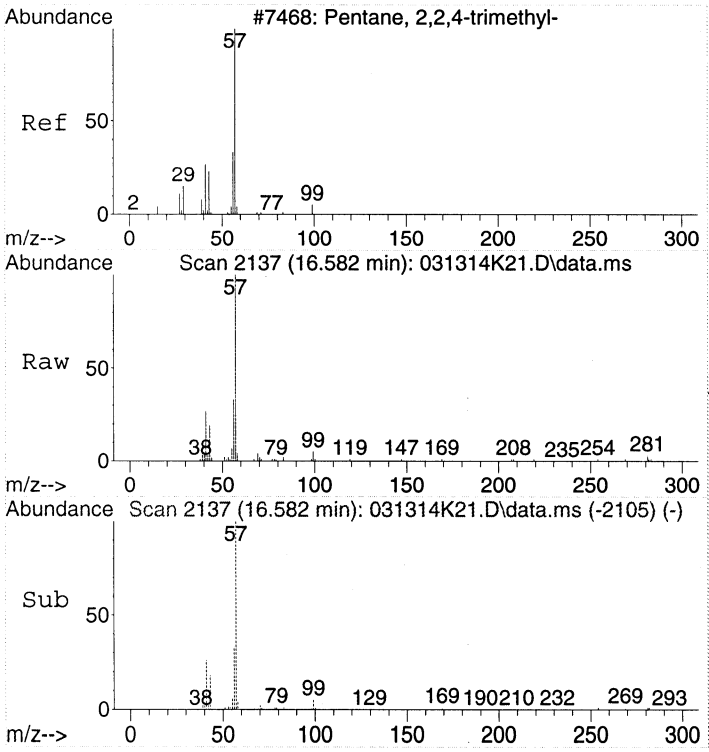


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion:114 Resp: 2535447

Ion	Ratio	Lower	Upper
114	100		
63	25.2	2.7	42.7
88	15.9	0.0	36.0

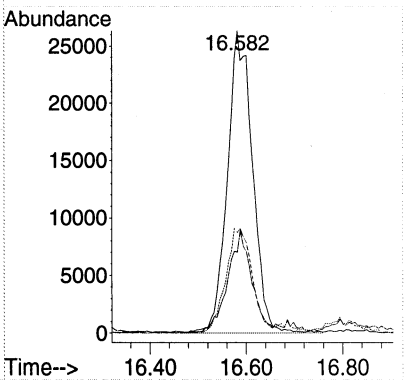


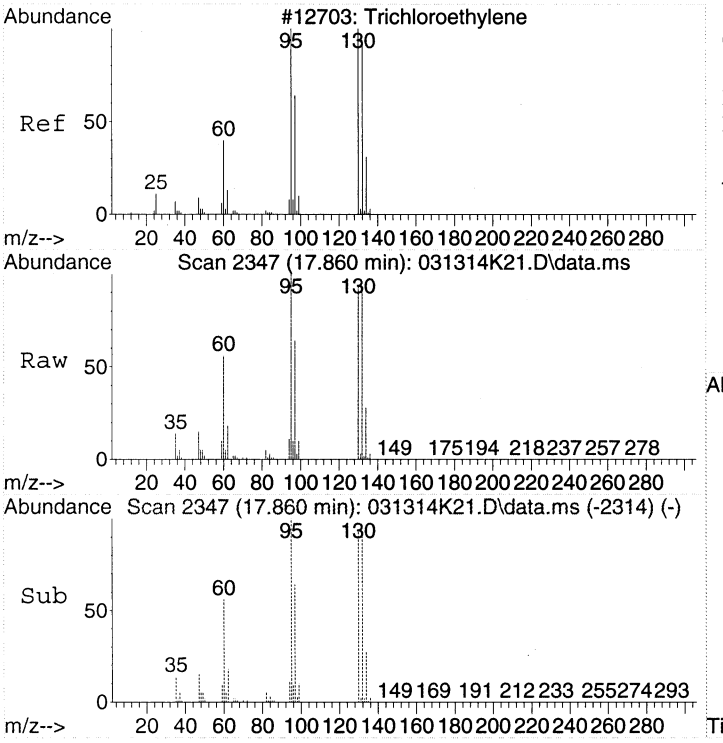


#34
2,2,4-Trimethylpentane
Concen: 0.72 ppbv
RT: 16.582 min Scan# 2137
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 57 Resp: 95169

Ion	Ratio	Lower	Upper
57	100		
41	32.7	9.2	49.2
56	36.7	12.6	52.6

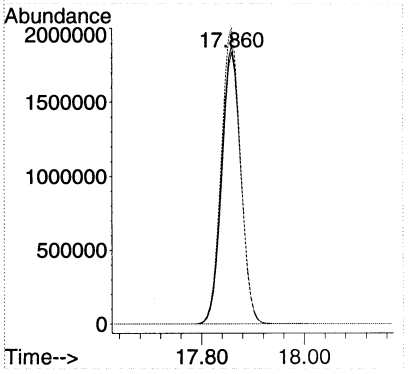


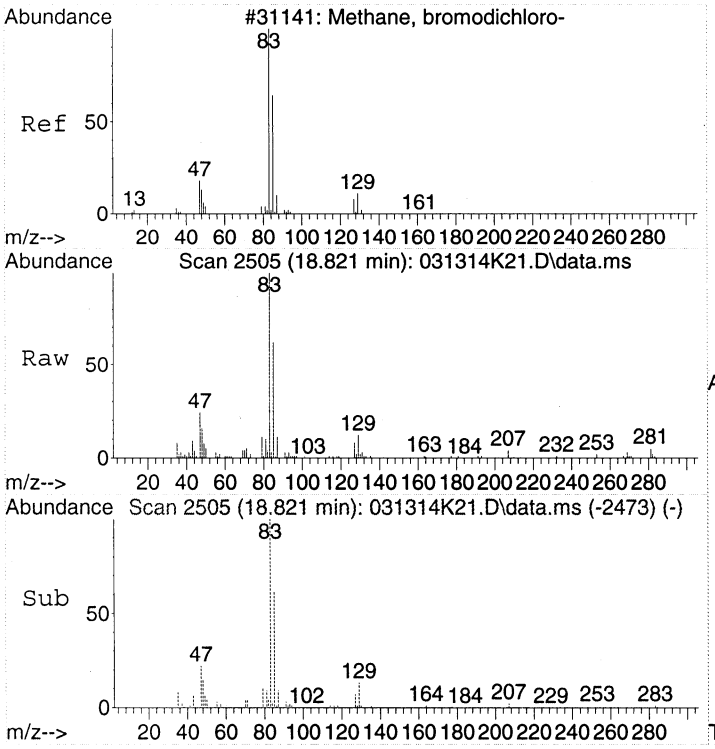


#37
Trichloroethene
Concen: 124.73 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion:130 Resp: 4913605

Ion	Ratio	Lower	Upper
130	100		
132	96.9	77.7	117.7
95	106.3	80.9	120.9

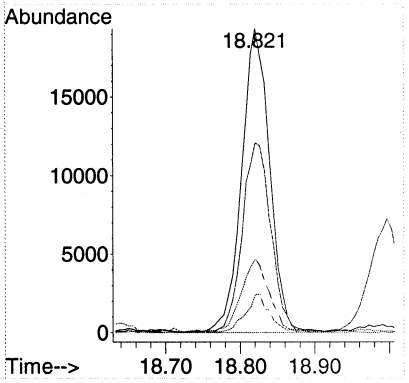


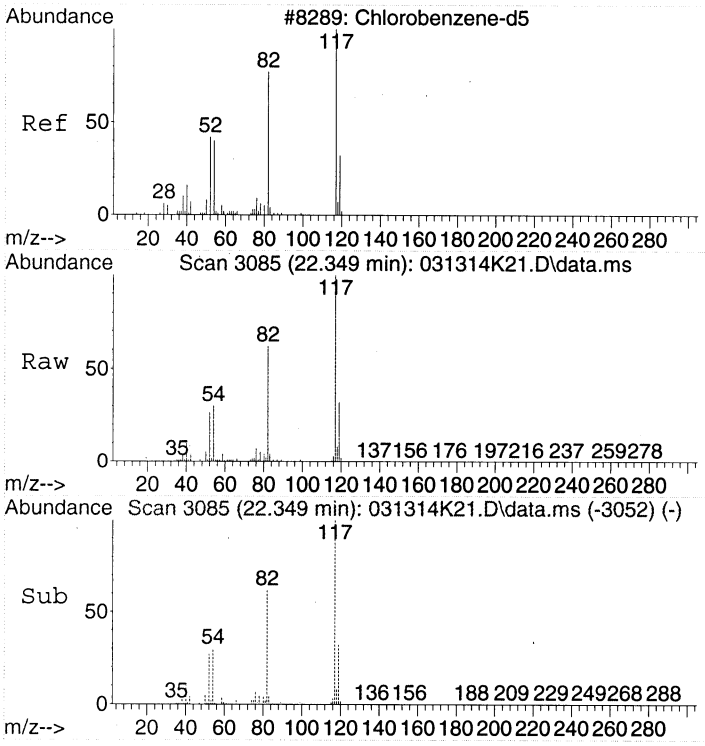


#40
Bromodichloromethane
Concen: 0.79 ppbv
RT: 18.821 min Scan# 2505
Delta R.T. -0.006 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 83 Resp: 50747

Ion	Ratio	Lower	Upper
83	100		
85	64.0	45.1	85.1
47	23.9	0.0	39.9
129	11.3	0.0	31.2

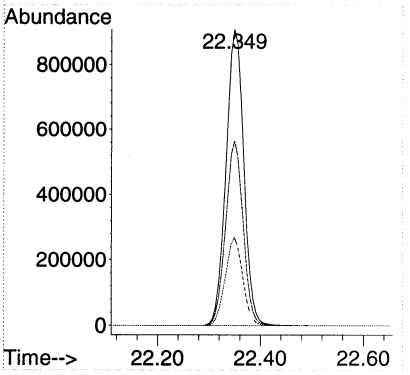


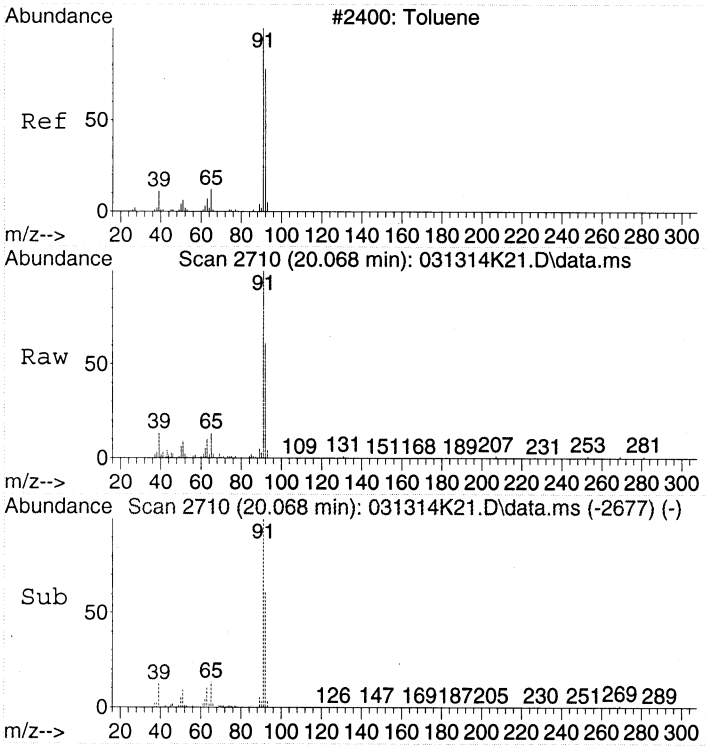


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion:117 Resp: 2177162

Ion	Ratio	Lower	Upper
117	100		
82	61.4	36.4	76.4
54	29.2	5.4	45.4

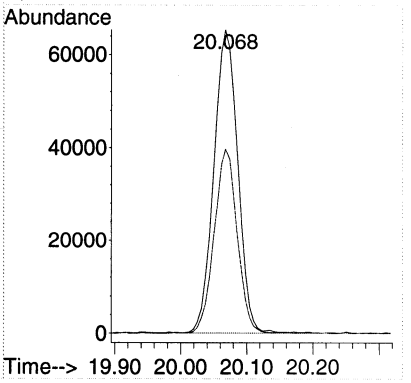


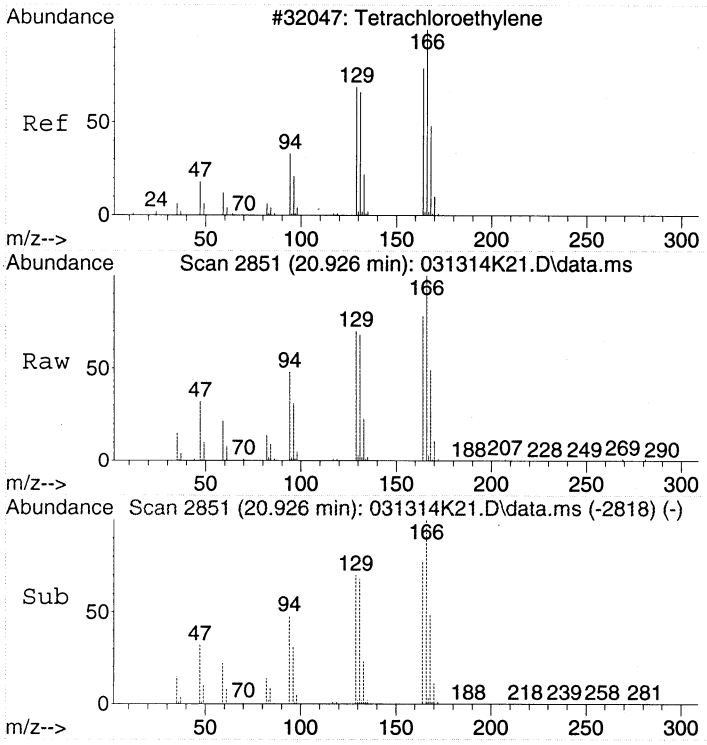


#44
Toluene
Concen: 1.54 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion: 91 Resp: 164122

Ion	Ratio	Lower	Upper
91	100		
92	58.6	39.8	79.8

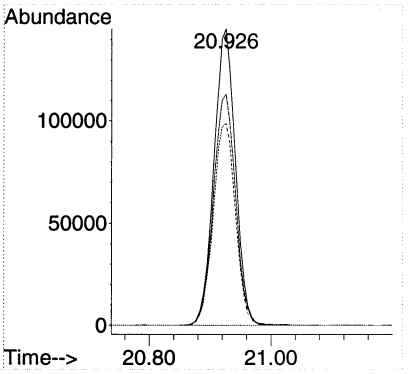




#47
Tetrachloroethene
Concen: 6.80 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. 0.000 min
Lab File: 031314K21.D
Acq: 14 Mar 2014 00:10

Tgt Ion:166 Resp: 356956

Ion	Ratio	Lower	Upper
166	100		
164	80.8	60.8	100.8
131	70.6	50.5	90.5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K22.D
Acq On : 14 Mar 2014 00:58
Instrument: HP5973K
Operator : EM
Sample : 1403028-08
Misc : 200mL MH67 CAN 1980
ALS Vial : 43
Multiplier: 2.1

Rpt this run
em 3/27/14
Rerun to check for
Carryover
em 3/14/14

Quant Time: Mar 14 19:26:24 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	1048305	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2450556	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2137560	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	24534	1.04	ppbv #	75
5) Chloromethane	5.011	50	14240	0.51	ppbv	98
14) Acetone	9.884	43	40915	0.83	ppbv	100
18) Dichloromethane	11.380	49	36519	0.74	ppbv	82
28) Chloroform	15.590	83	1052640	13.59	ppbv	96
37) Trichloroethene	17.853	130	63440	1.67	ppbv	97
44) Toluene	20.068	91	102262	0.98	ppbv	99

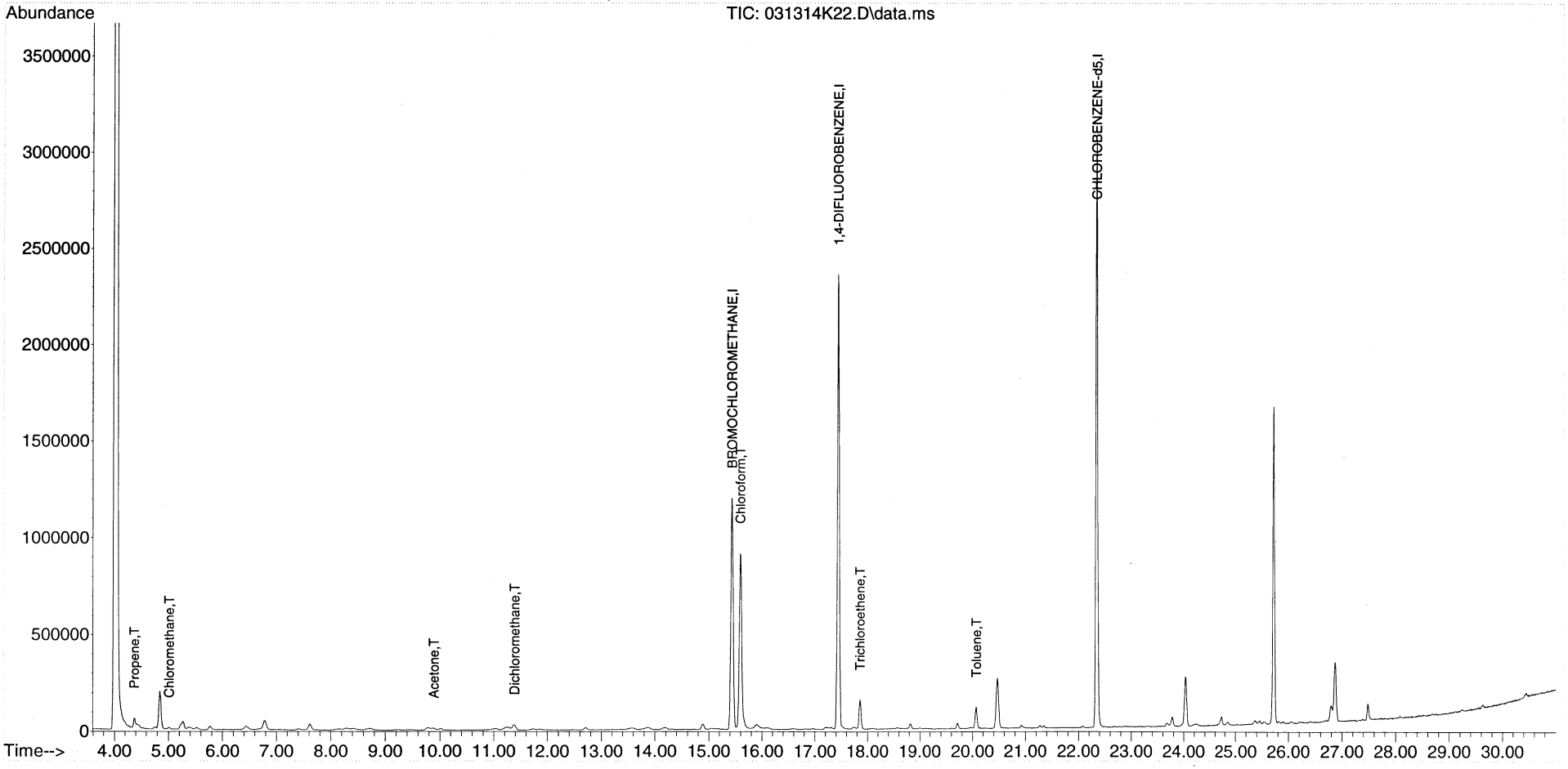
(#) = qualifier out of range (m) = manual integration (+) = signals summed

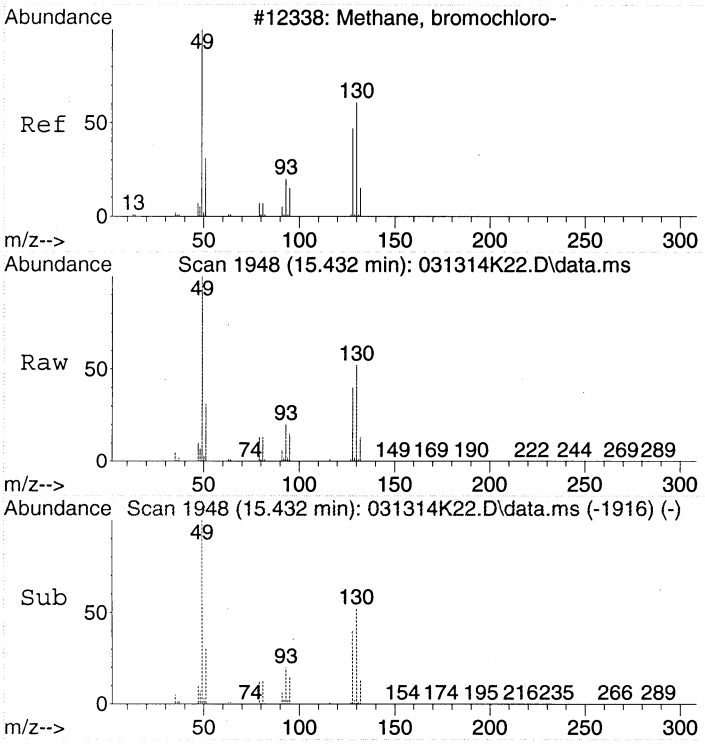
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K22.D
Acq On : 14 Mar 2014 00:58
Instrument: HP5973K
Operator : EM
Sample : 1403028-08
Misc : 200mL MH67 CAN 1980
ALS Vial : 43
Multiplier: 2.1

Quant Time: Mar 14 19:26:24 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

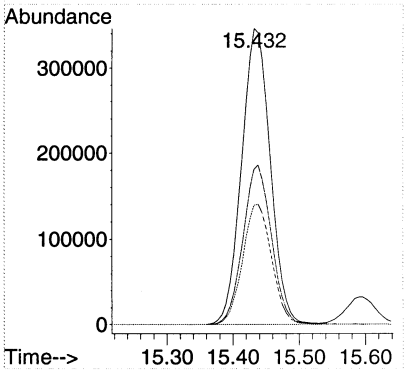


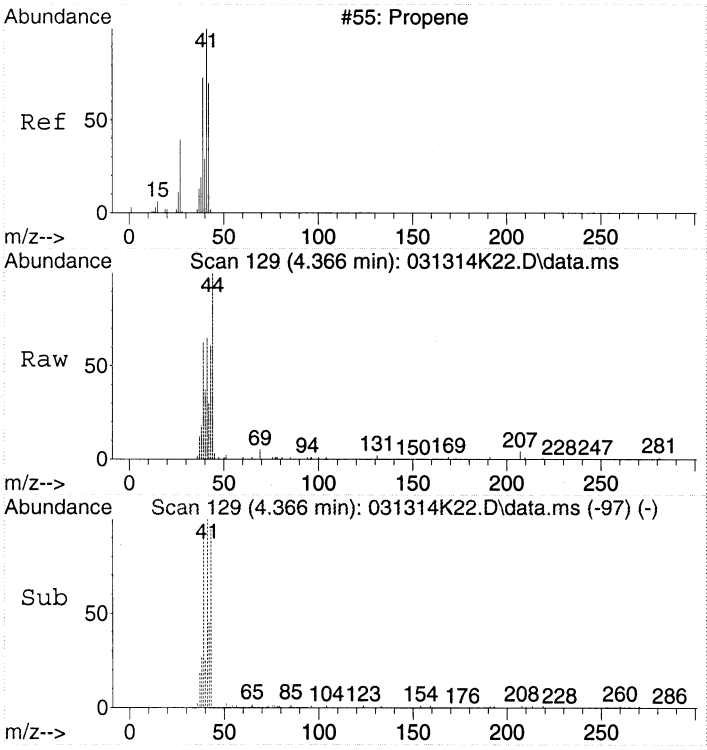


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 49 Resp: 1048305

Ion	Ratio	Lower	Upper
49	100		
130	53.4	53.4	93.4
128	41.0	35.1	75.1

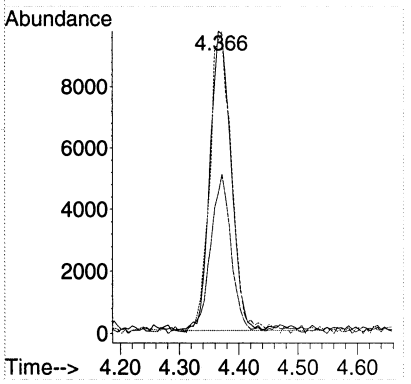


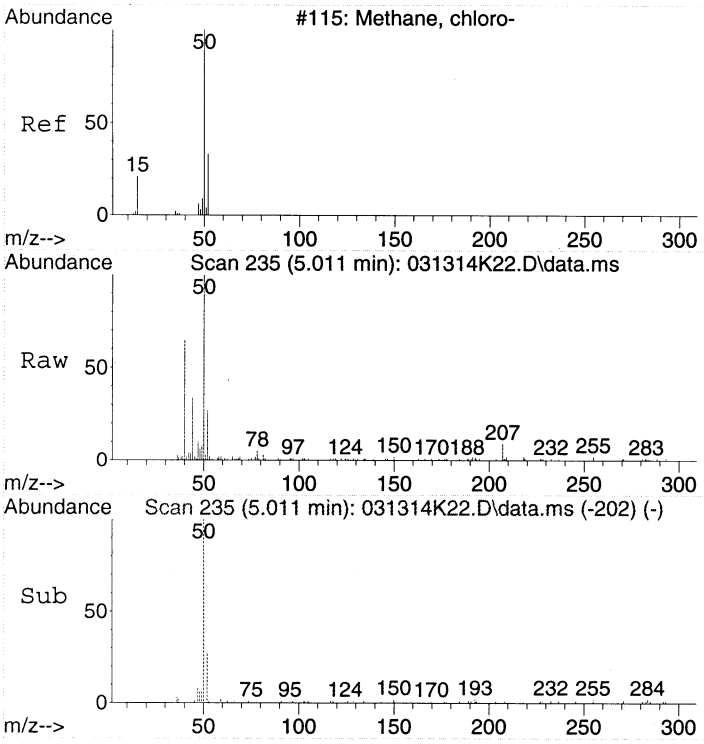


#2
Propene
Concen: 1.04 ppbv
RT: 4.366 min Scan# 129
Delta R.T. -0.006 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 41 Resp: 24534

Ion	Ratio	Lower	Upper
41	100		
42	51.1	46.3	86.3
39	102.6	56.1	96.1#

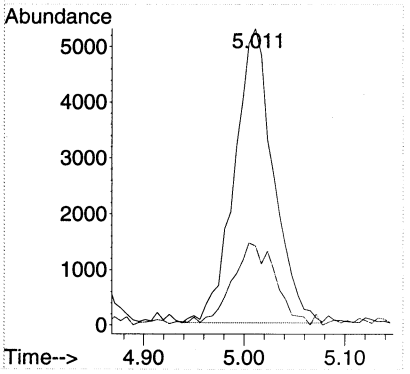


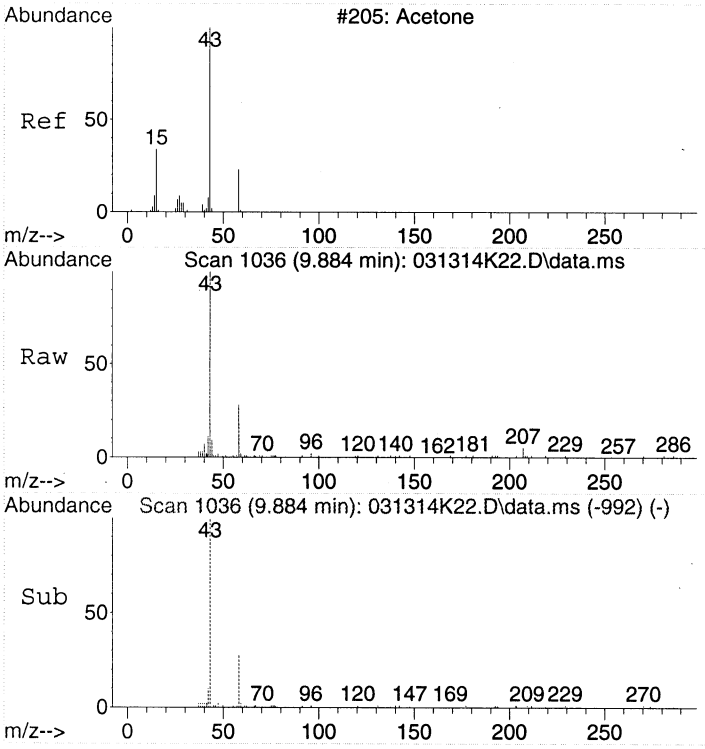


#5
Chloromethane
Concen: 0.51 ppbv
RT: 5.011 min Scan# 235
Delta R.T. -0.000 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 50 Resp: 14240

Ion	Ratio	Lower	Upper
50	100		
52	31.1	12.1	52.1

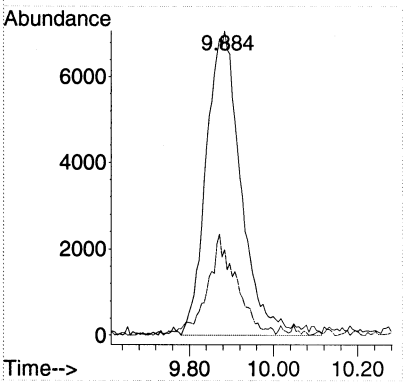


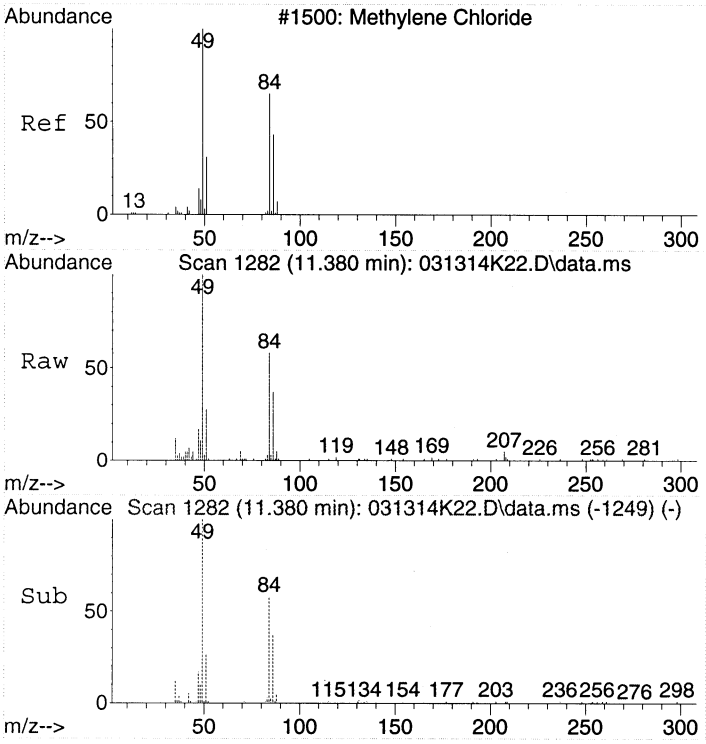


#14
Acetone
Concen: 0.83 ppbv
RT: 9.884 min Scan# 1036
Delta R.T. 0.067 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 43 Resp: 40915

Ion	Ratio	Lower	Upper
43	100		
58	27.9	8.0	48.0

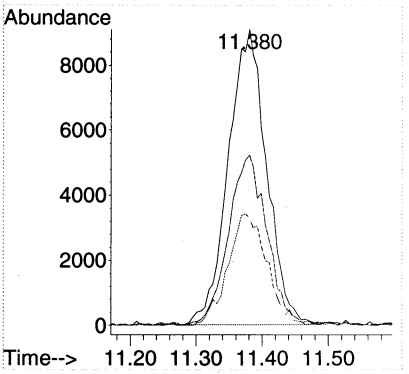


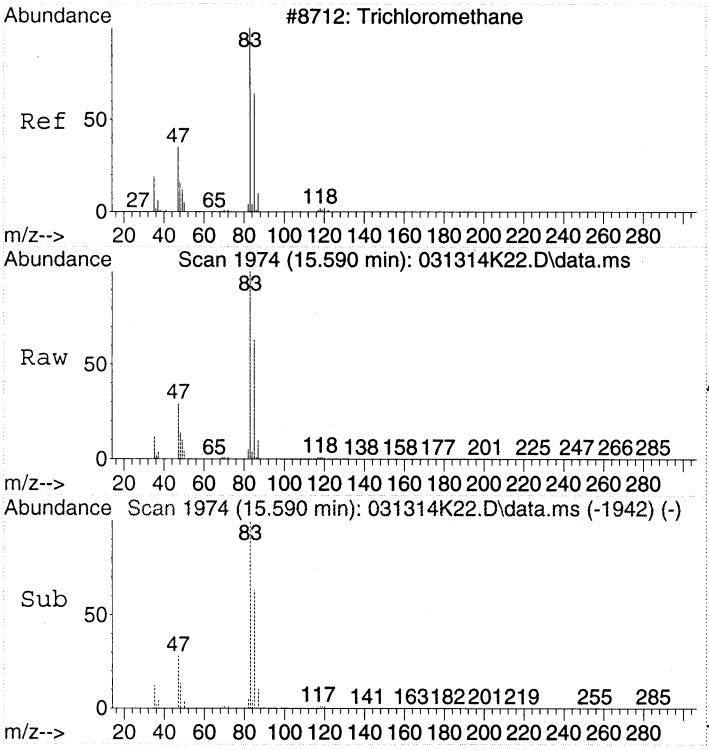


#18
Dichloromethane
Concen: 0.74 ppbv
RT: 11.380 min Scan# 1282
Delta R.T. -0.000 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 49 Resp: 36519

Ion	Ratio	Lower	Upper
49	100		
84	58.5	54.7	94.7
86	38.5	29.1	69.1

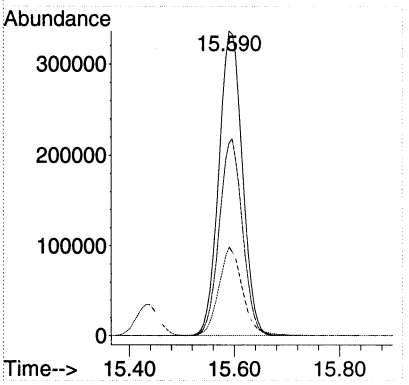


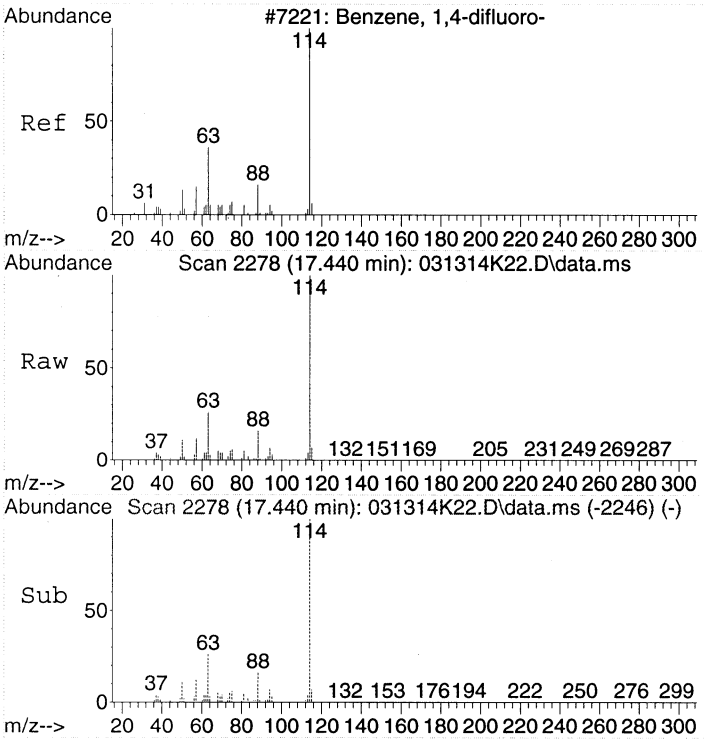


#28
Chloroform
Concen: 13.59 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 83 Resp: 1052640

Ion	Ratio	Lower	Upper
83	100		
85	64.0	46.8	86.8
47	29.2	6.3	46.3

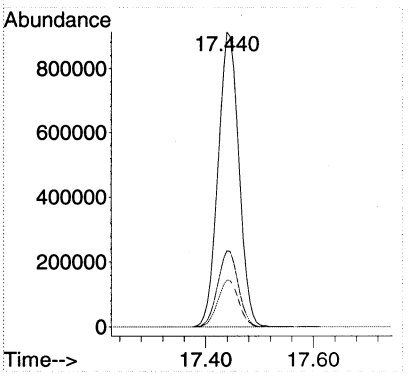


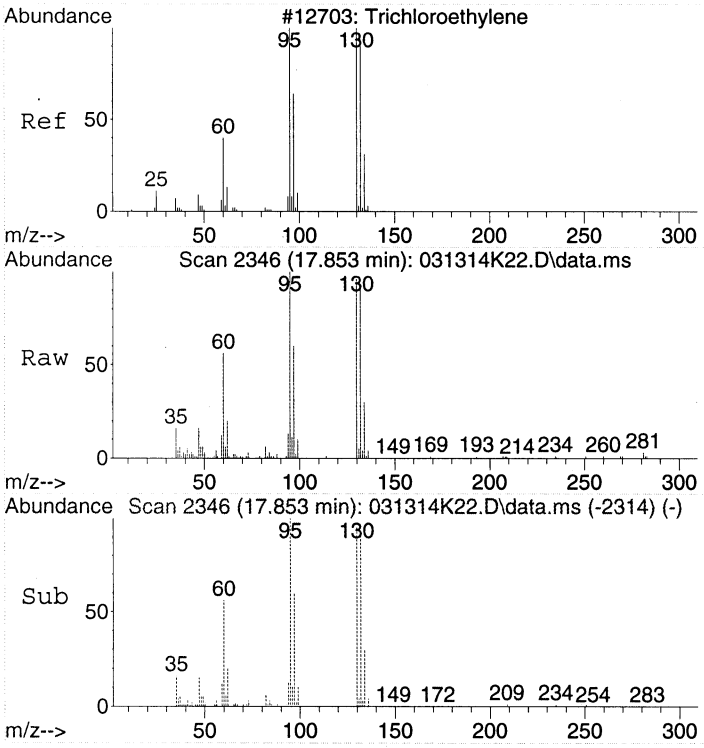


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion:114 Resp: 2450556

Ion	Ratio	Lower	Upper
114	100		
63	25.6	2.7	42.7
88	16.0	0.0	36.0

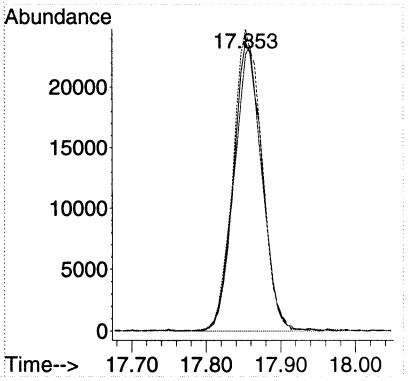


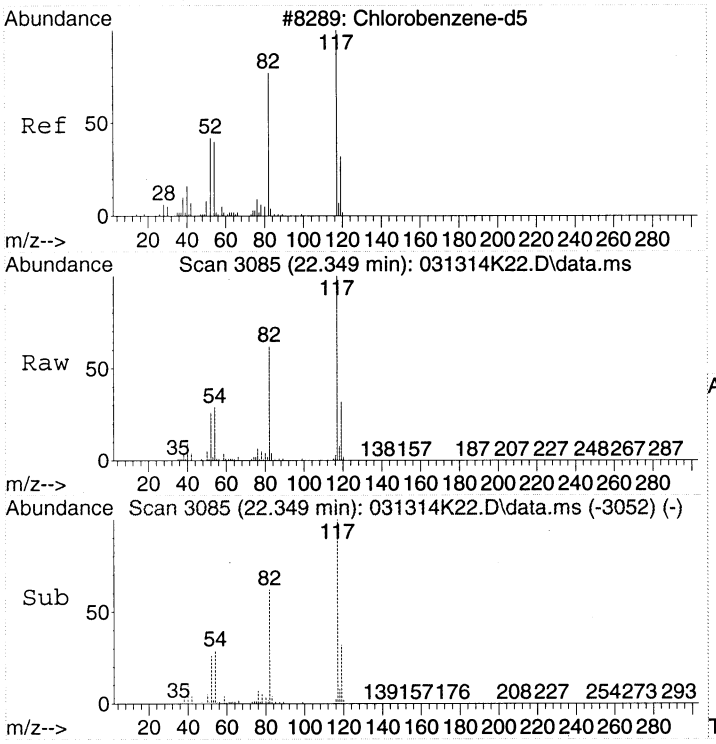


#37
Trichloroethene
Concen: 1.67 ppbv
RT: 17.853 min Scan# 2346
Delta R.T. -0.006 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion:130 Resp: 63440

Ion	Ratio	Lower	Upper
130	100		
132	95.6	77.7	117.7
95	105.0	80.9	120.9

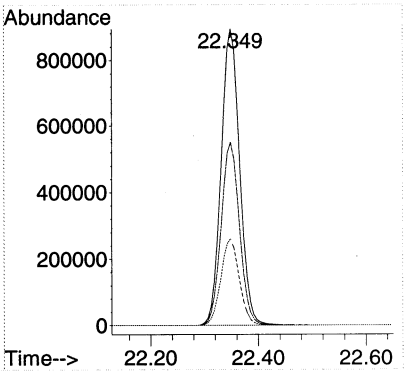


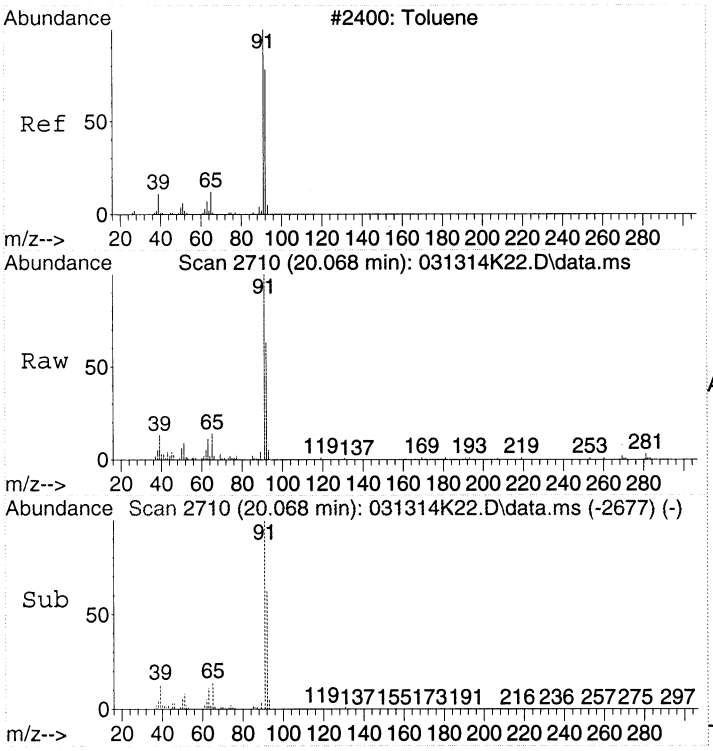


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion:117 Resp: 2137560

Ion	Ratio	Lower	Upper
117	100		
82	61.2	36.4	76.4
54	29.2	5.4	45.4

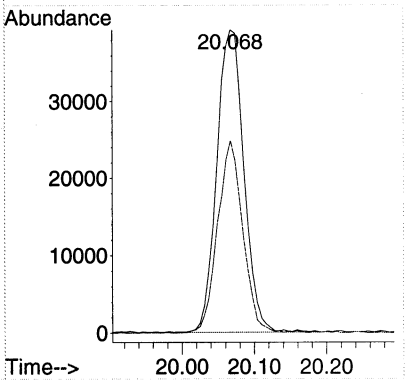




#44
Toluene
Concen: 0.98 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. -0.000 min
Lab File: 031314K22.D
Acq: 14 Mar 2014 00:58

Tgt Ion: 91 Resp: 102262

Ion	Ratio	Lower	Upper
91	100		
92	59.2	39.8	79.8



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K23.D
Acq On : 14 Mar 2014 1:47
Instrument: HP5973K
Operator : EM
Sample : 1403028-09
Misc : 200mL MH68 CAN 1983
ALS Vial : 44
Multiplier: 1.97

Quant Time: Mar 14 19:26:39 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	1037706	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2432056	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2114173	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	25958	1.11	ppbv	# 76
5) Chloromethane	5.017	50	14507	0.53	ppbv	97
14) Acetone	9.878	43	60693	1.25	ppbv	99
18) Dichloromethane	11.374	49	36660	0.75	ppbv	85
28) Chloroform	15.596	83	1125404	14.68	ppbv	96
37) Trichloroethene	17.860	130	38648	1.02	ppbv	99
44) Toluene	20.068	91	140796	1.36	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

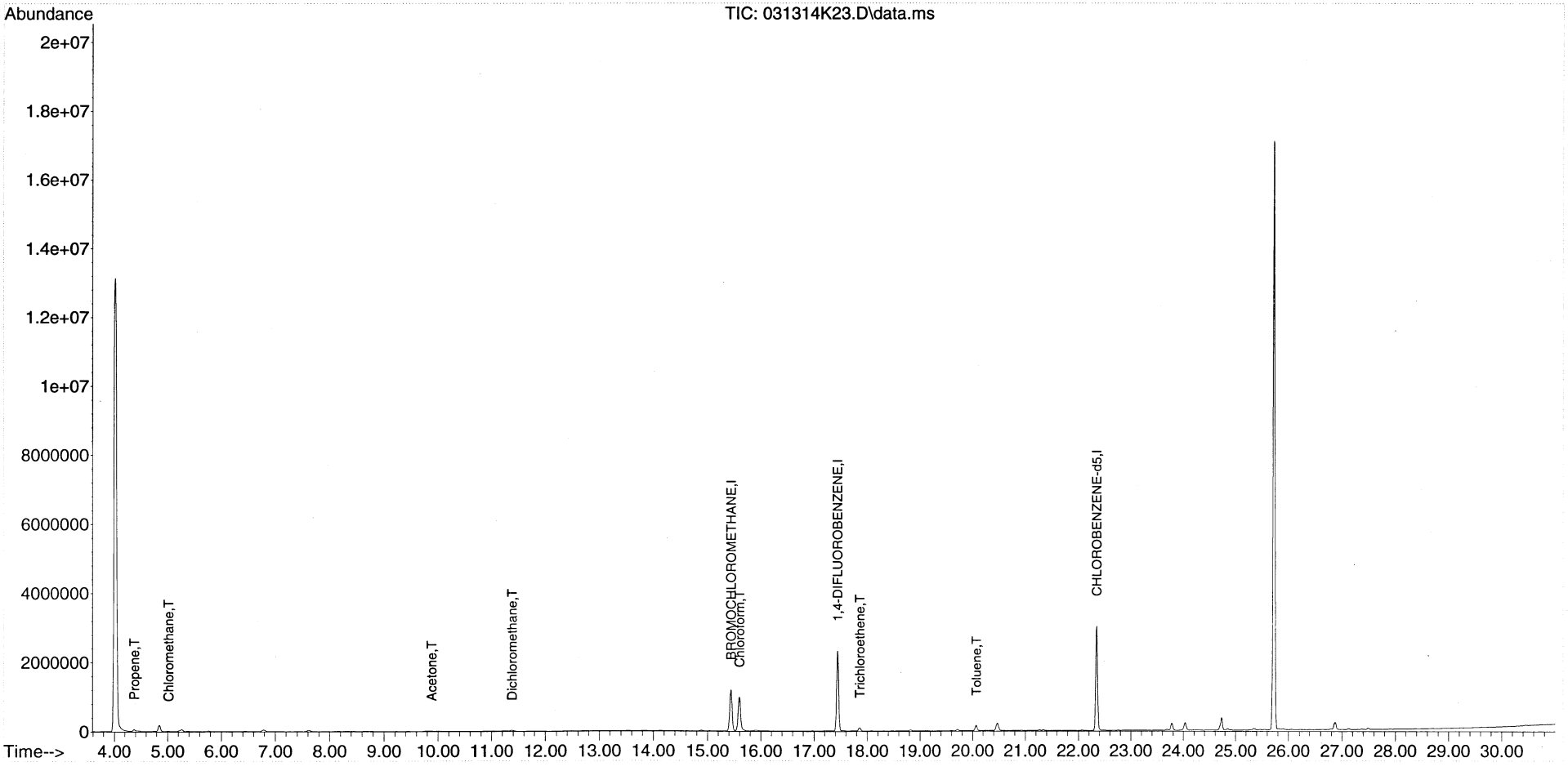
00274

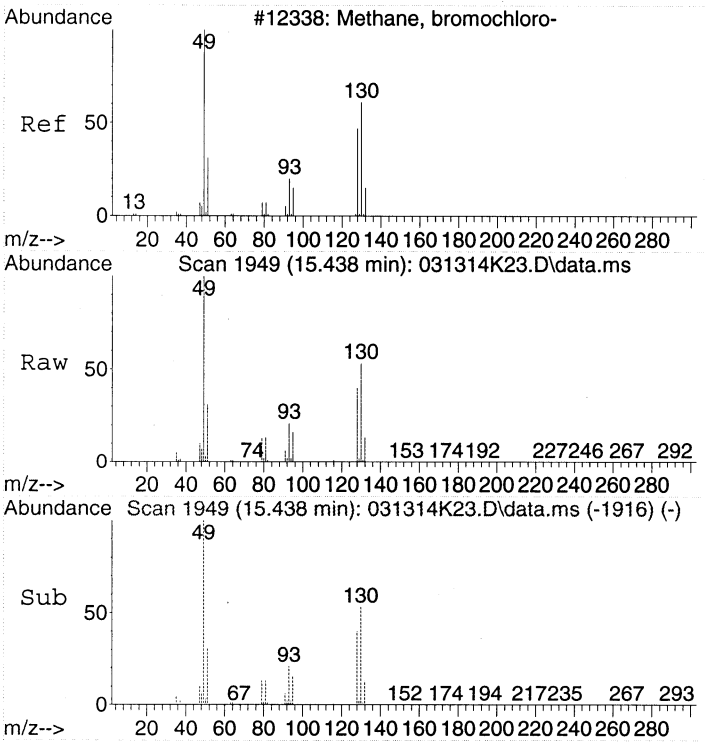
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K23.D
Acq On : 14 Mar 2014 1:47
Instrument: HP5973K
Operator : EM
Sample : 1403028-09
Misc : 200mL MH68 CAN 1983
ALS Vial : 44
Multiplier: 1.97

Quant Time: Mar 14 19:26:39 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

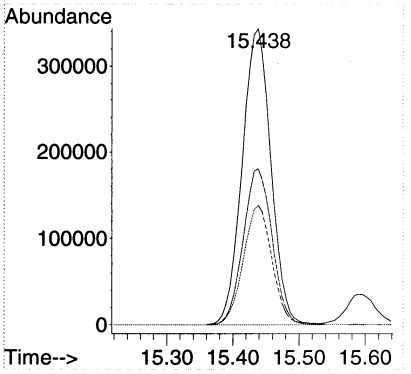


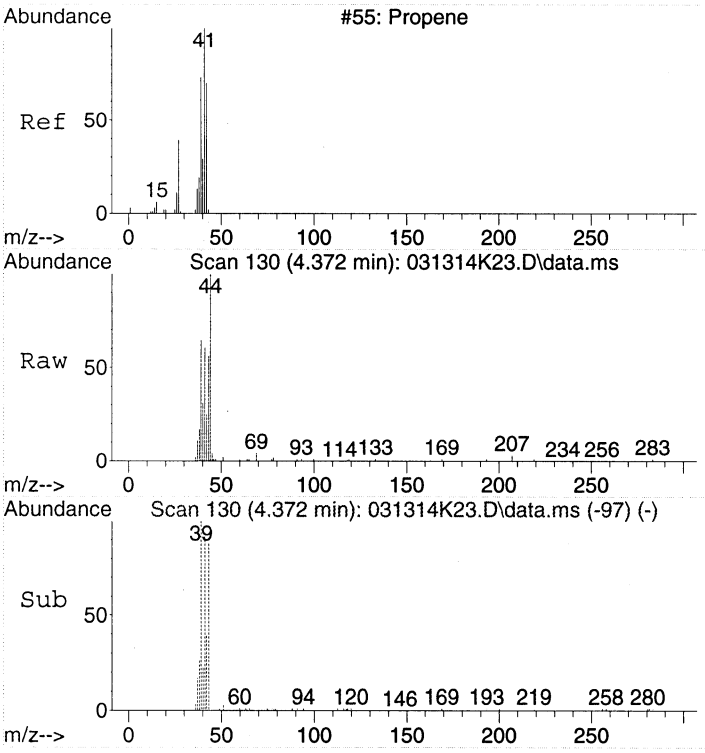


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 49 Resp: 1037706

Ion	Ratio	Lower	Upper
49	100		
130	53.2	53.4	93.4#
128	40.2	35.1	75.1

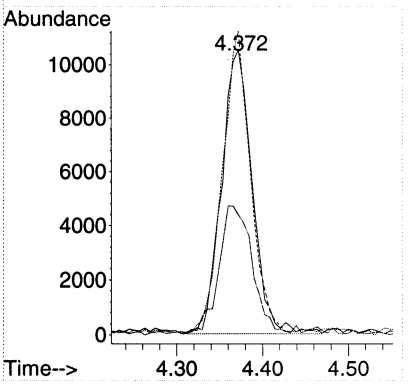


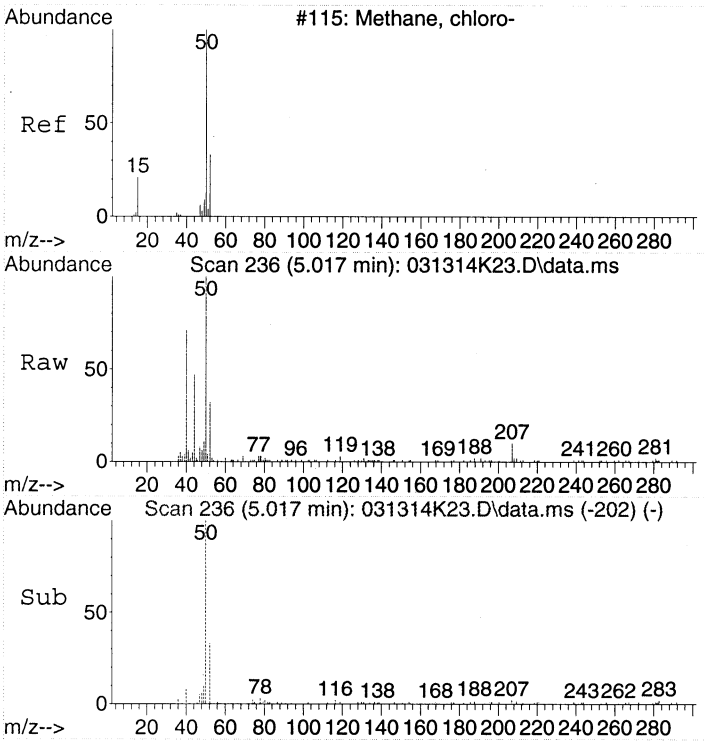


#2
Propene
Concen: 1.11 ppbv
RT: 4.372 min Scan# 130
Delta R.T. 0.000 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 41 Resp: 25958

Ion	Ratio	Lower	Upper
41	100		
42	48.8	46.3	86.3
39	98.1	56.1	96.1#

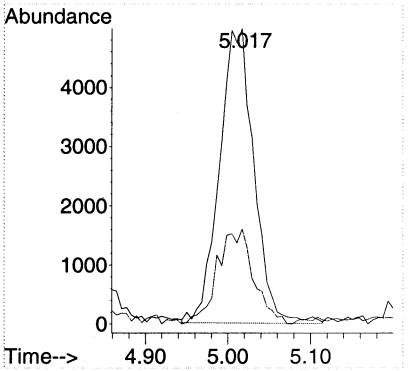


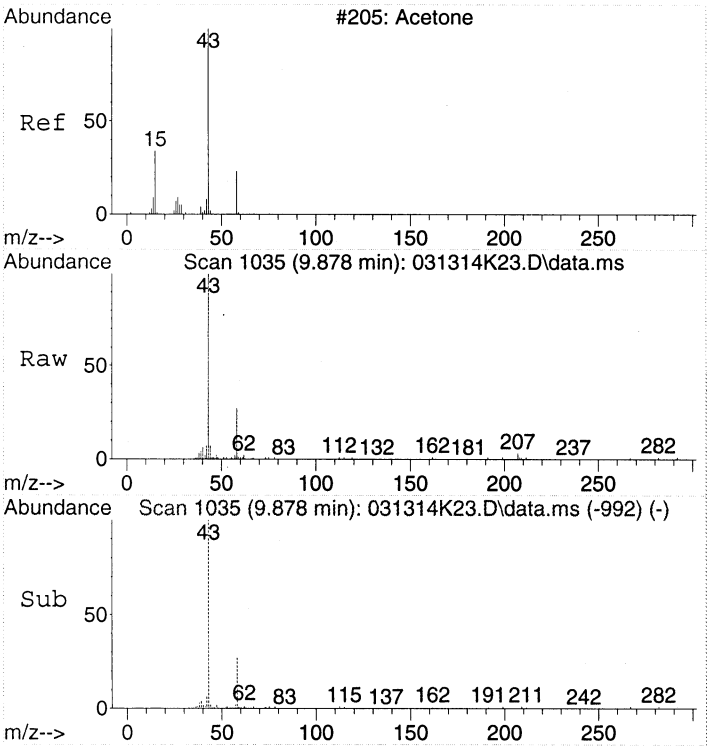


#5
Chloromethane
Concen: 0.53 ppbv
RT: 5.017 min Scan# 236
Delta R.T. 0.006 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 50 Resp: 14507

Ion	Ratio	Lower	Upper
50	100		
52	33.8	12.1	52.1

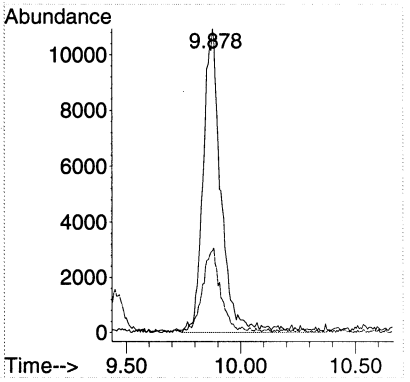


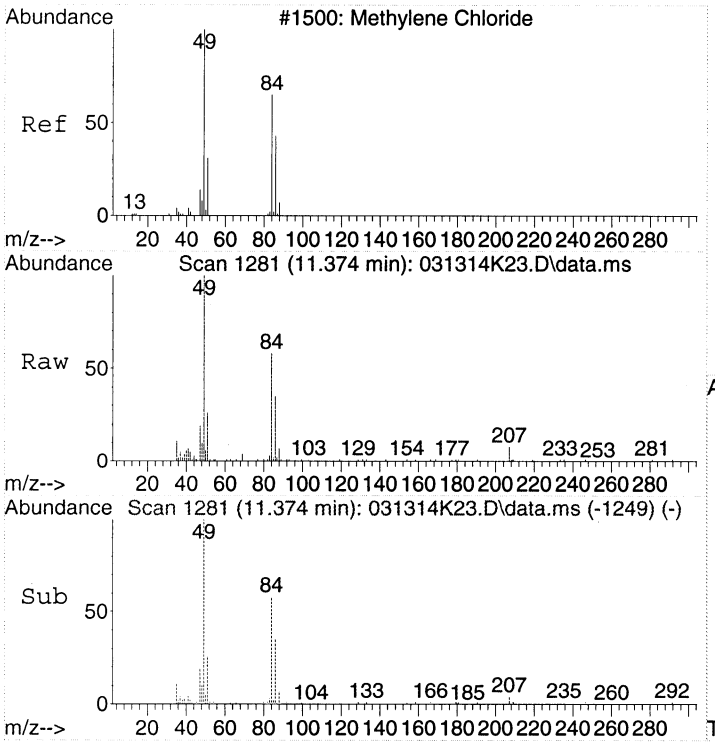


#14
Acetone
Concen: 1.25 ppbv
RT: 9.878 min Scan# 1035
Delta R.T. 0.061 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 43 Resp: 60693

Ion	Ratio	Lower	Upper
43	100		
58	27.6	8.0	48.0

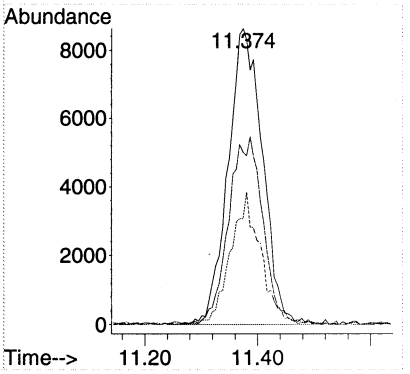


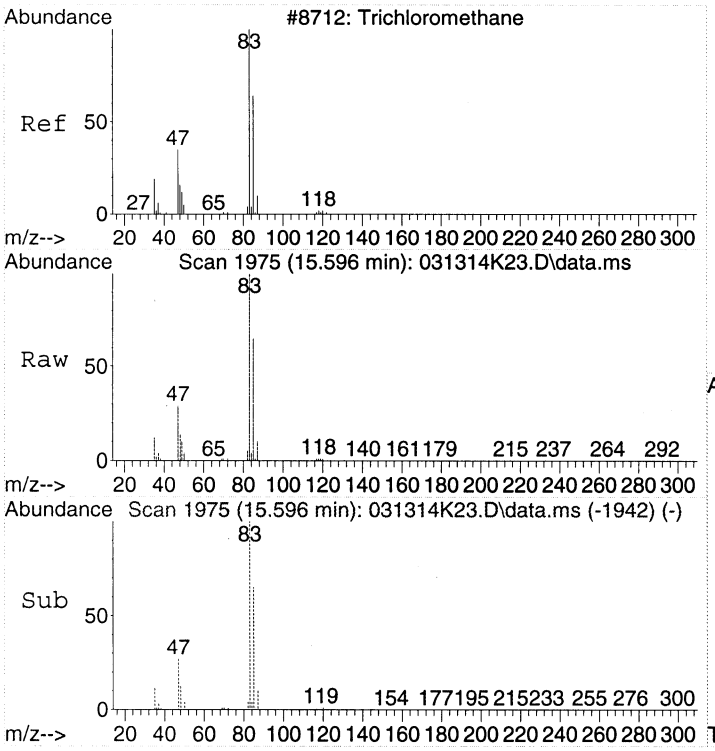


#18
Dichloromethane
Concen: 0.75 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. -0.006 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 49 Resp: 36660

Ion	Ratio	Lower	Upper
49	100		
84	62.9	54.7	94.7
86	38.5	29.1	69.1

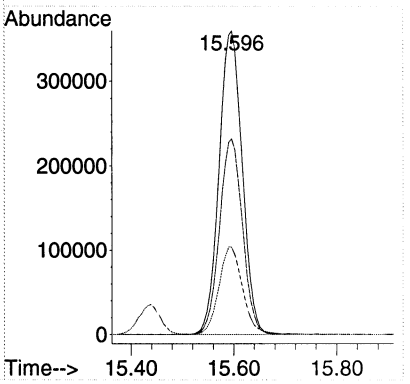


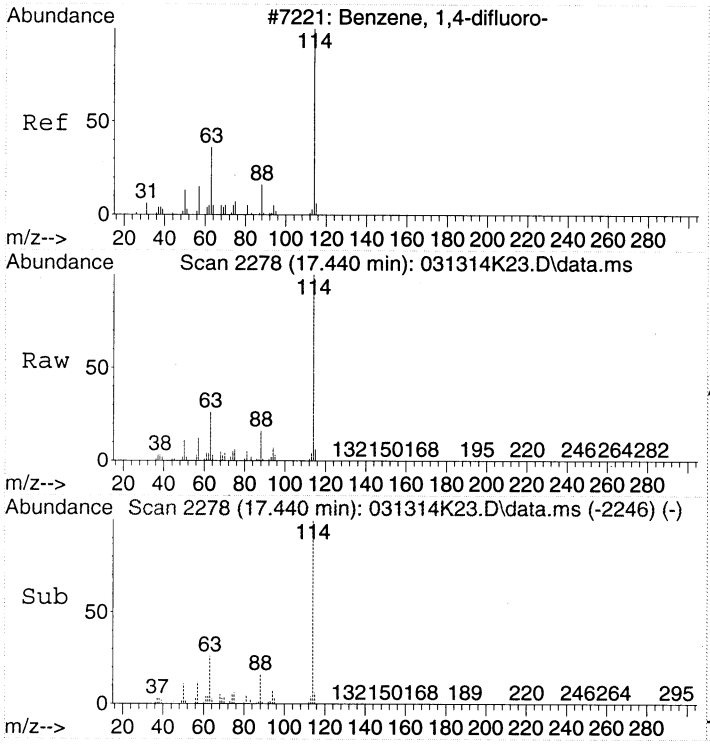


#28
Chloroform
Concen: 14.68 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 83 Resp: 1125404

Ion	Ratio	Lower	Upper
83	100		
85	64.1	46.8	86.8
47	29.4	6.3	46.3

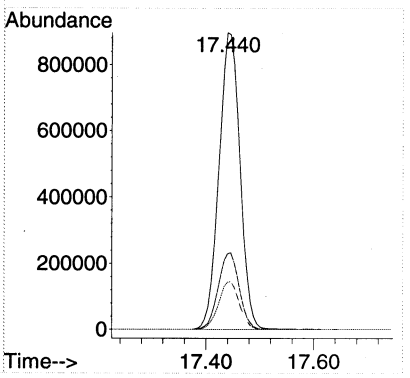


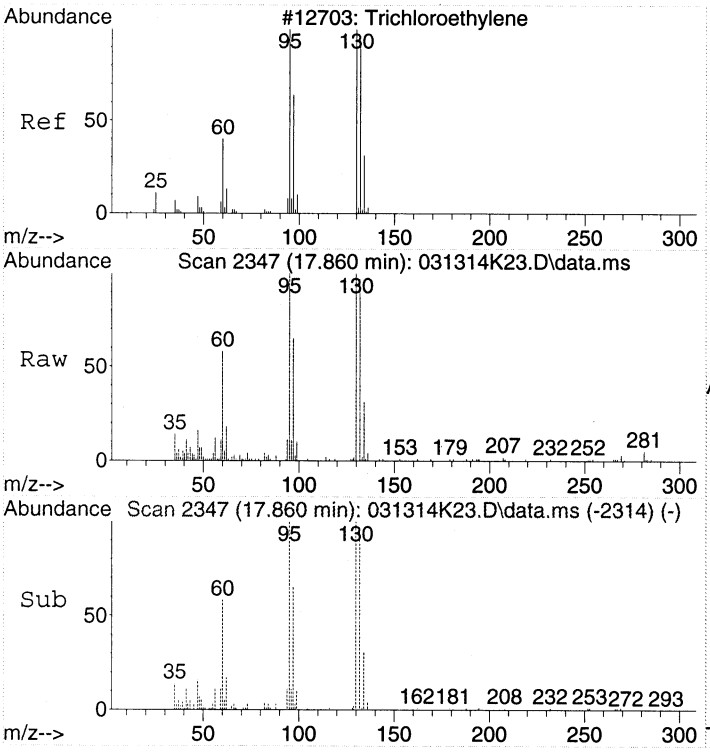


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion:114 Resp: 2432056

Ion	Ratio	Lower	Upper
114	100		
63	25.8	2.7	42.7
88	16.0	0.0	36.0

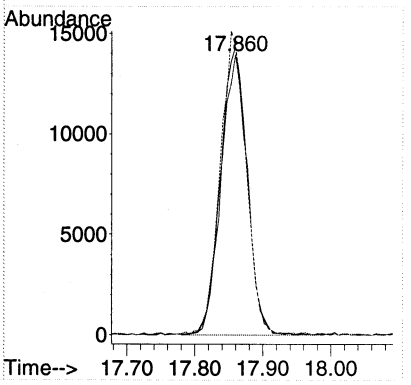


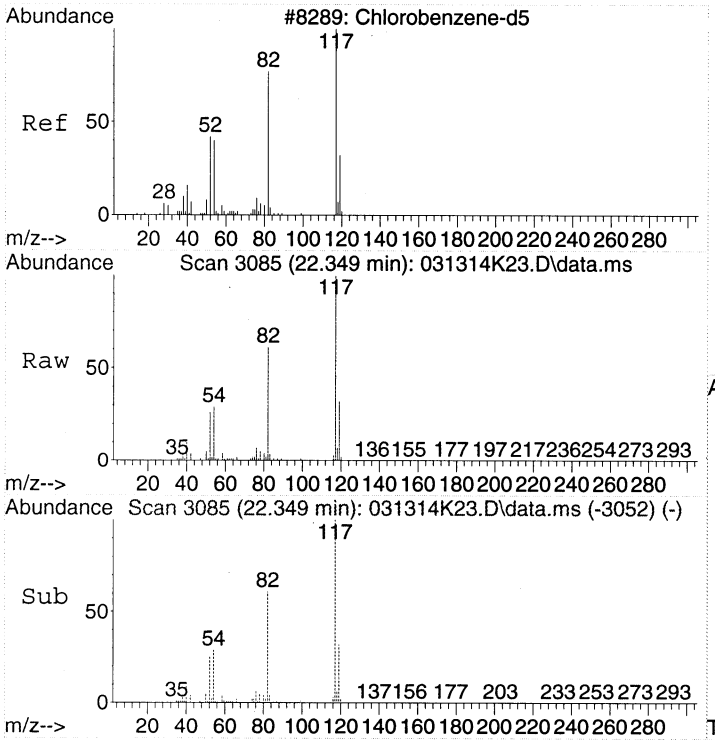


#37
Trichloroethene
Concen: 1.02 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion:130 Resp: 38648

Ion	Ratio	Lower	Upper
130	100		
132	97.5	77.7	117.7
95	103.1	80.9	120.9

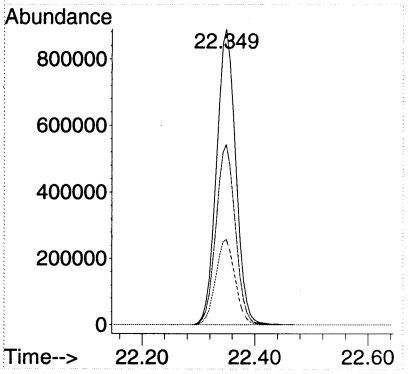


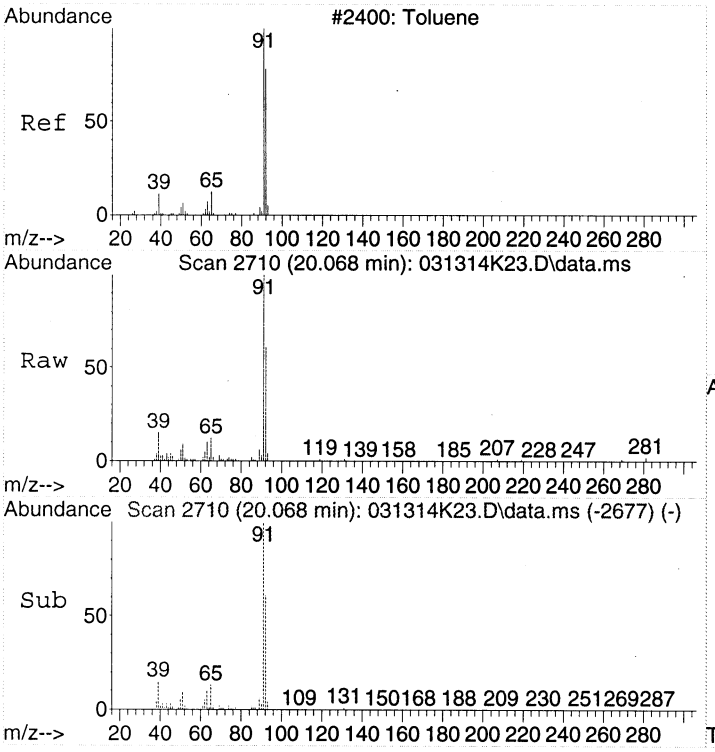


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion:117 Resp: 2114173

Ion	Ratio	Lower	Upper
117	100		
82	61.3	36.4	76.4
54	29.2	5.4	45.4

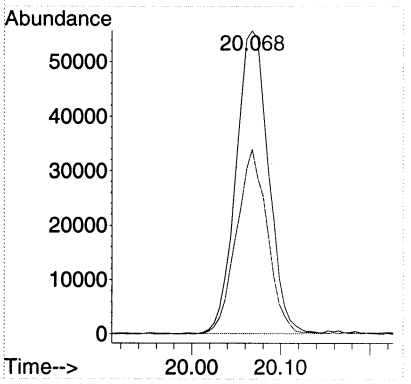




#44
Toluene
Concen: 1.36 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. 0.000 min
Lab File: 031314K23.D
Acq: 14 Mar 2014 1:47

Tgt Ion: 91 Resp: 140796

Ion	Ratio	Lower	Upper
91	100		
92	58.7	39.8	79.8



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K24.D
Acq On : 14 Mar 2014 2:36
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 45
Multiplier: 1

Quant Time: Mar 14 19:26:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	1034757	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2402191	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2086438	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.872	43	36320	0.75	ppbv	96
18) Dichloromethane	11.387	49	27674	0.57	ppbv	83
45) trans-1,3-Dichloropropene	20.463	75	25912	0.51	ppbv #	43

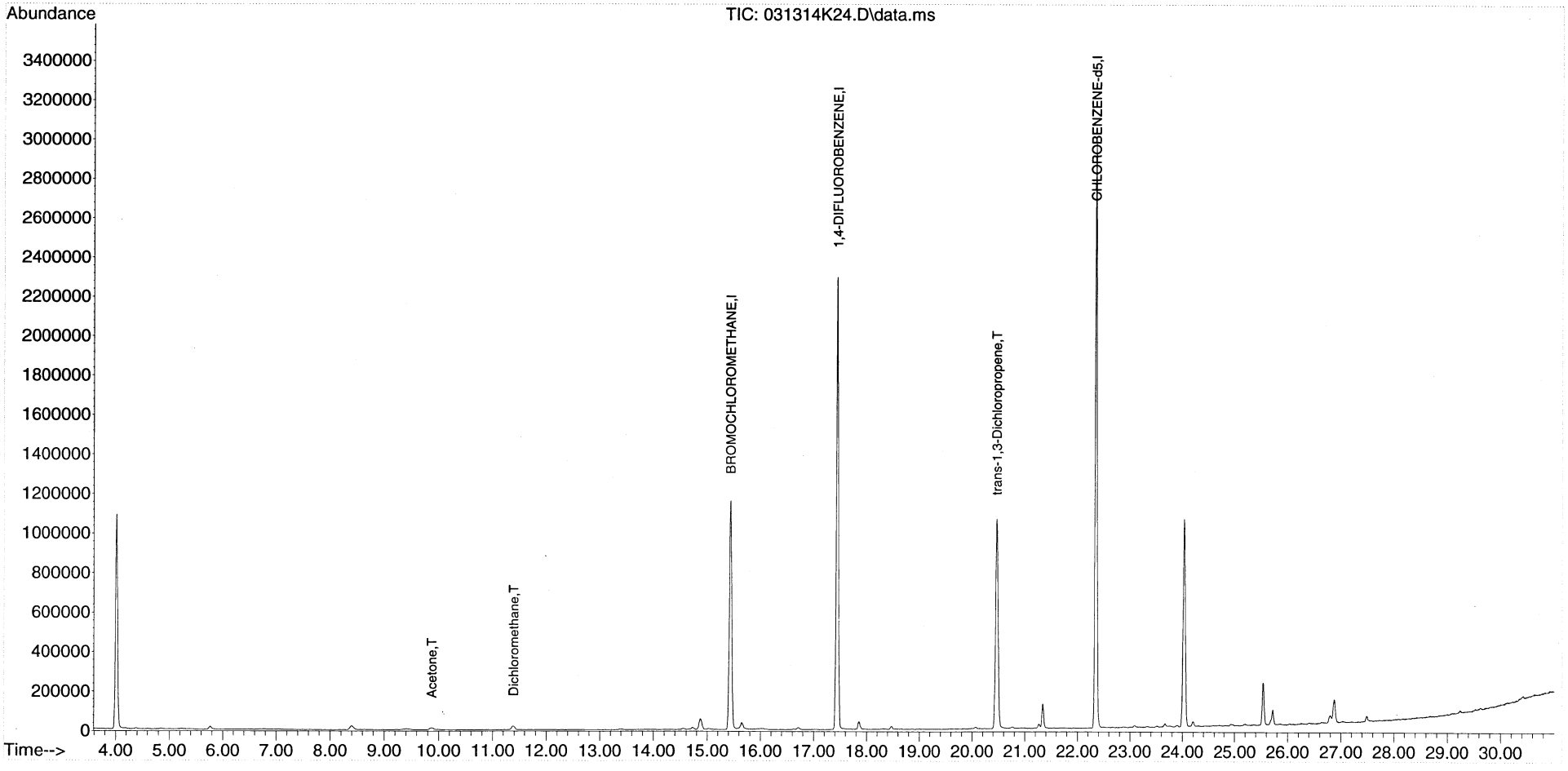
(#) = qualifier out of range (m) = manual integration (+) = signals summed

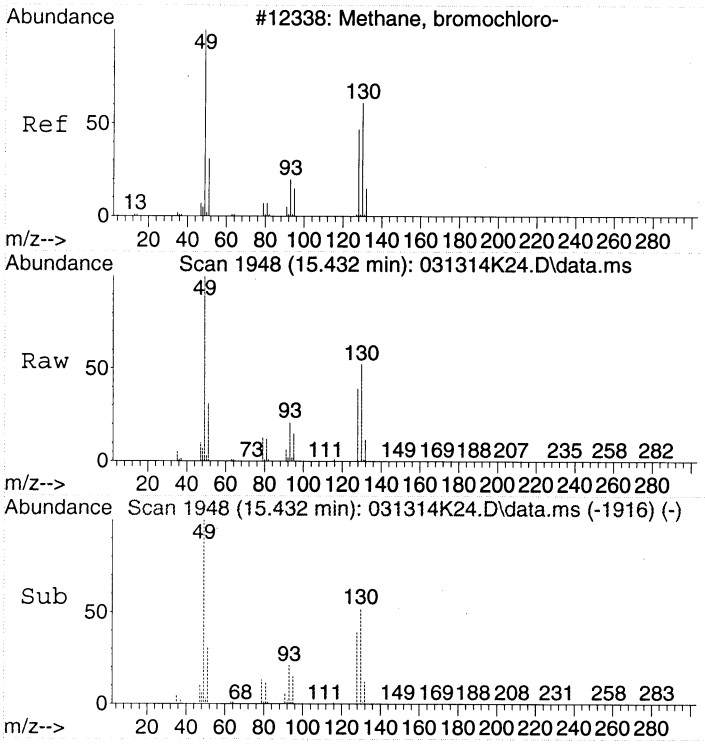
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K24.D
Acq On : 14 Mar 2014 2:36
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 45
Multiplier: 1

Quant Time: Mar 14 19:26:54 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

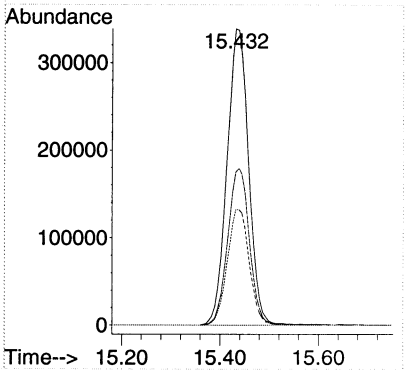


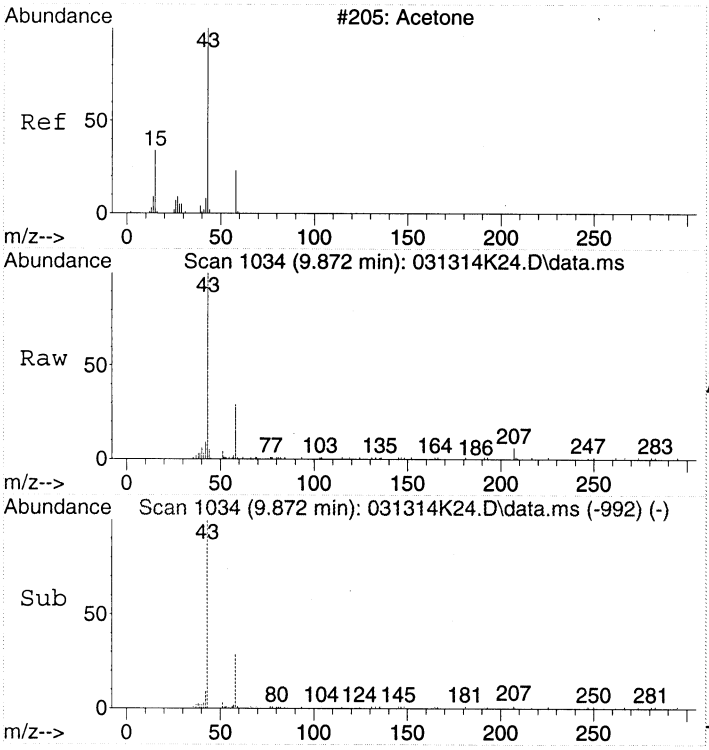


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031314K24.D
Acq: 14 Mar 2014 2:36

Tgt Ion: 49 Resp: 1034757

Ion	Ratio	Lower	Upper
49	100		
130	53.2	53.4	93.4#
128	39.8	35.1	75.1

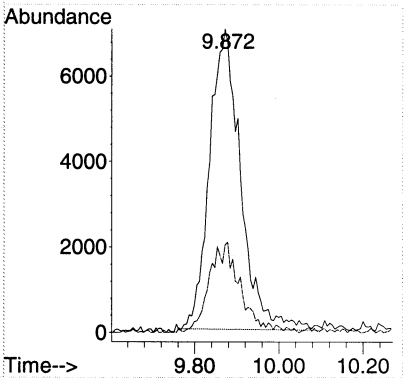


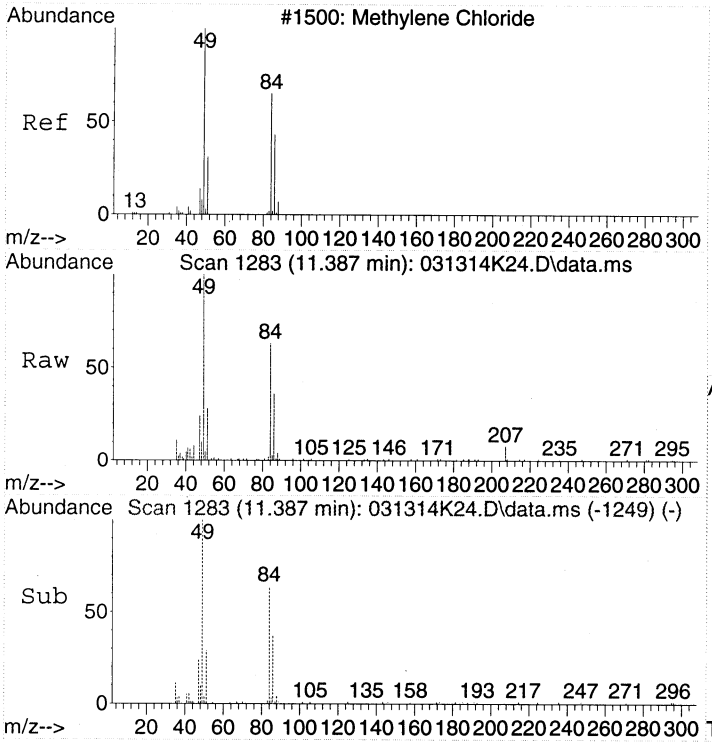


#14
Acetone
Concen: 0.75 ppbv
RT: 9.872 min Scan# 1034
Delta R.T. 0.055 min
Lab File: 031314K24.D
Acq: 14 Mar 2014 2:36

Tgt Ion: 43 Resp: 36320

Ion	Ratio	Lower	Upper
43	100		
58	30.3	8.0	48.0

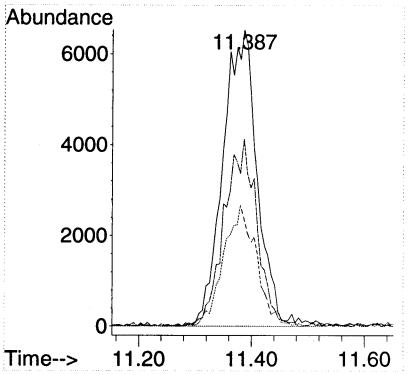


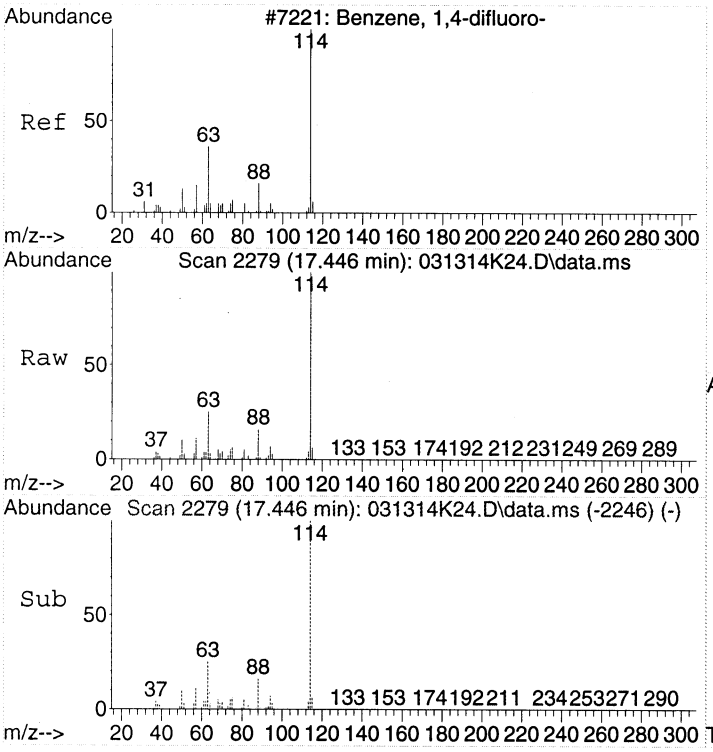


#18
Dichloromethane
Concen: 0.57 ppbv
RT: 11.387 min Scan# 1283
Delta R.T. 0.006 min
Lab File: 031314K24.D
Acq: 14 Mar 2014 2:36

Tgt Ion: 49 Resp: 27674

Ion	Ratio	Lower	Upper
49	100		
84	59.7	54.7	94.7
86	37.7	29.1	69.1

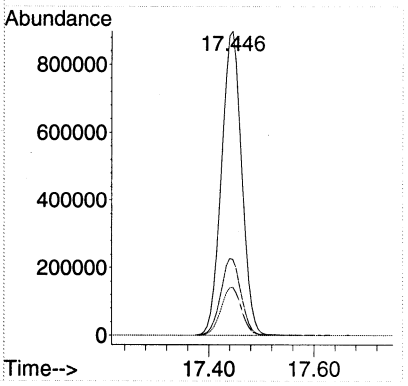


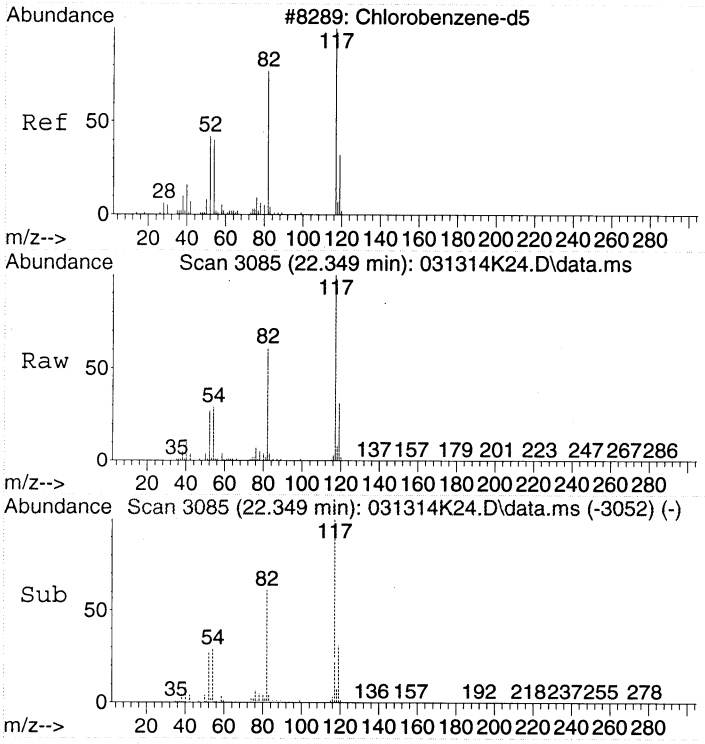


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K24.D
Acq: 14 Mar 2014 2:36

Tgt Ion:114 Resp: 2402191

Ion	Ratio	Lower	Upper
114	100		
63	25.5	2.7	42.7
88	16.0	0.0	36.0

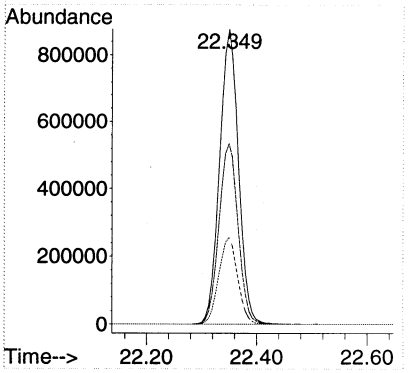


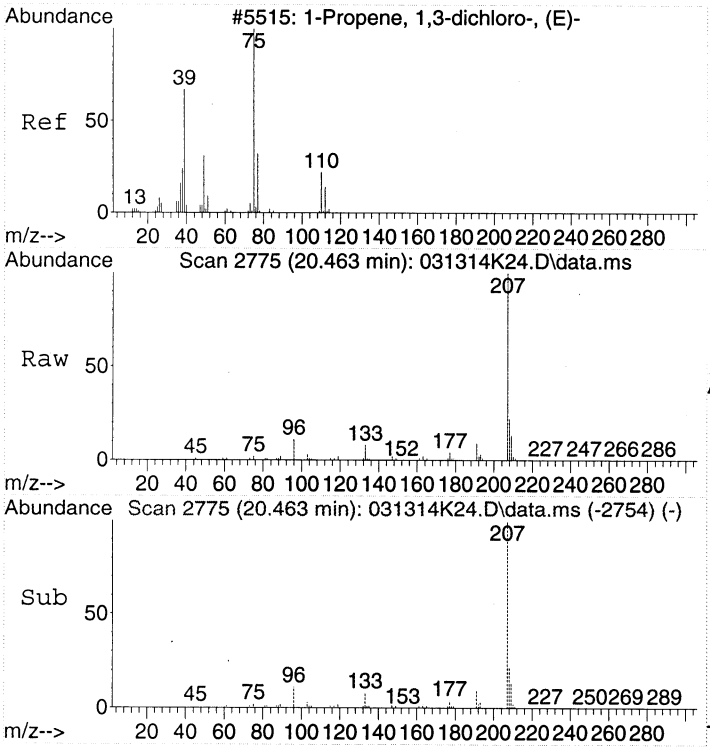


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K24.D
Acq: 14 Mar 2014 2:36

Tgt Ion:117 Resp: 2086438

Ion	Ratio	Lower	Upper
117	100		
82	61.7	36.4	76.4
54	29.4	5.4	45.4

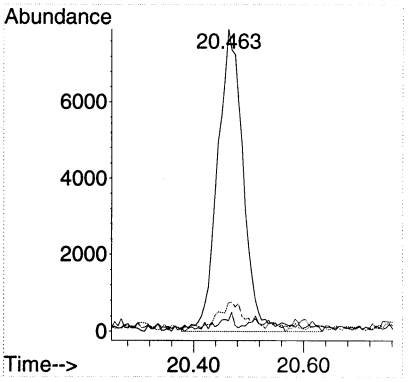




#45
trans-1,3-Dichloropropene
Concen: 0.51 ppbv
RT: 20.463 min Scan# 2775
Delta R.T. -0.073 min
Lab File: 031314K24.D
Acq: 14 Mar 2014 2:36

Tgt Ion: 75 Resp: 25912

Ion	Ratio	Lower	Upper
75	100		
39	4.4	32.2	72.2#
77	10.1	11.6	51.6#



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K25.D
Acq On : 14 Mar 2014 3:25
Instrument: HP5973K
Operator : EM
Sample : 1403028-10
Misc : 200mL MH69 CAN 1994
ALS Vial : 46
Multiplier: 1.98

Quant Time: Mar 14 19:27:05 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	1039640	22.00 ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2409713	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2103124	22.00 ppbv	0.00
Target Compounds					Qvalue
14) Acetone	9.872	43	48002	0.99 ppbv	98
18) Dichloromethane	11.386	49	26988	0.55 ppbv	84
28) Chloroform	15.596	83	46891	0.61 ppbv	97

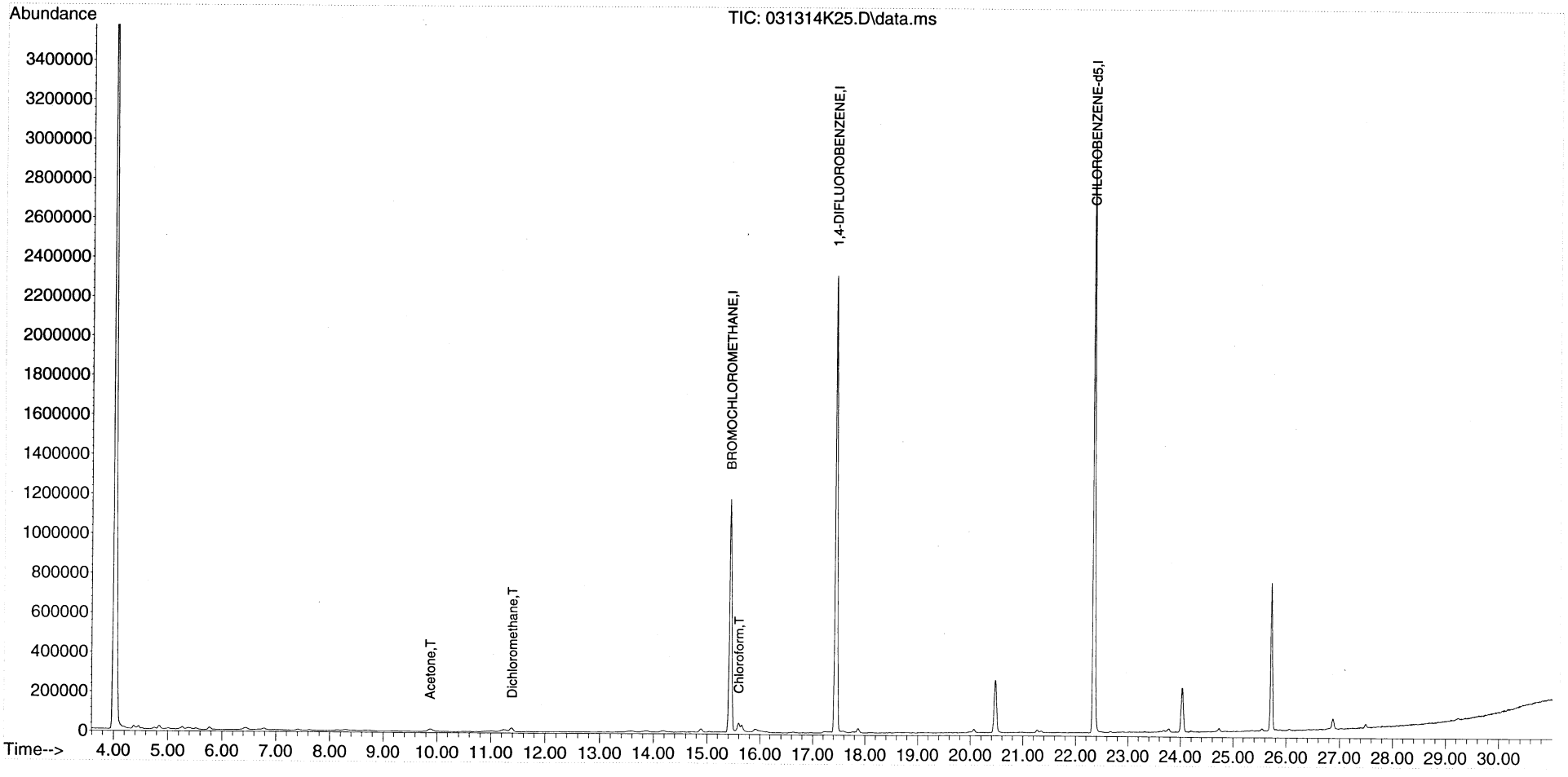
(#) = qualifier out of range (m) = manual integration (+) = signals summed

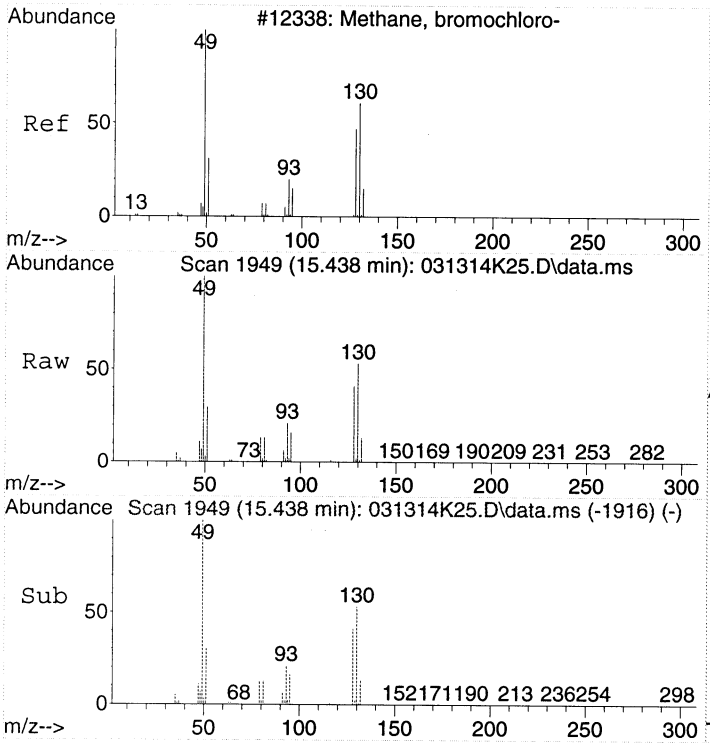
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K25.D
Acq On : 14 Mar 2014 3:25
Instrument: HP5973K
Operator : EM
Sample : 1403028-10
Misc : 200mL MH69 CAN 1994
ALS Vial : 46
Multiplier: 1.98

Quant Time: Mar 14 19:27:05 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

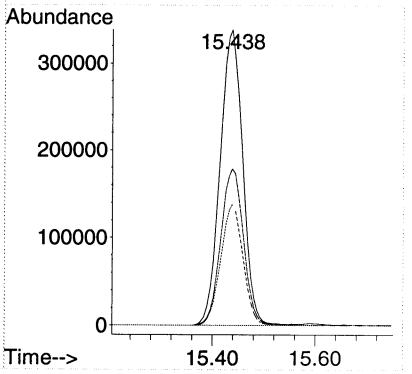


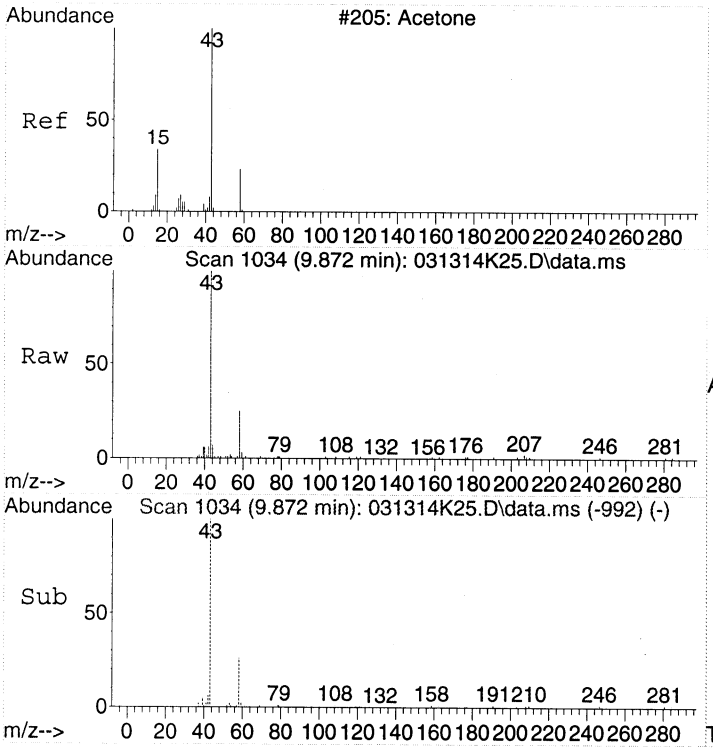


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K25.D
Acq: 14 Mar 2014 3:25

Tgt Ion: 49 Resp: 1039640

Ion	Ratio	Lower	Upper
49	100		
130	53.0	53.4	93.4#
128	40.2	35.1	75.1

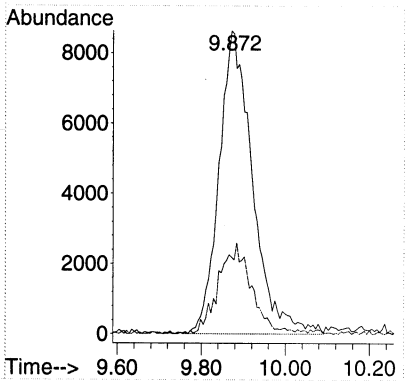


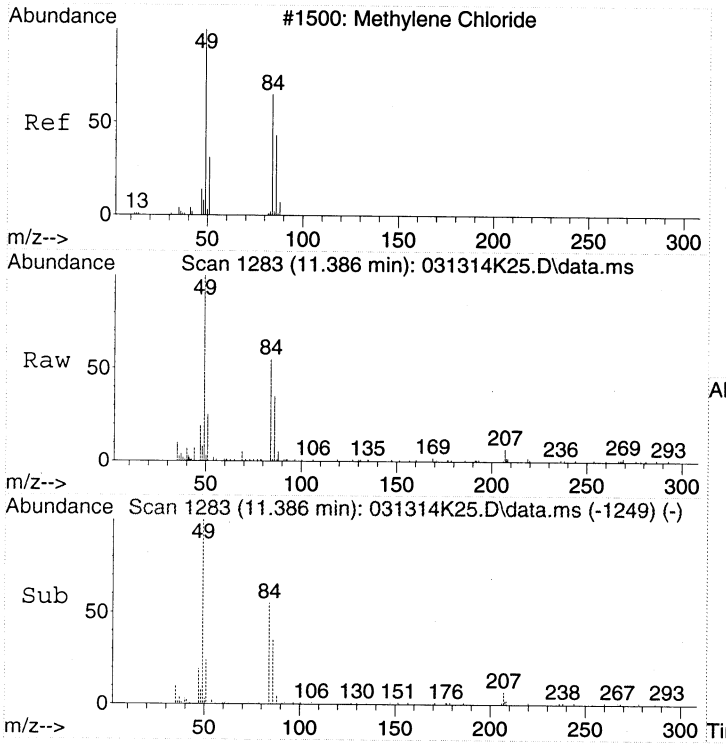


#14
Acetone
Concen: 0.99 ppbv
RT: 9.872 min Scan# 1034
Delta R.T. 0.055 min
Lab File: 031314K25.D
Acq: 14 Mar 2014 3:25

Tgt Ion: 43 Resp: 48002

Ion	Ratio	Lower	Upper
43	100		
58	28.9	8.0	48.0

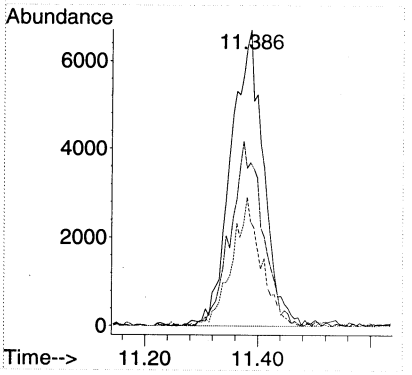


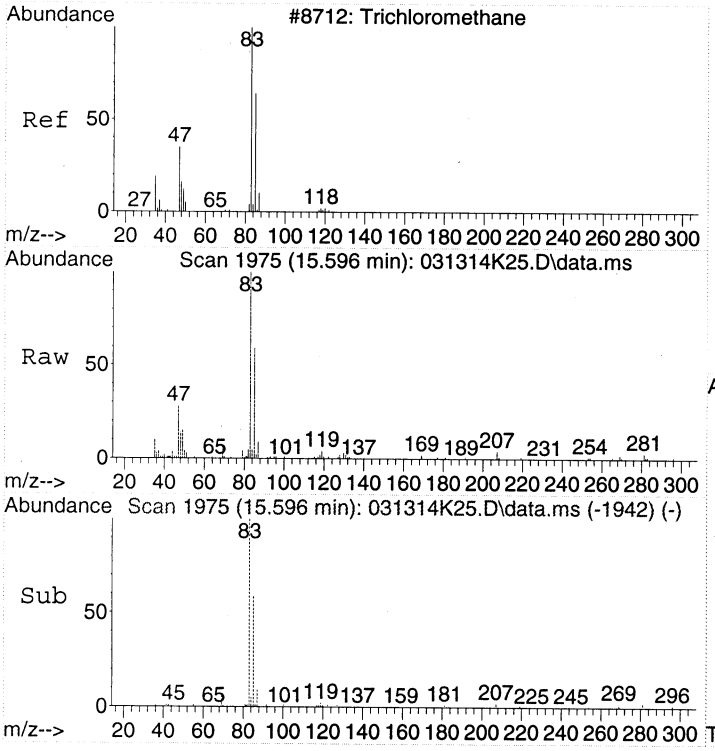


#18
Dichloromethane
Concen: 0.55 ppbv
RT: 11.386 min Scan# 1283
Delta R.T. 0.006 min
Lab File: 031314K25.D
Acq: 14 Mar 2014 3:25

Tgt Ion: 49 Resp: 26988

Ion	Ratio	Lower	Upper
49	100		
84	60.8	54.7	94.7
86	38.9	29.1	69.1

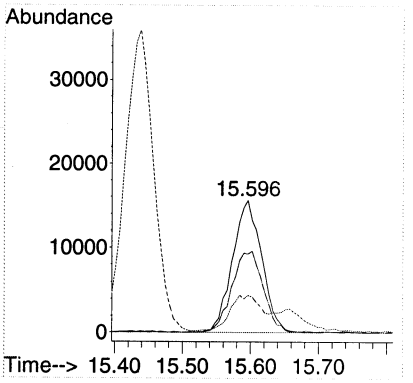


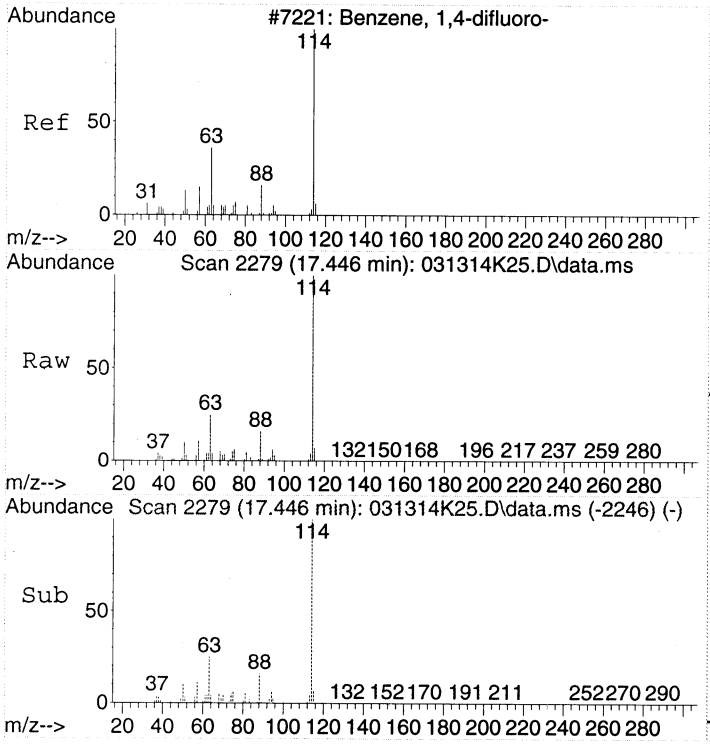


#28
Chloroform
Concen: 0.61 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. -0.000 min
Lab File: 031314K25.D
Acq: 14 Mar 2014 3:25

Tgt Ion: 83 Resp: 46891

Ion	Ratio	Lower	Upper
83	100		
85	65.4	46.8	86.8
47	28.6	6.3	46.3

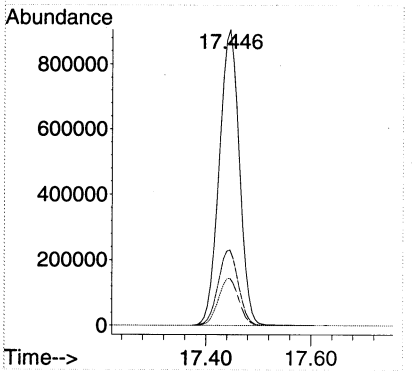


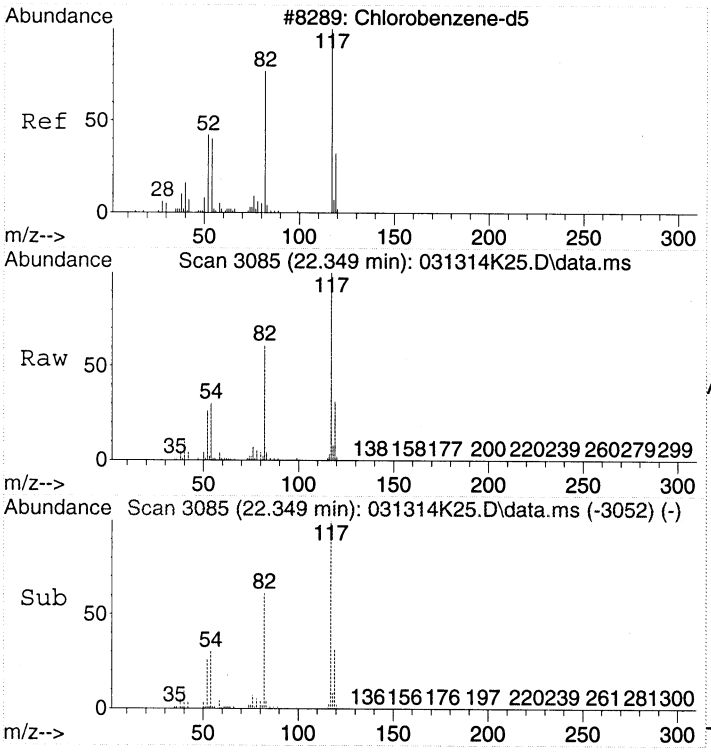


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K25.D
Acq: 14 Mar 2014 3:25

Tgt Ion:114 Resp: 2409713

Ion	Ratio	Lower	Upper
114	100		
63	25.7	2.7	42.7
88	16.2	0.0	36.0

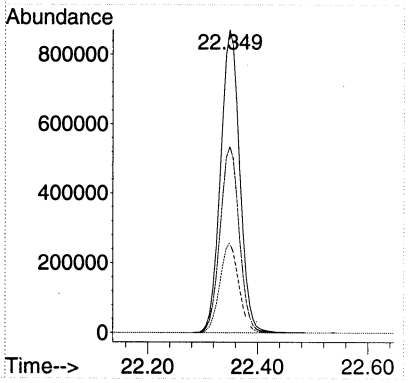




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K25.D
Acq: 14 Mar 2014 3:25

Tgt Ion:117 Resp: 2103124

Ion	Ratio	Lower	Upper
117	100		
82	61.5	36.4	76.4
54	29.3	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K26.D
Acq On : 14 Mar 2014 4:13
Instrument: HP5973K
Operator : EM
Sample : 1403028-11
Misc : 200mL MH70 CAN 1118
ALS Vial : 47
Multiplier: 2.1

Quant Time: Mar 14 19:27:16 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	1038632	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2465612	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2106019	22.00 ppbv	0.00
Target Compounds					Qvalue
14) Acetone	9.878	43	49009	1.01 ppbv	96
18) Dichloromethane	11.374	49	29621	0.61 ppbv	84
28) Chloroform	15.596	83	330318	4.31 ppbv	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

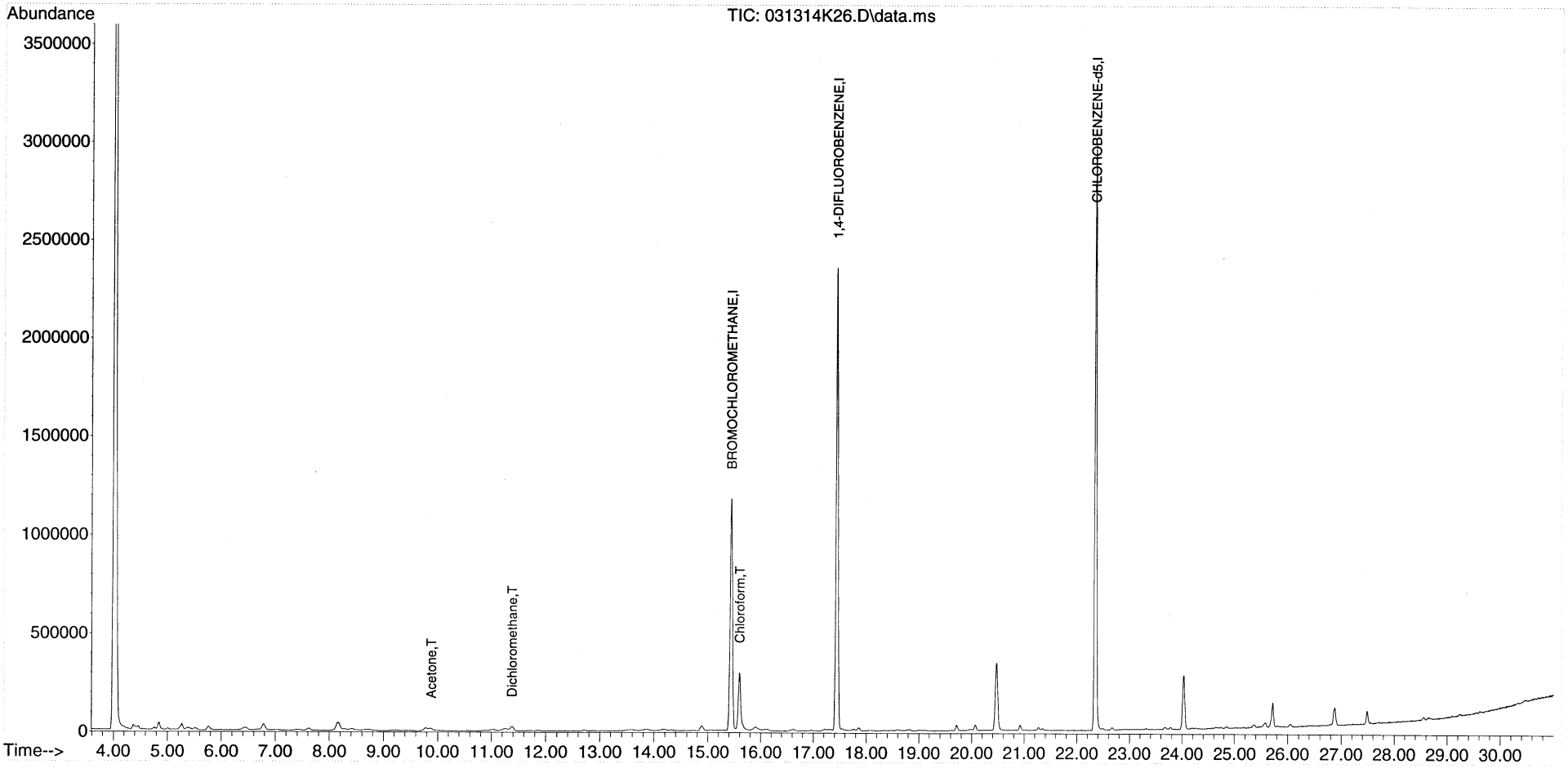
00285

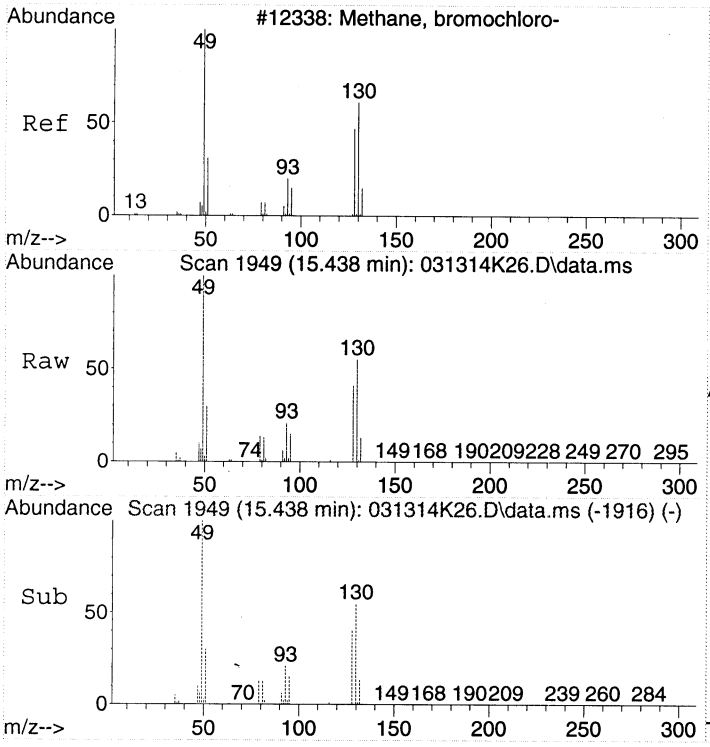
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K26.D
Acq On : 14 Mar 2014 4:13
Instrument: HP5973K
Operator : EM
Sample : 1403028-11
Misc : 200mL MH70 CAN 1118
ALS Vial : 47
Multiplier: 2.1

Quant Time: Mar 14 19:27:16 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

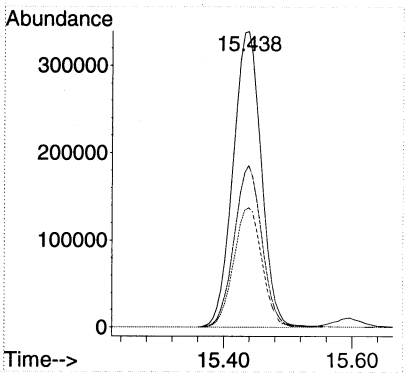


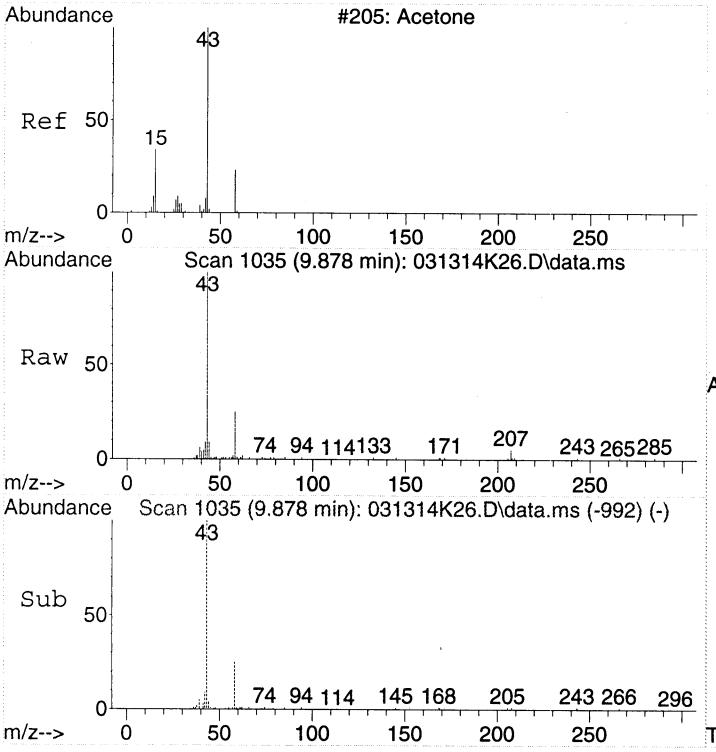


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K26.D
Acq: 14 Mar 2014 4:13

Tgt Ion: 49 Resp: 1038632

Ion	Ratio	Lower	Upper
49	100		
130	53.8	53.4	93.4
128	40.9	35.1	75.1

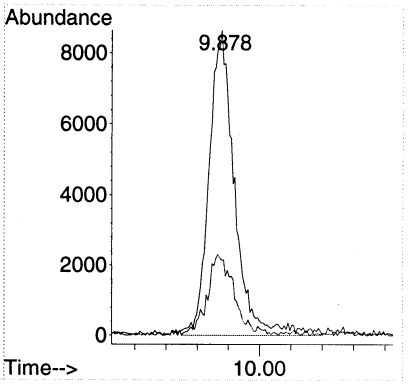


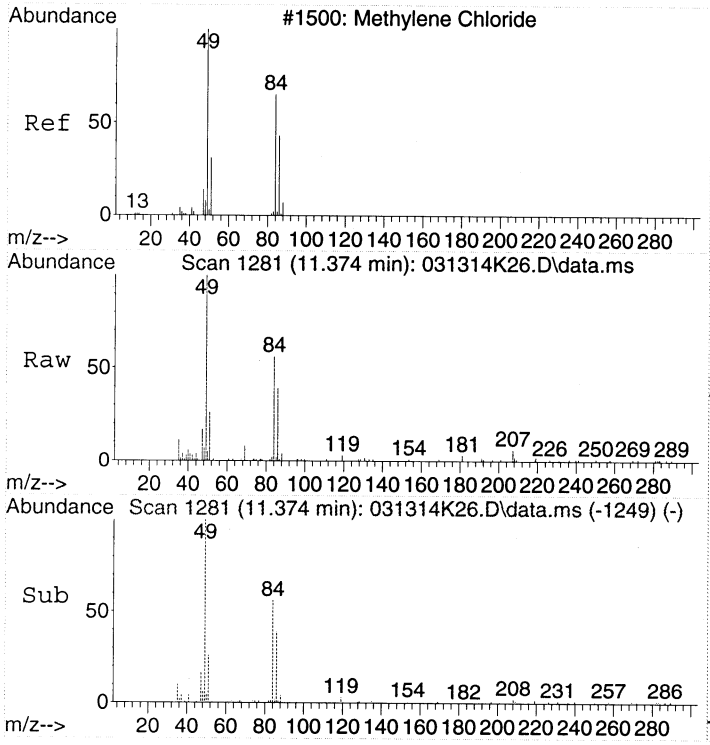


#14
Acetone
Concen: 1.01 ppbv
RT: 9.878 min Scan# 1035
Delta R.T. 0.061 min
Lab File: 031314K26.D
Acq: 14 Mar 2014 4:13

Tgt Ion: 43 Resp: 49009

Ion	Ratio	Lower	Upper
43	100		
58	26.0	8.0	48.0

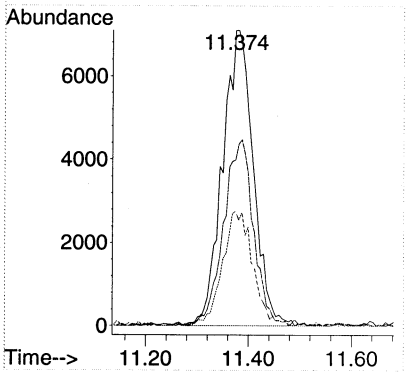


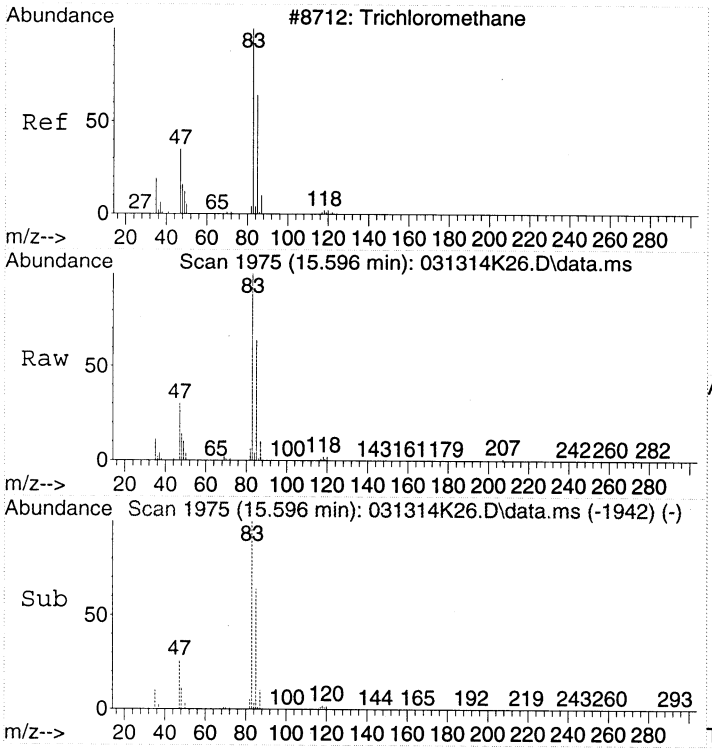


#18
Dichloromethane
Concen: 0.61 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. -0.006 min
Lab File: 031314K26.D
Acq: 14 Mar 2014 4:13

Tgt Ion: 49 Resp: 29621

Ion	Ratio	Lower	Upper
49	100		
84	61.1	54.7	94.7
86	38.6	29.1	69.1

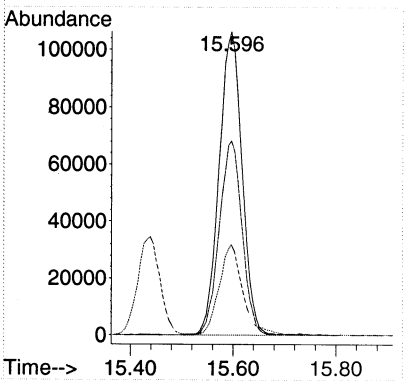


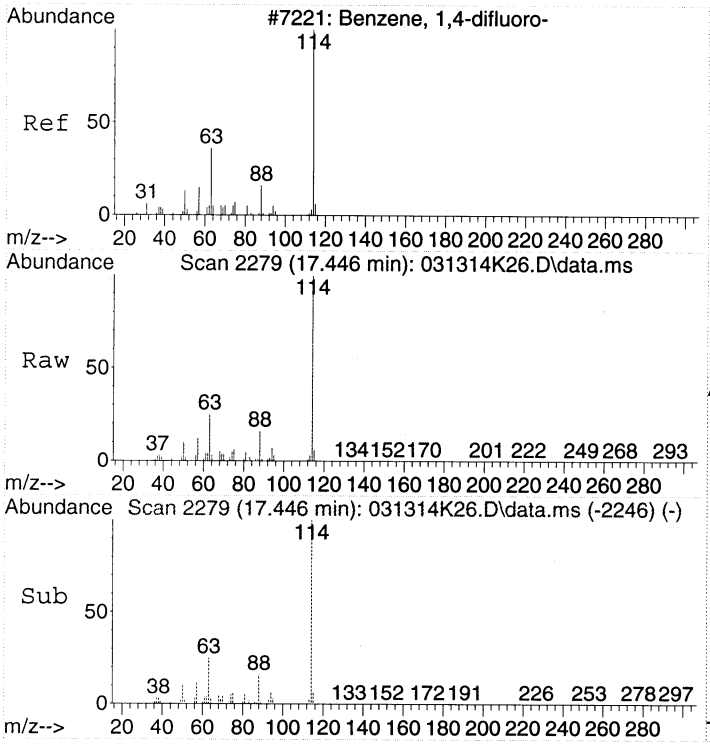


#28
Chloroform
Concen: 4.31 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031314K26.D
Acq: 14 Mar 2014 4:13

Tgt Ion: 83 Resp: 330318

Ion	Ratio	Lower	Upper
83	100		
85	64.1	46.8	86.8
47	29.8	6.3	46.3

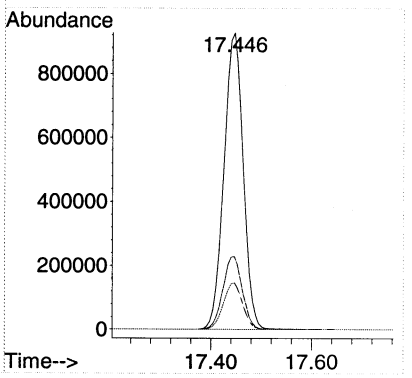


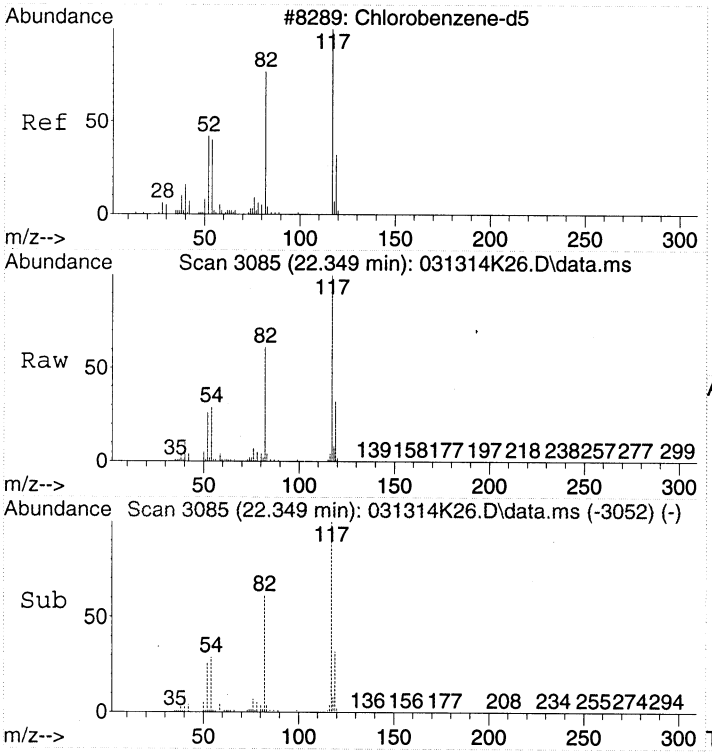


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K26.D
Acq: 14 Mar 2014 4:13

Tgt Ion:114 Resp: 2465612

Ion	Ratio	Lower	Upper
114	100		
63	25.0	2.7	42.7
88	15.8	0.0	36.0

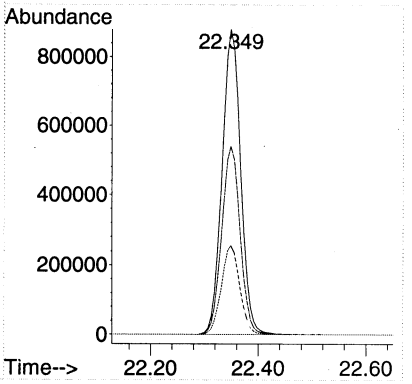




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K26.D
Acq: 14 Mar 2014 4:13

Tgt Ion:117 Resp: 2106019

Ion	Ratio	Lower	Upper
117	100		
82	61.3	36.4	76.4
54	29.1	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K27.D
Acq On : 14 Mar 2014 5:02
Instrument: HP5973K
Operator : EM
Sample : 1403028-12
Misc : 200mL MH71 CAN 1100
ALS Vial : 48
Multiplier: 2.1

Quant Time: Mar 14 19:27:27 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.432	49	1016598	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2407345	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2056382	22.00 ppbv	0.00
Target Compounds					Qvalue
14) Acetone	9.878	43	60785	1.28 ppbv	100
18) Dichloromethane	11.380	49	28172	0.59 ppbv	87
28) Chloroform	15.596	83	381685	5.08 ppbv	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

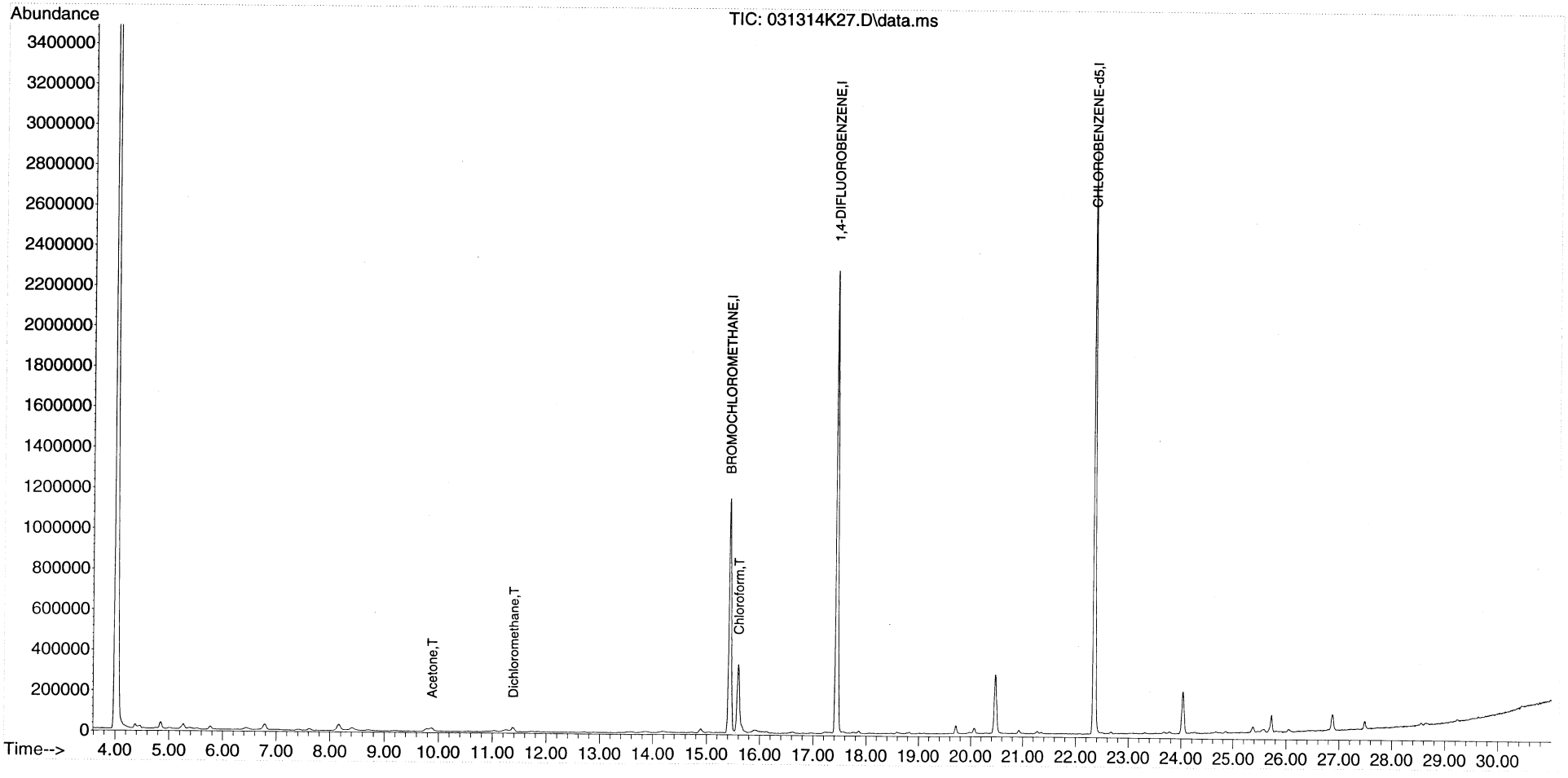
00294

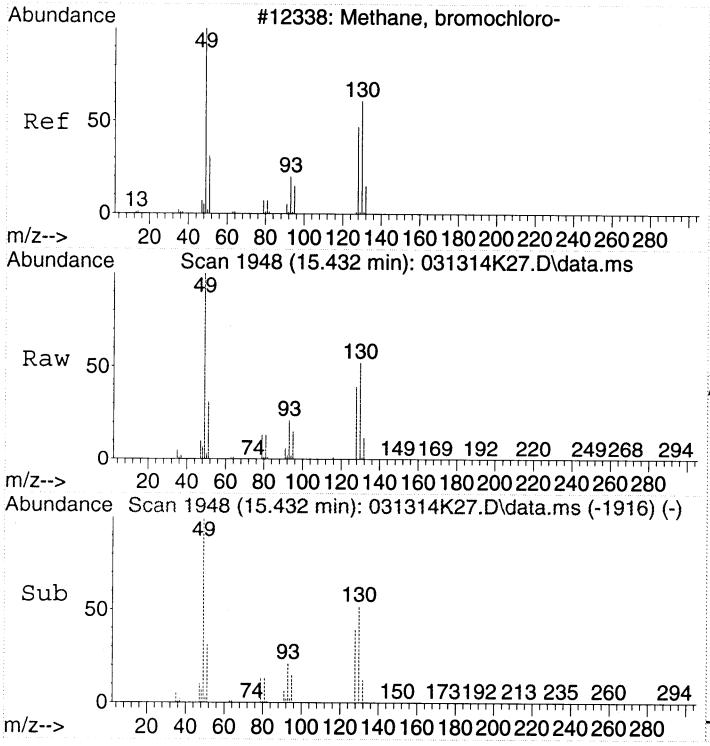
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K27.D
Acq On : 14 Mar 2014 5:02
Instrument: HP5973K
Operator : EM
Sample : 1403028-12
Misc : 200mL MH71 CAN 1100
ALS Vial : 48
Multiplier: 2.1

Quant Time: Mar 14 19:27:27 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

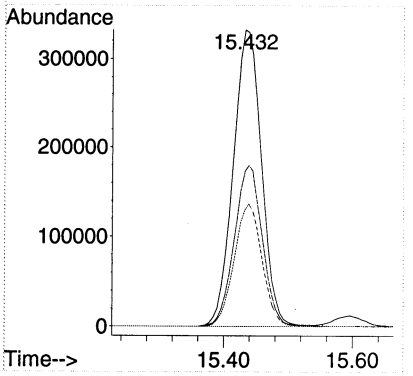


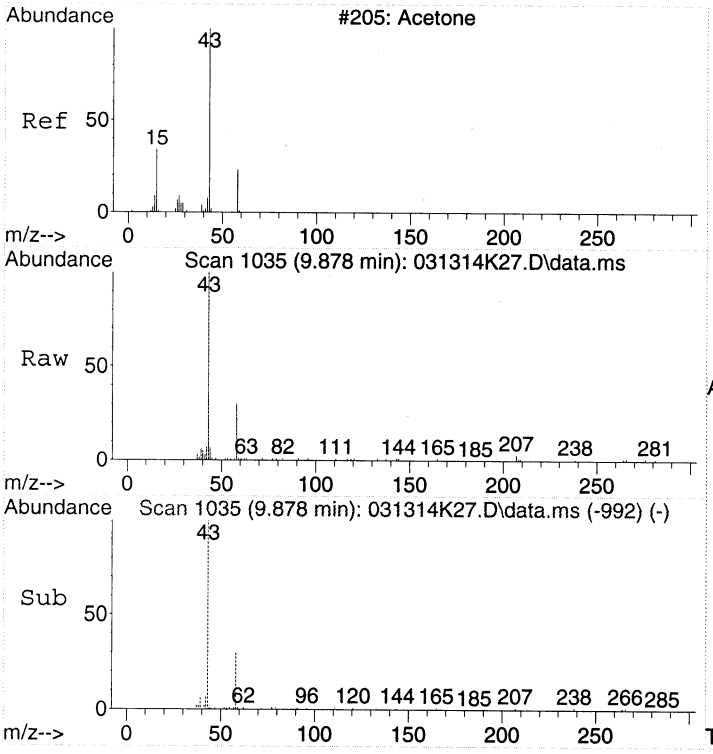


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031314K27.D
Acq: 14 Mar 2014 5:02

Tgt Ion: 49 Resp: 1016598

Ion	Ratio	Lower	Upper
49	100		
130	53.6	53.4	93.4
128	40.6	35.1	75.1

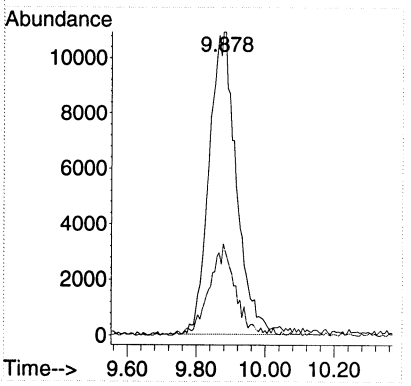


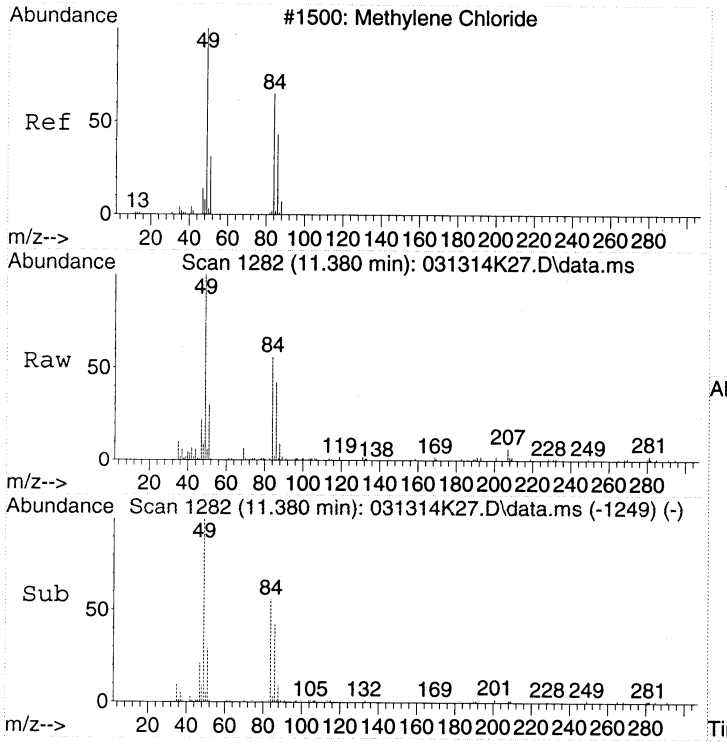


#14
Acetone
Concen: 1.28 ppbv
RT: 9.878 min Scan# 1035
Delta R.T. 0.061 min
Lab File: 031314K27.D
Acq: 14 Mar 2014 5:02

Tgt Ion: 43 Resp: 60785

Ion	Ratio	Lower	Upper
43	100		
58	28.1	8.0	48.0

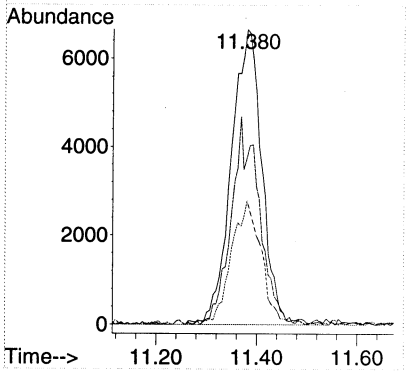


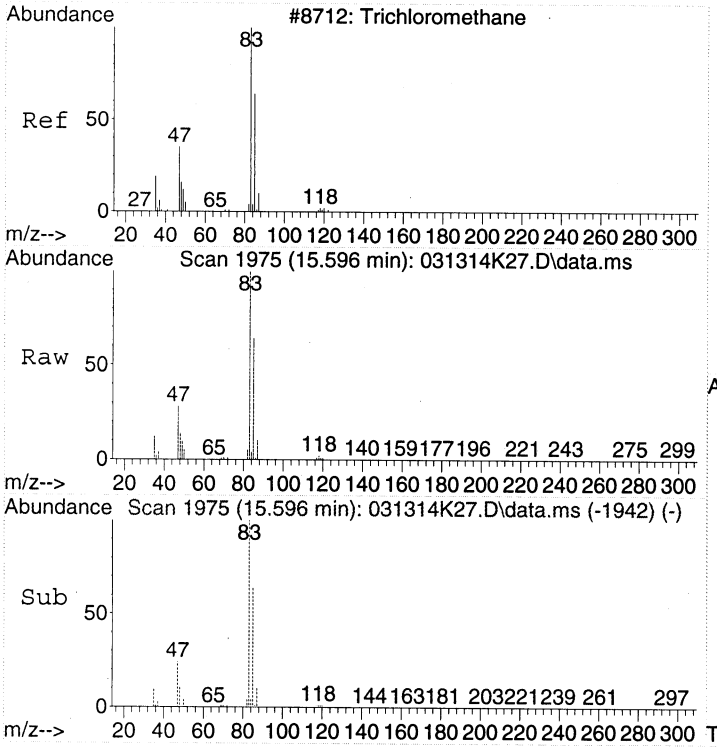


#18
Dichloromethane
Concen: 0.59 ppbv
RT: 11.380 min Scan# 1282
Delta R.T. 0.000 min
Lab File: 031314K27.D
Acq: 14 Mar 2014 5:02

Tgt Ion: 49 Resp: 28172

Ion	Ratio	Lower	Upper
49	100		
84	63.9	54.7	94.7
86	40.7	29.1	69.1

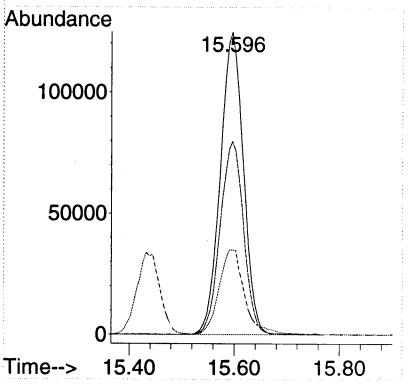


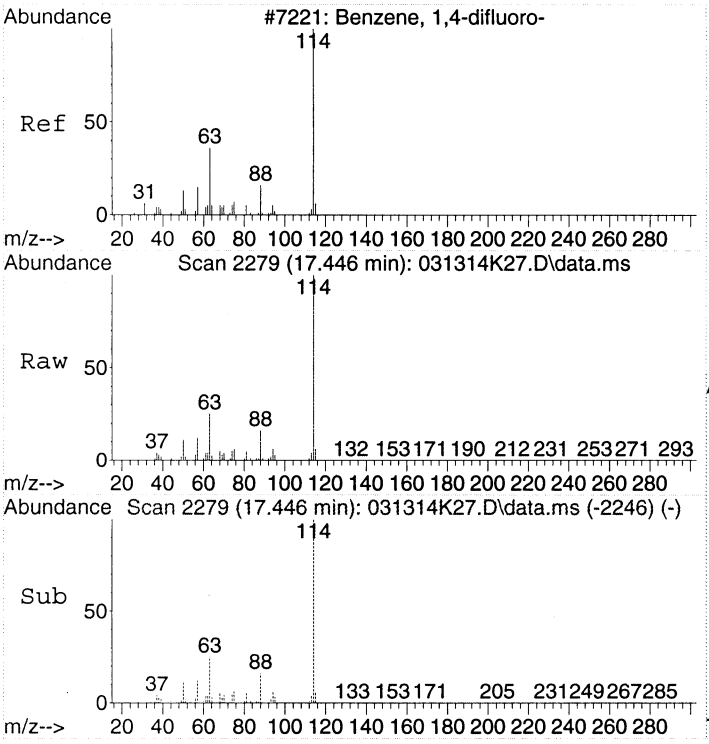


#28
Chloroform
Concen: 5.08 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031314K27.D
Acq: 14 Mar 2014 5:02

Tgt Ion: 83 Resp: 381685

Ion	Ratio	Lower	Upper
83	100		
85	64.9	46.8	86.8
47	30.4	6.3	46.3

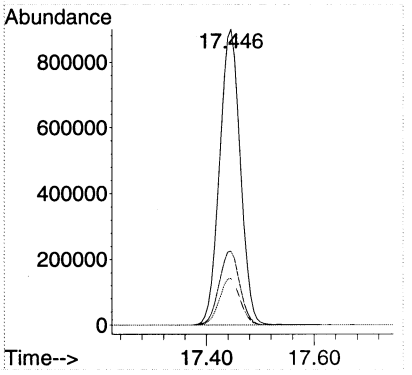


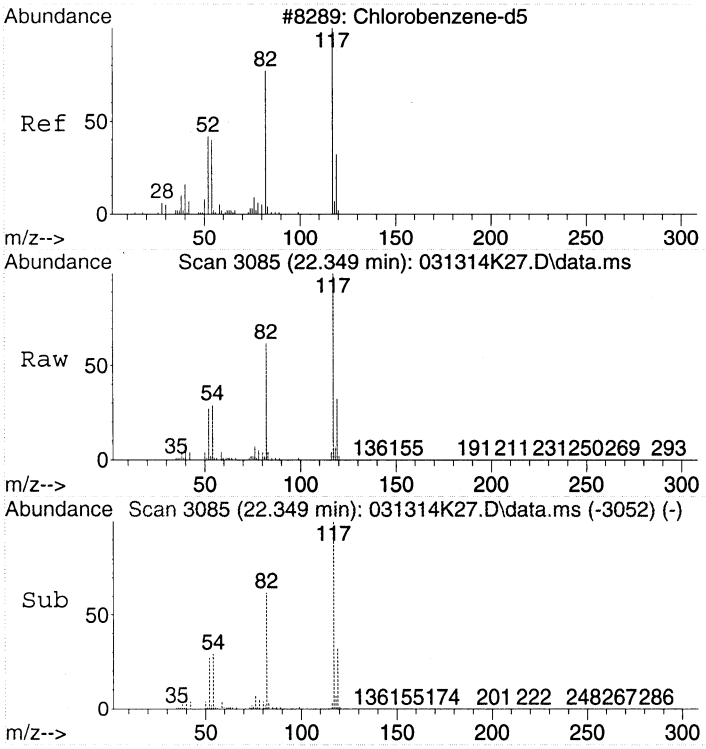


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031314K27.D
Acq: 14 Mar 2014 5:02

Tgt Ion:114 Resp: 2407345

Ion	Ratio	Lower	Upper
114	100		
63	25.2	2.7	42.7
88	15.9	0.0	36.0

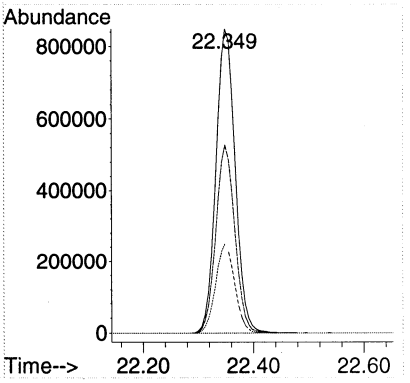




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031314K27.D
Acq: 14 Mar 2014 5:02

Tgt Ion:117 Resp: 2056382

Ion	Ratio	Lower	Upper
117	100		
82	61.1	36.4	76.4
54	29.0	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K28.D
Acq On : 14 Mar 2014 5:51
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 49
Multiplier: 1

Quant Time: Mar 14 19:27:38 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	994959	22.00 ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2296701	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1958616	22.00 ppbv	0.00
Target Compounds					Qvalue
18) Dichloromethane	11.386	49	25076	0.54 ppbv	84

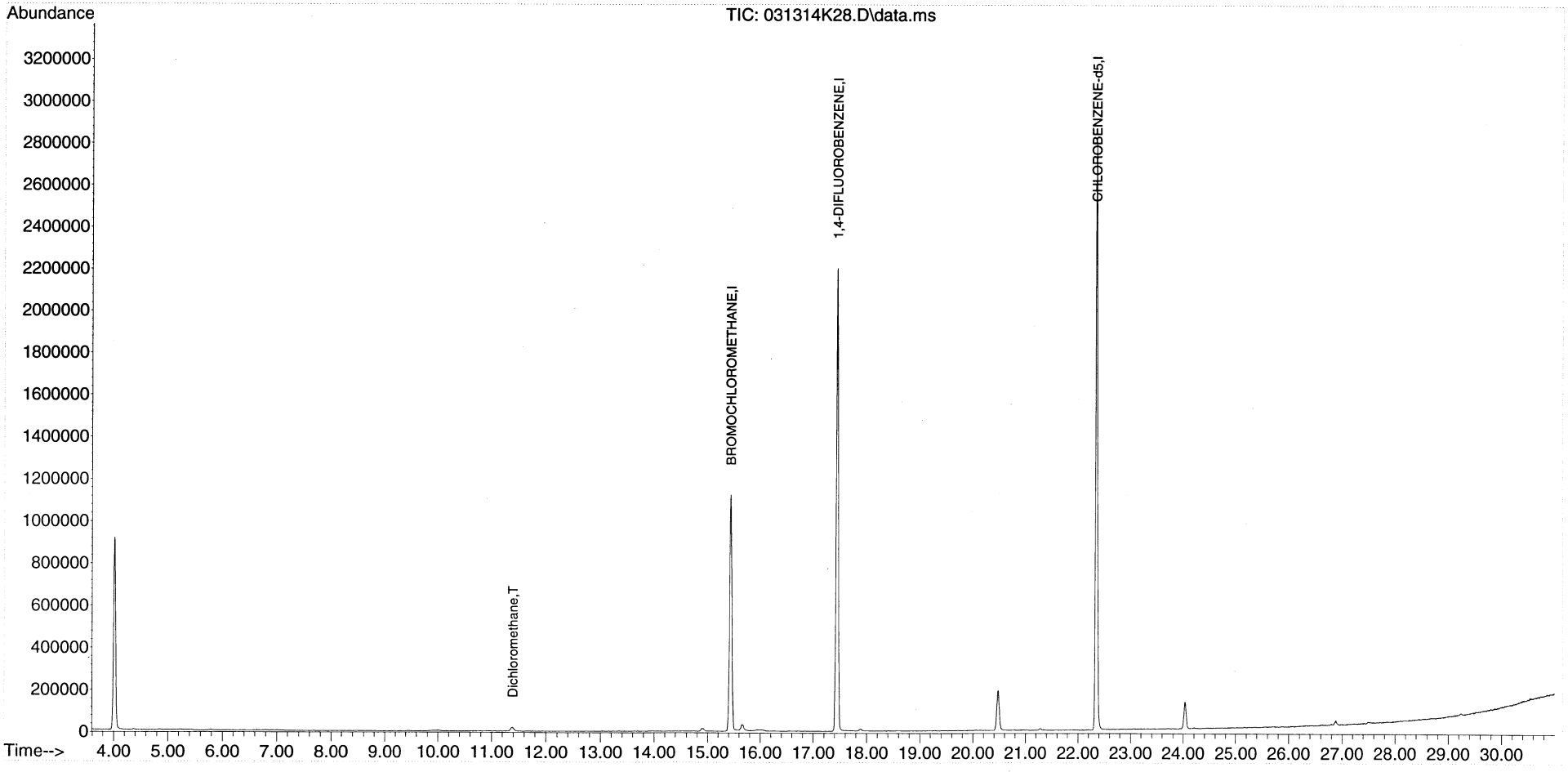
(#) = qualifier out of range (m) = manual integration (+) = signals summed

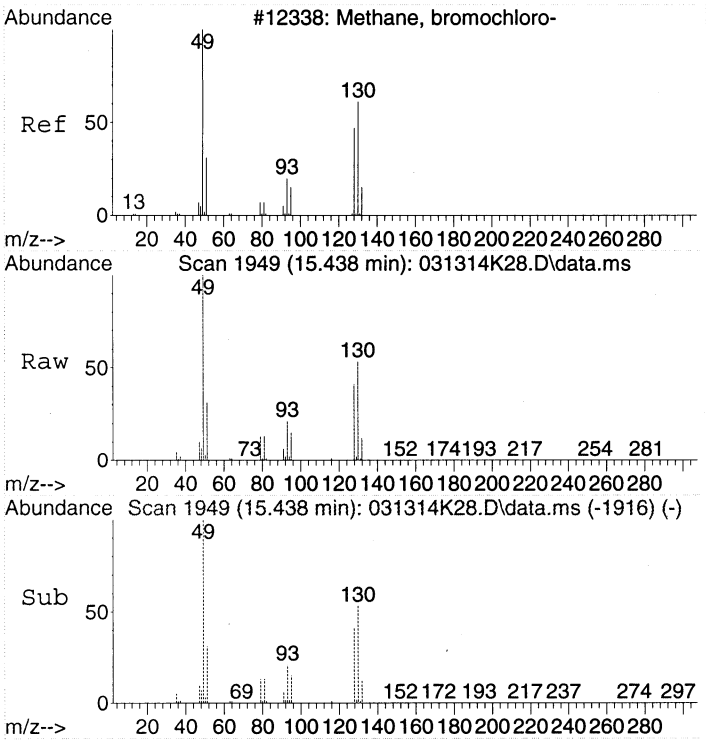
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031314KA\
Data File : 031314K28.D
Acq On : 14 Mar 2014 5:51
Instrument: HP5973K
Operator : EM
Sample : IBL
Misc : IBL
ALS Vial : 49
Multiplier: 1

Quant Time: Mar 14 19:27:38 2014
Quant Title : TO15
QLast Update : Fri Mar 14 19:07:29 2014
Response via : Initial Calibration

DataAcq Meth:031214KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031314KAA.M

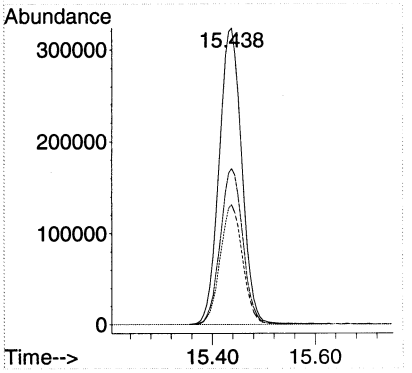


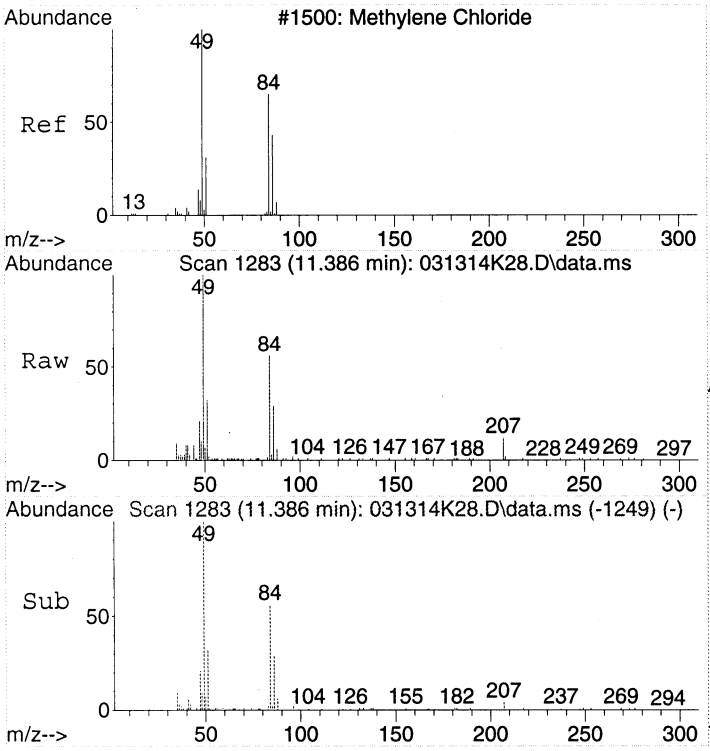


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031314K28.D
Acq: 14 Mar 2014 5:51

Tgt Ion: 49 Resp: 994959

Ion	Ratio	Lower	Upper
49	100		
130	52.6	53.4	93.4#
128	40.2	35.1	75.1

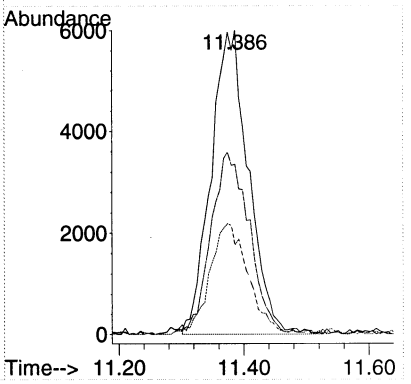


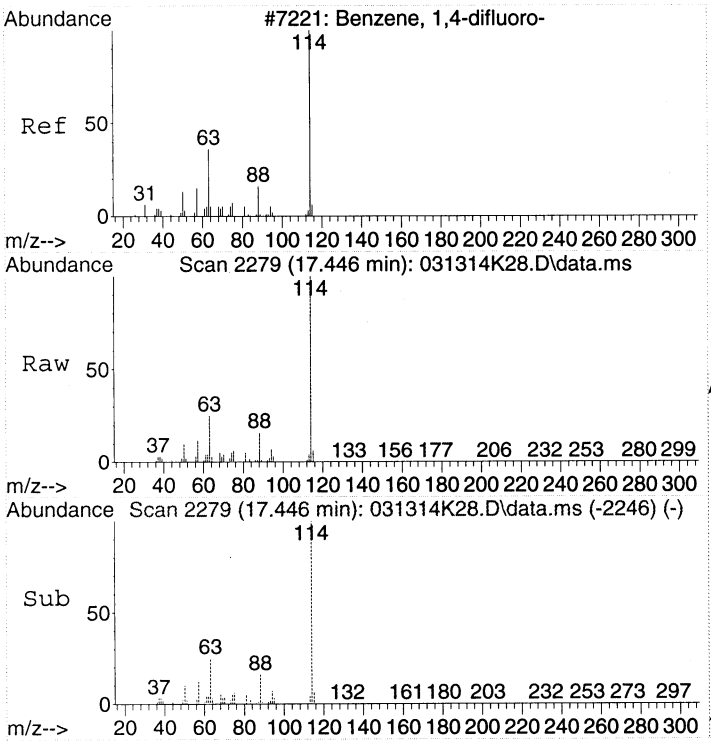


#18
Dichloromethane
Concen: 0.54 ppbv
RT: 11.386 min Scan# 1283
Delta R.T. 0.006 min
Lab File: 031314K28.D
Acq: 14 Mar 2014 5:51

Tgt Ion: 49 Resp: 25076

Ion	Ratio	Lower	Upper
49	100		
84	62.0	54.7	94.7
86	37.4	29.1	69.1

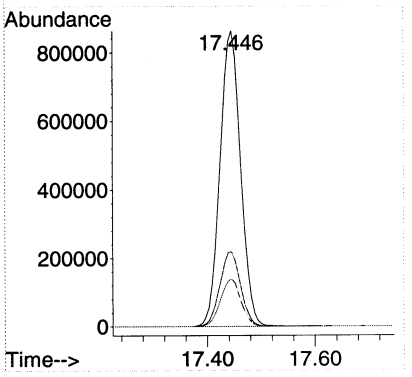


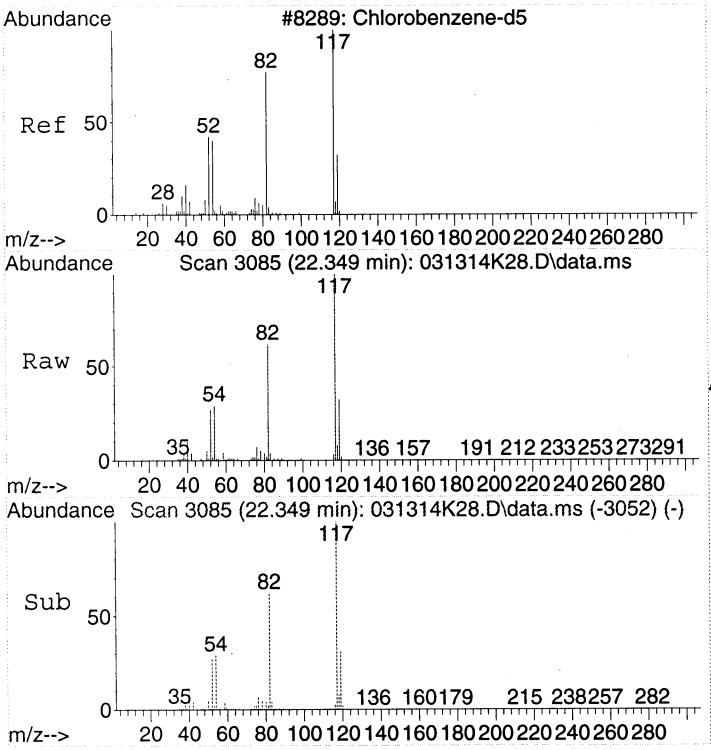


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 031314K28.D
Acq: 14 Mar 2014 5:51

Tgt Ion:114 Resp: 2296701

Ion	Ratio	Lower	Upper
114	100		
63	25.7	2.7	42.7
88	16.1	0.0	36.0

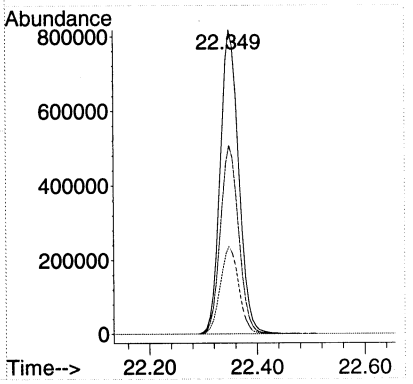




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.000 min
Lab File: 031314K28.D
Acq: 14 Mar 2014 5:51

Tgt Ion:117 Resp: 1958616

Ion	Ratio	Lower	Upper
117	100		
82	61.5	36.4	76.4
54	29.1	5.4	45.4



SDG: 14072D

Instrument: HP5973K

Analysis Date: 3/14/14

SAMPLE DATA

ANALYSIS SEQUENCE

S14C061

Instrument: HP5973K

Calibration ID: 1403007

Printed: 3/25/2014 6:44:09PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S14C061-TUN1	QC		1		1410062			
S14C061-CAL1	QC		2		1411090			
S14C061-CAL2	QC		3		1411091			
S14C061-CAL3	QC		4		1411092			
S14C061-CAL4	QC		5		1411093			
S14C061-CAL5	QC		6		1411094			
S14C061-CAL6	QC		7		1411095			
S14C061-SCV1	QC		8		1411087			
B14C068-BS1	QC		9					
B14C068-BLK1	QC		10			1350050		
1403028-02RE1	VOCs, Soil Gas	A	11			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
B14C068-DUP1	QC		12			1350050		
1403028-03RE1	VOCs, Soil Gas	A	13			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-04RE1	VOCs, Soil Gas	A	14			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-05RE1	VOCs, Soil Gas	A	15			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-07RE1	VOCs, Soil Gas	A	16			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final
1403028-08RE1	VOCs, Soil Gas	A	17			1350050	California Site Cleanup Section 3	14 day prelim - 28 day final

Samples Loaded By Date

Data Processed By Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2014\031414KAA.SEQ
Date: 03-25-2014
Time: 19:14:58
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB 1311118	3	2	100	40	C:\Smart\TO15.CTD	12:00
10 ppbv 1411093	3	2	100	0	C:\Smart\TO15.CTD	12:00
10 ppbv 1411093	3	2	100	0	C:\Smart\TO15.CTD	12:00
1 ppbv 1411090	3	3	20	0	C:\Smart\TO15.CTD	12:00
2 ppbv 1411091	3	3	40	0	C:\Smart\TO15.CTD	12:00
5 ppbv 1411092	3	3	100	0	C:\Smart\TO15.CTD	12:00
15 ppbv 1411094	3	2	150	0	C:\Smart\TO15.CTD	12:00
20 ppbv 1411095	3	2	200	0	C:\Smart\TO15.CTD	12:00
10 ppbv SCV	3	4	100	0	C:\Smart\TO15.CTD	12:00
10 ppbv BS1	3	2	100	0	C:\Smart\TO15.CTD	12:00
CAN 670	3	7	200	0	C:\Smart\TO15.CTD	12:00
CAN 859	3	8	200	0	C:\Smart\TO15.CTD	12:00
CAN 1105	3	9	200	0	C:\Smart\TO15.CTD	12:00
1403028-05RE1	3	10	200	0	C:\Smart\TO15.CTD	12:00
1403028-08RE1	3	11	200	0	C:\Smart\TO15.CTD	12:00
1403028-02RE1	3	12	50	0	C:\Smart\TO15.CTD	12:00
1403028-02DUP1	3	12	50	0	C:\Smart\TO15.CTD	12:00
1403028-03RE1	4	1	50	0	C:\Smart\TO15.CTD	12:00
1403028-04RE1	4	2	50	0	C:\Smart\TO15.CTD	12:00
1403028-07RE1	4	3	20	0	C:\Smart\TO15.CTD	12:00
CAN 636	4	4	200	0	C:\Smart\TO15.CTD	12:00
CAN 648	4	5	200	0	C:\Smart\TO15.CTD	12:00
CAN 870	4	6	200	0	C:\Smart\TO15.CTD	12:00
CAN 1110	4	7	200	0	C:\Smart\TO15.CTD	12:00
CAN 1112	4	8	200	0	C:\Smart\TO15.CTD	12:00
CAN 1114	4	9	200	0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\msdchem\1\DATA\2014\031414KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	031414K01.D	1.	S14C061-TUN1	BFB STD /IS 1350050/10ppbv STD	14 Mar 2014 12:42
2	32	031414K02.D	1.	S14C061-CCV1	10 ppbv	14 Mar 2014 13:29
3	32	031414K03.D	1.	S14C061-CAL4	10 ppbv 1411093	14 Mar 2014 14:16
4	33	031414K04.D	1.	S14C061-CAL1	1.0 ppbv 1411090	14 Mar 2014 15:03
5	33	031414K05.D	1.	S14C061-CAL2	2.0 ppbv 1411091	14 Mar 2014 15:50
6	33	031414K06.D	1.	S14C061-CAL3	5.0 ppbv 1411092	14 Mar 2014 16:37
7	32	031414K07.D	1.	S14C061-CAL5	15 ppbv	14 Mar 2014 17:25
8	32	031414K08.D	1.	S14C061-CAL6	20 ppbv 1411095	14 Mar 2014 18:14
9	34	031414K09.D	1.	S14C061-SCV1	10 ppbv SCV 1411087	14 Mar 2014 19:01
10	32	031414K10.D	1.	B14C068-BS1	10 ppbv BS1 1411096	14 Mar 2014 19:48
11	37	031414K11.D	1.	CAN 670	200mL CAN 670	14 Mar 2014 20:38
12	38	031414K12.D	1.	CAN 859	200mL CAN 859	14 Mar 2014 21:27
13	39	031414K13.D	1.	B14C068-BLK1	200mL CAN 1105	14 Mar 2014 22:17
14	10	031414K14.D	3.66	1403028-05RE1	200mL MH64 CAN 1120	14 Mar 2014 23:07
15	11	031414K15.D	2.98	1403028-08RE1	200mL MH67 CAN 1980	14 Mar 2014 23:57
16	12	031414K16.D	4.39	1403028-02RE1	50mL MH61 CAN 629	15 Mar 2014 00:43
17	12	031414K17.D	4.39	B14C068-DUP1	50mL MH61 CAN 629	15 Mar 2014 01:30
18	41	031414K18.D	4.68	1403028-03RE1	50mL MH62 CAN 1107	15 Mar 2014 02:17
19	42	031414K19.D	4.52	1403028-04RE1	50mL MH63 CAN 1113	15 Mar 2014 03:04
20	43	031414K20.D	3.82	1403028-07RE1	20mL MH66 CAN 626	15 Mar 2014 03:50
21	44	031414K21.D	1.	CAN 636	CAN 636	15 Mar 2014 04:40
22	45	031414K22.D	1.	CAN 648	CAN 648	15 Mar 2014 05:30
23	46	031414K23.D	1.	CAN 870	CAN 870	15 Mar 2014 06:20
24	47	031414K24.D	1.	CAN 1110	CAN 1110	15 Mar 2014 07:09
25	48	031414K25.D	1.	CAN 1112	CAN 1112	15 Mar 2014 07:59
26	49	031414K26.D	1.	CAN 1114	CAN 1114	15 Mar 2014 08:49

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031414KAA.M
Title : TO15
Last Update : Fri Mar 14 18:45:41 2014
Response Via : Initial Calibration

Calibration Files
1 =031414K04.D 2 =031414K05.D 5 =031414K06.D 10 =031414K03.D 15 =031414K07.D
20 =031414K08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.659	0.576	0.513	0.572	0.502	0.500	0.554	11.17
3)	T	Dichlorodifluo...	2.124	1.741	1.586	1.724	1.501	1.571	1.708	13.12
4)	T	1,2-Dichlorote...	1.796	1.492	1.355	1.477	1.296	1.417	1.472	11.89
5)	T	Chloromethane	0.719	0.622	0.579	0.617	0.539	0.571	0.608	10.31
6)	T	Vinyl chloride	0.796	0.630	0.605	0.660	0.561	0.622	0.646	12.49
7)	T	1,3-Butadiene	0.571	0.479	0.457	0.493	0.426	0.467	0.482	10.13
8)	T	Bromomethane	0.584	0.505	0.469	0.496	0.452	0.462	0.495	9.76
9)	T	Chloroethane	0.428	0.366	0.344	0.352	0.338	0.329	0.359	9.93
10)	T	Bromoethene	0.570	0.453	0.411	0.452	0.418	0.426	0.455	12.92
11)	T	Trichlorofluor...	2.109	1.718	1.570	1.713	1.553	1.620	1.714	12.01
12)	T	1,1,2-Trichlor...	1.099	0.952	0.863	0.942	0.845	0.890	0.932	9.89
13)	T	1,1-Dichloroet...	1.295	1.148	1.093	1.166	1.075	1.089	1.144	7.17
14)	T	Acetone	1.135	1.060	0.959	1.086	1.013	0.992	1.041	6.25
15)	T	Carbon disulfide	1.695	1.514	1.414	1.561	1.431	1.425	1.507	7.25
16)	T	2-Propanol	0.988	0.995	0.962	1.116	1.059	1.038	1.026	5.49
17)	T	Allyl chloride	0.890	0.844	0.802	0.888	0.848	0.805	0.846	4.52
18)	T	Dichloromethane	1.505	1.154	0.929	0.941	0.841	0.821	1.032	25.22
19)	T	tert-Butyl met...	1.761	1.700	1.595	1.803	1.677	1.704	1.707	4.18
20)	T	trans-1,2-Dich...	0.961	0.850	0.799	0.888	0.826	0.813	0.856	7.00
21)	T	Hexane	1.079	1.020	0.963	1.076	1.019	0.976	1.022	4.75
22)	T	1,1-Dichloroet...	1.542	1.382	1.268	1.371	1.272	1.266	1.350	7.99
23)	T	Vinyl acetate	1.772	1.656	1.636	1.968	1.895	1.804	1.788	7.29
24)	T	cis-1,2-Dichlo...	1.177	1.046	0.969	1.054	0.987	0.969	1.034	7.71
25)	T	2-Butanone (MEK)	0.314	0.279	0.258	0.309	0.286	0.283	0.288	7.11
26)	T	Ethyl acetate	0.213	0.195	0.190	0.211	0.206	0.197	0.202	4.72
27)	T	Tetrahydrofuran	0.914	0.871	0.808	0.910	0.875	0.846	0.870	4.59
28)	T	Chloroform	1.669	1.430	1.319	1.440	1.326	1.376	1.427	9.04
29)	T	Cyclohexane	1.210	1.059	1.003	1.116	1.058	1.046	1.082	6.66
30)	T	1,1,1-Trichlor...	1.822	1.536	1.423	1.581	1.425	1.501	1.548	9.55
31)	T	Carbon tetrach...	1.857	1.560	1.419	1.596	1.437	1.548	1.570	10.05
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	1.009	0.936	0.846	0.905	0.854	0.819	0.895	7.83
34)	T	2,2,4-Trimethy...	1.469	1.382	1.284	1.414	1.377	1.292	1.370	5.20
35)	T	1,2-Dichloroet...	0.540	0.481	0.432	0.478	0.451	0.439	0.470	8.46
36)	T	Heptane	0.590	0.563	0.530	0.582	0.584	0.529	0.563	4.90
37)	T	Trichloroethene	0.393	0.350	0.316	0.346	0.325	0.325	0.343	8.16
38)	T	1,2-Dichloropr...	0.392	0.361	0.324	0.345	0.339	0.314	0.346	8.11
39)	T	1,4-Dioxane	0.172	0.166	0.153	0.169	0.166	0.160	0.165	4.19
40)	T	Bromodichlorom...	0.664	0.607	0.551	0.622	0.589	0.573	0.601	6.58
41)	T	cis-1,3-Dichlo...	0.579	0.517	0.475	0.522	0.507	0.484	0.514	7.15
42)	T	4-Methyl-2-pen...	0.837	0.761	0.712	0.810	0.810	0.737	0.778	6.26
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.336	1.184	1.091	1.179	1.148	1.099	1.173	7.58
45)	T	trans-1,3-Dich...	0.625	0.586	0.539	0.601	0.577	0.565	0.582	5.07
46)	T	1,1,2-Trichlor...	0.410	0.402	0.353	0.376	0.366	0.352	0.376	6.51
47)	T	Tetrachloroethene	0.594	0.546	0.486	0.533	0.504	0.506	0.528	7.31
48)	T	2-Hexanone	0.834	0.834	0.796	0.879	0.898	0.820	0.843	4.53
49)	T	Chlorodibromom...	0.643	0.592	0.554	0.634	0.600	0.594	0.603	5.35
50)	T	1,2-Dibromoeth...	0.622	0.579	0.523	0.584	0.548	0.536	0.565	6.51
51)	T	Chlorobenzene	0.984	0.884	0.808	0.898	0.827	0.804	0.867	7.99
52)	T	Ethylbenzene	1.791	1.617	1.495	1.678	1.576	1.524	1.613	6.75
53)	T	m&p-Xylene	1.341	1.205	1.154	1.294	1.223	1.199	1.236	5.56
54)	T	o-Xylene	1.355	1.246	1.151	1.275	1.229	1.206	1.244	5.53
55)	T	Styrene	1.013	0.942	0.887	0.981	0.955	0.943	0.953	4.45
56)	T	Bromoform	0.630	0.606	0.547	0.657	0.621	0.629	0.615	6.04

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 031414KAA.M
Title : TO15

57)	T	1,1,2,2-Tetrac...	0.994	0.958	0.849	0.905	0.895	0.855	0.909	6.28
58)	T	4-Ethyltoluene	1.560	1.517	1.392	1.565	1.519	1.502	1.509	4.16
59)	T	1,3,5-Trimethy...	1.509	1.416	1.328	1.461	1.404	1.407	1.421	4.28
60)	T	1,2,4-Trimethy...	1.525	1.453	1.349	1.492	1.442	1.416	1.446	4.24
61)	T	1,3-Dichlorobe...	1.044	0.979	0.902	1.003	0.971	0.989	0.981	4.76
62)	T	1,4-Dichlorobe...	1.068	0.973	0.903	1.005	0.980	0.990	0.987	5.41
63)	T	Benzyl chloride	1.230	1.175	1.112	1.361	1.341	1.326	1.257	8.04
64)	T	1,2-Dichlorobe...	1.003	0.934	0.877	0.968	0.935	0.952	0.945	4.44
65)	T	1,2,4-Trichlor...	1.029	0.951	0.865	0.992	0.957	1.003	0.966	5.96
66)	T	Hexachlorobuta...	0.942	0.872	0.802	0.845	0.759	0.785	0.834	7.99

(#) = Out of Range

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2014\031414KA\031414K01.D
Tune Time : 14 Mar 2014 12:42

Daily Calibration File : C:\msdchem\1\DATA\2014\031414KA\031414K10.D

File	Sample	Surrogate Recovery %	Internal Standard Responses			
			866519	2270220	2050910	
031414K02.D	S14C061-CCV1	980697	2378986	2027486	Failed RR ICAL	
031414K03.D	S14C061-CAL4	874386	2120842	1927062		
031414K04.D	S14C061-CAL1	886867	2193776	2118293		
031414K05.D	S14C061-CAL2	960089	2274176	2021646		
031414K06.D	S14C061-CAL3	980253	2358221	2084965		
031414K07.D	S14C061-CAL4	1009459	2396399	2110930		
031414K08.D	S14C061-CAL5	926725	2329322	2069944		
031414K09.D	S14C061-SCV1	825821	2208651	2110569		
031414K10.D	B14C068-BS1	866519	2270221	2050912		
031414K11.D	CAN 670	844397	2172360	1936051		
031414K12.D	CAN 859	991407	2473627	2213596		
031414K13.D	B14C068-BLK1	1006151	2323104	2082276		
031414K14.D	1403028-05RE1	1040413	2406406	2094765		
031414K15.D	1403028-08RE1	998663	2311322	2002986		
031414K16.D	1403028-02RE1	989388	2255914	1965244		
031414K17.D	B14C068-DUP1	993155	2338241	2018763		
031414K18.D	1403028-03RE1	955636	2186965	1888801		
031414K19.D	1403028-04RE1	928137	2223823	1932332		
031414K20.D	1403028-07RE1	917910	2219626	1928523		

031414K21.D				
	CAN 636	915831	2208243	1962522
031414K22.D				
	CAN 648	914786	2206658	1900368
031414K23.D				
	CAN 870	898155	2183480	1908891
031414K24.D				
	CAN 1110	884500	2121743	1877976
031414K25.D				
	CAN 1112	877102	2079015	1821348
031414K26.D				
	CAN 1114	890547	2154233	1878633

(fails) - fails 24hr time check * - fails criteria

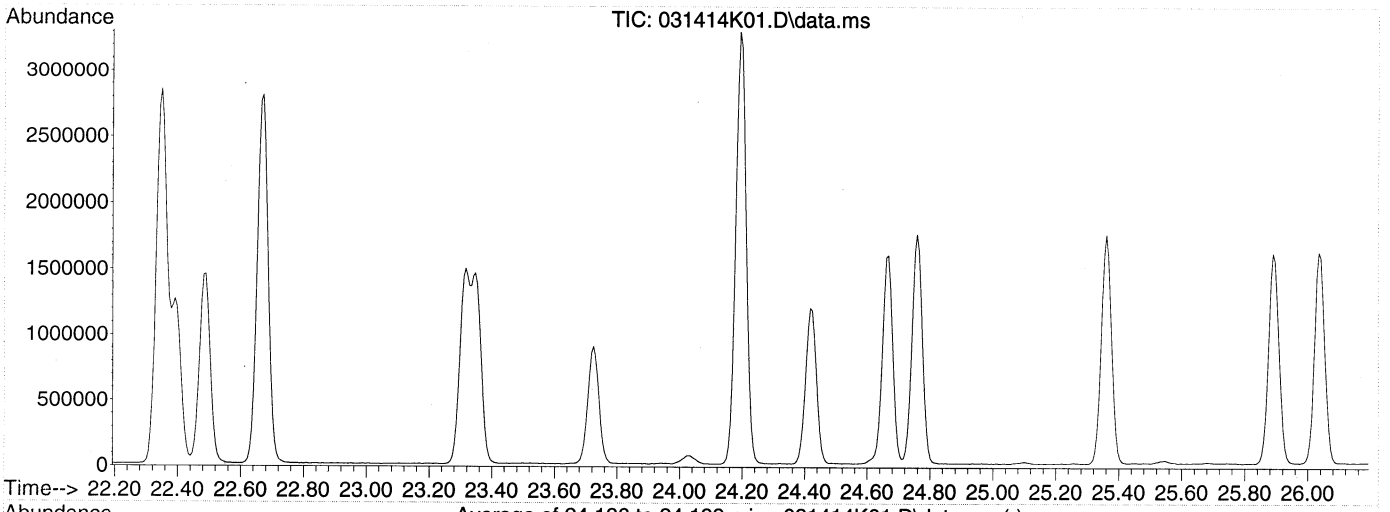
Created: Tue Mar 25 17:43:27 2014 HP5973K

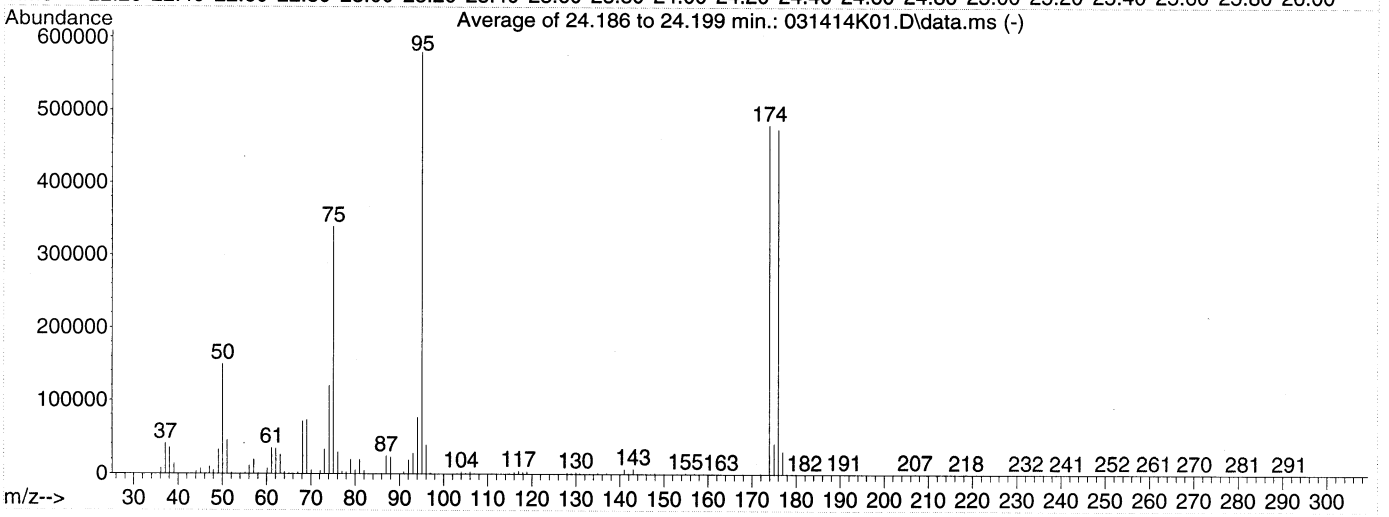
BFB

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K01.D
Acq On : 14 Mar 2014 12:42
Operator : EM
Sample : S14C061-TUN1
Misc : BFB STD /IS 1350050/10ppbv STD•
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\2014\031414KAA.M
Title : TO15
Last Update : Fri Mar 14 18:45:41 2014





AutoFind: Scans 3387, 3388, 3389; Background Corrected with Scan 3373

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	25.9	149916	PASS
75	95	30	66	58.5	338910	PASS
95	95	100	100	100.0	579614	PASS
96	95	5	9	6.6	38501	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	82.8	480007	PASS
175	174	4	9	8.5	40970	PASS
176	174	93	101	98.8	474143	PASS
177	176	5	9	6.5	31034	PASS

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	73	46.05	414	56.10	11013	65.90	83
36.10	7563	46.30	218	57.10	19374	67.05	2132
37.10	40715	47.10	9866	58.00	160	68.10	70723
38.05	35013	48.00	4953	58.15	607	69.05	72575
39.05	13710	49.10	32451	59.00	17	70.10	5228
40.10	386	50.05	149916	60.10	7223	71.00	132
41.00	136	51.10	45331	61.10	34410	71.30	42
42.10	159	52.10	1788	62.05	34120	72.10	4101
43.05	164	53.05	141	63.10	25593	73.05	32803
44.10	3665	54.15	133	64.00	2516	74.10	119992
45.10	6788	55.10	1752	65.05	808	75.10	338910

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.10	28997	87.00	24081	97.95	156	105.00	1033
77.05	3362	88.00	22612	98.95	60	106.00	2854
77.95	2248	89.20	6	99.30	10	106.95	570
79.00	19470	89.80	30	99.70	15	107.75	56
80.00	5541	91.00	2701	100.30	30	108.30	74
81.00	19725	92.05	19239	100.60	27	108.50	19
82.00	4436	93.05	28059	101.50	17	108.95	110
83.05	421	94.05	76083	102.20	72	109.95	394
84.00	37	95.10	579614	103.00	117	110.90	578
84.75	58	96.05	38501	103.20	150	112.00	534
85.95	638	97.00	1140	104.00	2969	113.00	705

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
114.95	693	124.00	411	132.30	44	139.90	225
115.95	2332	124.95	285	133.00	107	140.20	260
117.00	4342	125.90	41	133.20	120	141.00	6755
117.90	2357	126.10	207	133.95	239	141.85	1010
118.90	3545	126.85	138	135.00	1454	143.00	7206
120.05	136	128.00	1877	135.90	218	143.95	480
120.60	19	128.95	1057	137.00	1346	145.05	657
121.20	42	130.00	2350	137.90	48	145.90	793
121.40	16	130.85	978	138.20	72	147.00	432
121.90	189	131.70	53	138.70	56	147.95	1558
122.95	202	131.90	90	139.05	284	148.95	386

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
150.05	632	157.90	44	166.70	15	173.95	480007
150.85	138	158.20	70	167.30	12	175.00	40970
151.20	20	159.00	805	167.85	79	175.95	474143
151.80	115	159.85	119	168.10	34	177.00	31034
152.05	182	160.95	863	168.40	26	177.90	877
152.95	489	162.05	28	169.10	88	179.85	32
153.90	294	162.95	127	170.00	108	180.60	10
154.95	1602	163.70	25	170.30	104	181.20	8
155.80	76	164.70	28	170.50	142	181.60	7
156.00	196	164.95	14	171.00	126	182.00	15
156.90	1274	166.50	15	171.90	619	183.10	17

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.55	22	197.10	26	207.05	655	222.50	32
187.95	98	198.00	8	209.10	67	223.20	56
188.95	10	199.60	8	210.10	56	224.10	10
189.55	29	200.80	48	210.25	64	224.70	13
190.90	113	201.80	15	213.00	28	225.40	13
191.80	83	202.10	33	215.10	41	226.95	38
192.30	78	202.90	11	215.90	35	227.80	16
193.15	49	203.20	22	218.60	56	228.20	8
194.90	70	203.50	21	219.20	19	229.60	9

196.05	3	203.70	19	219.80	15	230.00	34
196.40	16	204.60	8	220.95	32	230.40	12

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.00	28	242.60	7	250.90	66	257.50	11
231.40	28	243.35	17	251.65	71	259.20	20
232.10	114	244.80	16	253.05	101	259.95	70
233.10	16	246.05	25	253.80	132	261.00	173
235.00	11	246.30	10	254.20	69	261.90	67
236.00	30	246.80	37	254.40	29	262.40	8
237.50	26	249.20	45	255.00	94	263.15	50
238.90	37	249.50	24	255.90	23	263.90	8
239.20	14	249.80	1	256.20	9	264.45	33
239.95	73	250.10	20	256.70	14	264.80	30
241.35	20	250.50	31	257.10	11	265.40	17

Average of 24.186 to 24.199 min.: 031414K01.D\data.ms
S14C061-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.60	20	274.20	19	292.50	15		
266.95	67	275.20	14	292.90	7		
268.20	80	277.20	16	293.10	12		
269.05	152	280.20	9	293.70	2		
270.00	177	281.05	130	294.20	10		
270.15	226	284.70	12	294.95	6		
270.90	88	285.10	29	295.80	31		
272.30	10	286.05	31	296.65	21		
272.90	7	287.05	18	297.25	30		
273.20	33	288.85	27	299.20	7		
273.40	19	291.50	42				

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K10.D
Acq On : 14 Mar 2014 19:48
Instrument: HP5973K
Operator : EM
Sample : B14C068-BS1
Misc : 10 ppbv BS1 1411096
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 25 18:34:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	99	0.00
2	T	Propene	0.554	0.513	7.4	89	0.00
3	T	Dichlorodifluoromethane	1.708	1.785	-4.5	103	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.472	1.557	-5.8	104	0.00
5	T	Chloromethane	0.608	0.597	1.8	96	0.00
6	T	Vinyl chloride	0.646	0.665	-2.9	100	0.00
7	T	1,3-Butadiene	0.482	0.502	-4.1	101	0.00
8	T	Bromomethane	0.495	0.525	-6.1	105	0.00
9	T	Chloroethane	0.359	0.366	-1.9	103	0.00
10	T	Bromoethene	0.455	0.472	-3.7	104	0.00
11	T	Trichlorofluoromethane	1.714	1.802	-5.1	104	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	0.932	1.021	-9.5	107	0.02
13	T	1,1-Dichloroethene	1.144	1.187	-3.8	101	-0.01
14	T	Acetone	1.041	1.060	-1.8	97	0.00
15	T	Carbon disulfide	1.507	1.580	-4.8	100	0.00
16	T	2-Propanol	1.026	1.083	-5.6	96	0.00
17	T	Allyl chloride	0.846	0.861	-1.8	96	0.00
18	T	Dichloromethane	1.032	0.891	13.7	94	0.00
19	T	tert-Butyl methyl ether (MT	1.707	1.890	-10.7	104	0.00
20	T	trans-1,2-Dichloroethene	0.856	0.886	-3.5	99	0.00
21	T	Hexane	1.022	1.064	-4.1	98	0.00
22	T	1,1-Dichloroethane	1.350	1.386	-2.7	100	0.00
23	T	Vinyl acetate	1.788	1.882	-5.3	95	0.00
24	T	cis-1,2-Dichloroethene	1.034	1.050	-1.5	99	0.00
25	T	2-Butanone (MEK)	0.288	0.313	-8.7	101	0.00
26	T	Ethyl acetate	0.202	0.207	-2.5	97	0.00
27	T	Tetrahydrofuran	0.870	0.863	0.8	94	0.00
28	T	Chloroform	1.427	1.486	-4.1	102	0.00
29	T	Cyclohexane	1.082	1.097	-1.4	97	0.00
30	T	1,1,1-Trichloroethane	1.548	1.629	-5.2	102	0.00
31	T	Carbon tetrachloride	1.570	1.688	-7.5	105	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	107	0.00
33	T	Benzene	0.895	0.853	4.7	101	0.00
34	T	2,2,4-Trimethylpentane	1.370	1.298	5.3	98	0.00
35	T	1,2-Dichloroethane	0.470	0.453	3.6	101	0.00
36	T	Heptane	0.563	0.506	10.1	93	0.00
37	T	Trichloroethene	0.343	0.347	-1.2	107	0.00
38	T	1,2-Dichloropropane	0.346	0.317	8.4	98	0.00
39	T	1,4-Dioxane	0.165	0.164	0.6	104	0.00
40	T	Bromodichloromethane	0.601	0.576	4.2	99	0.00
41	T	cis-1,3-Dichloropropene	0.514	0.482	6.2	99	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.778	0.689	11.4	91	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	106	0.00
44	T	Toluene	1.173	1.102	6.1	99	0.00
45	T	trans-1,3-Dichloropropene	0.582	0.550	5.5	97	0.00

00311

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K10.D
Acq On : 14 Mar 2014 19:48
Instrument: HP5973K
Operator : EM
Sample : B14C068-BS1
Misc : 10 ppbv BS1 1411096
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 25 18:34:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	1,1,2-Trichloroethane	0.376	0.350	6.9	99	0.00
47	T	Tetrachloroethene	0.528	0.522	1.1	104	0.00
48	T	2-Hexanone	0.843	0.771	8.5	93	0.00
49	T	Chlorodibromomethane	0.603	0.613	-1.7	103	0.00
50	T	1,2-Dibromoethane (EDB)	0.565	0.548	3.0	100	0.00
51	T	Chlorobenzene	0.867	0.831	4.2	98	0.00
52	T	Ethylbenzene	1.613	1.542	4.4	98	0.00
53	T	m&p-Xylene	1.236	1.199	3.0	99	0.00
54	T	o-Xylene	1.244	1.209	2.8	101	0.00
55	T	Styrene	0.953	0.938	1.6	102	0.00
56	T	Bromoform	0.615	0.655	-6.5	106	0.00
57	T	1,1,2,2-Tetrachloroethane	0.909	0.898	1.2	106	0.00
58	T	4-Ethyltoluene	1.509	1.608	-6.6	109	0.00
59	T	1,3,5-Trimethylbenzene	1.421	1.493	-5.1	109	0.00
60	T	1,2,4-Trimethylbenzene	1.446	1.535	-6.2	109	0.00
61	T	1,3-Dichlorobenzene	0.981	1.059	-8.0	112	0.00
62	T	1,4-Dichlorobenzene	0.987	1.054	-6.8	112	0.00
63	T	Benzyl chloride	1.257	1.400	-11.4	109	0.00
64	T	1,2-Dichlorobenzene	0.945	1.012	-7.1	111	0.00
65	T	1,2,4-Trichlorobenzene	0.966	1.042	-7.9	112	0.00
66	T	Hexachlorobutadiene	0.834	0.896	-7.4	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

00312

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K10.D
Acq On : 14 Mar 2014 19:48
Instrument: HP5973K
Operator : EM
Sample : B14C068-BS1
Misc : 10 ppbv BS1 1411096
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 25 18:34:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	866519	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2270221	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2050912	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	208062	9.54	ppbv	97
3) Dichlorodifluoromethane	4.457	85	724146	10.77	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.810	85	643877	11.11	ppbv	94
5) Chloromethane	5.005	50	246754	10.30	ppbv	99
6) Vinyl chloride	5.327	62	275056	10.82	ppbv	100
7) 1,3-Butadiene	5.425	54	197851	10.42	ppbv	96
8) Bromomethane	6.355	94	213180	10.94	ppbv	100
9) Chloroethane	6.684	64	148402	10.48	ppbv	99
10) Bromoethene	7.256	106	193543	10.80	ppbv	99
11) Trichlorofluoromethane	7.396	101	759610	11.25	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	390056	10.63	ppbv	92
13) 1,1-Dichloroethene	9.282	61	448785	9.96	ppbv	95
14) Acetone	9.805	43	438410	10.69	ppbv	99
15) Carbon disulfide	10.012	76	653688	11.02	ppbv	98
16) 2-Propanol	10.438	45	452210	11.19	ppbv	98
17) Allyl chloride	10.833	41	363132	10.89	ppbv	92
18) Dichloromethane	11.374	49	344146	8.47	ppbv	90
19) tert-Butyl methyl ethe...	12.074	73	796613	11.85	ppbv	97
20) trans-1,2-Dichloroethene	12.098	61	356193	10.56	ppbv	94
21) Hexane	12.707	57	431892	10.73	ppbv	95
22) 1,1-Dichloroethane	13.443	63	529732	9.96	ppbv	100
23) Vinyl acetate	13.595	43	785693	11.15	ppbv	96
24) cis-1,2-Dichloroethene	14.897	61	417779	10.26	ppbv	94
25) 2-Butanone (MEK)	14.988	72	129591	11.42	ppbv #	74
26) Ethyl acetate	15.043	61	84730	10.66	ppbv #	91
27) Tetrahydrofuran	15.450	42	350258	10.22	ppbv	91
28) Chloroform	15.596	83	597137	10.63	ppbv	97
29) Cyclohexane	15.828	56	453754	10.65	ppbv	94
30) 1,1,1-Trichloroethane	15.876	97	648066	10.63	ppbv	98
31) Carbon tetrachloride	16.132	117	684877	11.08	ppbv	100
33) Benzene	16.631	78	889063	9.63	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1406342	9.95	ppbv	99
35) 1,2-Dichloroethane	16.825	62	458251	9.45	ppbv	100
36) Heptane	16.971	43	548611	9.44	ppbv	93
37) Trichloroethene	17.860	130	361797	10.23	ppbv	99
38) 1,2-Dichloropropane	18.358	63	337167	9.45	ppbv	99
39) 1,4-Dioxane	18.559	88	177831	10.47	ppbv	92
40) Bromodichloromethane	18.821	83	618618	9.97	ppbv	98
41) cis-1,3-Dichloropropene	19.593	75	512376	9.66	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	746719	9.30	ppbv	98
44) Toluene	20.068	91	1048201	9.59	ppbv	99
45) trans-1,3-Dichloropropene	20.536	75	548883	10.11	ppbv	97
46) 1,1,2-Trichloroethane	20.840	97	336513	9.59	ppbv	96
47) Tetrachloroethene	20.926	166	486491	9.88	ppbv	99
48) 2-Hexanone	21.181	43	747751	9.51	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K10.D
Acq On : 14 Mar 2014 19:48
Instrument: HP5973K
Operator : EM
Sample : B14C068-BS1
Misc : 10 ppbv BS1 1411096
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 25 18:34:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.449	129	594613	10.58	ppbv	99
50)	1,2-Dibromoethane (EDB)	21.680	107	526269	9.99	ppbv	99
51)	Chlorobenzene	22.398	112	805965	9.97	ppbv	99
52)	Ethylbenzene	22.489	91	1466465	9.75	ppbv	99
53)	m&p-Xylene	22.672	91	2279826	19.78	ppbv	99
54)	o-Xylene	23.316	91	1160814	10.01	ppbv	100
55)	Styrene	23.353	104	883679	9.94	ppbv	100
56)	Bromoform	23.730	173	629486	10.98	ppbv	99
57)	1,1,2,2-Tetrachloroethane	24.424	83	853750	10.07	ppbv	99
58)	4-Ethyltoluene	24.667	105	1558984	11.08	ppbv	99
59)	1,3,5-Trimethylbenzene	24.764	105	1434011	10.83	ppbv	100
60)	1,2,4-Trimethylbenzene	25.367	105	1445187	10.72	ppbv	100
61)	1,3-Dichlorobenzene	25.896	146	977578	10.69	ppbv	99
62)	1,4-Dichlorobenzene	26.042	146	972683	10.58	ppbv	99
63)	Benzyl chloride	26.255	91	1357278	11.58	ppbv	98
64)	1,2-Dichlorobenzene	26.644	146	933945	10.60	ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	884283	9.82	ppbv	99
66)	Hexachlorobutadiene	29.248	225	793676	10.21	ppbv	100

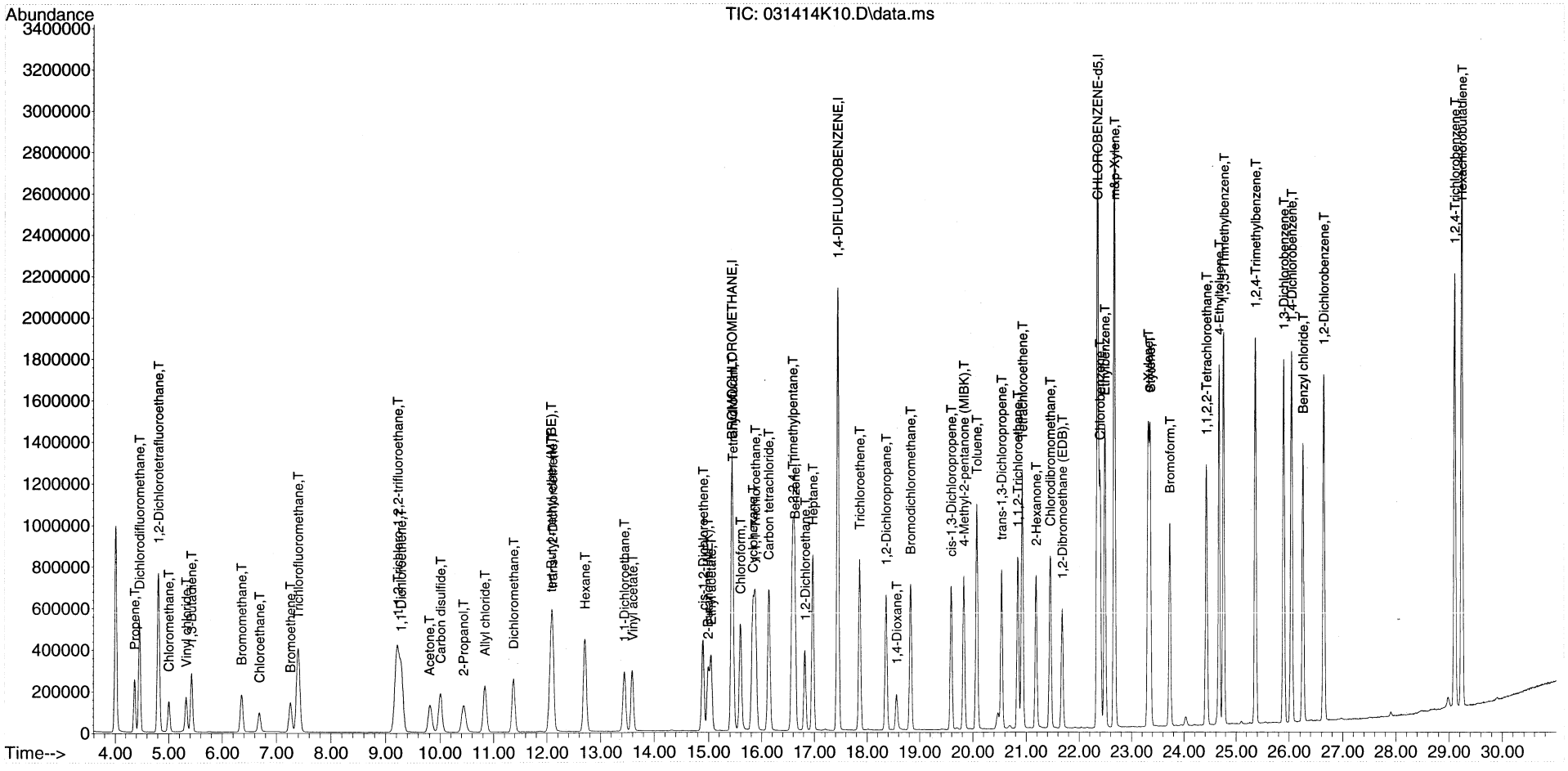
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K10.D
Acq On : 14 Mar 2014 19:48
Instrument: HP5973K
Operator : EM
Sample : B14C068-BS1
Misc : 10 ppbv BS1 1411096
ALS Vial : 32
Multiplier: 1

Quant Time: Mar 25 18:34:19 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



LCS REPORT

Instrument Name: HP5973K
Sample Name: B14C068-BS1
Misc Info: 10 ppbv BS1 1411096
Date Acquired: 3/14/2014 19:48
QLast Update: Fri Mar 14 18:45:41 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.43	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.37	10.30	9.54	93%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.46	10.30	10.77	105%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.81	10.50	11.11	106%	68.0	147.0	pass
5)	Chloromethane	5.00	10.50	10.30	98%	64.0	141.0	pass
6)	Vinyl chloride	5.33	10.50	10.82	103%	65.0	141.0	pass
7)	1,3-Butadiene	5.42	10.00	10.42	104%	61.0	154.0	pass
8)	Bromomethane	6.36	10.30	10.94	106%	71.0	132.0	pass
9)	Chloroethane	6.68	10.30	10.48	102%	70.0	134.0	pass
10)	Bromoethene	7.26	10.40	10.80	104%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.40	10.70	11.25	105%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.22	9.70	10.63	110%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.28	9.60	9.96	104%	81.0	127.0	pass
14)	Acetone	9.80	10.50	10.69	102%	77.0	150.0	pass
15)	Carbon disulfide	10.01	10.50	11.02	105%	75.0	138.0	pass
16)	2-Propanol	10.44	10.60	11.19	106%	71.0	142.0	pass
17)	Allyl chloride	10.83	10.70	10.89	102%	84.0	143.0	pass
18)	Dichloromethane	11.37	9.80	8.47	86%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.07	10.70	11.85	111%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	12.10	10.20	10.56	104%	82.0	136.0	pass
21)	Hexane	12.71	10.30	10.73	104%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.44	9.70	9.96	103%	82.0	123.0	pass
23)	Vinyl acetate	13.59	10.60	11.15	105%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.90	10.10	10.26	102%	83.0	126.0	pass
25)	2-Butanone (MEK)	14.99	10.50	11.42	109%	76.0	138.0	pass
26)	Ethyl acetate	15.04	10.40	10.66	102%	83.0	136.0	pass
27)	Tetrahydrofuran	15.45	10.30	10.22	99%	74.0	132.0	pass
28)	Chloroform	15.60	10.20	10.63	104%	81.0	127.0	pass
29)	Cyclohexane	15.83	10.50	10.65	101%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.88	10.10	10.63	105%	80.0	131.0	pass
31)	Carbon tetrachloride	16.13	10.30	11.08	108%	77.0	136.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.63	10.10	9.63	95%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.59	10.50	9.95	95%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.83	9.80	9.45	96%	70.0	149.0	pass
36)	Heptane	16.97	10.50	9.44	90%	62.0	159.0	pass
37)	Trichloroethene	17.86	10.10	10.23	101%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.36	10.30	9.45	92%	74.0	135.0	pass
39)	1,4-Dioxane	18.56	10.50	10.47	100%	67.0	134.0	pass
40)	Bromodichloromethane	18.82	10.40	9.97	96%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.59	10.30	9.66	94%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.83	10.50	9.30	89%	59.0	147.0	pass
43)	CHLOROBENZENE-d5	22.35	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.07	10.20	9.59	94%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.54	10.70	10.11	95%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.84	10.30	9.59	93%	76.0	124.0	pass
47)	Tetrachloroethene	20.93	10.00	9.88	99%	80.0	122.0	pass

48)	2-Hexanone	21.18	10.40	9.51	91%	55.0	149.0	pass
49)	Chlorodibromomethane	21.45	10.40	10.58	102%	76.0	145.0	pass
50)	1,2-Dibromoethane (EDB)	21.68	10.30	9.99	97%	78.0	124.0	pass
51)	Chlorobenzene	22.40	10.40	9.97	96%	76.0	120.0	pass
52)	Ethylbenzene	22.49	10.20	9.75	96%	75.0	125.0	pass
53)	m&p-Xylene	22.67	20.40	19.78	97%	75.0	128.0	pass
54)	o-Xylene	23.32	10.30	10.01	97%	74.0	128.0	pass
55)	Styrene	23.35	10.10	9.94	98%	69.0	122.0	pass
56)	Bromoform	23.73	10.30	10.98	107%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.42	10.20	10.07	99%	70.0	130.0	pass
58)	4-Ethyltoluene	24.67	10.40	11.08	107%	69.0	138.0	pass
59)	1,3,5-Trimethylbenzene	24.76	10.30	10.83	105%	70.0	134.0	pass
60)	1,2,4-Trimethylbenzene	25.37	10.10	10.72	106%	65.0	129.0	pass
61)	1,3-Dichlorobenzene	25.90	9.90	10.69	108%	62.0	130.0	pass
62)	1,4-Dichlorobenzene	26.04	9.90	10.58	107%	61.0	131.0	pass
63)	Benzyl chloride	26.25	10.40	11.58	111%	61.0	153.0	pass
64)	1,2-Dichlorobenzene	26.64	9.90	10.60	107%	60.0	130.0	pass
65)	1,2,4-Trichlorobenzene	29.11	9.10	9.82	108%	38.0	128.0	pass
66)	Hexachlorobutadiene	29.25	9.50	10.21	107%	37.0	124.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K11.D
Acq On : 14 Mar 2014 20:38
Instrument: HP5973K
Operator : EM
Sample : CAN 670
Misc : 200mL CAN 670
ALS Vial : 37
Multiplier: 1

Quant Time: Mar 18 11:19:56 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	844397	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2172360	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1936051	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.374	49	23868	0.60	ppbv	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

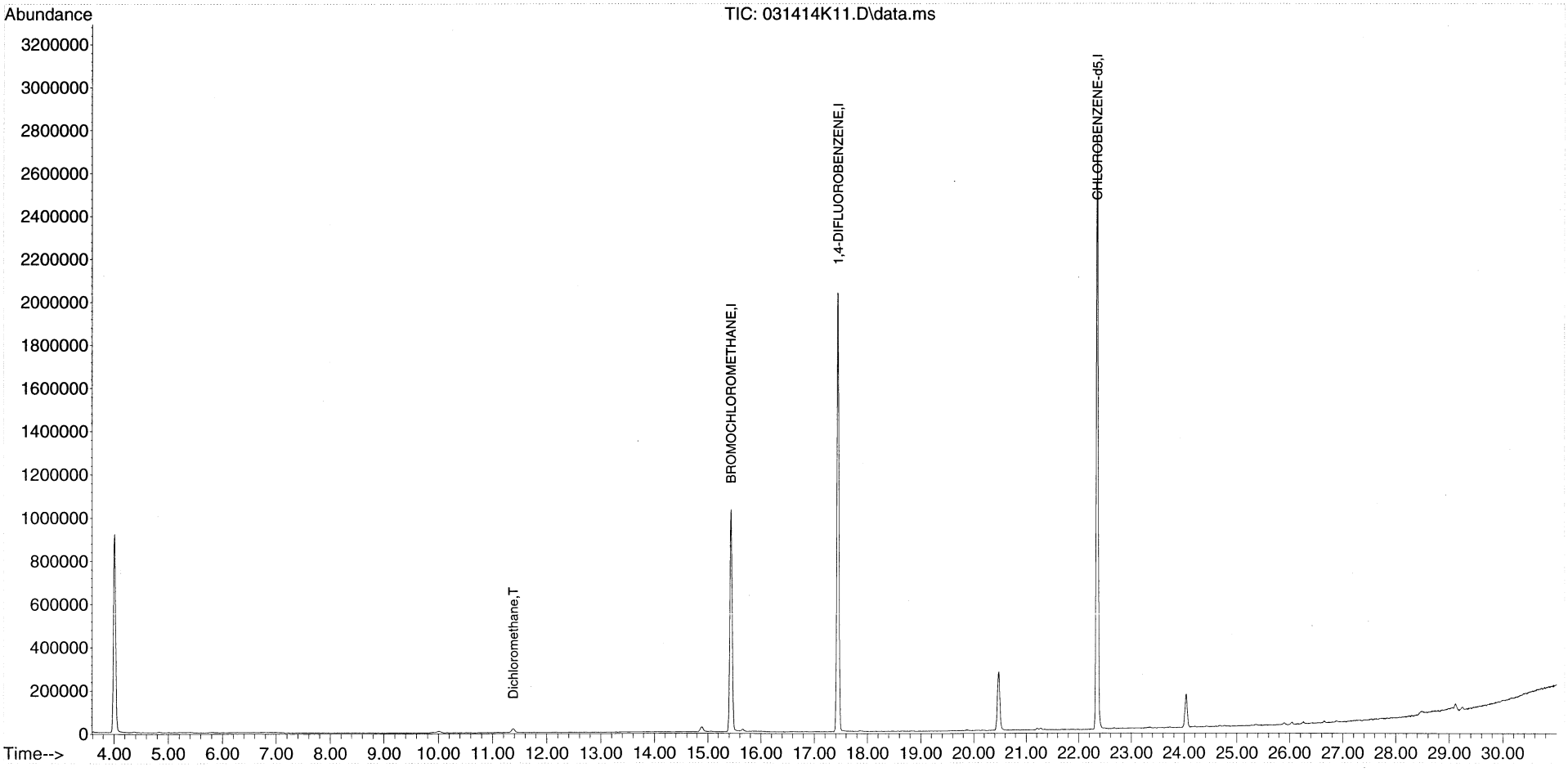
00817

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K11.D
Acq On : 14 Mar 2014 20:38
Instrument: HP5973K
Operator : EM
Sample : CAN 670
Misc : 200mL CAN 670
ALS Vial : 37
Multiplier: 1

Quant Time: Mar 18 11:19:56 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K12.D
Acq On : 14 Mar 2014 21:27
Instrument: HP5973K
Operator : EM
Sample : CAN 859
Misc : 200mL CAN 859
ALS Vial : 38
Multiplier: 1

Quant Time: Mar 18 11:28:49 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	991407	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2473627	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2213596	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.380	49	25735	0.55	ppbv	88

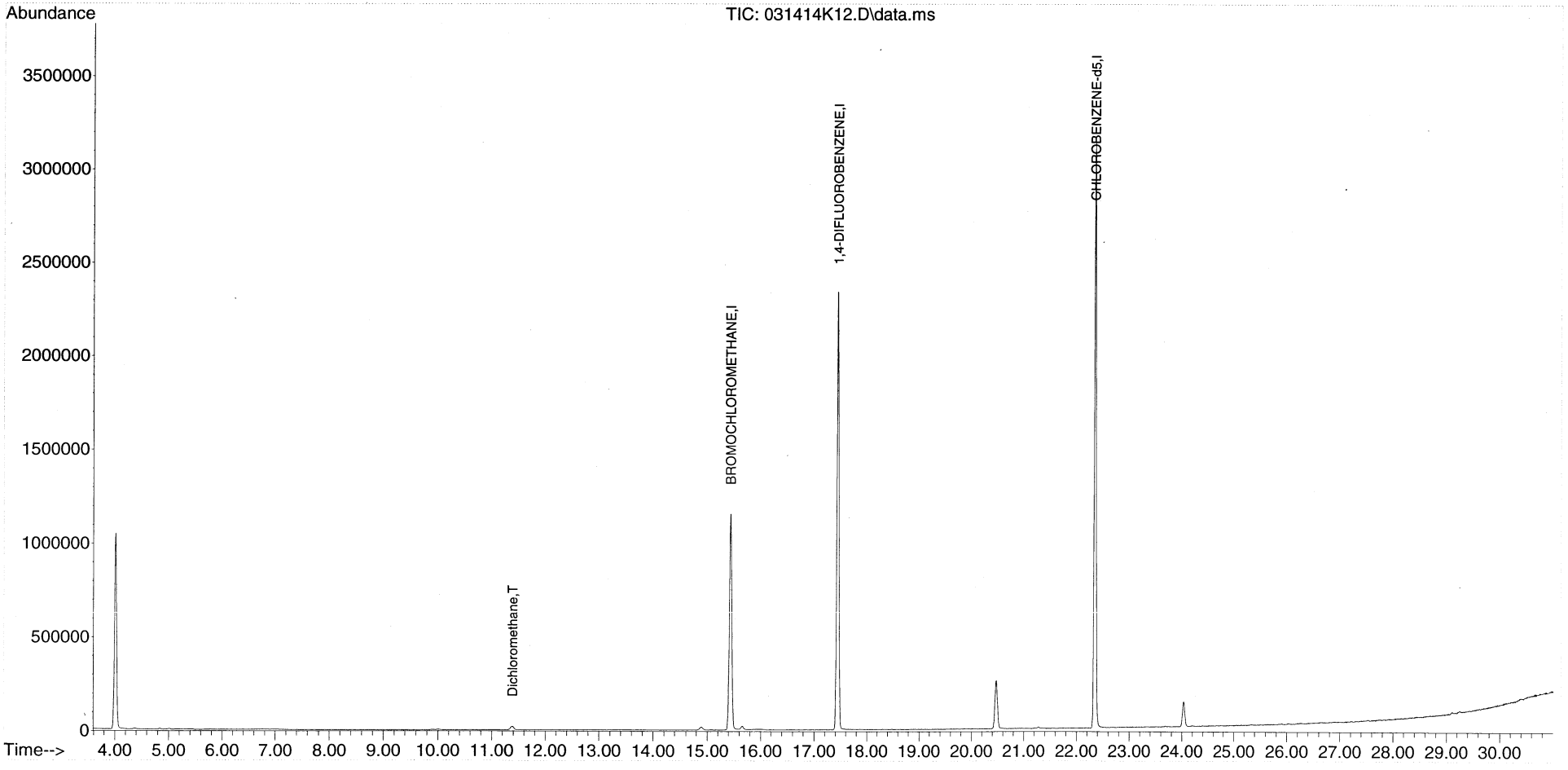
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K12.D
Acq On : 14 Mar 2014 21:27
Instrument: HP5973K
Operator : EM
Sample : CAN 859
Misc : 200mL CAN 859
ALS Vial : 38
Multiplier: 1

Quant Time: Mar 18 11:28:49 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K13.D
Acq On : 14 Mar 2014 22:17
Instrument: HP5973K
Operator : EM
Sample : B14C068-BLK1
Misc : 200mL CAN 1105
ALS Vial : 39
Multiplier: 1

Quant Time: Mar 18 10:49:15 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	1006151	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2323104	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2082276	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.386	49	25875	0.55	ppbv	84

B-flag

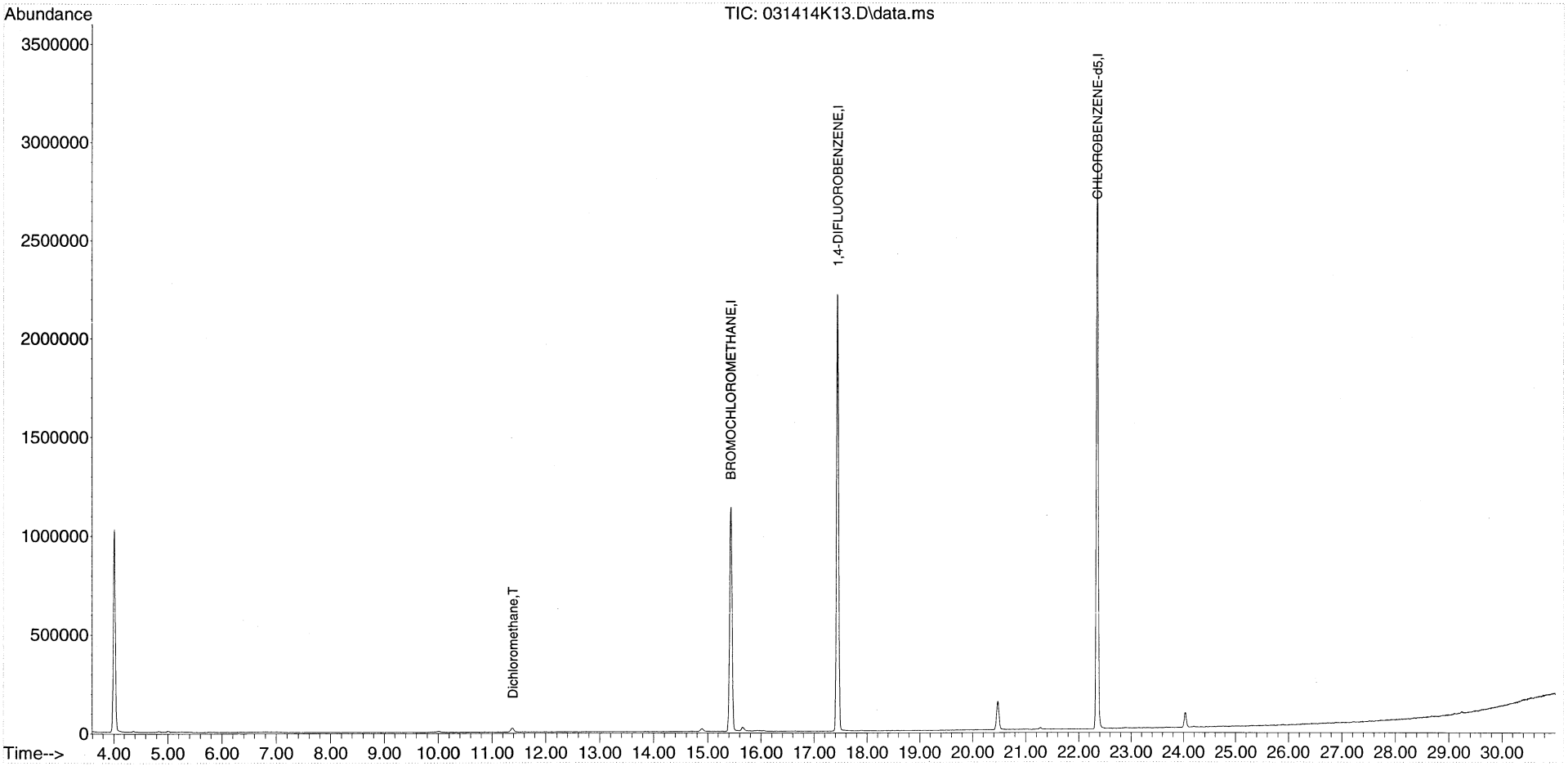
(#) = qualifier out of range (m) = manual integration (+) = signals summed

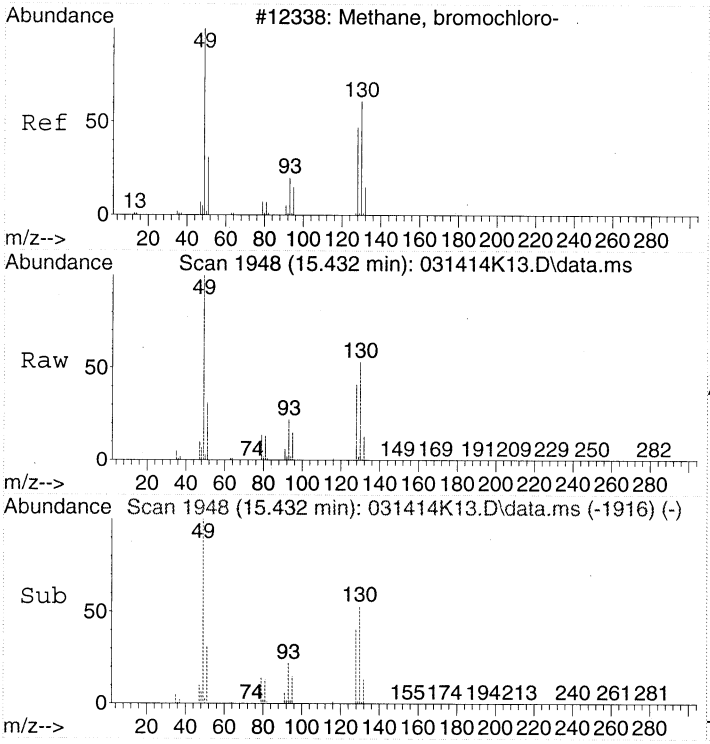
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K13.D
Acq On : 14 Mar 2014 22:17
Instrument: HP5973K
Operator : EM
Sample : B14C068-BLK1
Misc : 200mL CAN 1105
ALS Vial : 39
Multiplier: 1

Quant Time: Mar 18 10:49:15 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

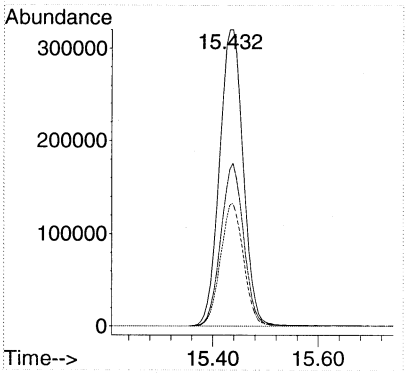


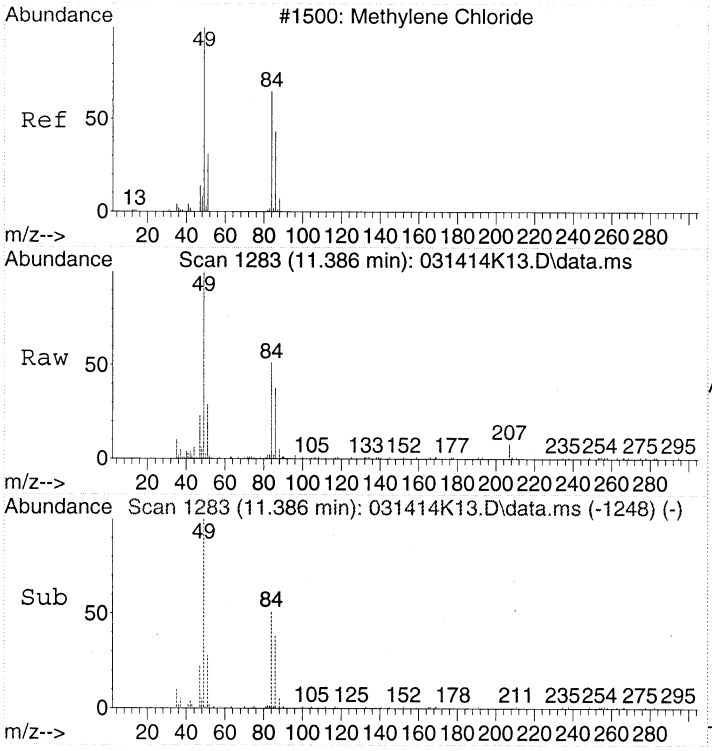


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K13.D
Acq: 14 Mar 2014 22:17

Tgt Ion: 49 Resp: 1006151

Ion	Ratio	Lower	Upper
49	100		
130	52.8	53.4	93.4#
128	40.1	35.1	75.1

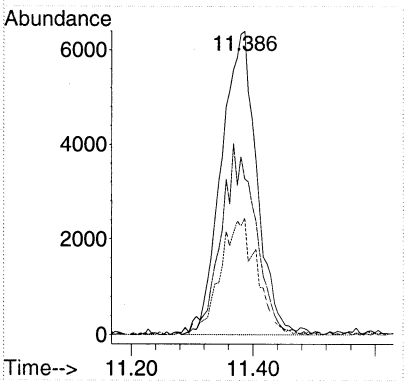


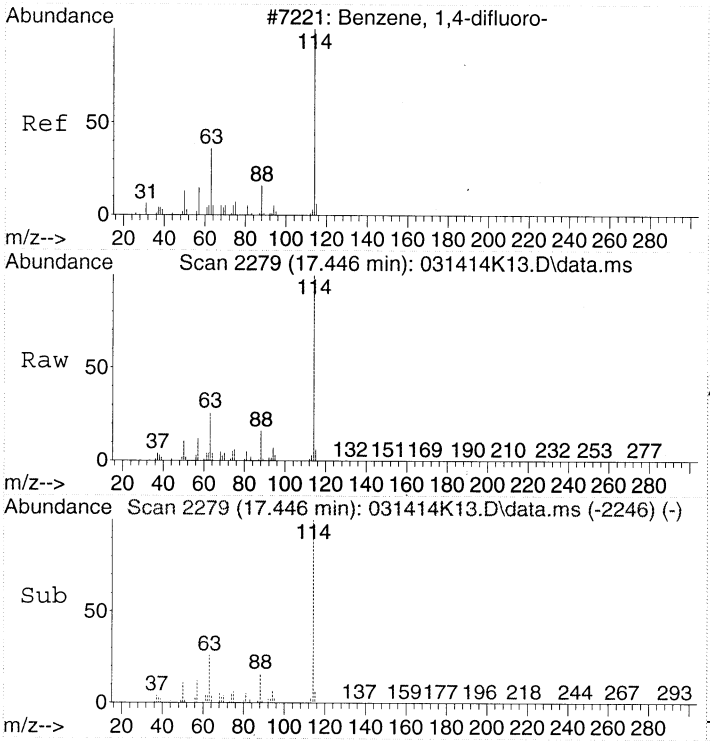


#18
Dichloromethane
Concen: 0.55 ppbv
RT: 11.386 min Scan# 1283
Delta R.T. 0.012 min
Lab File: 031414K13.D
Acq: 14 Mar 2014 22:17

Tgt Ion: 49 Resp: 25875

Ion	Ratio	Lower	Upper
49	100		
84	59.8	54.7	94.7
86	39.6	29.1	69.1

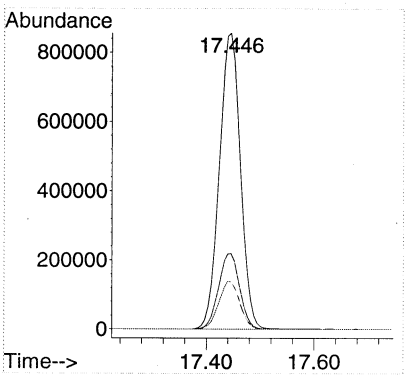


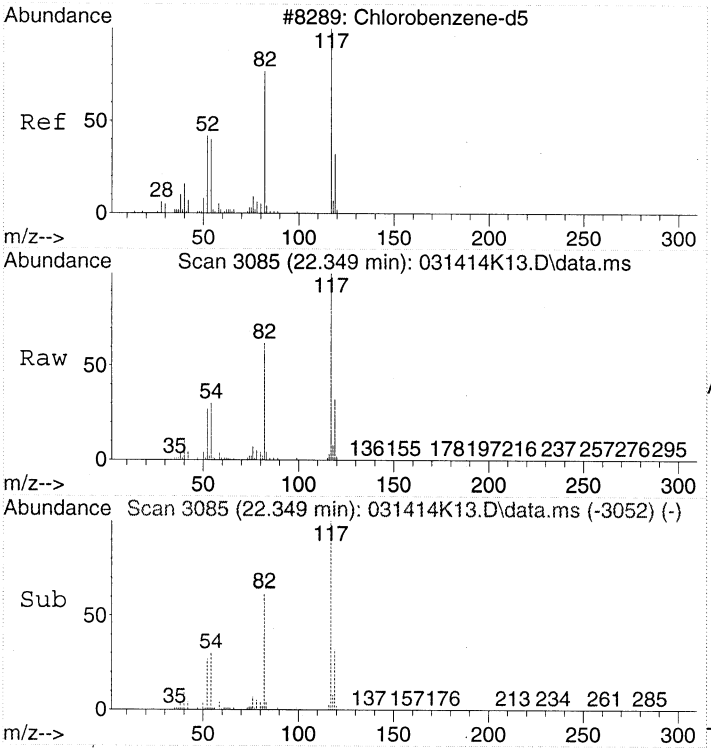


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031414K13.D
Acq: 14 Mar 2014 22:17

Tgt Ion:114 Resp: 2323104

Ion	Ratio	Lower	Upper
114	100		
63	25.7	2.7	42.7
88	16.2	0.0	36.0

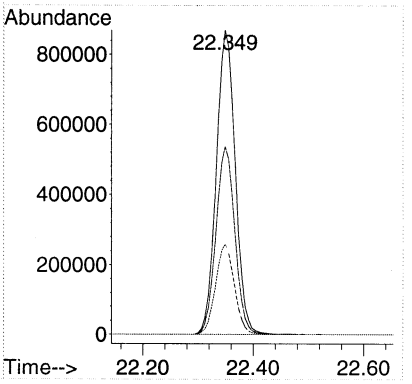




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K13.D
Acq: 14 Mar 2014 22:17

Tgt Ion:117 Resp: 2082276

Ion	Ratio	Lower	Upper
117	100		
82	61.8	36.4	76.4
54	29.7	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K14.D
Acq On : 14 Mar 2014 23:07
Instrument: HP5973K
Operator : EM
Sample : 1403028-05RE1
Misc : 200mL MH64 CAN 1120
ALS Vial : 10
Multiplier: 3.66

Quant Time: Mar 18 10:49:24 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.432	49	1040413	22.00 ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2406406	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2094765	22.00 ppbv	0.00
Target Compounds					Qvalue
14) Acetone	9.872	43	25674	0.52 ppbv	96
18) Dichloromethane	11.381	49	26980	0.55 ppbv	85
24) cis-1,2-Dichloroethene	14.897	61	157185	3.22 ppbv	89
28) Chloroform	15.590	83	128117	1.90 ppbv	94
37) Trichloroethene	17.853	130	78825	2.10 ppbv	98

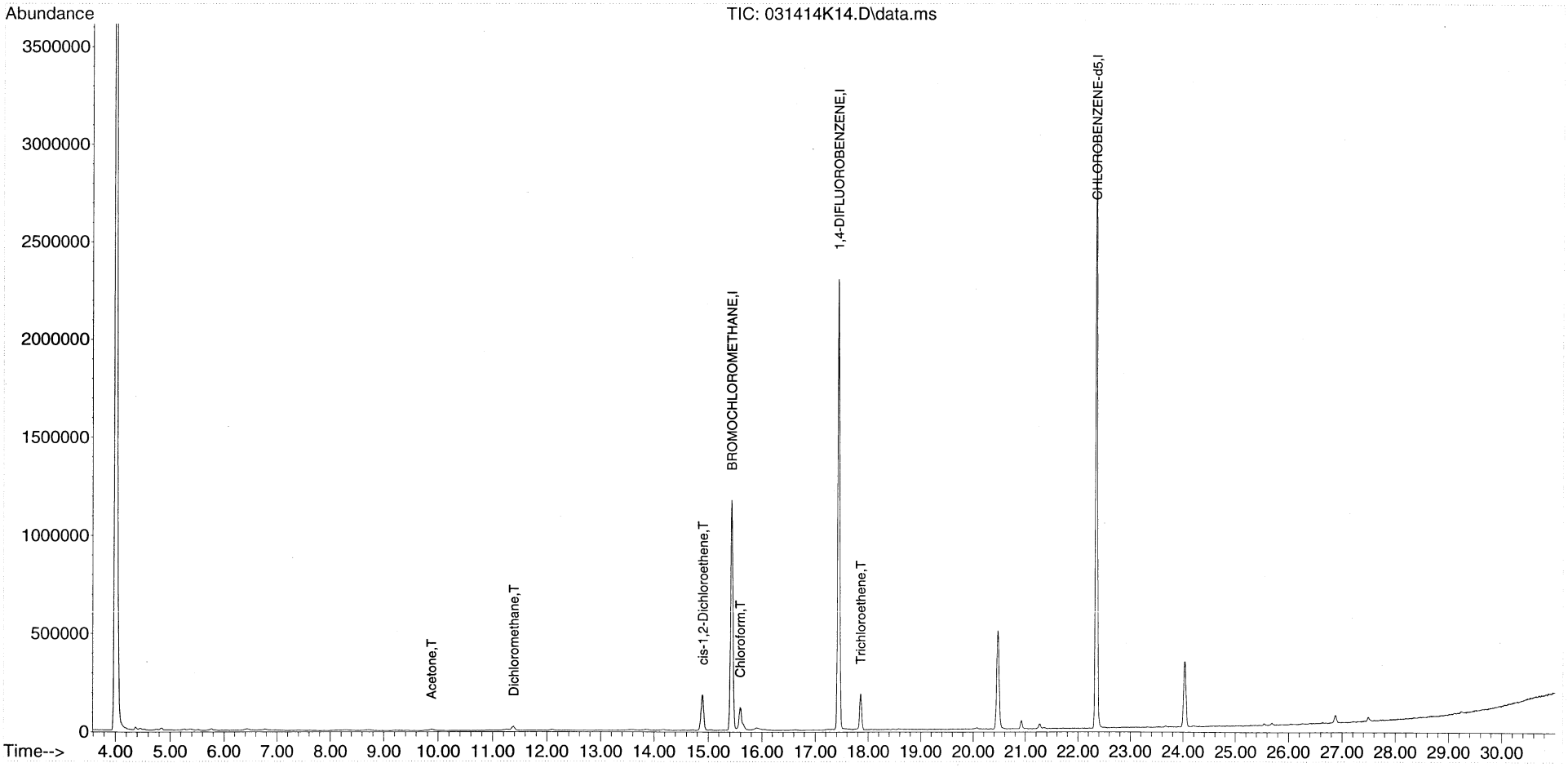
(#) = qualifier out of range (m) = manual integration (+) = signals summed

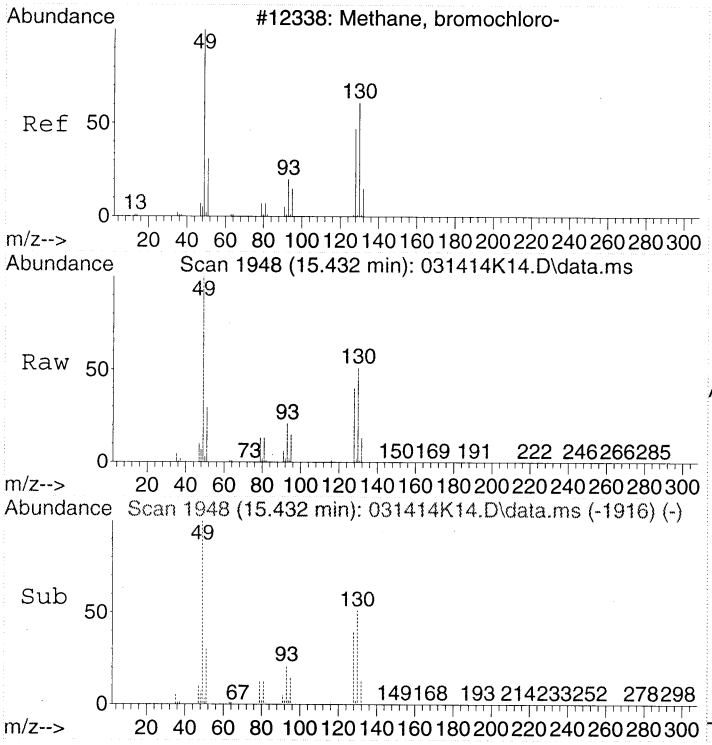
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K14.D
Acq On : 14 Mar 2014 23:07
Instrument: HP5973K
Operator : EM
Sample : 1403028-05RE1
Misc : 200mL MH64 CAN 1120
ALS Vial : 10
Multiplier: 3.66

Quant Time: Mar 18 10:49:24 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

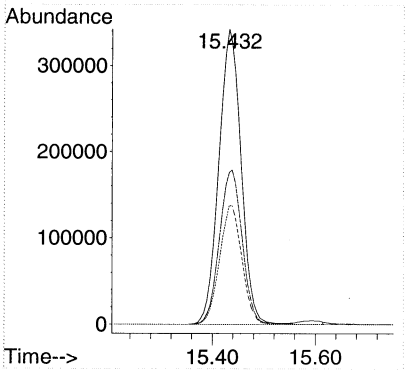


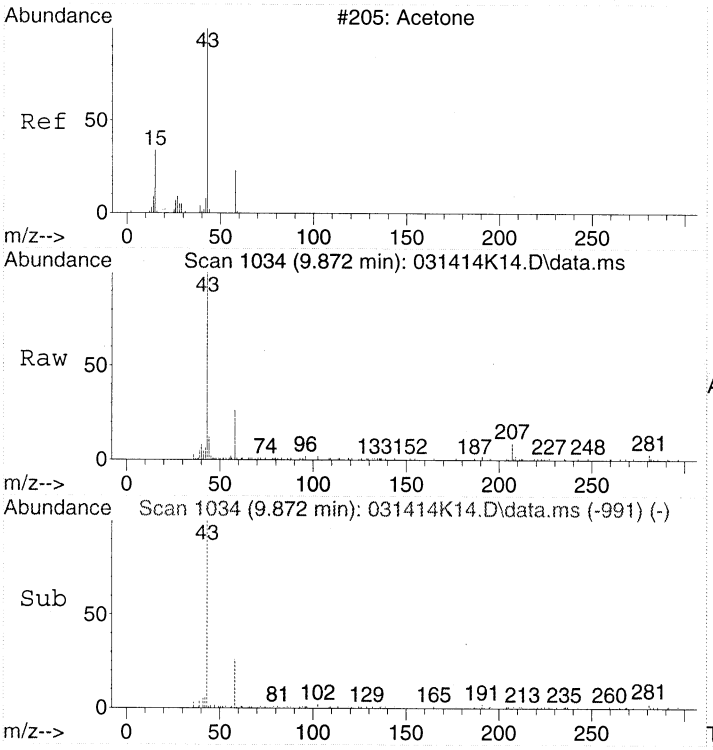


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion: 49 Resp: 1040413

Ion	Ratio	Lower	Upper
49	100		
130	52.9	53.4	93.4#
128	40.0	35.1	75.1

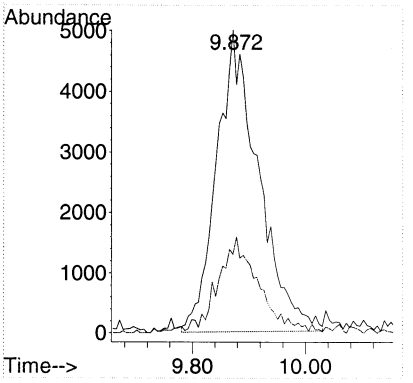


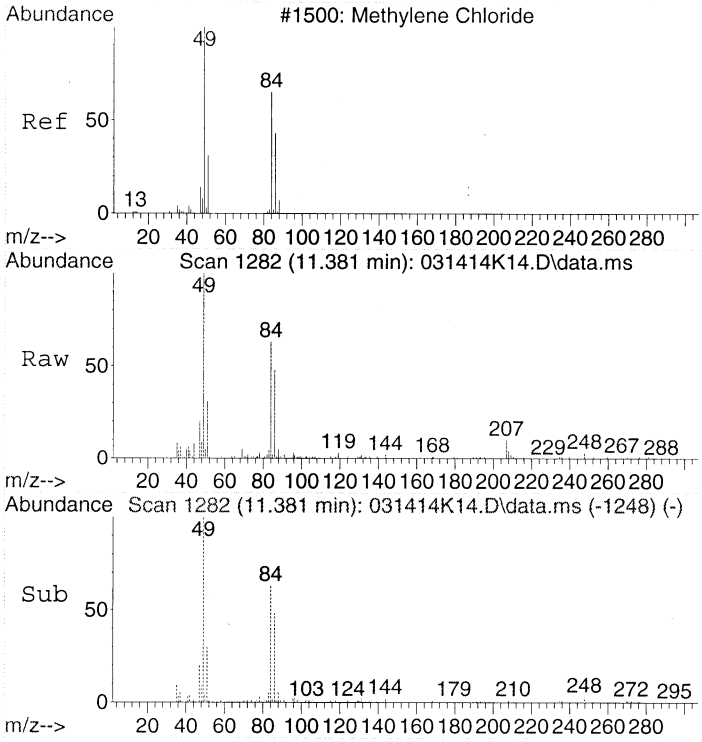


#14
Acetone
Concen: 0.52 ppbv
RT: 9.872 min Scan# 1034
Delta R.T. 0.061 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion: 43 Resp: 25674

Ion	Ratio	Lower	Upper
43	100		
58	30.2	8.0	48.0

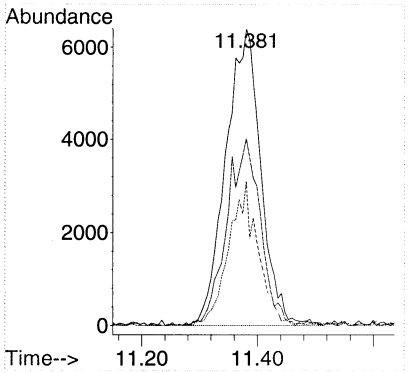


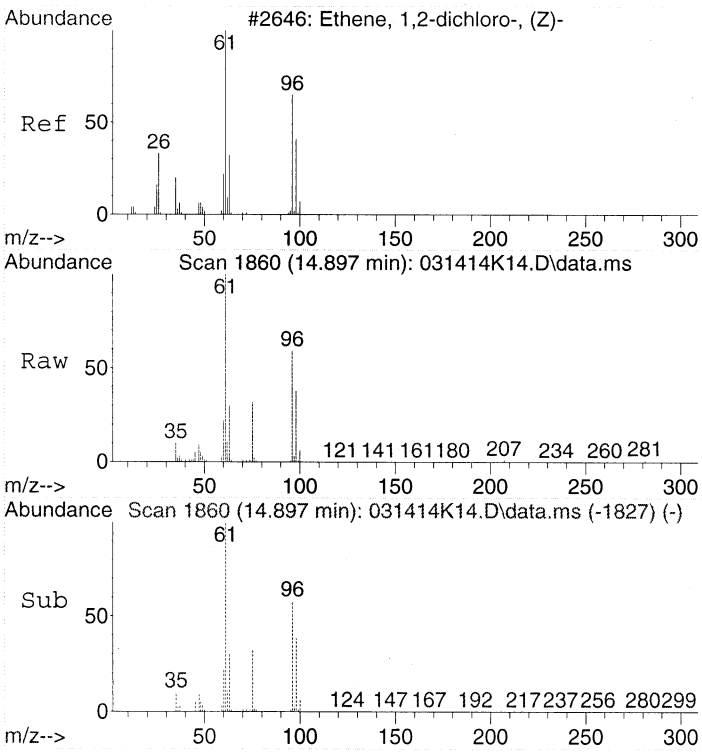


#18
Dichloromethane
Concen: 0.55 ppbv
RT: 11.381 min Scan# 1282
Delta R.T. 0.006 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion: 49 Resp: 26980

Ion	Ratio	Lower	Upper
49	100		
84	60.0	54.7	94.7
86	40.5	29.1	69.1

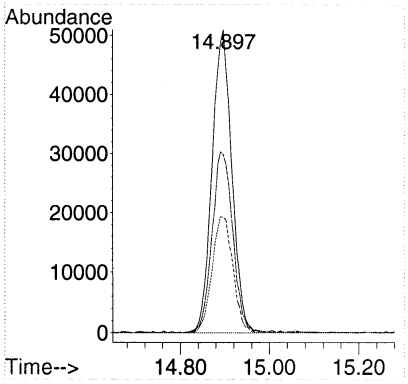


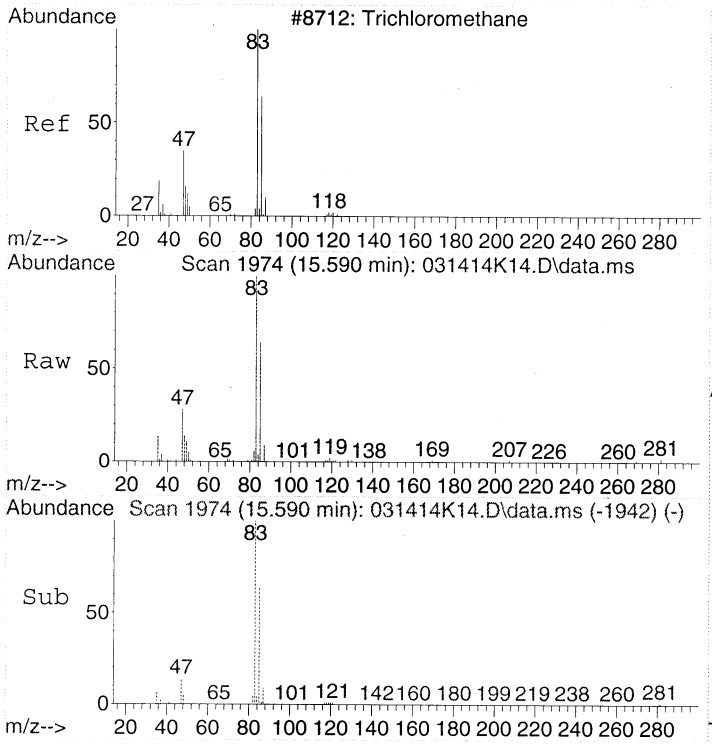


#24
cis-1,2-Dichloroethene
Concen: 3.22 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion: 61 Resp: 157185

Ion	Ratio	Lower	Upper
61	100		
96	61.8	52.9	92.9
98	39.8	24.5	64.5

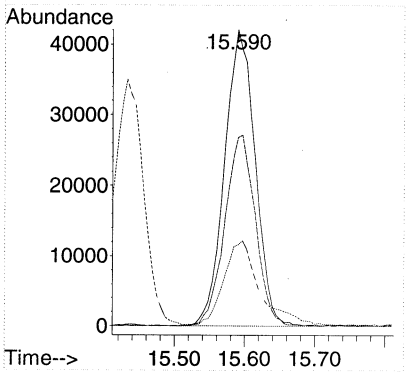


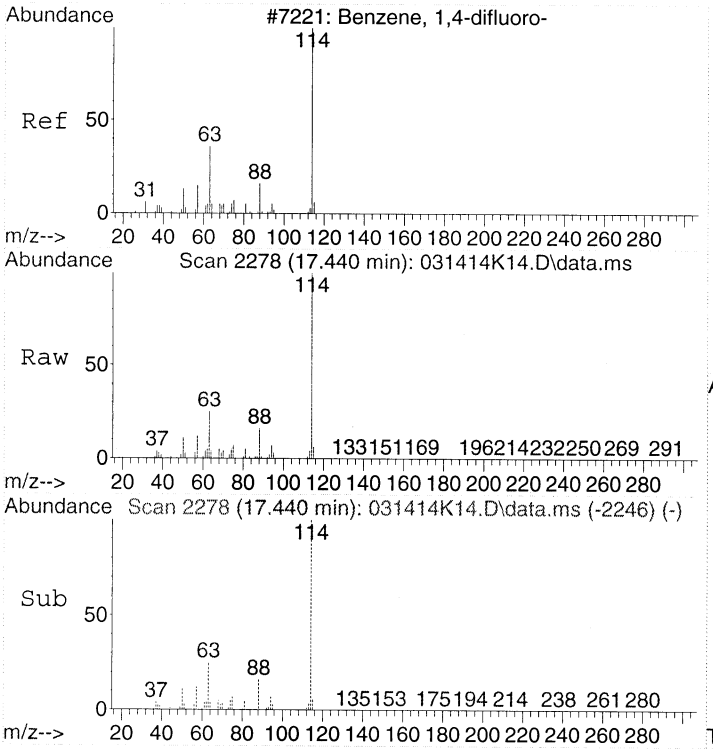


#28
Chloroform
Concen: 1.90 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion: 83 Resp: 128117

Ion	Ratio	Lower	Upper
83	100		
85	64.9	46.8	86.8
47	33.3	6.3	46.3

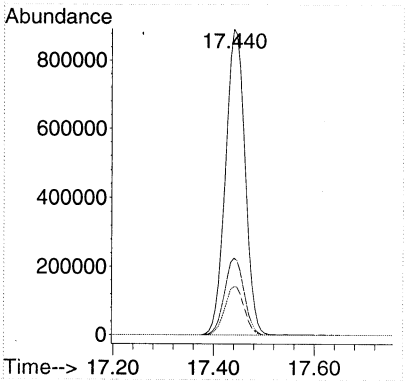


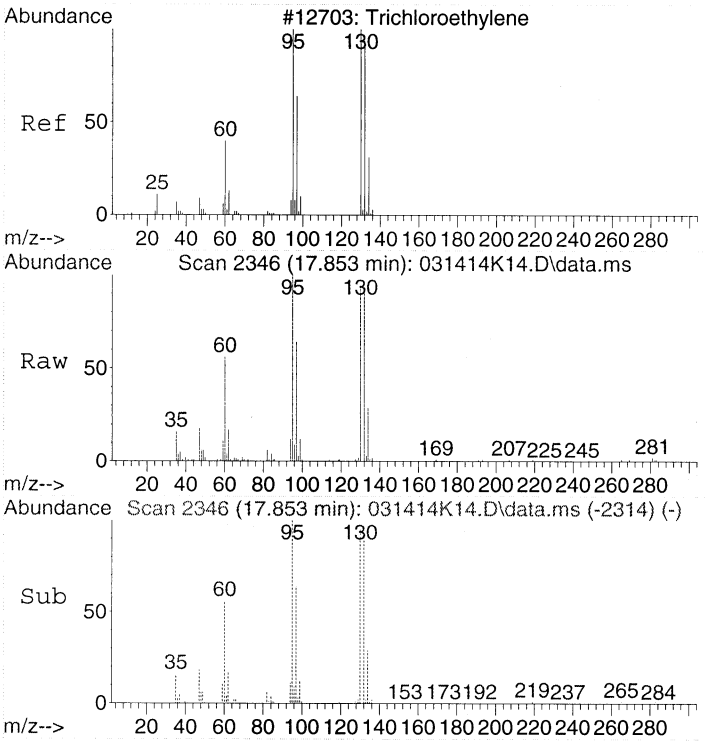


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion:114 Resp: 2406406

Ion	Ratio	Lower	Upper
114	100		
63	25.4	2.7	42.7
88	16.0	0.0	36.0

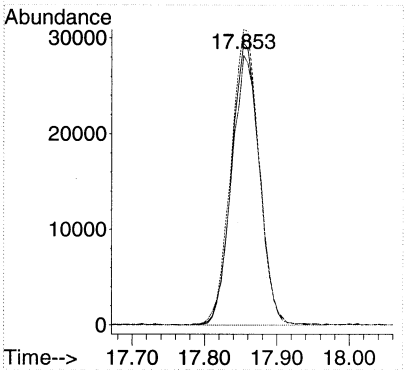


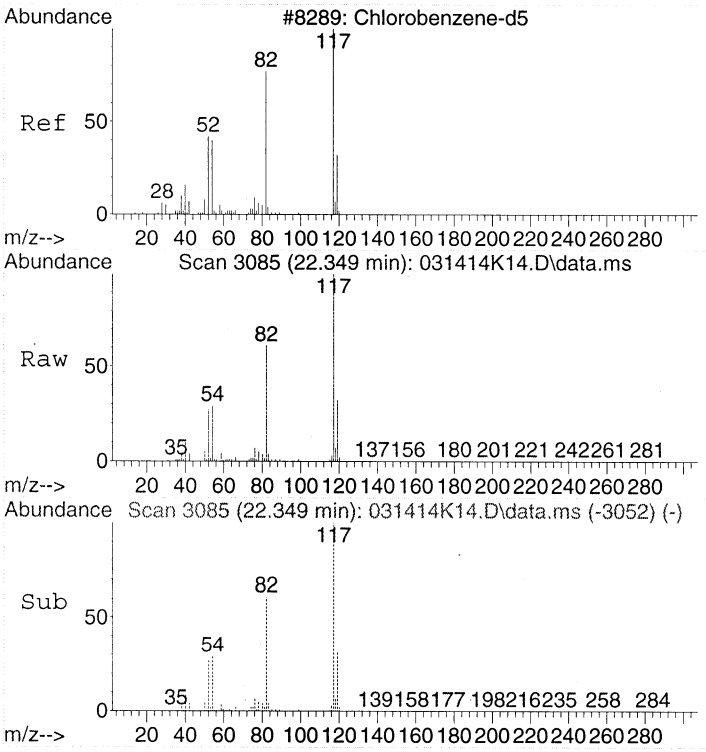


#37
Trichloroethene
Concen: 2.10 ppbv
RT: 17.853 min Scan# 2346
Delta R.T. -0.006 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion:130 Resp: 78825

Ion	Ratio	Lower	Upper
130	100		
132	97.6	77.7	117.7
95	105.5	80.9	120.9

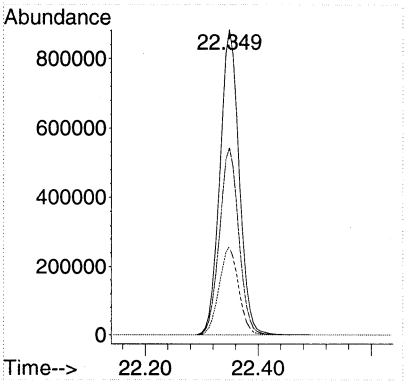




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K14.D
Acq: 14 Mar 2014 23:07

Tgt Ion:117 Resp: 2094765

Ion	Ratio	Lower	Upper
117	100		
82	61.8	36.4	76.4
54	29.4	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K15.D
Acq On : 14 Mar 2014 23:57
Instrument: HP5973K
Operator : EM
Sample : 1403028-08RE1
Misc : 200mL MH67 CAN 1980
ALS Vial : 11
Multiplier: 2.98

Quant Time: Mar 18 10:49:37 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	998663	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2311322	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2002986	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	19298	0.77	ppbv	# 76
14) Acetone	9.866	43	38353	0.81	ppbv	100
18) Dichloromethane	11.374	49	32756	0.70	ppbv	83
28) Chloroform	15.590	83	657416	10.15	ppbv	95
37) Trichloroethene	17.859	130	32437	0.90	ppbv	98
44) Toluene	20.068	91	64823	0.61	ppbv	96

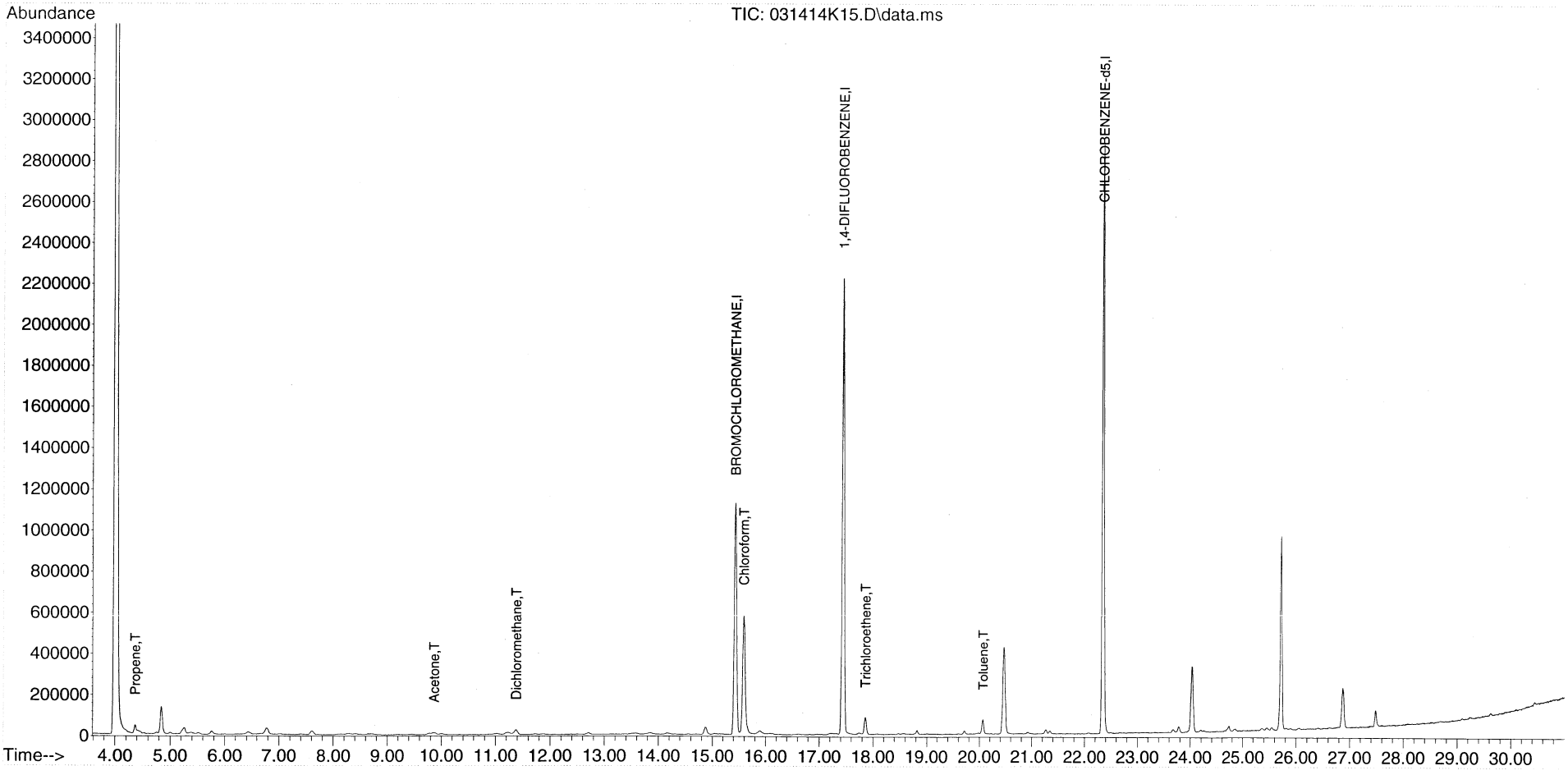
(#) = qualifier out of range (m) = manual integration (+) = signals summed

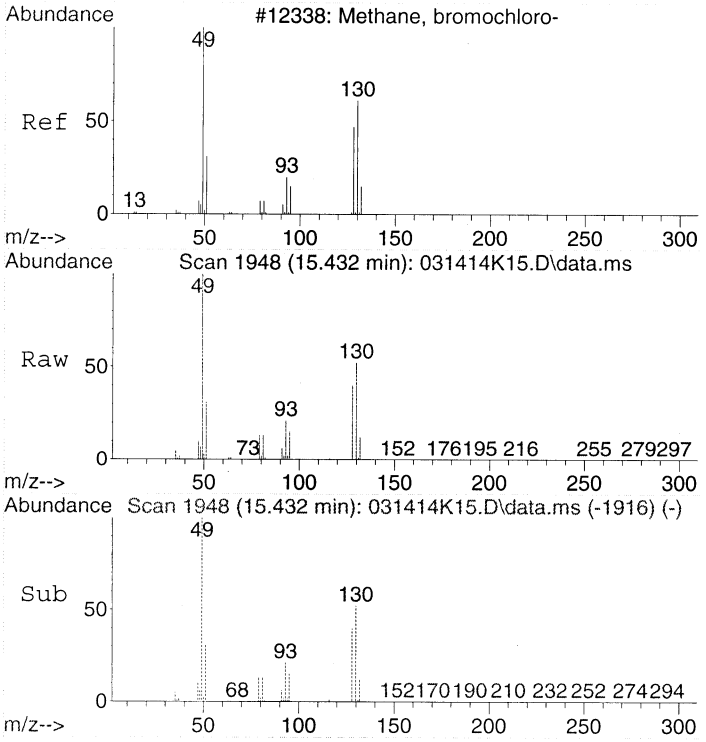
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K15.D
Acq On : 14 Mar 2014 23:57
Instrument: HP5973K
Operator : EM
Sample : 1403028-08RE1
Misc : 200mL MH67 CAN 1980
ALS Vial : 11
Multiplier: 2.98

Quant Time: Mar 18 10:49:37 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

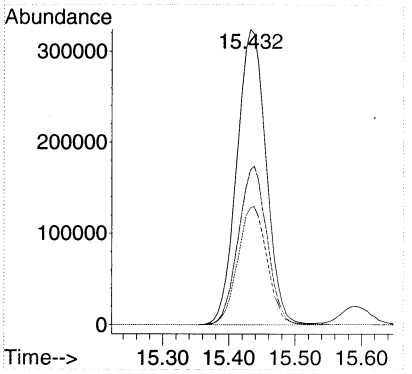


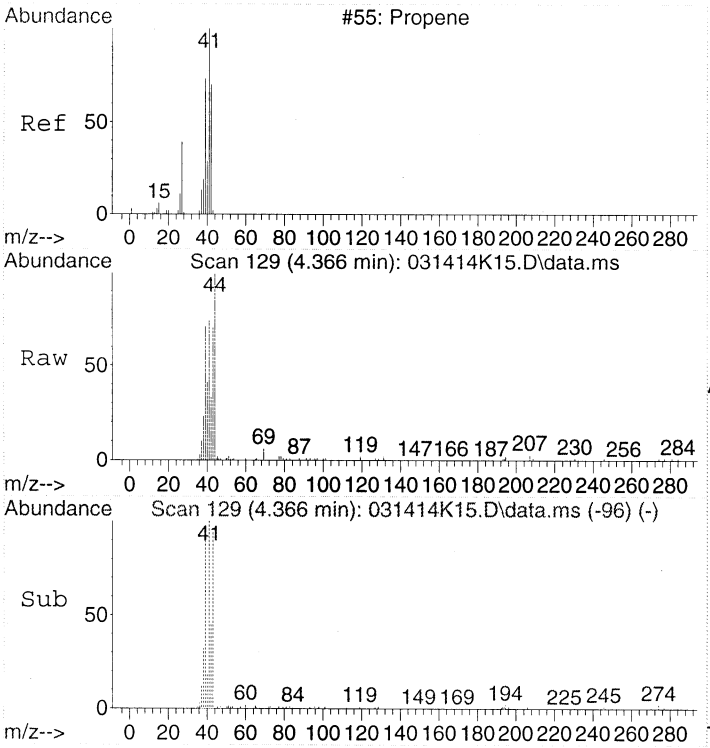


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion: 49 Resp: 998663

Ion	Ratio	Lower	Upper
49	100		
130	52.7	53.4	93.4#
128	39.9	35.1	75.1

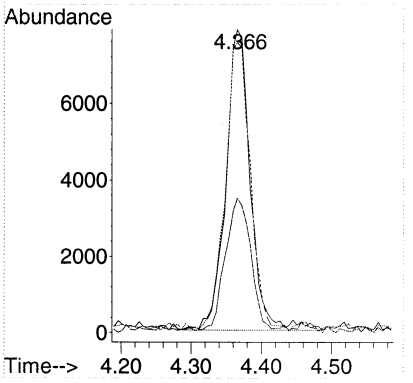


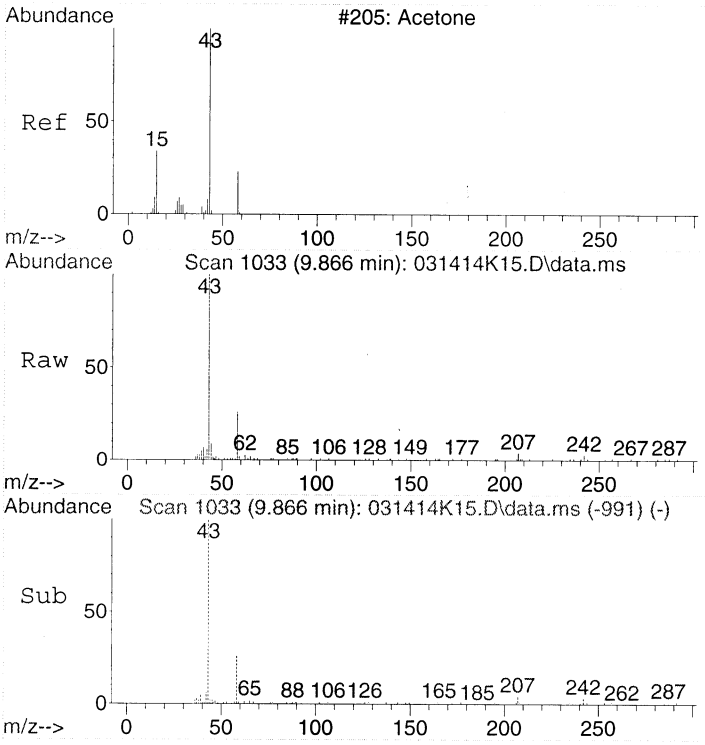


#2
Propene
Concen: 0.77 ppbv
RT: 4.366 min Scan# 129
Delta R.T. 0.000 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion: 41 Resp: 19298

Ion	Ratio	Lower	Upper
41	100		
42	48.5	46.3	86.3
39	97.8	56.1	96.1#

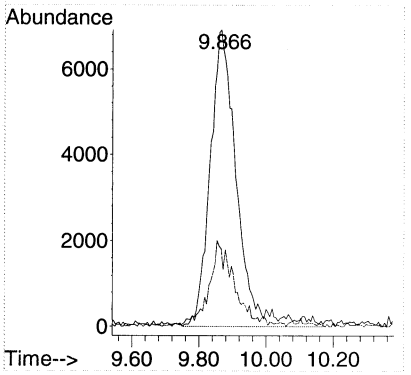


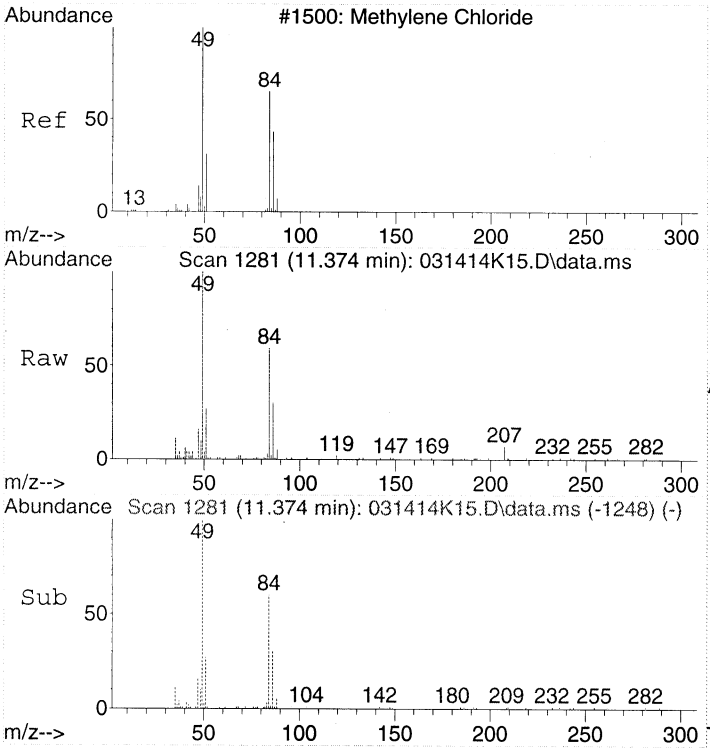


#14
Acetone
Concen: 0.81 ppbv
RT: 9.866 min Scan# 1033
Delta R.T. 0.055 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion: 43 Resp: 38353

Ion	Ratio	Lower	Upper
43	100		
58	27.8	8.0	48.0

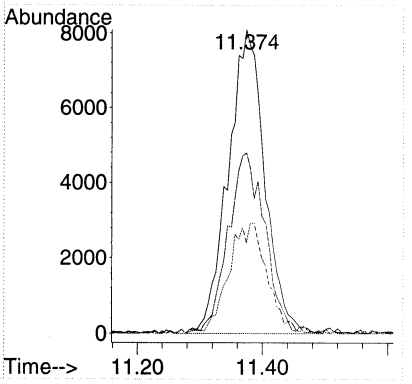


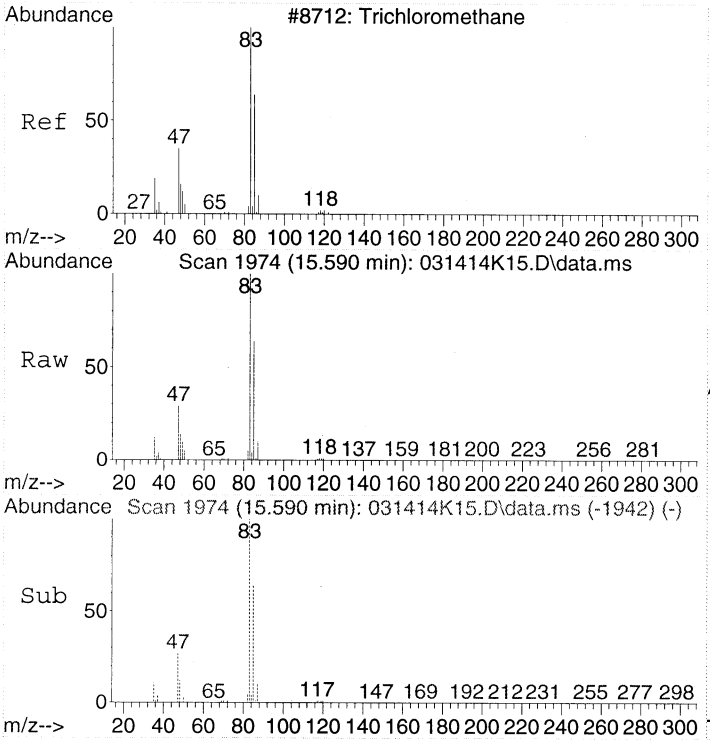


#18
Dichloromethane
Concen: 0.70 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. 0.000 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion: 49 Resp: 32756

Ion	Ratio	Lower	Upper
49	100		
84	59.8	54.7	94.7
86	37.9	29.1	69.1

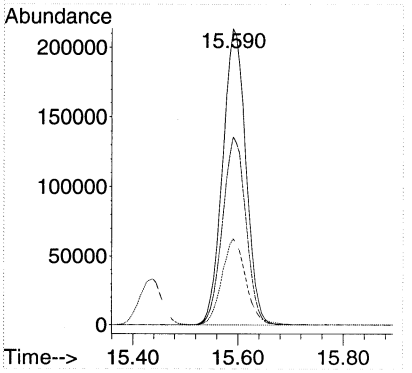


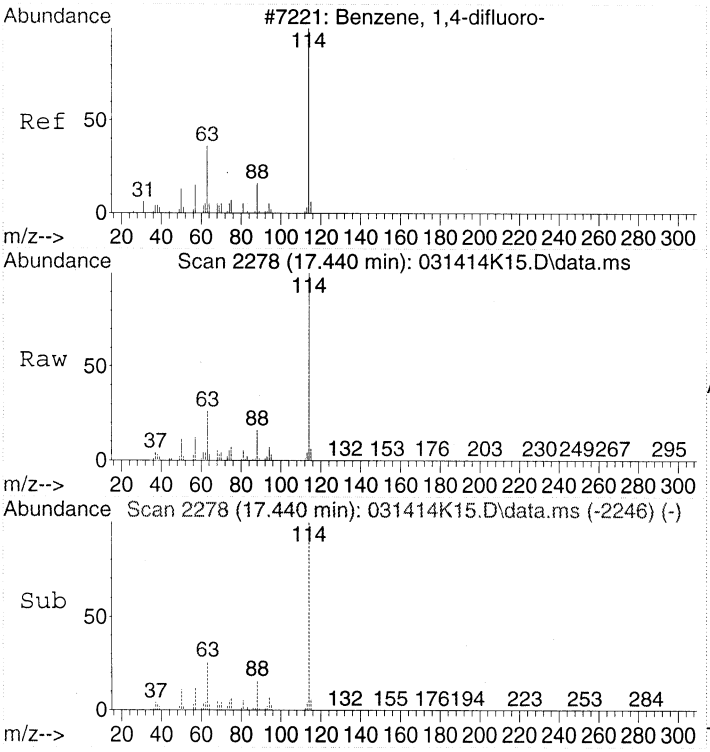


#28
Chloroform
Concen: 10.15 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion: 83 Resp: 657416

Ion	Ratio	Lower	Upper
83	100		
85	64.2	46.8	86.8
47	30.3	6.3	46.3

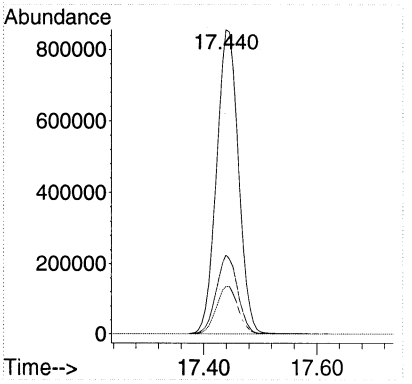


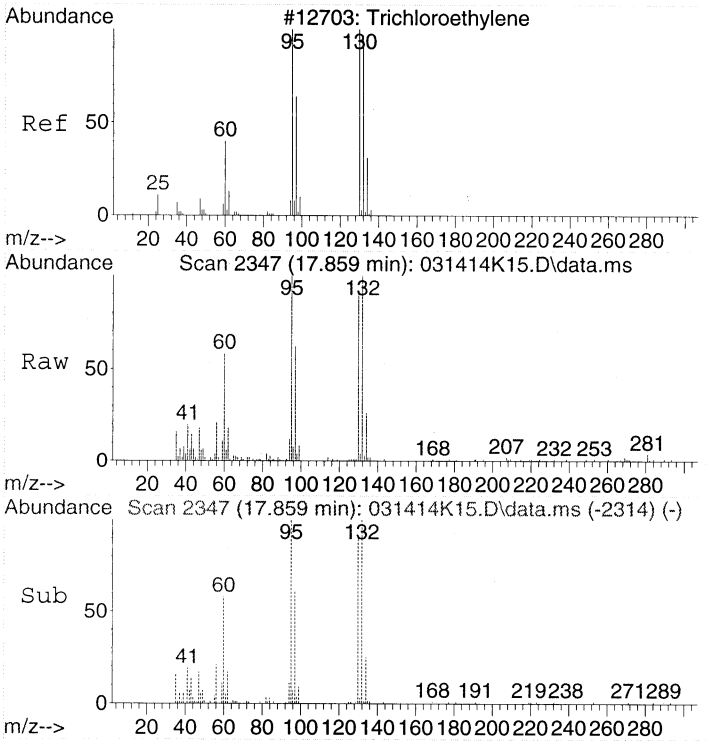


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion:114 Resp: 2311322

Ion	Ratio	Lower	Upper
114	100		
63	25.8	2.7	42.7
88	15.9	0.0	36.0

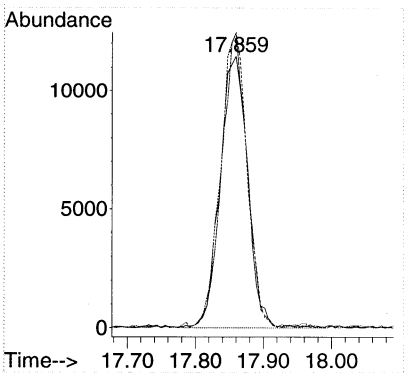


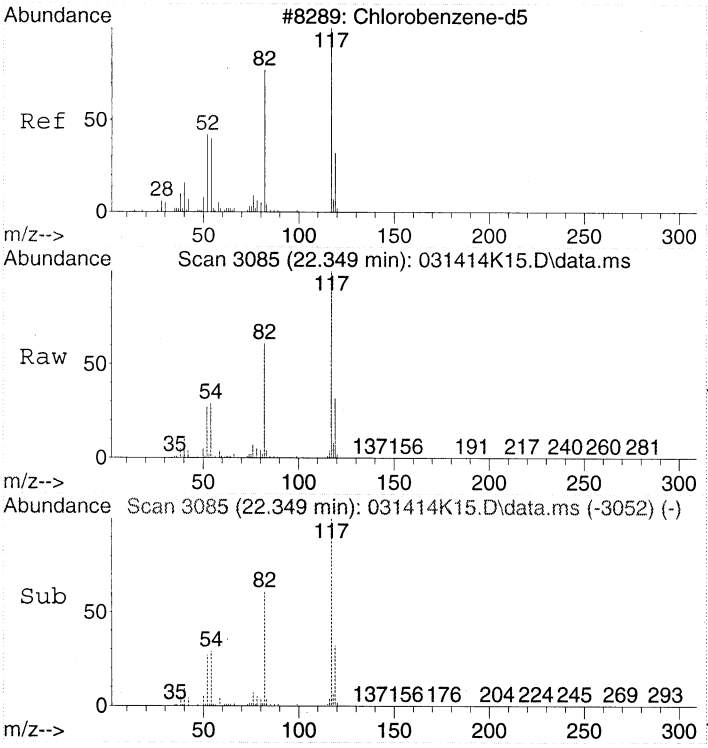


#37
Trichloroethene
Concen: 0.90 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion:130 Resp: 32437

Ion	Ratio	Lower	Upper
130	100		
132	98.7	77.7	117.7
95	103.3	80.9	120.9

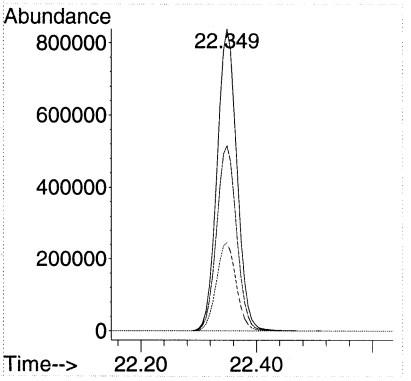


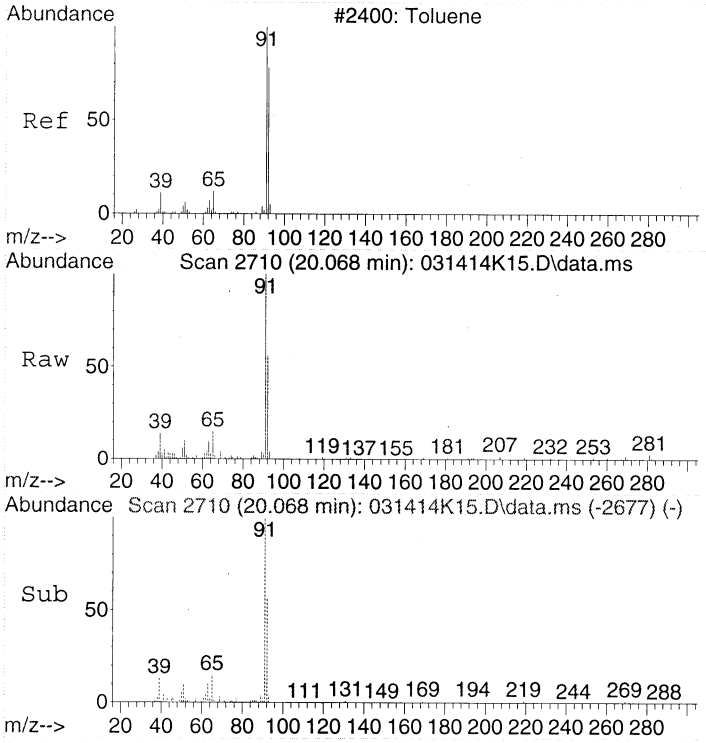


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion:117 Resp: 2002986

Ion	Ratio	Lower	Upper
117	100		
82	61.9	36.4	76.4
54	29.4	5.4	45.4

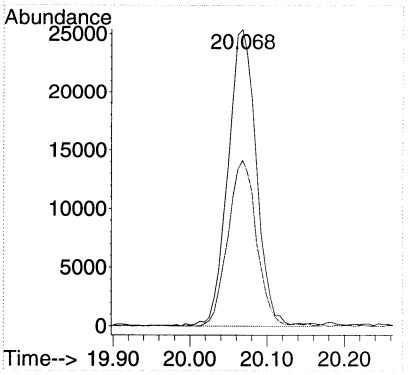




#44
Toluene
Concen: 0.61 ppbv
RT: 20.068 min Scan# 2710
Delta R.T. 0.000 min
Lab File: 031414K15.D
Acq: 14 Mar 2014 23:57

Tgt Ion: 91 Resp: 64823

Ion	Ratio	Lower	Upper
91	100		
92	56.5	39.8	79.8



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K16.D
Acq On : 15 Mar 2014 00:43
Instrument: HP5973K
Operator : EM
Sample : 1403028-02RE1
Misc : 50mL MH61 CAN 629
ALS Vial : 12
Multiplier: 4.39

Quant Time: Mar 18 10:49:51 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	989388	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2255914	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1965244	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.872	43	34156	0.73	ppbv	98
18) Dichloromethane	11.375	49	28208	0.61	ppbv	81
24) cis-1,2-Dichloroethene	14.897	61	104007	2.24	ppbv	89
28) Chloroform	15.597	83	218309	3.40	ppbv	94
37) Trichloroethene	17.860	130	268178	7.63	ppbv	96

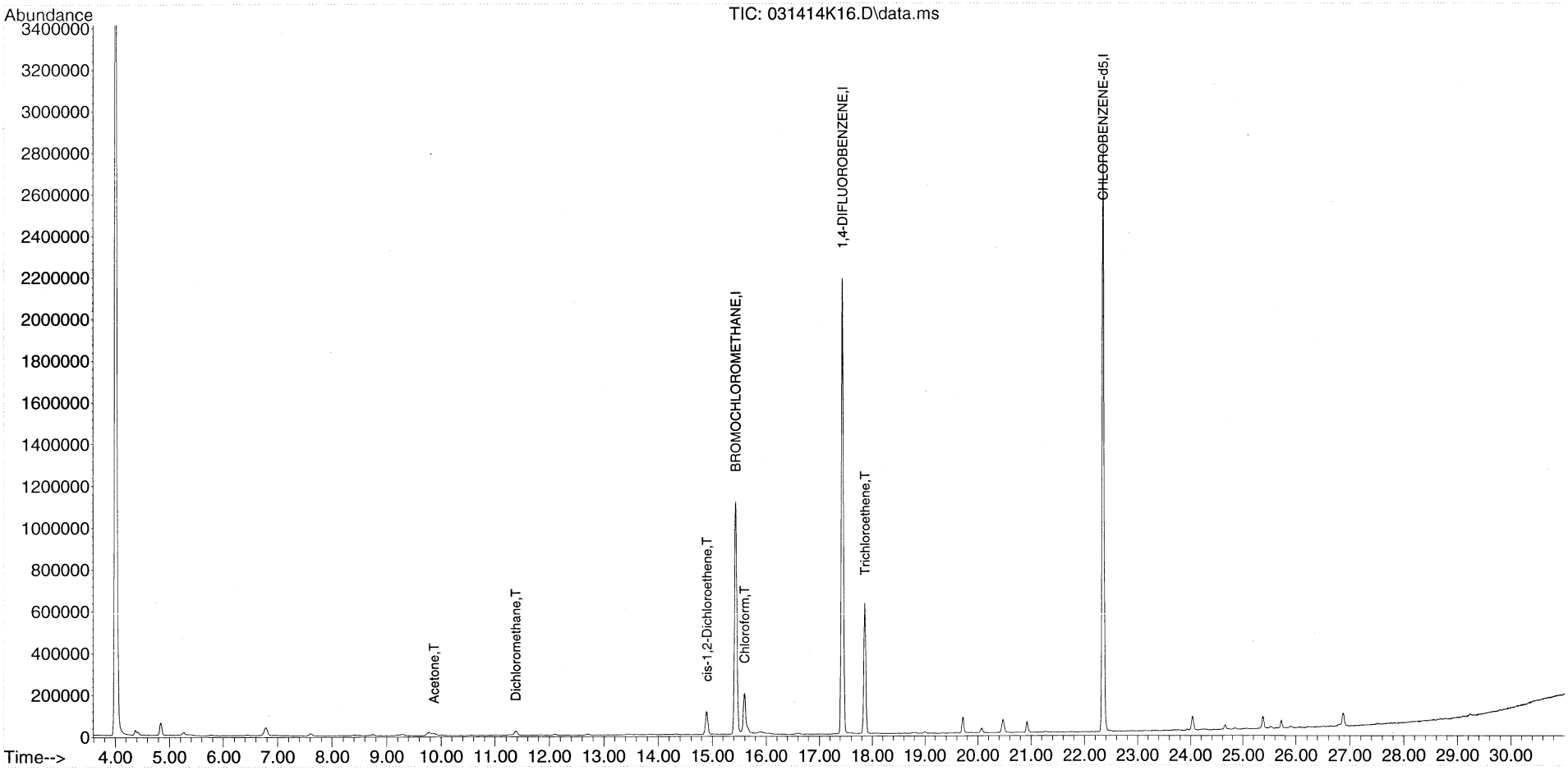
(#) = qualifier out of range (m) = manual integration (+) = signals summed

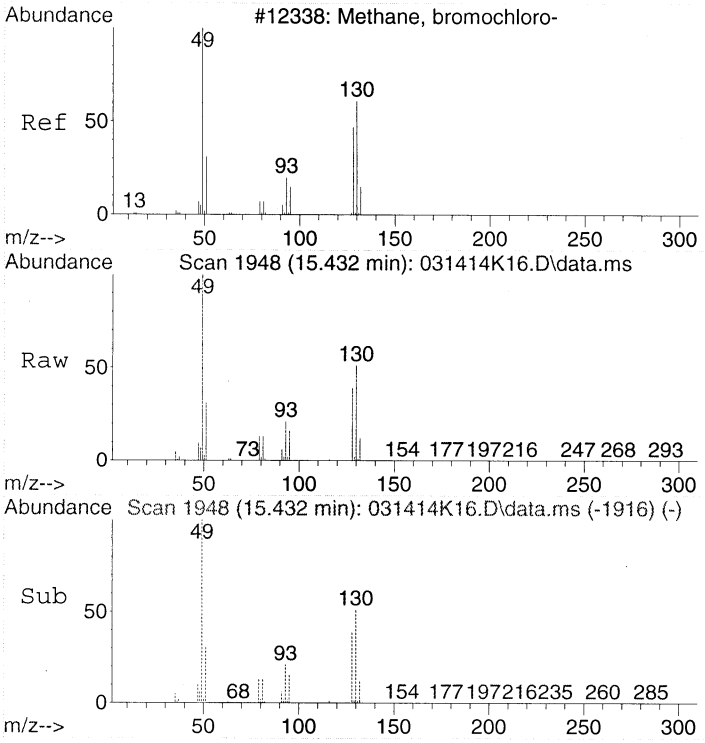
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K16.D
Acq On : 15 Mar 2014 00:43
Instrument: HP5973K
Operator : EM
Sample : 1403028-02RE1
Misc : 50mL MH61 CAN 629
ALS Vial : 12
Multiplier: 4.39

Quant Time: Mar 18 10:49:51 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

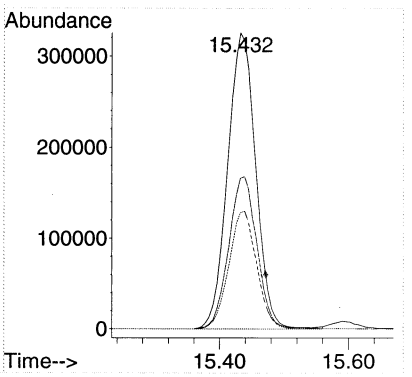


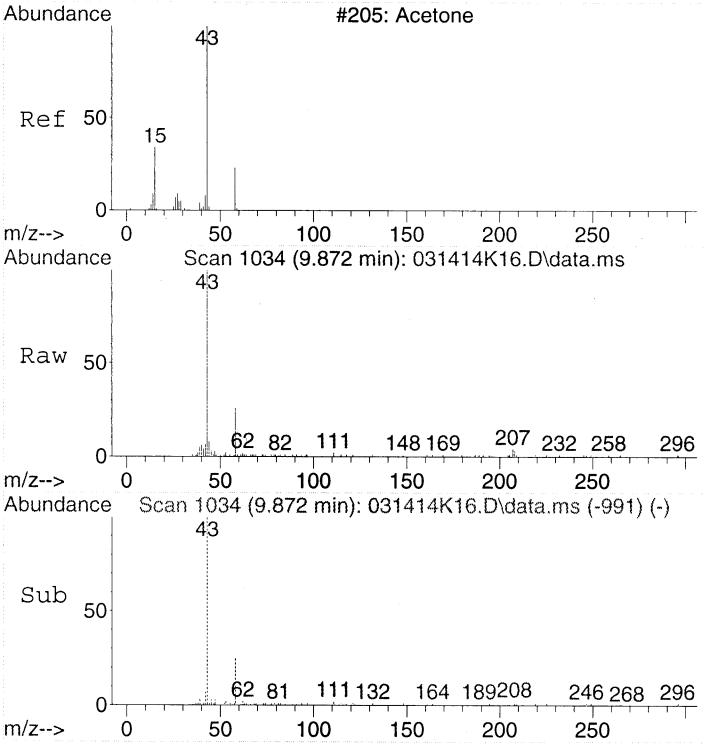


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion: 49 Resp: 989388

Ion	Ratio	Lower	Upper
49	100		
130	51.8	53.4	93.4#
128	39.6	35.1	75.1

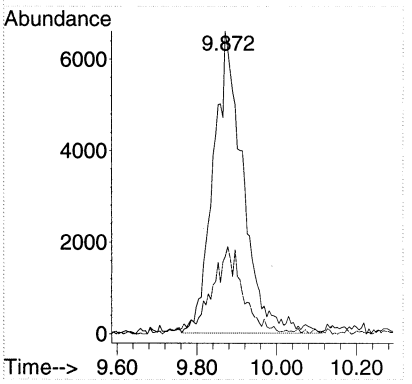


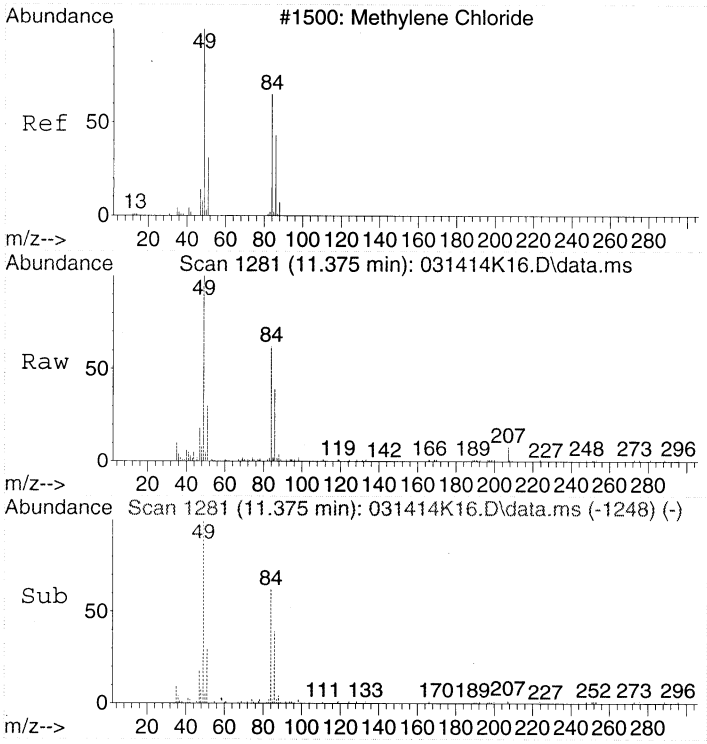


#14
Acetone
Concen: 0.73 ppbv
RT: 9.872 min Scan# 1034
Delta R.T. 0.061 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion: 43 Resp: 34156

Ion	Ratio	Lower	Upper
43	100		
58	29.2	8.0	48.0

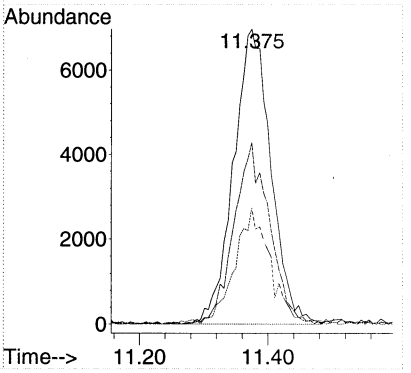


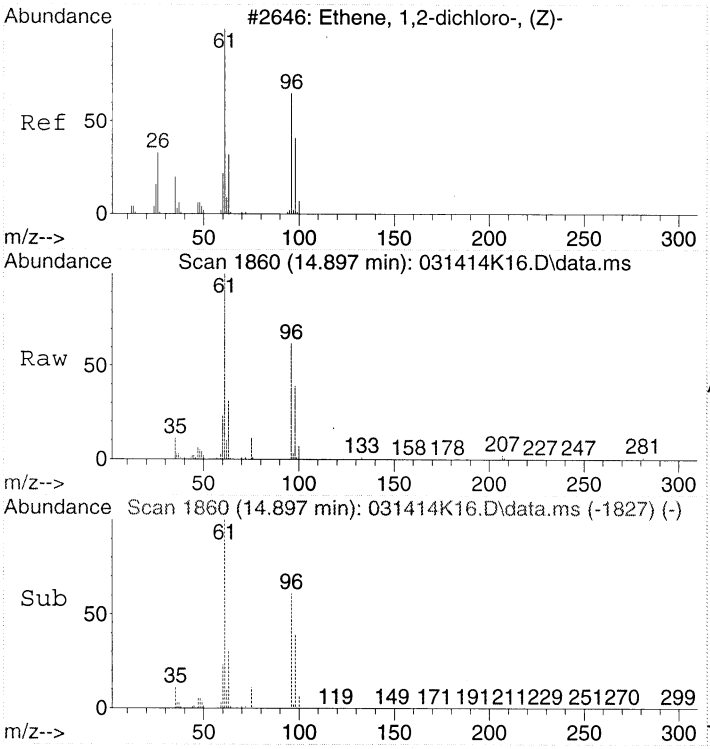


#18
Dichloromethane
Concen: 0.61 ppbv
RT: 11.375 min Scan# 1281
Delta R.T. 0.000 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion: 49 Resp: 28208

Ion	Ratio	Lower	Upper
49	100		
84	58.7	54.7	94.7
86	36.1	29.1	69.1

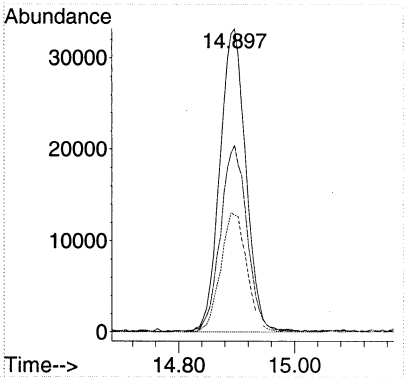


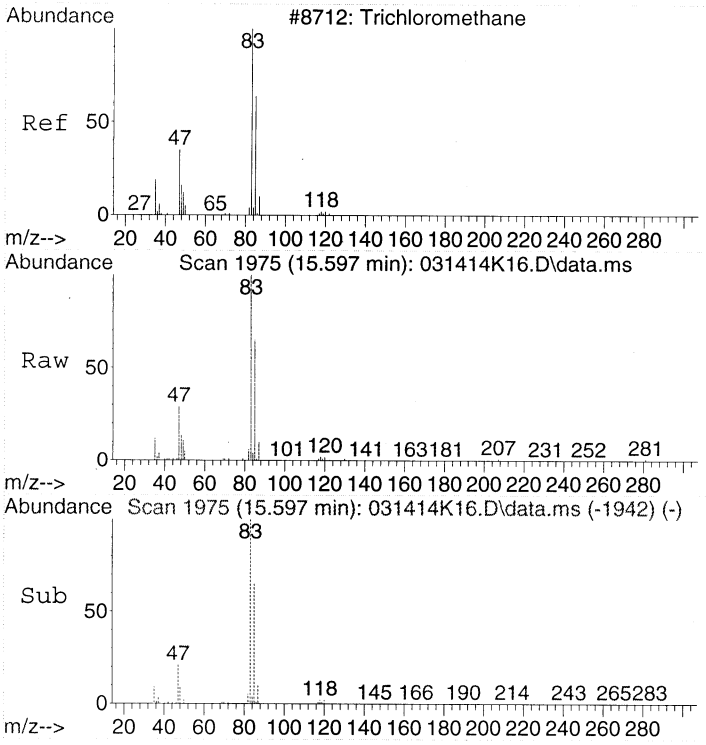


#24
cis-1,2-Dichloroethene
Concen: 2.24 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion: 61 Resp: 104007

Ion	Ratio	Lower	Upper
61	100		
96	62.5	52.9	92.9
98	39.6	24.5	64.5

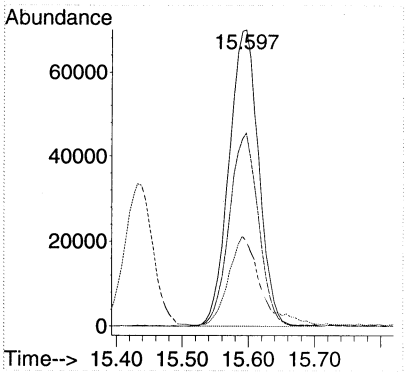


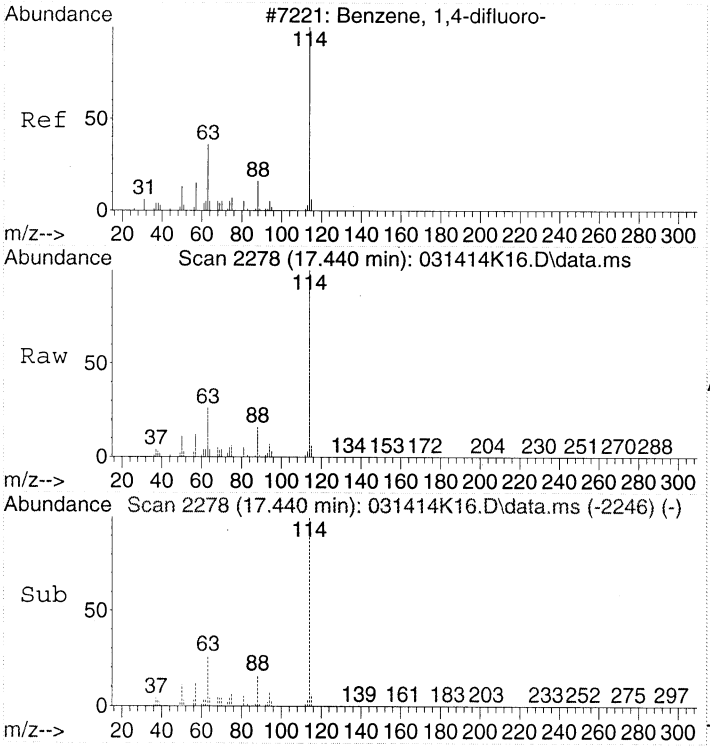


#28
Chloroform
Concen: 3.40 ppbv
RT: 15.597 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion: 83 Resp: 218309

Ion	Ratio	Lower	Upper
83	100		
85	63.9	46.8	86.8
47	32.2	6.3	46.3

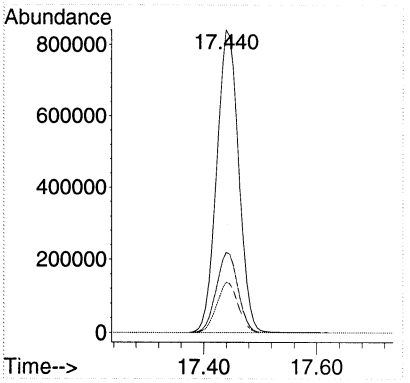


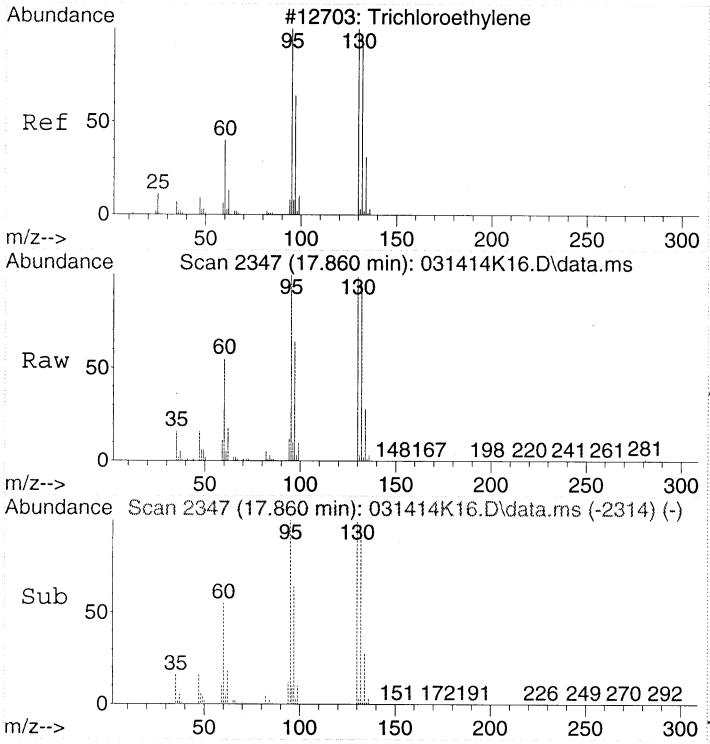


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion:114 Resp: 2255914

Ion	Ratio	Lower	Upper
114	100		
63	25.9	2.7	42.7
88	16.0	0.0	36.0

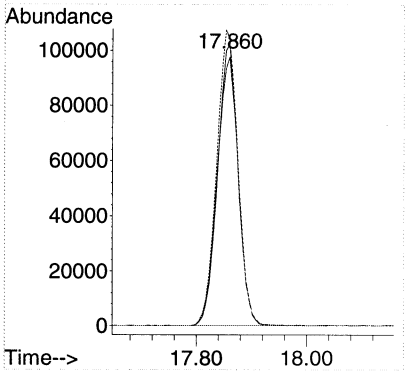


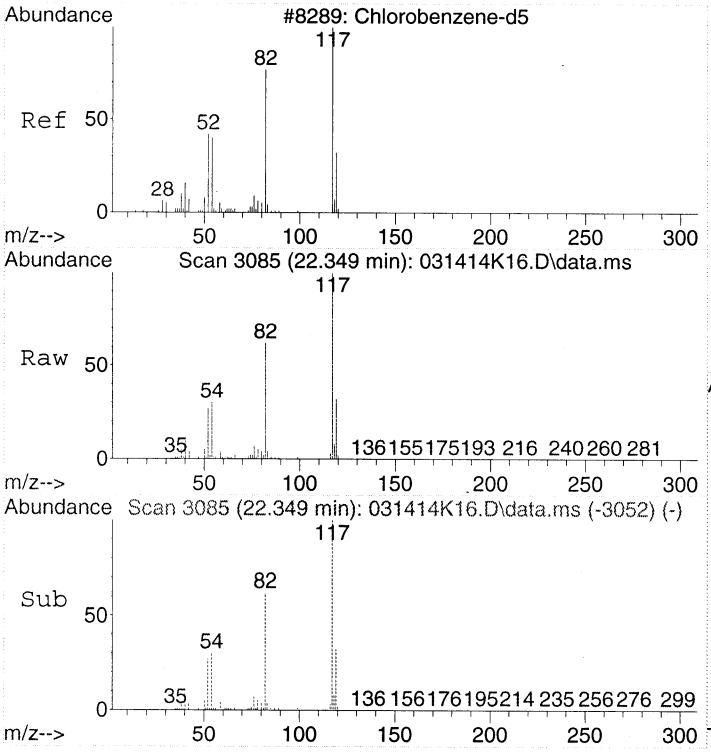


#37
Trichloroethene
Concen: 7.63 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion:130 Resp: 268178

Ion	Ratio	Lower	Upper
130	100		
132	96.6	77.7	117.7
95	107.2	80.9	120.9

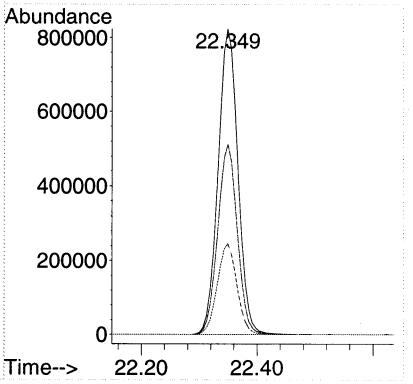




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K16.D
Acq: 15 Mar 2014 00:43

Tgt Ion:117 Resp: 1965244

Ion	Ratio	Lower	Upper
117	100		
82	61.8	36.4	76.4
54	29.7	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K17.D
Acq On : 15 Mar 2014 1:30
Instrument: HP5973K
Operator : EM
Sample : B14C068-DUP1
Misc : 50mL MH61 CAN 629
ALS Vial : 12
Multiplier: 4.39

Quant Time: Mar 18 10:50:04 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	993155	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2338241	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	2018763	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.878	43	32068	0.68	ppbv	98
18) Dichloromethane	11.380	49	27645	0.59	ppbv	84
24) cis-1,2-Dichloroethene	14.891	61	96056	2.06	ppbv	89
28) Chloroform	15.590	83	203085	3.15	ppbv	96
37) Trichloroethene	17.853	130	249007	6.84	ppbv	97

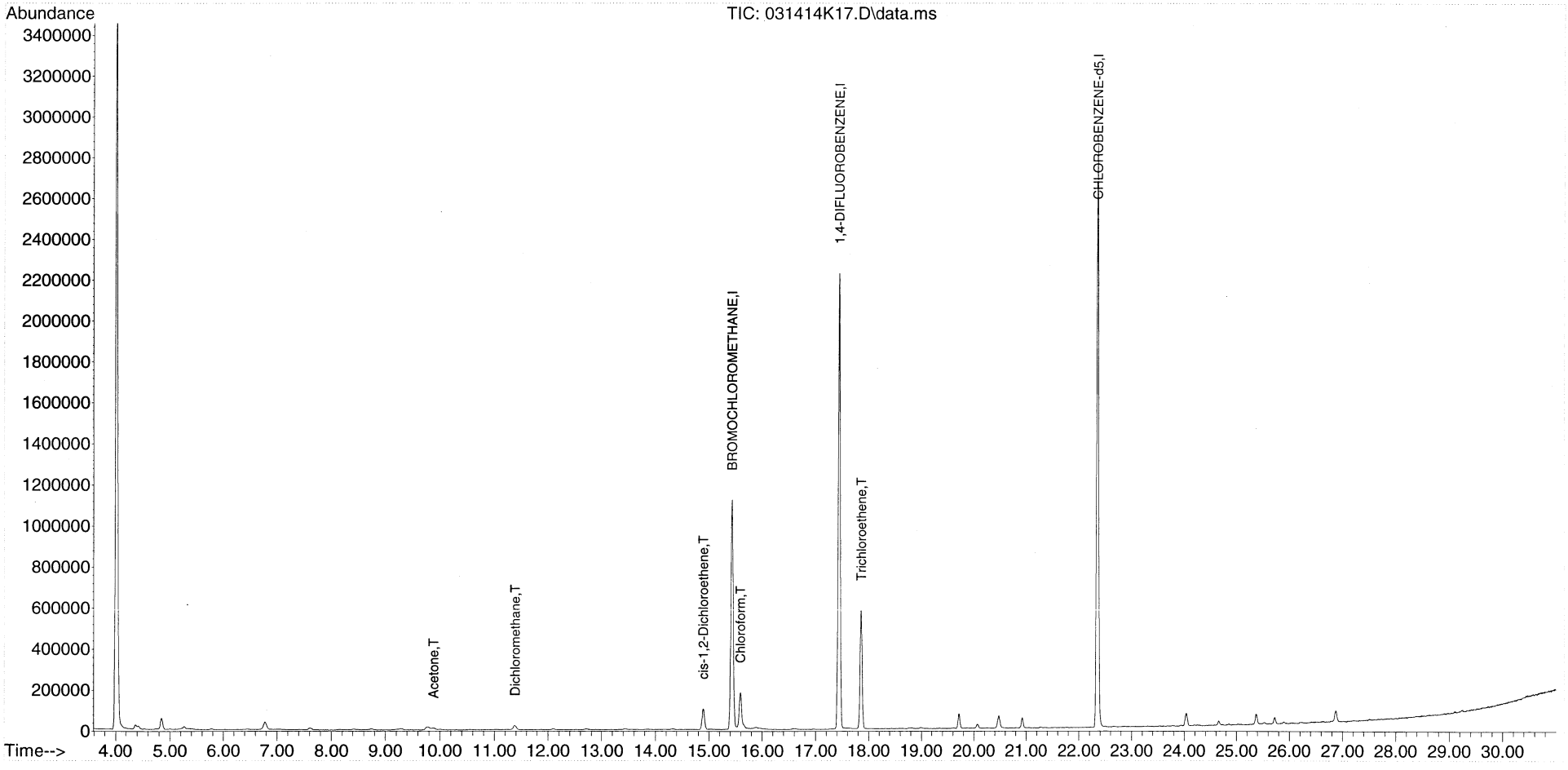
(#) = qualifier out of range (m) = manual integration (+) = signals summed

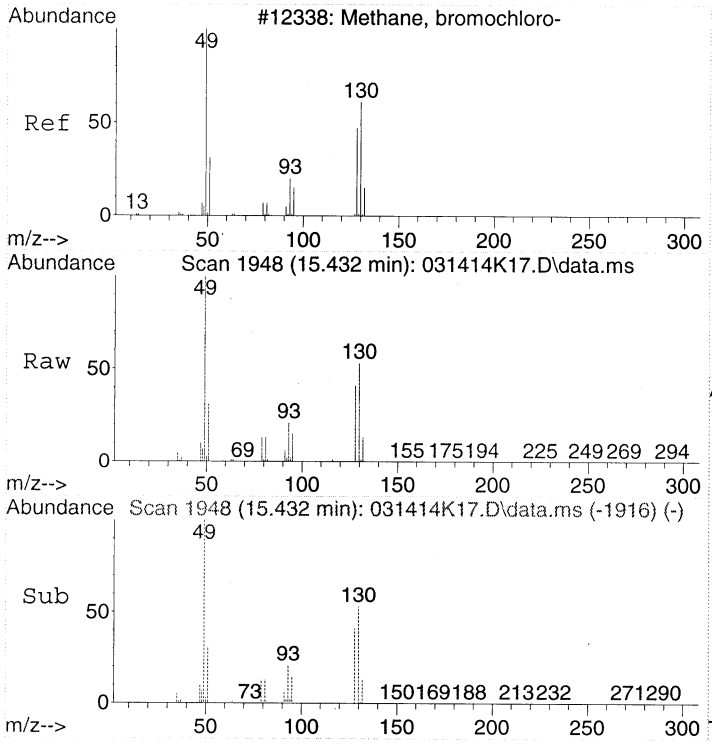
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K17.D
Acq On : 15 Mar 2014 1:30
Instrument: HP5973K
Operator : EM
Sample : B14C068-DUP1
Misc : 50mL MH61 CAN 629
ALS Vial : 12
Multiplier: 4.39

Quant Time: Mar 18 10:50:04 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

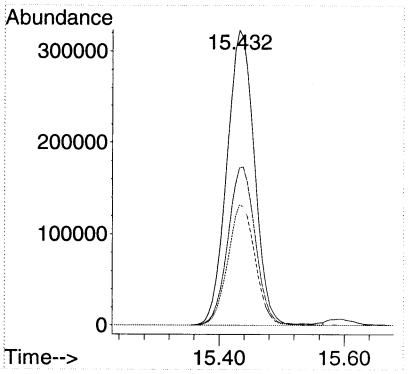


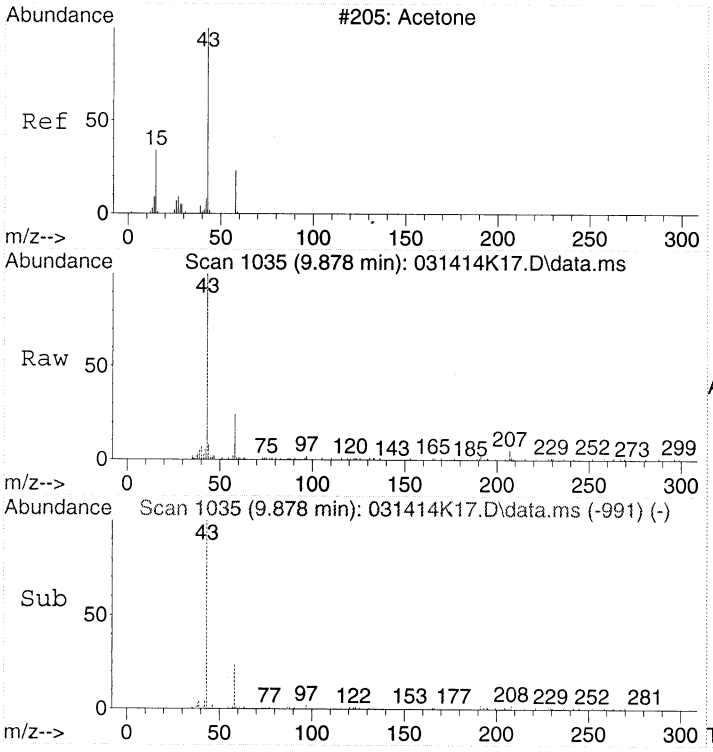


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion: 49 Resp: 993155

Ion	Ratio	Lower	Upper
49	100		
130	53.4	53.4	93.4#
128	40.6	35.1	75.1

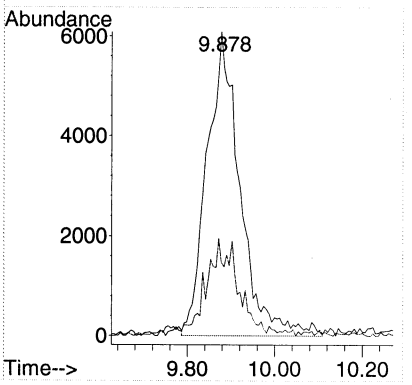


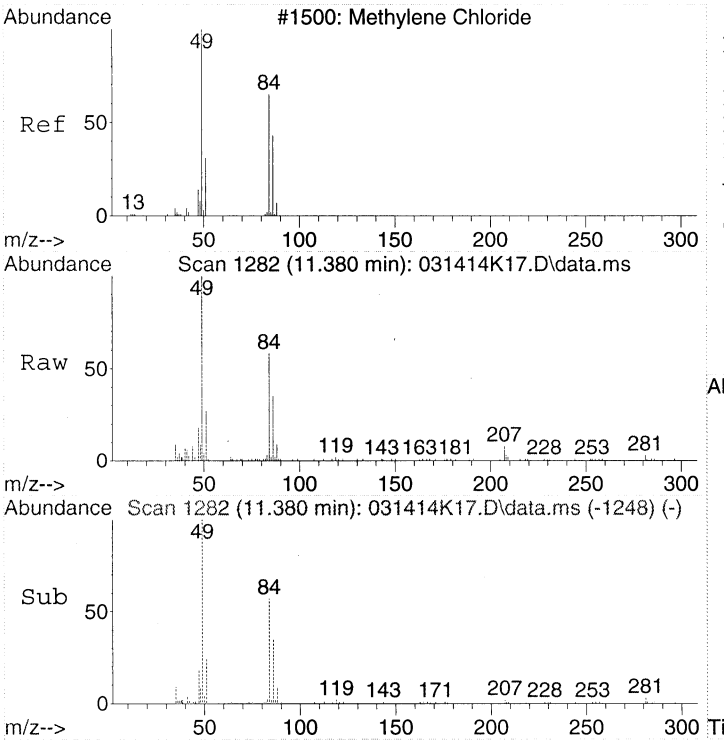


#14
Acetone
Concen: 0.68 ppbv
RT: 9.878 min Scan# 1035
Delta R.T. 0.067 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion: 43 Resp: 32068

Ion	Ratio	Lower	Upper
43	100		
58	26.9	8.0	48.0

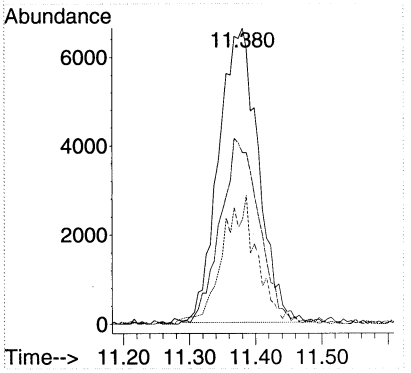


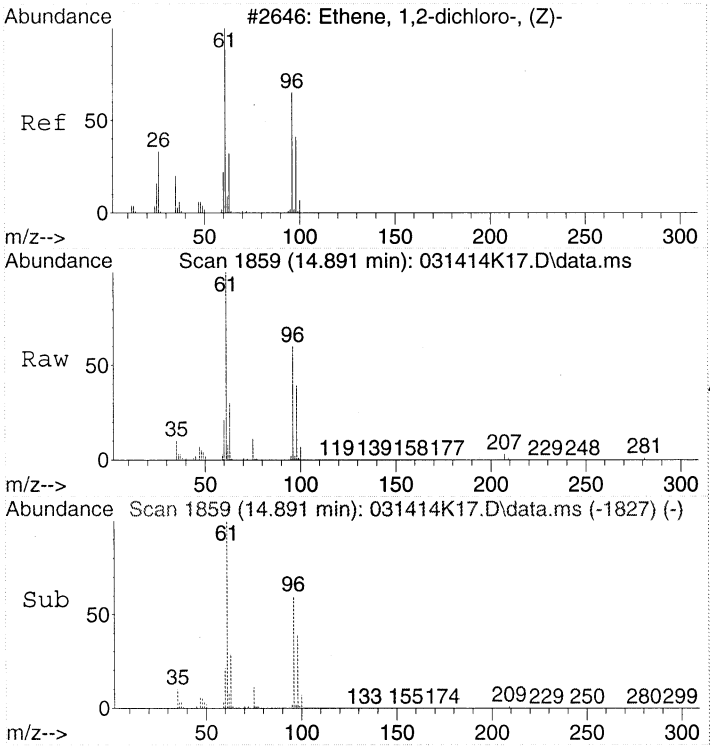


#18
Dichloromethane
Concen: 0.59 ppbv
RT: 11.380 min Scan# 1282
Delta R.T. 0.006 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion: 49 Resp: 27645

Ion	Ratio	Lower	Upper
49	100		
84	61.7	54.7	94.7
86	37.6	29.1	69.1

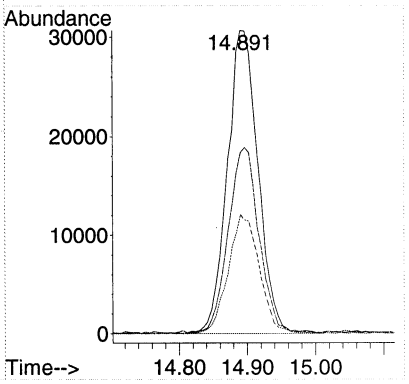


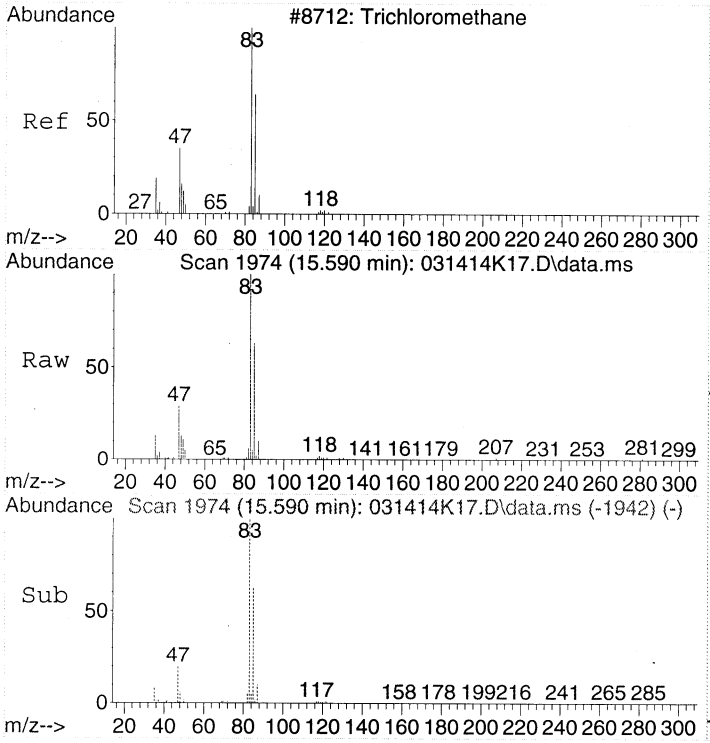


#24
cis-1,2-Dichloroethene
Concen: 2.06 ppbv
RT: 14.891 min Scan# 1859
Delta R.T. -0.006 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion: 61 Resp: 96056

Ion	Ratio	Lower	Upper
61	100		
96	61.6	52.9	92.9
98	39.8	24.5	64.5

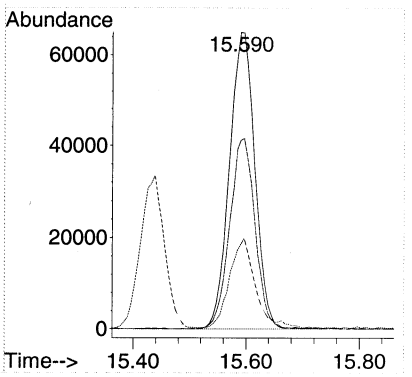


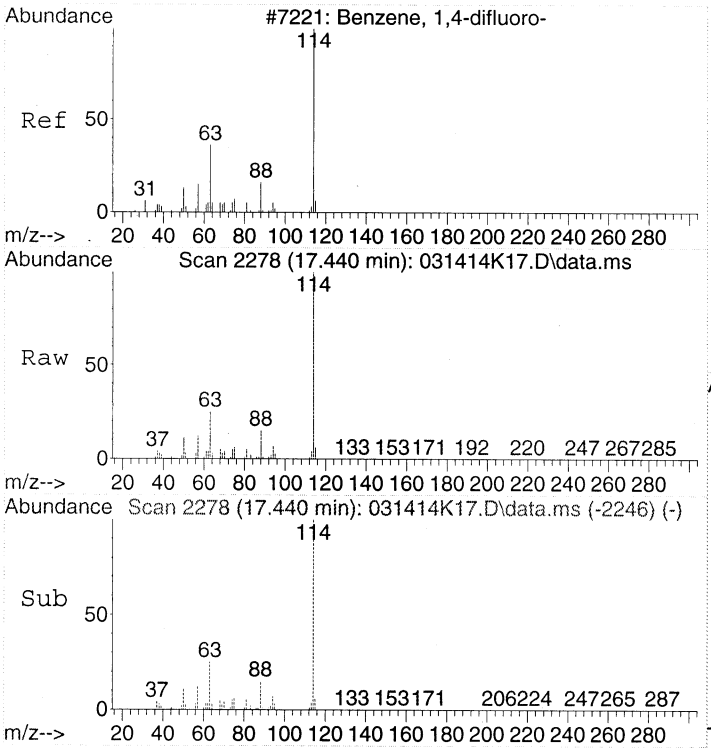


#28
Chloroform
Concen: 3.15 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion: 83 Resp: 203085

Ion	Ratio	Lower	Upper
83	100		
85	64.2	46.8	86.8
47	30.1	6.3	46.3

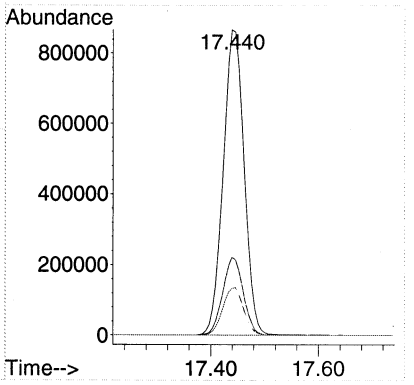


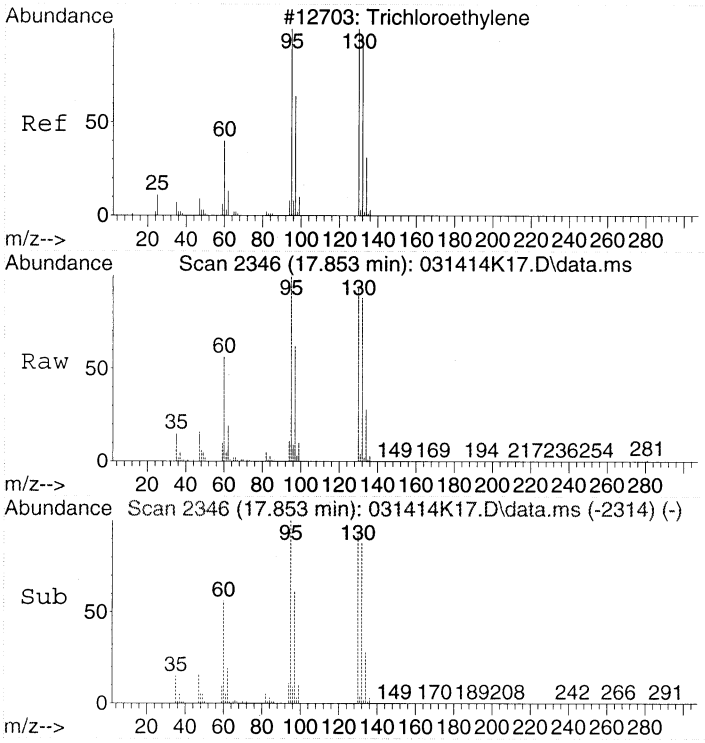


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion:114 Resp: 2338241

Ion	Ratio	Lower	Upper
114	100		
63	25.1	2.7	42.7
88	15.7	0.0	36.0

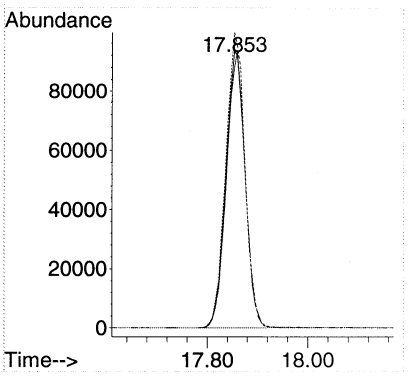


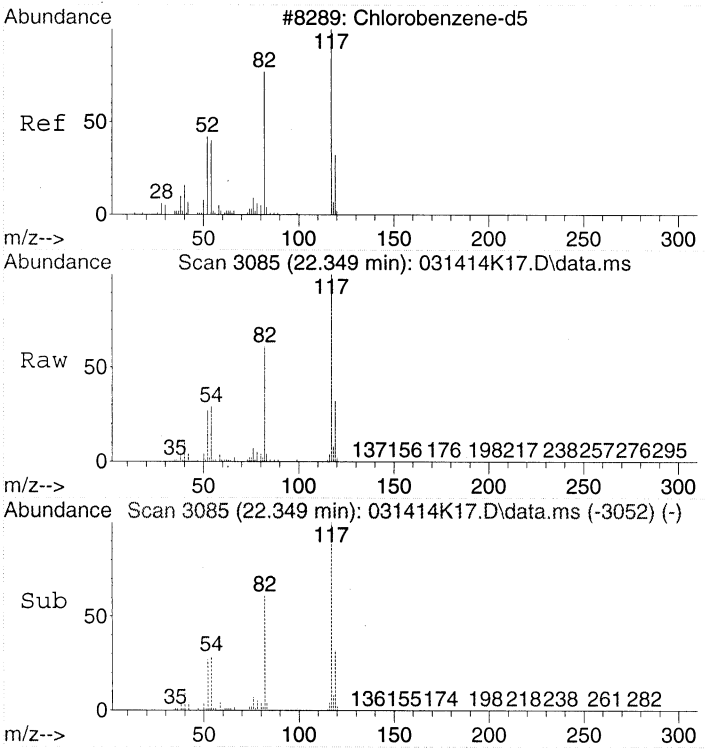


#37
Trichloroethene
Concen: 6.84 ppbv
RT: 17.853 min Scan# 2346
Delta R.T. -0.006 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion:130 Resp: 249007

Ion	Ratio	Lower	Upper
130	100		
132	97.4	77.7	117.7
95	106.4	80.9	120.9

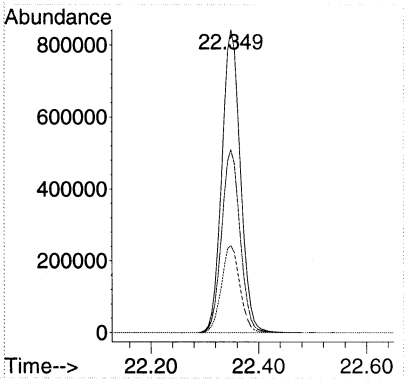




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K17.D
Acq: 15 Mar 2014 1:30

Tgt Ion:117 Resp: 2018763

Ion	Ratio	Lower	Upper
117	100		
82	60.5	36.4	76.4
54	28.8	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K18.D
Acq On : 15 Mar 2014 2:17
Instrument: HP5973K
Operator : EM
Sample : 1403028-03RE1
Misc : 50mL MH62 CAN 1107
ALS Vial : 41
Multiplier: 4.68

Quant Time: Mar 18 10:50:17 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	955636	22.00	ppbv	# 0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2186965	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1888801	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.866	43	24771	0.55	ppbv	85
18) Dichloromethane	11.374	49	27430	0.61	ppbv	85
24) cis-1,2-Dichloroethene	14.897	61	141479	3.15	ppbv	91
28) Chloroform	15.596	83	299745	4.84	ppbv	94
37) Trichloroethene	17.860	130	393938	11.57	ppbv	97
47) Tetrachloroethene	20.926	166	30289	0.67	ppbv	100

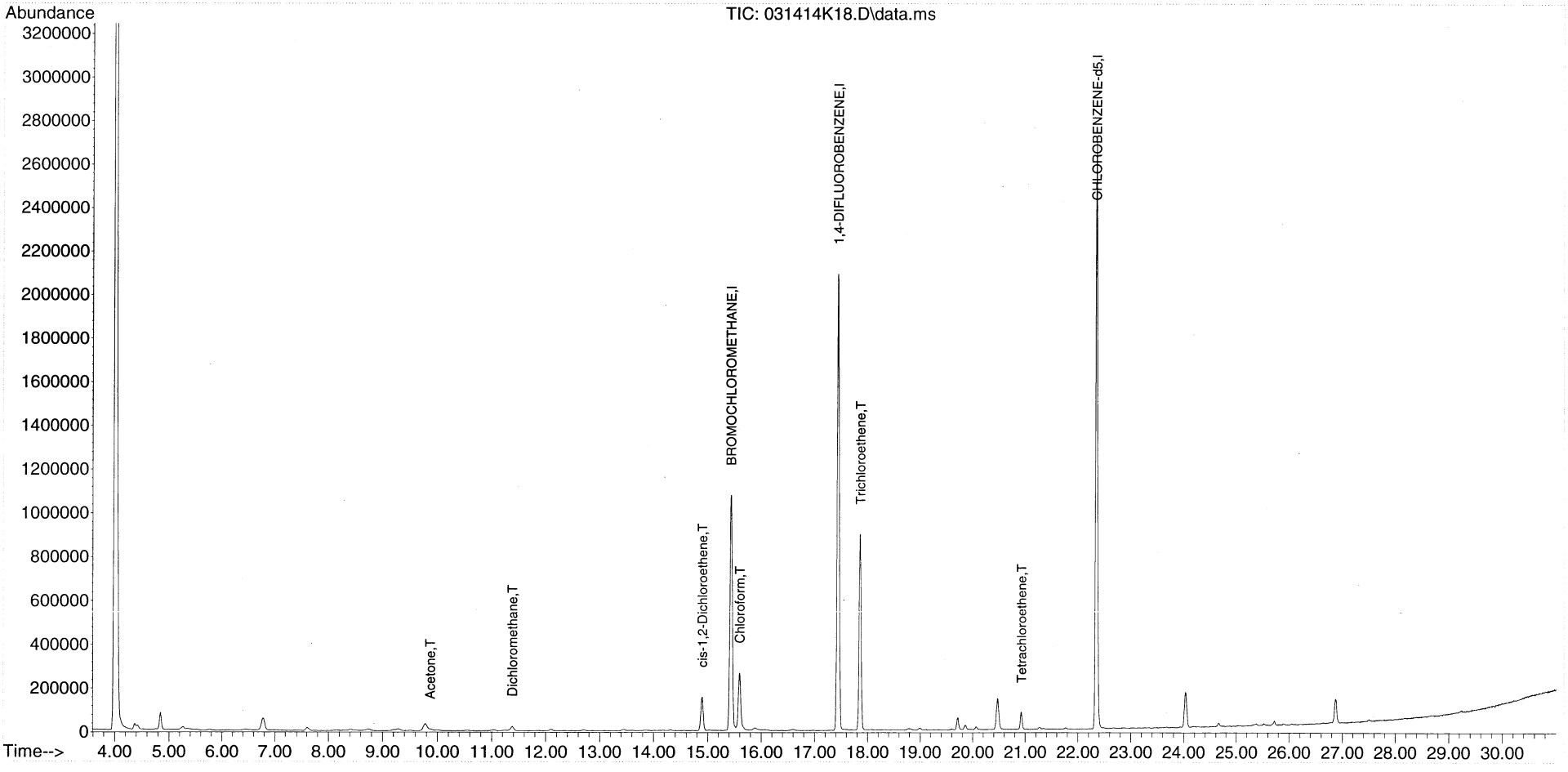
(#) = qualifier out of range (m) = manual integration (+) = signals summed

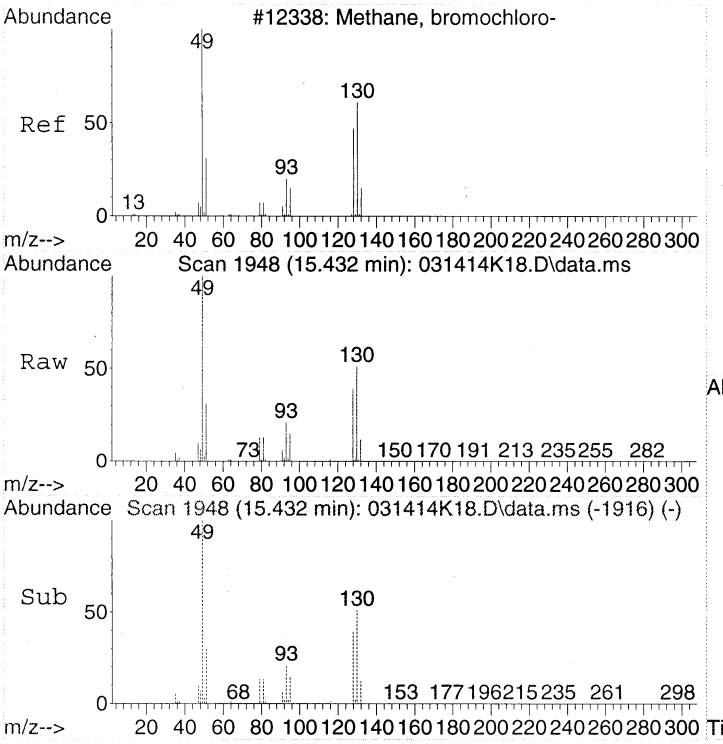
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K18.D
Acq On : 15 Mar 2014 2:17
Instrument: HP5973K
Operator : EM
Sample : 1403028-03RE1
Misc : 50mL MH62 CAN 1107
ALS Vial : 41
Multiplier: 4.68

Quant Time: Mar 18 10:50:17 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

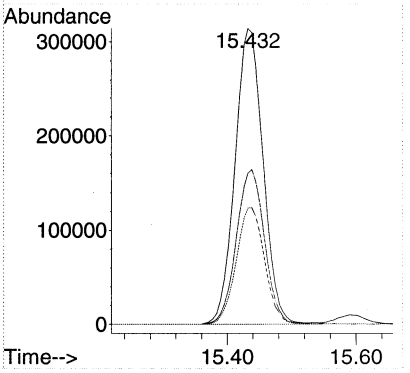


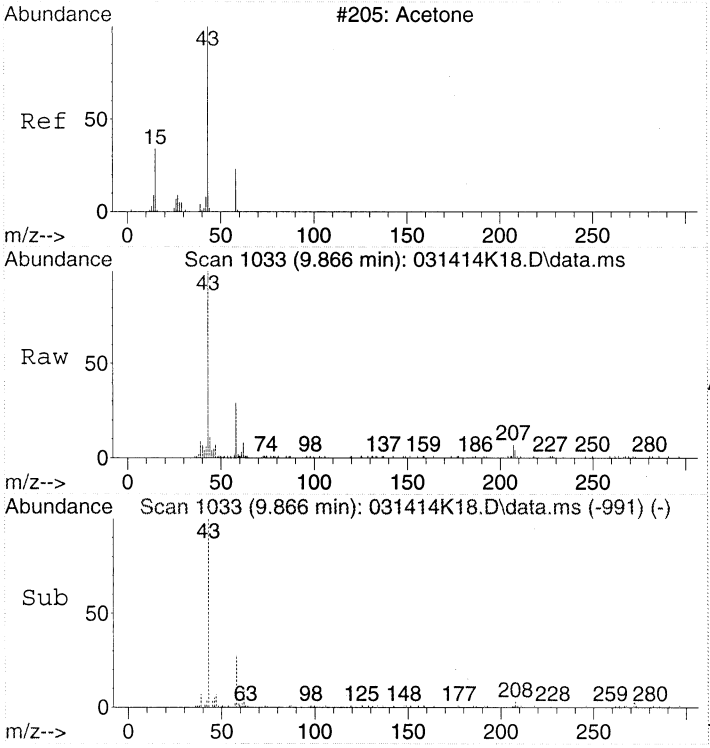


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion: 49 Resp: 955636

Ion	Ratio	Lower	Upper
49	100		
130	52.6	53.4	93.4#
128	39.9	35.1	75.1

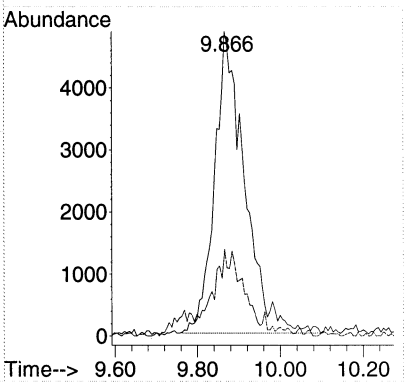


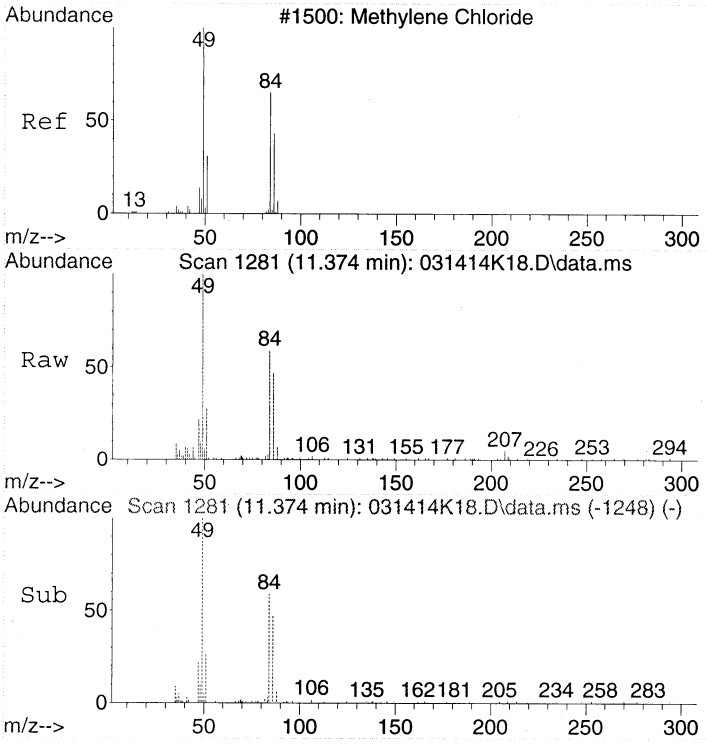


#14
Acetone
Concen: 0.55 ppbv
RT: 9.866 min Scan# 1033
Delta R.T. 0.055 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion: 43 Resp: 24771

Ion	Ratio	Lower	Upper
43	100		
58	35.7	8.0	48.0

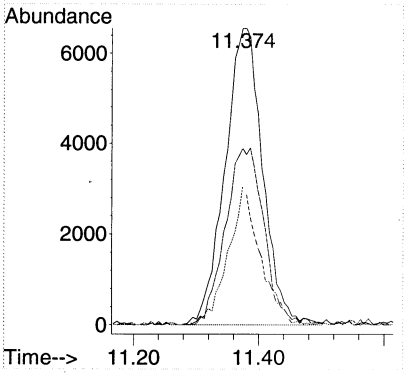


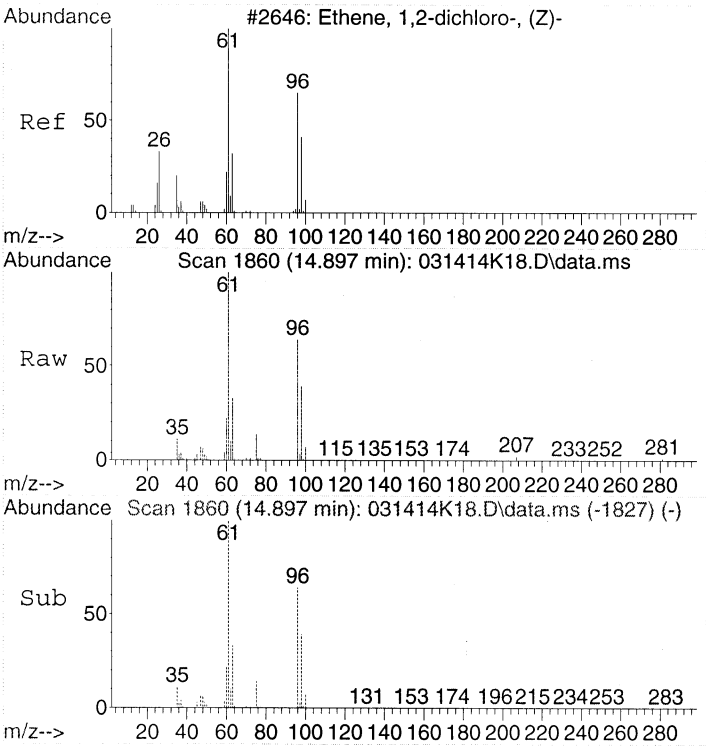


#18
Dichloromethane
Concen: 0.61 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. 0.000 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion: 49 Resp: 27430

Ion	Ratio	Lower	Upper
49	100		
84	61.5	54.7	94.7
86	39.4	29.1	69.1

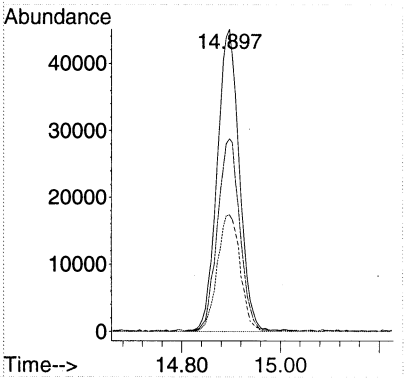


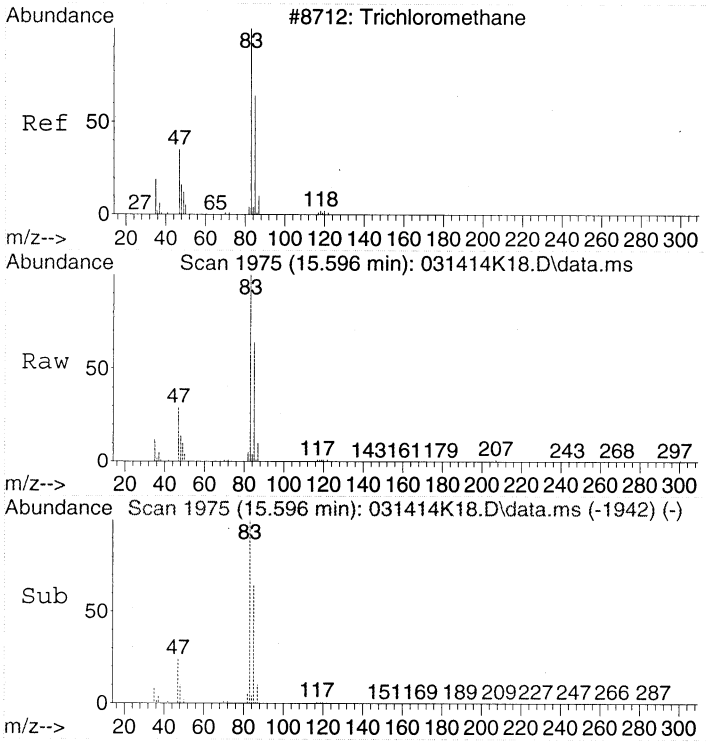


#24
cis-1,2-Dichloroethene
Concen: 3.15 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion: 61 Resp: 141479

Ion	Ratio	Lower	Upper
61	100		
96	64.4	52.9	92.9
98	39.7	24.5	64.5

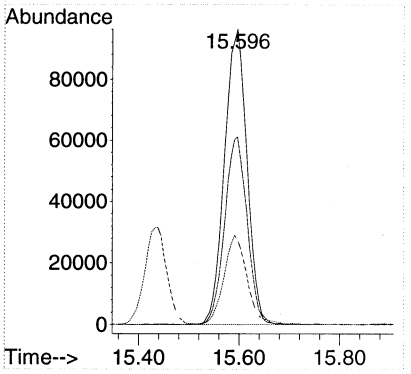


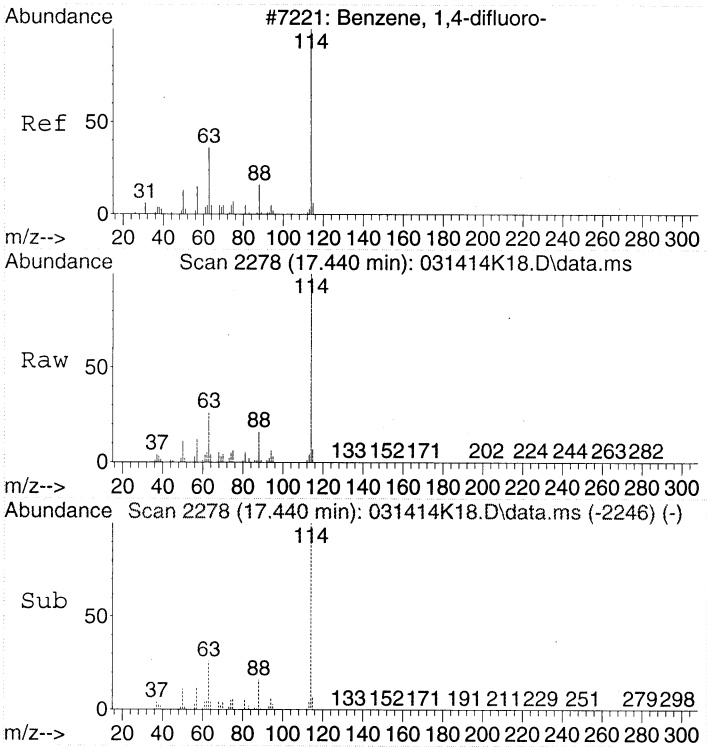


#28
Chloroform
Concen: 4.84 ppbv
RT: 15.596 min Scan# 1975
Delta R.T. 0.000 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion: 83 Resp: 299745

Ion	Ratio	Lower	Upper
83	100		
85	63.0	46.8	86.8
47	30.2	6.3	46.3

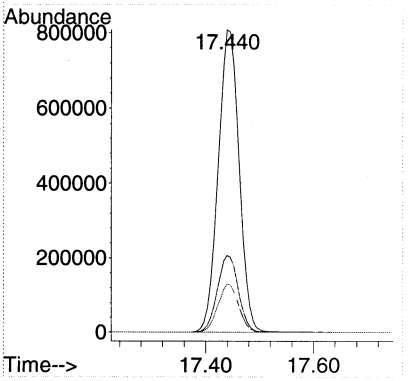


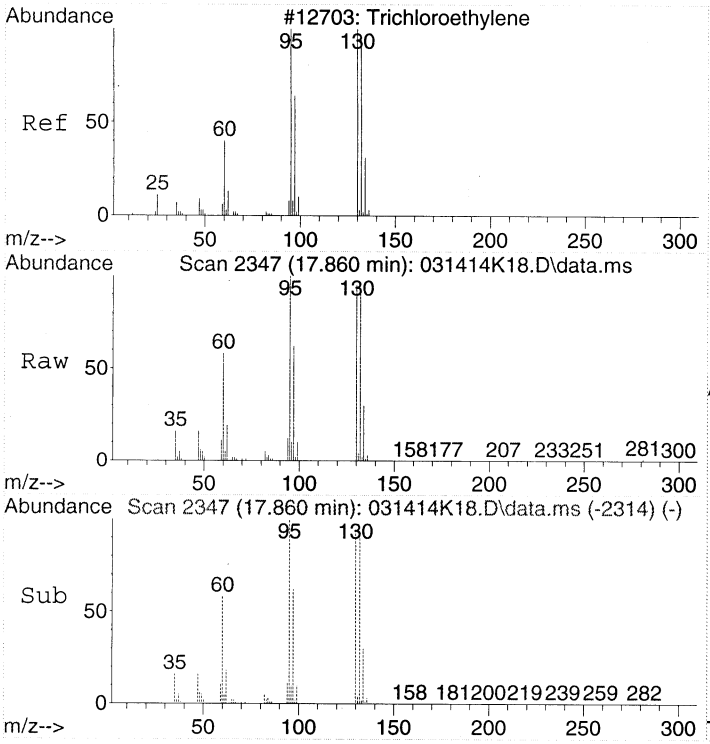


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion:114 Resp: 2186965

Ion	Ratio	Lower	Upper
114	100		
63	25.7	2.7	42.7
88	15.9	0.0	36.0

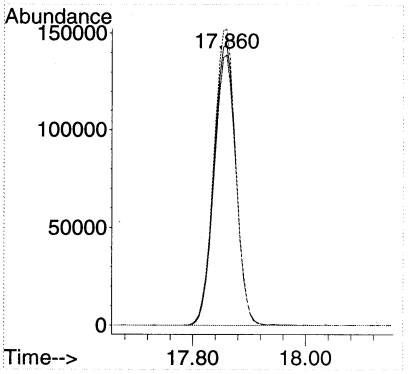


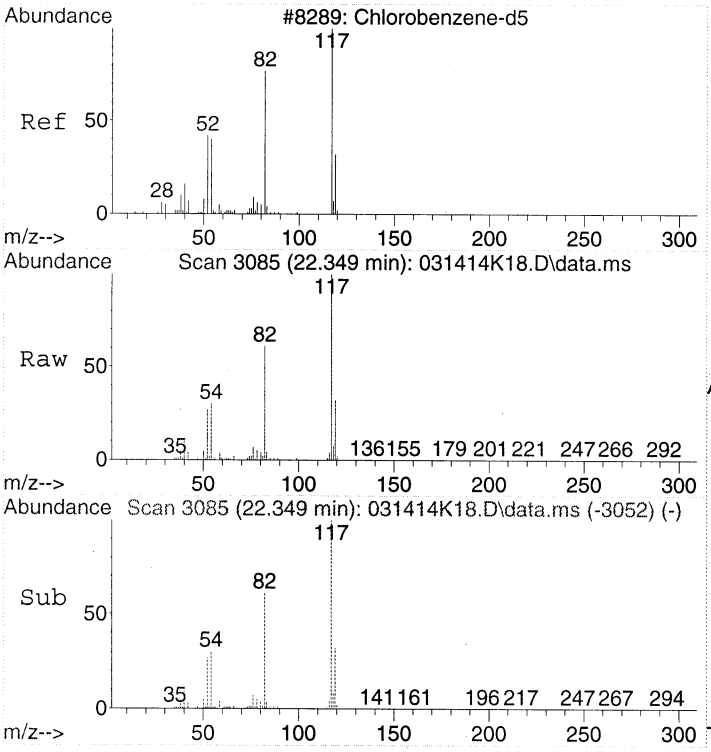


#37
Trichloroethene
Concen: 11.57 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion:130 Resp: 393938

Ion	Ratio	Lower	Upper
130	100		
132	95.5	77.7	117.7
95	104.3	80.9	120.9

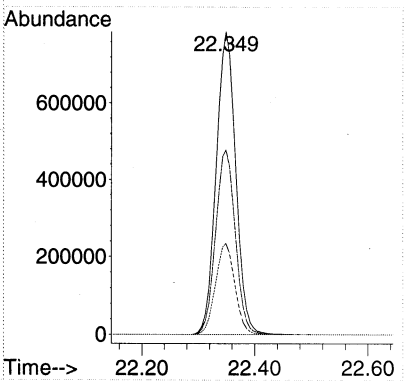


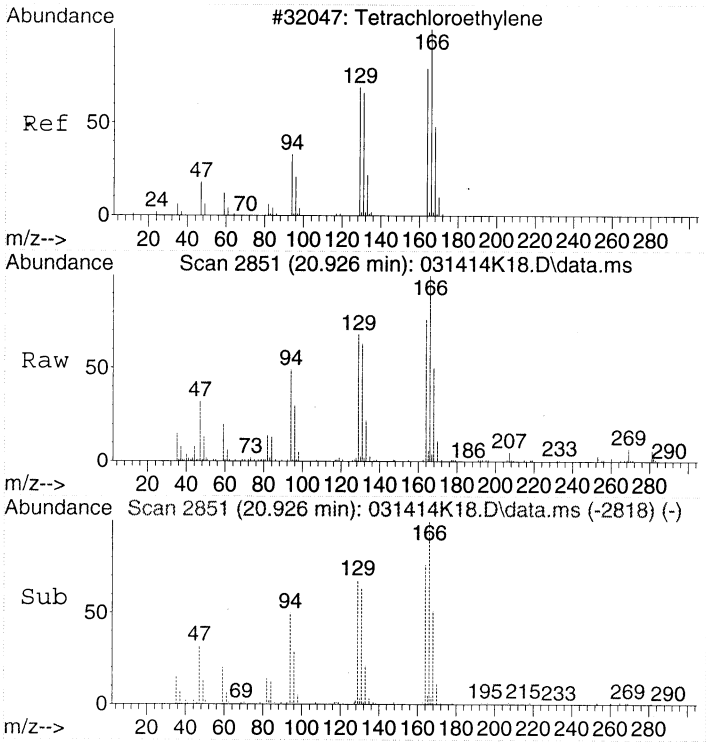


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion:117 Resp: 1888801

Ion	Ratio	Lower	Upper
117	100		
82	61.1	36.4	76.4
54	29.6	5.4	45.4

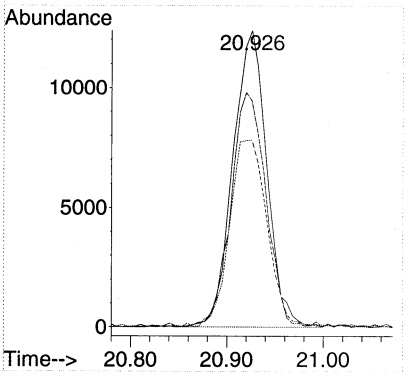




#47
Tetrachloroethene
Concen: 0.67 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. 0.000 min
Lab File: 031414K18.D
Acq: 15 Mar 2014 2:17

Tgt Ion:166 Resp: 30289

Ion	Ratio	Lower	Upper
166	100		
164	81.1	60.8	100.8
131	70.8	50.5	90.5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K19.D
Acq On : 15 Mar 2014 3:04
Instrument: HP5973K
Operator : EM
Sample : 1403028-04RE1
Misc : 50mL MH63 CAN 1113
ALS Vial : 42
Multiplier: 4.52

Quant Time: Mar 18 10:50:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.432	49	928137	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2223823	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1932332	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.368	49	24419	0.56	ppbv #	76
24) cis-1,2-Dichloroethene	14.897	61	95788	2.20	ppbv	91
28) Chloroform	15.590	83	547181	9.09	ppbv	96
37) Trichloroethene	17.859	130	268000	7.74	ppbv	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

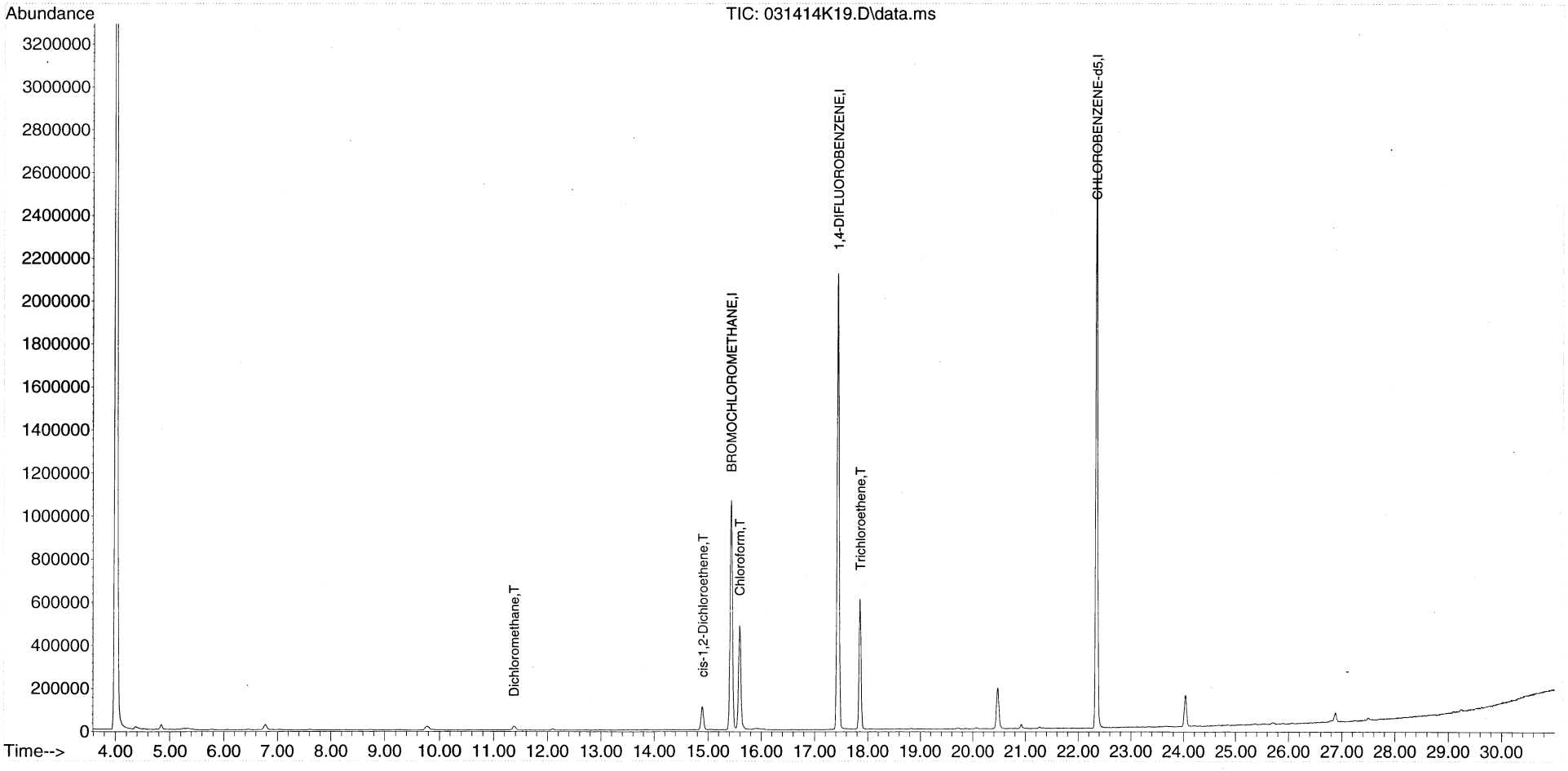
00351

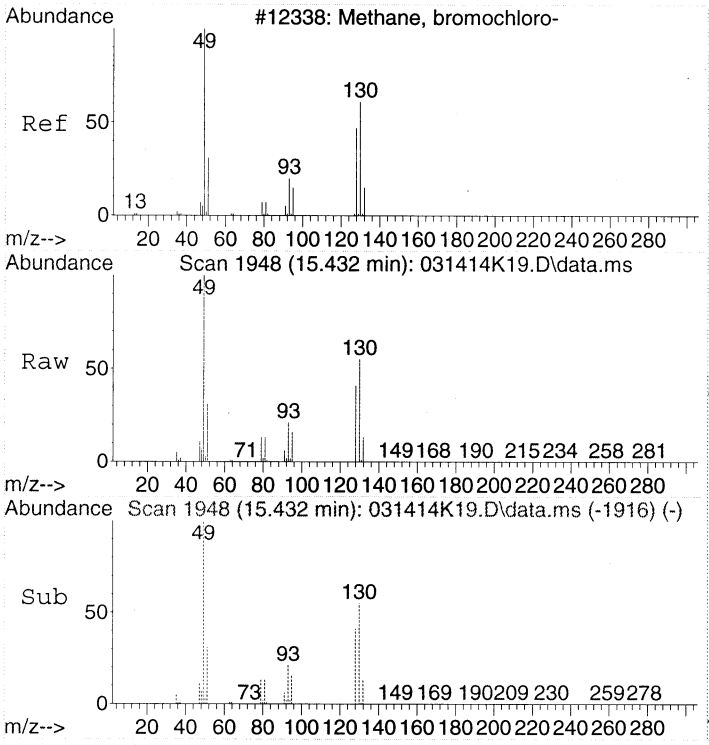
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K19.D
Acq On : 15 Mar 2014 3:04
Instrument: HP5973K
Operator : EM
Sample : 1403028-04RE1
Misc : 50mL MH63 CAN 1113
ALS Vial : 42
Multiplier: 4.52

Quant Time: Mar 18 10:50:31 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

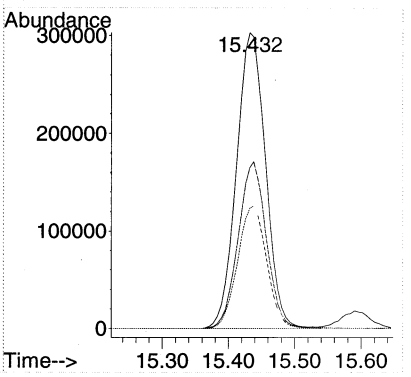


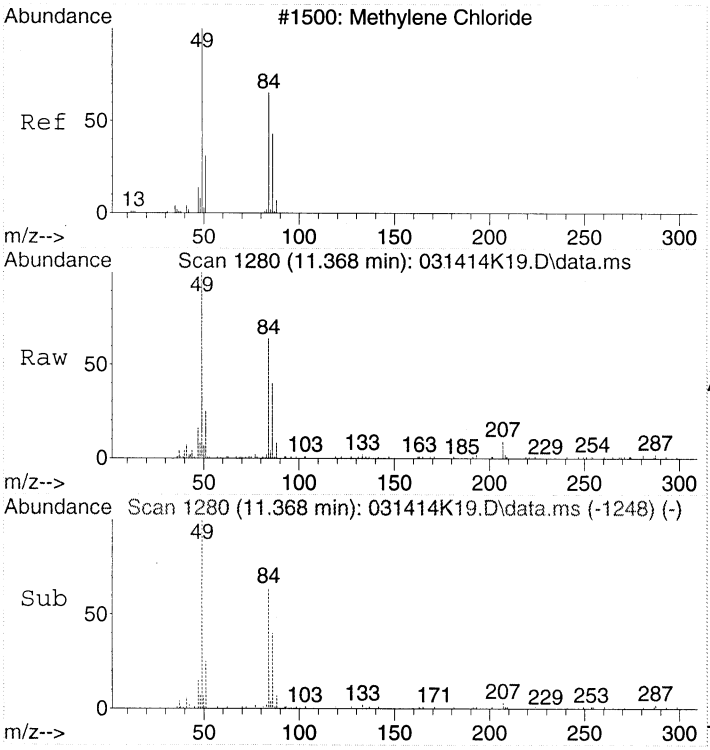


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.432 min Scan# 1948
Delta R.T. -0.006 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion: 49 Resp: 928137

Ion	Ratio	Lower	Upper
49	100		
130	54.9	53.4	93.4
128	41.6	35.1	75.1

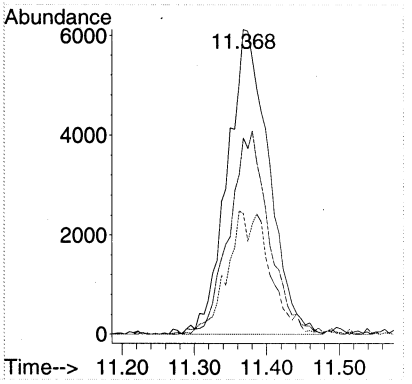


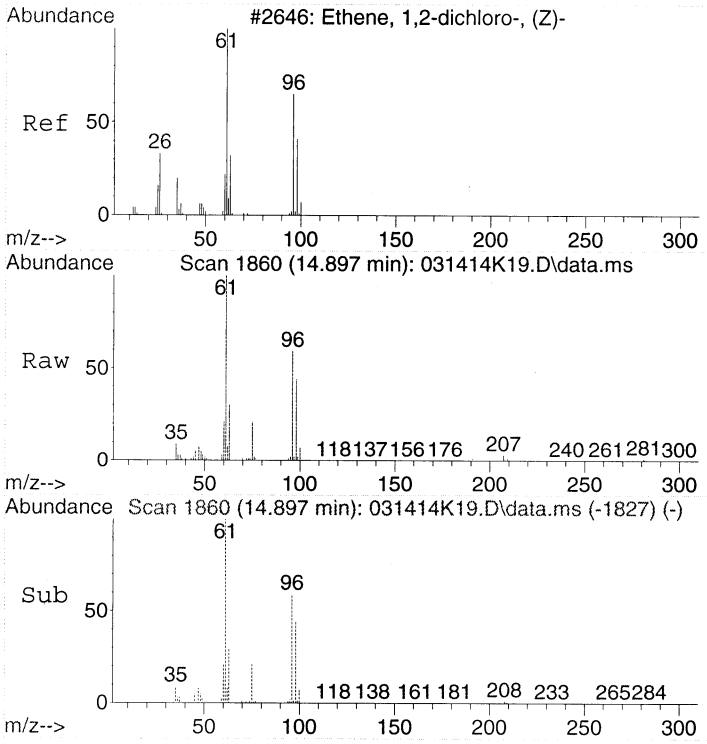


#18
Dichloromethane
Concen: 0.56 ppbv
RT: 11.368 min Scan# 1280
Delta R.T. -0.006 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion: 49 Resp: 24419

Ion	Ratio	Lower	Upper
49	100		
84	64.1	54.7	94.7
86	21.1	29.1	69.1#

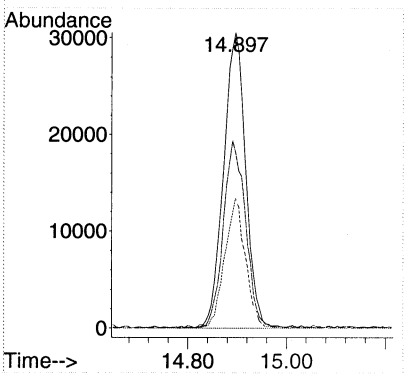


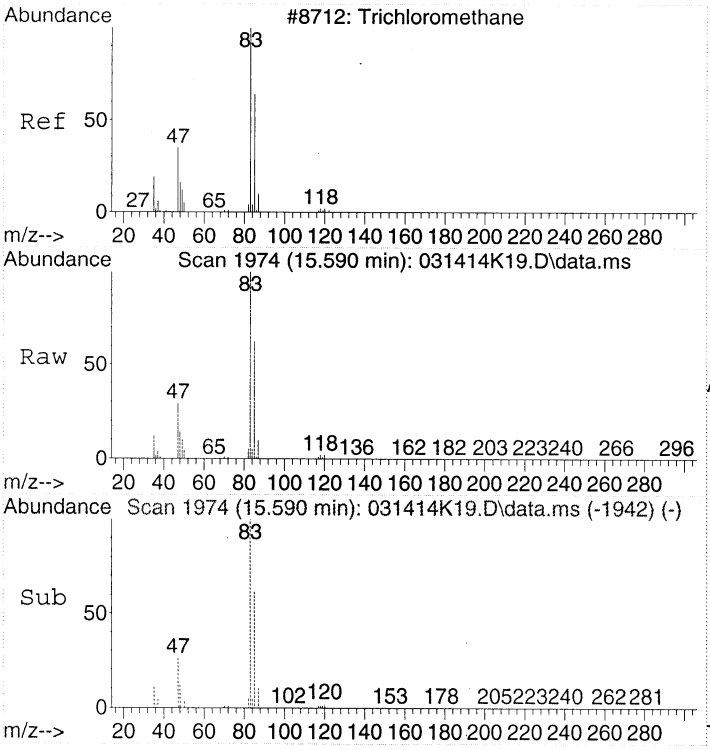


#24
cis-1,2-Dichloroethene
Concen: 2.20 ppbv
RT: 14.897 min Scan# 1860
Delta R.T. 0.000 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion: 61 Resp: 95788

Ion	Ratio	Lower	Upper
61	100		
96	63.1	52.9	92.9
98	40.9	24.5	64.5

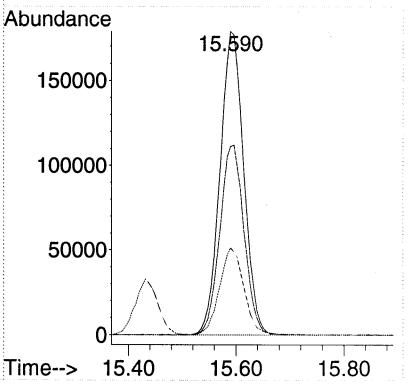


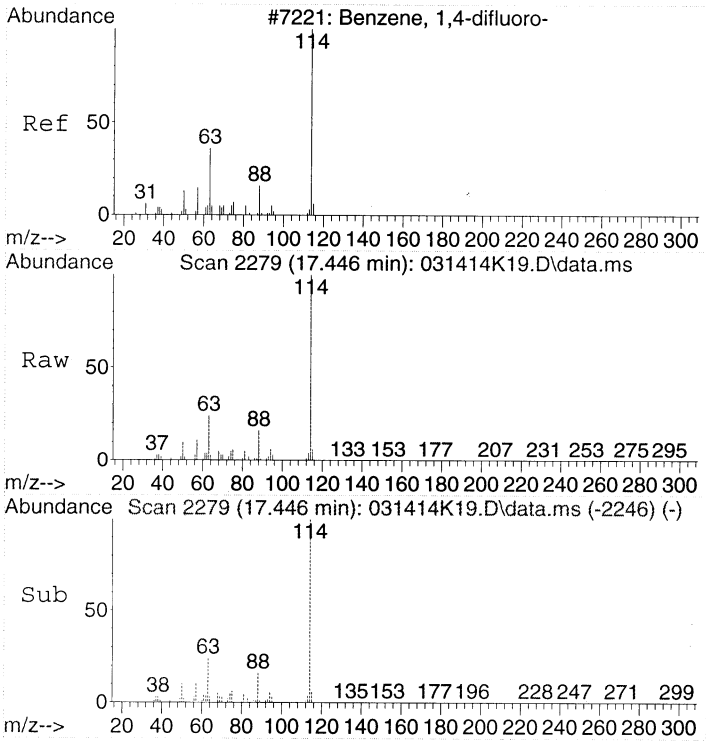


#28
Chloroform
Concen: 9.09 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion: 83 Resp: 547181

Ion	Ratio	Lower	Upper
83	100		
85	64.0	46.8	86.8
47	29.1	6.3	46.3

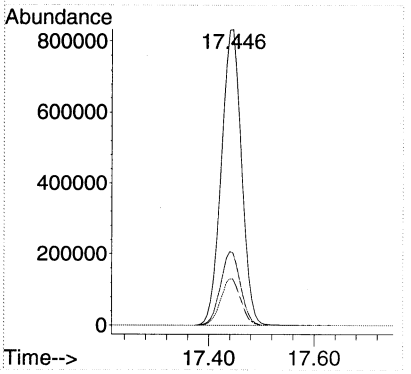


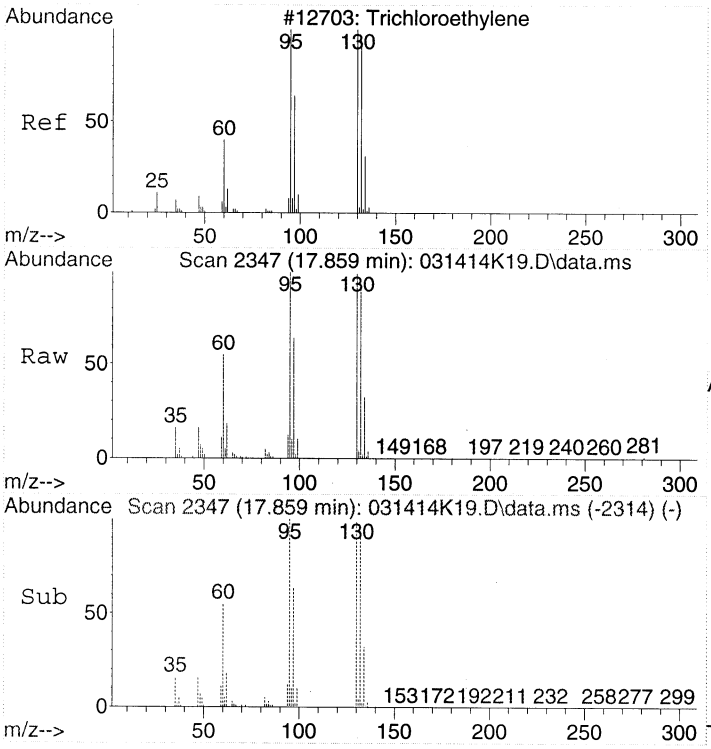


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion:114 Resp: 2223823

Ion	Ratio	Lower	Upper
114	100		
63	24.7	2.7	42.7
88	15.8	0.0	36.0

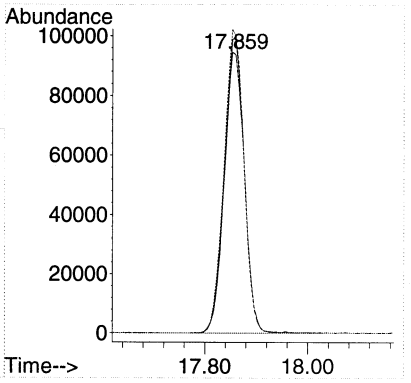


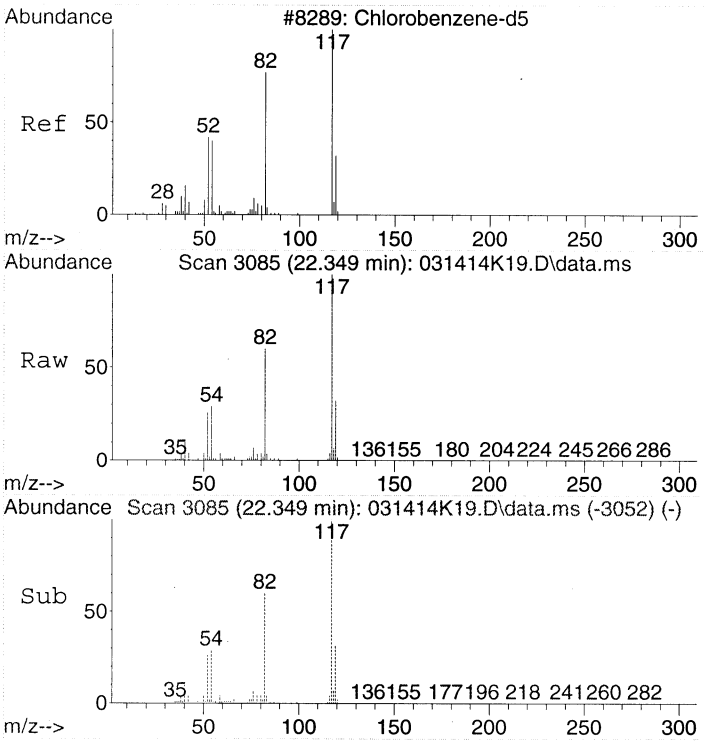


#37
Trichloroethene
Concen: 7.74 ppbv
RT: 17.859 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion:130 Resp: 268000

Ion	Ratio	Lower	Upper
130	100		
132	96.1	77.7	117.7
95	102.8	80.9	120.9

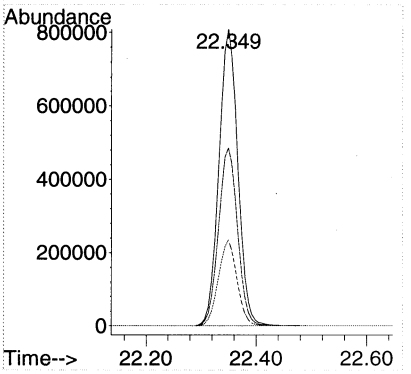




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K19.D
Acq: 15 Mar 2014 3:04

Tgt Ion:117 Resp: 1932332

Ion	Ratio	Lower	Upper
117	100		
82	60.5	36.4	76.4
54	28.6	5.4	45.4



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K20.D
Acq On : 15 Mar 2014 3:50
Instrument: HP5973K
Operator : EM
Sample : 1403028-07RE1
Misc : 20mL MH66 CAN 626
ALS Vial : 43
Multiplier: 3.82

Quant Time: Mar 18 10:50:43 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	917910	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.440	114	2219626	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1928523	22.00	ppbv	0.00
Target Compounds						Qvalue
18) Dichloromethane	11.374	49	26026	0.60	ppbv #	79
24) cis-1,2-Dichloroethene	14.891	61	106947	2.48	ppbv	93
28) Chloroform	15.590	83	277619	4.66	ppbv	95
37) Trichloroethene	17.860	130	317740	9.19	ppbv	98
47) Tetrachloroethene	20.926	166	25305	0.55	ppbv	97

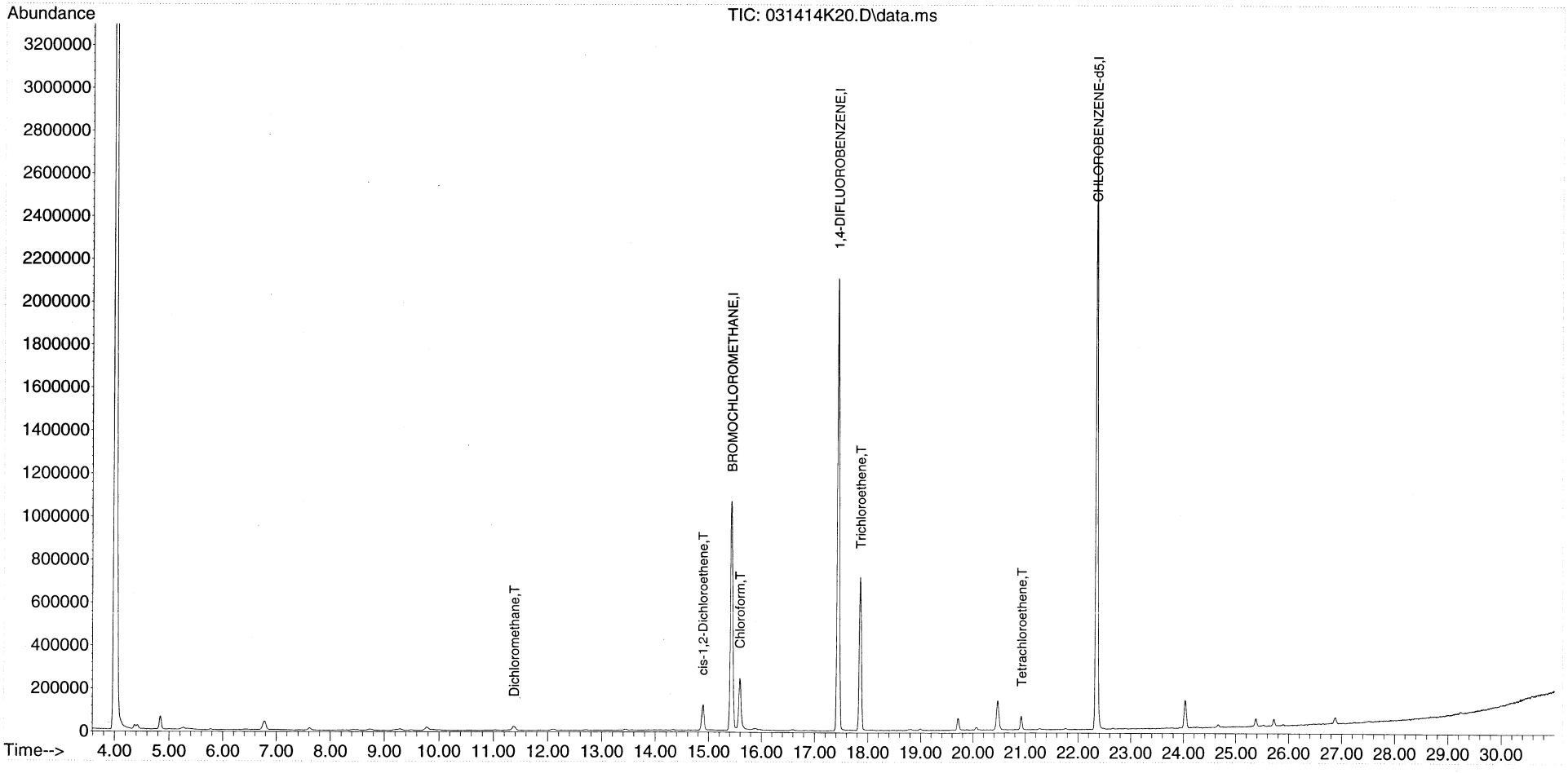
(#) = qualifier out of range (m) = manual integration (+) = signals summed

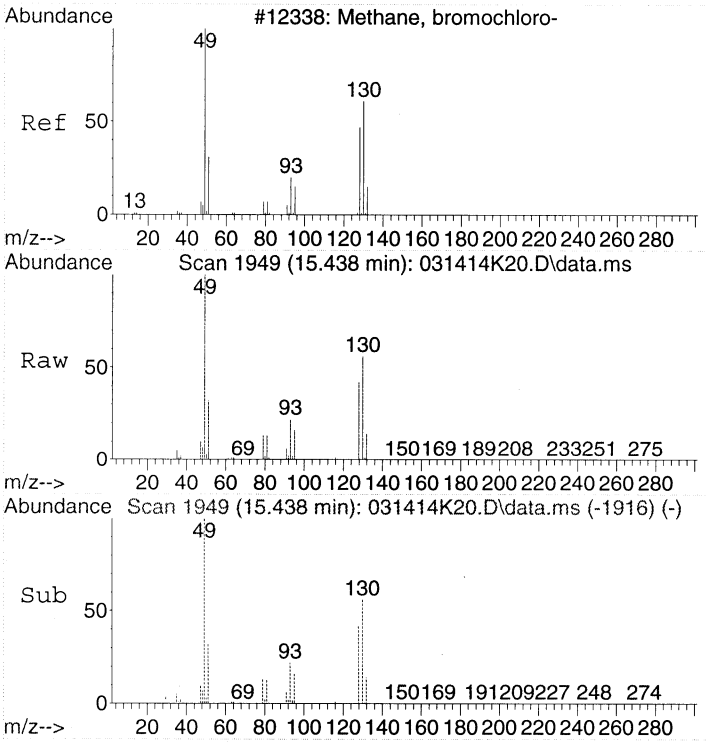
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\031414KA\
Data File : 031414K20.D
Acq On : 15 Mar 2014 3:50
Instrument: HP5973K
Operator : EM
Sample : 1403028-07RE1
Misc : 20mL MH66 CAN 626
ALS Vial : 43
Multiplier: 3.82

Quant Time: Mar 18 10:50:43 2014
Quant Title : TO15
QLast Update : Fri Mar 14 18:45:41 2014
Response via : Initial Calibration

DataAcq Meth:031414KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\031414KAA.M

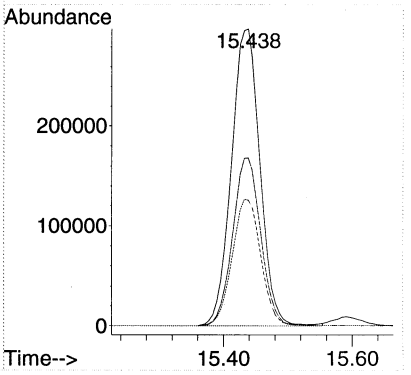


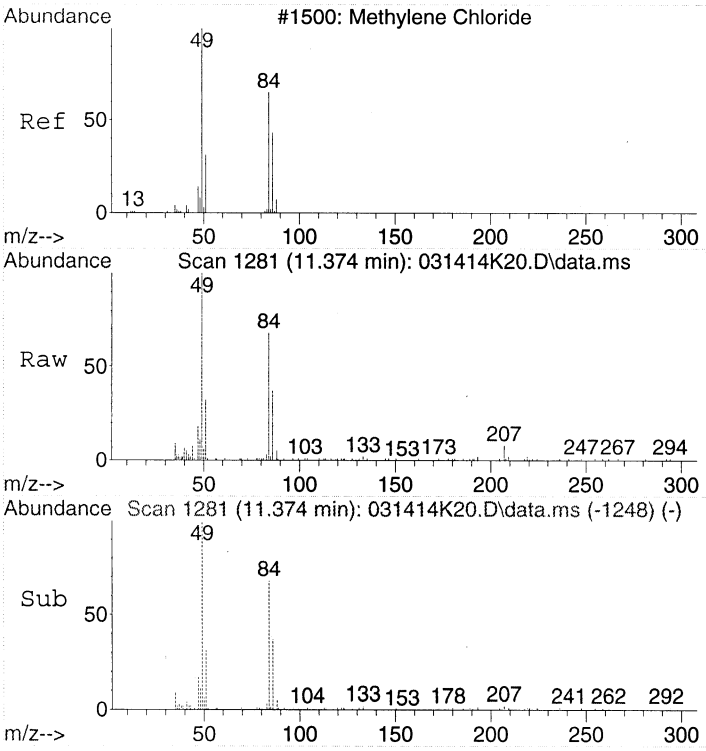


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion: 49 Resp: 917910

Ion	Ratio	Lower	Upper
49	100		
130	55.9	53.4	93.4
128	42.7	35.1	75.1

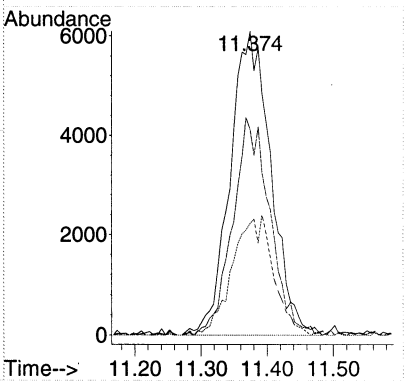


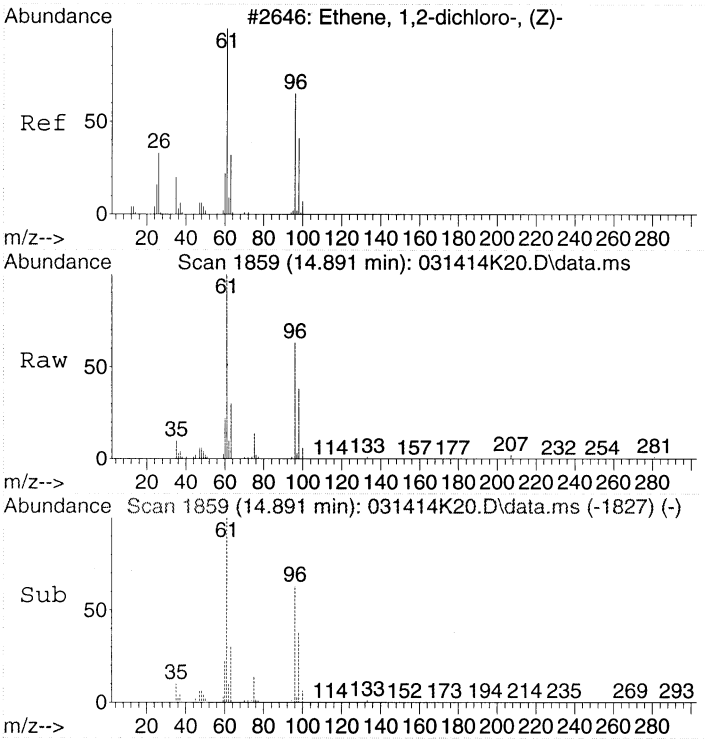


#18
Dichloromethane
Concen: 0.60 ppbv
RT: 11.374 min Scan# 1281
Delta R.T. 0.000 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion: 49 Resp: 26026

Ion	Ratio	Lower	Upper
49	100		
84	65.3	54.7	94.7
86	25.0	29.1	69.1#

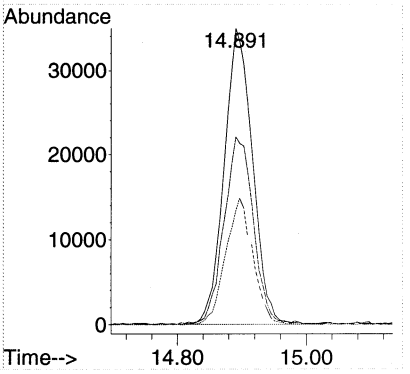


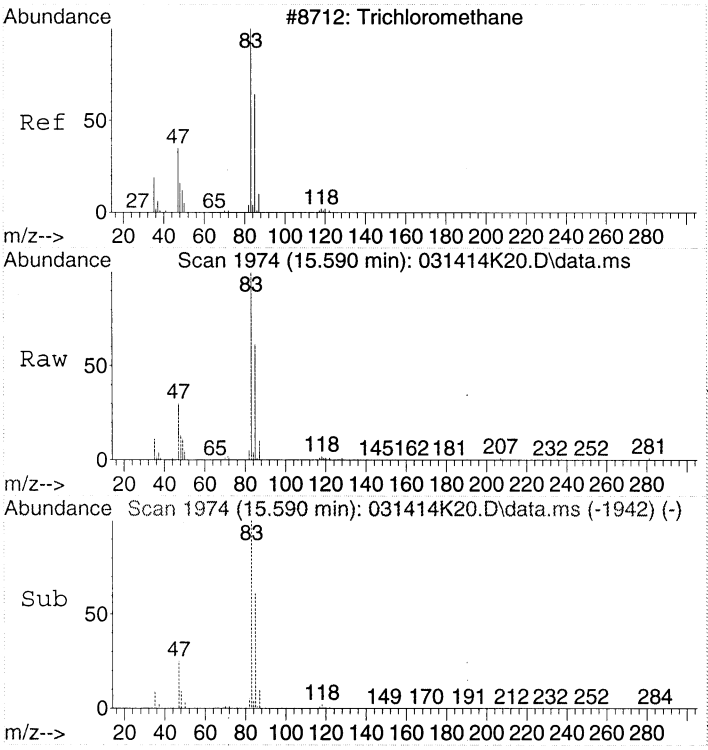


#24
cis-1,2-Dichloroethene
Concen: 2.48 ppbv
RT: 14.891 min Scan# 1859
Delta R.T. -0.006 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion: 61 Resp: 106947

Ion	Ratio	Lower	Upper
61	100		
96	66.5	52.9	92.9
98	41.1	24.5	64.5

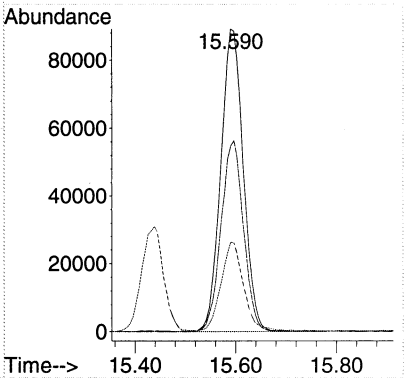


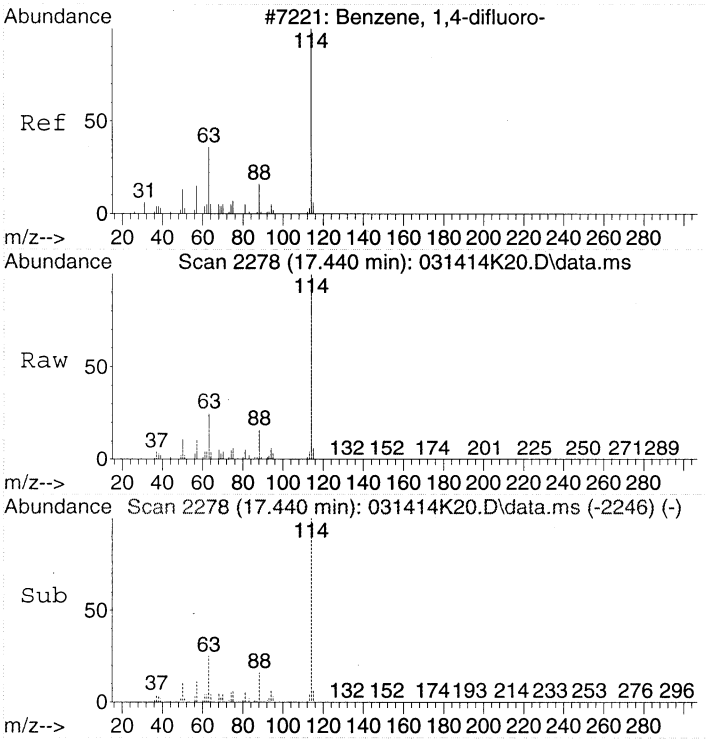


#28
Chloroform
Concen: 4.66 ppbv
RT: 15.590 min Scan# 1974
Delta R.T. -0.006 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion: 83 Resp: 277619

Ion	Ratio	Lower	Upper
83	100		
85	63.2	46.8	86.8
47	29.2	6.3	46.3

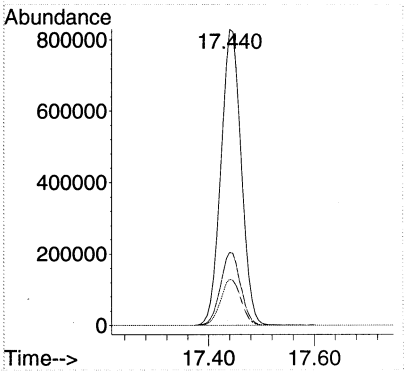


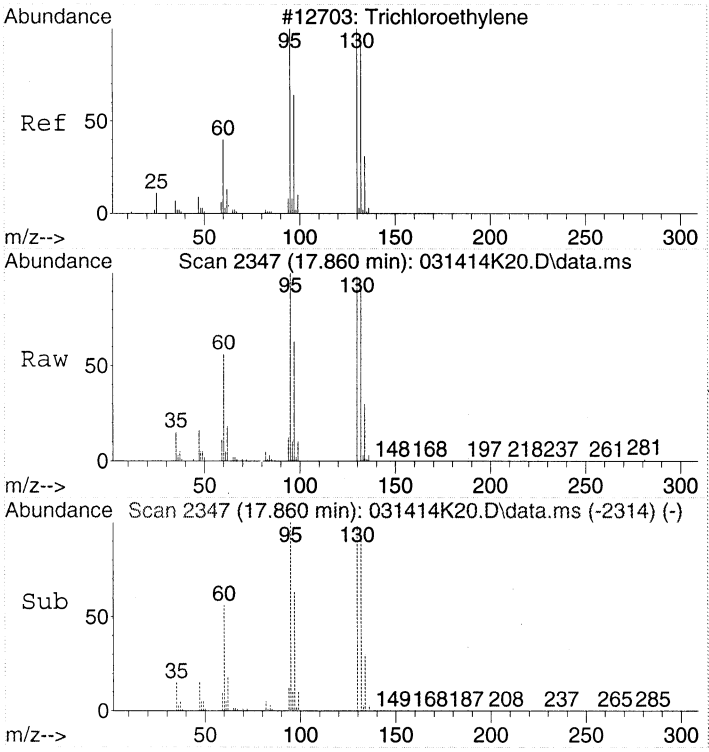


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.440 min Scan# 2278
Delta R.T. -0.006 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion:114 Resp: 2219626

Ion	Ratio	Lower	Upper
114	100		
63	24.6	2.7	42.7
88	15.7	0.0	36.0

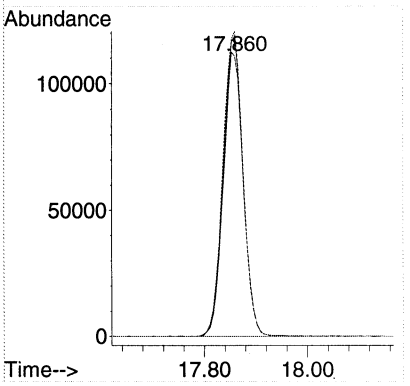


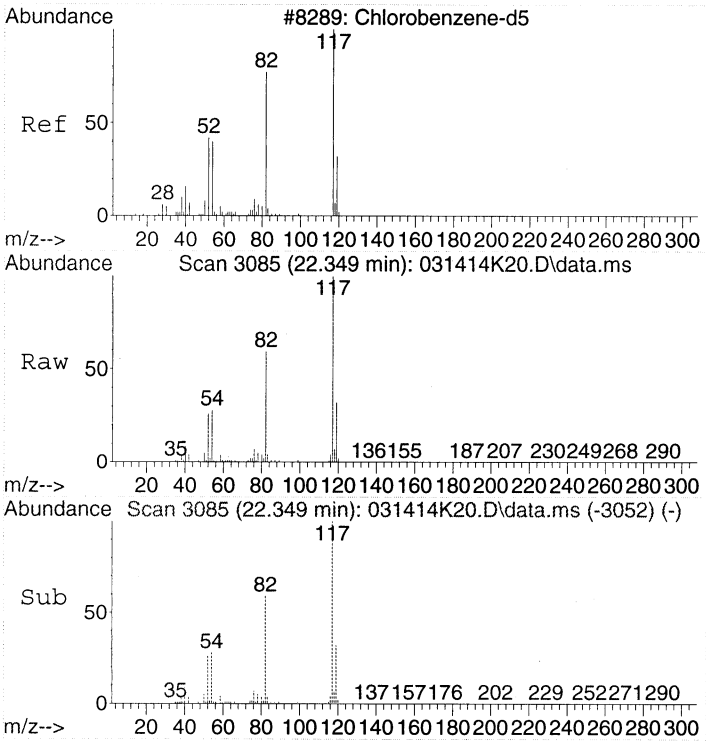


#37
Trichloroethene
Concen: 9.19 ppbv
RT: 17.860 min Scan# 2347
Delta R.T. 0.000 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion:130 Resp: 317740

Ion	Ratio	Lower	Upper
130	100		
132	95.0	77.7	117.7
95	102.3	80.9	120.9

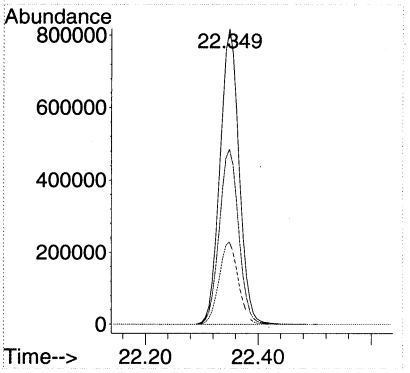


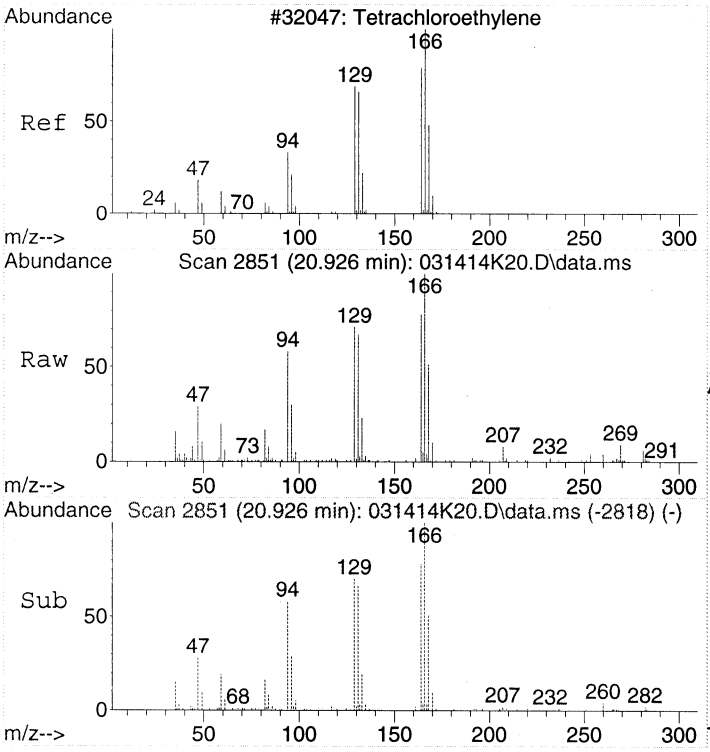


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. 0.000 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion:117 Resp: 1928523

Ion	Ratio	Lower	Upper
117	100		
82	60.1	36.4	76.4
54	28.1	5.4	45.4

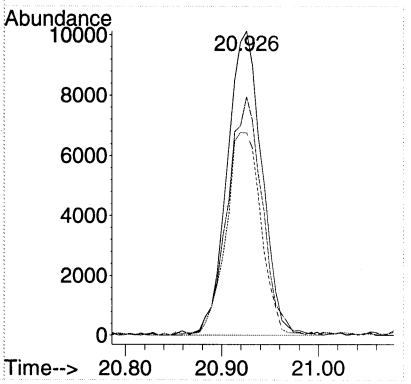




#47
Tetrachloroethene
Concen: 0.55 ppbv
RT: 20.926 min Scan# 2851
Delta R.T. 0.000 min
Lab File: 031414K20.D
Acq: 15 Mar 2014 3:50

Tgt Ion:166 Resp: 25305

Ion	Ratio	Lower	Upper
166	100		
164	78.4	60.8	100.8
131	68.0	50.5	90.5



CANISTER

CERTIFICATION

DATA

EPA Region 9 Laboratory
Canister Certification Status

Canister	Type	Status	Cert. Date	Cert. File
626	400 mL	Certified Clean	11/13/2013	111313K06.d
629	400 mL	Certified Clean	11/13/2013	111313K07.d
1100	400 mL	Certified Clean	10/8/2013	100813M24.D
1107	400 mL	Certified Clean	10/8/2013	100813M25.D
1113	400 mL	Certified Clean	10/8/2013	100813M26.D
1118	400 mL	Certified Clean	10/8/2013	100813M27.D
1120	400 mL	Certified Clean	10/8/2013	100813M28.D
1980	400 mL	Certified Clean	11/7/2013	110713M18.D
1983	400 mL	Certified Clean	11/7/2013	110713M19.D
1986	400 mL	Certified Clean	10/29/2013	102913K18.D
1988	400 mL	Certified Clean	10/29/2013	102913K08.D
1994	400 mL	Certified Clean	10/29/2013	102913K19.D

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO-15	**Analyst Initial**	EM	**Reviewer Initial**	ZR	**Batch/ Sequence**	B13J036 S13J031
Instrument ID	HP5973M	**Date Analyzed**	10/8/13	**Date**	10/10/13	**Chemstation Last Update**	10/8/13 16:43:21
Cases	R13SA6, R13SA7, R13SB6 R14S03			**SDGs**	13266C, 13266D, 13271A, 13277A, BLANK CERTIFICATION		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
	✓	✓	Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
✓			Surrogate Recoveries
	✓	✓	IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	~~MS/MSD~~ DUPLICATE
	✓	✓	Samples (within calibration range, results calculated correctly)
✓			Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
CRL	100813M05	142%	60-140%	✓			✓	1,2-Dichlorotetrafluoroethane
↓	↓	143%	↓	✓			✓	Dichloromethane

ANALYSIS SEQUENCE

S13J031

Instrument: AG5973M

Calibration ID: 1308004

Printed: 10/9/2013 3:58:17PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S13J031-TUN1	QC		1		1305020			
S13J031-CCV1	QC		2		1341042			
B13J036-BS1	QC		3					
S13J031-CRL1	QC		4		1341059			
B13J036-BLK1	QC		5					
1310008-02	VOCs, Soil Gas	A	6				California Site Cleanup Section 2	one week preliminary results
1310008-01	VOCs, Soil Gas	A	7				California Site Cleanup Section 2	one week preliminary results
1310008-01RE1	VOCs, Soil Gas	A	8				California Site Cleanup Section 2	one week preliminary results
B13J036-DUP1	QC		9					
1309114-01	VOCs, Soil Gas	A	10				California Site Cleanup Section 3	16 compounds only
1309120-01RE1	VOCs, Soil Gas	A	11				California Site Cleanup Section 3	16 compounds only
1309113-02	VOCs, Soil Gas	A	12				California Site Cleanup Section 3	16 compounds only
1309114-02RE1	VOCs, Soil Gas	A	13				California Site Cleanup Section 3	16 compounds only
B13J036-DUP2	QC		14					
1309114-02RE2	VOCs, Soil Gas	A	15				California Site Cleanup Section 3	16 compounds only
1309114-03RE1	VOCs, Soil Gas	A	16				California Site Cleanup Section 3	16 compounds only
B13J036-DUP3	QC		17					
1309113-01	VOCs, Soil Gas	A	18				California Site Cleanup Section 3	16 compounds only
B13J036-DUP4	QC		19					

[illegible] 10/8/13

Samples Loaded By — Date

[illegible] 10/9/13

Data Processed By — Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2013\100813MAAA .SEQ
Date: 10-09-2013
Time: 10:50:53
Int. Std Volume: 50 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB 1305020	3	3	100	40	C:\Smart\TO15.CTD	12:00
10ppbv 1341042	3	3	100	40	C:\Smart\TO15.CTD	12:00
10ppbv 1341042	3	3	100	0	C:\Smart\TO15.CTD	12:00
1.0ppbv 1341043	3	3	10	0	C:\Smart\TO15.CTD	12:00
1.0ppbv 1341043	3	3	20	0	C:\Smart\TO15.CTD	12:00
Blank Can 1584E	3	4	200	0	C:\Smart\TO15.CTD	12:00
1310008-02	3	5	200	0	C:\Smart\TO15.CTD	12:00
1310008-01	3	6	200	0	C:\Smart\TO15.CTD	12:00
1310008-01RE1	3	6	20	0	C:\Smart\TO15.CTD	12:00
1310008-01DUP	3	6	20	0	C:\Smart\TO15.CTD	12:00
1309114-01	3	7	200	0	C:\Smart\TO15.CTD	12:00
1309120-01RE1	3	8	200	0	C:\Smart\TO15.CTD	12:00
1309113-02	3	9	200	0	C:\Smart\TO15.CTD	12:00
1309113-01RE1	3	10	20	0	C:\Smart\TO15.CTD	12:00
1309113-01DUP	3	10	20	0	C:\Smart\TO15.CTD	12:00
IBL	3	11	200	0	C:\Smart\TO15.CTD	12:00
1309114-02RE1	3	12	50	0	C:\Smart\TO15.CTD	12:00
1309114-02DUP	3	12	50	0	C:\Smart\TO15.CTD	12:00
IBL	4	1	200	0	C:\Smart\TO15.CTD	12:00
1309114-02RE2	4	2	100	0	C:\Smart\TO15.CTD	12:00
1309114-03RE1	4	3	100	0	C:\Smart\TO15.CTD	12:00
1309114-03DUP	4	3	100	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1059	4	4	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1100	4	5	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1107	4	6	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1113	4	7	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1118	4	8	200	0	C:\Smart\TO15.CTD	12:00
BLANK CAN 1120	4	9	200	0	C:\Smart\TO15.CTD	12:00
1309113-01	3	10	200	0	C:\Smart\TO15.CTD	12:00
1309113-01DUP	3	10	200	0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\MSDChem\1\2013\Data\100813

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	33	100813M01.D	1.	S13J031-TUN1	BFB 1305026/IS 1311120/1340061	8 Oct 2013 10:56
2	33	100813M02.D	1.	S13J031-CCV1	10ppbv 1341042	8 Oct 2013 11:44
3	33	100813M03.D	1.	B13J036-BS1	10ppbv 1341042	8 Oct 2013 12:30
4	33	100813M04.D	1.	S13J031-CRL1	1.0ppbv 1341043	8 Oct 2013 13:17
5	33	100813M05.D	1.	S13J031-CRL1	1.0ppbv 1341059	8 Oct 2013 14:19
6	34	100813M06.D	1.	B13J036-BLK1	Blank Can 1584E	8 Oct 2013 15:10
7	35	100813M07.D	2.51	1310008-02	200mL SVE Stack-1001 can 1061	8 Oct 2013 15:59
8	36	100813M08.D	2.56	1310008-01	200mL SVE Pre GAC-1001 can 1087	8 Oct 2013 16:47
9	36	100813M09.D	2.56	1310008-01RE1	20mL SVE Pre GAC-1001 can 1087	8 Oct 2013 17:34
10	36	100813M10.D	2.56	B13J036-DUP1	20mL SVE Pre GAC-1001 can 1087	8 Oct 2013 18:19
11	37	100813M11.D	1.	1309114-01	200mL 59383 can 860	8 Oct 2013 19:08
12	38	100813M12.D	2.31	1309120-01RE1	200mL EPA-B10-Tunnel Path can 862	8 Oct 2013 19:57
13	39	100813M13.D	2.04	1309113-02	200mL SG33-3.2-092613 can 1102	8 Oct 2013 20:47
14	10	100813M14.D	2.07	1309113-01RE1	20mL SG29-3.1-092613 can 898	8 Oct 2013 21:33
15	10	100813M15.D	2.07	1309113-01DUP	20mL SG29-3.1-092613 can 898	8 Oct 2013 22:18
16	11	100813M16.D	1.	Blank Can 859	Blank Can 859	8 Oct 2013 23:07
17	12	100813M17.D	4.97	1309114-02RE1	50mL 59379 can 881	8 Oct 2013 23:53
18	12	100813M18.D	4.97	B13J036-DUP2	50mL 59379 can 881	9 Oct 2013 00:38
19	41	100813M19.D	1.	Blank Can 1578E	Blank Can 1578E	9 Oct 2013 01:27
20	42	100813M20.D	381.94	1309114-02RE2	100mL 10mL of can 881 into 2002	9 Oct 2013 02:13
21	43	100813M21.D	183.2	1309114-03RE1	100mL 10mL of can 1097 into 1995	9 Oct 2013 03:00
22	43	100813M22.D	183.2	B13J036-DUP3	100mL 10mL of can 1097 into 1995	9 Oct 2013 03:50
23	44	100813M23.D	1.	BLANK CAN 1059	BLANK CAN 1059	9 Oct 2013 04:38
24	45	100813M24.D	1.	BLANK CAN 1100	BLANK CAN 1100	9 Oct 2013 05:27
25	46	100813M25.D	1.	BLANK CAN 1107	BLANK CAN 1107	9 Oct 2013 06:16
26	47	100813M26.D	1.	BLANK CAN 1113	BLANK CAN 1113	9 Oct 2013 07:04
27	48	100813M27.D	1.	BLANK CAN 1118	BLANK CAN 1118	9 Oct 2013 07:55
28	49	100813M28.D	1.	BLANK CAN 1120	BLANK CAN 1120	9 Oct 2013 08:43
29	10	100813M29.D	2.07	1309113-01	200mL SG29-3.1-092613 can 898	9 Oct 2013 10:23
30	10	100813M30.D	2.07	B13J036-DUP4	200mL SG29-3.1-092613 can 898	9 Oct 2013 11:13

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\2013\DATA\100813\100813M01.D
Tune Time : 8 Oct 2013 10:56 am

Daily Calibration File : C:\MSDChem\1\2013\Data\100813\100813M02.D

File	Sample	Surrogate Recovery %	Internal Standard Responses		
		908323	4472930	4041090	
100813M02.D	S13J031-CCV1	908323	4472929	4041087	
100813M03.D	B13J036-BS1	920195	4541624	3855676	
100813M04.D	S13J031-CRL1	935015	4594137	3848557	NU
100813M05.D	S13J031-CRL1	835343	4206727	3635618	
100813M06.D	B13J036-BLK1	877998	4288630	3600969	can 1584E
100813M07.D	1310008-02	862746	4162515	3484987	
100813M08.D	1310008-01	857930	4141801	3433610	
100813M09.D	1310008-01RE1	898053	4542398	3683848	
100813M10.D	B13J036-DUP1	845441	4199569	3485315	
100813M11.D	1309114-01	858558	4169629	3460586	
100813M12.D	1309120-01RE1	884470	4244431	3622922	
100813M13.D	1309113-02	848340	4032540	3352914	
100813M14.D	1309113-01RE1	839391	4049608	3496754	NU
100813M15.D	1309113-01DUP	795730	3833769	3231978	NU
100813M16.D	IBL	801895	3814330	3250496	
100813M17.D	1309114-02RE1	814238	3781974	3174158	
100813M18.D	1309114-02DUP	827961	3866142	3225877	
100813M19.D	BLANK CAN 1578E	814537	3864019	3209221	
100813M20.D	1309114-02RE2	769180	3590053	3016996	

100813M21.D					
	1309114-03RE1	795735	3784187	3217196	
100813M22.D					
	1309114-03DUP	775374	3699725	3157860	
100813M23.D					
	BLANK CAN 1059	788808	3703840	3100870	
100813M24.D					
	BLANK CAN 1100	778149	3665028	3059130	
100813M25.D					
	BLANK CAN 1107	761700	3542299	2993800	
100813M26.D					
	BLANK CAN 1113	757138	3502307	2982641	
100813M27.D					
	BLANK CAN 1118	744150	3462459	2877109	
100813M28.D					
	BLANK CAN 1120	741586	3421009	2914202	
100813M29.D					
	1309113-01	779136	3535394	3026872	
100813M30.D					
(fails)	1309113-01DUP	783861	3619035	3205733	Use CCV as BFB

(fails) - fails 24hr time check * - fails criteria

Created: Wed Oct 09 12:14:01 2013 Morpheus

Response Factor Report Morpheus

Method Path : C:\MSDCHEM\1\2013\METHOD\
Method File : 100813MAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013
Response Via : Initial Calibration

Calibration Files
1 =091913M02.D 2 =091913M03.D 5 =091913M04.D
10 =091913M05.D 15 =091913M06.D 20 =091913M07.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.518	0.462	0.436	0.431	0.432	0.437	0.453	7.51
3)	T	Dichlorodifluorom	2.711	2.486	2.260	2.075	1.887	1.724	2.190	16.91
4)	T	1,2-Dichlorotetra	2.467	2.426	2.283	1.887	1.491	1.232	1.964	26.30
5)	T	Chloromethane	0.604	0.548	0.547	0.552	0.550	0.559	0.560	3.92
6)	T	Vinyl chloride	0.802	0.717	0.662	0.659	0.662	0.679	0.697	8.05
7)	T	1,3-Butadiene	0.613	0.516	0.489	0.485	0.486	0.494	0.514	9.73
8)	T	Bromomethane	0.868	0.769	0.706	0.696	0.695	0.698	0.739	9.40
9)	T	Chloroethane	0.454	0.400	0.364	0.355	0.344	0.348	0.378	11.26
10)	T	Bromoethene	0.974	0.873	0.792	0.789	0.789	0.797	0.836	8.99
11)	T	Trichlorofluorome	3.038	2.841	2.699	2.670	2.631	2.626	2.751	5.85
12)	T	1,1,2-Trichloro-1	2.295	2.118	2.003	2.002	1.997	2.026	2.074	5.66
13)	T	1,1-Dichloroethen	1.608	1.453	1.334	1.315	1.288	1.290	1.381	9.18
14)	T	Acetone	1.309	1.119	1.074	1.068	1.035	1.055	1.110	9.12
15)	T	Carbon disulfide	2.325	2.111	1.926	1.895	1.883	1.907	2.008	8.81
16)	T	2-Propanol	1.343	0.990	0.968	1.018	1.005	1.034	1.059	13.29
17)	T	Allyl chloride	1.005	0.885	0.810	0.801	0.794	0.791	0.848	9.99
18)	T	Dichloromethane	1.146	0.962	0.820	0.782	0.759	0.751	0.870	17.93
19)	T	tert-Butyl methyl	2.238	2.250	2.336	2.380	2.362	2.413	2.330	3.06
20)	T	trans-1,2-Dichlor	1.400	1.230	1.111	1.096	1.076	1.076	1.165	11.06
21)	T	Hexane	1.392	1.263	1.147	1.135	1.132	1.139	1.201	8.81
22)	T	1,1-Dichloroethan	1.881	1.683	1.536	1.498	1.481	1.487	1.594	9.99
23)	T	Vinyl acetate	1.779	1.633	1.565	1.575	1.568	1.581	1.617	5.15
24)	T	cis-1,2-Dichloroe	1.478	1.309	1.194	1.172	1.141	1.152	1.241	10.57
25)	T	2-Butanone (MEK)	1.160	1.058	1.289	1.310	1.296	1.310	1.237	8.47
26)	T	Ethyl acetate	1.370	1.570	1.462	1.483	1.444	1.506	1.472	4.52
27)	T	Tetrahydrofuran	0.697	0.644	0.701	0.717	0.692	0.719	0.695	3.92
28)	T	Chloroform	2.490	2.257	2.041	1.986	1.956	1.962	2.115	10.17
29)	T	Cyclohexane	1.358	1.231	1.158	1.148	1.151	1.155	1.200	6.96
30)	T	1,1,1-Trichloroet	2.794	2.569	2.371	2.346	2.314	2.318	2.452	7.86
31)	T	Carbon tetrachlor	3.124	2.888	2.683	2.669	2.643	2.649	2.776	6.98
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.706	0.639	0.587	0.573	0.558	0.557	0.603	9.76
34)	T	2,2,4-Trimethylpe	0.892	0.820	0.764	0.750	0.739	0.733	0.783	7.88
35)	T	1,2-Dichloroethan	0.346	0.316	0.288	0.283	0.272	0.265	0.295	10.32
36)	T	Heptane	0.306	0.281	0.261	0.256	0.251	0.247	0.267	8.38
37)	T	Trichloroethene	0.401	0.362	0.334	0.326	0.323	0.324	0.345	8.99
38)	T	1,2-Dichloropropa	0.216	0.203	0.186	0.180	0.177	0.177	0.190	8.51
39)	T	1,4-Dioxane	0.131	0.102	0.101	0.104	0.102	0.105	0.107	10.81
40)	T	Bromodichlorometh	0.505	0.466	0.437	0.433	0.423	0.420	0.447	7.33
41)	T	cis-1,3-Dichlorop	0.381	0.348	0.333	0.329	0.324	0.323	0.340	6.54
42)	T	4-Methyl-2-pentan	0.298	0.261	0.304	0.309	0.306	0.310	0.298	6.18
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	0.984	0.959	0.897	0.895	0.884	0.887	0.918	4.65
45)	T	trans-1,3-Dichlor	0.431	0.423	0.396	0.396	0.388	0.390	0.404	4.55
46)	T	1,1,2-Trichloroet	0.321	0.318	0.297	0.292	0.289	0.289	0.301	4.85
47)	T	Tetrachloroethene	0.632	0.627	0.584	0.585	0.579	0.586	0.599	3.95
48)	T	2-Hexanone	0.360	0.303	0.330	0.344	0.340	0.346	0.337	5.74
49)	T	Chlorodibromometh	0.638	0.644	0.620	0.624	0.617	0.624	0.628	1.72
50)	T	1,2-Dibromoethane	0.519	0.508	0.475	0.476	0.469	0.473	0.487	4.39
51)	T	Chlorobenzene	0.822	0.832	0.808	0.804	0.795	0.800	0.810	1.77
52)	T	Ethylbenzene	1.168	1.242	1.236	1.246	1.232	1.235	1.227	2.36
53)	T	m&p-Xylene	0.879	0.961	0.983	1.003	0.983	0.977	0.964	4.56
54)	T	o-Xylene	0.849	0.945	0.990	1.024	1.015	1.021	0.974	6.99
55)	T	Styrene	0.652	0.754	0.804	0.846	0.846	0.855	0.793	9.95
56)	T	Bromoform	0.604	0.663	0.710	0.757	0.759	0.768	0.710	9.24

Response Factor Report Morpheus

Method Path : C:\MSDCHEM\1\2013\METHOD\
Method File : 100813MAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013
Response Via : Initial Calibration

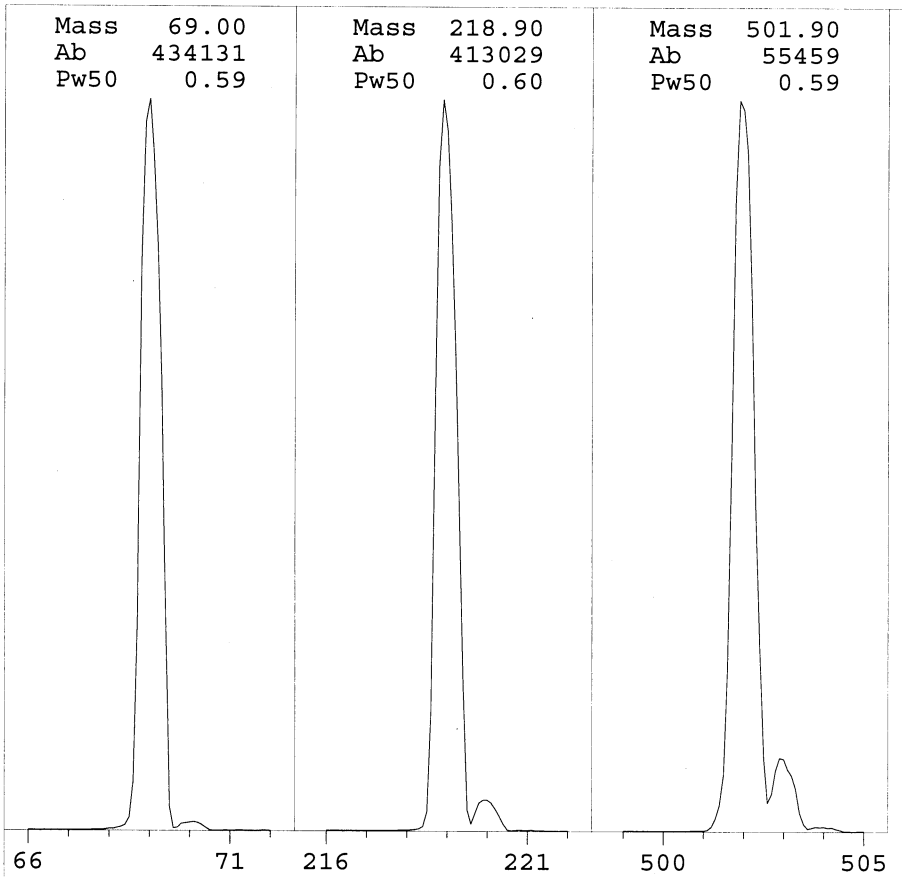
Calibration Files
1 =091913M02.D 2 =091913M03.D 5 =091913M04.D
10 =091913M05.D 15 =091913M06.D 20 =091913M07.D

		Compound	1	2	5	10	15	20	Avg	%RSD
57)	T	1,1,2,2-Tetrachlo	0.478	0.540	0.593	0.621	0.619	0.635	0.581	10.46
58)	T	1,2,3-Trichloropr	0.177	0.370	0.367	0.382	0.366	0.350	0.336	23.32
59)	T	4-Ethyltoluene	1.036	1.230	1.374	1.468	1.471	1.499	1.346	13.47
60)	T	1,3,5-Trimethylbe	0.926	1.115	1.255	1.339	1.333	1.351	1.220	13.84
61)	T	1,2,4-Trimethylbe	0.883	1.055	1.213	1.304	1.302	1.318	1.179	14.91
62)	T	1,3-Dichlorobenze	0.712	0.841	0.964	1.044	1.044	1.061	0.945	14.87
63)	T	1,4-Dichlorobenze	0.697	0.838	0.958	1.033	1.038	1.055	0.937	15.19
64)	T	Benzyl chloride	0.704	0.804	0.941	1.024	1.018	1.040	0.922	14.97
65)	T	1,2-Dichlorobenze	0.680	0.760	0.879	0.961	0.960	0.977	0.869	14.17
66)	T	1,2,4-Trichlorobe	0.916	0.843	0.884	0.964	0.948	0.954	0.918	5.13
67)	T	Hexachlorobutadie	1.069	0.975	0.981	1.068	1.046	1.027	1.028	4.03
68)		Naphthalene	0.051	0.080	0.103	0.153	0.217	0.359	0.160	70.76 NA

(#) = Out of Range

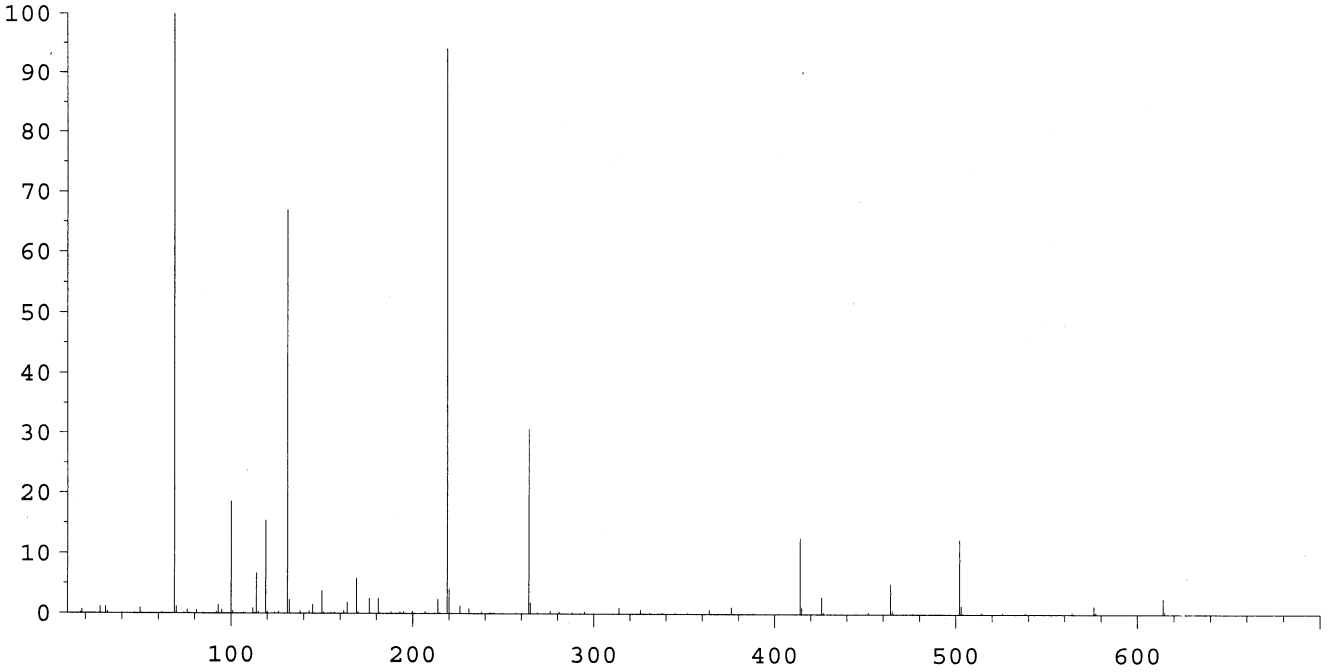
Tue Oct 08 10:10:20 2013
C:\MSDCHEM\1\5973N\BFB100813.U

Instrument: Morpheus



Ion Pol	POS	MassGain	321
		MassOffs	-10
Emission	34.6	AmuGain	2331
ElEnrgy	69.9	AmuOffs	126
Filament	1	Wid219	-0.028
		DC Pol	POS
Repeller	21.91		
IonFcus	90.2	HEDEnab	ON
EntLens	23.0	EMVolts	1153
EntOffs	17.57		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
165 peaks Base: 69.00 Abundance: 382656



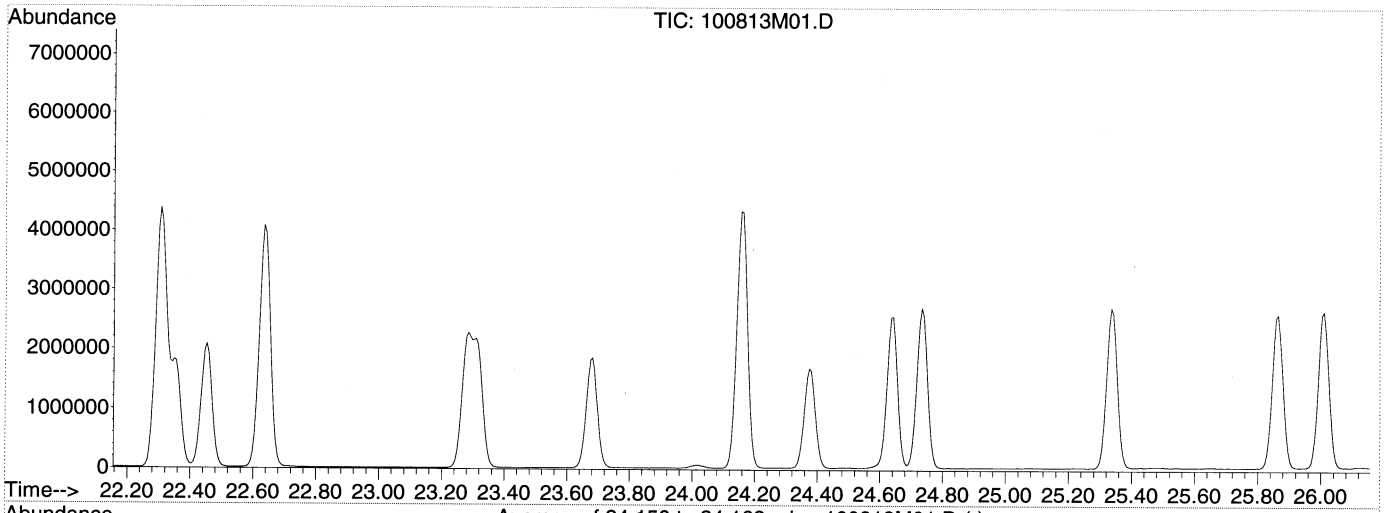
Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	382656	100.00	70.00	4211	1.10
219.00	360000	94.08	220.00	15699	4.36
502.00	47472	12.41	503.00	5251	11.06

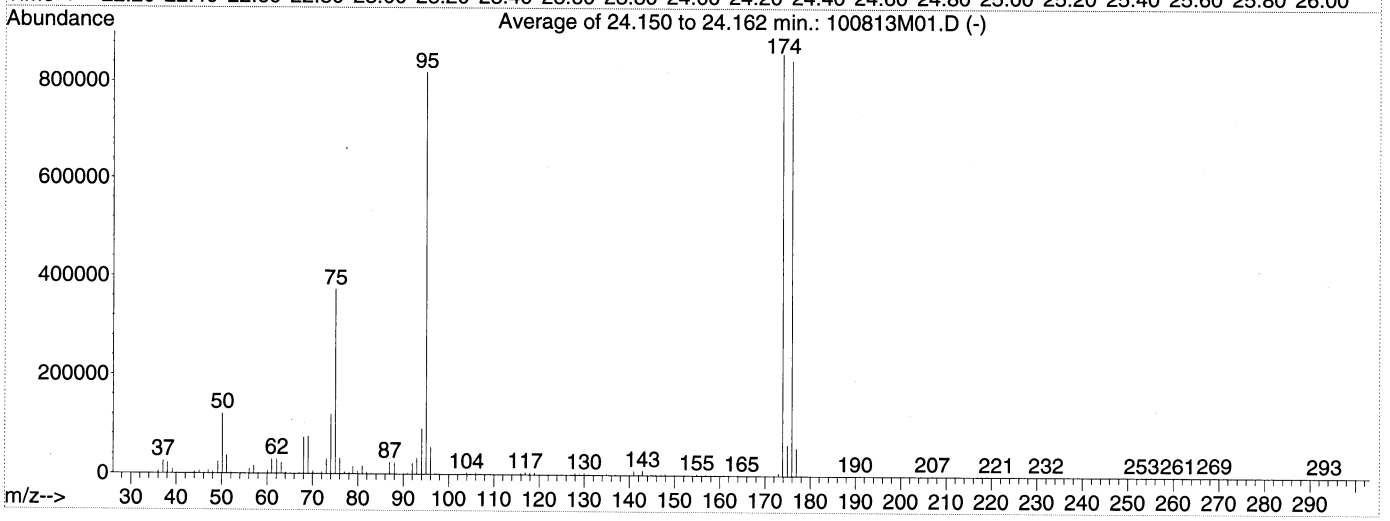
BFB

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M01.D
Acq On : 8 Oct 2013 10:56 am
Operator : EM
Sample : S13J031-TUN1
Misc : BFB 1305026/IS 1311120/1340061
ALS Vial : 33 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013





AutoFind: Scans 3380, 3381, 3382; Background Corrected with Scan 3365

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.7	120332	PASS
75	95	30	66	45.4	372025	PASS
95	95	100	100	100.0	818709	PASS
96	95	5	9	6.6	54185	PASS
173	174	0.00	2	0.6	4803	PASS
174	95	50	120	104.9	858794	PASS
175	174	4	9	7.1	61168	PASS
176	174	93	101	98.4	844928	PASS
177	176	5	9	6.6	55772	PASS

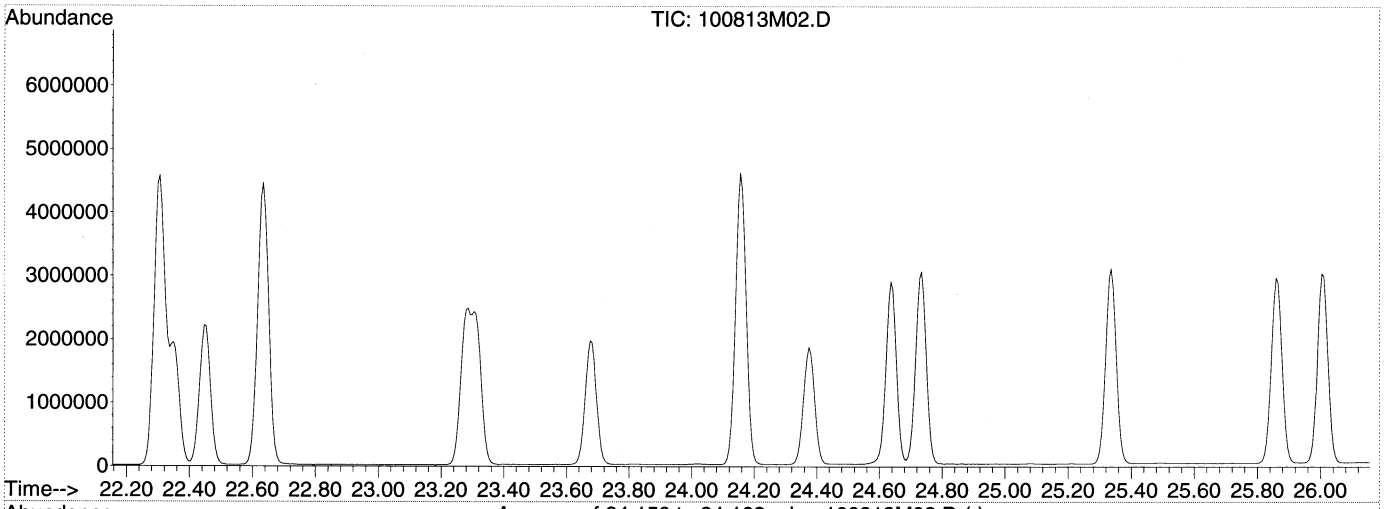
BFB

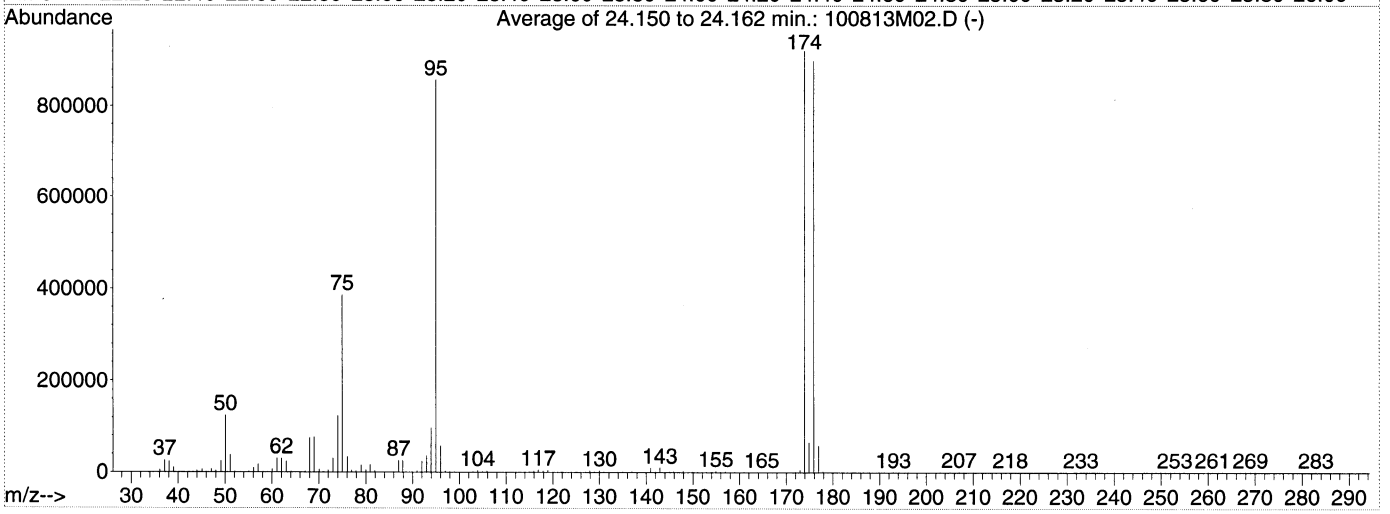
Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M02.D
Acq On : 8 Oct 2013 11:44 am
Operator : EM
Sample : S13J031-CCV1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Used as BFB for last sple. EM 10/10/13

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013





AutoFind: Scans 3380, 3381, 3382; Background Corrected with Scan 3367

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.6	125005	PASS
75	95	30	66	45.1	386693	PASS
95	95	100	100	100.0	857322	PASS
96	95	5	9	6.7	57181	PASS
173	174	0.00	2	0.6	5225	PASS
174	95	50	120	107.6	922709	PASS
175	174	4	9	7.1	65224	PASS
176	174	93	101	97.4	899050	PASS
177	176	5	9	6.5	58620	PASS

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M02.D
Acq On : 8 Oct 2013 11:44 am
Operator : EM
Sample : S13J031-CCV1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:31:34 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	102	0.00
2	T	Propene	0.453	0.430	5.1	101	0.00
3	T	Dichlorodifluoromethane	2.190	2.218	-1.3	109	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.964	2.044	-4.1	110	0.00
5	T	Chloromethane	0.560	0.552	1.4	101	0.00
6	T	Vinyl chloride	0.697	0.659	5.5	102	0.00
7	T	1,3-Butadiene	0.514	0.481	6.4	101	0.00
8	T	Bromomethane	0.739	0.690	6.6	101	0.00
9	T	Chloroethane	0.378	0.343	9.3	98	0.00
10	T	Bromoethene	0.836	0.774	7.4	100	0.00
11	T	Trichlorofluoromethane	2.751	2.708	1.6	103	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	2.074	1.980	4.5	100	0.00
13	T	1,1-Dichloroethene	1.381	1.297	6.1	100	0.00
14	T	Acetone	1.110	1.029	7.3	98	0.00
15	T	Carbon disulfide	2.008	1.838	8.5	99	0.00
16	T	2-Propanol	1.059	0.982	7.3	98	0.00
17	T	Allyl chloride	0.848	0.770	9.2	98	0.00
18	T	Dichloromethane	0.870	0.761	12.5	99	0.00
19	T	tert-Butyl methyl ether (MT	2.330	2.270	2.6	97	0.00
20	T	trans-1,2-Dichloroethene	1.165	1.068	8.3	99	0.00
21	T	Hexane	1.201	1.082	9.9	97	0.00
22	T	1,1-Dichloroethane	1.594	1.454	8.8	99	0.00
23	T	Vinyl acetate	1.617	1.480	8.5	95	0.00
24	T	cis-1,2-Dichloroethene	1.241	1.130	8.9	98	0.00
25	T	2-Butanone (MEK)	1.237	1.252	-1.2	97	0.00
26	T	Ethyl acetate	1.472	1.380	6.3	95	0.00
27	T	Tetrahydrofuran	0.695	0.656	5.6	93	0.00
28	T	Chloroform	2.115	1.950	7.8	100	0.00
29	T	Cyclohexane	1.200	1.084	9.7	96	0.00
30	T	1,1,1-Trichloroethane	2.452	2.313	5.7	100	0.00
31	T	Carbon tetrachloride	2.776	2.656	4.3	101	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	98	0.00
33	T	Benzene	0.603	0.559	7.3	96	0.00
34	T	2,2,4-Trimethylpentane	0.783	0.736	6.0	96	0.00
35	T	1,2-Dichloroethane	0.295	0.293	0.7	102	0.00
36	T	Heptane	0.267	0.252	5.6	97	0.00
37	T	Trichloroethene	0.345	0.321	7.0	97	0.00
38	T	1,2-Dichloropropane	0.190	0.177	6.8	97	0.00
39	T	1,4-Dioxane	0.107	0.107	0.0	101	0.00
40	T	Bromodichloromethane	0.447	0.440	1.6	100	0.00
41	T	cis-1,3-Dichloropropene	0.340	0.324	4.7	97	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.298	0.309	-3.7	98	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	101	0.00
44	T	Toluene	0.918	0.846	7.8	95	0.00
45	T	trans-1,3-Dichloropropene	0.404	0.384	5.0	98	0.00
46	T	1,1,2-Trichloroethane	0.301	0.277	8.0	96	0.00
47	T	Tetrachloroethene	0.599	0.557	7.0	96	0.00
48	T	2-Hexanone	0.337	0.341	-1.2	100	0.00
49	T	Chlorodibromomethane	0.628	0.608	3.2	98	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M02.D
Acq On : 8 Oct 2013 11:44 am
Operator : EM
Sample : S13J031-CCV1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:31:34 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
50	T	1,2-Dibromoethane (EDB)	0.487	0.456	6.4	97	0.00	
51	T	Chlorobenzene	0.810	0.762	5.9	96	0.00	
52	T	Ethylbenzene	1.227	1.190	3.0	96	0.00	
53	T	m&p-Xylene	0.964	0.961	0.3	97	0.00	
54	T	o-Xylene	0.974	0.981	-0.7	97	0.00	
55	T	Styrene	0.793	0.807	-1.8	96	0.00	
56	T	Bromoform	0.710	0.728	-2.5	97	0.00	
57	T	1,1,2,2-Tetrachloroethane	0.581	0.601	-3.4	98	0.00	
58	T	1,2,3-Trichloropropane	0.336	0.002	~~99.4#~~	1#	0.00	NOT Analyzed
59	T	4-Ethyltoluene	1.346	1.393	-3.5	96	0.00	
60	T	1,3,5-Trimethylbenzene	1.220	1.285	-5.3	97	0.00	
61	T	1,2,4-Trimethylbenzene	1.179	1.257	-6.6	97	0.00	
62	T	1,3-Dichlorobenzene	0.945	1.007	-6.6	97	0.00	
63	T	1,4-Dichlorobenzene	0.937	1.009	-7.7	98	0.00	
64	T	Benzyl chloride	0.922	0.957	-3.8	94	0.00	
65	T	1,2-Dichlorobenzene	0.869	0.934	-7.5	98	0.00	
66	T	1,2,4-Trichlorobenzene	0.918	0.950	-3.5	99	0.00	
67	T	Hexachlorobutadiene	1.028	1.046	-1.8	99	0.00	
68		Naphthalene	0.160	0.024	85.0#	16#	0.00	NA em 10/10/13

(#) = Out of Range SPCC's out = 0 CCC's out = 0

% Dev #67 HCB = $\frac{1.028 - 1.046}{1.028} \times 100 = 1.8\%$ ✓

RF #67 HCB = $\frac{2093069\ (20.8)}{4041087\ (10.3)} = 1.046$ ✓

em 10/10/13

00374

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M02.D
Acq On : 8 Oct 2013 11:44 am
Operator : EM
Sample : S13J031-CCV1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:30:23 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	908323	18.80	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	4472929	20.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	4041087	20.80	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.14	41	222402	10.17	ppbv	99
3) Dichlorodifluoromethane	4.23	85	1082613	10.23	ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.59	85	1027456	10.83	ppbv	100
5) Chloromethane	4.78	50	274543	10.15	ppbv	98
6) Vinyl chloride	5.11	62	334496	9.94	ppbv	100
7) 1,3-Butadiene	5.21	54	237148	9.56	ppbv	100
8) Bromomethane	6.13	94	346725	9.72	ppbv	99
9) Chloroethane	6.46	64	172509	9.46	ppbv	99
10) Bromoethene	7.04	106	385278	9.54	ppbv	100
11) Trichlorofluoromethane	7.19	101	1374099	10.34	ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.01	151	889870	8.88	ppbv	99
13) 1,1-Dichloroethene	9.07	61	589356	8.83	ppbv	98
14) Acetone	9.57	43	527128	9.83	ppbv	98
15) Carbon disulfide	9.79	76	905914	9.34	ppbv	100
16) 2-Propanol	10.17	45	450907	8.81	ppbv	99
17) Allyl chloride	10.64	41	376038	9.18	ppbv	99
18) Dichloromethane	11.19	49	352906	8.40	ppbv	99
19) tert-Butyl methyl ether (M	11.92	73	1195955	10.62	ppbv	100
20) trans-1,2-Dichloroethene	11.95	61	490240	8.71	ppbv	99
21) Hexane	12.60	57	533305	9.19	ppbv	99
22) 1,1-Dichloroethane	13.32	63	688524	8.94	ppbv	100
23) Vinyl acetate	13.48	43	714903	9.15	ppbv	99
24) cis-1,2-Dichloroethene	14.79	61	551409	9.20	ppbv	99
25) 2-Butanone (MEK)	14.88	43	629144	10.53	ppbv	99
26) Ethyl acetate	14.95	43	693781	9.75	ppbv	99
27) Tetrahydrofuran	15.35	42	326616	9.73	ppbv	100
28) Chloroform	15.50	83	951735	9.31	ppbv	100
29) Cyclohexane	15.75	56	544980	9.40	ppbv	99
30) 1,1,1-Trichloroethane	15.80	97	1117619	9.43	ppbv	100
31) Carbon tetrachloride	16.06	117	1283807	9.57	ppbv	99
33) Benzene	16.55	78	1288611	9.55	ppbv	99
34) 2,2,4-Trimethylpentane	16.53	57	1729331	9.88	ppbv	99
35) 1,2-Dichloroethane	16.74	62	655184	9.92	ppbv	100
36) Heptane	16.92	43	591860	9.91	ppbv	99
37) Trichloroethene	17.79	130	739252	9.58	ppbv	100
38) 1,2-Dichloropropane	18.29	63	419449	9.88	ppbv	98
39) 1,4-Dioxane	18.47	88	253084	10.54	ppbv	98
40) Bromodichloromethane	18.75	83	1042305	10.42	ppbv	100
41) cis-1,3-Dichloropropene	19.53	75	746693	9.83	ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.76	43	726116	10.90	ppbv	99
44) Toluene	20.02	91	1710550	9.59	ppbv	100
45) trans-1,3-Dichloropropene	20.48	75	820715	10.46	ppbv	99
46) 1,1,2-Trichloroethane	20.79	97	581220	9.94	ppbv	98
47) Tetrachloroethene	20.88	166	1126018	9.68	ppbv	99
48) 2-Hexanone	21.12	43	682515	10.42	ppbv	99
49) Chlorodibromomethane	21.39	129	1229635	10.08	ppbv	100
50) 1,2-Dibromoethane (EDB)	21.63	107	947660	10.02	ppbv	100
51) Chlorobenzene	22.35	112	1570186	9.98	ppbv	99
52) Ethylbenzene	22.45	91	2428599	10.19	ppbv	99
53) m&p-Xylene	22.64	91	3957341	21.12	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M02.D
Acq On : 8 Oct 2013 11:44 am
Operator : EM
Sample : S13J031-CCV1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:30:23 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

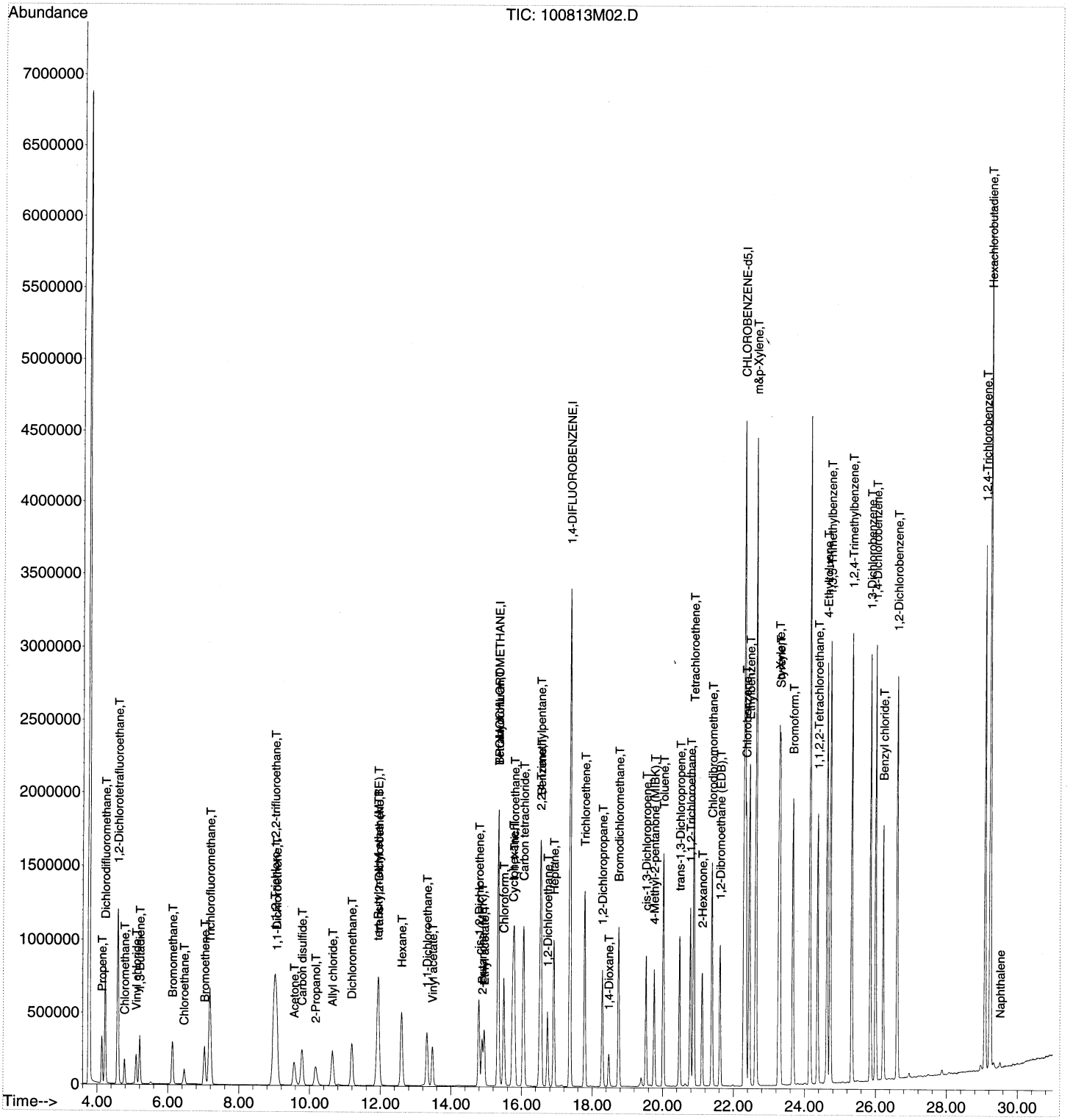
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.28	91	2040232	10.78 ppbv	99
55) Styrene	23.31	104	1630851	10.59 ppbv	99
56) Bromoform	23.68	173	1457127	10.56 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.37	83	1238193	10.97 ppbv	100
59) 4-Ethyltoluene	24.64	105	2842216	10.87 ppbv	99
60) 1,3,5-Trimethylbenzene	24.73	105	2597126	10.96 ppbv	99
61) 1,2,4-Trimethylbenzene	25.34	105	2614192	11.41 ppbv	99
62) 1,3-Dichlorobenzene	25.86	146	2015591	10.98 ppbv	99
63) 1,4-Dichlorobenzene	26.01	146	2038606	11.20 ppbv	100
64) Benzyl chloride	26.22	91	1915063	10.70 ppbv	99
65) 1,2-Dichlorobenzene	26.61	146	1886939	11.17 ppbv	100
66) 1,2,4-Trichlorobenzene	29.09	180	1883610	10.56 ppbv	100
67) Hexachlorobutadiene	29.24	225	2093069	10.48 ppbv	100
68) Naphthalene	29.51	128	42471	1.36 ppbv	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M02.D
Acq On : 8 Oct 2013 11:44 am
Operator : EM
Sample : S13J031-CCV1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:30:23 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration



LCS REPORT

Instrument Name: Morpheus
Sample Name: B13J036-BS1
Misc Info: 10ppbv 1341042
Date Acquired: 10/8/2013 12:30
QLast Update: Tue Oct 08 16:43:21 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.35	#N/A	18.80	#N/A	70.0	130.0	#N/A
2)	Propene	4.14	10.70	9.95	93%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.24	10.10	9.44	93%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.60	10.40	9.90	95%	68.0	147.0	pass
5)	Chloromethane	4.79	10.30	9.84	96%	64.0	141.0	pass
6)	Vinyl chloride	5.11	10.50	9.73	93%	65.0	141.0	pass
7)	1,3-Butadiene	5.22	10.20	9.33	92%	61.0	154.0	pass
8)	Bromomethane	6.14	10.40	9.57	92%	71.0	132.0	pass
9)	Chloroethane	6.48	10.40	9.38	90%	70.0	134.0	pass
10)	Bromoethene	7.05	10.30	9.35	91%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.20	10.50	10.03	95%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.03	9.30	8.54	92%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.09	9.40	8.50	90%	81.0	127.0	pass
14)	Acetone	9.59	10.60	9.65	91%	77.0	150.0	pass
15)	Carbon disulfide	9.80	10.20	9.13	90%	75.0	138.0	pass
16)	2-Propanol	10.21	9.50	8.38	88%	71.0	142.0	pass
17)	Allyl chloride	10.67	10.10	8.90	88%	84.0	143.0	pass
18)	Dichloromethane	11.21	9.60	8.15	85%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	11.95	10.90	10.58	97%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	11.96	9.50	8.43	89%	82.0	136.0	pass
21)	Hexane	12.62	10.20	8.93	88%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.33	9.80	8.76	89%	82.0	123.0	pass
23)	Vinyl acetate	13.49	10.00	8.96	90%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.80	10.10	9.02	89%	83.0	126.0	pass
25)	2-Butanone (MEK)	14.90	10.40	10.47	101%	76.0	138.0	pass
26)	Ethyl acetate	14.96	10.40	9.73	94%	83.0	136.0	pass
27)	Tetrahydrofuran	15.36	10.30	9.77	95%	74.0	132.0	pass
28)	Chloroform	15.51	10.10	9.03	89%	81.0	127.0	pass
29)	Cyclohexane	15.77	10.40	9.26	89%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.80	10.00	9.20	92%	80.0	131.0	pass
31)	Carbon tetrachloride	16.07	10.00	9.29	93%	77.0	136.0	pass
32)	1,4-DIFLUOROBENZENE	17.38	#N/A	20.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.56	10.30	9.35	91%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.54	10.50	9.63	92%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.75	10.00	9.46	95%	70.0	149.0	pass
36)	Heptane	16.93	10.50	9.62	92%	62.0	159.0	pass
37)	Trichloroethene	17.80	10.30	9.38	91%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.30	10.60	9.72	92%	74.0	135.0	pass
40)	Bromodichloromethane	18.76	10.60	10.16	96%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.54	10.30	9.64	94%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.77	10.50	10.85	103%	59.0	147.0	pass
43)	CHLOROBENZENE-d5	22.31	#N/A	20.80	#N/A	70.0	130.0	#N/A
44)	Toluene	20.03	10.40	10.04	97%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.48	11.00	10.90	99%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.79	10.80	10.46	97%	76.0	124.0	pass
47)	Tetrachloroethene	20.88	10.40	10.10	97%	80.0	122.0	pass
48)	2-Hexanone	21.12	10.30	10.96	106%	55.0	149.0	pass

50)	1,2-Dibromoethane (EDB)	21.63	10.70	10.55	99%	78.0	124.0	pass
51)	Chlorobenzene	22.36	10.60	10.46	99%	76.0	120.0	pass
52)	Ethylbenzene	22.45	10.50	10.65	101%	75.0	125.0	pass
53)	m&p-Xylene	22.64	21.20	22.08	104%	75.0	128.0	pass
54)	o-Xylene	23.28	10.70	11.26	105%	74.0	128.0	pass
55)	Styrene	23.32	10.40	11.06	106%	69.0	122.0	pass
56)	Bromoform	23.68	10.30	11.10	108%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.37	10.60	11.47	108%	70.0	130.0	pass
59)	4-Ethyltoluene	24.64	10.50	11.27	107%	69.0	138.0	pass
61)	1,2,4-Trimethylbenzene	25.34	10.70	11.88	111%	65.0	129.0	pass
62)	1,3-Dichlorobenzene	25.86	10.30	11.46	111%	62.0	130.0	pass
63)	1,4-Dichlorobenzene	26.01	10.40	11.70	112%	61.0	131.0	pass
64)	Benzyl chloride	26.22	10.30	11.18	109%	61.0	153.0	pass
65)	1,2-Dichlorobenzene	26.61	10.40	11.63	112%	60.0	130.0	pass
66)	1,2,4-Trichlorobenzene	29.09	10.20	11.07	109%	38.0	128.0	pass
67)	Hexachlorobutadiene	29.24	10.30	10.87	106%	37.0	124.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M03.D
Acq On : 8 Oct 2013 12:30 pm
Operator : EM
Sample : B13J036-BS1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:31:49 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.35	49	920195	18.80	ppbv	0.01
32) 1,4-DIFLUOROBENZENE	17.38	114	4541624	20.00	ppbv	0.01
43) CHLOROBENZENE-d5	22.31	117	3855676	20.80	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.14	41	220329	9.95	ppbv	100
3) Dichlorodifluoromethane	4.24	85	1011610	9.44	ppbv	100
4) 1,2-Dichlorotetrafluoroeth	4.60	85	952195	9.90	ppbv	99
5) Chloromethane	4.79	50	269699	9.84	ppbv	98
6) Vinyl chloride	5.11	62	331962	9.73	ppbv	99
7) 1,3-Butadiene	5.22	54	234656	9.33	ppbv	100
8) Bromomethane	6.14	94	345814	9.57	ppbv	99
9) Chloroethane	6.48	64	173346	9.38	ppbv	99
10) Bromoethene	7.05	106	382523	9.35	ppbv	100
11) Trichlorofluoromethane	7.20	101	1349913	10.03	ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.03	151	866551	8.54	ppbv	99
13) 1,1-Dichloroethene	9.09	61	575051	8.50	ppbv	99
14) Acetone	9.59	43	524616	9.65	ppbv	99
15) Carbon disulfide	9.80	76	897597	9.13	ppbv	100
16) 2-Propanol	10.21	45	434384	8.38	ppbv	100
17) Allyl chloride	10.67	41	369405	8.90	ppbv	100
18) Dichloromethane	11.21	49	346913	8.15	ppbv	99
19) tert-Butyl methyl ether (M	11.95	73	1206222	10.58	ppbv	100
20) trans-1,2-Dichloroethene	11.96	61	480790	8.43	ppbv	99
21) Hexane	12.62	57	524792	8.93	ppbv	99
22) 1,1-Dichloroethane	13.33	63	684001	8.76	ppbv	99
23) Vinyl acetate	13.49	43	709255	8.96	ppbv	99
24) cis-1,2-Dichloroethene	14.80	61	547693	9.02	ppbv	99
25) 2-Butanone (MEK)	14.90	43	634009	10.47	ppbv	99
26) Ethyl acetate	14.96	43	700987	9.73	ppbv	100
27) Tetrahydrofuran	15.36	42	332212	9.77	ppbv	100
28) Chloroform	15.51	83	934950	9.03	ppbv	100
29) Cyclohexane	15.77	56	544243	9.26	ppbv	99
30) 1,1,1-Trichloroethane	15.80	97	1103671	9.20	ppbv	99
31) Carbon tetrachloride	16.07	117	1262200	9.29	ppbv	100
33) Benzene	16.56	78	1280683	9.35	ppbv	100
34) 2,2,4-Trimethylpentane	16.54	57	1711791	9.63	ppbv	100
35) 1,2-Dichloroethane	16.75	62	634507	9.46	ppbv	100
36) Heptane	16.93	43	583250	9.62	ppbv	100
37) Trichloroethene	17.80	130	734566	9.38	ppbv	100
38) 1,2-Dichloropropane	18.30	63	418668	9.72	ppbv	99
39) 1,4-Dioxane	18.48	88	247985	10.17	ppbv	99
40) Bromodichloromethane	18.76	83	1031956	10.16	ppbv	100
41) cis-1,3-Dichloropropene	19.54	75	743640	9.64	ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.77	43	734030	10.85	ppbv	99
44) Toluene	20.03	91	1707567	10.04	ppbv	99
45) trans-1,3-Dichloropropene	20.48	75	816378	10.90	ppbv	99
46) 1,1,2-Trichloroethane	20.79	97	583532	10.46	ppbv	99
47) Tetrachloroethene	20.88	166	1121394	10.10	ppbv	99
48) 2-Hexanone	21.12	43	685326	10.96	ppbv	99
49) Chlorodibromomethane	21.40	129	1224939	10.53	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.63	107	952053	10.55	ppbv	99
51) Chlorobenzene	22.36	112	1570446	10.46	ppbv	99
52) Ethylbenzene	22.45	91	2420869	10.65	ppbv	100
53) m&p-Xylene	22.64	91	3946278	22.08	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M03.D
Acq On : 8 Oct 2013 12:30 pm
Operator : EM
Sample : B13J036-BS1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:31:49 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

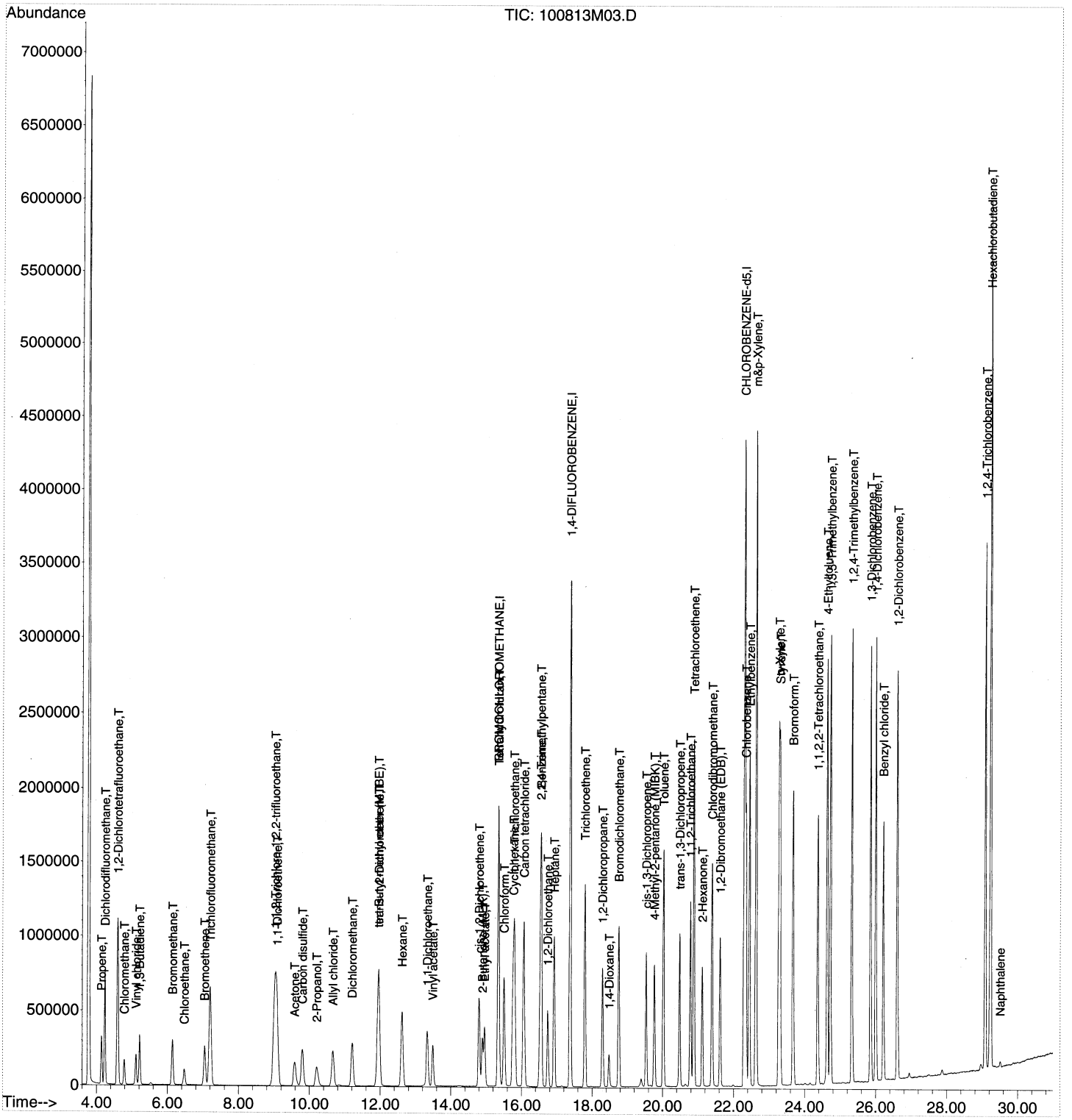
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.28	91	2032292	11.26 ppbv	99
55) Styrene	23.32	104	1625119	11.06 ppbv	99
56) Bromoform	23.68	173	1460851	11.10 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.37	83	1235354	11.47 ppbv	100
59) 4-Ethyltoluene	24.64	105	2813843	11.27 ppbv	100
60) 1,3,5-Trimethylbenzene	24.73	105	2568883	11.36 ppbv	99
61) 1,2,4-Trimethylbenzene	25.34	105	2595939	11.88 ppbv	99
62) 1,3-Dichlorobenzene	25.86	146	2006766	11.46 ppbv	99
63) 1,4-Dichlorobenzene	26.01	146	2030608	11.70 ppbv	100
64) Benzyl chloride	26.22	91	1909561	11.18 ppbv	99
65) 1,2-Dichlorobenzene	26.61	146	1874991	11.63 ppbv	99
66) 1,2,4-Trichlorobenzene	29.09	180	1883887	11.07 ppbv	100
67) Hexachlorobutadiene	29.24	225	2070549	10.87 ppbv	100
68) Naphthalene	29.51	128	39759	1.34 ppbv	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M03.D
Acq On : 8 Oct 2013 12:30 pm
Operator : EM
Sample : B13J036-BS1
Misc : 10ppbv 1341042
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:31:49 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration



QLS REPORT

2 out
EM 10/8/13

Instrument Name: Morpheus
Sample Name: S13J031-CRL1
Misc Info: 1.0ppbv 1341059
Date Acquired: 10/8/2013 14:19
QLast Update: Tue Oct 08 16:43:21 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
2)	Propene	4.13	1.07	1.29	120%	60.0	140.0	pass	Subset
3)	Dichlorodifluoromethane	4.23	1.01	1.40	138%	60.0	140.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.59	1.04	1.48	142%	60.0	140.0	FAIL	Primary
5)	Chloromethane	4.77	1.03	1.19	116%	60.0	140.0	pass	Primary
6)	Vinyl chloride	5.10	1.05	1.23	117%	60.0	140.0	pass	Primary
7)	1,3-Butadiene	5.21	1.02	1.27	125%	60.0	140.0	pass	Subset
8)	Bromomethane	6.12	1.04	1.30	125%	60.0	140.0	pass	Primary
9)	Chloroethane	6.46	1.04	1.35	130%	60.0	140.0	pass	Primary
10)	Bromoethene	7.04	1.03	1.31	127%	60.0	140.0	pass	Subset
11)	Trichlorofluoromethane	7.18	1.05	1.32	126%	60.0	140.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.00	0.93	1.09	117%	60.0	140.0	pass	Primary
13)	1,1-Dichloroethene	9.07	0.94	1.21	129%	60.0	140.0	pass	Primary
14)	Acetone	9.57	1.06	1.39	131%	60.0	140.0	pass	Subset
15)	Carbon disulfide	9.78	1.02	1.26	123%	60.0	140.0	pass	Subset
16)	2-Propanol	10.19	0.95	1.02	107%	60.0	140.0	pass	Subset
17)	Allyl chloride	10.64	1.01	1.23	121%	60.0	140.0	pass	Subset
18)	Dichloromethane	11.19	0.96	1.38	143%	60.0	140.0	FAIL	Primary
19)	tert-Butyl methyl ether (MTBE)	11.93	1.09	1.11	102%	60.0	140.0	pass	Subset
20)	trans-1,2-Dichloroethene	11.95	0.95	1.19	126%	60.0	140.0	pass	Subset
21)	Hexane	12.60	1.02	1.23	121%	60.0	140.0	pass	Subset
22)	1,1-Dichloroethane	13.31	0.98	1.26	129%	60.0	140.0	pass	Primary
23)	Vinyl acetate	13.47	1.00	1.08	108%	60.0	140.0	pass	Subset
24)	cis-1,2-Dichloroethene	14.79	1.01	1.28	127%	60.0	140.0	pass	Primary
25)	2-Butanone (MEK)	14.88	1.04	0.98	94%	60.0	140.0	pass	Subset
26)	Ethyl acetate	14.95	1.04	0.92	88%	60.0	140.0	pass	Subset
27)	Tetrahydrofuran	15.36	1.03	0.94	91%	60.0	140.0	pass	Subset
28)	Chloroform	15.49	1.01	1.32	130%	60.0	140.0	pass	Primary
29)	Cyclohexane	15.75	1.04	1.22	118%	60.0	140.0	pass	Subset
30)	1,1,1-Trichloroethane	15.79	1.00	1.27	127%	60.0	140.0	pass	Primary
31)	Carbon tetrachloride	16.05	1.00	1.28	127%	60.0	140.0	pass	Primary
33)	Benzene	16.55	1.03	1.32	128%	60.0	140.0	pass	Primary
34)	2,2,4-Trimethylpentane	16.53	1.05	1.29	123%	60.0	140.0	pass	Subset
35)	1,2-Dichloroethane	16.73	1.00	1.34	134%	60.0	140.0	pass	Primary
36)	Heptane	16.92	1.05	1.31	125%	60.0	140.0	pass	Subset
37)	Trichloroethene	17.79	1.03	1.32	128%	60.0	140.0	pass	Primary
38)	1,2-Dichloropropane	18.29	1.06	1.37	129%	60.0	140.0	pass	Primary
39)	1,4-Dioxane	18.48	1.06	1.12	106%	60.0	140.0	pass	Subset
40)	Bromodichloromethane	18.75	1.06	1.33	126%	60.0	140.0	pass	Subset
41)	cis-1,3-Dichloropropene	19.53	1.03	1.26	122%	60.0	140.0	pass	Primary
42)	4-Methyl-2-pentanone (MIBK)	19.76	1.05	0.90	86%	60.0	140.0	pass	Subset
43)	CHLOROBENZENE-d5	22.30	20.80	20.80	100%	60.0	140.0	pass	Subset
45)	trans-1,3-Dichloropropene	20.48	1.10	1.39	126%	60.0	140.0	pass	Primary
46)	1,1,2-Trichloroethane	20.78	1.08	1.35	125%	60.0	140.0	pass	Primary
47)	Tetrachloroethene	20.88	1.04	1.30	125%	60.0	140.0	pass	Primary
48)	2-Hexanone	21.11	1.03	1.02	99%	60.0	140.0	pass	Subset
49)	Chlorodibromomethane	21.39	1.04	1.23	118%	60.0	140.0	pass	Subset
50)	1,2-Dibromoethane (EDB)	21.62	1.07	1.32	123%	60.0	140.0	pass	Primary
51)	Chlorobenzene	22.35	1.06	1.26	119%	60.0	140.0	pass	Primary
52)	Ethylbenzene	22.45	1.05	1.20	114%	60.0	140.0	pass	Primary
53)	m&p-Xylene	22.63	2.12	2.33	110%	60.0	140.0	pass	Primary

54)	o-Xylene	23.28	1.07	1.10	103%	60.0	140.0	pass	Primary
55)	Styrene	23.31	1.04	1.00	97%	60.0	140.0	pass	Primary
56)	Bromoform	23.68	1.03	1.01	98%	60.0	140.0	pass	Subset
57)	1,1,2,2-Tetrachloroethane	24.37	1.06	0.93	87%	60.0	140.0	pass	Primary
59)	4-Ethyltoluene	24.64	1.05	0.85	81%	60.0	140.0	pass	Subset
60)	1,3,5-Trimethylbenzene	24.73	1.04	0.85	82%	60.0	140.0	pass	Primary
61)	1,2,4-Trimethylbenzene	25.34	1.07	0.84	78%	60.0	140.0	pass	Primary
62)	1,3-Dichlorobenzene	25.86	1.03	0.82	80%	60.0	140.0	pass	Primary
63)	1,4-Dichlorobenzene	26.01	1.04	0.85	81%	60.0	140.0	pass	Subset
64)	Benzyl chloride	26.22	1.03	0.76	74%	60.0	140.0	pass	Primary
65)	1,2-Dichlorobenzene	26.61	1.04	0.83	80%	60.0	140.0	pass	Primary
66)	1,2,4-Trichlorobenzene	29.09	1.02	0.95	94%	60.0	140.0	pass	Primary
67)	Hexachlorobutadiene	29.24	1.03	1.06	103%	60.0	140.0	pass	Primary

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M05.D
Acq On : 8 Oct 2013 2:19 pm
Operator : EM
Sample : S13J031-CRL1
Misc : 1.0ppbv 1341059
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:33:08 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	835343	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	4206727	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.30	117	3635618	20.80 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.13	41	25881	1.29 ppbv	99
3) Dichlorodifluoromethane	4.23	85	136182	1.40 ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.59	85	128778	1.48 ppbv	98
5) Chloromethane	4.77	50	29683	1.19 ppbv	97
6) Vinyl chloride	5.10	62	38055	1.23 ppbv	99
7) 1,3-Butadiene	5.21	54	29001	1.27 ppbv	100
8) Bromomethane	6.12	94	42517	1.30 ppbv	99
9) Chloroethane	6.46	64	22652	1.35 ppbv	98
10) Bromoethene	7.04	106	48743	1.31 ppbv	100
11) Trichlorofluoromethane	7.18	101	161208	1.32 ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.00	151	100311	1.09 ppbv	99
13) 1,1-Dichloroethene	9.07	61	74198	1.21 ppbv	99
14) Acetone	9.57	43	68741	1.39 ppbv	97
15) Carbon disulfide	9.78	76	112101	1.26 ppbv #	80
16) 2-Propanol	10.19	45	48076	1.02 ppbv	93
17) Allyl chloride	10.64	41	46155	1.23 ppbv	96
18) Dichloromethane	11.19	49	53156	1.38 ppbv	99
19) tert-Butyl methyl ether (M	11.93	73	114796	1.11 ppbv	100
20) trans-1,2-Dichloroethene	11.95	61	61808	1.19 ppbv	100
21) Hexane	12.60	57	65864	1.23 ppbv	96
22) 1,1-Dichloroethane	13.31	63	89603	1.26 ppbv	99
23) Vinyl acetate	13.47	43	77509	1.08 ppbv	100
24) cis-1,2-Dichloroethene	14.79	61	70652	1.28 ppbv	99
25) 2-Butanone (MEK)	14.88	43	53940	0.98 ppbv	95
26) Ethyl acetate	14.95	43	59951	0.92 ppbv	95
27) Tetrahydrofuran	15.36	42	28924	0.94 ppbv	95
28) Chloroform	15.49	83	123889	1.32 ppbv	99
29) Cyclohexane	15.75	56	65289	1.22 ppbv	98
30) 1,1,1-Trichloroethane	15.79	97	138276	1.27 ppbv	100
31) Carbon tetrachloride	16.05	117	157282	1.28 ppbv	100
33) Benzene	16.55	78	167618	1.32 ppbv	99
34) 2,2,4-Trimethylpentane	16.53	57	213164	1.29 ppbv	99
35) 1,2-Dichloroethane	16.73	62	83511	1.34 ppbv	99
36) Heptane	16.92	43	73728	1.31 ppbv	99
37) Trichloroethene	17.79	130	95738	1.32 ppbv	97
38) 1,2-Dichloropropane	18.29	63	54519	1.37 ppbv	98
39) 1,4-Dioxane	18.48	88	25284	1.12 ppbv	96
40) Bromodichloromethane	18.75	83	125310	1.33 ppbv	99
41) cis-1,3-Dichloropropene	19.53	75	90005	1.26 ppbv	98
42) 4-Methyl-2-pentanone (MIBK	19.76	43	56647	0.90 ppbv	98
44) Toluene	20.02	91	205961	1.28 ppbv	100
45) trans-1,3-Dichloropropene	20.48	75	98003	1.39 ppbv	99
46) 1,1,2-Trichloroethane	20.78	97	71097	1.35 ppbv	96
47) Tetrachloroethene	20.88	166	135697	1.30 ppbv	99
48) 2-Hexanone	21.11	43	60068	1.02 ppbv	100
49) Chlorodibromomethane	21.39	129	134803	1.23 ppbv	99
50) 1,2-Dibromoethane (EDB)	21.62	107	111932	1.32 ppbv	98
51) Chlorobenzene	22.35	112	179095	1.26 ppbv	87
52) Ethylbenzene	22.45	91	257090	1.20 ppbv	99
53) m&p-Xylene	22.63	91	393035	2.33 ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M05.D
Acq On : 8 Oct 2013 2:19 pm
Operator : EM
Sample : S13J031-CRL1
Misc : 1.0ppbv 1341059
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:33:08 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

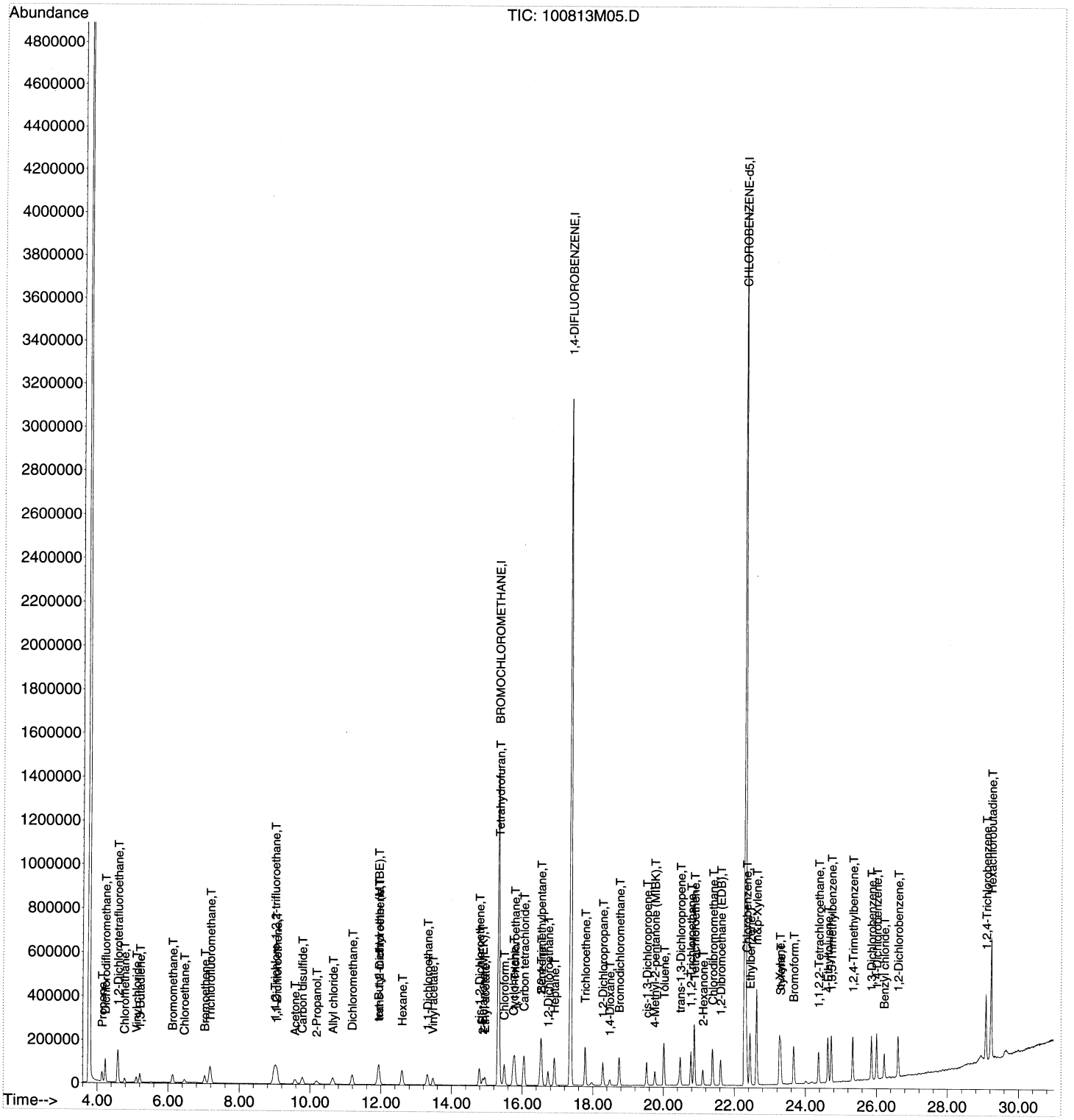
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.28	91	187649	1.10 ppbv	99
55) Styrene	23.31	104	139124	1.00 ppbv	98
56) Bromoform	23.68	173	125349	1.01 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.37	83	94177	0.93 ppbv	100
59) 4-Ethyltoluene	24.64	105	200835	0.85 ppbv	98
60) 1,3,5-Trimethylbenzene	24.73	105	180851	0.85 ppbv	96
61) 1,2,4-Trimethylbenzene	25.34	105	172778	0.84 ppbv	98
62) 1,3-Dichlorobenzene	25.86	146	135993	0.82 ppbv	99
63) 1,4-Dichlorobenzene	26.01	146	138332	0.85 ppbv	99
64) Benzyl chloride	26.22	91	122725	0.76 ppbv	99
65) 1,2-Dichlorobenzene	26.61	146	126282	0.83 ppbv	100
66) 1,2,4-Trichlorobenzene	29.09	180	153231	0.95 ppbv	99
67) Hexachlorobutadiene	29.24	225	190151	1.06 ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M05.D
Acq On : 8 Oct 2013 2:19 pm
Operator : EM
Sample : S13J031-CRL1
Misc : 1.0ppbv 1341059
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 08 17:33:08 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M06.D
Acq On : 8 Oct 2013 3:10 pm
Operator : EM
Sample : B13J036-BLK1
Misc : Blank Can 1584E
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 08 17:34:27 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	877998	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	4288630	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	3600969	20.80 ppbv	0.00

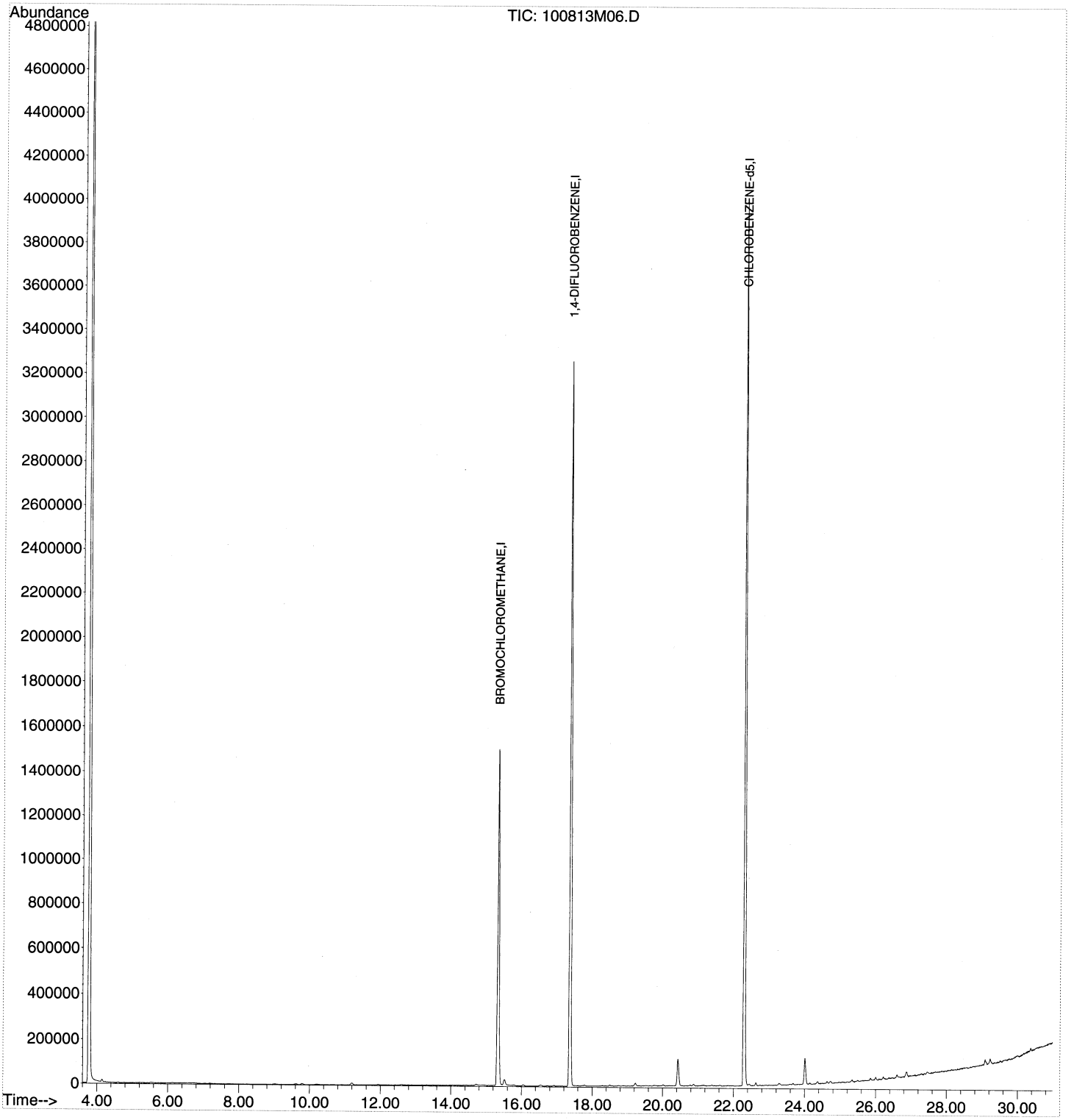
Target Compounds	Qvalue

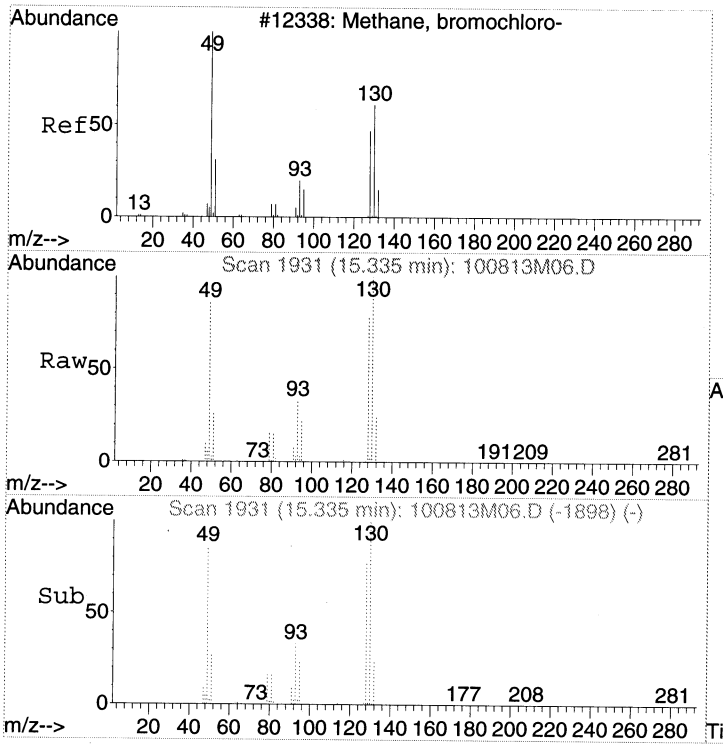
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M06.D
Acq On : 8 Oct 2013 3:10 pm
Operator : EM
Sample : B13J036-BLK1
Misc : Blank Can 1584E
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 08 17:34:27 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

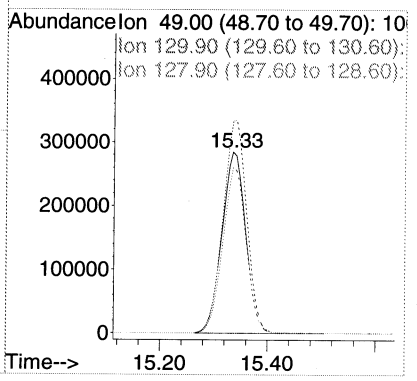


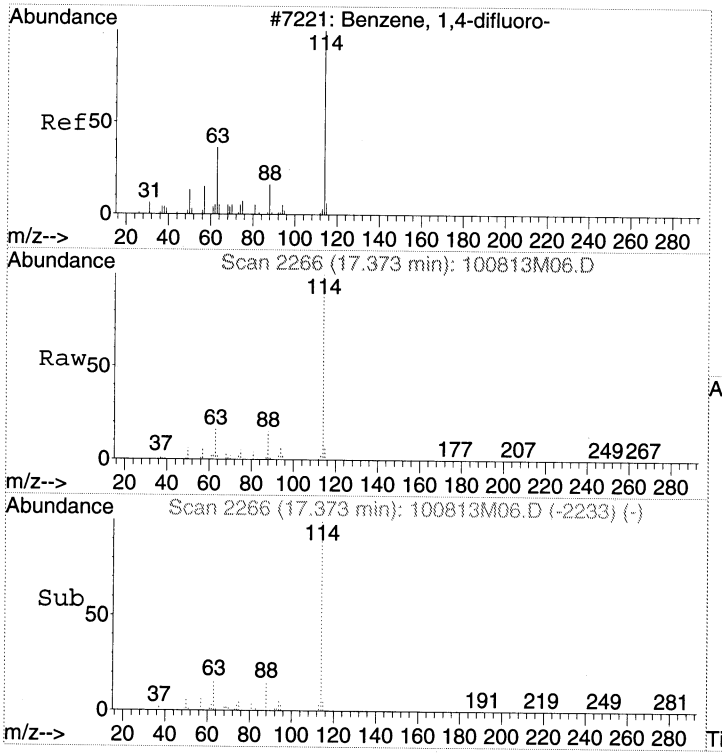


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. 0.00 min
Lab File: 100813M06.D
Acq: 8 Oct 2013 3:10 pm

Tgt Ion: 49 Resp: 877998

Ion	Ratio	Lower	Upper
49	100		
130	117.4	97.9	137.9
128	90.1	70.6	110.6

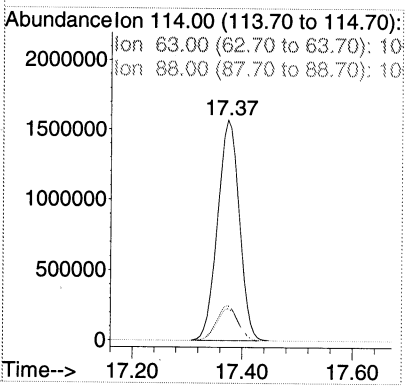


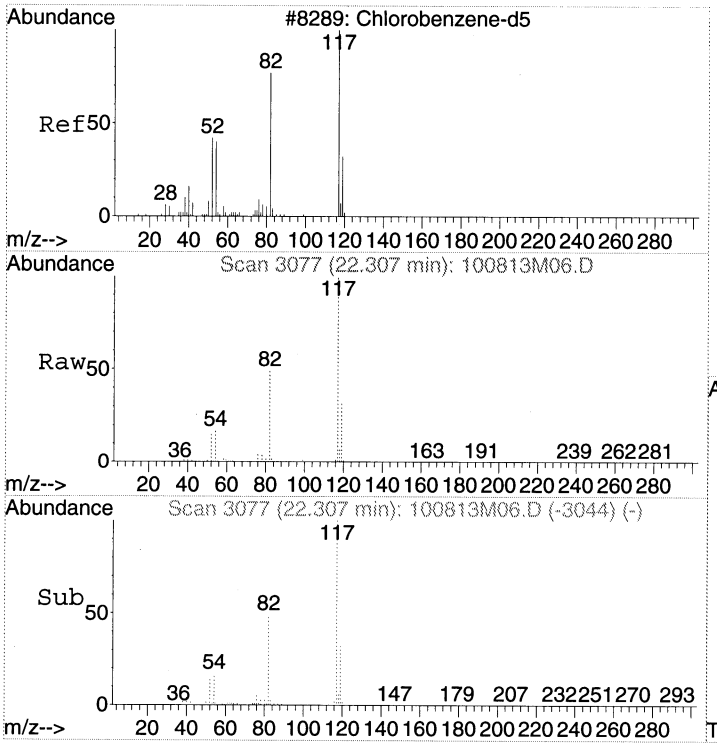


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. 0.00 min
Lab File: 100813M06.D
Acq: 8 Oct 2013 3:10 pm

Tgt Ion:114 Resp: 4288630

Ion	Ratio	Lower	Upper
114	100		
63	16.1	0.0	35.8
88	14.6	0.0	34.6

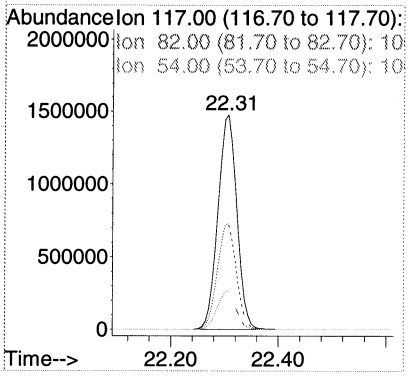




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. 0.00 min
Lab File: 100813M06.D
Acq: 8 Oct 2013 3:10 pm

Tgt Ion:117 Resp: 3600969

Ion	Ratio	Lower	Upper
117	100		
82	49.7	28.9	68.9
54	17.8	0.0	36.9



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M24.D
Acq On : 9 Oct 2013 5:27 am
Operator : EM
Sample : BLANK CAN 1100
Misc : BLANK CAN 1100
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Oct 09 10:05:14 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	778149	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3665028	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	3059130	20.80 ppbv	0.00

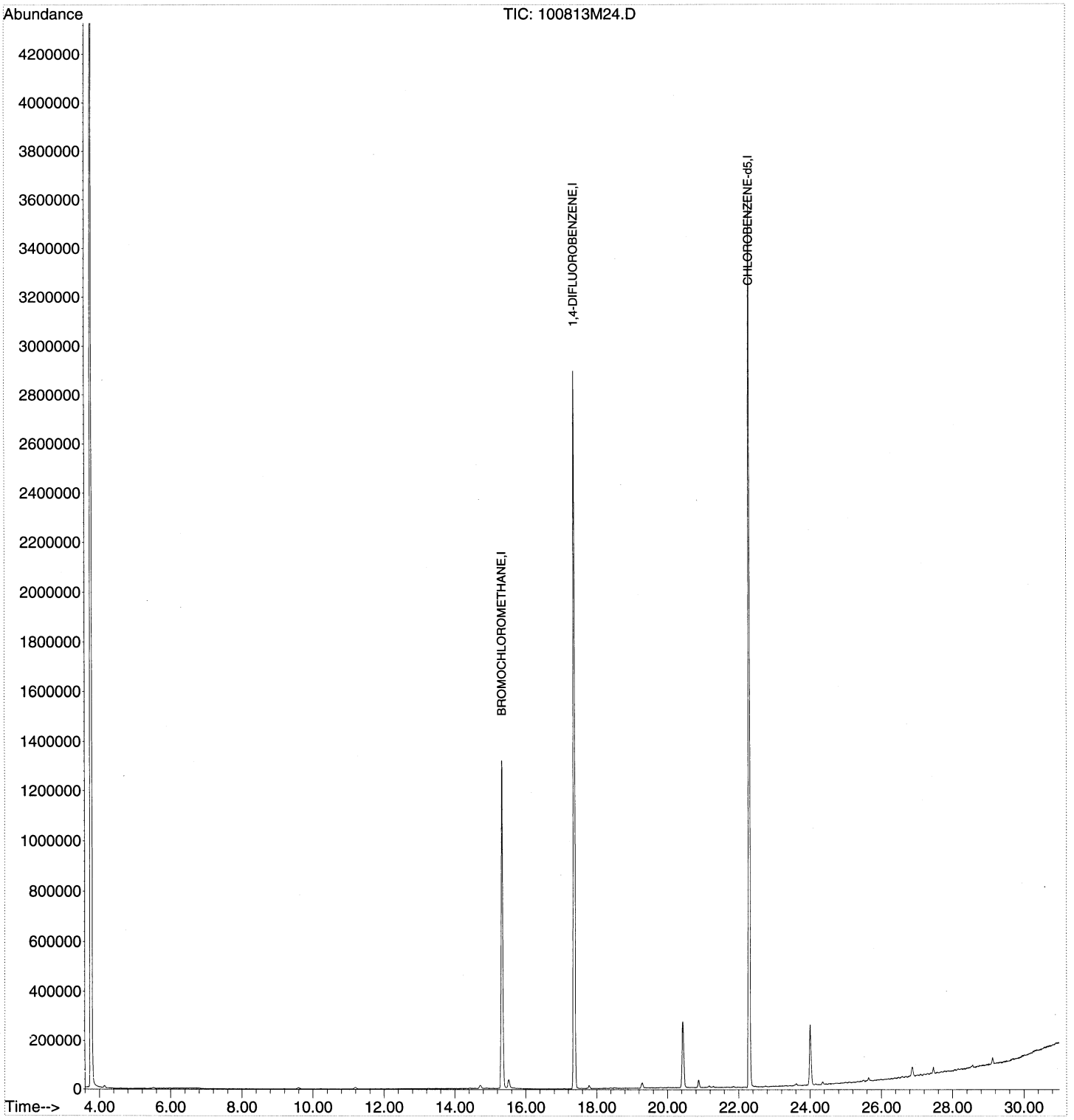
Target Compounds	Qvalue

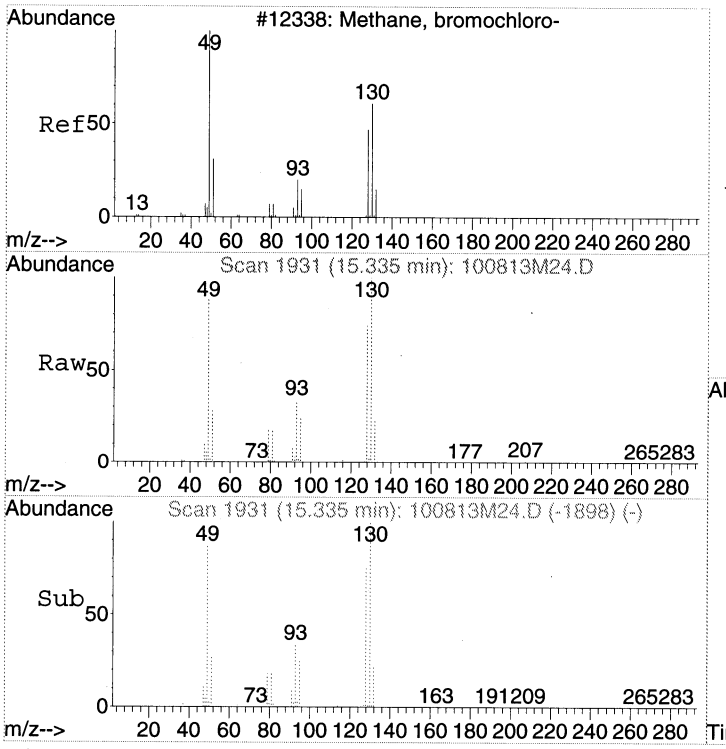
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M24.D
Acq On : 9 Oct 2013 5:27 am
Operator : EM
Sample : BLANK CAN 1100
Misc : BLANK CAN 1100
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Oct 09 10:05:14 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

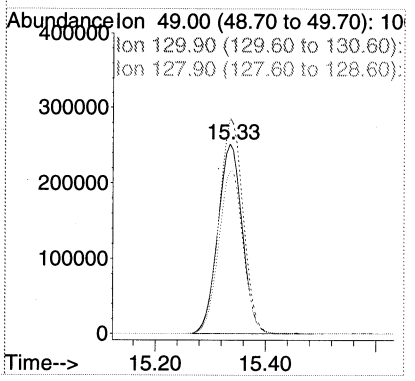


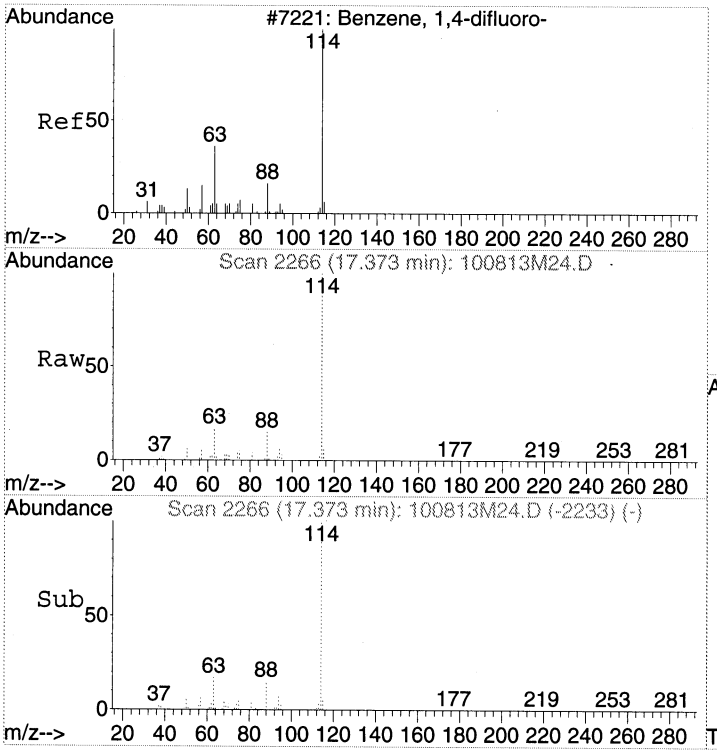


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. 0.00 min
Lab File: 100813M24.D
Acq: 9 Oct 2013 5:27 am

Tgt Ion: 49 Resp: 778149

Ion	Ratio	Lower	Upper
49	100		
130	112.4	97.9	137.9
128	86.2	70.6	110.6

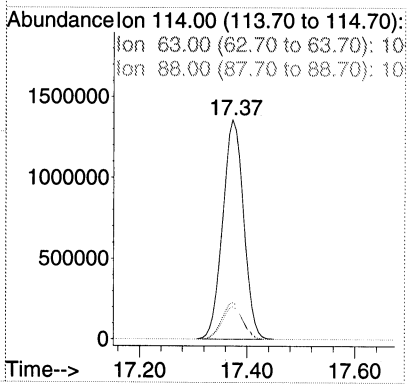


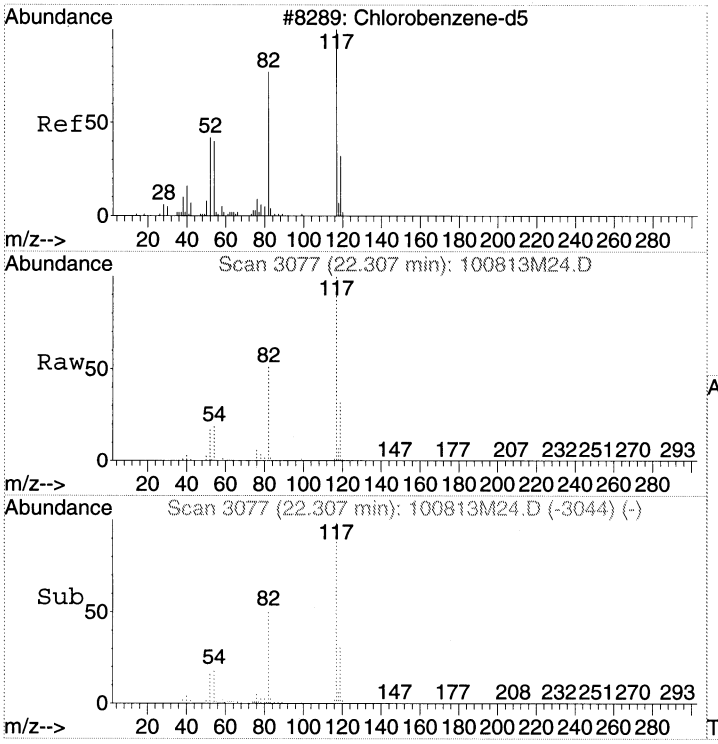


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. 0.00 min
Lab File: 100813M24.D
Acq: 9 Oct 2013 5:27 am

Tgt Ion:114 Resp: 3665028

Ion	Ratio	Lower	Upper
114	100		
63	17.0	0.0	35.8
88	14.9	0.0	34.6

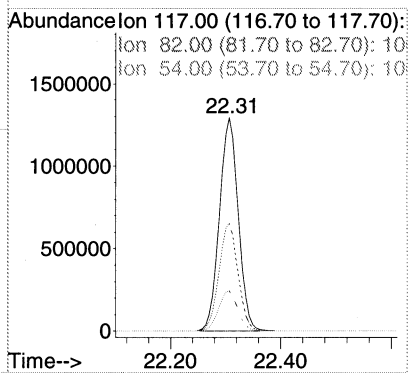




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. 0.00 min
Lab File: 100813M24.D
Acq: 9 Oct 2013 5:27 am

Tgt Ion:117 Resp: 3059130

Ion	Ratio	Lower	Upper
117	100		
82	51.0	28.9	68.9
54	19.3	0.0	36.9



LSC Area Percent Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M24.D
Acq On : 9 Oct 2013 5:27 am
Operator : EM
Sample : BLANK CAN 1100
Misc : BLANK CAN 1100
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.01
Stop Thrs : 0.1

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Title : TO15

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	15.335	1917	1931	1949	rBV	1318703	4081098	47.09%	18.119%
2	15.523	1952	1962	1976	rVB	33060	111188	1.28%	0.494%
3	17.373	2253	2266	2285	rBV	2895082	7886258	91.00%	35.012%
4	20.439	2758	2770	2785	rVB	269316	902712	10.42%	4.008%
5	22.307	3065	3077	3091	rBV	3600061	8665871	100.00%	38.473%
6	24.016	3347	3358	3373	rVB	247433	762983	8.80%	3.387%
7	26.875	3822	3828	3838	rVB3	37748	114215	1.32%	0.507%

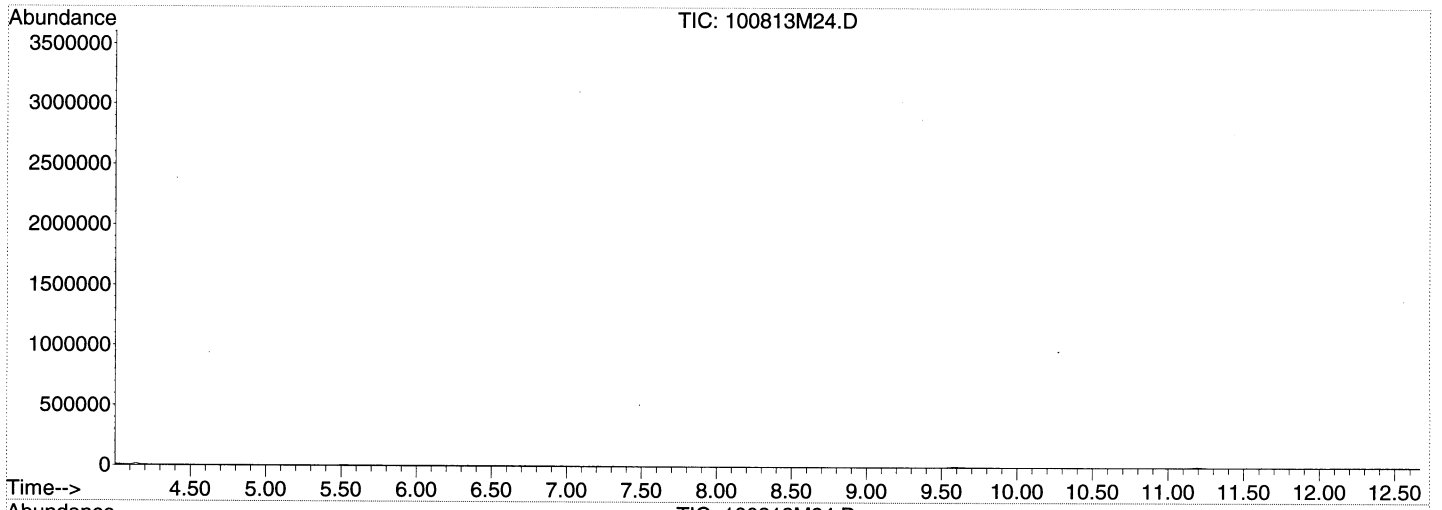
Sum of corrected areas: 22524325

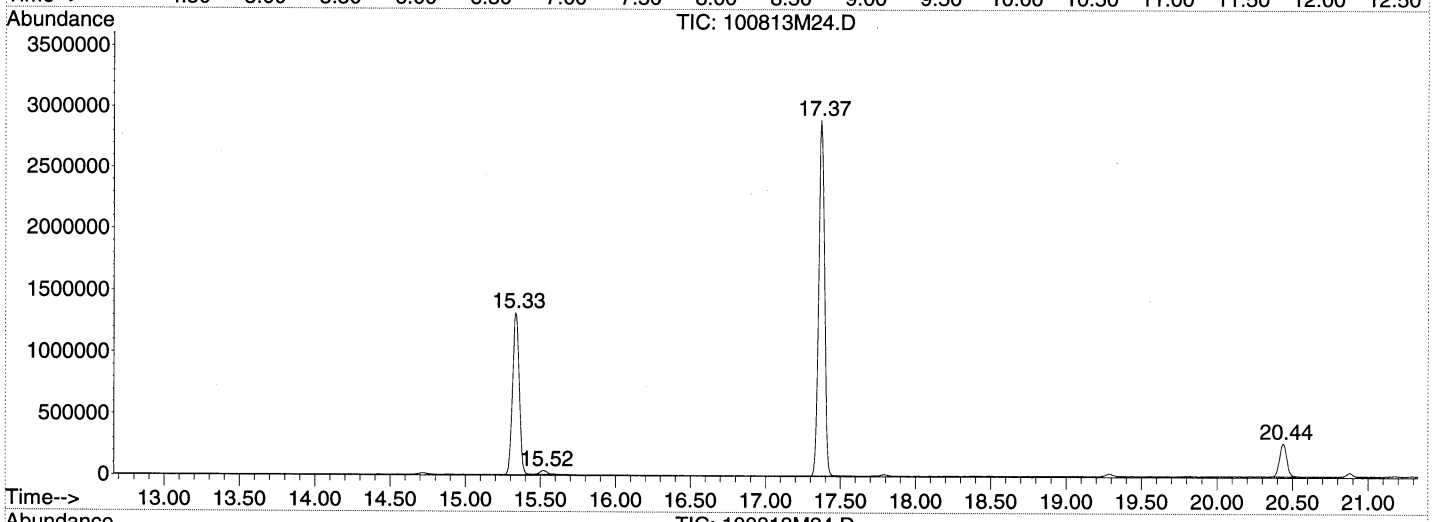
LSC Report - Integrated Chromatogram

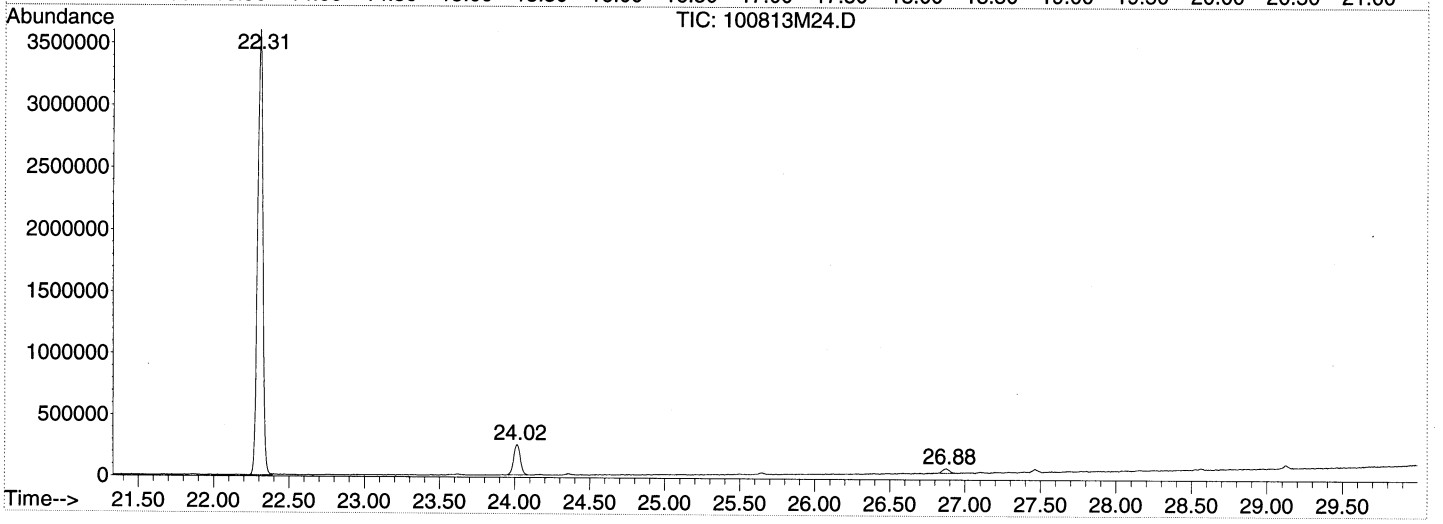
Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M24.D
Acq On : 9 Oct 2013 5:27 am
Operator : EM
Sample : BLANK CAN 1100
Misc : BLANK CAN 1100
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M24.D
Acq On : 9 Oct 2013 5:27 am
Operator : EM
Sample : BLANK CAN 1100
Misc : BLANK CAN 1100
ALS Vial : 45 Sample Multiplier: 1

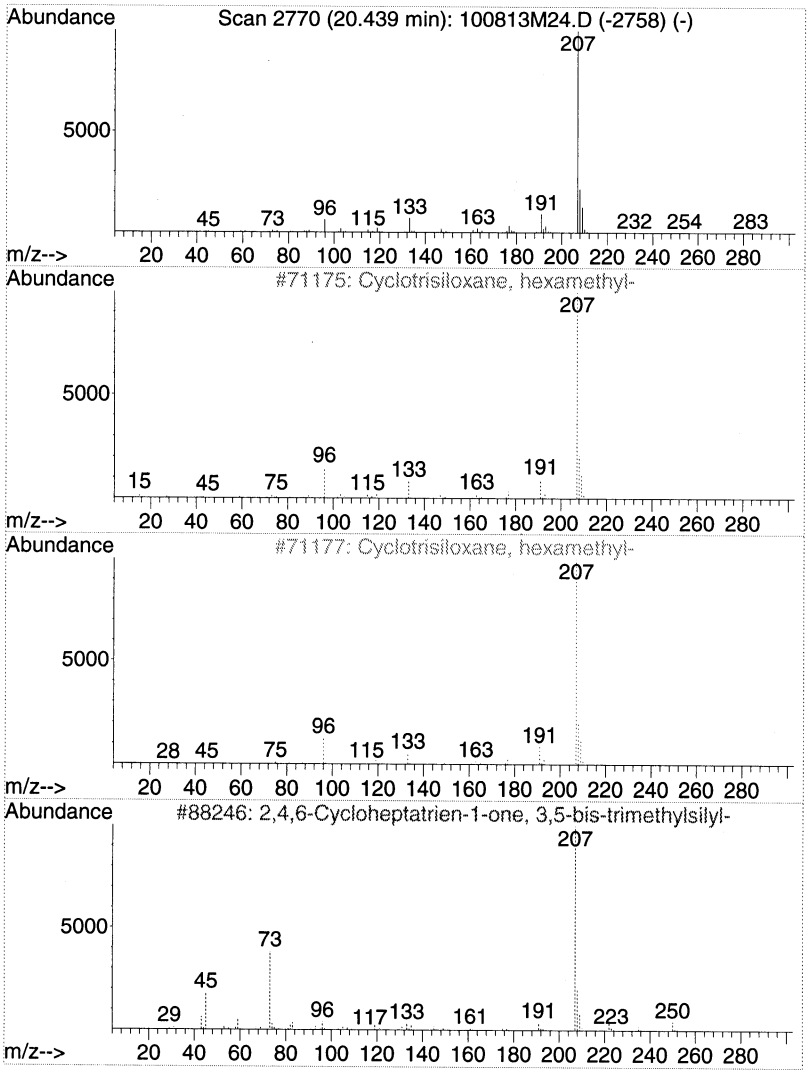
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15

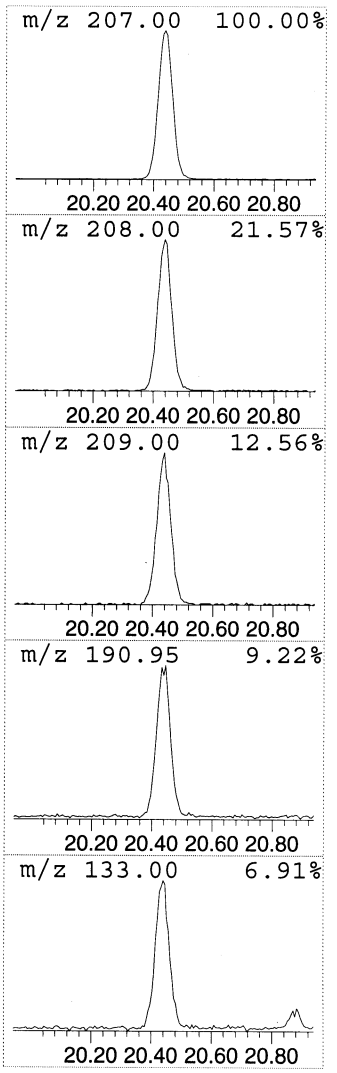
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 column bleed Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.44	2.17 ppbv	902712	CHLOROBENZENE-d5	22.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
3	2,4,6-Cycloheptatrien-1-one, 3,5...	250	C13H22OSi2	1000161-21-8	64
4	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	64
5	Silane, 1,4-phenylenebis[trimethyl-	222	C12H22Si2	013183-70-5	56





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M24.D
Acq On : 9 Oct 2013 5:27 am
Operator : EM
Sample : BLANK CAN 1100
Misc : BLANK CAN 1100
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
column bleed	20.44	2.2	ppbv	902712	3	22.31	8665870	20.8

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M25.D
Acq On : 9 Oct 2013 6:16 am
Operator : EM
Sample : BLANK CAN 1107
Misc : BLANK CAN 1107
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Oct 09 10:05:17 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	761700	18.80	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3542299	20.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	2993800	20.80	ppbv	0.00

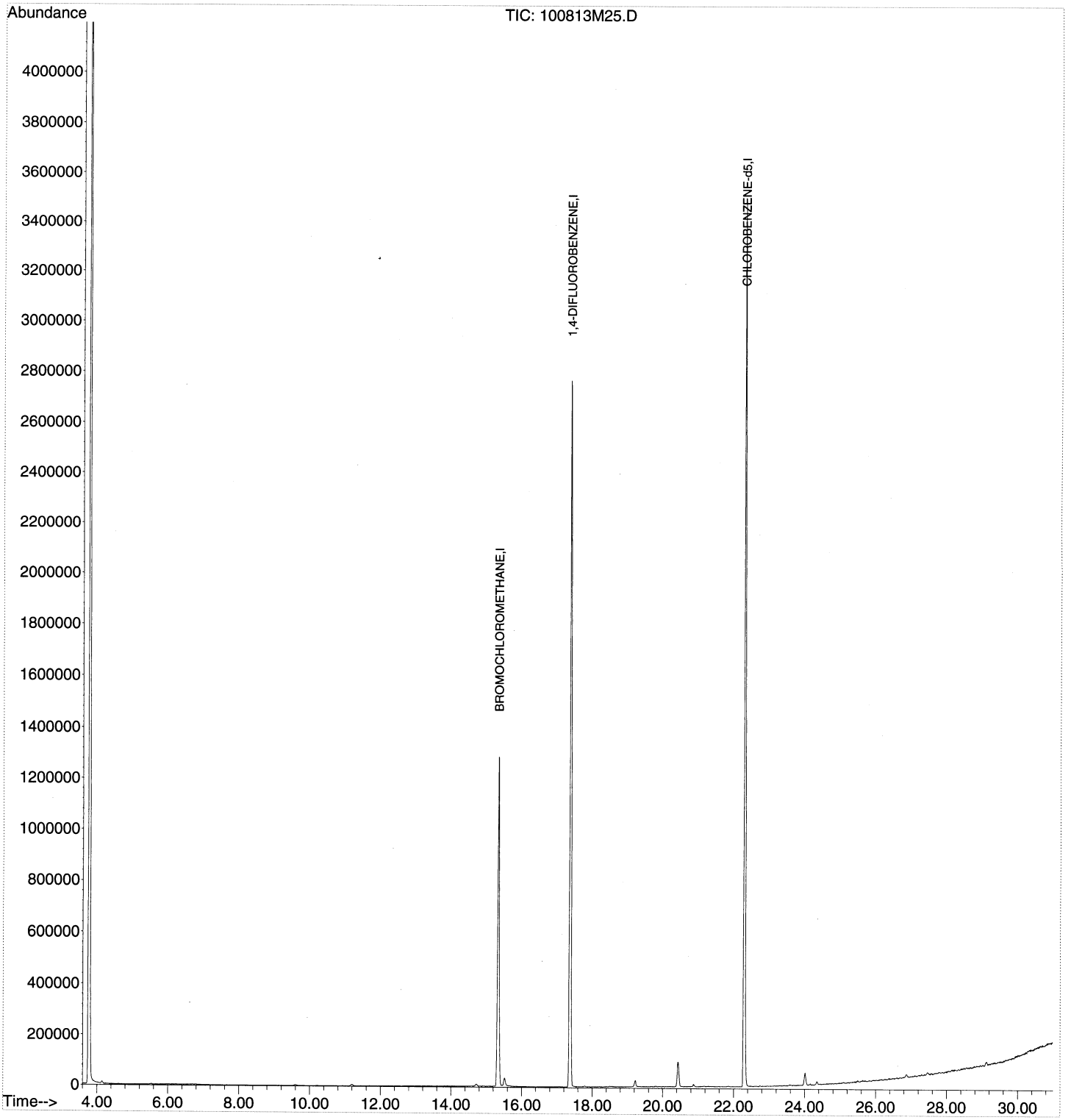
Target Compounds	Qvalue

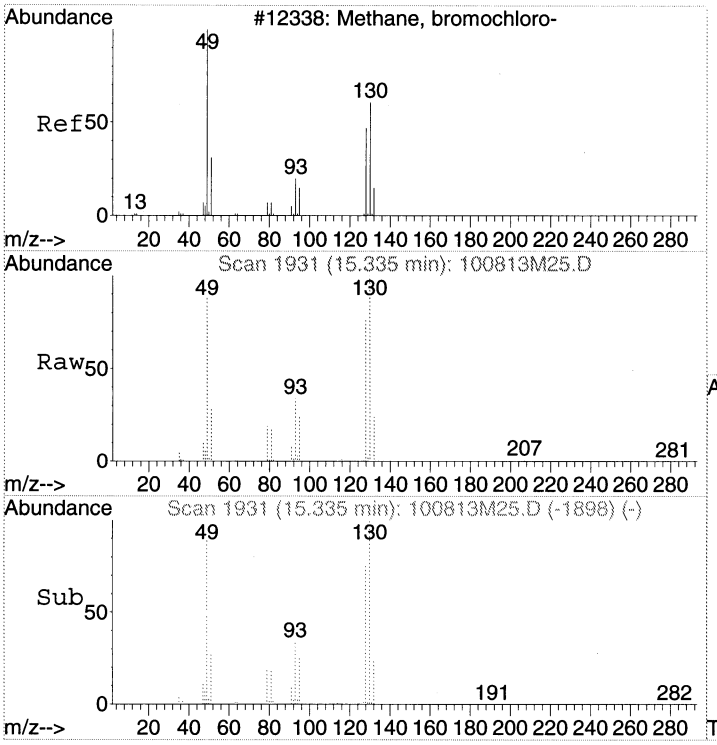
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M25.D
Acq On : 9 Oct 2013 6:16 am
Operator : EM
Sample : BLANK CAN 1107
Misc : BLANK CAN 1107
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Oct 09 10:05:17 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

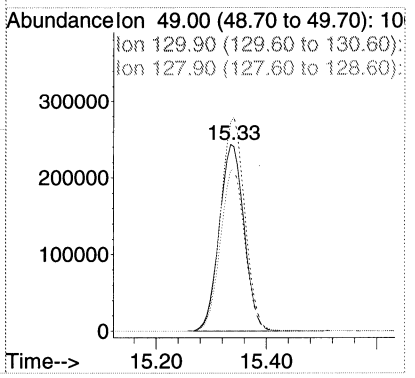


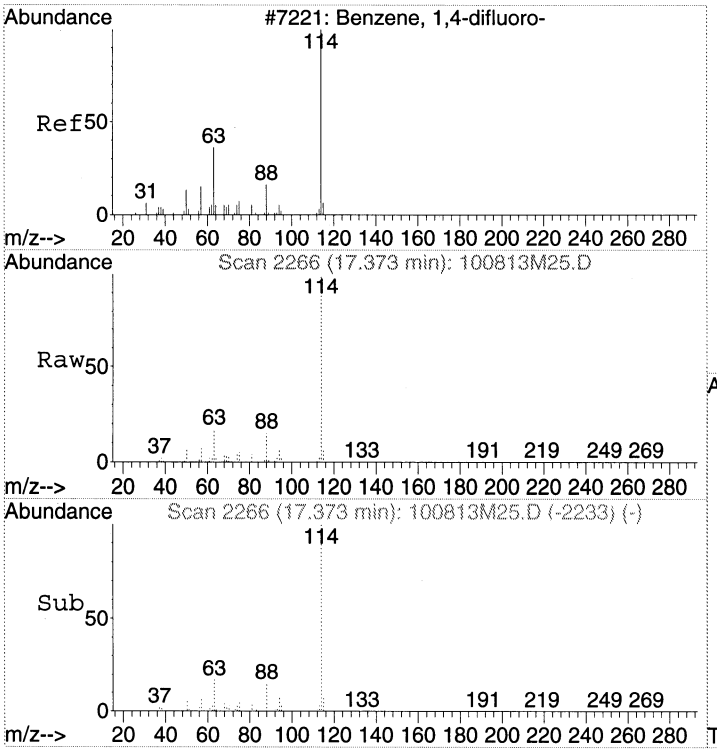


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. 0.00 min
Lab File: 100813M25.D
Acq: 9 Oct 2013 6:16 am

Tgt Ion: 49 Resp: 761700

Ion	Ratio	Lower	Upper
49	100		
130	112.0	97.9	137.9
128	85.8	70.6	110.6

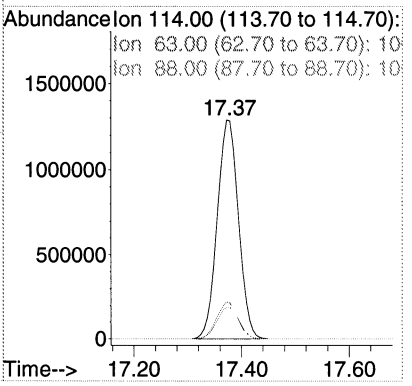


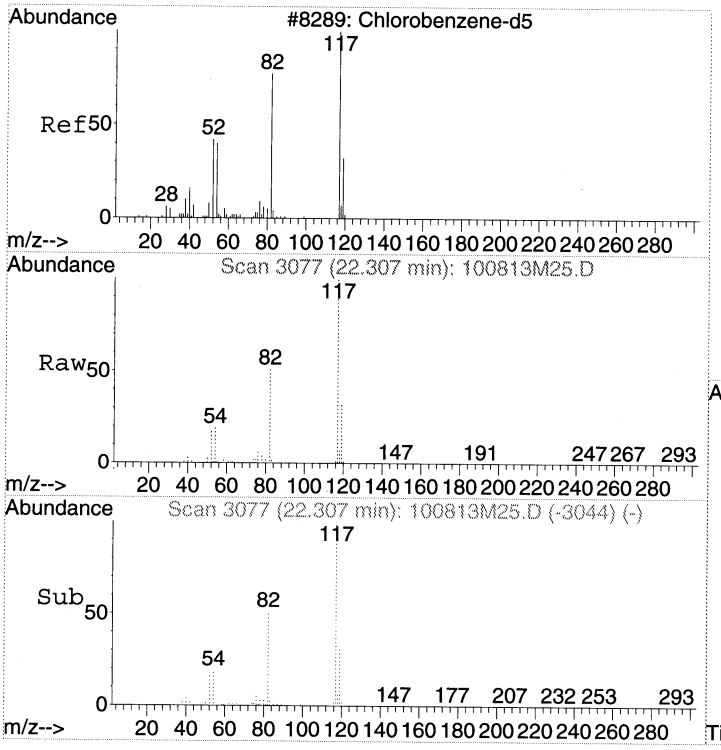


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. 0.00 min
Lab File: 100813M25.D
Acq: 9 Oct 2013 6:16 am

Tgt Ion:114 Resp: 3542299

Ion	Ratio	Lower	Upper
114	100		
63	17.2	0.0	35.8
88	14.9	0.0	34.6

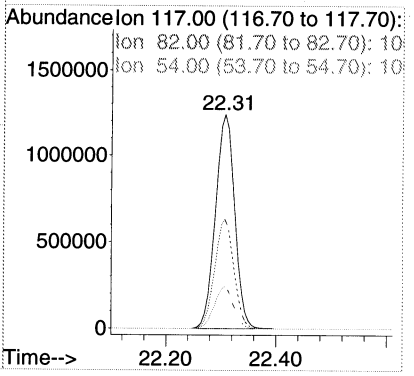




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. 0.00 min
Lab File: 100813M25.D
Acq: 9 Oct 2013 6:16 am

Tgt Ion:117 Resp: 2993800

Ion	Ratio	Lower	Upper
117	100		
82	50.8	28.9	68.9
54	19.4	0.0	36.9



LSC Area Percent Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M25.D
Acq On : 9 Oct 2013 6:16 am
Operator : EM
Sample : BLANK CAN 1107
Misc : BLANK CAN 1107
ALS Vial : 46 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.01
Stop Thrs : 0.1

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Title : TO15

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	15.335	1918	1931	1946	rBV	1286349	3987629	47.03%	19.264%
2	15.523	1953	1962	1974	rVB	29301	89582	1.06%	0.433%
3	17.373	2253	2266	2280	rBV	2766716	7651935	90.24%	36.966%
4	20.439	2759	2770	2783	rBV	97749	333554	3.93%	1.611%
5	22.307	3065	3077	3094	rBV	3490984	8479547	100.00%	40.964%
6	24.016	3349	3358	3370	rVB	49004	157645	1.86%	0.762%

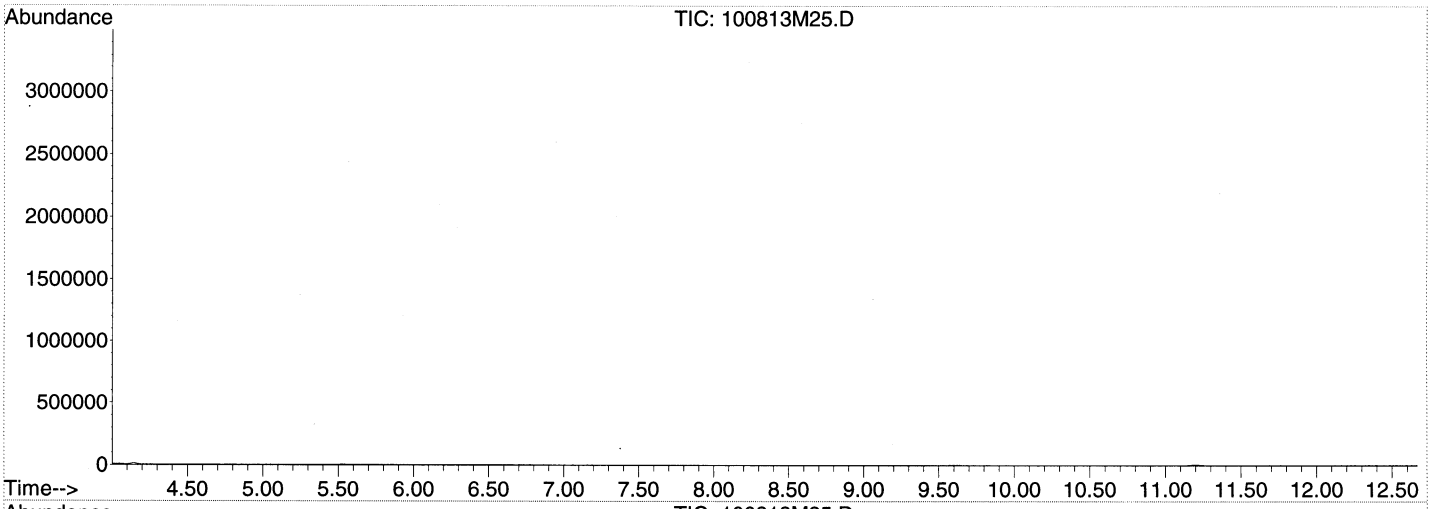
Sum of corrected areas: 20699892

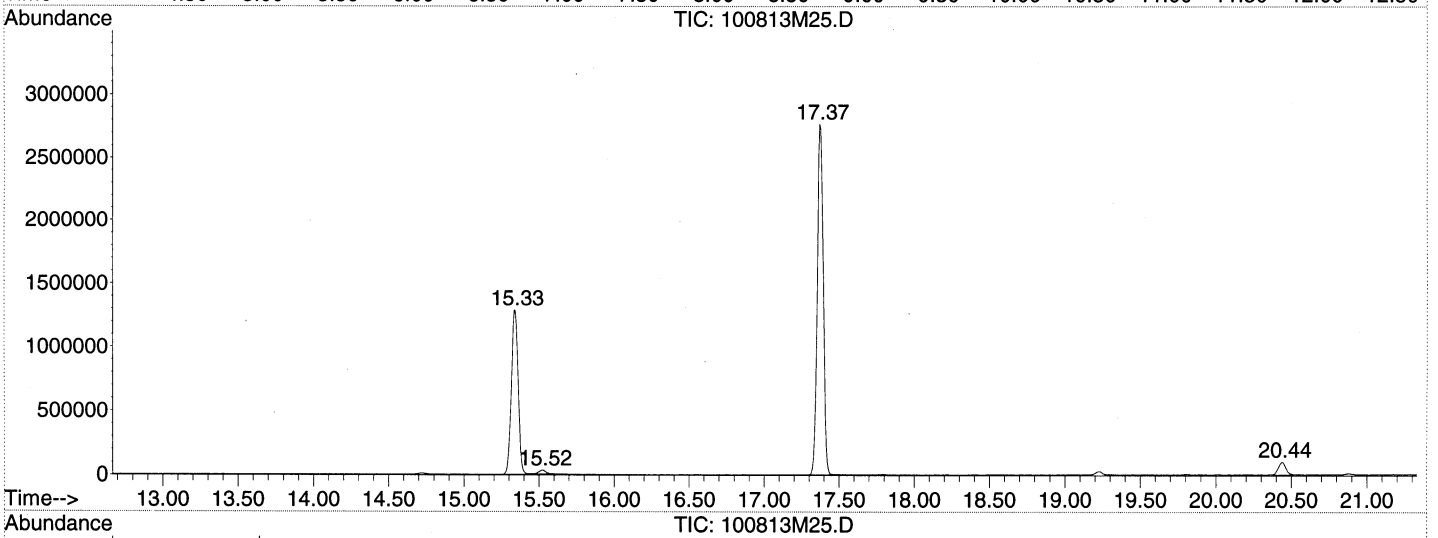
LSC Report - Integrated Chromatogram

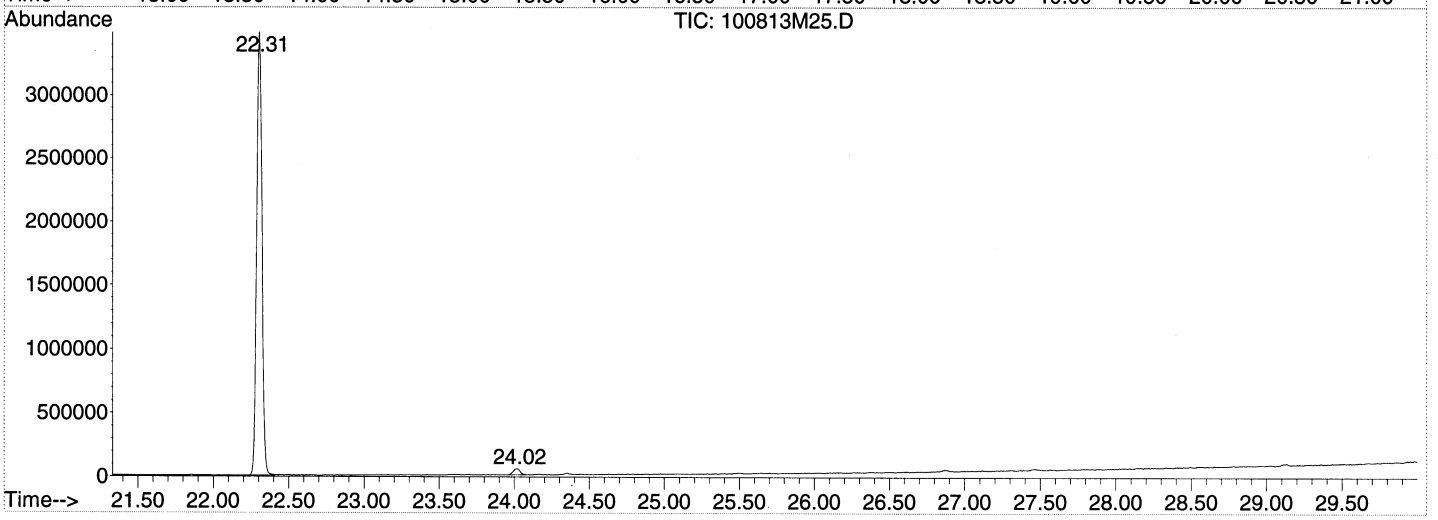
Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M25.D
Acq On : 9 Oct 2013 6:16 am
Operator : EM
Sample : BLANK CAN 1107
Misc : BLANK CAN 1107
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Tentatively Identified Compound (LSC) summary

```
Data Path : C:\MSDChem\1\2013\Data\100813\\
Data File : 100813M25.D
Acq On    :  9 Oct 2013   6:16 amm
Operator  : EMM
Sample    : BLANK CAN 11077
Misc      : BLANK CAN 11077
ALS Vial  : 46   Sample Multiplier: 11

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.MM
Quant Title  : TO155

TIC Library    : C:\DATABASE\NIST02.LL
TIC Integration Parameters: LSCINT.PP

                                                  |--Internal Standard---|
TIC Top Hit name      RT  EstConc Units Response |#    RT     Resp  Conc|
-------------------------------------------------------------------------------
```

No Library Search Compounds Detected
****

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M26.D
Acq On : 9 Oct 2013 7:04 am
Operator : EM
Sample : BLANK CAN 1113
Misc : BLANK CAN 1113
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Oct 09 10:05:20 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	757138	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3502307	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	2982641	20.80 ppbv	0.00

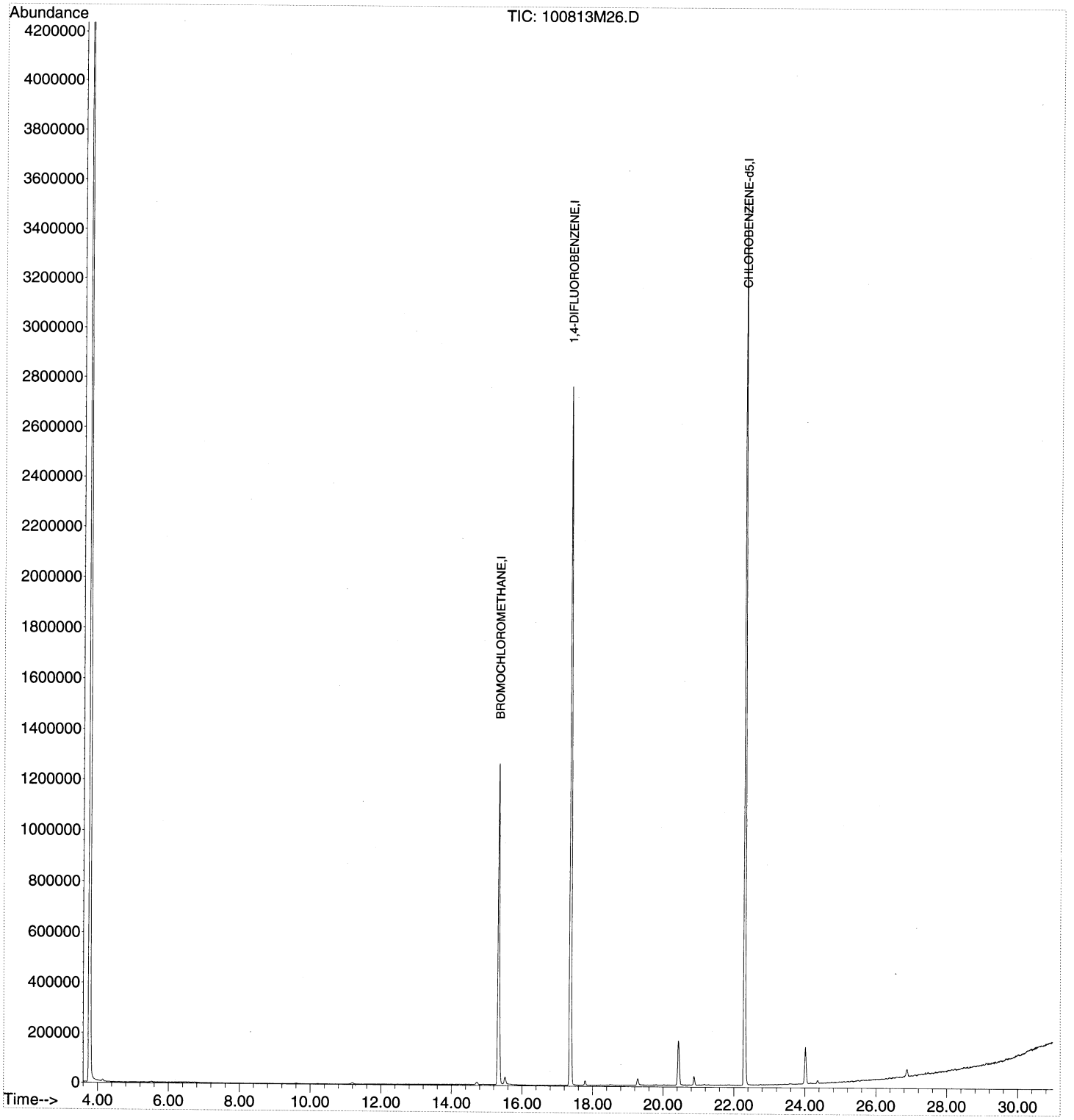
Target Compounds	Qvalue

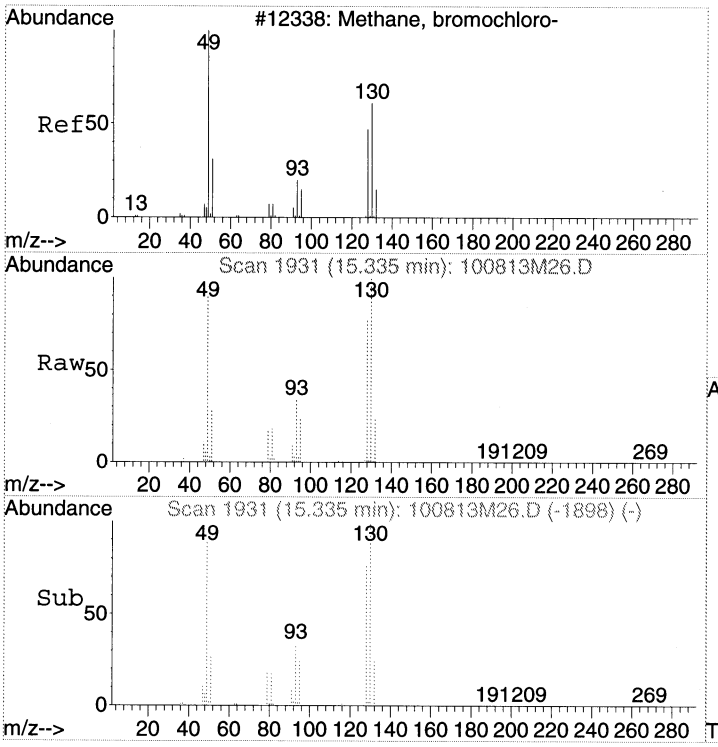
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M26.D
Acq On : 9 Oct 2013 7:04 am
Operator : EM
Sample : BLANK CAN 1113
Misc : BLANK CAN 1113
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Oct 09 10:05:20 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

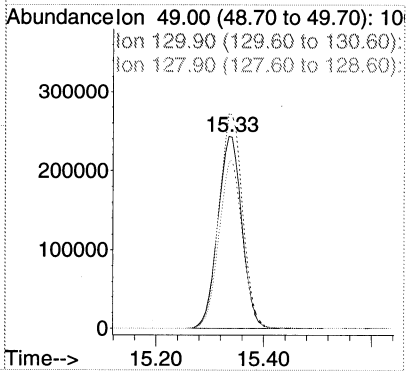


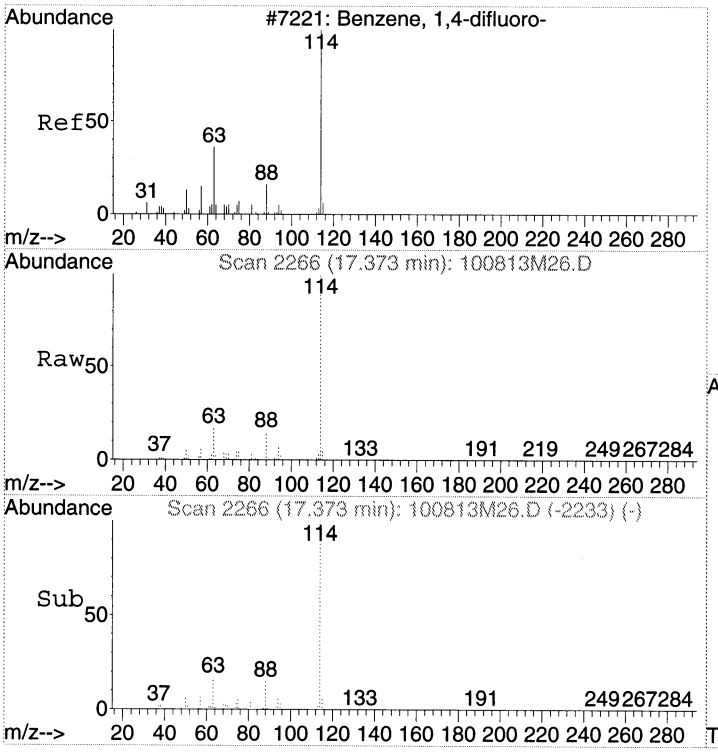


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. -0.00 min
Lab File: 100813M26.D
Acq: 9 Oct 2013 7:04 am

Tgt Ion: 49 Resp: 757138

Ion	Ratio	Lower	Upper
49	100		
130	110.7	97.9	137.9
128	85.8	70.6	110.6

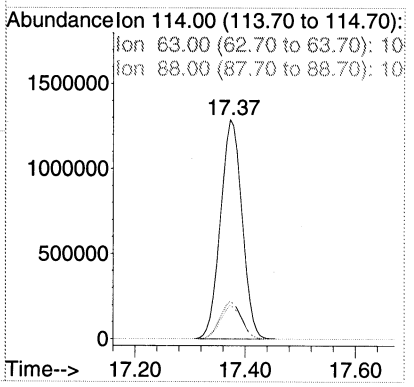


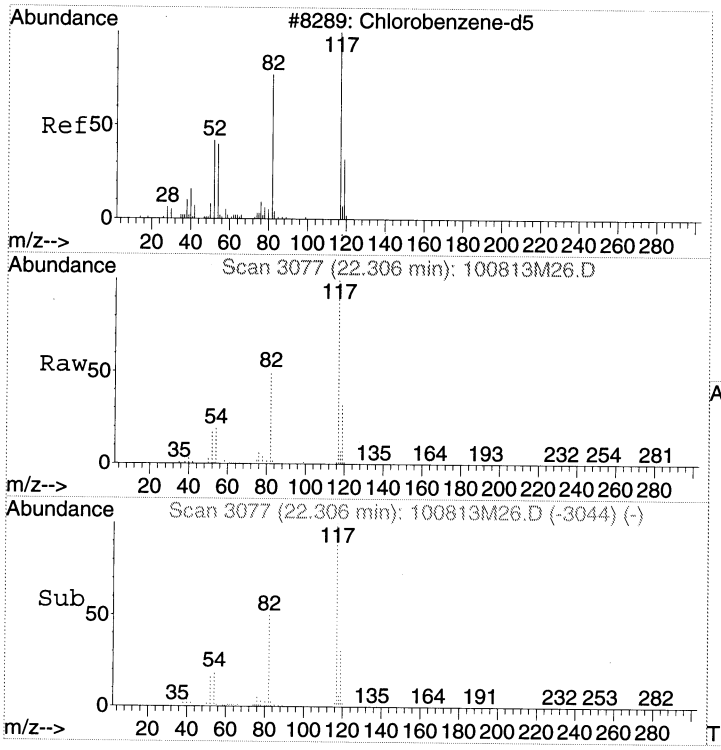


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. -0.00 min
Lab File: 100813M26.D
Acq: 9 Oct 2013 7:04 am

Tgt Ion:114 Resp: 3502307

Ion	Ratio	Lower	Upper
114	100		
63	17.1	0.0	35.8
88	15.0	0.0	34.6

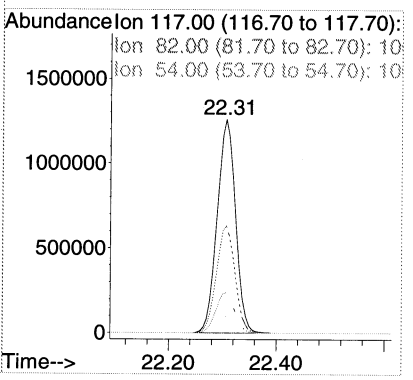




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. -0.00 min
Lab File: 100813M26.D
Acq: 9 Oct 2013 7:04 am

Tgt Ion:117 Resp: 2982641

Ion	Ratio	Lower	Upper
117	100		
82	51.0	28.9	68.9
54	19.4	0.0	36.9



LSC Area Percent Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M26.D
Acq On : 9 Oct 2013 7:04 am
Operator : EM
Sample : BLANK CAN 1113
Misc : BLANK CAN 1113
ALS Vial : 47 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.01 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Title : TO15

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	15.341	1917	1932	1950	rBV	1267684	3950952	46.68%	18.553%
2	15.523	1952	1962	1972	rVB	27661	89657	1.06%	0.421%
3	17.373	2253	2266	2283	rBV	2769436	7578380	89.53%	35.586%
4	19.283	2570	2580	2592	rBV2	27355	87816	1.04%	0.412%
5	20.439	2757	2770	2786	rBV2	177765	590266	6.97%	2.772%
6	20.877	2833	2842	2852	rVB3	35644	94407	1.12%	0.443%
7	22.306	3065	3077	3095	rBV	3522605	8464325	100.00%	39.746%
8	24.016	3349	3358	3371	rVB	144202	440236	5.20%	2.067%

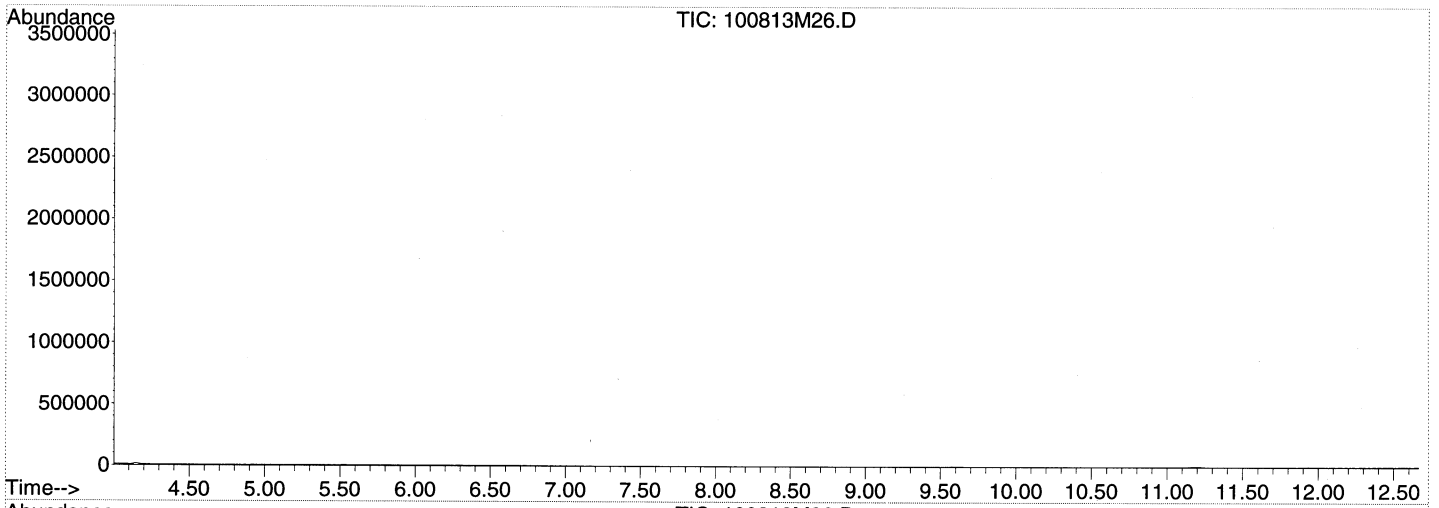
Sum of corrected areas: 21296039

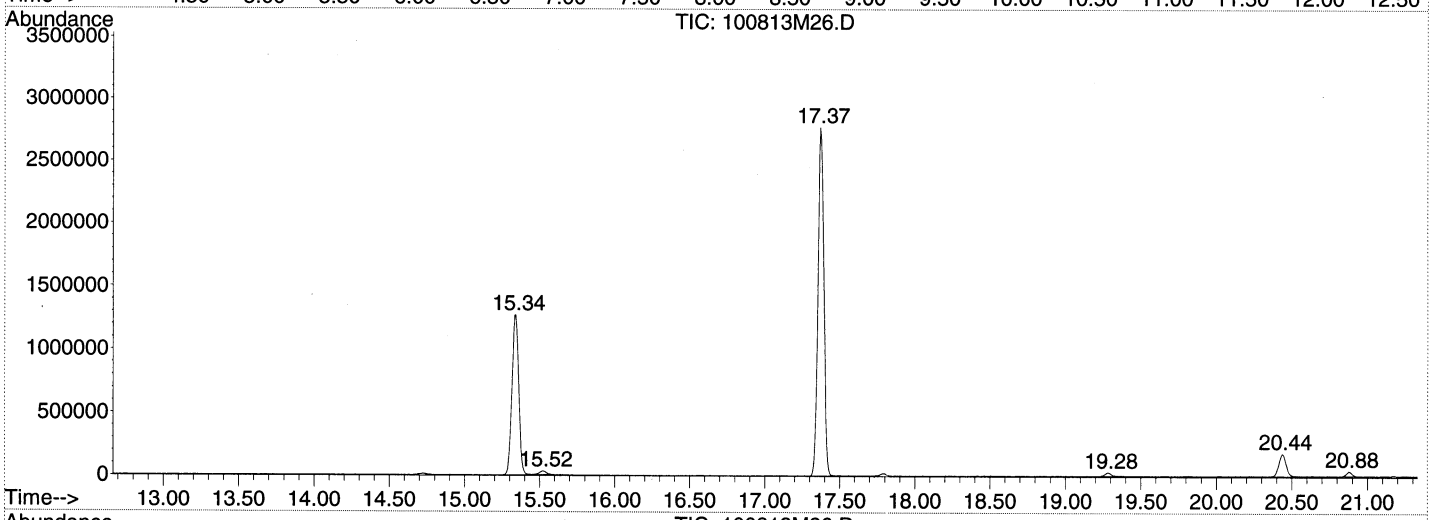
LSC Report - Integrated Chromatogram

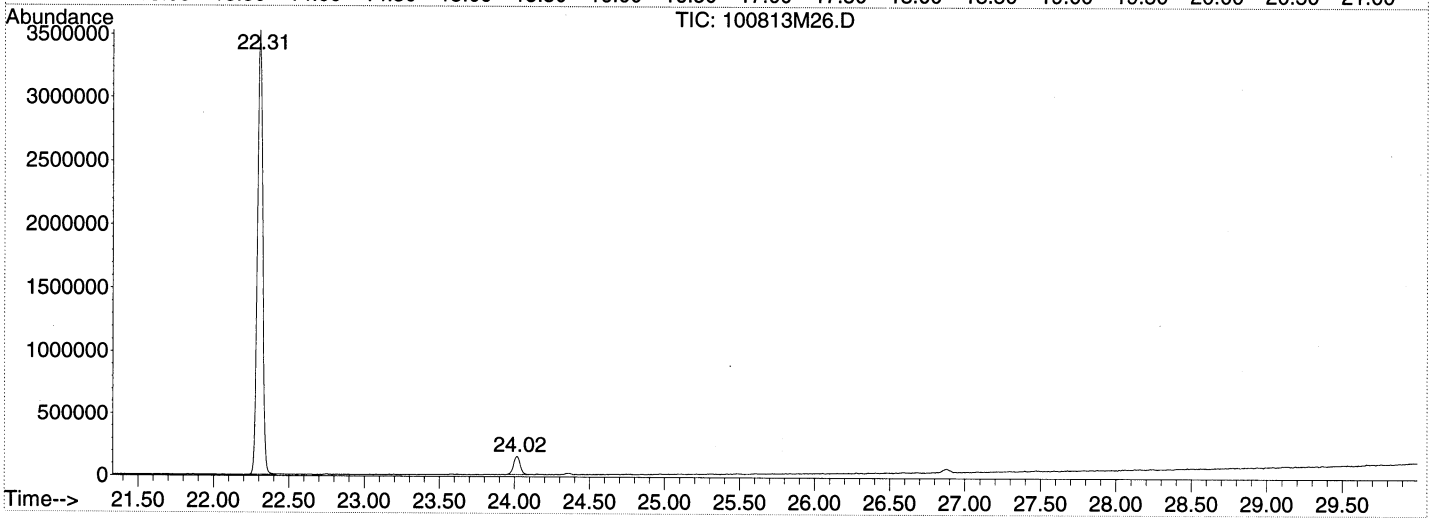
Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M26.D
Acq On : 9 Oct 2013 7:04 am
Operator : EM
Sample : BLANK CAN 1113
Misc : BLANK CAN 1113
ALS Vial : 47 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Tentatively Identified Compound (LSC) summary

```
Data Path : C:\MSDChem\1\2013\Data\100813\\
Data File : 100813M26.D
Acq On    :  9 Oct 2013   7:04 amm
Operator  : EMM
Sample    : BLANK CAN 11133
Misc      : BLANK CAN 11133
ALS Vial  : 47   Sample Multiplier: 11

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.MM
Quant Title  : TO155

TIC Library    : C:\DATABASE\NIST02.LL
TIC Integration Parameters: LSCINT.PP
```

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M27.D
Acq On : 9 Oct 2013 7:55 am
Operator : EM
Sample : BLANK CAN 1118
Misc : BLANK CAN 1118
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Oct 09 10:05:23 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	744150	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3462459	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	2877109	20.80 ppbv	0.00

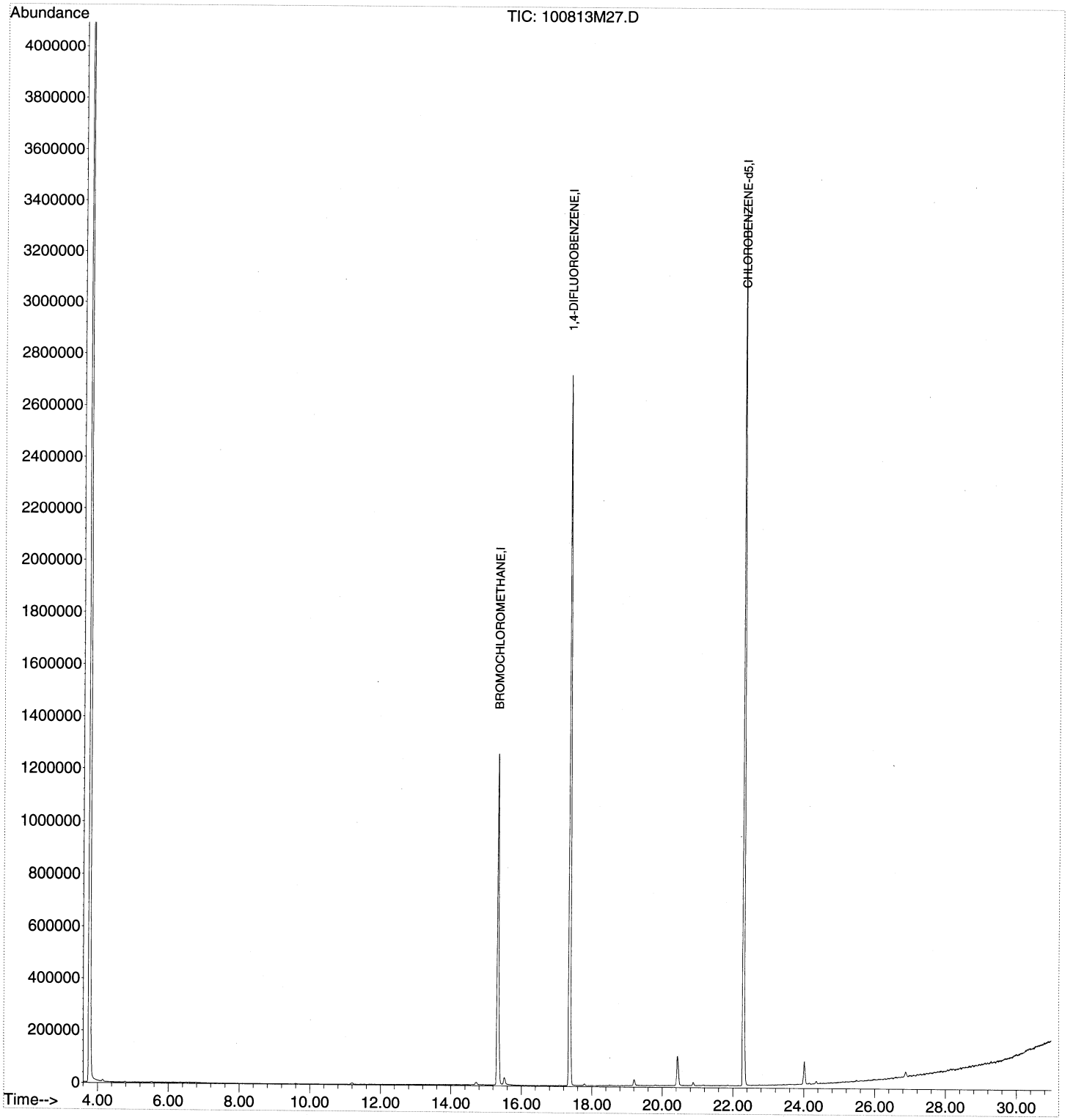
Target Compounds	Qvalue

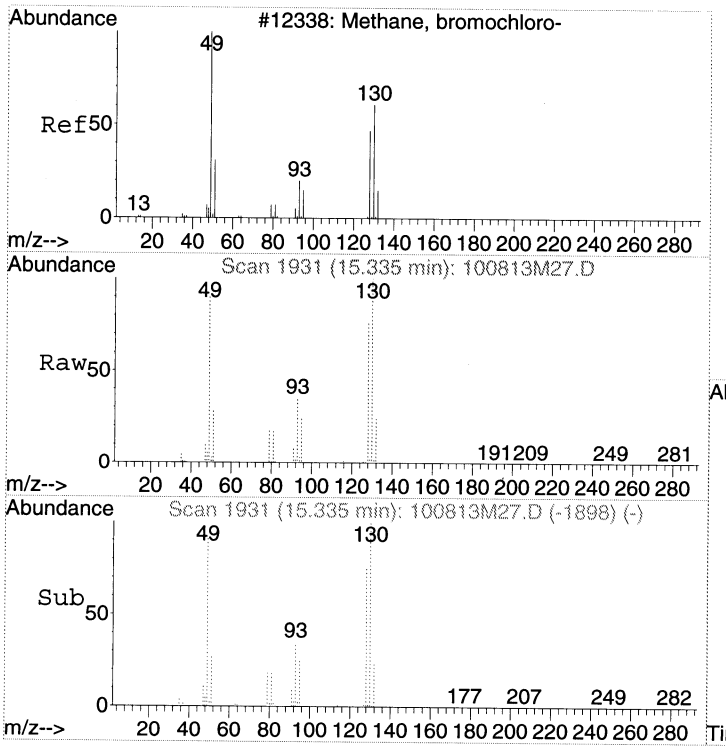
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M27.D
Acq On : 9 Oct 2013 7:55 am
Operator : EM
Sample : BLANK CAN 1118
Misc : BLANK CAN 1118
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Oct 09 10:05:23 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

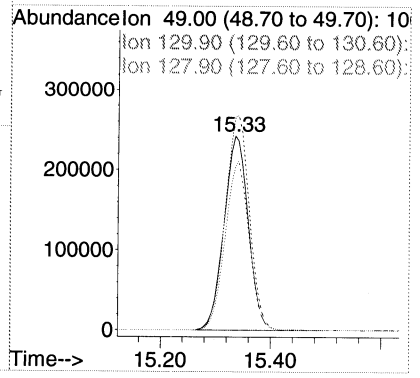


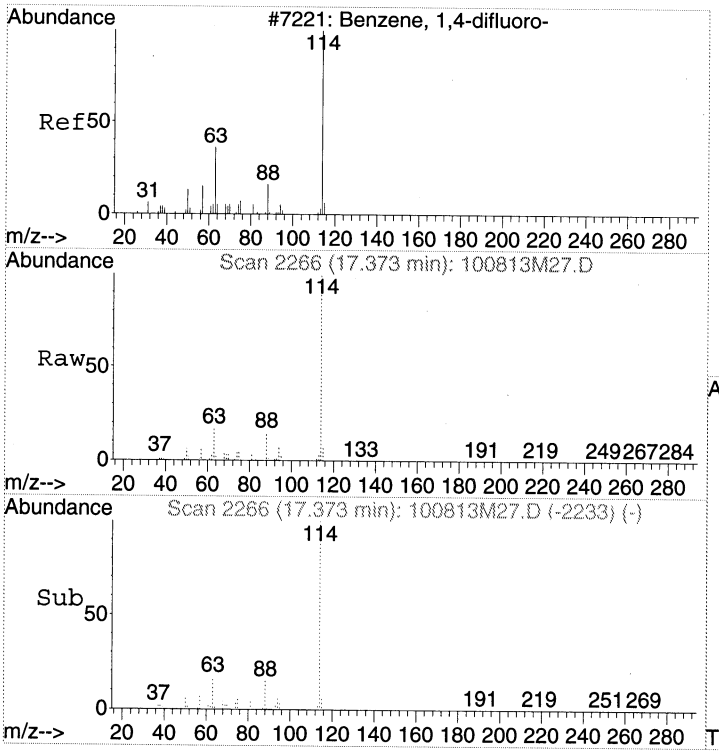


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. -0.00 min
Lab File: 100813M27.D
Acq: 9 Oct 2013 7:55 am

Tgt Ion: 49 Resp: 744150

Ion	Ratio	Lower	Upper
49	100		
130	110.7	97.9	137.9
128	85.6	70.6	110.6

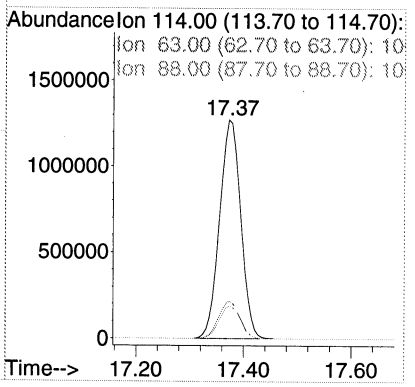


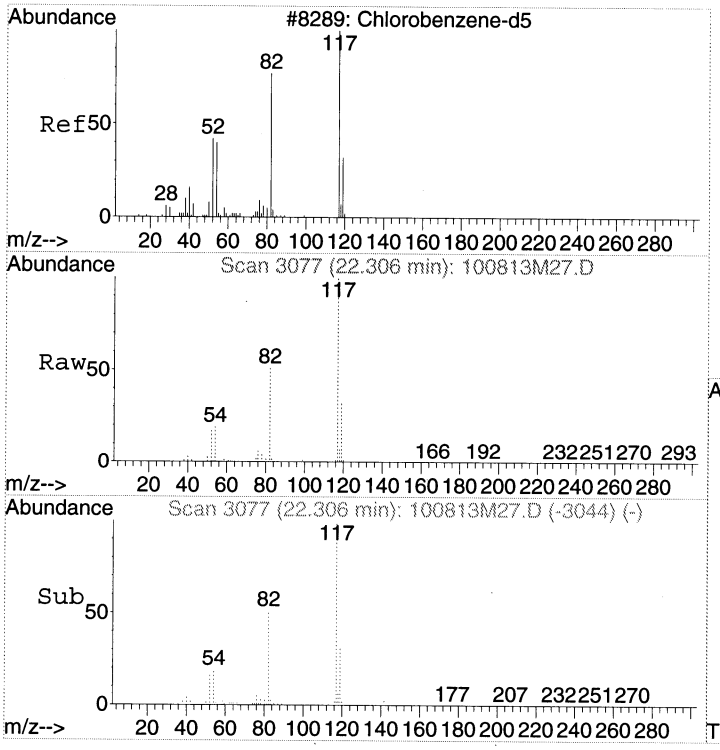


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. -0.00 min
Lab File: 100813M27.D
Acq: 9 Oct 2013 7:55 am

Tgt Ion:114 Resp: 3462459

Ion	Ratio	Lower	Upper
114	100		
63	17.1	0.0	35.8
88	14.9	0.0	34.6

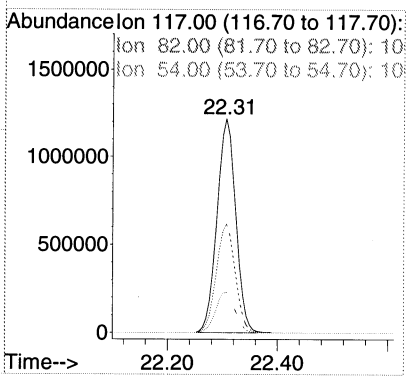




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. -0.00 min
Lab File: 100813M27.D
Acq: 9 Oct 2013 7:55 am

Tgt Ion:117 Resp: 2877109

Ion	Ratio	Lower	Upper
117	100		
82	51.3	28.9	68.9
54	19.6	0.0	36.9



LSC Area Percent Report

Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M27.D
Acq On : 9 Oct 2013 7:55 am
Operator : EM
Sample : BLANK CAN 1118
Misc : BLANK CAN 1118
ALS Vial : 48 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.01
Stop Thrs : 0.1

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Title : TO15

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	15.335	1918	1931	1947	rBV	1263090	3888900	47.44%	19.249%
2	17.373	2253	2266	2281	rBV	2723839	7480333	91.25%	37.026%
3	20.439	2758	2770	2788	rVB	111854	378441	4.62%	1.873%
4	22.306	3066	3077	3095	rBV	3403074	8197212	100.00%	40.574%
5	24.016	3349	3358	3369	rVB2	85435	258062	3.15%	1.277%

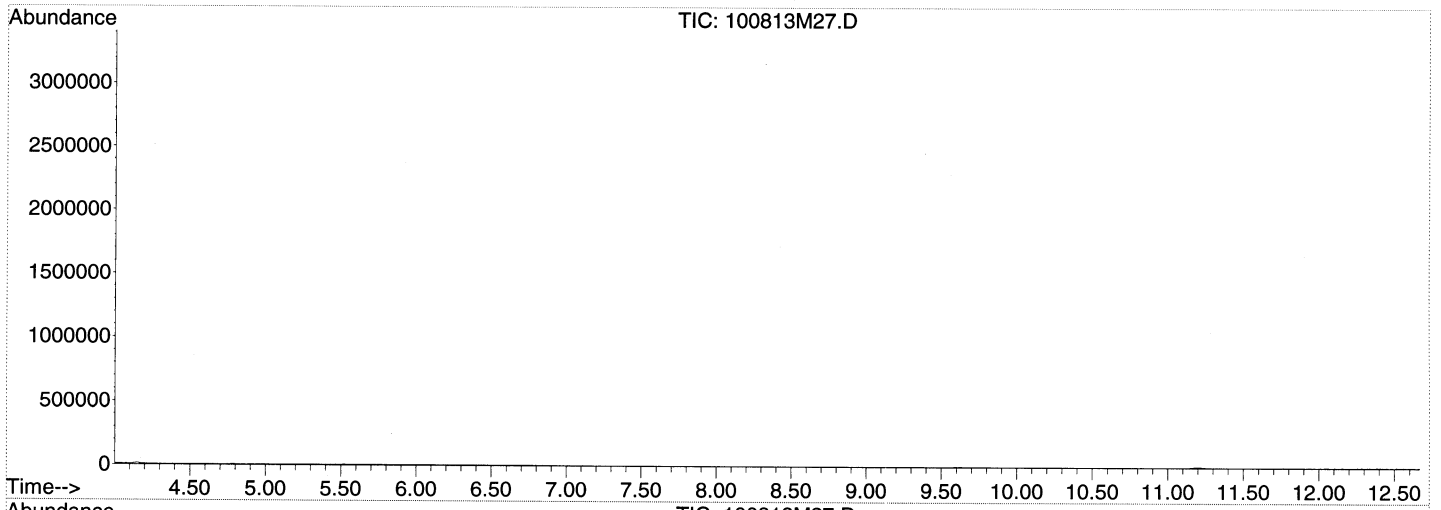
Sum of corrected areas: 20202948

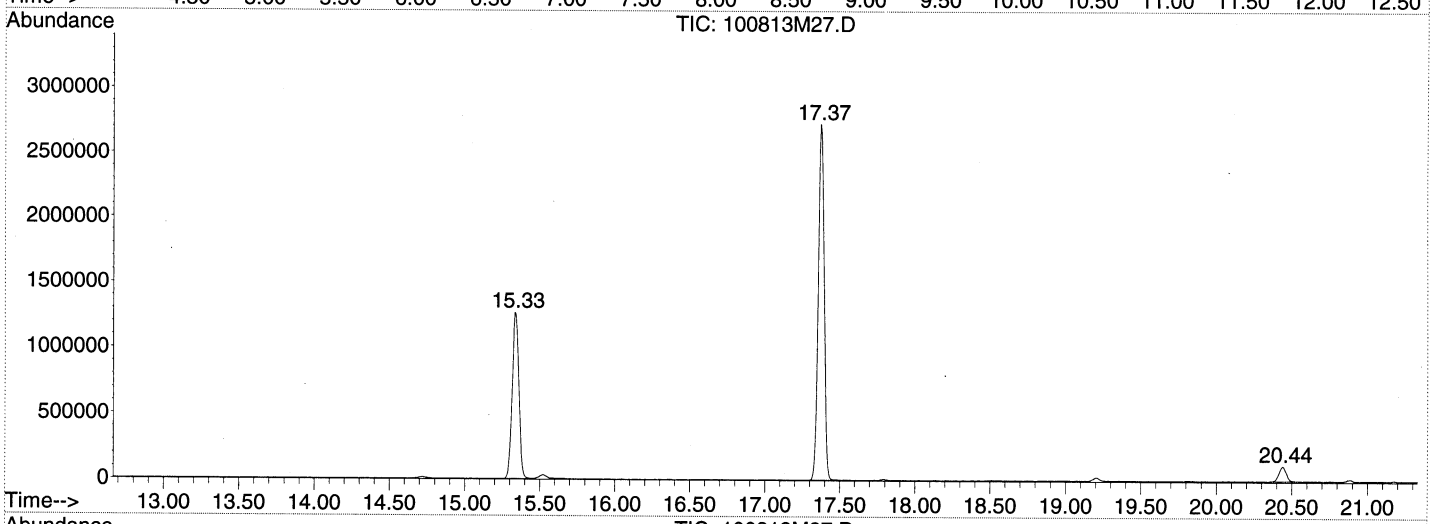
LSC Report - Integrated Chromatogram

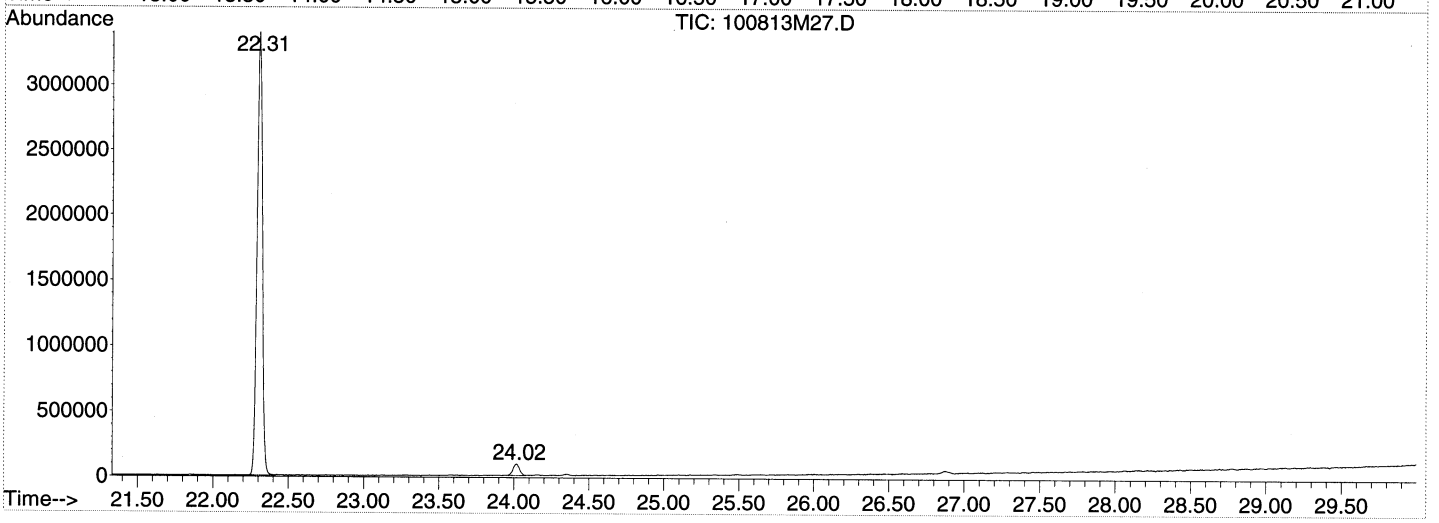
Data Path : C:\MSDChem\1\2013\Data\100813\
Data File : 100813M27.D
Acq On : 9 Oct 2013 7:55 am
Operator : EM
Sample : BLANK CAN 1118
Misc : BLANK CAN 1118
ALS Vial : 48 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2013\Data\100813\\
Data File : 100813M27.D
Acq On : 9 Oct 2013 7:55 amm
Operator : EMM
Sample : BLANK CAN 11188
Misc : BLANK CAN 11188
ALS Vial : 48 Sample Multiplier: 11

Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.MM
Quant Title : TO155

TIC Library : C:\DATABASE\NIST02.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M28.D
Acq On : 9 Oct 2013 8:43 am
Operator : EM
Sample : BLANK CAN 1120
Misc : BLANK CAN 1120
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Oct 09 10:05:26 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.34	49	741586	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3421009	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	2914202	20.80 ppbv	0.00

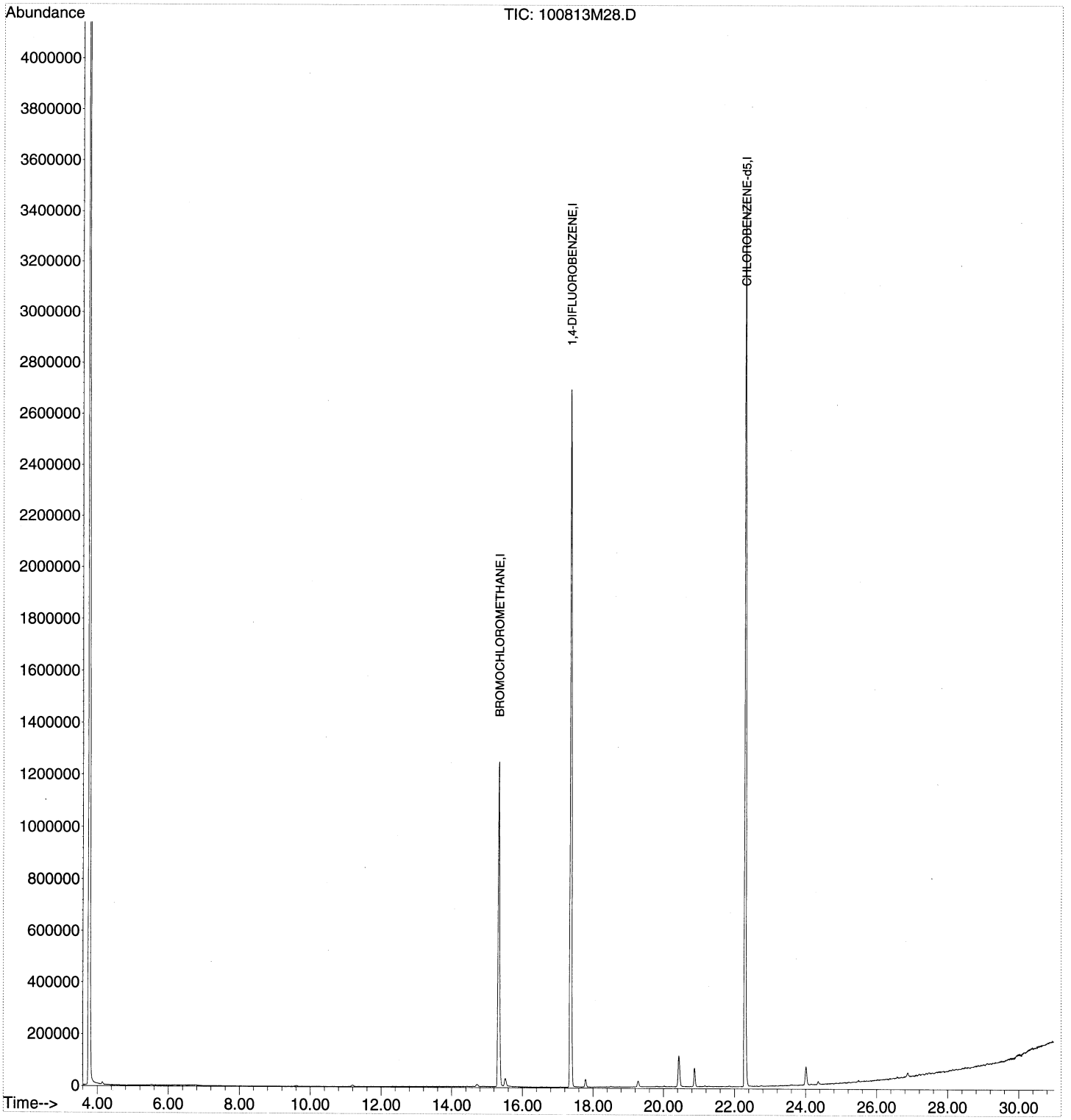
Target Compounds	Qvalue

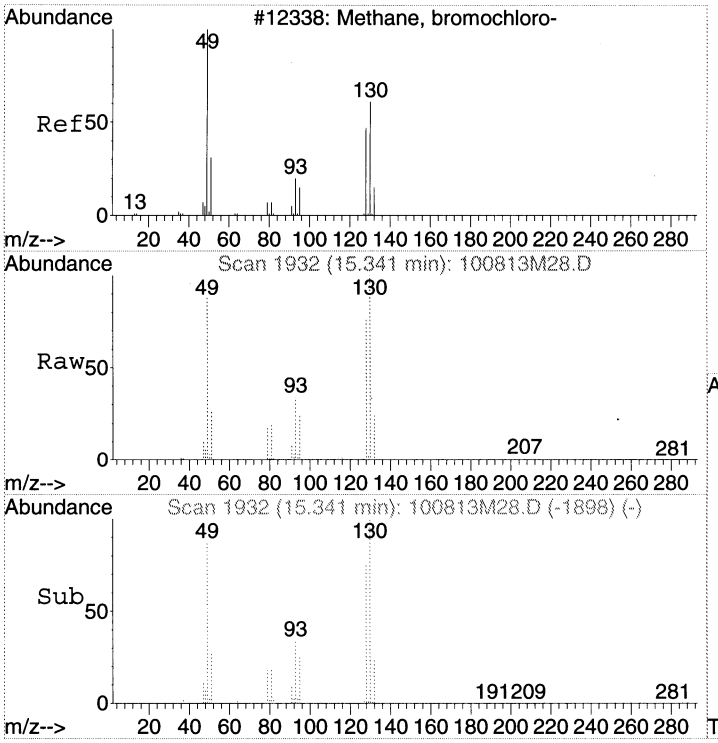
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\100813\
Data File : 100813M28.D
Acq On : 9 Oct 2013 8:43 am
Operator : EM
Sample : BLANK CAN 1120
Misc : BLANK CAN 1120
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Oct 09 10:05:26 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\100813MAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

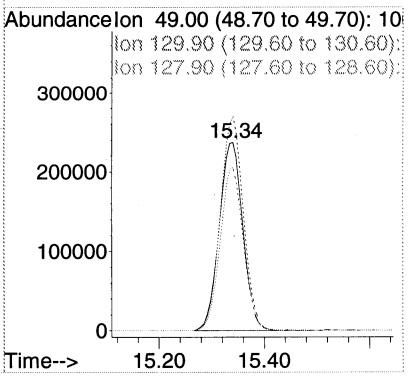


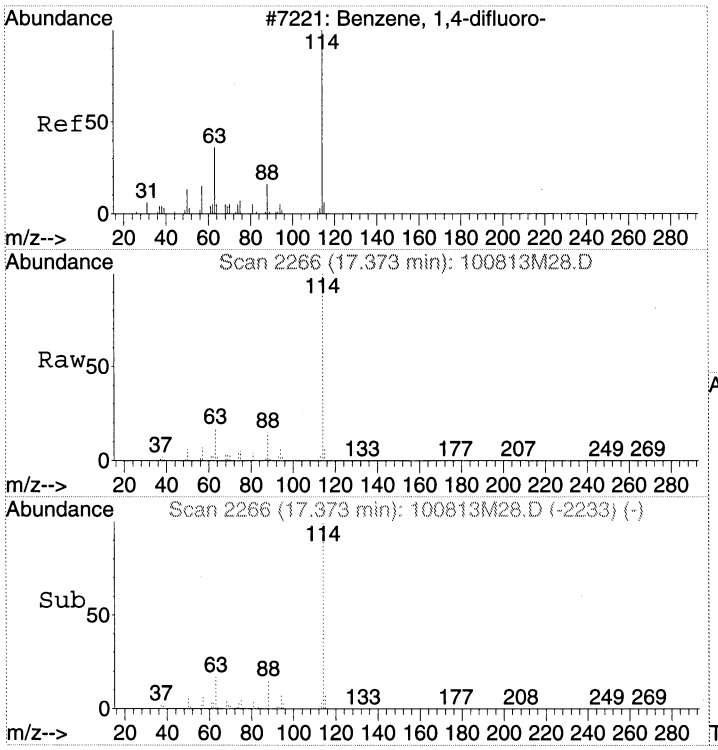


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.34 min Scan# 1932
Delta R.T. 0.01 min
Lab File: 100813M28.D
Acq: 9 Oct 2013 8:43 am

Tgt Ion: 49 Resp: 741586

Ion	Ratio	Lower	Upper
49	100		
130	110.8	97.9	137.9
128	85.2	70.6	110.6

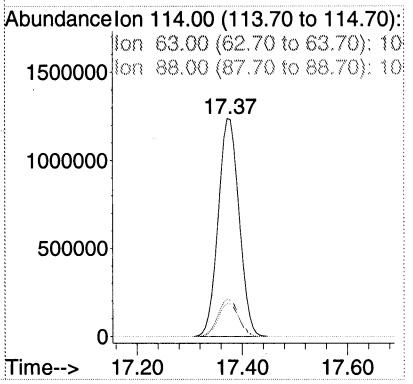


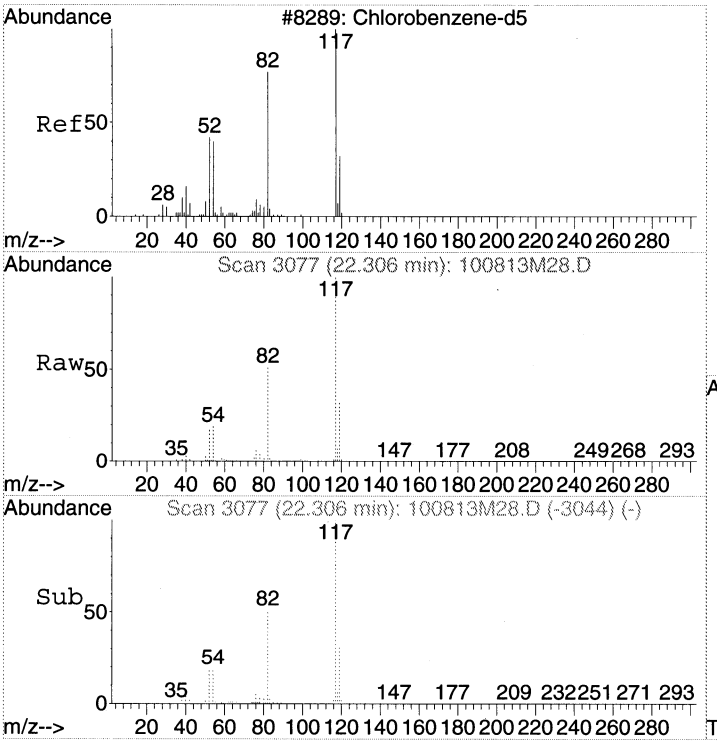


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. -0.00 min
Lab File: 100813M28.D
Acq: 9 Oct 2013 8:43 am

Tgt Ion:114 Resp: 3421009

Ion	Ratio	Lower	Upper
114	100		
63	17.3	0.0	35.8
88	15.0	0.0	34.6

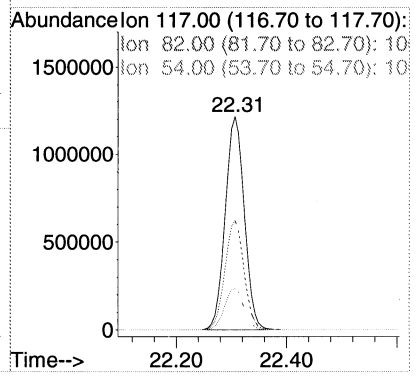




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. -0.00 min
Lab File: 100813M28.D
Acq: 9 Oct 2013 8:43 am

Tgt Ion:117 Resp: 2914202

Ion	Ratio	Lower	Upper
117	100		
82	51.4	28.9	68.9
54	19.8	0.0	36.9



Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	T015	Analyst Initial	SM	Reviewer Initial	SL	Batch/ Sequence	B13J115 S13J102
Instrument ID	HP5973K	Date Analyzed	10/29/13	Date	11/6/13	Chemstation Last Update	10/30/13 141400
Cases	R13SB3			SDGs	13298A, BLANK CERTIFICATION		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
	✓	✓	Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
✓			Surrogate Recoveries
	✓	✓	IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	~~MS/MSD~~ DUPLICATE
	✓	✓	Samples (within calibration range, results calculated correctly)
	✓	✓	Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
CRL1	102913K04	151%	60-140%	✓			✓	Dichloromethane

EPA Region 9 Laboratory
Canister Certification Status

Canister	Type	Status	Cert. Date	Cert. File
1986	400 mL	Certified Clean	10/29/2013	102913K18.D
1988	400 mL	Certified Clean	10/29/2013	102913K08.D
1994	400 mL	Certified Clean	10/29/2013	102913K19.D

ANALYSIS SEQUENCE

S13J102

Instrument: HP5973K

Calibration ID: 1310021

Printed: 11/1/2013 4:31:10PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S13J102-TUN1	QC		1		1311118			
S13J102-CCV1	QC		2		1344121			
B13J115-BS1	QC		3					
S13J102-CRL1	QC		4		1344118			
S13J102-CCV2	QC		5		1340079			
B13J115-BS2	QC		6					
S13J102-CRL2	QC		7		1340100			
B13J115-BLK1	QC		8			1328060		
1310042-01	VOCs, Soil Gas	A	9			1328060	Navy and Army Section	include naphthalene
B13J115-DUP1	QC		10			1328060		
1310042-02	VOCs, Soil Gas	A	11			1328060	Navy and Army Section	include naphthalene
1310042-03	VOCs, Soil Gas	A	12			1328060	Navy and Army Section	include naphthalene
1310042-04	VOCs, Soil Gas	A	13			1328060	Navy and Army Section	include naphthalene
1310042-05	VOCs, Soil Gas	A	14			1328060	Navy and Army Section	include naphthalene
1310042-06	VOCs, Soil Gas	A	15			1328060	Navy and Army Section	include naphthalene

[illegible] 10/29/13

Samples Loaded By — Date

[illegible] 10/30/13

Data Processed By — Date

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2013\102913KAA.SEQ
Date: 10-30-2013
Time: 15:09:21
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB 1335020	3	1	200	40	C:\Smart\TO15.CTD	08:00
10ppbv 1328071	3	1	200	40	C:\Smart\TO15.CTD	08:00
10ppbv 1328071	3	1	200	0	C:\Smart\TO15.CTD	08:00
1.0ppbv 10ppbv	3	1	20	0	C:\Smart\TO15.CTD	08:00
10ppbv 1337079	3	3	200	0	C:\Smart\TO15.CTD	08:00
10ppbv 1337079	3	3	200	0	C:\Smart\TO15.CTD	08:00
1.0ppbv 10ppbv	3	3	20	0	C:\Smart\TO15.CTD	08:00
BLANK CAN 1988	3	5	200	0	C:\Smart\TO15.CTD	08:00
1310042-01	3	6	200	0	C:\Smart\TO15.CTD	08:00
1310042-01DUP	3	6	200	0	C:\Smart\TO15.CTD	08:00
1310042-02	3	7	200	0	C:\Smart\TO15.CTD	08:00
1310042-03	3	8	200	0	C:\Smart\TO15.CTD	08:00
1310042-04	3	9	200	0	C:\Smart\TO15.CTD	08:00
1310042-05	3	10	200	0	C:\Smart\TO15.CTD	08:00
1310042-06	3	11	200	0	C:\Smart\TO15.CTD	08:00
1310042-06RE1	3	11	20	0	C:\Smart\TO15.CTD	08:00
1310042-06RE2	3	11	20	0	C:\Smart\TO15.CTD	08:00
BLANK CAN 1986	3	12	200	0	C:\Smart\TO15.CTD	08:00
BLANK CAN 1994	4	1	200	0	C:\Smart\TO15.CTD	08:00

Injection Log

Directory: C:\msdchem\1\DATA\2013\102913KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	102913K01.D	1.	S13J102-TUN1	BFB STD/IS/10ppbv STD	29 Oct 2013 10:46
2	31	102913K02.D	1.	S13J102-CCV1	10ppbv TO15 Std	29 Oct 2013 11:37
3	31	102913K03.D	1.	B13J115-BS1	10 ppbv TO15 Std	29 Oct 2013 12:27
4	31	102913K04.D	1.	S13J102-CRL1	1.0 ppbv TO15 Std	29 Oct 2013 13:13
5	33	102913K05.D	1.	S13J102-CCV2	10 ppbv Addtl Std	29 Oct 2013 14:02
6	33	102913K06.D	1.	B13J115-BS2	10 ppbv Addtl Std	29 Oct 2013 14:52
7	33	102913K07.D	1.	S13J102-CRL2	1.0 ppbv Addtl Std	29 Oct 2013 15:38
8	35	102913K08.D	1.	B13J115-BLK1	BLANK CAN 1988	29 Oct 2013 16:59
9	36	102913K09.D	2.08	1310042-01	200mL APTOU5-SS1 can 882	29 Oct 2013 17:49
10	36	102913K10.D	2.08	B13J115-DUP1	200mL APTOU5-SS1 can 882	29 Oct 2013 18:43
11	37	102913K11.D	2.09	1310042-02	200mL APTOU5-SS2 can 632	29 Oct 2013 19:33
12	38	102913K12.D	2.07	1310042-03	200mL APTOU5-SS3 can 867	29 Oct 2013 20:23
13	39	102913K13.D	2.07	1310042-04	200mL APTOU5-SS4 can 851	29 Oct 2013 21:12
14	10	102913K14.D	2.06	1310042-05	200mL APTOU5-SS5 can 880	29 Oct 2013 22:02
15	11	102913K15.D	2.08	1310042-06	200mL APTOU5-SS6 can 887	29 Oct 2013 22:52
16	11	102913K16.D	2.08	1310042-06RE1	20mL APTOU5-SS6 can 887	29 Oct 2013 23:38
17	11	102913K17.D	2.08	1310042-06RE2	20mL APTOU5-SS6 can 887	30 Oct 2013 00:24
18	12	102913K18.D	1.	BLANK CAN 1986	BLANK CAN 1986	30 Oct 2013 01:14
19	41	102913K19.D	1.	BLANK CAN 1994	BLANK CAN 1994	30 Oct 2013 02:04

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2013\102913KA\102913K01.D
Tune Time : 29 Oct 2013 10:46

Daily Calibration File : C:\msdchem\1\DATA\2013\102913KA\102913K02.D

File	Sample	Surrogate Recovery %	Internal Standard Responses			
			1071070	4359550	3647470	
102913K02.D	S13J102-CCV1	1071071	4359548	3647471		
102913K03.D	B13J102-BS1 (15)	1047474	4173877	3590012		
	S13J102-CRL1	1074978	4213230	3601728		
102913K05.D	S13J102-CCV2 (SG 11/6/13)	1072353	4175677	3652403		
102913K06.D	B13J102-BS2 (15)	1067059	4025275	3561498		
102913K07.D	S13J102-CRL2	1072806	4072117	3591740		
102913K08.D	B13J115-BLK1	1064826	4059467	3557218	CAN 1988	
102913K09.D	1310042-01	1073129	3968389	3588864		
102913K10.D	B13J115-DUP1	1027484	3713604	3334916		
102913K11.D	1310042-02	1082910	4088923	3719300		
102913K12.D	1310042-03	1087194	4026813	3623584		
102913K13.D	1310042-04	1090777	3992333	3646808		
102913K14.D	1310042-05	1090116	4089586	3723418		
102913K15.D	1310042-06	1117374	4109404	3752888		
102913K16.D	1310042-06RE1	1145139	4227460	3715484		
102913K17.D	1310042-06RE2	1110673	4021511	3473842		
102913K18.D	BLANK CAN 1986	1146247	4326614	3844525		
[illegible]	BLANK CAN 1994	1093107	3999499	3573070		

(fails) - fails 24hr time check * - fails criteria

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 102513TO15KAA.M
Title : TO15
Last Update : Wed Oct 30 14:14:00 2013
Response Via : Initial Calibration

Calibration Files
1 =102513K08.D 2 =102513K09.D 5 =102513K10.D 10 =102513K11.D 15 =102513K12.D
20 =102513K13.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.656	0.563	0.517	0.530	0.544	0.556	0.561	8.85
3)	T	Dichlorodifluo...	2.706	2.292	2.124	2.182	2.226	2.194	2.287	9.28
4)	T	1,2-Dichlorote...	2.898	2.429	2.308	2.358	2.481	2.507	2.497	8.42
5)	T	Chloromethane	0.782	0.666	0.625	0.637	0.655	0.674	0.673	8.38
6)	T	Vinyl chloride	0.911	0.776	0.733	0.765	0.786	0.811	0.797	7.73
7)	T	1,3-Butadiene	0.692	0.568	0.552	0.572	0.600	0.626	0.601	8.54
8)	T	Bromomethane	0.938	0.794	0.738	0.757	0.793	0.802	0.804	8.73
9)	T	Chloroethane	0.536	0.454	0.426	0.435	0.448	0.461	0.460	8.53
10)	T	Bromoethene	0.939	0.783	0.739	0.769	0.814	0.824	0.811	8.58
11)	T	Trichlorofluor...	2.726	2.295	2.173	2.205	2.336	2.339	2.346	8.46
12)	T	1,1,2-Trichlor...	2.162	1.794	1.731	1.733	1.842	1.839	1.850	8.66
13)	T	1,1-Dichloroet...	1.544	1.317	1.259	1.292	1.357	1.381	1.358	7.43
14)	T	Acetone	1.464	1.259	1.166	1.092	1.125	1.158	1.211	11.24
15)	T	Carbon disulfide	2.667	2.190	1.981	1.971	2.049	2.084	2.157	12.17
16)	T	2-Propanol	1.108	0.993	0.959	1.134	1.189	1.227	1.102	9.65
17)	T	Allyl chloride	0.984	0.860	0.822	0.855	0.887	0.917	0.887	6.43
18)	T	Dichloromethane	1.234	1.005	0.892	0.884	0.902	0.929	0.974	13.79
		tert Butyl met...	2.534	2.274	2.188	2.280	2.411	2.472	2.360	5.65
20)	T	trans-1,2-Dich...	1.266	1.131	1.082	1.108	1.153	1.178	1.153	5.59
21)	T	Hexane	1.460	1.316	1.253	1.297	1.356	1.394	1.346	5.49
22)	T	1,1-Dichloroet...	1.820	1.592	1.527	1.538	1.606	1.642	1.621	6.58
23)	T	Vinyl acetate	1.773	1.642	1.614	1.737	1.807	1.891	1.744	5.95
24)	T	cis-1,2-Dichlo...	1.351	1.199	1.142	1.172	1.213	1.251	1.221	6.02
25)	T	2-Butanone (MEK)	1.180	1.352	1.321	1.494	1.387	1.635	1.395	11.15
26)	T	Ethyl acetate	2.240	1.753	1.695	1.700	1.937	1.804	1.855	11.24
27)	T	Tetrahydrofuran	0.933	0.864	0.830	0.911	0.938	0.968	0.907	5.65
28)	T	Chloroform	2.160	1.896	1.815	1.842	1.934	1.964	1.935	6.38
29)	T	Cyclohexane	1.470	1.337	1.291	1.344	1.398	1.442	1.380	4.93
30)	T	1,1,1-Trichlor...	2.346	2.096	1.990	2.036	2.146	2.172	2.131	5.87
31)	T	Carbon tetrach...	2.576	2.234	2.153	2.204	2.351	2.373	2.315	6.63
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.852	0.748	0.728	0.752	0.791	0.821	0.782	6.11
34)	T	2,2,4-Trimethy...	1.168	1.056	1.040	1.093	1.146	1.194	1.116	5.61
35)	T	1,2-Dichloroet...	0.354	0.313	0.299	0.310	0.322	0.332	0.322	6.00
36)	T	Heptane	0.394	0.357	0.354	0.370	0.387	0.406	0.378	5.52
37)	T	Trichloroethene	0.432	0.375	0.367	0.377	0.401	0.411	0.394	6.37
38)	T	1,2-Dichloropr...	0.296	0.253	0.249	0.257	0.269	0.280	0.267	6.76
39)	T	1,4-Dioxane	0.122	0.066	0.082	0.109	0.131	0.144	0.109	27.39
40)	T	Bromodichlorom...	0.565	0.501	0.486	0.506	0.533	0.549	0.523	5.86
41)	T	cis-1,3-Dichlo...	0.433	0.392	0.386	0.402	0.424	0.443	0.414	5.63
42)	T	4-Methyl-2-pen...	0.282	0.279	0.328	0.463	0.491	0.520	0.394	27.83
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.183	1.058	1.031	1.088	1.168	1.200	1.121	6.37
45)	T	trans-1,3-Dich...	0.476	0.428	0.409	0.441	0.472	0.489	0.452	6.89
46)	T	1,1,2-Trichlor...	0.393	0.343	0.334	0.351	0.370	0.381	0.362	6.36
47)	T	Tetrachloroethene	0.759	0.645	0.613	0.634	0.686	0.692	0.671	7.84
48)	T	2-Hexanone	0.316	0.274	0.298	0.477	0.524	0.561	0.408	31.03
49)	T	Chlorodibromom...	0.735	0.646	0.632	0.677	0.729	0.748	0.695	7.11
50)	T	1,2-Dibromoeth...	0.606	0.539	0.523	0.548	0.589	0.603	0.568	6.26
51)	T	Chlorobenzene	1.047	0.909	0.875	0.913	0.976	0.996	0.953	6.77
52)	T	Ethylbenzene	1.515	1.385	1.357	1.451	1.560	1.609	1.480	6.71
53)	T	m&p-Xylene	1.158	1.061	1.059	1.155	1.255	1.301	1.165	8.46
54)	T	o-Xylene	1.176	1.059	1.059	1.149	1.239	1.281	1.160	7.87
55)	T	Styrene	0.897	0.833	0.847	0.976	1.073	1.107	0.956	12.13
56)	T	Bromoform	0.798	0.717	0.720	0.789	0.864	0.883	0.795	8.80

00422

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 102513TO15KAA.M
Title : TO15

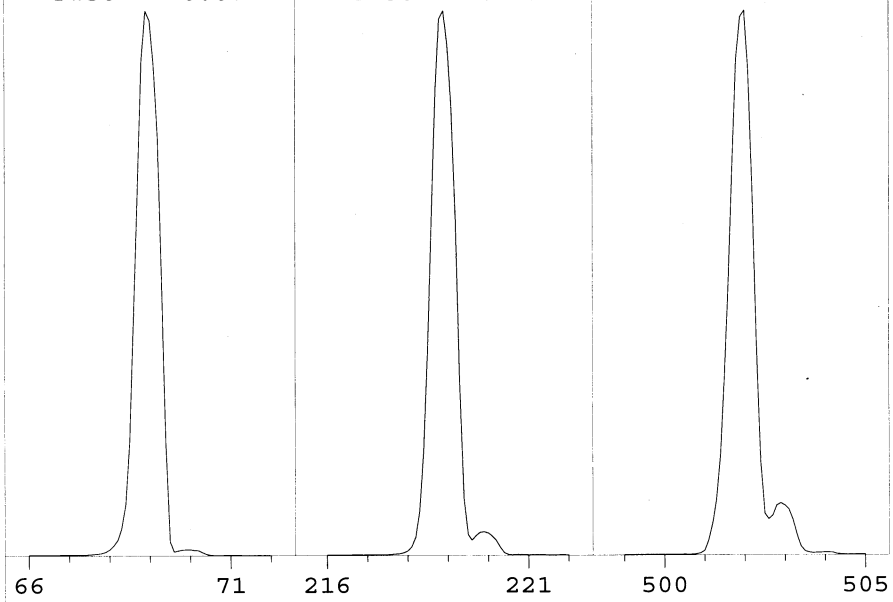
57)	T	1,1,2,2-Tetrac...	0.825	0.743	0.720	0.776	0.835	0.863	0.794	7.10
58)	T	1,2,3-Trichlor...	0.600	0.543	0.498	0.514	0.514	0.518	0.531	6.91
59)	T	4-Ethyltoluene	1.559	1.414	1.426	1.599	1.751	1.807	1.593	10.19
60)	T	1,3,5-Trimethy...	1.313	1.204	1.214	1.437	1.577	1.633	1.396	13.11
61)	T	1,2,4-Trimethy...	1.296	1.181	1.196	1.381	1.518	1.578	1.358	12.14
62)	T	1,3-Dichlorobe...	1.146	1.004	1.000	1.075	1.190	1.217	1.105	8.42
63)	T	1,4-Dichlorobe...	1.106	0.994	0.996	1.078	1.189	1.211	1.096	8.43
64)	T	Benzyl chloride	0.921	0.897	0.943	1.071	1.175	1.226	1.039	13.44
65)	T	1,2-Dichlorobe...	1.048	0.926	0.930	1.001	1.101	1.123	1.022	8.22
66)	T	1,2,4-Trichlor...	1.168	1.030	1.020	1.089	1.237	1.267	1.135	9.26
67)	T	Hexachlorobuta...	1.141	1.023	0.961	0.925	1.009	0.998	1.010	7.28
68)	T	Naphthalene	1.255	1.228	1.240	1.451	1.562	1.591	1.388	12.10

(#) = Out of Range

5973N

Tue Oct 29 09:47:55 2013 Instrument: HP5973K
C:\msdchem\1\5973N\BFB102913KA.u US03960556

Mass	68.90	Mass	218.90	Mass	502.00
Ab	949043	Ab	769436	Ab	79828
Pw50	0.67	Pw50	0.69	Pw50	0.66

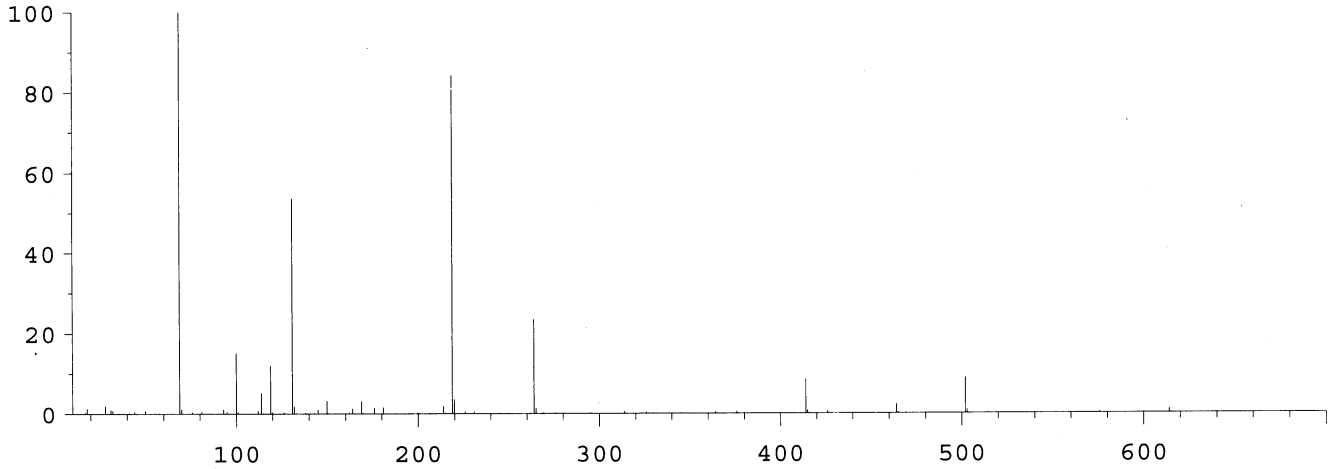


Ion Pol	Pos	MassGain	100
		MassOffs	-9
Emission	34.6	AmuGain	2000
EIEnrgy	69.9	AmuOffs	119
Filament	1	Wid219	0.006
		DC Pol	Pos
Repeller	34.81		
IonFcus	85.4	HEDEnab	On
EntLens	14.5	EMVolts	1624
EntOffs	20.08		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
189 peaks Base: 69.00 Abundance: 802176



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	802176	100.00	70.00	9338	1.16
218.90	675008	84.15	219.90	29240	4.33
502.00	70696	8.81	503.00	7582	10.72

Air/Water Check: H20~1.28% N2~1.99% O2~0.75% CO2~0.47% N2/H2O~155.39%

Column Flow: Front: 1.499 Back: 0 ml/min. Interface Temp: 260

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 69721
Repeller Maximum 35 volts using ion 219; Gain Factor 0.70

MassGain Values(Samples): 103(3) 95(2) 101(1) 99(0) 100(FS)

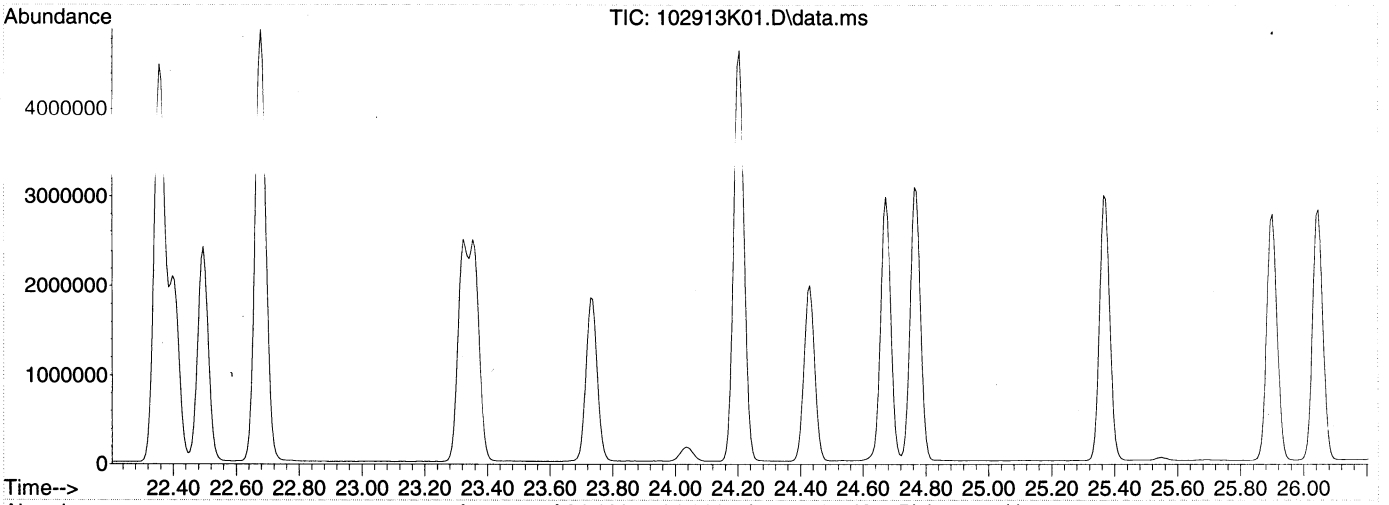
TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	119.0	119.0	119.0	119.0	119.0	119.0	119.0
Entrance Lens Offset:	20.1	20.1	20.1	20.1	20.1	20.1	20.1

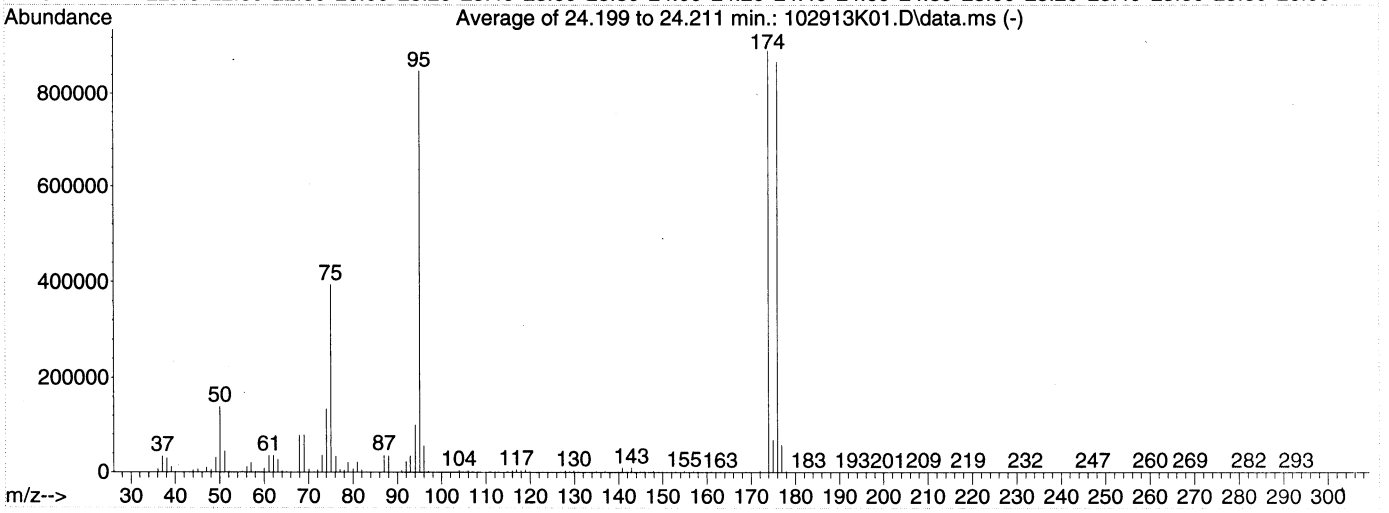
BFB

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K01.D
Acq On : 29 Oct 2013 10:46
Operator : EM
Sample : S13J102-TUN1
Misc : BFB STD/IS/10ppbv STD
ALS Vial : 32 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Title : TO15
Last Update : Wed Oct 30 14:14:00 2013





AutoFind: Scans 3389, 3390, 3391; Background Corrected with Scan 3376

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.4	139094	PASS
75	95	30	66	46.3	393086	PASS
95	95	100	100	100.0	848328	PASS
96	95	5	9	6.5	55477	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	105.3	893407	PASS
175	174	4	9	7.6	68034	PASS
176	174	93	101	97.1	867787	PASS
177	176	5	9	6.6	57216	PASS

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:07 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	98	0.00
2	T	Propene	0.561	0.531	5.3	98	0.00
3	T	Dichlorodifluoromethane	2.287	1.995	12.8	89	0.00
4	T	1,2-Dichlorotetrafluoroetha	2.497	2.247	10.0	93	0.00
5	T	Chloromethane	0.673	0.628	6.7	96	0.00
6	T	Vinyl chloride	0.797	0.734	7.9	94	0.00
7	T	1,3-Butadiene	0.601	0.566	5.8	97	0.00
8	T	Bromomethane	0.804	0.724	10.0	93	0.00
9	T	Chloroethane	0.460	0.413	10.2	93	0.00
10	T	Bromoethene	0.811	0.733	9.6	93	0.00
11	T	Trichlorofluoromethane	2.346	2.132	9.1	94	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	1.850	1.692	8.5	95	0.00
13	T	1,1-Dichloroethene	1.358	1.238	8.8	94	0.00
14	T	Acetone	1.211	1.250	-3.2	112	0.00
15	T	Carbon disulfide	2.157	1.898	12.0	94	0.01
16	T	2-Propanol	1.102	0.947	14.1	82	0.00
17	T	Allyl chloride	0.887	0.843	5.0	96	0.00
18	T	Dichloromethane	0.974	0.894	8.2	99	0.00
19	T	tert-Butyl methyl ether (MT	2.360	2.136	9.5	91	0.00
20	T	trans-1,2-Dichloroethene	1.153	1.050	8.9	93	0.00
21	T	Hexane	1.346	1.247	7.4	94	0.00
22	T	1,1-Dichloroethane	1.621	1.496	7.7	95	0.00
23	T	Vinyl acetate	1.744	1.588	8.9	89	0.00
24	T	cis-1,2-Dichloroethene	1.221	1.110	9.1	92	0.00
25	T	2-Butanone (MEK)	1.395	1.438	-3.1	94	0.00
26	T	Ethyl acetate	1.855	1.617	12.8	93	0.00
27	T	Tetrahydrofuran	0.907	0.828	8.7	89	0.00
28	T	Chloroform	1.935	1.753	9.4	93	0.00
29	T	Cyclohexane	1.380	1.269	8.0	92	0.00
30	T	1,1,1-Trichloroethane	2.131	1.917	10.0	92	0.00
31	T	Carbon tetrachloride	2.315	2.072	10.5	92	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	104	0.00
33	T	Benzene	0.782	0.669	14.5	92	0.00
34	T	2,2,4-Trimethylpentane	1.116	0.974	12.7	92	0.00
35	T	1,2-Dichloroethane	0.322	0.278	13.7	93	0.00
36	T	Heptane	0.378	0.338	10.6	94	0.00
37	T	Trichloroethene	0.394	0.328	16.8	90	0.00
38	T	1,2-Dichloropropane	0.267	0.227	15.0	92	0.00
39	T	1,4-Dioxane	0.109	0.095	12.8	91	0.00
40	T	Bromodichloromethane	0.523	0.452	13.6	93	0.00
41	T	cis-1,3-Dichloropropene	0.414	0.353	14.7	91	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.394	0.321	18.5	72	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	97	0.00
44	T	Toluene	1.121	1.017	9.3	91	0.00
45	T	trans-1,3-Dichloropropene	0.452	0.419	7.3	93	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:07 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	1,1,2-Trichloroethane	0.362	0.328	9.4	91	0.00
47	T	Tetrachloroethene	0.671	0.583	13.1	90	0.00
48	T	2-Hexanone	0.408	0.299	26.7	61	0.00
49	T	Chlorodibromomethane	0.695	0.629	9.5	90	0.00
50	T	1,2-Dibromoethane (EDB)	0.568	0.513	9.7	91	0.00
51	T	Chlorobenzene	0.953	0.842	11.6	90	0.00
52	T	Ethylbenzene	1.480	1.343	9.3	90	0.00
53	T	m&p-Xylene	1.165	1.065	8.6	90	0.00
54	T	o-Xylene	1.160	1.059	8.7	90	0.00
55	T	Styrene	0.956	0.804	15.9	80	0.00
56	T	Bromoform	0.795	0.712	10.4	88	0.00
57	T	1,1,2,2-Tetrachloroethane	0.794	0.739	6.9	93	0.00
58	T	~~1,2,3-Trichloropropane~~	~~0.531~~	~~0.000~~	~~100.0#~~	~~0#~~	~~0.00~~ em 11/1/13
59	T	4-Ethyltoluene	1.593	1.419	10.9	86	0.00
60	T	1,3,5-Trimethylbenzene	1.396	1.161	16.8	79	0.00
61	T	1,2,4-Trimethylbenzene	1.358	1.170	13.8	83	0.00
62	T	1,3-Dichlorobenzene	1.105	0.970	12.2	88	0.00
63	T	1,4-Dichlorobenzene	1.096	0.959	12.5	87	0.00
64	T	Benzyl chloride	1.039	0.934	10.1	85	0.00
65	T	1,2-Dichlorobenzene	1.022	0.885	13.4	86	0.00
66	T	1,2,4-Trichlorobenzene	1.135	0.927	18.3	83	0.00
67	T	Hexachlorobutadiene	1.010 ✓	0.836 ✓	17.2	88	0.00
68	T	~~Naphthalene~~	~~1.388~~	~~0.014~~	~~99.0#~~	~~1#~~	~~0.00~~ em 11/1/13

(#) = Out of Range SPCC's out = 0 CCC's out = 0

$$\%\ Dev.\ \#67\ HCB = \frac{1.010 - 0.836}{1.010} \times 100 = 17.2\ \%\ ✓$$

$$RF_{HCB} = \frac{1428642\ (77)}{3647471\ (10.3)} = 0.836\ ✓$$

em 10/1/13

00427

Quantitation Report (QT Reviewed)

MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other:
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: [illegible] Date: 10/30/13
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 11/6/13

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:07 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1071071	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4359548	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.361	117	3647471	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	276657	10.13	ppbv	99
3) Dichlorodifluoromethane	4.464	85	981151	8.81	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	1138077	9.36	ppbv	99
5) Chloromethane	5.011	50	315212	9.62	ppbv	100
6) Vinyl chloride	5.340	62	375468	9.68	ppbv	100
7) 1,3-Butadiene	5.431	54	281195	9.60	ppbv	99
8) Bromomethane	6.362	94	366570	9.37	ppbv	100
9) Chloroethane	6.690	64	208975	9.33	ppbv	99
10) Bromoethene	7.262	106	367667	9.31	ppbv	100
11) Trichlorofluoromethane	7.408	101	1089987	9.55	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	766323	8.51	ppbv	98
13) 1,1-Dichloroethene	9.300	61	566718	8.57	ppbv	100
14) Acetone	9.811	43	645427	10.95	ppbv	99
15) Carbon disulfide	10.024	76	942812	8.98	ppbv	100
16) 2-Propanol	10.444	45	438280	8.17	ppbv	99
17) Allyl chloride	10.851	41	414581	9.60	ppbv	96
18) Dichloromethane	11.387	49	417721	8.81	ppbv	97
19) tert-Butyl methyl ethe...	12.080	73	1133627	9.87	ppbv	100
20) trans-1,2-Dichloroethene	12.104	61	485985	8.66	ppbv	100
21) Hexane	12.719	57	619349	9.45	ppbv	99
22) 1,1-Dichloroethane	13.449	63	714099	9.05	ppbv	100
23) Vinyl acetate	13.595	43	773174	9.11	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	545729	9.18	ppbv	99
25) 2-Butanone (MEK)	14.994	43	728239	10.72	ppbv	97
26) Ethyl acetate	15.043	43	819137m	9.07	ppbv	
27) Tetrahydrofuran	15.450	42	415098	9.40	ppbv	97
28) Chloroform	15.603	83	862304	9.15	ppbv	100
29) Cyclohexane	15.840	56	642570	9.56	ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	933620	9.00	ppbv	100
31) Carbon tetrachloride	16.138	117	1008906	8.95	ppbv	99
33) Benzene	16.631	78	1365160	8.81	ppbv	99
34) 2,2,4-Trimethylpentane	16.594	57	2027045	9.16	ppbv	99
35) 1,2-Dichloroethane	16.831	62	551560	8.65	ppbv	100
36) Heptane	16.977	43	703209	9.38	ppbv	98
37) Trichloroethene	17.866	130	669414	8.58	ppbv	99
38) 1,2-Dichloropropane	18.364	63	477974	9.03	ppbv	99
39) 1,4-Dioxane	18.565	88	200004	9.27	ppbv	99
40) Bromodichloromethane	18.827	83	950325	9.16	ppbv	100
41) cis-1,3-Dichloropropene	19.593	75	720559	8.79	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	668448	8.57	ppbv	99
44) Toluene	20.074	91	1753657	9.43	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	764590	10.19	ppbv	99
46) 1,1,2-Trichloroethane	20.853	97	587076	9.79	ppbv	99
47) Tetrachloroethene	20.932	166	1004991	9.03	ppbv	99
48) 2-Hexanone	21.187	43	511398	7.56	ppbv	98

00428

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:07 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	1084011	9.41	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.680	107	910382	9.67	ppbv	100
51)	Chlorobenzene	22.404	112	1479646	9.37	ppbv	99
52)	Ethylbenzene	22.495	91	2338214	9.53	ppbv	100
53)	m&p-Xylene	22.678	91	3743638	19.38	ppbv	100
54)	o-Xylene	23.323	91	1879921	9.77	ppbv	100
55)	Styrene	23.359	104	1387206	8.75	ppbv	99
56)	Bromoform	23.736	173	1216676	9.23	ppbv	100
57)	1,1,2,2-Tetrachloroethane	24.430	83	1299822	9.88	ppbv	100
59)	4-Ethyltoluene	24.673	105	2471213	9.36	ppbv	100
60)	1,3,5-Trimethylbenzene	24.770	105	2003036	8.65	ppbv	99
61)	1,2,4-Trimethylbenzene	25.373	105	2075853	9.22	ppbv	99
62)	1,3-Dichlorobenzene	25.902	146	1657265	9.04	ppbv	99
63)	1,4-Dichlorobenzene	26.048	146	1654300	9.11	ppbv	99
64)	Benzyl chloride	26.261	91	1595879	9.26	ppbv	99
65)	1,2-Dichlorobenzene	26.650	146	1525936	9.01	ppbv	100
66)	1,2,4-Trichlorobenzene	29.114	180	1568425	8.33	ppbv	100
67)	Hexachlorobutadiene	29.254	225	1428642	8.53	ppbv	100

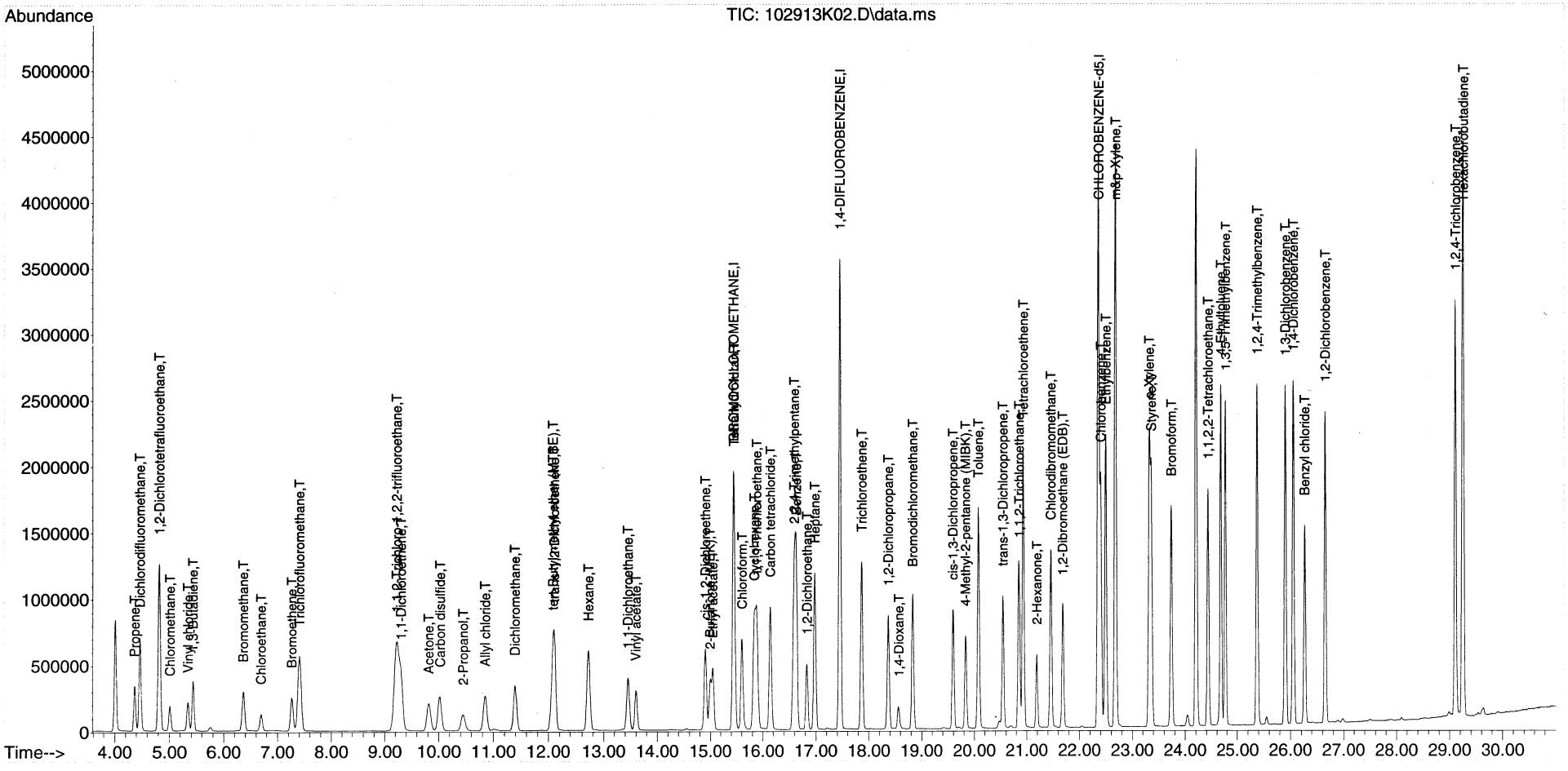
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:07 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

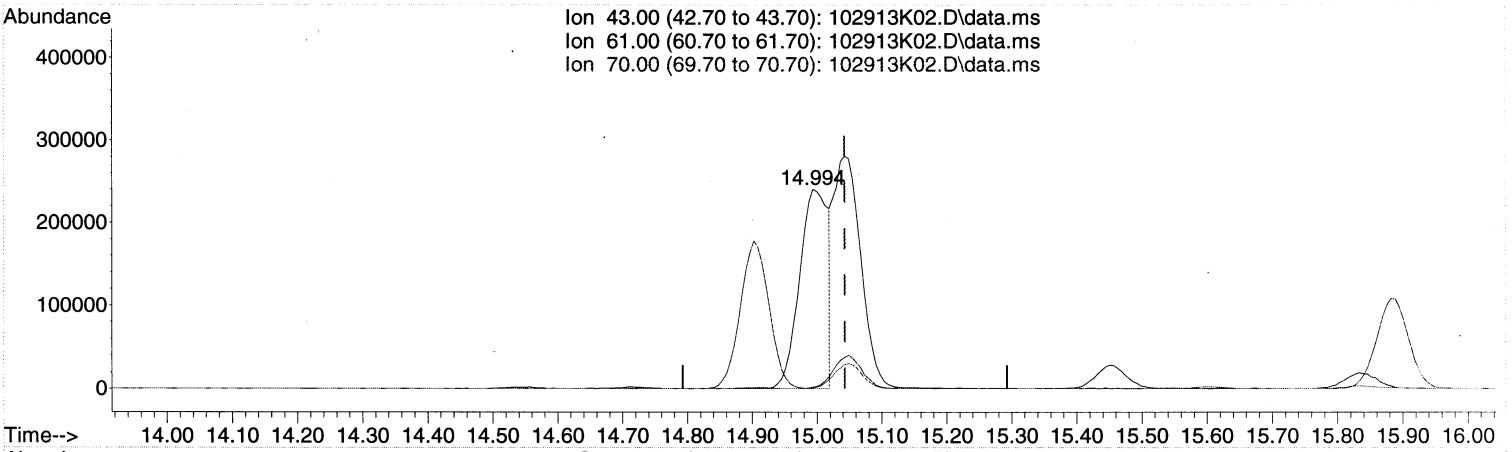


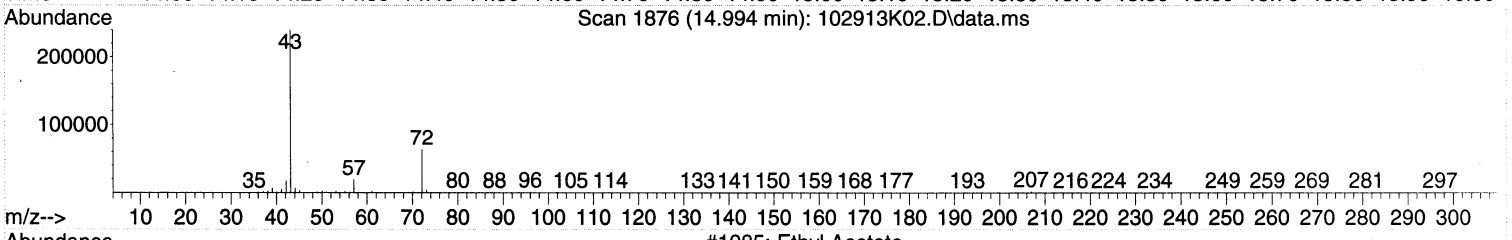
Quantitation Report (Qedit)

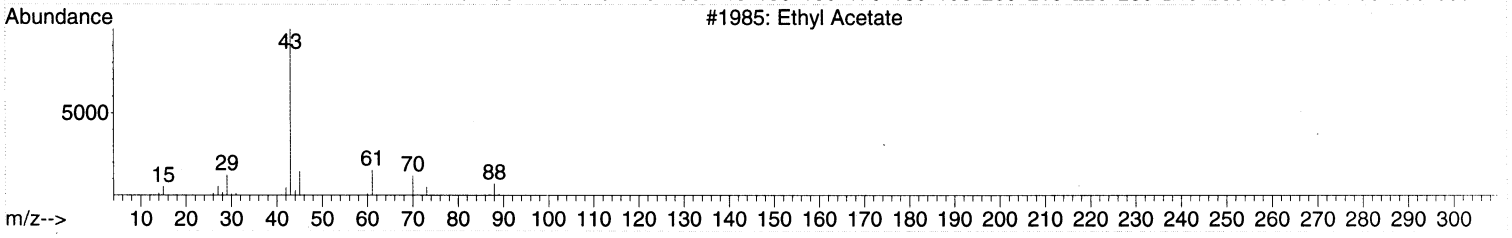
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:22:54 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M







TIC: 102913K02.D\data.ms

(26) Ethyl acetate (T)

14.994min (-0.049) 8.06 ppbv

response 728239

Ion	Exp%	Act%
43.00	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☑ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☑ Other: RT off

☐ After Manual Integration

Manual integration(s) performed by.

Analyst: _____ Date: _____

Manual integration(s) reviewed by:

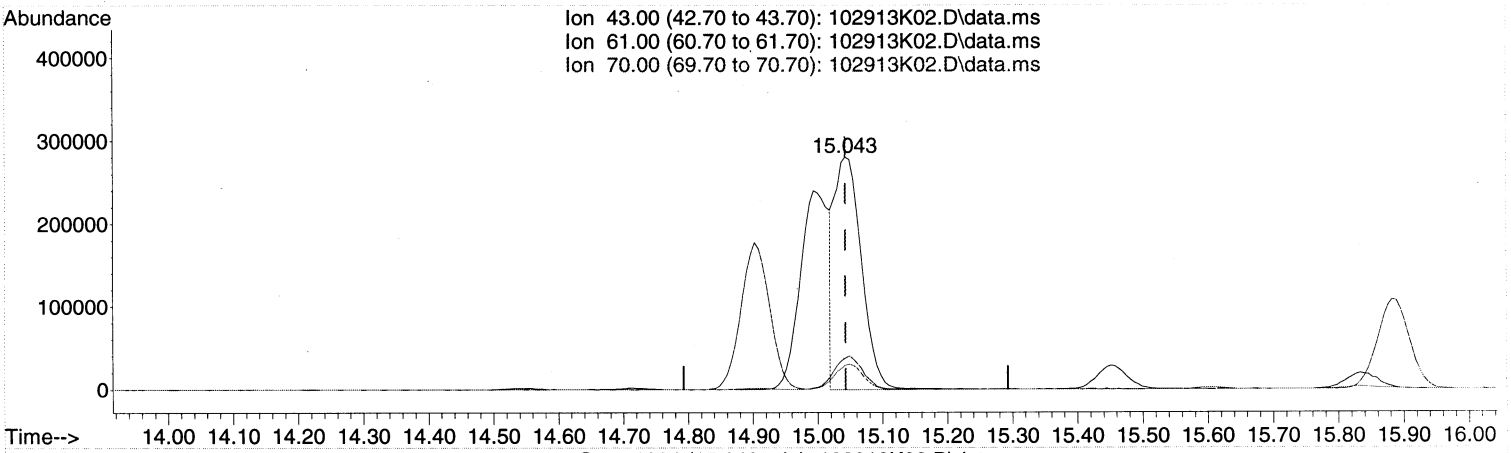
Reviewer: _____ Date: _____

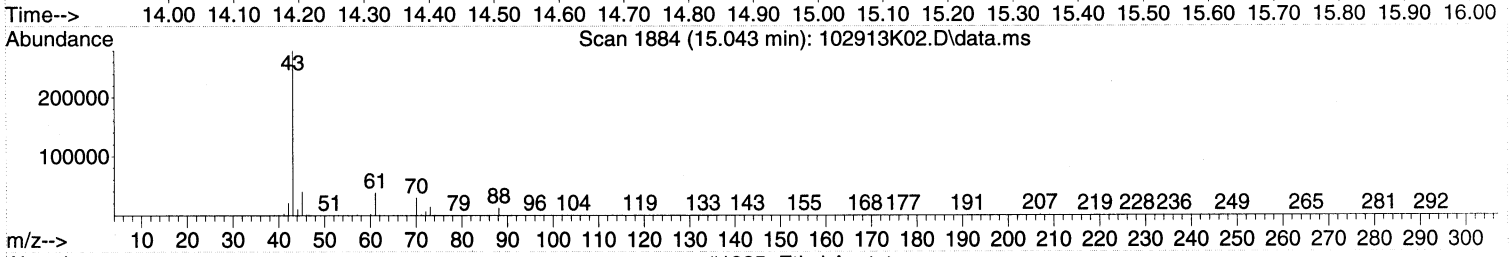
Quantitation Report (Qedit)

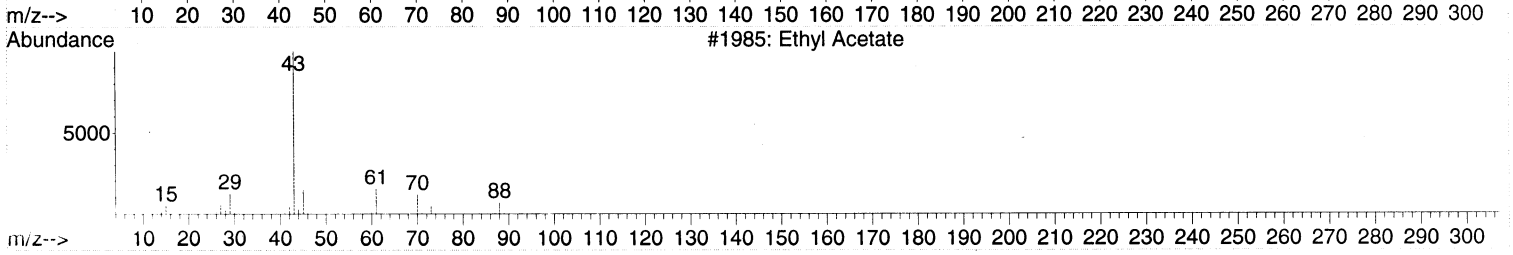
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:22:54 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M







TIC: 102913K02.D\data.ms

(26) Ethyl acetate (T)

15.043min (+0.000) 9.07 ppbv m

response 819137

Ion	Exp%	Act%
43.00	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: EM Date: 10/30/13

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 11/6/13

00432

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:22:54 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

pll MI
lm 10/30/13

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1071071	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4359548	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.361	117	3647471	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	276657	10.13	ppbv	99
3) Dichlorodifluoromethane	4.464	85	981151	8.81	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	1138077	9.36	ppbv	99
5) Chloromethane	5.011	50	315212	9.62	ppbv	100
6) Vinyl chloride	5.340	62	375468	9.68	ppbv	100
7) 1,3-Butadiene	5.431	54	281195	9.60	ppbv	99
8) Bromomethane	6.362	94	366570	9.37	ppbv	100
9) Chloroethane	6.690	64	208975	9.33	ppbv	99
10) Bromoethene	7.262	106	367667	9.31	ppbv	100
11) Trichlorofluoromethane	7.408	101	1089987	9.55	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	766323	8.51	ppbv	98
13) 1,1-Dichloroethene	9.300	61	566718	8.57	ppbv	100
14) Acetone	9.811	43	645427	10.95	ppbv	99
15) Carbon disulfide	10.024	76	942812	8.98	ppbv	100
16) 2-Propanol	10.444	45	438280	8.17	ppbv	99
17) Allyl chloride	10.851	41	414581	9.60	ppbv	96
18) Dichloromethane	11.387	49	417721	8.81	ppbv	97
19) tert-Butyl methyl ethe...	12.080	73	1133627	9.87	ppbv	100
20) trans-1,2-Dichloroethene	12.104	61	485985	8.66	ppbv	100
21) Hexane	12.719	57	619349	9.45	ppbv	99
22) 1,1-Dichloroethane	13.449	63	714099	9.05	ppbv	100
23) Vinyl acetate	13.595	43	773174	9.11	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	545729	9.18	ppbv	99
25) 2-Butanone (MEK)	14.994	43	728239	10.72	ppbv	97
26) Ethyl acetate	14.994	43	728239	8.06	ppbv #	100
27) Tetrahydrofuran	15.450	42	415098	9.40	ppbv	97
28) Chloroform	15.603	83	862304	9.15	ppbv	100
29) Cyclohexane	15.840	56	642570	9.56	ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	933620	9.00	ppbv	100
31) Carbon tetrachloride	16.138	117	1008906	8.95	ppbv	99
33) Benzene	16.631	78	1365160	8.81	ppbv	99
34) 2,2,4-Trimethylpentane	16.594	57	2027045	9.16	ppbv	99
35) 1,2-Dichloroethane	16.831	62	551560	8.65	ppbv	100
36) Heptane	16.977	43	703209	9.38	ppbv	98
37) Trichloroethene	17.866	130	669414	8.58	ppbv	99
38) 1,2-Dichloropropane	18.364	63	477974	9.03	ppbv	99
39) 1,4-Dioxane	18.565	88	200004	9.27	ppbv	99
40) Bromodichloromethane	18.827	83	950325	9.16	ppbv	100
41) cis-1,3-Dichloropropene	19.593	75	720559	8.79	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	668448	8.57	ppbv	99
44) Toluene	20.074	91	1753657	9.43	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	764590	10.19	ppbv	99
46) 1,1,2-Trichloroethane	20.853	97	587076	9.79	ppbv	99
47) Tetrachloroethene	20.932	166	1004991	9.03	ppbv	99
48) 2-Hexanone	21.187	43	511398	7.56	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K02.D
Acq On : 29 Oct 2013 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV1
Misc : 10ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:22:54 2013
Quant Title : TO15
Last Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	1084011	9.41	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.680	107	910382	9.67	ppbv	100
51)	Chlorobenzene	22.404	112	1479646	9.37	ppbv	99
52)	Ethylbenzene	22.495	91	2338214	9.53	ppbv	100
53)	m&p-Xylene	22.678	91	3743638	19.38	ppbv	100
54)	o-Xylene	23.323	91	1879921	9.77	ppbv	100
55)	Styrene	23.359	104	1387206	8.75	ppbv	99
56)	Bromoform	23.736	173	1216676	9.23	ppbv	100
57)	1,1,2,2-Tetrachloroethane	24.430	83	1299822	9.88	ppbv	100
59)	4-Ethyltoluene	24.673	105	2471213	9.36	ppbv	100
60)	1,3,5-Trimethylbenzene	24.770	105	2003036	8.65	ppbv	99
61)	1,2,4-Trimethylbenzene	25.373	105	2075853	9.22	ppbv	99
62)	1,3-Dichlorobenzene	25.902	146	1657265	9.04	ppbv	99
63)	1,4-Dichlorobenzene	26.048	146	1654300	9.11	ppbv	99
64)	Benzyl chloride	26.261	91	1595879	9.26	ppbv	99
65)	1,2-Dichlorobenzene	26.650	146	1525936	9.01	ppbv	100
66)	1,2,4-Trichlorobenzene	29.114	180	1568425	8.33	ppbv	100
67)	Hexachlorobutadiene	29.254	225	1428642	8.53	ppbv	100

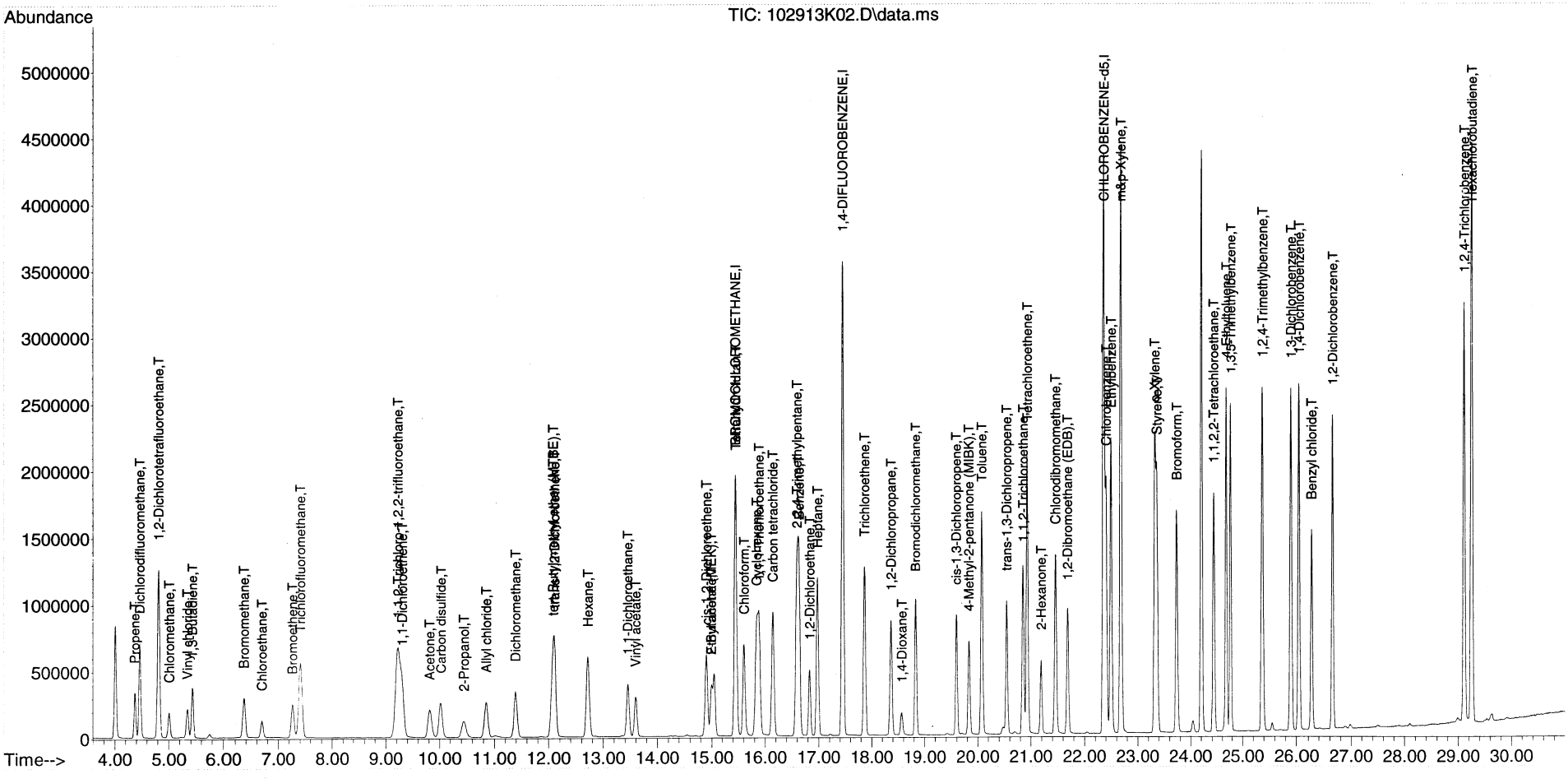
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem DATA\2013\102913KA\
Data File : 102913K02
Acq On : 29 Oct 20 11:37
Instrument: HP5973K
Operator : EM
Sample : S13J102-C
Misc : 10ppbv TO1 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16: 2:54 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M



LCS REPORT

Instrument Name: HP5973K
Sample Name: B13J102-BS1
Misc Info: 10 ppbv TO15 Std
Date Acquired: 10/29/2013 12:27
QLast Update: Wed Oct 30 14:14:00 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.37	10.70	10.70	100%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.46	10.10	9.29	92%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.82	10.40	10.00	96%	68.0	147.0	pass
5)	Chloromethane	5.01	10.30	10.12	98%	64.0	141.0	pass
6)	Vinyl chloride	5.33	10.50	10.34	99%	65.0	141.0	pass
7)	1,3-Butadiene	5.43	10.20	10.24	100%	61.0	154.0	pass
8)	Bromomethane	6.36	10.40	10.01	96%	71.0	132.0	pass
9)	Chloroethane	6.70	10.40	9.98	96%	70.0	134.0	pass
10)	Bromoethene	7.26	10.30	9.95	97%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.41	10.50	10.15	97%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.22	9.30	8.82	95%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.30	9.40	9.12	97%	81.0	127.0	pass
14)	Acetone	9.82	10.60	11.46	108%	77.0	150.0	pass
15)	Carbon disulfide	10.02	10.20	9.63	94%	75.0	138.0	pass
16)	2-Propanol	10.45	9.50	8.70	92%	71.0	142.0	pass
17)	Allyl chloride	10.85	10.10	10.05	100%	84.0	143.0	pass
18)	Dichloromethane	11.39	9.60	9.16	95%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.08	10.90	10.59	97%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	12.11	9.50	9.20	97%	82.0	136.0	pass
21)	Hexane	12.72	10.20	10.08	99%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.46	9.80	9.55	97%	82.0	123.0	pass
23)	Vinyl acetate	13.59	10.00	9.65	96%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.90	10.10	9.80	97%	83.0	126.0	pass
25)	2-Butanone (MEK)	15.00	10.40	11.18	107%	76.0	138.0	pass
26)	Ethyl acetate	15.05	10.40	9.83	95%	83.0	136.0	pass
27)	Tetrahydrofuran	15.45	10.30	9.96	97%	74.0	132.0	pass
28)	Chloroform	15.60	10.10	9.79	97%	81.0	127.0	pass
29)	Cyclohexane	15.83	10.40	10.27	99%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.89	10.00	9.72	97%	80.0	131.0	pass
31)	Carbon tetrachloride	16.14	10.00	9.61	96%	77.0	136.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.64	10.30	9.72	94%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.59	10.50	10.07	96%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.83	10.00	9.50	95%	70.0	149.0	pass
36)	Heptane	16.98	10.50	10.35	99%	62.0	159.0	pass
37)	Trichloroethene	17.87	10.30	9.49	92%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.36	10.60	9.98	94%	74.0	135.0	pass
39)	1,4-Dioxane	18.57	10.60	10.46	99%	67.0	134.0	pass
40)	Bromodichloromethane	18.83	10.60	9.99	94%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.59	10.30	9.73	94%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.84	10.50	9.46	90%	59.0	147.0	pass
43)	CHLOROBENZENE-d5	22.36	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.07	10.40	10.18	98%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.54	11.00	10.88	99%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.85	10.80	10.57	98%	76.0	124.0	pass
47)	Tetrachloroethene	20.93	10.40	9.82	94%	80.0	122.0	pass

48)	2-Hexanone	21.19	10.30	8.46	82%	55.0	149.0	pass
49)	Chlorodibromomethane	21.46	10.40	10.13	97%	76.0	145.0	pass
50)	1,2-Dibromoethane (EDB)	21.69	10.70	10.40	97%	78.0	124.0	pass
51)	Chlorobenzene	22.40	10.60	10.08	95%	76.0	120.0	pass
52)	Ethylbenzene	22.50	10.50	10.33	98%	75.0	125.0	pass
53)	m&p-Xylene	22.68	21.20	20.77	98%	75.0	128.0	pass
54)	o-Xylene	23.32	10.70	10.51	98%	74.0	128.0	pass
55)	Styrene	23.36	10.40	9.44	91%	69.0	122.0	pass
56)	Bromoform	23.74	10.30	10.04	97%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.43	10.60	10.44	99%	70.0	130.0	pass
58)	1,2,3-Trichloropropane	24.55	#N/A	0.01	#N/A	67.0	131.0	#N/A
59)	4-Ethyltoluene	24.67	10.50	10.07	96%	69.0	138.0	pass
60)	1,3,5-Trimethylbenzene	24.77	10.40	9.22	89%	70.0	134.0	pass
61)	1,2,4-Trimethylbenzene	25.37	10.70	9.91	93%	65.0	129.0	pass
62)	1,3-Dichlorobenzene	25.90	10.30	9.85	96%	62.0	130.0	pass
63)	1,4-Dichlorobenzene	26.05	10.40	9.97	96%	61.0	131.0	pass
64)	Benzyl chloride	26.26	10.30	10.06	98%	61.0	153.0	pass
65)	1,2-Dichlorobenzene	26.66	10.40	9.79	94%	60.0	130.0	pass
66)	1,2,4-Trichlorobenzene	29.11	10.20	9.15	90%	38.0	128.0	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J1~~02~~15-BS1 SL 11/6/13
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:58 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: EM Date: 11/1/13

Manual integration(s) reviewed by:

Reviewer: JL Date: 11/6/13

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1047474	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4173877	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.361	117	3590012	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	285747	10.70	ppbv	99
3) Dichlorodifluoromethane	4.464	85	1011494	9.29	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	1188791	10.00	ppbv	99
5) Chloromethane	5.011	50	324326	10.12	ppbv	100
6) Vinyl chloride	5.333	62	392545	10.34	ppbv	100
7) 1,3-Butadiene	5.431	54	293106	10.24	ppbv	99
8) Bromomethane	6.362	94	382900	10.01	ppbv	100
9) Chloroethane	6.696	64	218649	9.98	ppbv	100
10) Bromoethene	7.262	106	384505	9.95	ppbv	99
11) Trichlorofluoromethane	7.408	101	1133664	10.15	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	776776	8.82	ppbv	99
13) 1,1-Dichloroethene	9.300	61	589564	9.12	ppbv	99
14) Acetone	9.817	43	660551	11.46	ppbv	99
15) Carbon disulfide	10.018	76	988518	9.63	ppbv	100
16) 2-Propanol	10.450	45	456106	8.70	ppbv	99
17) Allyl chloride	10.845	41	424743	10.05	ppbv	99
18) Dichloromethane	11.387	49	424875	9.16	ppbv	99
19) tert-Butyl methyl ethe...	12.080	73	1190424	10.59	ppbv	100
20) trans-1,2-Dichloroethene	12.111	61	505073	9.20	ppbv	100
21) Hexane	12.719	57	645971	10.08	ppbv	99
22) 1,1-Dichloroethane	13.455	63	737006	9.55	ppbv	100
23) Vinyl acetate	13.595	43	801071	9.65	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	570007	9.80	ppbv	99
25) 2-Butanone (MEK)	15.000	43	742452	11.18	ppbv	99
26) Ethyl acetate	15.049	43	868538m	9.83	ppbv	
27) Tetrahydrofuran	15.450	42	430332	9.96	ppbv	98
28) Chloroform	15.603	83	902263	9.79	ppbv	100
29) Cyclohexane	15.834	56	674972	10.27	ppbv	99
30) 1,1,1-Trichloroethane	15.888	97	986247	9.72	ppbv	100
31) Carbon tetrachloride	16.144	117	1059431	9.61	ppbv	100
33) Benzene	16.637	78	1441640	9.72	ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	2133581	10.07	ppbv	100
35) 1,2-Dichloroethane	16.831	62	580464	9.50	ppbv	100
36) Heptane	16.977	43	742627	10.35	ppbv	98
37) Trichloroethene	17.866	130	708749	9.49	ppbv	99
38) 1,2-Dichloropropane	18.365	63	505932	9.98	ppbv	100
39) 1,4-Dioxane	18.565	88	216225	10.46	ppbv	100
40) Bromodichloromethane	18.827	83	991477	9.99	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	763615	9.73	ppbv	99
42) 4-Methyl-2-pentanone (...	19.837	43	706984	9.46	ppbv	99
44) Toluene	20.074	91	1862760	10.18	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	803164	10.88	ppbv	99
46) 1,1,2-Trichloroethane	20.853	97	623904	10.57	ppbv	100
47) Tetrachloroethene	20.932	166	1075587	9.82	ppbv	100
48) 2-Hexanone	21.187	43	563333	8.46	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:58 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.461	129	1148619	10.13	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.686	107	964236	10.40	ppbv	100
51)	Chlorobenzene	22.404	112	1566615	10.08	ppbv	99
52)	Ethylbenzene	22.495	91	2494853	10.33	ppbv	100
53)	m&p-Xylene	22.678	91	3947853	20.77	ppbv	100
54)	o-Xylene	23.323	91	1991013	10.51	ppbv	100
55)	Styrene	23.359	104	1471830	9.44	ppbv	99
56)	Bromoform	23.736	173	1302750	10.04	ppbv	100
57)	1,1,2,2-Tetrachloroethane	24.430	83	1352167	10.44	ppbv	100
59)	4-Ethyltoluene	24.673	105	2617360	10.07	ppbv	99
60)	1,3,5-Trimethylbenzene	24.771	105	2101412	9.22	ppbv	99
61)	1,2,4-Trimethylbenzene	25.373	105	2195466	9.91	ppbv	100
62)	1,3-Dichlorobenzene	25.902	146	1776722	9.85	ppbv	100
63)	1,4-Dichlorobenzene	26.048	146	1781731	9.97	ppbv	100
64)	Benzyl chloride	26.261	91	1706292	10.06	ppbv	99
65)	1,2-Dichlorobenzene	26.656	146	1631258	9.79	ppbv	100
66)	1,2,4-Trichlorobenzene	29.114	180	1694972	9.15	ppbv	99
67)	Hexachlorobutadiene	29.254	225	1558962	9.46	ppbv	100

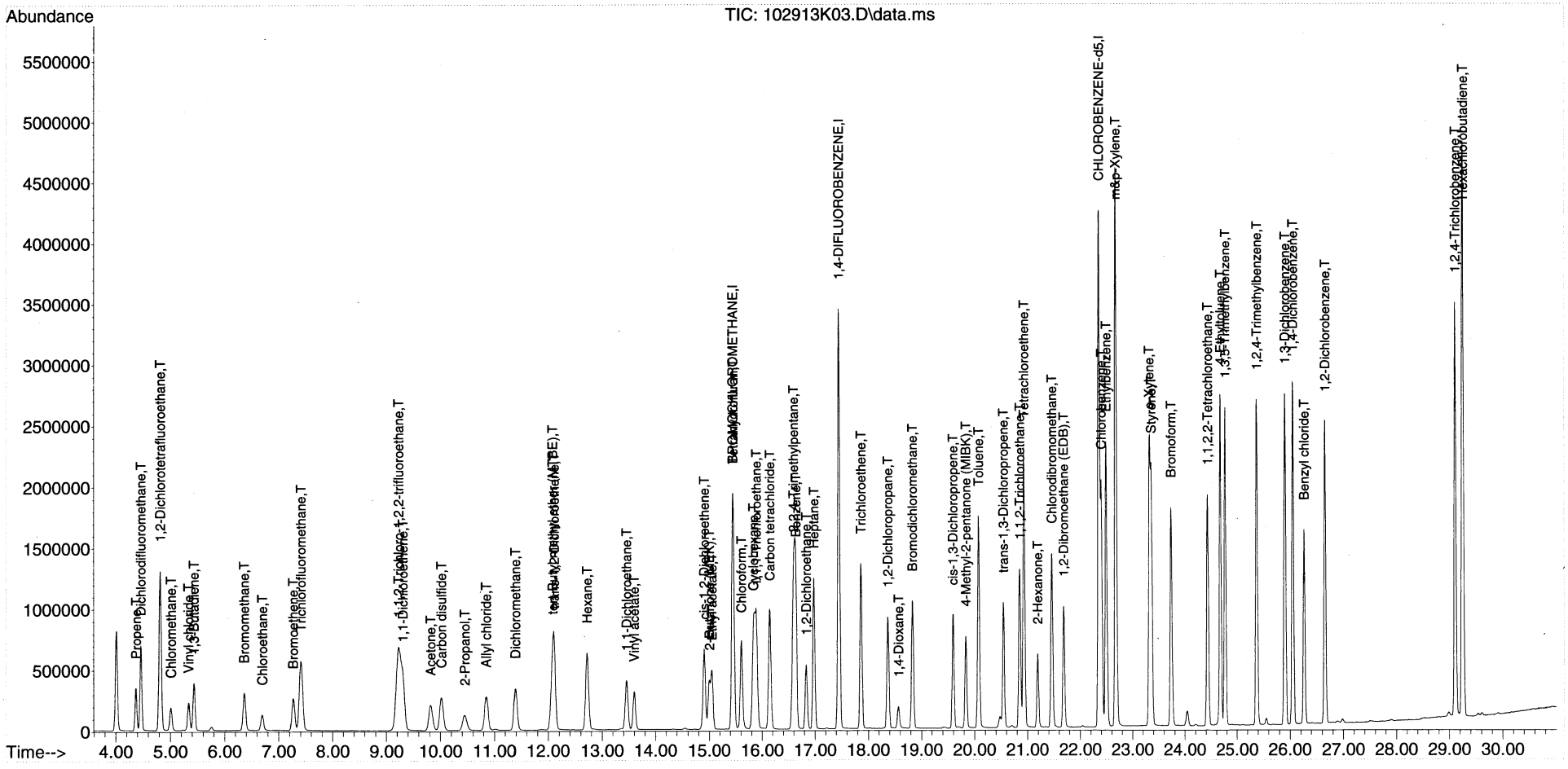
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:58 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

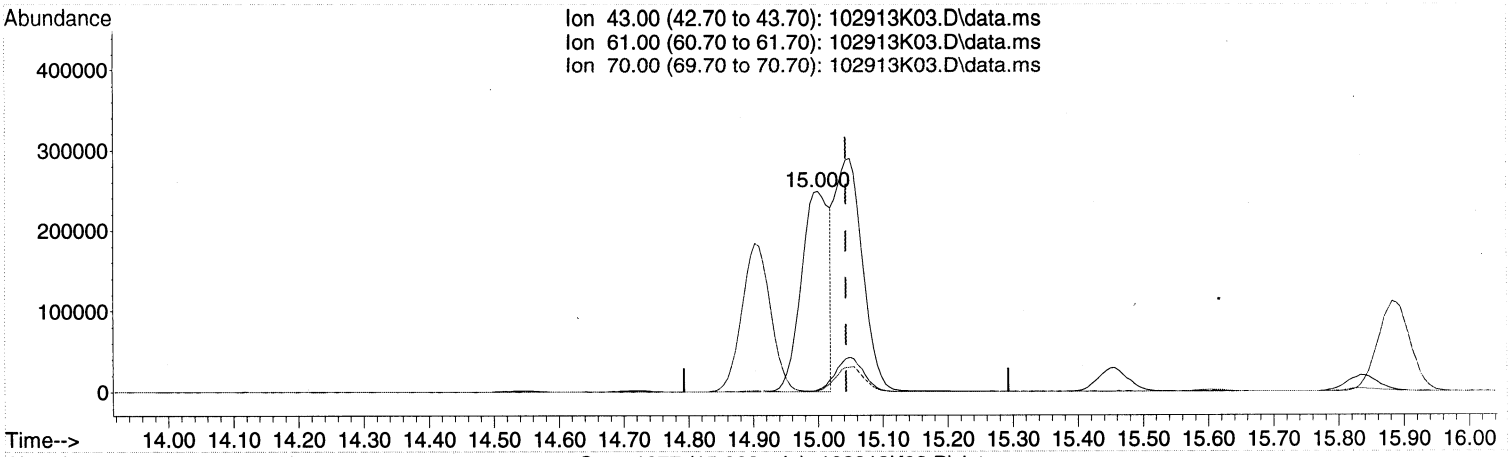


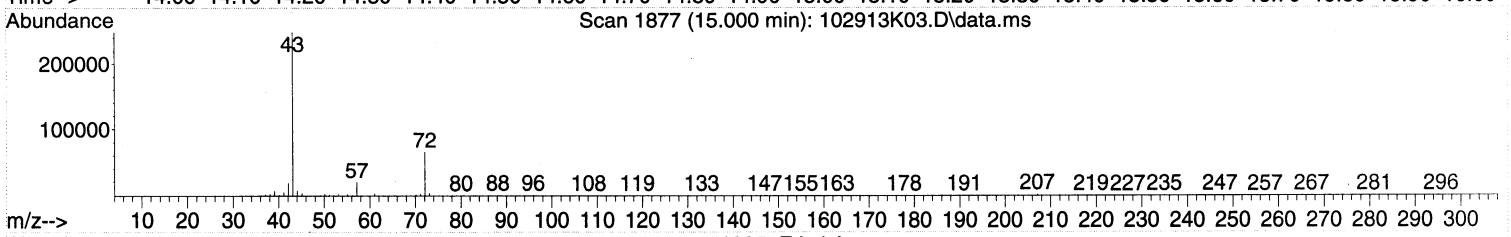
Quantitation Report (Qedit)

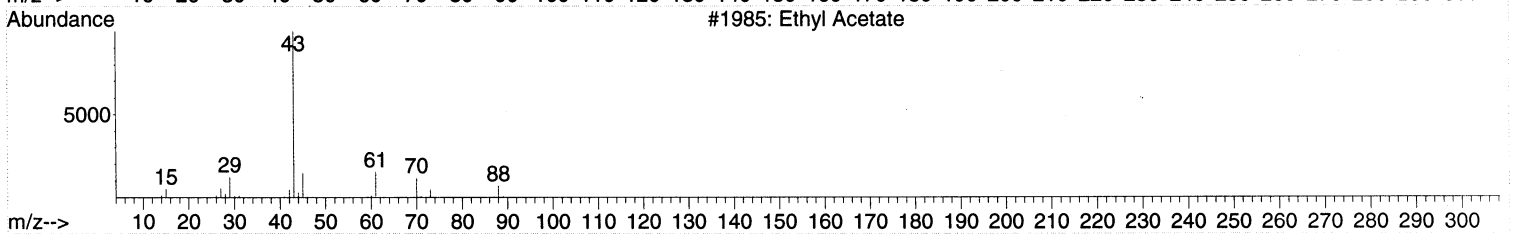
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:38 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Quant Time via : Initial Calibration

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M







TIC: 102913K03.D\data.ms

(26) Ethyl acetate (T)

15.000min (-0.042) 8.41 ppbv

response 742452

Ion	Exp%	Act%
43.00	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

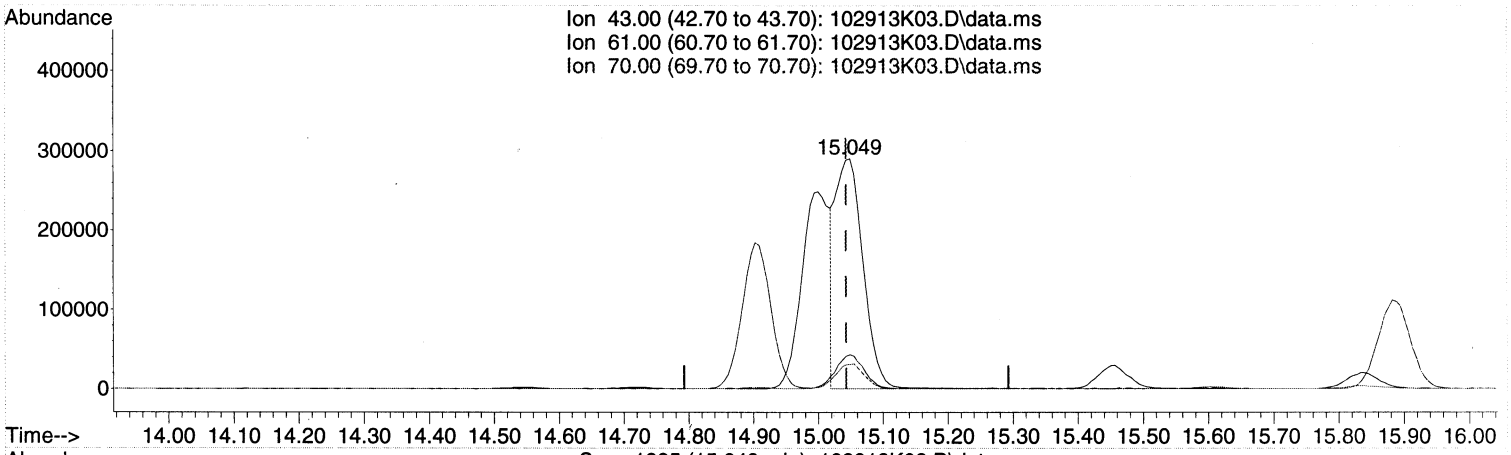
MANUAL INTEGRATION VERIFICATION
☐ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☑ Other: RT off
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

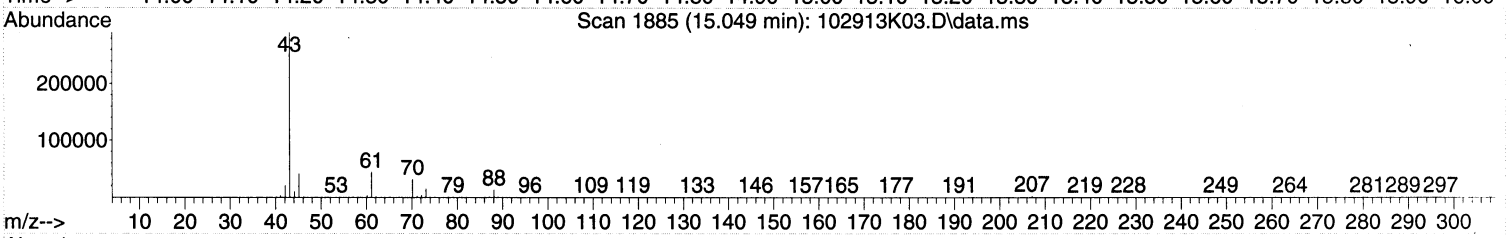
Quantitation Report (Qedit)

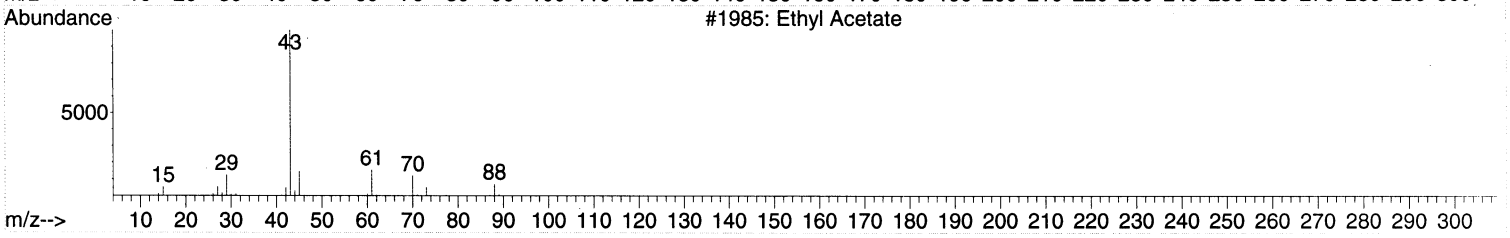
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:38 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M







TIC: 102913K03.D\data.ms

(26) Ethyl acetate (T)

15.049min (+0.006) 9.83 ppbv m

response 868538

Ion	Exp%	Act%
43.00	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: EM Date: 10/30/13

Manual integration(s) reviewed by:

Reviewer: TR Date: 11/6/13

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:38 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

All MT
em 10/30/13

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1047474	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4173877	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.361	117	3590012	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	285747	10.70	ppbv	99
3) Dichlorodifluoromethane	4.464	85	1011494	9.29	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	1188791	10.00	ppbv	99
5) Chloromethane	5.011	50	324326	10.12	ppbv	100
6) Vinyl chloride	5.333	62	392545	10.34	ppbv	100
7) 1,3-Butadiene	5.431	54	293106	10.24	ppbv	99
8) Bromomethane	6.362	94	382900	10.01	ppbv	100
9) Chloroethane	6.696	64	218649	9.98	ppbv	100
10) Bromoethene	7.262	106	384505	9.95	ppbv	99
11) Trichlorofluoromethane	7.408	101	1133664	10.15	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	776776	8.82	ppbv	99
13) 1,1-Dichloroethene	9.300	61	589564	9.12	ppbv	99
14) Acetone	9.817	43	660551	11.46	ppbv	99
15) Carbon disulfide	10.018	76	988518	9.63	ppbv	100
16) 2-Propanol	10.450	45	456106	8.70	ppbv	99
17) Allyl chloride	10.845	41	424743	10.05	ppbv	99
18) Dichloromethane	11.387	49	424875	9.16	ppbv	99
19) tert-Butyl methyl ethe...	12.080	73	1190424	10.59	ppbv	100
20) trans-1,2-Dichloroethene	12.111	61	505073	9.20	ppbv	100
21) Hexane	12.719	57	645971	10.08	ppbv	99
22) 1,1-Dichloroethane	13.455	63	737006	9.55	ppbv	100
23) Vinyl acetate	13.595	43	801071	9.65	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	570007	9.80	ppbv	99
25) 2-Butanone (MEK)	15.000	43	742452	11.18	ppbv	99
26) Ethyl acetate	15.000	43	742452	8.41	ppbv #	100
27) Tetrahydrofuran	15.450	42	430332	9.96	ppbv	98
28) Chloroform	15.603	83	902263	9.79	ppbv	100
29) Cyclohexane	15.834	56	674972	10.27	ppbv	99
30) 1,1,1-Trichloroethane	15.888	97	986247	9.72	ppbv	100
31) Carbon tetrachloride	16.144	117	1059431	9.61	ppbv	100
33) Benzene	16.637	78	1441640	9.72	ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	2133581	10.07	ppbv	100
35) 1,2-Dichloroethane	16.831	62	580464	9.50	ppbv	100
36) Heptane	16.977	43	742627	10.35	ppbv	98
37) Trichloroethene	17.866	130	708749	9.49	ppbv	99
38) 1,2-Dichloropropane	18.365	63	505932	9.98	ppbv	100
39) 1,4-Dioxane	18.565	88	216225	10.46	ppbv	100
40) Bromodichloromethane	18.827	83	991477	9.99	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	763615	9.73	ppbv	99
42) 4-Methyl-2-pentanone (...	19.837	43	706984	9.46	ppbv	99
44) Toluene	20.074	91	1862760	10.18	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	803164	10.88	ppbv	99
46) 1,1,2-Trichloroethane	20.853	97	623904	10.57	ppbv	100
47) Tetrachloroethene	20.932	166	1075587	9.82	ppbv	100
48) 2-Hexanone	21.187	43	563333	8.46	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:23:38 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Chlorodibromomethane	21.461	129	1148619	10.13	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.686	107	964236	10.40	ppbv	100
51)	Chlorobenzene	22.404	112	1566615	10.08	ppbv	99
52)	Ethylbenzene	22.495	91	2494853	10.33	ppbv	100
53)	m&p-Xylene	22.678	91	3947853	20.77	ppbv	100
54)	o-Xylene	23.323	91	1991013	10.51	ppbv	100
55)	Styrene	23.359	104	1471830	9.44	ppbv	99
56)	Bromoform	23.736	173	1302750	10.04	ppbv	100
57)	1,1,2,2-Tetrachloroethane	24.430	83	1352167	10.44	ppbv	100
59)	4-Ethyltoluene	24.673	105	2617360	10.07	ppbv	99
60)	1,3,5-Trimethylbenzene	24.771	105	2101412	9.22	ppbv	99
61)	1,2,4-Trimethylbenzene	25.373	105	2195466	9.91	ppbv	100
62)	1,3-Dichlorobenzene	25.902	146	1776722	9.85	ppbv	100
63)	1,4-Dichlorobenzene	26.048	146	1781731	9.97	ppbv	100
64)	Benzyl chloride	26.261	91	1706292	10.06	ppbv	99
65)	1,2-Dichlorobenzene	26.656	146	1631258	9.79	ppbv	100
66)	1,2,4-Trichlorobenzene	29.114	180	1694972	9.15	ppbv	99
67)	Hexachlorobutadiene	29.254	225	1558962	9.46	ppbv	100

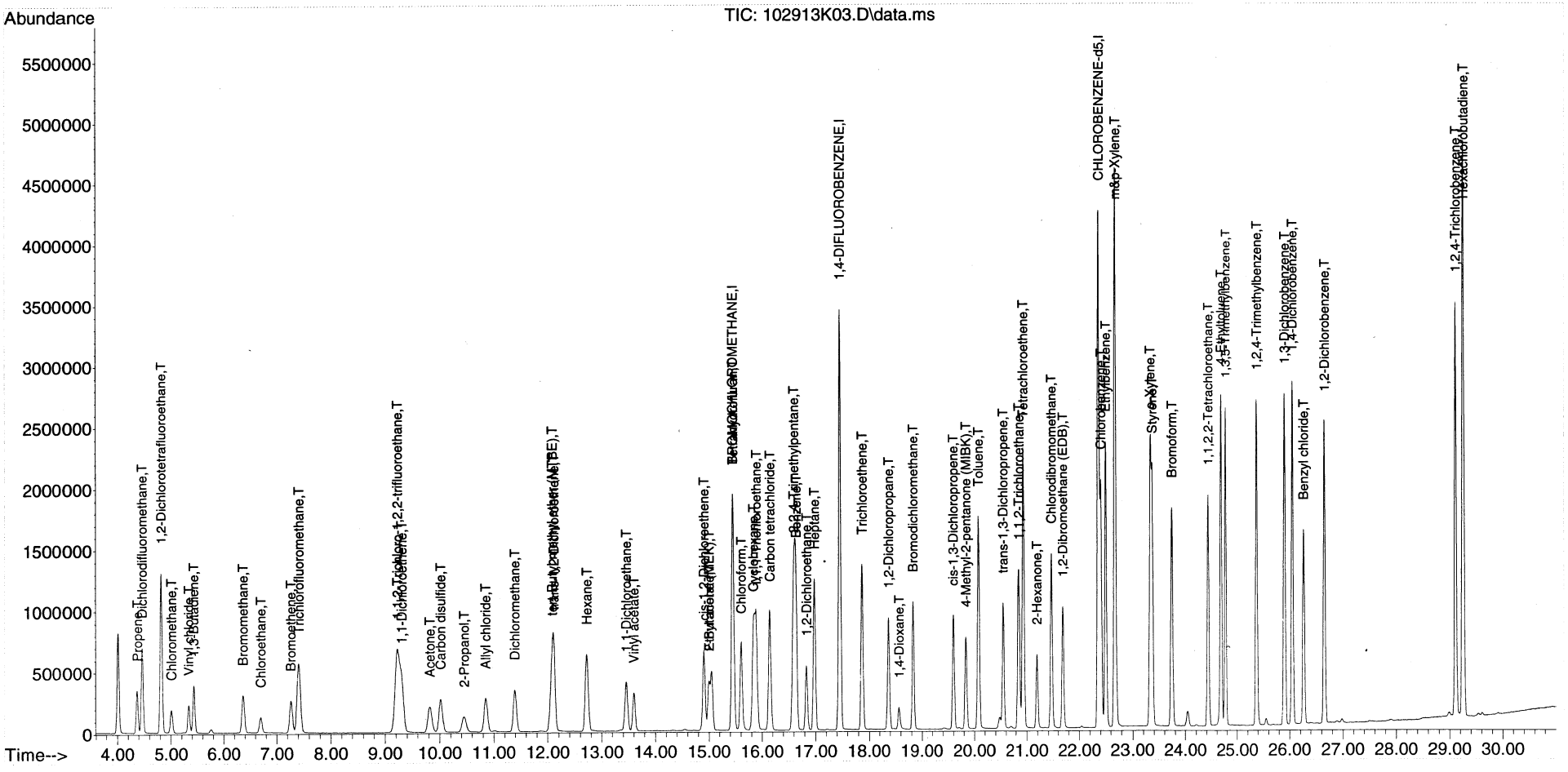
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K03.D
Acq On : 29 Oct 2013 12:27
Instrument : HP5973K
Operator : EM
Sample : B13J102-BS1
Misc : 10 ppbv TO15 Std
ALS Vial : 31
Multiplier : 1

Quant Time : Oct 30 16:23:38 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M



QLS REPORT

1 out
em 11/1/13

Instrument Name: HP5973K
Sample Name: S13J102-CRL1
Misc Info: 1.0 ppbv TO15 Std
Date Acquired: 10/29/2013 13:13
QLast Update: Wed Oct 30 14:14:00 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
2)	Propene	4.37	1.07	1.50	141%	60.0	140.0	FAIL	Subset ok in LIMS
3)	Dichlorodifluoromethane	4.46	1.01	1.30	129%	60.0	140.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.82	1.04	1.29	124%	60.0	140.0	pass	Primary
5)	Chloromethane	5.00	1.03	1.36	132%	60.0	140.0	pass	Primary
6)	Vinyl chloride	5.34	1.05	1.33	127%	60.0	140.0	pass	Primary
7)	1,3-Butadiene	5.43	1.02	1.30	127%	60.0	140.0	pass	Subset
8)	Bromomethane	6.37	1.04	1.32	126%	60.0	140.0	pass	Primary
9)	Chloroethane	6.70	1.04	1.35	129%	60.0	140.0	pass	Primary
10)	Bromoethene	7.26	1.03	1.27	123%	60.0	140.0	pass	Subset
11)	Trichlorofluoromethane	7.40	1.05	1.32	125%	60.0	140.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.23	0.93	1.14	122%	60.0	140.0	pass	Primary
13)	1,1-Dichloroethene	9.30	0.94	1.16	123%	60.0	140.0	pass	Primary
14)	Acetone	9.85	1.06	1.46	138%	60.0	140.0	pass	Subset
15)	Carbon disulfide	10.02	1.02	1.39	137%	60.0	140.0	pass	Subset
16)	2-Propanol	10.50	0.95	1.05	110%	60.0	140.0	pass	Subset
17)	Allyl chloride	10.86	1.01	1.28	127%	60.0	140.0	pass	Subset
18)	Dichloromethane	11.38	0.96	1.45	151%	60.0	140.0	FAIL	Primary
19)	tert-Butyl methyl ether (MTBE)	12.11	1.09	1.27	117%	60.0	140.0	pass	Subset
20)	trans-1,2-Dichloroethene	12.10	0.95	1.16	122%	60.0	140.0	pass	Subset
21)	Hexane	12.72	1.02	1.23	120%	60.0	140.0	pass	Subset
22)	1,1-Dichloroethane	13.45	0.98	1.21	123%	60.0	140.0	pass	Primary
23)	Vinyl acetate	13.61	1.00	1.14	114%	60.0	140.0	pass	Subset
24)	cis-1,2-Dichloroethene	14.91	1.01	1.25	124%	60.0	140.0	pass	Primary
25)	2-Butanone (MEK)	15.02	1.04	1.28	123%	60.0	140.0	pass	Subset
26)	Ethyl acetate	15.06	1.04	1.20	116%	60.0	140.0	pass	Subset
27)	Tetrahydrofuran	15.48	1.03	1.20	117%	60.0	140.0	pass	Subset
28)	Chloroform	15.60	1.01	1.26	125%	60.0	140.0	pass	Primary
29)	Cyclohexane	15.83	1.04	1.23	119%	60.0	140.0	pass	Subset
30)	1,1,1-Trichloroethane	15.88	1.00	1.23	123%	60.0	140.0	pass	Primary
31)	Carbon tetrachloride	16.14	1.00	1.21	121%	60.0	140.0	pass	Primary
33)	Benzene	16.64	1.03	1.22	118%	60.0	140.0	pass	Primary
34)	2,2,4-Trimethylpentane	16.59	1.05	1.23	117%	60.0	140.0	pass	Subset
35)	1,2-Dichloroethane	16.83	1.00	1.21	121%	60.0	140.0	pass	Primary
36)	Heptane	16.97	1.05	1.24	118%	60.0	140.0	pass	Subset
37)	Trichloroethene	17.87	1.03	1.21	117%	60.0	140.0	pass	Primary
38)	1,2-Dichloropropane	18.36	1.06	1.27	120%	60.0	140.0	pass	Primary
39)	1,4-Dioxane	18.58	1.06	1.08	102%	60.0	140.0	pass	Subset
40)	Bromodichloromethane	18.83	1.06	1.27	119%	60.0	140.0	pass	Subset
41)	cis-1,3-Dichloropropene	19.59	1.03	1.21	117%	60.0	140.0	pass	Primary
42)	4-Methyl-2-pentanone (MIBK)	19.85	1.05	0.83	79%	60.0	140.0	pass	Subset
43)	CHLOROBENZENE-d5	22.36	22.00	22.00	100%	60.0	140.0	pass	Subset
45)	trans-1,3-Dichloropropene	20.54	1.10	1.33	121%	60.0	140.0	pass	Primary
46)	1,1,2-Trichloroethane	20.85	1.08	1.34	124%	60.0	140.0	pass	Primary
47)	Tetrachloroethene	20.93	1.04	1.31	126%	60.0	140.0	pass	Primary
48)	2-Hexanone	21.20	1.03	0.76	73%	60.0	140.0	pass	Subset
49)	Chlorodibromomethane	21.45	1.04	1.23	119%	60.0	140.0	pass	Subset
50)	1,2-Dibromoethane (EDB)	21.69	1.07	1.28	119%	60.0	140.0	pass	Primary
51)	Chlorobenzene	22.40	1.06	1.28	121%	60.0	140.0	pass	Primary
52)	Ethylbenzene	22.50	1.05	1.21	116%	60.0	140.0	pass	Primary
53)	m&p-Xylene	22.68	2.12	2.38	112%	60.0	140.0	pass	Primary

54)	o-Xylene	23.32	1.07	1.22	114%	60.0	140.0	pass	Primary
55)	Styrene	23.36	1.04	1.05	101%	60.0	140.0	pass	Primary
56)	Bromoform	23.74	1.03	1.16	113%	60.0	140.0	pass	Subset
57)	1,1,2,2-Tetrachloroethane	24.43	1.06	1.25	118%	60.0	140.0	pass	Primary
59)	4-Ethyltoluene	24.67	1.05	1.12	107%	60.0	140.0	pass	Subset
60)	1,3,5-Trimethylbenzene	24.77	1.04	1.02	98%	60.0	140.0	pass	Primary
61)	1,2,4-Trimethylbenzene	25.37	1.07	1.09	102%	60.0	140.0	pass	Primary
62)	1,3-Dichlorobenzene	25.90	1.03	1.16	112%	60.0	140.0	pass	Primary
63)	1,4-Dichlorobenzene	26.05	1.04	1.15	111%	60.0	140.0	pass	Subset
64)	Benzyl chloride	26.26	1.03	1.07	104%	60.0	140.0	pass	Primary
65)	1,2-Dichlorobenzene	26.65	1.04	1.16	111%	60.0	140.0	pass	Primary
66)	1,2,4-Trichlorobenzene	29.11	1.02	1.10	108%	60.0	140.0	pass	Primary
67)	Hexachlorobutadiene	29.25	1.03	1.21	118%	60.0	140.0	pass	Primary

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:19 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other:

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: [illegible] Date: 11/1/13

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 11/6/13

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1074978	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4213230	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3601728	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	41221	1.50	ppbv	96
3) Dichlorodifluoromethane	4.463	85	145365	1.30	ppbv	97
4) 1,2-Dichlorotetrafluor...	4.816	85	157328	1.29	ppbv	99
5) Chloromethane	5.005	50	44714	1.36	ppbv	99
6) Vinyl chloride	5.339	62	51771	1.33	ppbv	98
7) 1,3-Butadiene	5.431	54	38119	1.30	ppbv	99
8) Bromomethane	6.368	94	51654	1.32	ppbv	100
9) Chloroethane	6.696	64	30252	1.35	ppbv	99
10) Bromoethene	7.262	106	50208	1.27	ppbv	99
11) Trichlorofluoromethane	7.402	101	151062	1.32	ppbv	98
12) 1,1,2-Trichloro-1,2,2-...	9.227	151	102738	1.14	ppbv	99
13) 1,1-Dichloroethene	9.300	61	76937	1.16	ppbv	99
14) Acetone	9.853	43	86279	1.46	ppbv	99
15) Carbon disulfide	10.024	76	146934	1.39	ppbv	99
16) 2-Propanol	10.504	45	56518	1.05	ppbv	94
17) Allyl chloride	10.857	41	55580	1.28	ppbv	95
18) Dichloromethane	11.380	49	69213	1.45	ppbv	97
19) tert-Butyl methyl ethe...	12.110	73	146816	1.27	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	65235	1.16	ppbv	99
21) Hexane	12.719	57	80682	1.23	ppbv	99
22) 1,1-Dichloroethane	13.455	63	95467	1.21	ppbv	100
23) Vinyl acetate	13.607	43	97498	1.14	ppbv	98
24) cis-1,2-Dichloroethene	14.909	61	74692	1.25	ppbv	98
25) 2-Butanone (MEK)	15.018	43	87000	1.28	ppbv	99
26) Ethyl acetate	15.061	43	108972m	1.20	ppbv	
27) Tetrahydrofuran	15.481	42	53313	1.20	ppbv	99
28) Chloroform	15.596	83	119156	1.26	ppbv	96
29) Cyclohexane	15.834	56	83185	1.23	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	127649	1.23	ppbv	99
31) Carbon tetrachloride	16.144	117	137189	1.21	ppbv	99
33) Benzene	16.637	78	182188	1.22	ppbv	99
34) 2,2,4-Trimethylpentane	16.594	57	263101	1.23	ppbv	98
35) 1,2-Dichloroethane	16.831	62	74436	1.21	ppbv	99
36) Heptane	16.971	43	89988	1.24	ppbv	98
37) Trichloroethene	17.866	130	91074	1.21	ppbv	99
38) 1,2-Dichloropropane	18.364	63	64847	1.27	ppbv	98
39) 1,4-Dioxane	18.583	88	22626	1.08	ppbv	99
40) Bromodichloromethane	18.827	83	126855	1.27	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	95578	1.21	ppbv	98
42) 4-Methyl-2-pentanone (...	19.849	43	62535	0.83	ppbv	98
44) Toluene	20.074	91	229476	1.25	ppbv	98
45) trans-1,3-Dichloropropene	20.542	75	98776	1.33	ppbv	99
46) 1,1,2-Trichloroethane	20.853	97	79171	1.34	ppbv	97
47) Tetrachloroethene	20.932	166	144319	1.31	ppbv	100
48) 2-Hexanone	21.199	43	50590	0.76	ppbv	96

00445

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:19 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	140195	1.23	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.686	107	118713	1.28	ppbv	99
51)	Chlorobenzene	22.404	112	199959	1.28	ppbv	88
52)	Ethylbenzene	22.495	91	294068	1.21	ppbv	99
53)	m&p-Xylene	22.678	91	454774	2.38	ppbv	100
54)	o-Xylene	23.323	91	230871	1.22	ppbv	99
55)	Styrene	23.359	104	163825	1.05	ppbv	100
56)	Bromoform	23.736	173	151071	1.16	ppbv	99
57)	1,1,2,2-Tetrachloroethane	24.430	83	162904	1.25	ppbv	99
59)	4-Ethyltoluene	24.673	105	291677	1.12	ppbv	100
60)	1,3,5-Trimethylbenzene	24.770	105	232064	1.02	ppbv	99
61)	1,2,4-Trimethylbenzene	25.373	105	243376	1.09	ppbv	100
62)	1,3-Dichlorobenzene	25.902	146	209360	1.16	ppbv	99
63)	1,4-Dichlorobenzene	26.048	146	206503	1.15	ppbv	100
64)	Benzyl chloride	26.261	91	181787	1.07	ppbv	99
65)	1,2-Dichlorobenzene	26.650	146	193310	1.16	ppbv	98
66)	1,2,4-Trichlorobenzene	29.114	180	204589	1.10	ppbv	100
67)	Hexachlorobutadiene	29.254	225	200154	1.21	ppbv	99

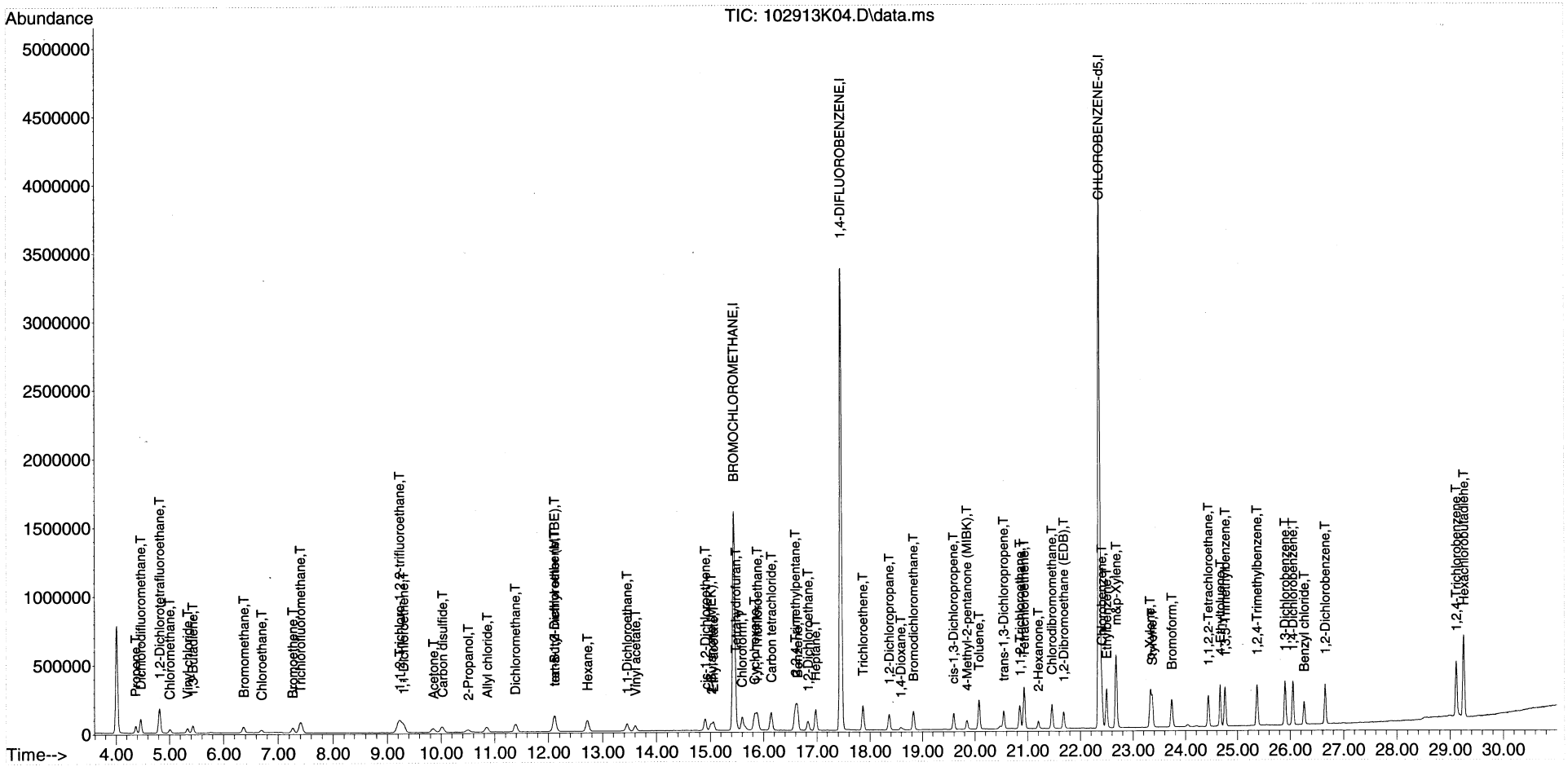
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:19 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

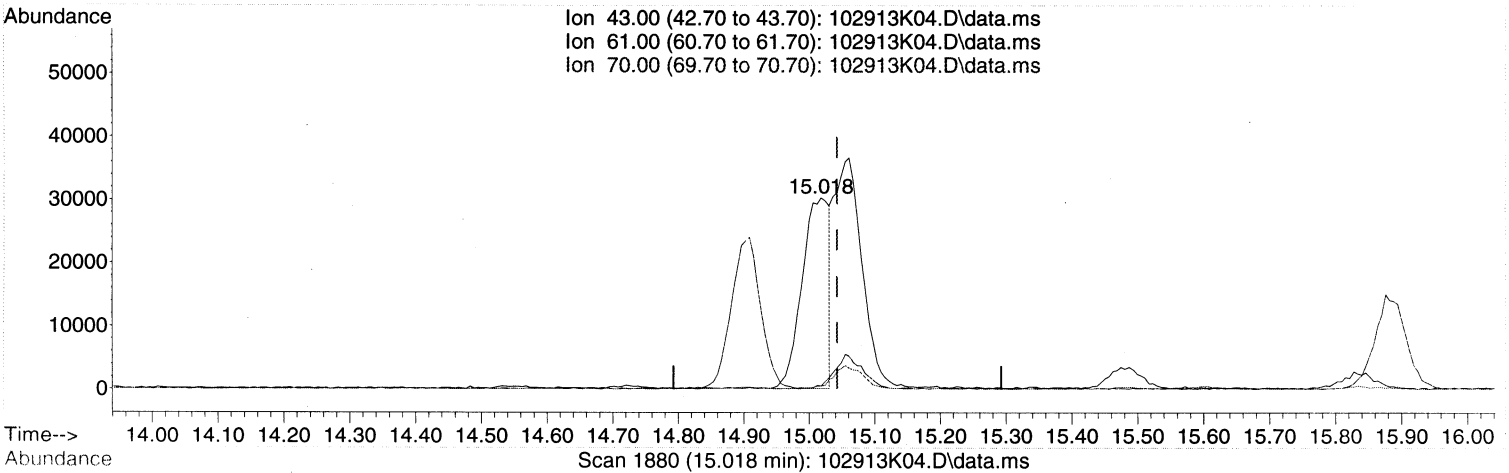


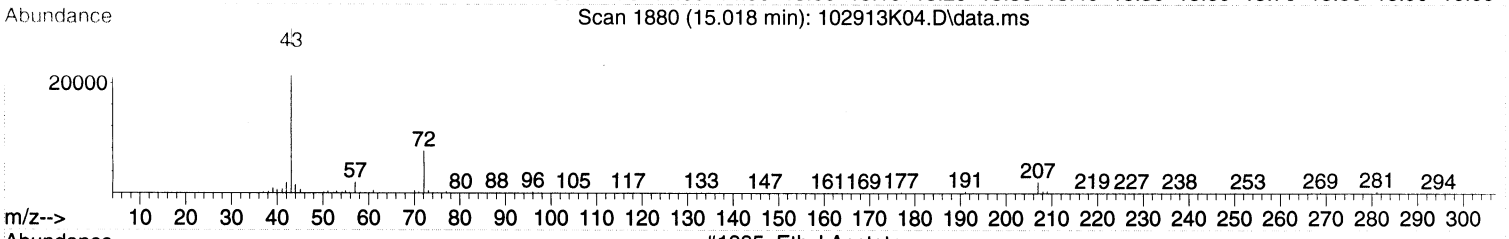
Quantitation Report (Qedit)

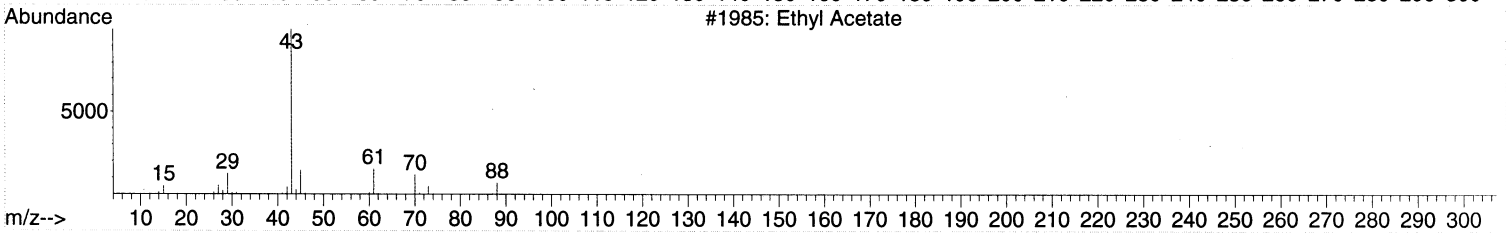
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:02 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M







TIC: 102913K04.D\data.ms

(26) Ethyl acetate (T)

15.018min (-0.024) 0.96 ppbv

response 87000

Ion	Exp%	Act%
43.00	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☑ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☑ Other: RT off

☐ After Manual Integration

Manual integration(s) performed by:

Analyst: _____ Date: _____

Manual integration(s) reviewed by:

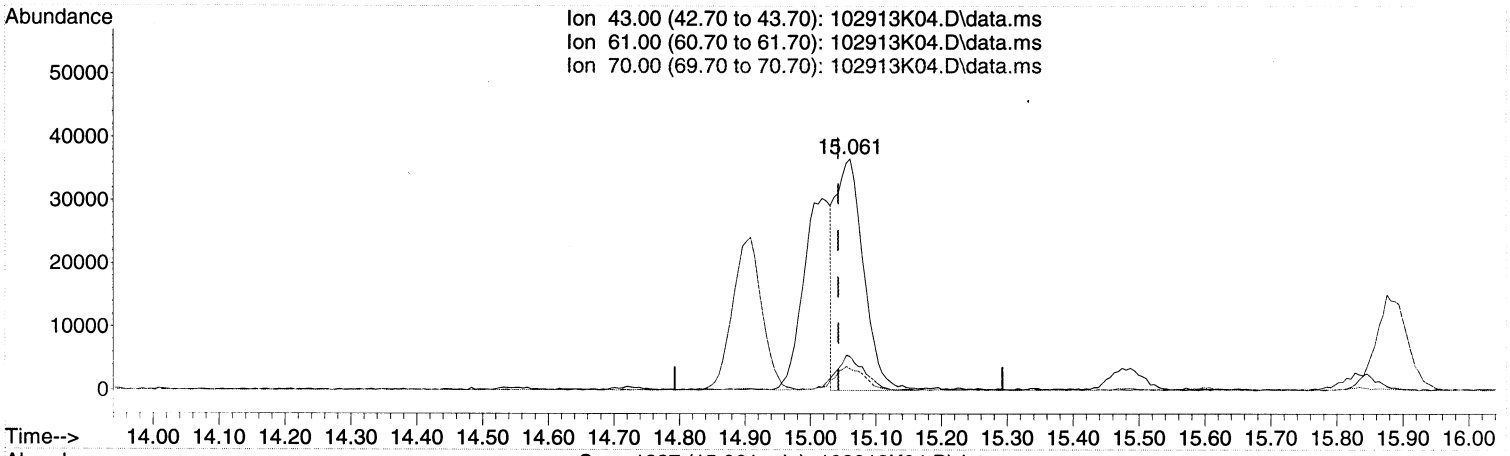
Reviewer: _____ Date: _____

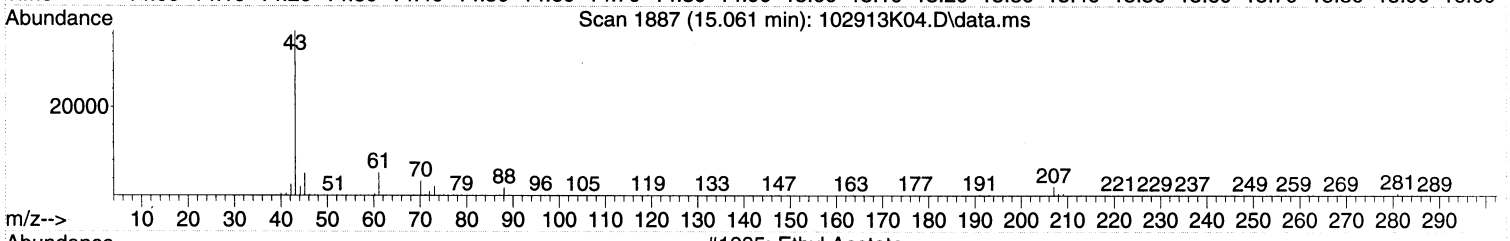
Quantitation Report (Qedit)

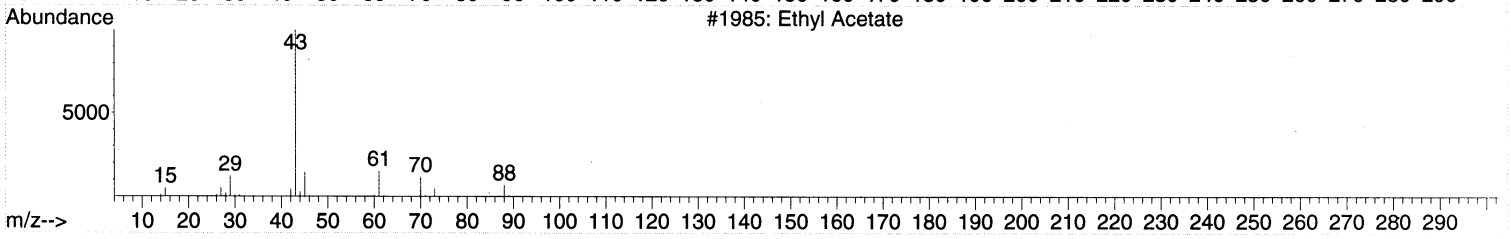
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:02 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M







TIC: 102913K04.D\data.ms

(26) Ethyl acetate (T)

15.061min (+0.018) 1.20 ppbv m

response 108972

Ion	Exp%	Act%
43.00	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: EM Date: 10/30/13

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 11/6/13

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:02 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Rel MT
lm 10/30/13

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1074978	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4213230	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3601728	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	41221	1.50	ppbv	96
3) Dichlorodifluoromethane	4.463	85	145365	1.30	ppbv	97
4) 1,2-Dichlorotetrafluor...	4.816	85	157328	1.29	ppbv	99
5) Chloromethane	5.005	50	44714	1.36	ppbv	99
6) Vinyl chloride	5.339	62	51771	1.33	ppbv	98
7) 1,3-Butadiene	5.431	54	38119	1.30	ppbv	99
8) Bromomethane	6.368	94	51654	1.32	ppbv	100
9) Chloroethane	6.696	64	30252	1.35	ppbv	99
10) Bromoethene	7.262	106	50208	1.27	ppbv	99
11) Trichlorofluoromethane	7.402	101	151062	1.32	ppbv	98
12) 1,1,2-Trichloro-1,2,2-...	9.227	151	102738	1.14	ppbv	99
13) 1,1-Dichloroethene	9.300	61	76937	1.16	ppbv	99
14) Acetone	9.853	43	86279	1.46	ppbv	99
15) Carbon disulfide	10.024	76	146934	1.39	ppbv	99
16) 2-Propanol	10.504	45	56518	1.05	ppbv	94
17) Allyl chloride	10.857	41	55580	1.28	ppbv	95
18) Dichloromethane	11.380	49	69213	1.45	ppbv	97
19) tert-Butyl methyl ethe...	12.110	73	146816	1.27	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	65235	1.16	ppbv	99
21) Hexane	12.719	57	80682	1.23	ppbv	99
[illegible] Dichloroethane	13.455	63	95467	1.21	ppbv	100
[illegible]	[illegible]	43	97498	1.14	ppbv	98
[illegible]	[illegible]	[illegible]	[illegible]	1.25	ppbv	98
[illegible]	[illegible]	[illegible]	[illegible]	1.28	ppbv	99
26) Ethyl acetate	15.018	43	87000	0.96	ppbv #	100
27) Tetrahydrofuran	15.481	42	53313	1.20	ppbv	99
28) Chloroform	15.596	83	119156	1.26	ppbv	96
29) Cyclohexane	15.834	56	83185	1.23	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	127649	1.23	ppbv	99
31) Carbon tetrachloride	16.144	117	137189	1.21	ppbv	99
33) Benzene	16.637	78	182188	1.22	ppbv	99
34) 2,2,4-Trimethylpentane	16.594	57	263101	1.23	ppbv	98
35) 1,2-Dichloroethane	16.831	62	74436	1.21	ppbv	99
36) Heptane	16.971	43	89988	1.24	ppbv	98
37) Trichloroethene	17.866	130	91074	1.21	ppbv	99
38) 1,2-Dichloropropane	18.364	63	64847	1.27	ppbv	98
39) 1,4-Dioxane	18.583	88	22626	1.08	ppbv	99
40) Bromodichloromethane	18.827	83	126855	1.27	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	95578	1.21	ppbv	98
42) 4-Methyl-2-pentanone (...	19.849	43	62535	0.83	ppbv	98
44) Toluene	20.074	91	229476	1.25	ppbv	98
45) trans-1,3-Dichloropropene	20.542	75	98776	1.33	ppbv	99
46) 1,1,2-Trichloroethane	20.853	97	79171	1.34	ppbv	97
47) Tetrachloroethene	20.932	166	144319	1.31	ppbv	100
48) 2-Hexanone	21.199	43	50590	0.76	ppbv	96

00450

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:02 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	140195	1.23	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.686	107	118713	1.28	ppbv	99
51)	Chlorobenzene	22.404	112	199959	1.28	ppbv	88
52)	Ethylbenzene	22.495	91	294068	1.21	ppbv	99
53)	m&p-Xylene	22.678	91	454774	2.38	ppbv	100
54)	o-Xylene	23.323	91	230871	1.22	ppbv	99
55)	Styrene	23.359	104	163825	1.05	ppbv	100
56)	Bromoform	23.736	173	151071	1.16	ppbv	99
57)	1,1,2,2-Tetrachloroethane	24.430	83	162904	1.25	ppbv	99
59)	4-Ethyltoluene	24.673	105	291677	1.12	ppbv	100
60)	1,3,5-Trimethylbenzene	24.770	105	232064	1.02	ppbv	99
61)	1,2,4-Trimethylbenzene	25.373	105	243376	1.09	ppbv	100
62)	1,3-Dichlorobenzene	25.902	146	209360	1.16	ppbv	99
63)	1,4-Dichlorobenzene	26.048	146	206503	1.15	ppbv	100
64)	Benzyl chloride	26.261	91	181787	1.07	ppbv	99
65)	1,2-Dichlorobenzene	26.650	146	193310	1.16	ppbv	98
66)	1,2,4-Trichlorobenzene	29.114	180	204589	1.10	ppbv	100
67)	Hexachlorobutadiene	29.254	225	200154	1.21	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

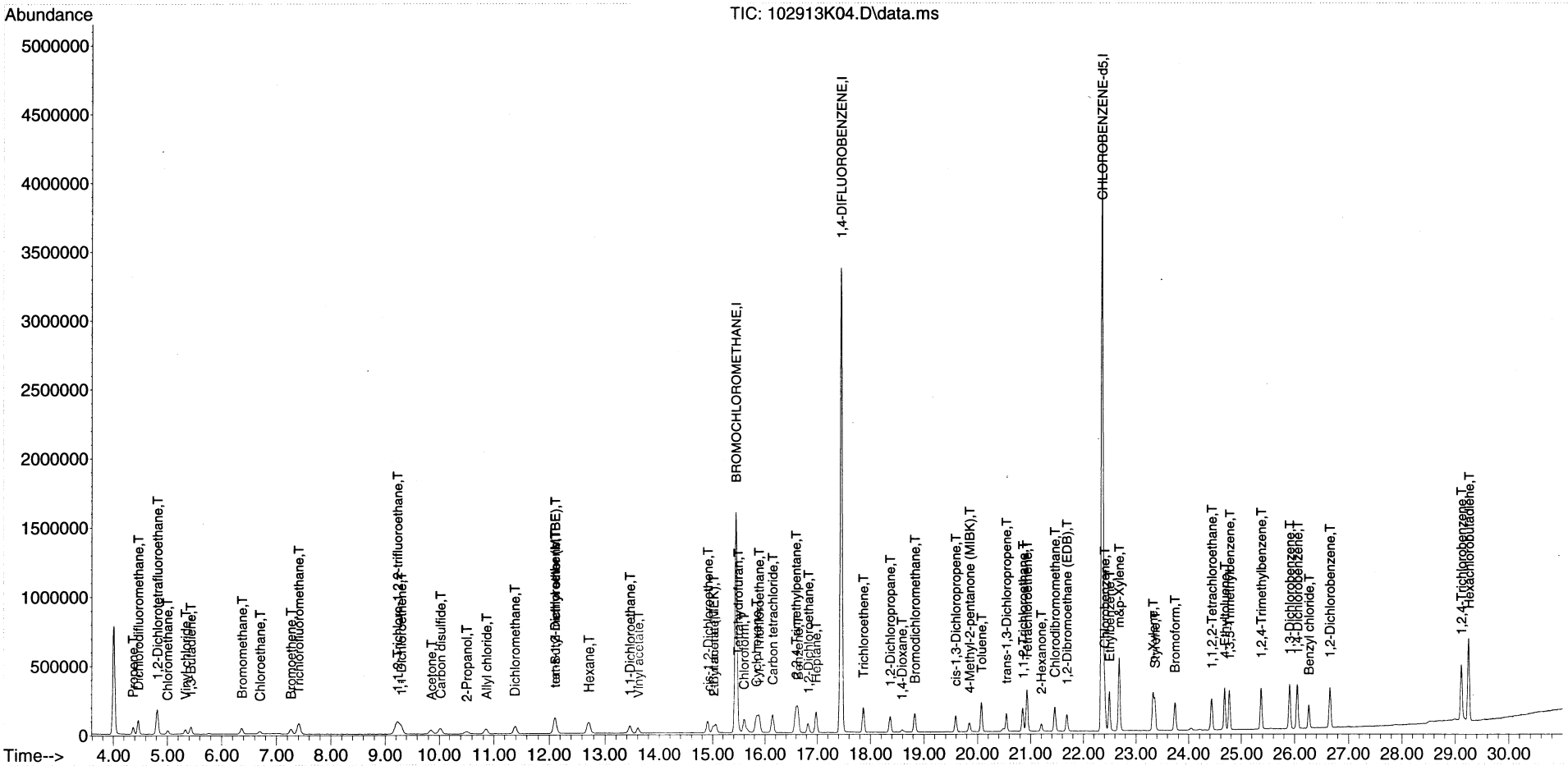
00451

Quantitation Report Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K04.D
Acq On : 29 Oct 2013 13:13
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL1
Misc : 1.0 ppbv TO15 Std
ALS Vial : 31
Multiplier: 1

Quant Time: Oct 30 16:26:02 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513T KAA.M



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K05.D
Acq On : 29 Oct 2013 14:02
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV2
Misc : 10 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Quant Time: Oct 30 16:26:34 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	98	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	99	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	98	0.00
58	T	1,2,3-Trichloropropane	0.531	0.505	4.9	96	0.00
68	T	Naphthalene	1.388	1.073	22.7	72	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

102513TO15KAA.M Wed Oct 30 16:26:42 2013 HP5973K

% Dev Naphthalene $= \frac{1.388 - 1.073}{1.388} \times 100$

$= 22.7\%$ ✓

RF #68 $= \frac{1602693 (22)}{3652403 (9.0)}$

$= 1.073$ ✓

Em 10/30/13

00453

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K05.D
Acq On : 29 Oct 2013 14:02
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV2
Misc : 10 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Quant Time: Oct 30 16:26:34 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1072353	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4175677	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3652403	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.872	43	58760	1.00	ppbv	100
39) 1,4-Dioxane	18.614	88	17163	0.83	ppbv	97
56) Bromoform	23.736	173	3694417	27.98	ppbv	99
58) 1,2,3-Trichloropropane	24.545	75	796855	9.03	ppbv	100
68) Naphthalene	29.534	128	1602693	6.96	ppbv	100

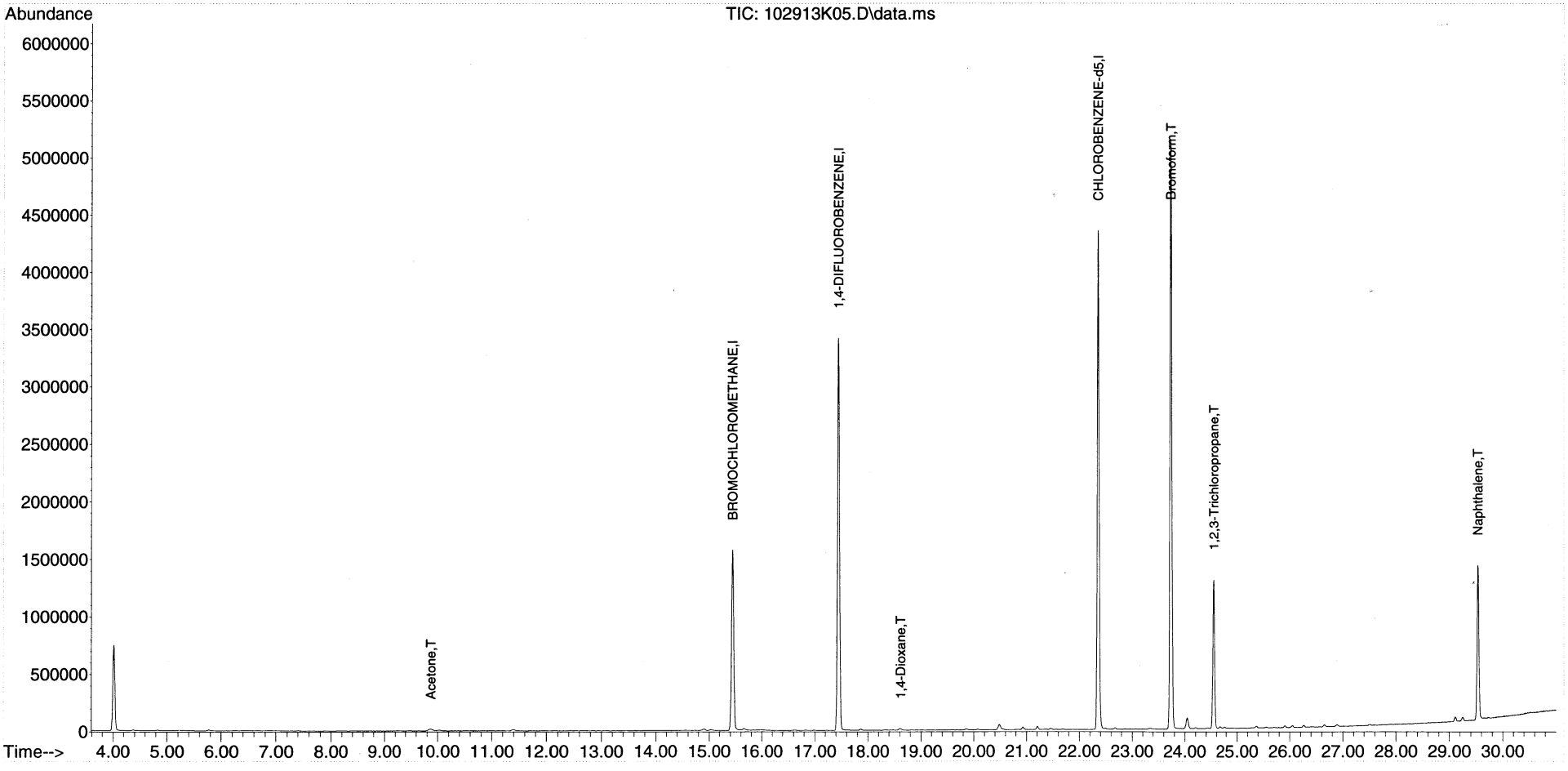
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K05.D
Acq On : 29 Oct 2013 14:02
Instrument: HP5973K
Operator : EM
Sample : S13J102-CCV2
Misc : 10 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Quant Time: Oct 30 16:26:34 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M



LCS REPORT

Instrument Name: HP5973K
Sample Name: B13J162-BS2 SC, 11/6/13
Misc Info: 10 ppbv Addtl Std
Date Acquired: 10/29/2013 14:52
QLast Update: Wed Oct 30 14:14:00 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	#N/A	22.00	#N/A	70.0	130.0	#N/A
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
43)	CHLOROBENZENE-d5	22.36	#N/A	22.00	#N/A	70.0	130.0	#N/A
58)	1,2,3-Trichloropropane	24.55	9.50	9.00	95%	67.0	131.0	pass
68)	Naphthalene	29.53	9.00	7.65	85%	70.0	130.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K06.D
Acq On : 29 Oct 2013 14:52
Instrument: HP5973K
Operator : EM
Sample : B13J152-BS2 SL 11/6/13
Misc : 10 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Pass
-EM 11/1/13

Quant Time: Oct 30 16:28:53 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1067059	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4025275	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3561498	22.00	ppbv	0.00
Target Compounds						Qvalue
14) Acetone	9.872	43	56073	0.95	ppbv	97
56) Bromoform	23.736	173	3560114	27.66	ppbv	99
58) 1,2,3-Trichloropropane	24.545	75	774219	9.00	ppbv	100
68) Naphthalene	29.540	128	1719459	7.65	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

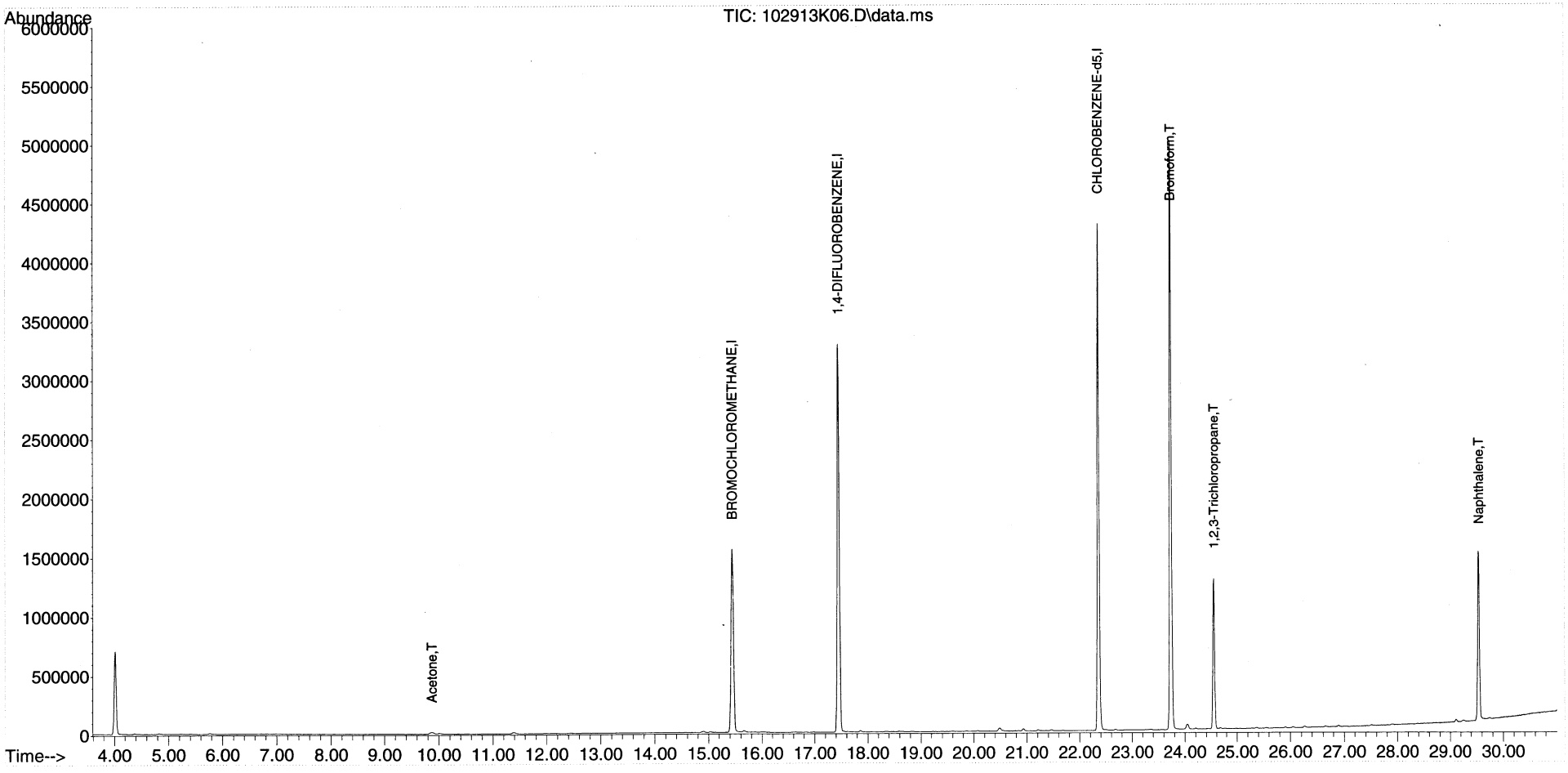
$$\%\,Rec = \frac{7.65}{9.00} \times 100 = 85\%$$

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K06.D
Acq On : 29 Oct 2013 14:52
Instrument: HP5973K
Operator : EM
Sample : B13J102-BS2
Misc : 10 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Quant Time: Oct 30 16:28:53 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M



QLS REPORT

Instrument Name: HP5973K
Sample Name: S13J102-CRL2
Misc Info: 1.0 ppbv Addtl Std
Date Acquired: 10/29/2013 15:38
QLast Update: Wed Oct 30 14:14:00 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
43)	CHLOROBENZENE-d5	22.36	22.00	22.00	100%	60.0	140.0	pass	Subset
58)	1,2,3-Trichloropropane	24.55	0.95	1.08	114%	60.0	140.0	pass	Subset
68)	Naphthalene	29.54	0.90	0.87	97%	60.0	140.0	pass	Additional

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K07.D
Acq On : 29 Oct 2013 15:38
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL2
Misc : 1.0 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Pass
em 11/1/13

Quant Time: Oct 30 16:29:40 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.444	49	1072806	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4072117	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3591740	22.00 ppbv	0.00
Target Compounds					Qvalue
56) Bromoform	23.736	173	395290	3.04 ppbv	100
58) 1,2,3-Trichloropropane	24.545	75	93732	1.08 ppbv	100
68) Naphthalene	29.534	128	197006	0.87 ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

% Rec.

$$\text{Naphthalene} = \frac{0.87}{0.9} \times 100 = 97\%$$

em 11/1/13

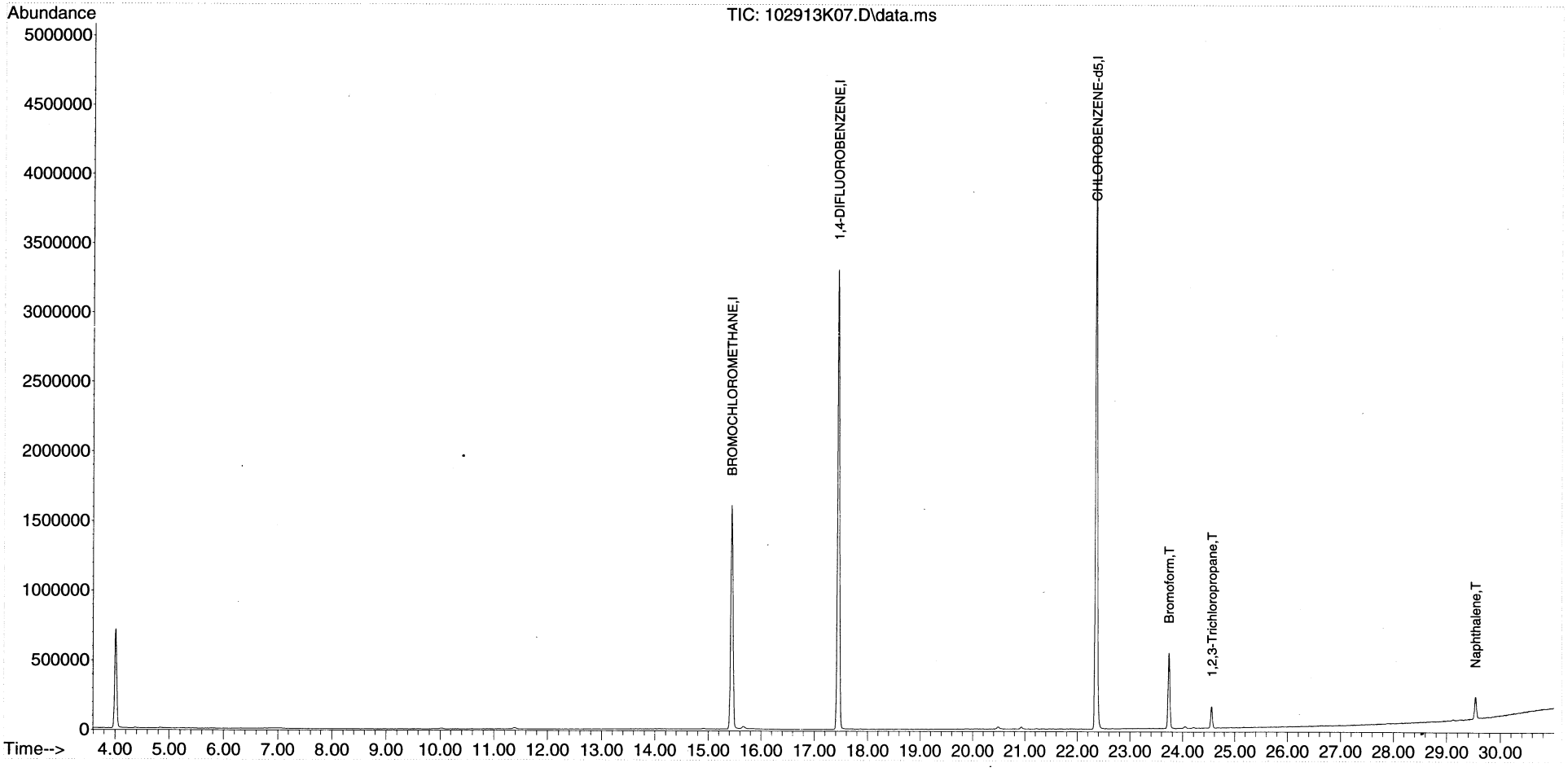
00460

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K07.D
Acq On : 29 Oct 2013 15:38
Instrument: HP5973K
Operator : EM
Sample : S13J102-CRL2
Misc : 1.0 ppbv Addtl Std
ALS Vial : 33
Multiplier: 1

Quant Time: Oct 30 16:29:40 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K08.D
Acq On : 29 Oct 2013 16:59
Instrument: HP5973K
Operator : EM
Sample : B13J115-BLK1
Misc : BLANK CAN 1988
ALS Vial : 35
Multiplier: 1

Quant Time: Oct 30 15:04:36 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	1064826	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	4059467	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3557218	22.00 ppbv	0.00

Target Compounds Qvalue

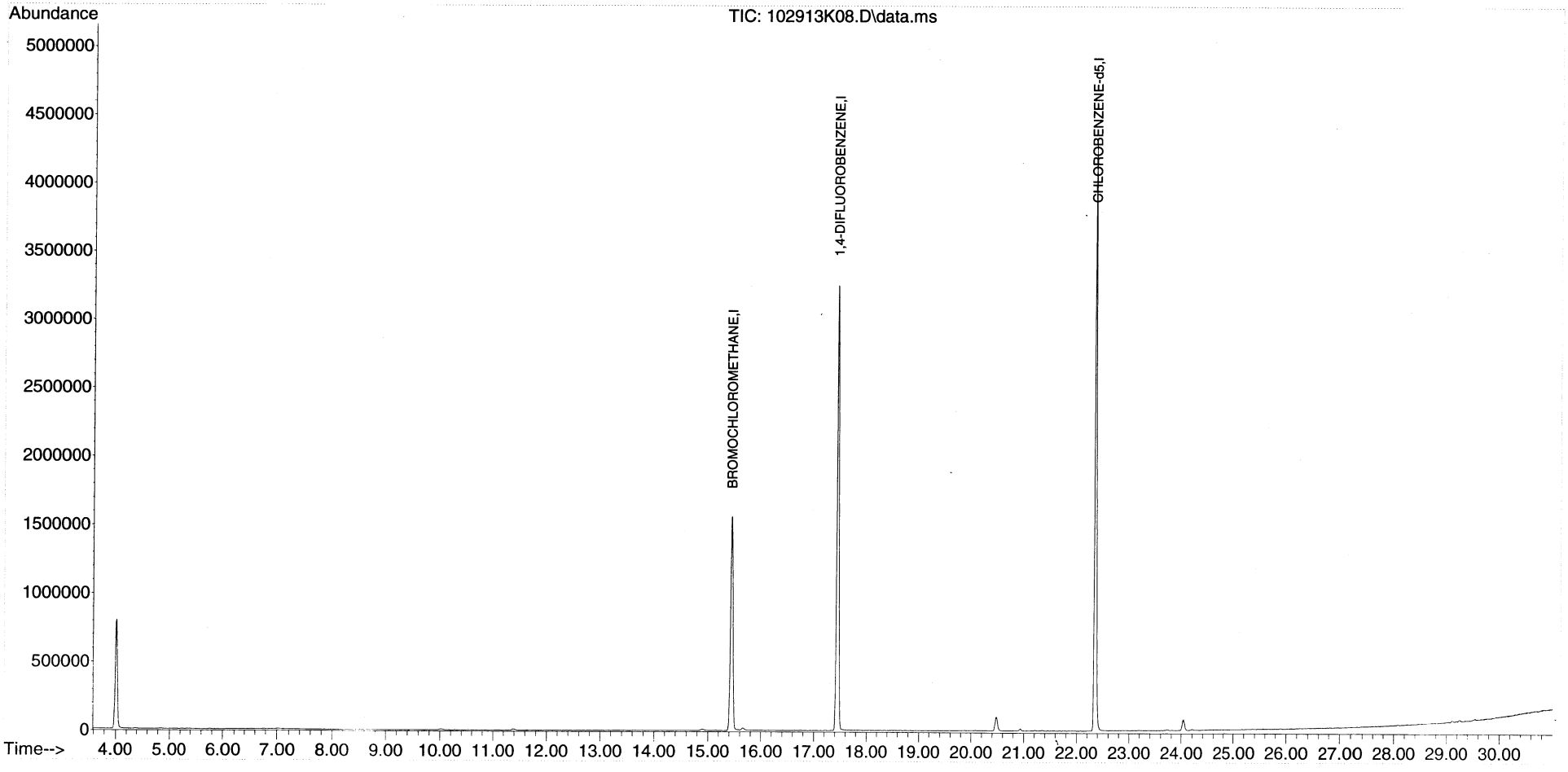
(#) = qualifier out of range (m) = manual integration (+) = signals summed

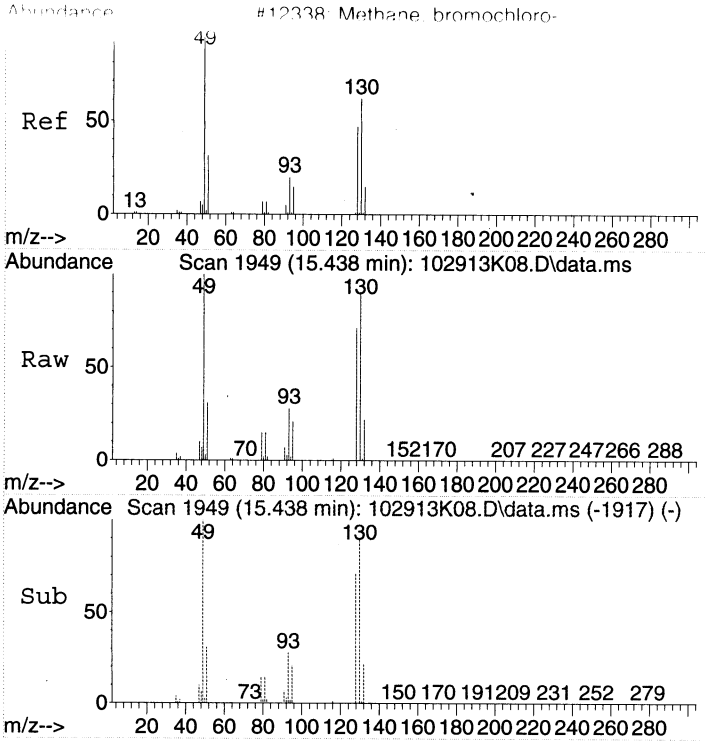
.titation Report (Not Reviewed)

Data Path : C:\msdchem\1\ 013\102913KA\
Data File : 102913K08.D
Acq On : 29 Oct 2013
Instrument: HP5973K
Operator : EM
Sample : B13J115-BLK1
Misc : BLANK CAN 19
ALS Vial : 35
Multiplier: 1

Quant Time: Oct 30 15:04 13
Quant Title : TO15
QLast Update : Wed Oct 3 4:00 2013
Response via : Initial Ca tion

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem THODS\2013\102513TO15KAA.M

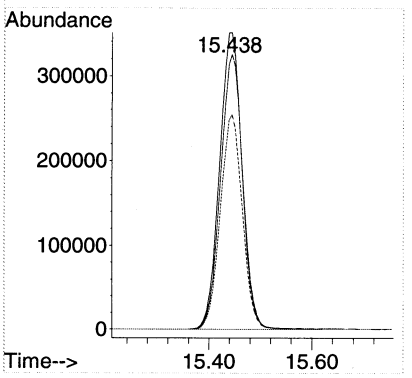


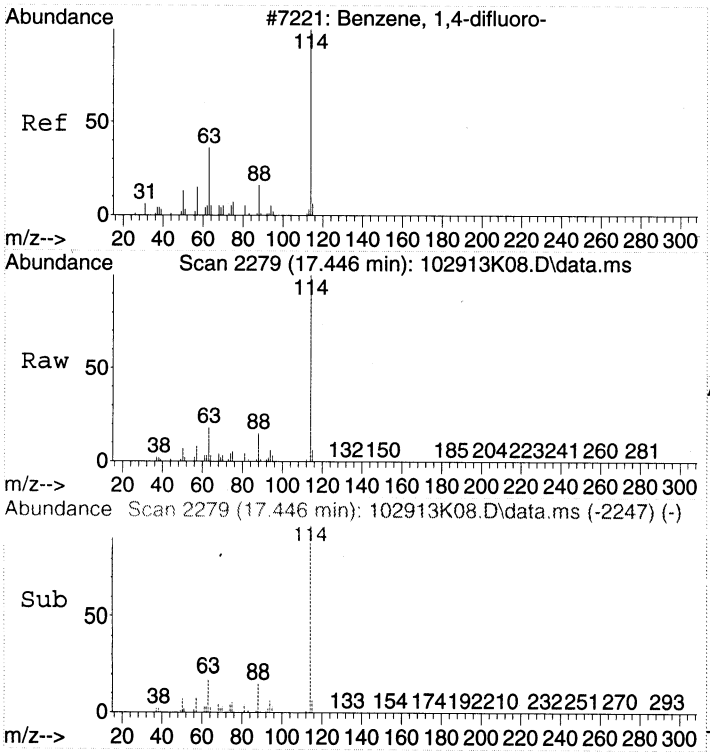


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. -0.006 min
Lab File: 102913K08.D
Acq: 29 Oct 2013 16:59

Tgt Ion: 49 Resp: 1064826

Ion	Ratio	Lower	Upper
49	100		
130	92.4	75.4	115.4
128	71.6	53.5	93.5

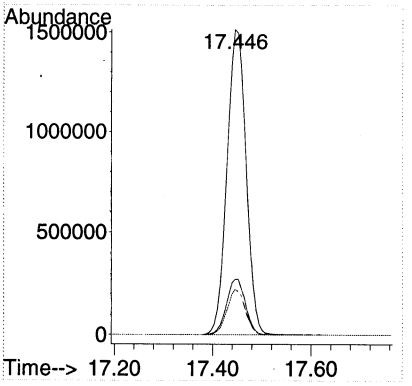


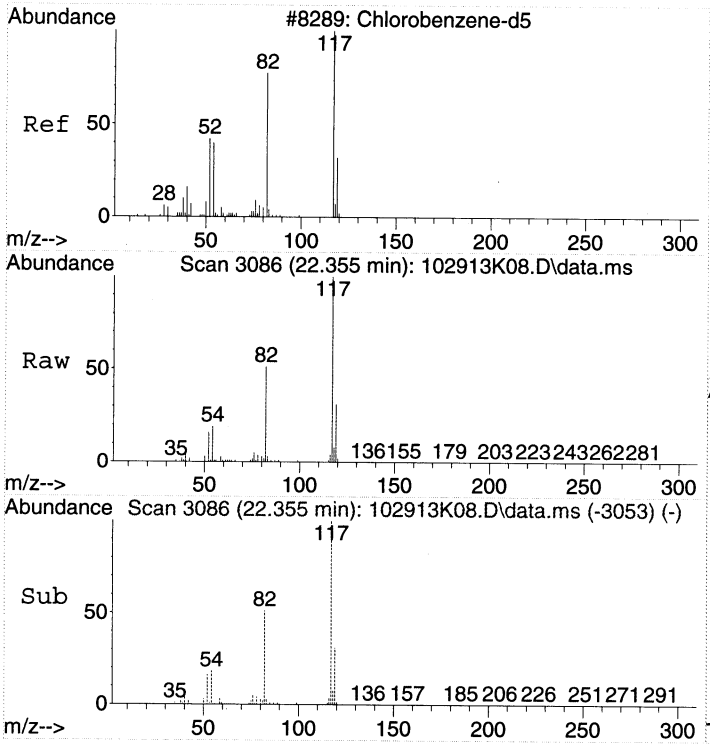


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.006 min
Lab File: 102913K08.D
Acq: 29 Oct 2013 16:59

Tgt Ion:114 Resp: 4059467

Ion	Ratio	Lower	Upper
114	100		
63	18.1	0.0	37.7
88	14.3	0.0	34.3

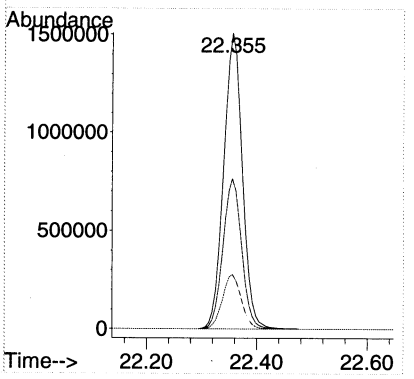




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 102913K08.D
Acq: 29 Oct 2013 16:59

Tgt Ion:117 Resp: 3557218

Ion	Ratio	Lower	Upper
117	100		
82	50.8	30.6	70.6
54	18.7	0.0	38.4



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K08.D
Acq On : 29 Oct 2013 16:59
Operator : EM
Sample : B13J115-BLK1
Misc : BLANK CAN 1988
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.01
Stop Thrs : 0.1

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Title : TO15

Signal : TIC: 102913K08.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.007	59	70	82	rBV	795354	2169966	21.25%	8.216%
2	15.444	1935	1950	1967	rBV	1559869	4752682	46.55%	17.996%
3	17.446	2266	2279	2294	rBV	3247729	8732902	85.53%	33.067%
4	20.482	2768	2778	2791	rBV2	97642	318279	3.12%	1.205%
5	22.355	3075	3086	3110	rBV	4284053	10210096	100.00%	38.660%
6	24.040	3354	3363	3378	rVB2	77439	226114	2.21%	0.856%

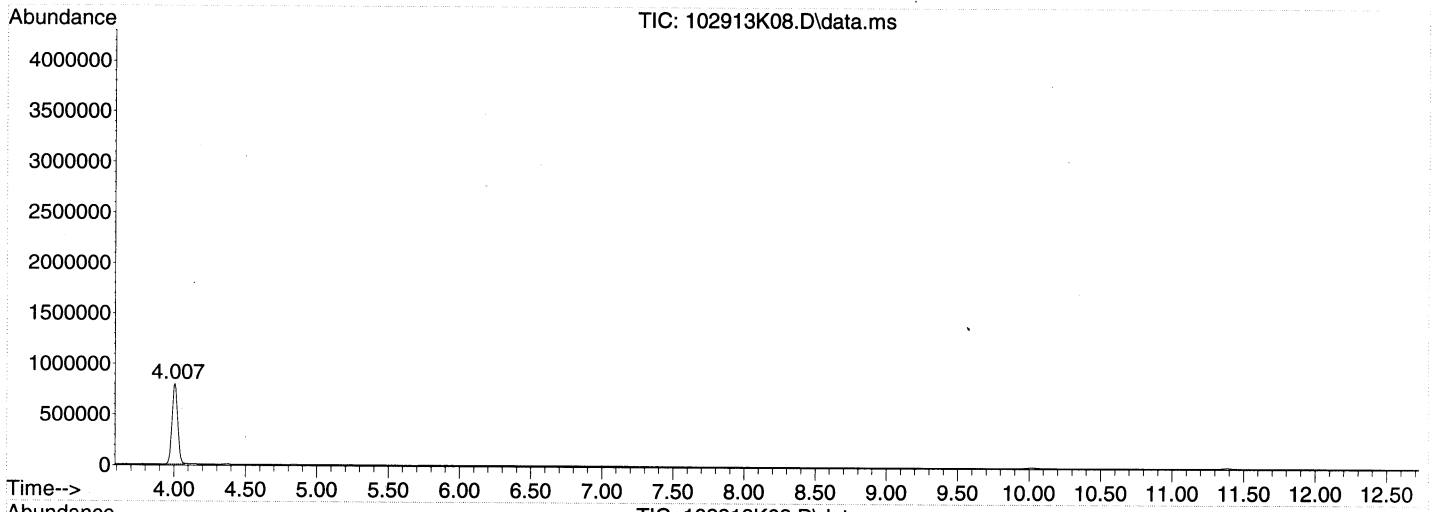
Sum of corrected areas: 26410039

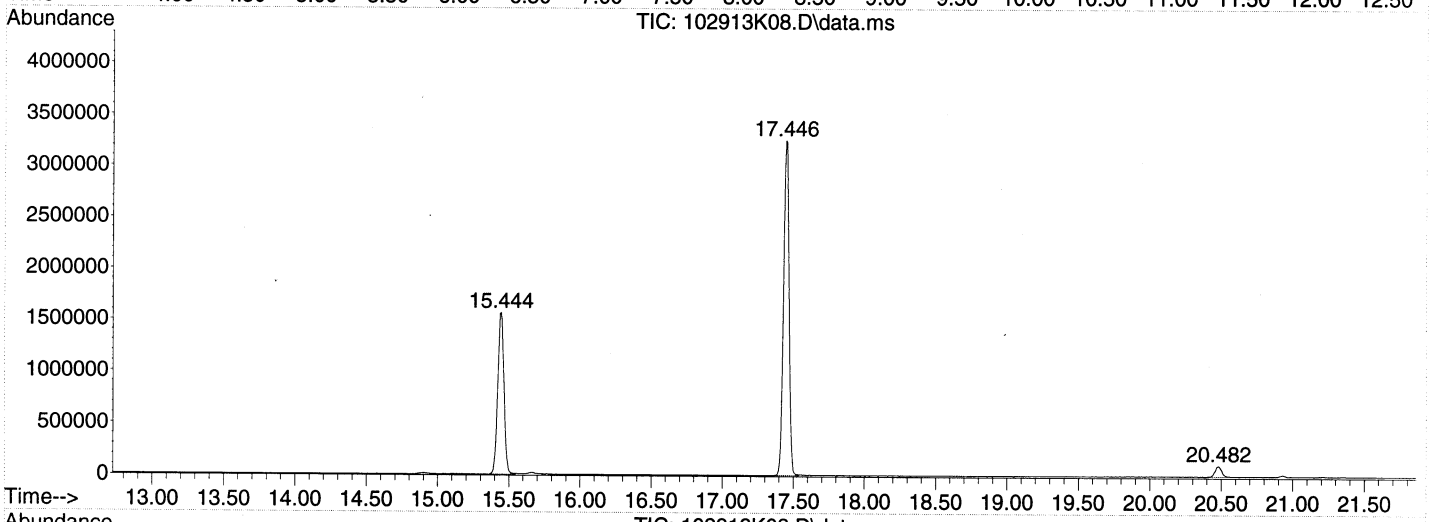
LSC Report - Integrated Chromatogram

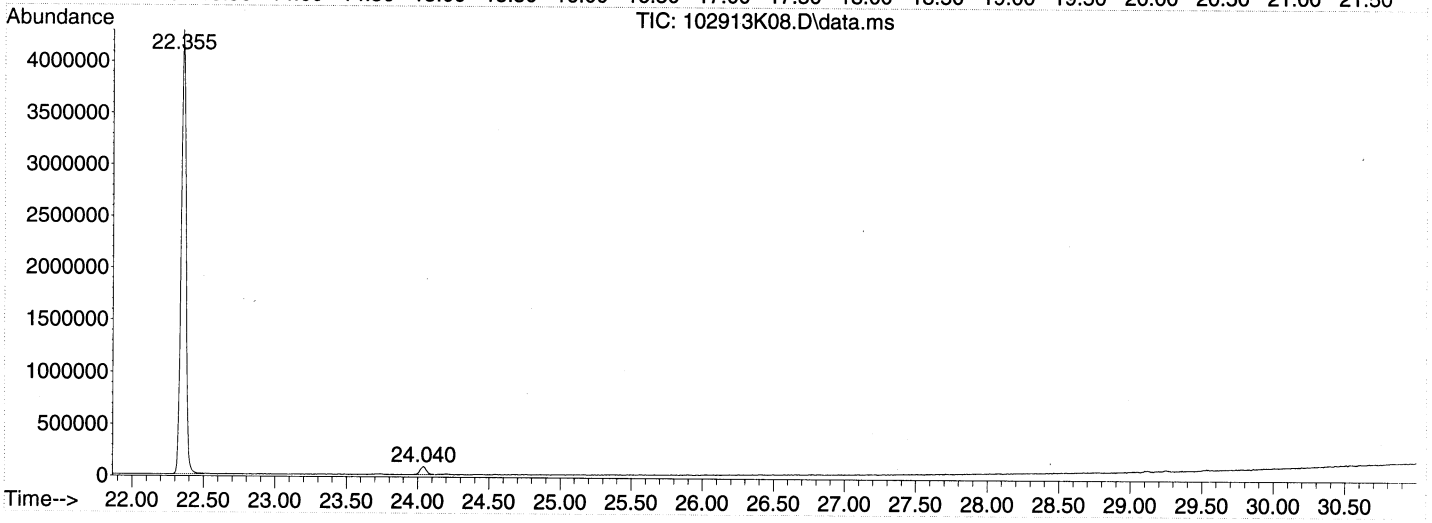
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K08.D
Acq On : 29 Oct 2013 16:59
Operator : EM
Sample : B13J115-BLK1
Misc : BLANK CAN 1988
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K08.D
Acq On : 29 Oct 2013 16:59
Operator : EM
Sample : B13J115-BLK1
Misc : BLANK CAN 1988
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K08.D
Acq On : 29 Oct 2013 16:59
Operator : EM
Sample : B13J115-BLK1
Misc : BLANK CAN 1988
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K18.D
Acq On : 30 Oct 2013 1:14
Instrument: HP5973K
Operator : EM
Sample : BLANK CAN 1986
Misc : BLANK CAN 1986
ALS Vial : 12
Multiplier: 1

Quant Time: Oct 30 15:05:41 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1146247	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4326614	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.361	117	3844525	22.00	ppbv	0.00

Target Compounds Qvalue

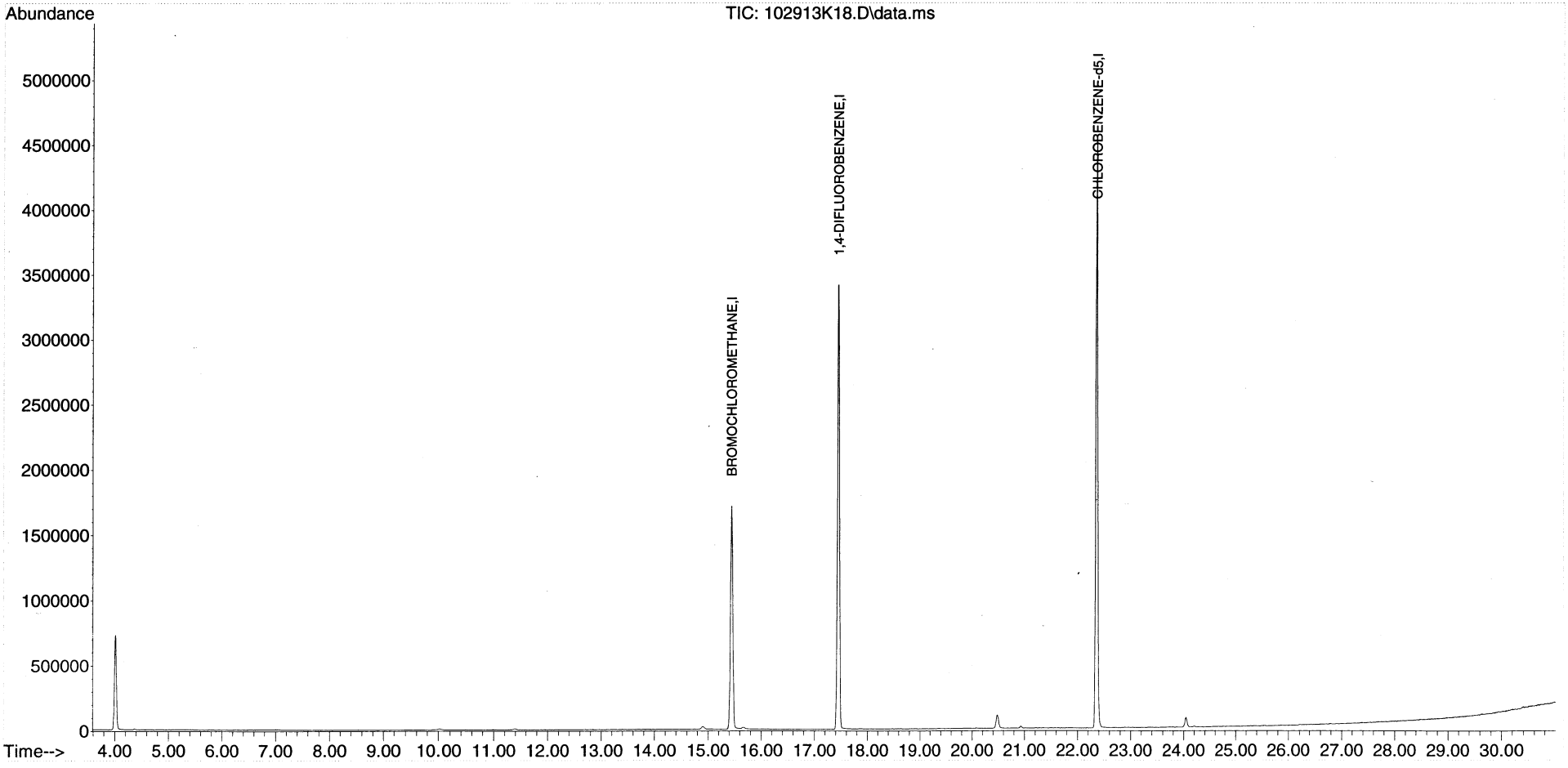
(#) = qualifier out of range (m) = manual integration (+) = signals summed

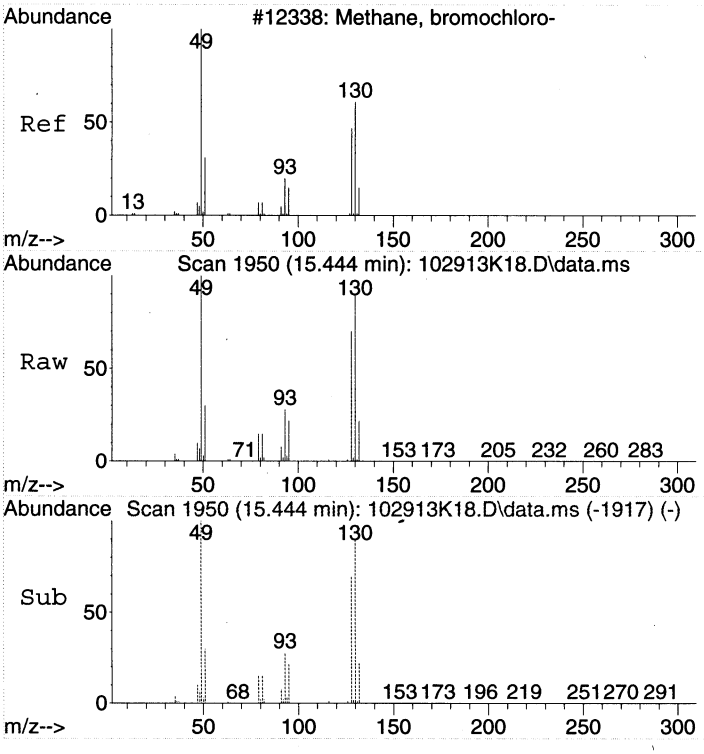
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K18.D
Acq On : 30 Oct 2013 1:14
Instrument: HP5973K
Operator : EM
Sample : BLANK CAN 1986
Misc : BLANK CAN 1986
ALS Vial : 12
Multiplier: 1

Quant Time: Oct 30 15:05:41 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

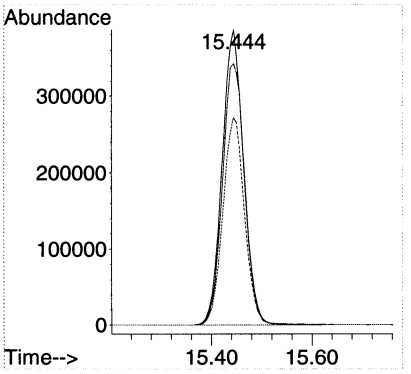


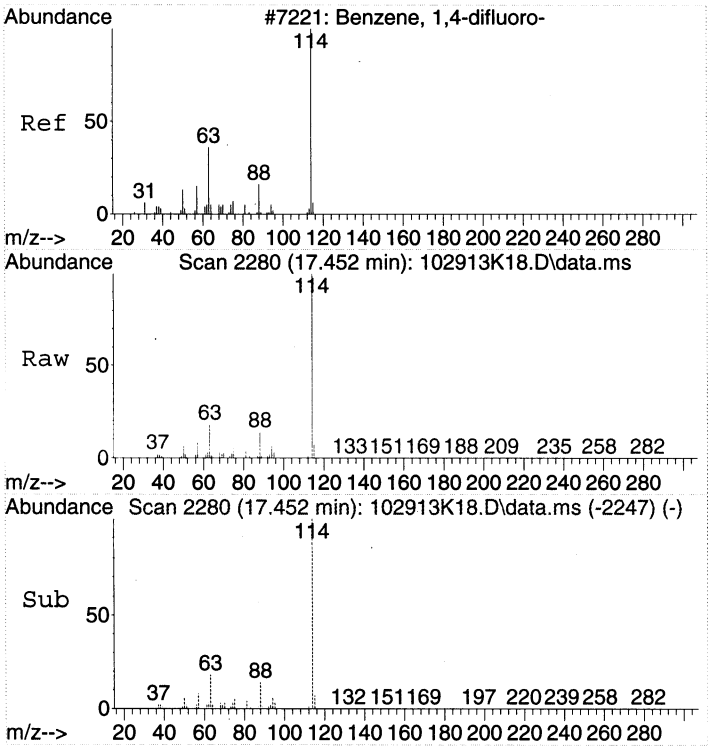


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.444 min Scan# 1950
Delta R.T. 0.000 min
Lab File: 102913K18.D
Acq: 30 Oct 2013 1:14

Tgt Ion: 49 Resp: 1146247

Ion	Ratio	Lower	Upper
49	100		
130	92.8	75.4	115.4
128	71.3	53.5	93.5

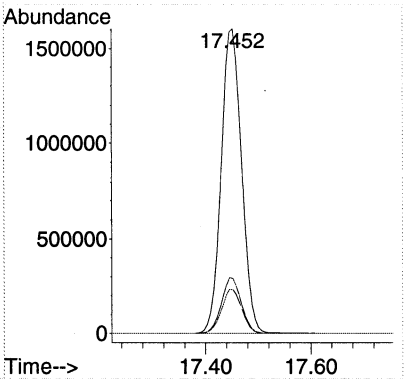


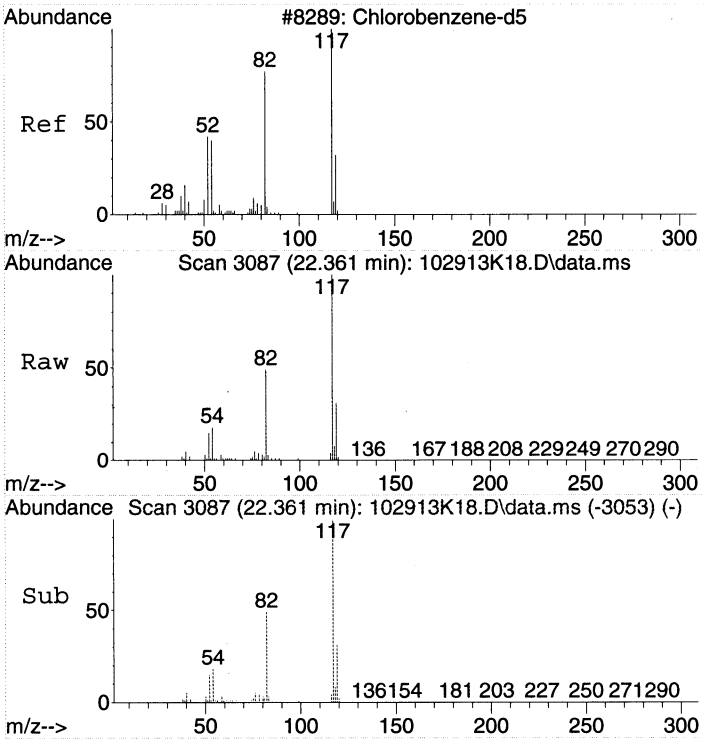


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.452 min Scan# 2280
Delta R.T. -0.000 min
Lab File: 102913K18.D
Acq: 30 Oct 2013 1:14

Tgt Ion:114 Resp: 4326614

Ion	Ratio	Lower	Upper
114	100		
63	18.0	0.0	37.7
88	14.5	0.0	34.3

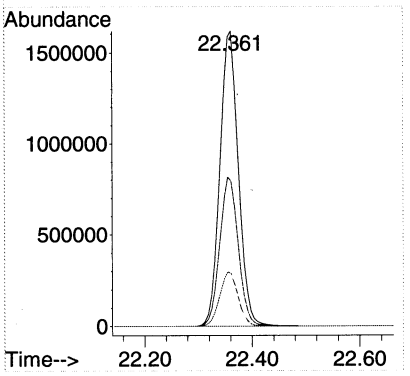




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.361 min Scan# 3087
Delta R.T. 0.006 min
Lab File: 102913K18.D
Acq: 30 Oct 2013 1:14

Tgt Ion:117 Resp: 3844525

Ion	Ratio	Lower	Upper
117	100		
82	50.8	30.6	70.6
54	18.5	0.0	38.4



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K18.D
Acq On : 30 Oct 2013 1:14
Operator : EM
Sample : BLANK CAN 1986
Misc : BLANK CAN 1986
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 3 % of largest Peak
Start Thrs: 0.01 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Title : TO15

Signal : TIC: 102913K18.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.007	59	70	84	rBV	723822	1957084	17.81%	7.031%
2	15.444	1936	1950	1966	rBV	1711951	5087940	46.30%	18.278%
3	17.446	2265	2279	2294	rBV	3411929	9266208	84.32%	33.289%
4	20.482	2768	2778	2791	rVB	99299	325212	2.96%	1.168%
5	22.355	3074	3086	3110	rBV	4514794	10989220	100.00%	39.479%
6	24.040	3354	3363	3374	rVB	73618	210174	1.91%	0.755%

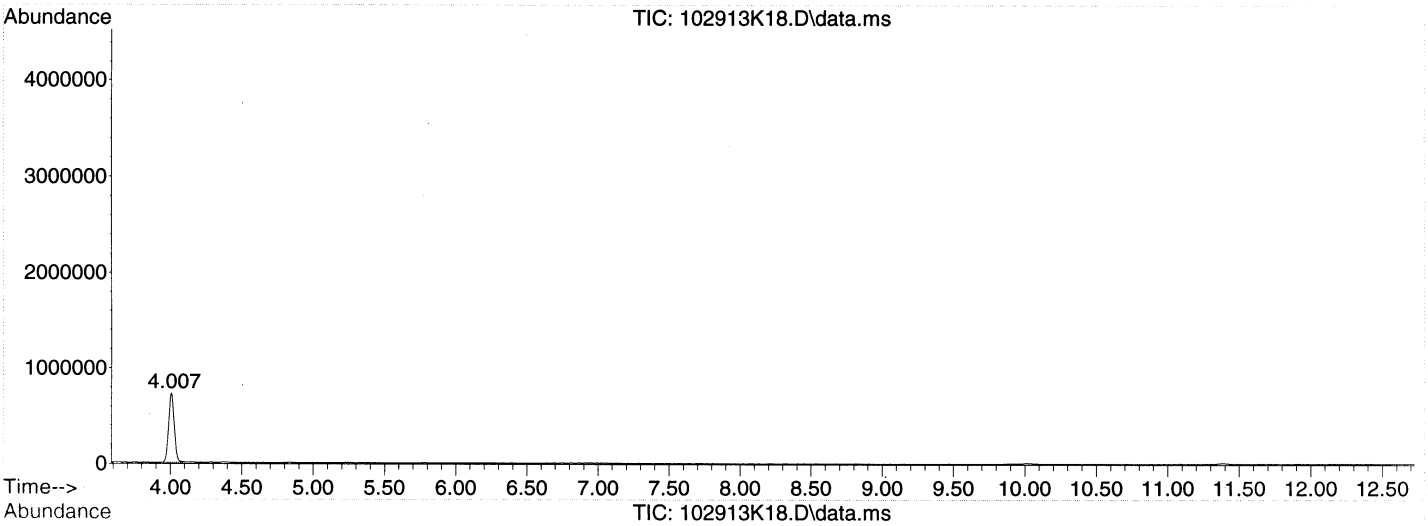
Sum of corrected areas: 27835838

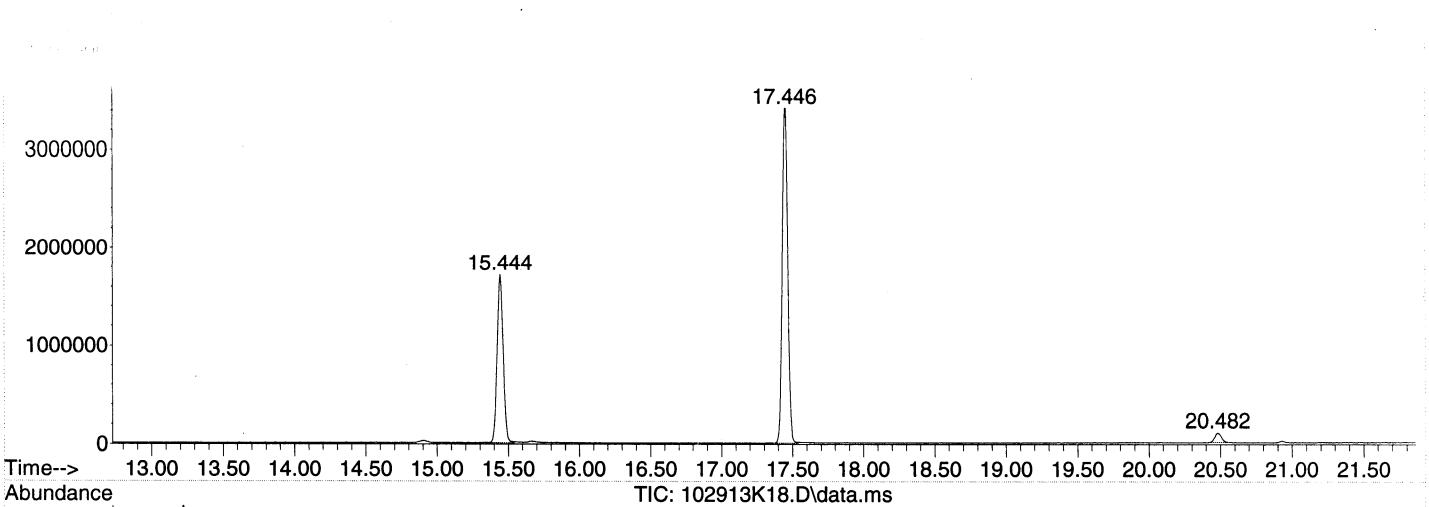
LSC Report - Integrated Chromatogram

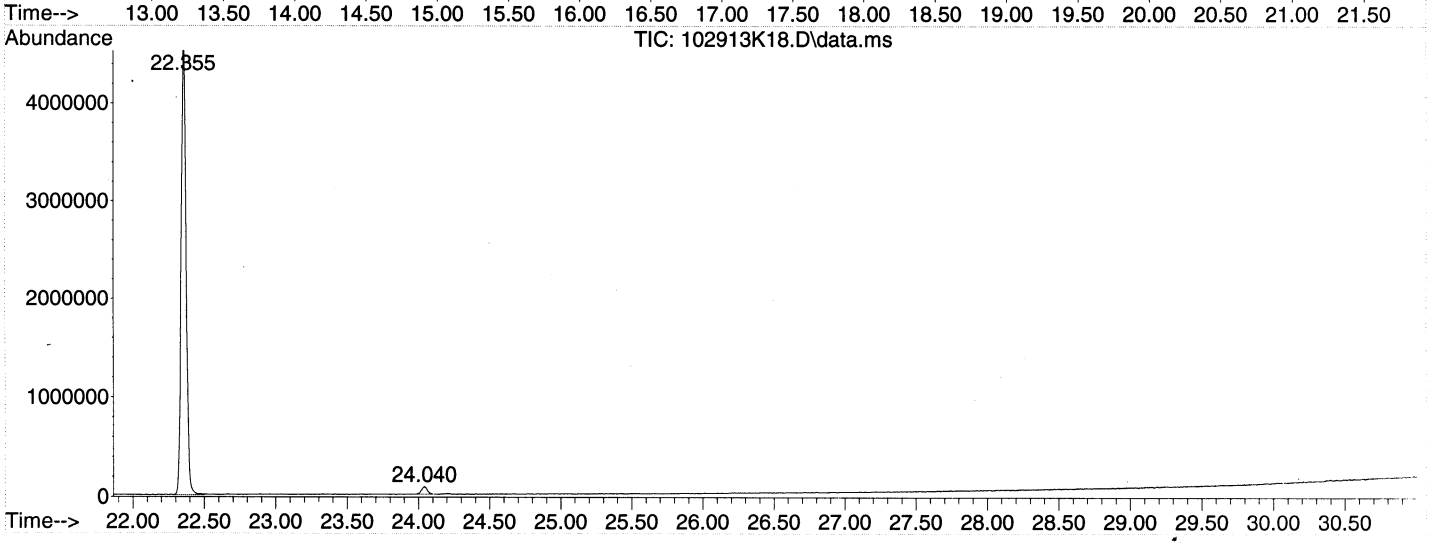
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K18.D
Acq On : 30 Oct 2013 1:14
Operator : EM
Sample : BLANK CAN 1986
Misc : BLANK CAN 1986
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K18.D
Acq On : 30 Oct 2013 1:14
Operator : EM
Sample : BLANK CAN 1986
Misc : BLANK CAN 1986
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K18.D
Acq On : 30 Oct 2013 1:14
Operator : EM
Sample : BLANK CAN 1986
Misc : BLANK CAN 1986
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc

00475

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Instrument: HP5973K
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41
Multiplier: 1

Quant Time: Oct 30 15:05:46 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	1093107	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	3999499	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3573070	22.00	ppbv	0.00

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

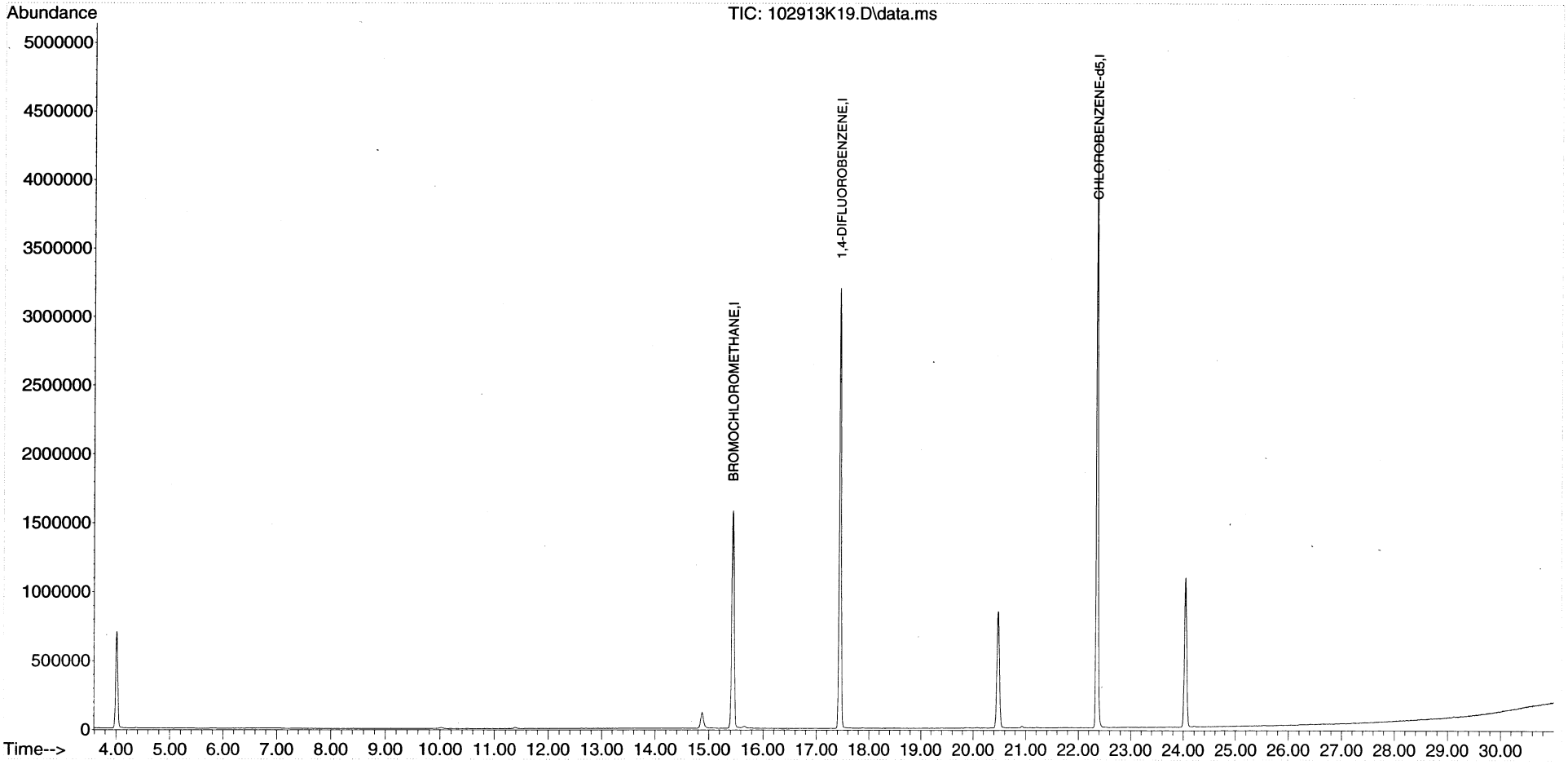
00476

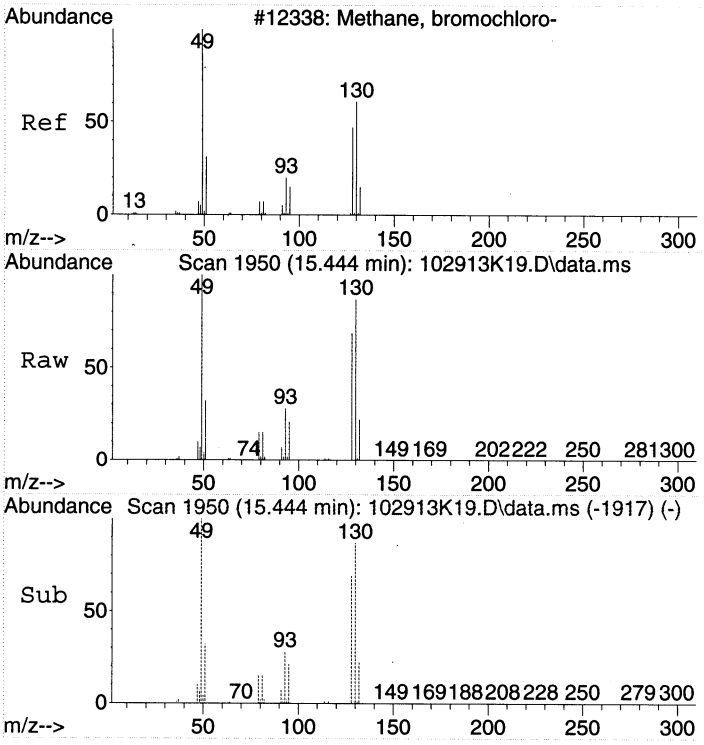
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Instrument: HP5973K
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41
Multiplier: 1

Quant Time: Oct 30 15:05:46 2013
Quant Title : TO15
QLast Update : Wed Oct 30 14:14:00 2013
Response via : Initial Calibration

DataAcq Meth:102913KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M

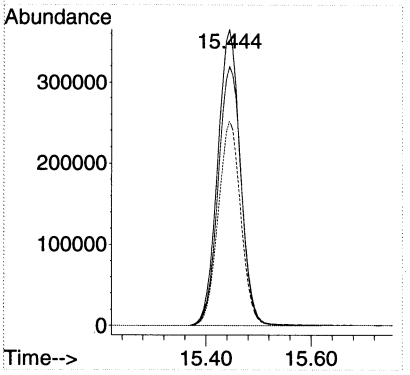


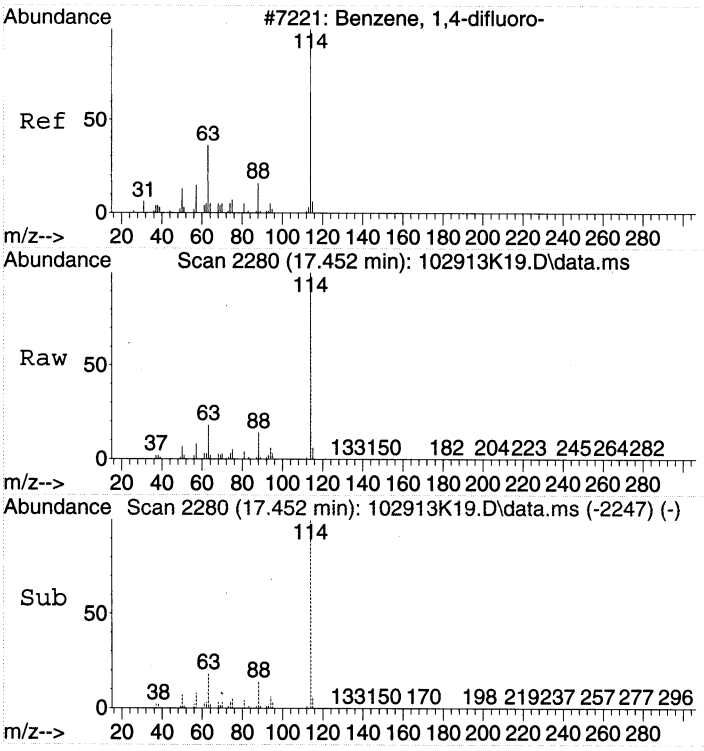


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.444 min Scan# 1950
Delta R.T. 0.000 min
Lab File: 102913K19.D
Acq: 30 Oct 2013 2:04

Tgt Ion: 49 Resp: 1093107

Ion	Ratio	Lower	Upper
49	100		
130	90.0	75.4	115.4
128	69.0	53.5	93.5

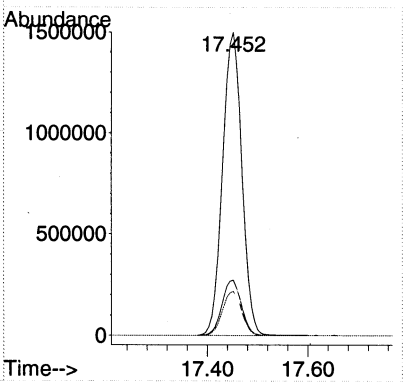


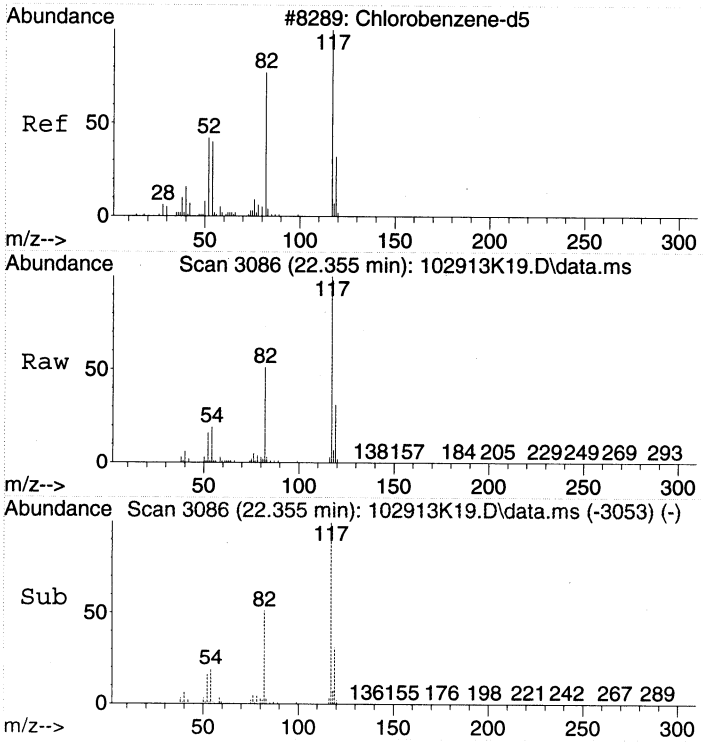


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.452 min Scan# 2280
Delta R.T. -0.000 min
Lab File: 102913K19.D
Acq: 30 Oct 2013 2:04

Tgt Ion:114 Resp: 3999499

Ion	Ratio	Lower	Upper
114	100		
63	18.3	0.0	37.7
88	14.5	0.0	34.3

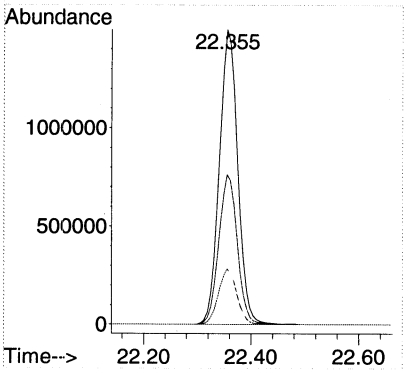




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 102913K19.D
Acq: 30 Oct 2013 2:04

Tgt Ion:117 Resp: 3573070

Ion	Ratio	Lower	Upper
117	100		
82	51.3	30.6	70.6
54	19.0	0.0	38.4



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.01
Stop Thrs : 0.1

Filtering: 5
Min Area: 3 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 1 prefer < Baseline drop else tangent >
Peak separation: 10

Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Title : TO15

Signal : TIC: 102913K19.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.007	59	70	85	rBV	699861	1896960	18.38%	5.940%
2	14.879	1842	1857	1874	rBV	118034	463803	4.49%	1.452%
3	15.444	1936	1950	1975	rBV	1578430	4793965	46.46%	15.012%
4	17.452	2267	2280	2301	rBV	3198910	8643429	83.76%	27.065%
5	20.475	2765	2777	2796	rBV	845366	2674076	25.91%	8.373%
6	22.355	3075	3086	3104	rBV	4269305	10318741	100.00%	32.311%
7	24.040	3351	3363	3378	rBV	1079054	3144283	30.47%	9.846%

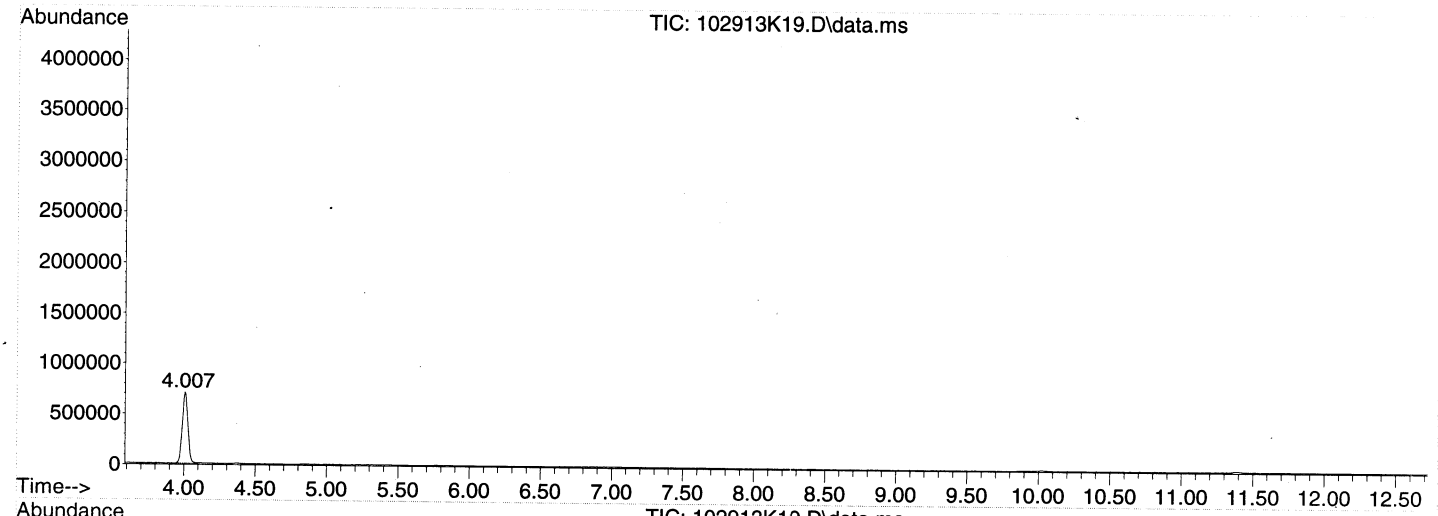
Sum of corrected areas: 31935257

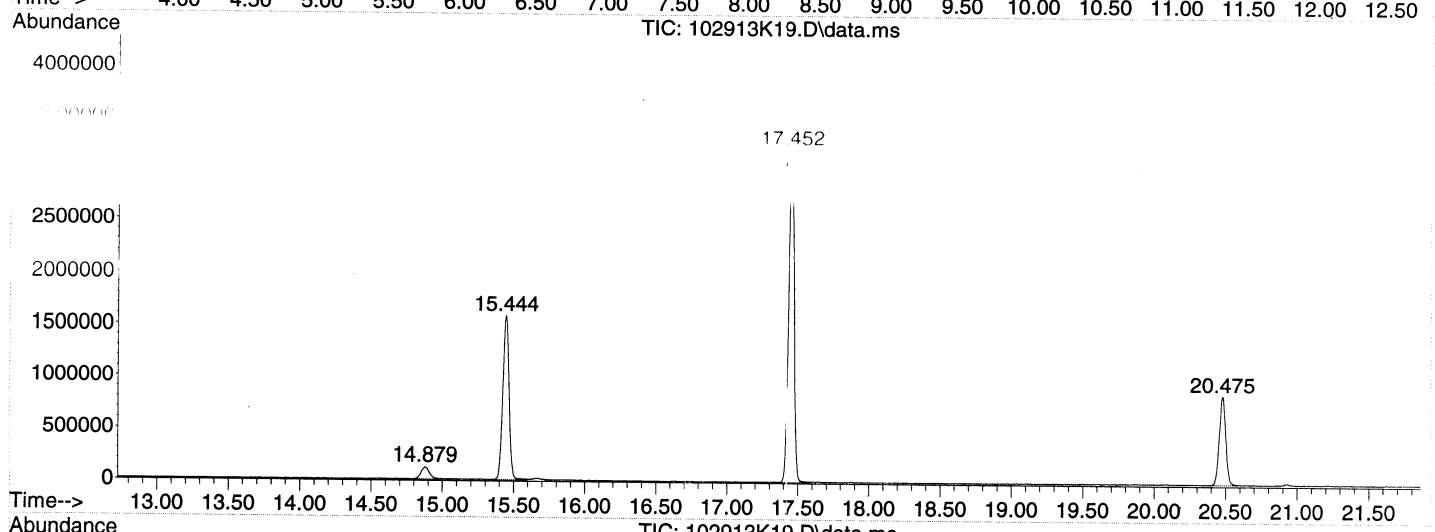
LSC Report - Integrated Chromatogram

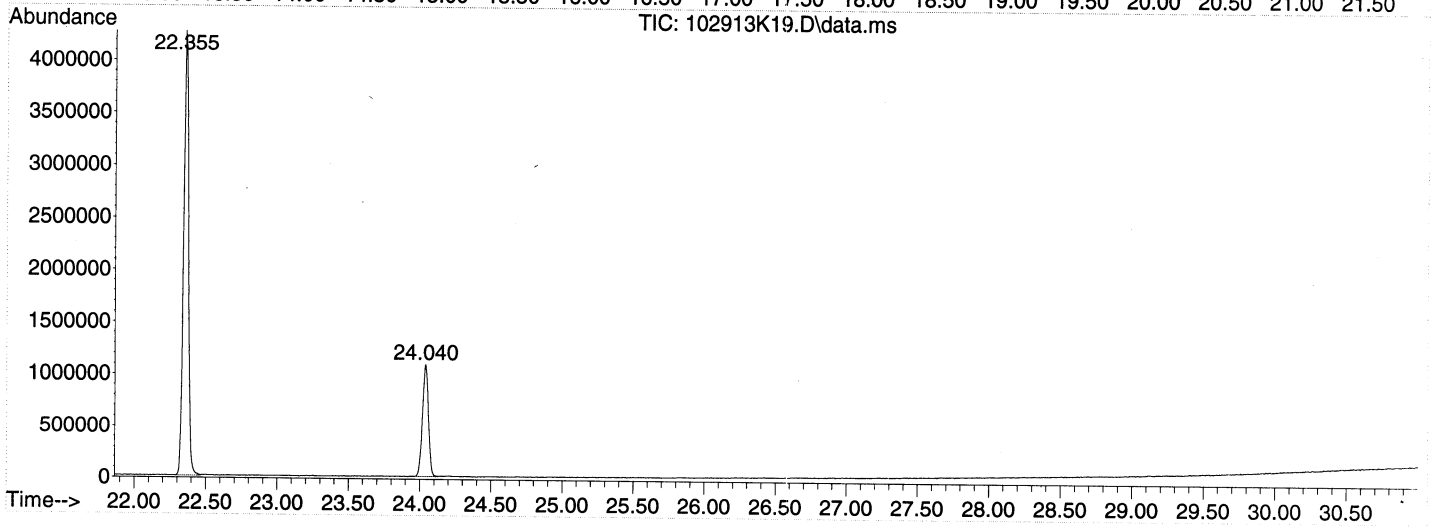
Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

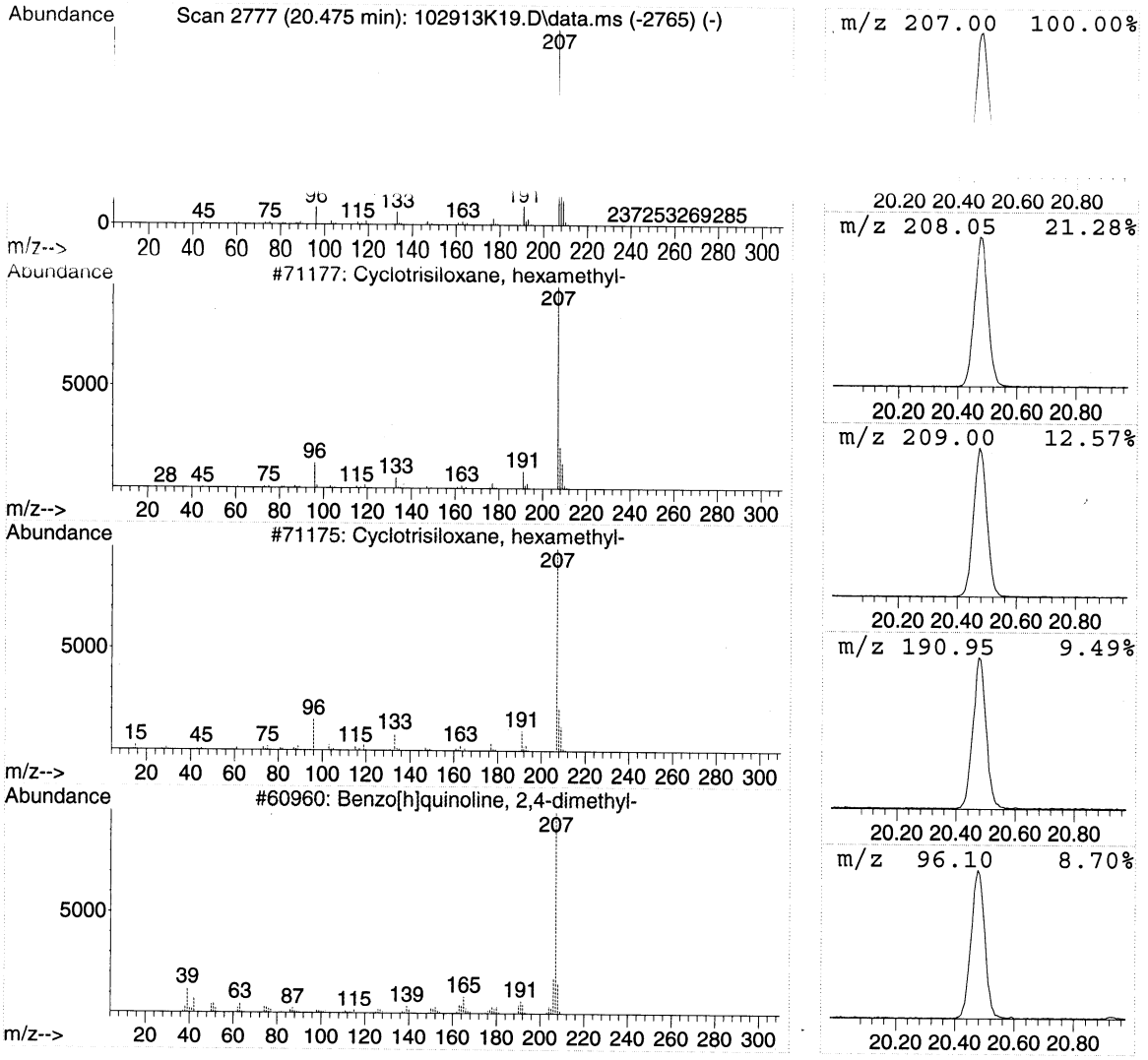
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 2 column bleed Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.476	5.70 ppbv	2674080	CHLOROBENZENE-d5	22.355

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
3	Benzo[h]quinoline, 2,4-dimethyl-	207	C15H13N	000605-67-4	39
4	1H-Indole, 1-methyl-2-phenyl-	207	C15H13N	003558-24-5	39
5	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	38



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

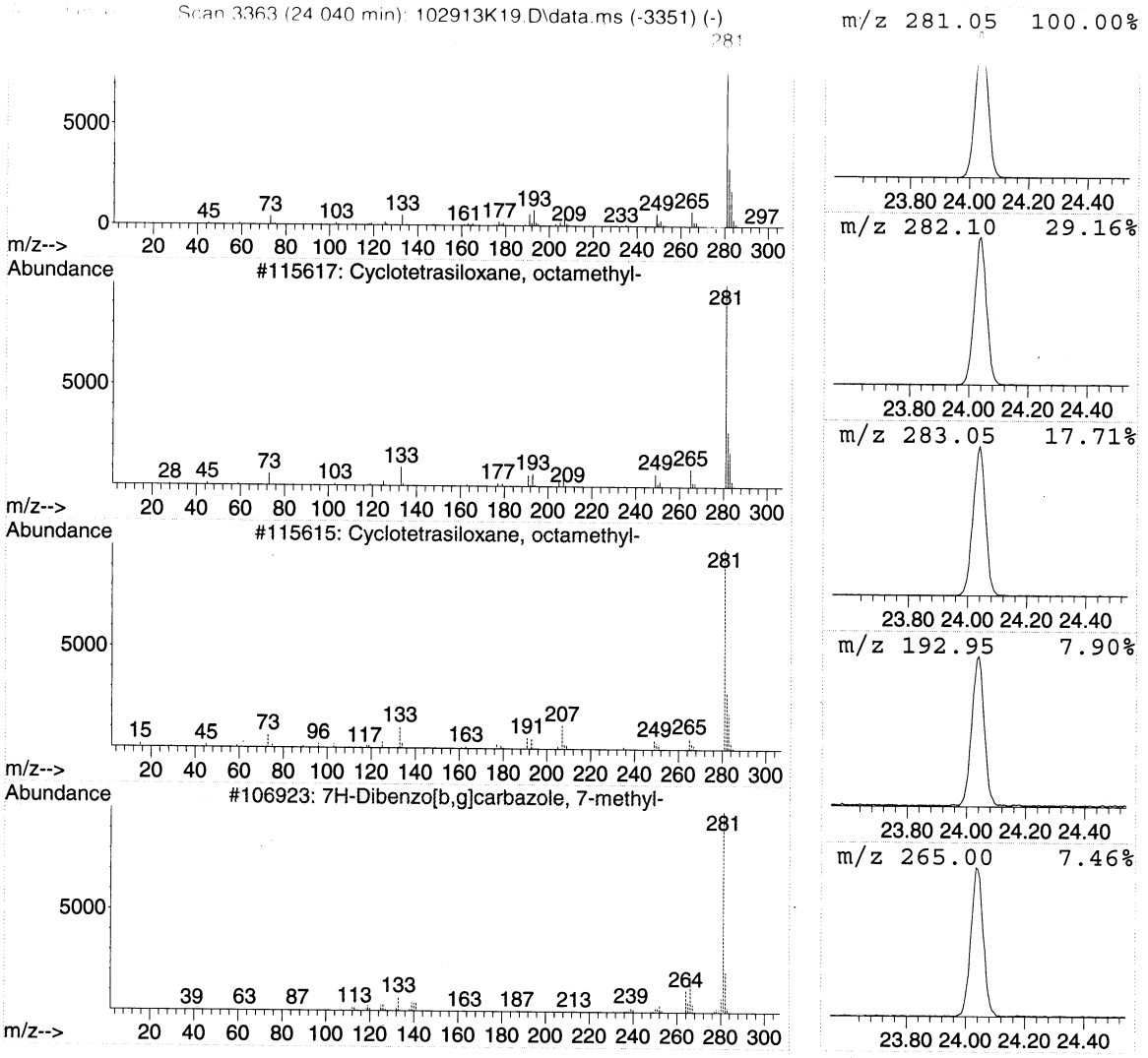
****

Peak Number 3 column bleed Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.041	6.70 ppbv	3144280	CHLOROBENZENE-d5	22.355

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	64
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	59
4	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	50
5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49

Scan 3363 (24.040 min): 102913K19.D\data.ms (-3351) (-)



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2013\102913KA\
Data File : 102913K19.D
Acq On : 30 Oct 2013 2:04
Operator : EM
Sample : BLANK CAN 1994
Misc : BLANK CAN 1994
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\102513TO15KAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
column bleed	20.476	5.7	ppbv	2674080	3	22.355	10318700	22.0
column bleed	24.041	6.7	ppbv	3144280	3	22.355	10318700	22.0

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO15	**Analyst Initial**	EM	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	NA NA
Instrument ID	HP5973M	**Date Analyzed**	11/7/13	**Date**	11/16/14	**Chemstation Last Update**	10/8/13 16:43:21
Cases				**SDGs**	BLANK CERTIFICATION		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
	✓	✓	Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
	✓	✓	Method / Extraction / Storage Blanks (frequency and contamination levels)
✓			Surrogate Recoveries
	✓	✓	IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
✓			Samples (within calibration range, results calculated correctly)
			Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
BLKS	110713M05	>1/2 QL	<1/2 QL					Rerun blanks - contaminated
	M06							w/ CH_2Cl_2 and Acetone
	M10							Bake and rerun
	M11							
	M12							
	M23							
	M24							

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2013\110713MAAA .SEQ
Date: 11-08-2013
Time: 10:03:31
Int. Std Volume: 50 cc

Sample Name	Inlet	Auto #	Samp Pos	Cal Vol.	Std Vol.	Method	Time
PRIME	3	2	100		40	C:\Smart\TO15.CTD	12:00
BFB 1305020	3	2	100		40	C:\Smart\TO15.CTD	12:00
10ppbv 1341042	3	2	100		40	C:\Smart\TO15.CTD	12:00
10ppbv 1341042	3	2	100		0	C:\Smart\TO15.CTD	12:00
1.0ppbv 1341043	3	2	10		0	C:\Smart\TO15.CTD	12:00
Can 652	3	4	200		0	C:\Smart\TO15.CTD	12:00
Can 658	3	5	200		0	C:\Smart\TO15.CTD	12:00
Can 670	3	6	200		0	C:\Smart\TO15.CTD	12:00
Can 860	3	7	200		0	C:\Smart\TO15.CTD	12:00
Can 862	3	8	200		0	C:\Smart\TO15.CTD	12:00
Can 881	3	9	200		0	C:\Smart\TO15.CTD	12:00
Can 898	3	10	200		0	C:\Smart\TO15.CTD	12:00
Can 899	3	11	200		0	C:\Smart\TO15.CTD	12:00
Can 1087	3	12	200		0	C:\Smart\TO15.CTD	12:00
Can 1091	4	1	200		0	C:\Smart\TO15.CTD	12:00
Can 1102	4	2	200		0	C:\Smart\TO15.CTD	12:00
Can 1110	4	3	200		0	C:\Smart\TO15.CTD	12:00
Can 1114	4	4	200		0	C:\Smart\TO15.CTD	12:00
Can 1980	4	5	200		0	C:\Smart\TO15.CTD	12:00
Can 1983	4	6	200		0	C:\Smart\TO15.CTD	12:00
Can 1985	4	7	200		0	C:\Smart\TO15.CTD	12:00
Can 1993	4	8	200		0	C:\Smart\TO15.CTD	12:00
Can 1995	4	9	200		0	C:\Smart\TO15.CTD	12:00
Can 1998	3	3	200		0	C:\Smart\TO15.CTD	12:00
Can 2002	3	4	200		0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\MSDChem\1\2013\Data\110713TO15

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	110713M01.D	1.	S13K0XX-TUN1	BFB 1305020/IS 1311120/1345091	7 Nov 2013 12:20
2	32	110713M02.D	1.	S13K0XX-CCV1	BFB 1305020/IS 1311120/1345091	7 Nov 2013 13:17
3	32	110713M03.D	1.	B13K0XX-BS1	10ppbv 1345091	7 Nov 2013 14:12
4	32	110713M04.D	1.	S13K0XX-CRL1	1.0ppbv 1345091	7 Nov 2013 15:28
5	34	110713M05.D	1.	CAN 652	CAN 652	7 Nov 2013 16:17
6	35	110713M06.D	1.	CAN 658	CAN 658	7 Nov 2013 17:06
7	36	110713M07.D	1.	CAN 670	CAN 670	7 Nov 2013 17:54
8	37	110713M08.D	1.	CAN 860	CAN 860	7 Nov 2013 18:43
9	38	110713M09.D	1.	CAN 862	CAN 862	7 Nov 2013 19:32
10	39	110713M10.D	1.	CAN 881	CAN 881	7 Nov 2013 20:21
11	10	110713M11.D	1.	CAN 898	CAN 898	7 Nov 2013 21:11
12	11	110713M12.D	1.	CAN 899	CAN 899	7 Nov 2013 22:00
13	12	110713M13.D	1.	CAN 1087	CAN 1087	7 Nov 2013 22:48
14	41	110713M14.D	1.	CAN 1091	CAN 1091	7 Nov 2013 23:37
15	42	110713M15.D	1.	CAN 1102	CAN 1102	8 Nov 2013 00:26
16	43	110713M16.D	1.	CAN 1110	CAN 1110	8 Nov 2013 01:16
17	44	110713M17.D	1.	CAN 1114	CAN 1114	8 Nov 2013 02:05
18	45	110713M18.D	1.	CAN 1980	CAN 1980	8 Nov 2013 02:54
19	46	110713M19.D	1.	CAN 1983	CAN 1983	8 Nov 2013 03:43
20	47	110713M20.D	1.	CAN 1985	CAN 1985	8 Nov 2013 04:32
21	48	110713M21.D	1.	CAN 1993	CAN 1993	8 Nov 2013 05:21
22	49	110713M22.D	1.	CAN 1995	CAN 1995	8 Nov 2013 06:10
23	33	110713M23.D	1.	CAN 1998	CAN 1998	8 Nov 2013 07:00
24	34	110713M24.D	1.	CAN 2002	CAN 2002	8 Nov 2013 07:50
25	47	110713M25.D	1.	CAN TEST	TEST	8 Nov 2013 10:39
26	47	110713M26.D	1.	CAN TEST	TEST	8 Nov 2013 11:28

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\2013\DATA\110713TO15\110713M01.D
Tune Time : 7 Nov 2013 12:20 pm

Daily Calibration File : C:\MSDCHEM\1\2013\DATA\110713TO15\110713M02.D

File	Sample	Surrogate Recovery %	Internal Standard Responses			
			841817	3843060	3465610	
110713M02.D	S13K0XX-CCV1	841817	3843059	3465607		
110713M03.D	B13K0XX-BS1	843821	3753058	3230799		
110713M04.D	S13K0XX-CRL1	860945	3782645	3223008		
110713M05.D	CAN 652	831490	3601895	3057883	NU	
110713M06.D	CAN 658	810771	3532743	3034471	NU	
110713M07.D	CAN 670	816236	3545176	3039987		
110713M08.D	CAN 860	774551	3340898	2805052		
110713M09.D	CAN 862	807351	3451667	2912042		
110713M10.D	CAN 881	798720	3422112	2932172	NU	
110713M11.D	CAN 898	789591	3366007	2822791	NU	
110713M12.D	CAN 899	791961	3347489	2878097	NU	
110713M13.D	CAN 1087	771175	3259940	2737475		
110713M14.D	CAN 1091	773206	3301430	2833963		
110713M15.D	CAN 1102	816795	3511027	3023050		
110713M16.D	CAN 1110	799515	3413923	2898420		
110713M17.D	CAN 1114	806879	3442234	2934517		
110713M18.D	CAN 1980	807561	3435925	2937069		
110713M19.D	CAN 1983	832838	3566303	3086191		
110713M20.D	CAN 1985	844776	3611105	3135601		

110713M21.D					
	CAN 1993	841608	3568817	3044976	
110713M22.D					
	CAN 1995	844586	3578882	3038403	
110713M23.D					
	CAN 1998	860354	3673583	3163519	NU
110713M24.D					
	CAN 2002	860802	3630651	3079107	NU

(fails) - fails 24hr time check * - fails criteria

Created: Fri Nov 08 11:18:38 2013 Morpheus

Response Factor Report Morpheus

Method Path : C:\MSDCHEM\1\2013\METHOD\
Method File : 110713TMAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013
Response Via : Initial Calibration

Calibration Files
1 =091913M02.D 2 =091913M03.D 5 =091913M04.D
10 =091913M05.D 15 =091913M06.D 20 =091913M07.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.518	0.462	0.436	0.431	0.432	0.437	0.453	7.51
3)	T	Dichlorodifluorom	2.711	2.486	2.260	2.075	1.887	1.724	2.190	16.91
4)	T	1,2-Dichlorotetra	2.467	2.426	2.283	1.887	1.491	1.232	1.964	26.30
5)	T	Chloromethane	0.604	0.548	0.547	0.552	0.550	0.559	0.560	3.92
6)	T	Vinyl chloride	0.802	0.717	0.662	0.659	0.662	0.679	0.697	8.05
7)	T	1,3-Butadiene	0.613	0.516	0.489	0.485	0.486	0.494	0.514	9.73
8)	T	Bromomethane	0.868	0.769	0.706	0.696	0.695	0.698	0.739	9.40
9)	T	Chloroethane	0.454	0.400	0.364	0.355	0.344	0.348	0.378	11.26
10)	T	Bromoethene	0.974	0.873	0.792	0.789	0.789	0.797	0.836	8.99
11)	T	Trichlorofluorome	3.038	2.841	2.699	2.670	2.631	2.626	2.751	5.85
12)	T	1,1,2-Trichloro-1	2.295	2.118	2.003	2.002	1.997	2.026	2.074	5.66
13)	T	1,1-Dichloroethen	1.608	1.453	1.334	1.315	1.288	1.290	1.381	9.18
14)	T	Acetone	1.309	1.119	1.074	1.068	1.035	1.055	1.110	9.12
15)	T	Carbon disulfide	2.325	2.111	1.926	1.895	1.883	1.907	2.008	8.81
16)	T	2-Propanol	1.343	0.990	0.968	1.018	1.005	1.034	1.059	13.29
17)	T	Allyl chloride	1.005	0.885	0.810	0.801	0.794	0.791	0.848	9.99
18)	T	Dichloromethane	1.146	0.962	0.820	0.782	0.759	0.751	0.870	17.93
19)	T	tert-Butyl methyl	2.238	2.250	2.336	2.380	2.362	2.413	2.330	3.06
20)	T	trans-1,2-Dichlor	1.400	1.230	1.111	1.096	1.076	1.076	1.165	11.06
21)	T	Hexane	1.392	1.263	1.147	1.135	1.132	1.139	1.201	8.81
22)	T	1,1-Dichloroethan	1.881	1.683	1.536	1.498	1.481	1.487	1.594	9.99
23)	T	Vinyl acetate	1.779	1.633	1.565	1.575	1.568	1.581	1.617	5.15
24)	T	cis-1,2-Dichloroe	1.478	1.309	1.194	1.172	1.141	1.152	1.241	10.57
25)	T	2-Butanone (MEK)	1.160	1.058	1.289	1.310	1.296	1.310	1.237	8.47
26)	T	Ethyl acetate	1.370	1.570	1.462	1.483	1.444	1.506	1.472	4.52
27)	T	Tetrahydrofuran	0.697	0.644	0.701	0.717	0.692	0.719	0.695	3.92
28)	T	Chloroform	2.490	2.257	2.041	1.986	1.956	1.962	2.115	10.17
29)	T	Cyclohexane	1.358	1.231	1.158	1.148	1.151	1.155	1.200	6.96
30)	T	1,1,1-Trichloroet	2.794	2.569	2.371	2.346	2.314	2.318	2.452	7.86
31)	T	Carbon tetrachlor	3.124	2.888	2.683	2.669	2.643	2.649	2.776	6.98
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.706	0.639	0.587	0.573	0.558	0.557	0.603	9.76
34)	T	2,2,4-Trimethylpe	0.892	0.820	0.764	0.750	0.739	0.733	0.783	7.88
35)	T	1,2-Dichloroethan	0.346	0.316	0.288	0.283	0.272	0.265	0.295	10.32
36)	T	Heptane	0.306	0.281	0.261	0.256	0.251	0.247	0.267	8.38
37)	T	Trichloroethene	0.401	0.362	0.334	0.326	0.323	0.324	0.345	8.99
38)	T	1,2-Dichloropropa	0.216	0.203	0.186	0.180	0.177	0.177	0.190	8.51
39)	T	1,4-Dioxane	0.131	0.102	0.101	0.104	0.102	0.105	0.107	10.81
40)	T	Bromodichlorometh	0.505	0.466	0.437	0.433	0.423	0.420	0.447	7.33
41)	T	cis-1,3-Dichlorop	0.381	0.348	0.333	0.329	0.324	0.323	0.340	6.54
42)	T	4-Methyl-2-pentan	0.298	0.261	0.304	0.309	0.306	0.310	0.298	6.18
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	0.984	0.959	0.897	0.895	0.884	0.887	0.918	4.65
45)	T	trans-1,3-Dichlor	0.431	0.423	0.396	0.396	0.388	0.390	0.404	4.55
46)	T	1,1,2-Trichloroet	0.321	0.318	0.297	0.292	0.289	0.289	0.301	4.85
47)	T	Tetrachloroethene	0.632	0.627	0.584	0.585	0.579	0.586	0.599	3.95
48)	T	2-Hexanone	0.360	0.303	0.330	0.344	0.340	0.346	0.337	5.74
49)	T	Chlorodibromometh	0.638	0.644	0.620	0.624	0.617	0.624	0.628	1.72
50)	T	1,2-Dibromoethane	0.519	0.508	0.475	0.476	0.469	0.473	0.487	4.39
51)	T	Chlorobenzene	0.822	0.832	0.808	0.804	0.795	0.800	0.810	1.77
52)	T	Ethylbenzene	1.168	1.242	1.236	1.246	1.232	1.235	1.227	2.36
53)	T	m&p-Xylene	0.879	0.961	0.983	1.003	0.983	0.977	0.964	4.56
54)	T	o-Xylene	0.849	0.945	0.990	1.024	1.015	1.021	0.974	6.99
55)	T	Styrene	0.652	0.754	0.804	0.846	0.846	0.855	0.793	9.95
56)	T	Bromoform	0.604	0.663	0.710	0.757	0.759	0.768	0.710	9.24

00487

Response Factor Report Morpheus

Method Path : C:\MSDCHEM\1\2013\METHOD\
Method File : 110713TMAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013
Response Via : Initial Calibration

Calibration Files
1 =091913M02.D 2 =091913M03.D 5 =091913M04.D
10 =091913M05.D 15 =091913M06.D 20 =091913M07.D

		Compound	1	2	5	10	15	20	Avg	%RSD
57)	T	1,1,2,2-Tetrachlo	0.478	0.540	0.593	0.621	0.619	0.635	0.581	10.46
58)	T	1,2,3-Trichloropr	0.177	0.370	0.367	0.382	0.366	0.350	0.336	23.32
59)	T	4-Ethyltoluene	1.036	1.230	1.374	1.468	1.471	1.499	1.346	13.47
60)	T	1,3,5-Trimethylbe	0.926	1.115	1.255	1.339	1.333	1.351	1.220	13.84
61)	T	1,2,4-Trimethylbe	0.883	1.055	1.213	1.304	1.302	1.318	1.179	14.91
62)	T	1,3-Dichlorobenze	0.712	0.841	0.964	1.044	1.044	1.061	0.945	14.87
63)	T	1,4-Dichlorobenze	0.697	0.838	0.958	1.033	1.038	1.055	0.937	15.19
64)	T	Benzyl chloride	0.704	0.804	0.941	1.024	1.018	1.040	0.922	14.97
65)	T	1,2-Dichlorobenze	0.680	0.760	0.879	0.961	0.960	0.977	0.869	14.17
66)	T	1,2,4-Trichlorobe	0.916	0.843	0.884	0.964	0.948	0.954	0.918	5.13
67)	T	Hexachlorobutadie	1.069	0.975	0.981	1.068	1.046	1.027	1.028	4.03
68)		Naphthalene	0.051	0.080	0.103	0.153	0.217	0.359	0.160	70.76 — NA

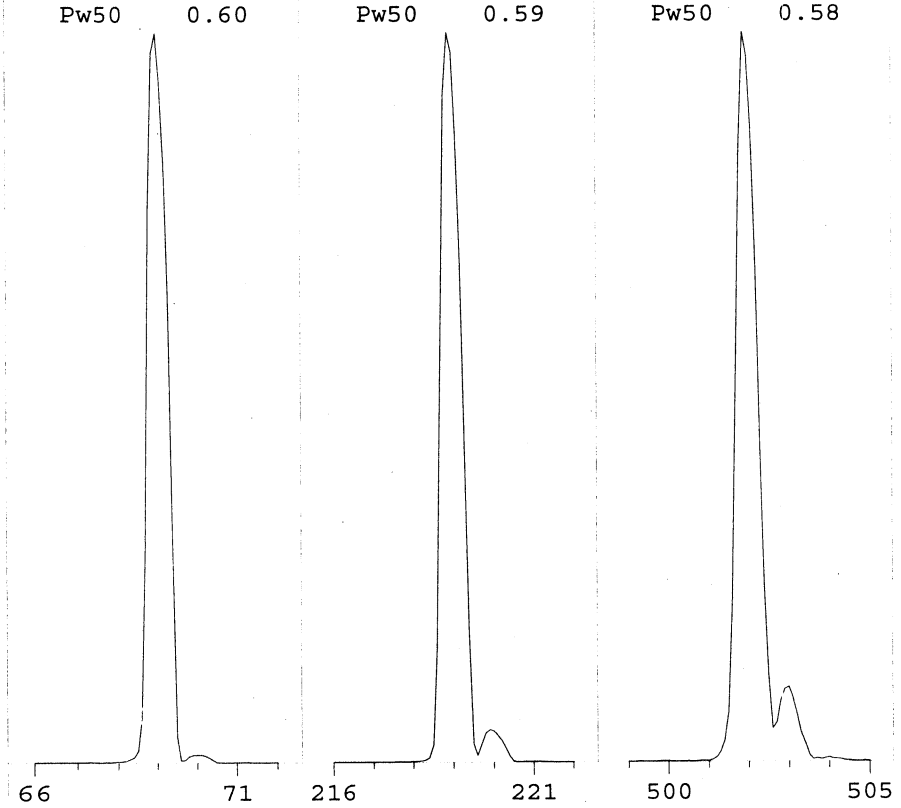
(#) = Out of Range

00488

Thu Nov 07 11:31:02 2013
C:\MSDCHEM\1\5973N\BFB110713.U

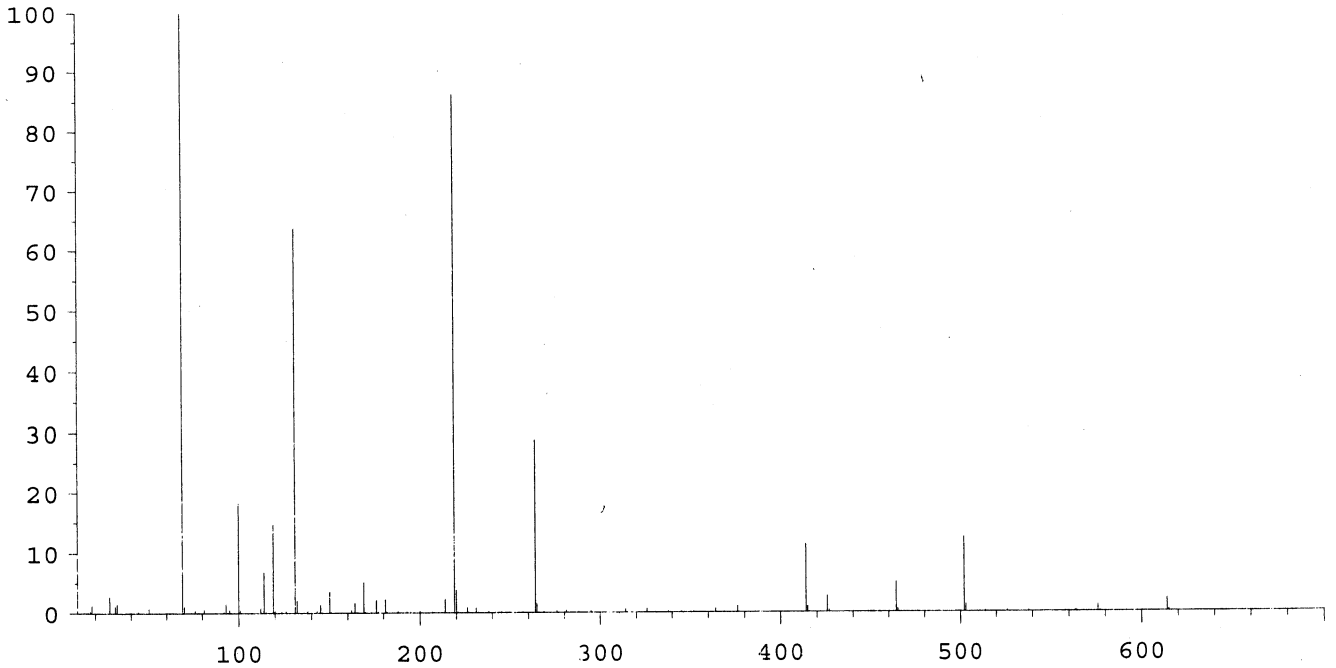
Instrument: Morpheus

Mass	69.00	Mass	218.90	Mass	501.90
Ab	757759	Ab	654628	Ab	89183
Pw50	0.60	Pw50	0.59	Pw50	0.58



Ion Pol	POS	MassGain	321
		MassOffs	-10
Emission	34.6	AmuGain	2331
ElEnrgy	69.9	AmuOffs	126
Filament	1	Wid219	-0.028
		DC Pol	POS
Repeller	21.91		
IonFcus	90.2	HEDEnab	ON
EntLens	23.0	EMVolts	1153
EntOffs	17.57		
		Samples	8
PFTBA	OPEN	Averages	3
		Stepsize	0.10
Zones:			
MS Source	230	TurboSpd	100
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
227 peaks Base: 69.00 Abundance: 563328



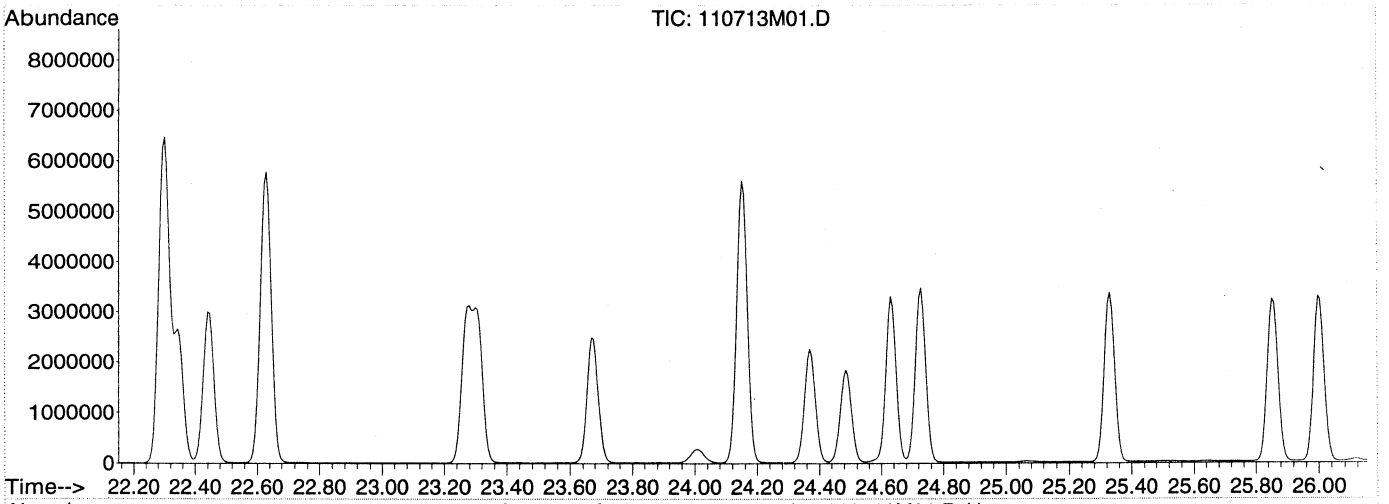
Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	563328	100.00	70.00	6513	1.16
219.00	485696	86.22	220.00	21192	4.36
502.00	70280	12.48	503.00	7520	10.70

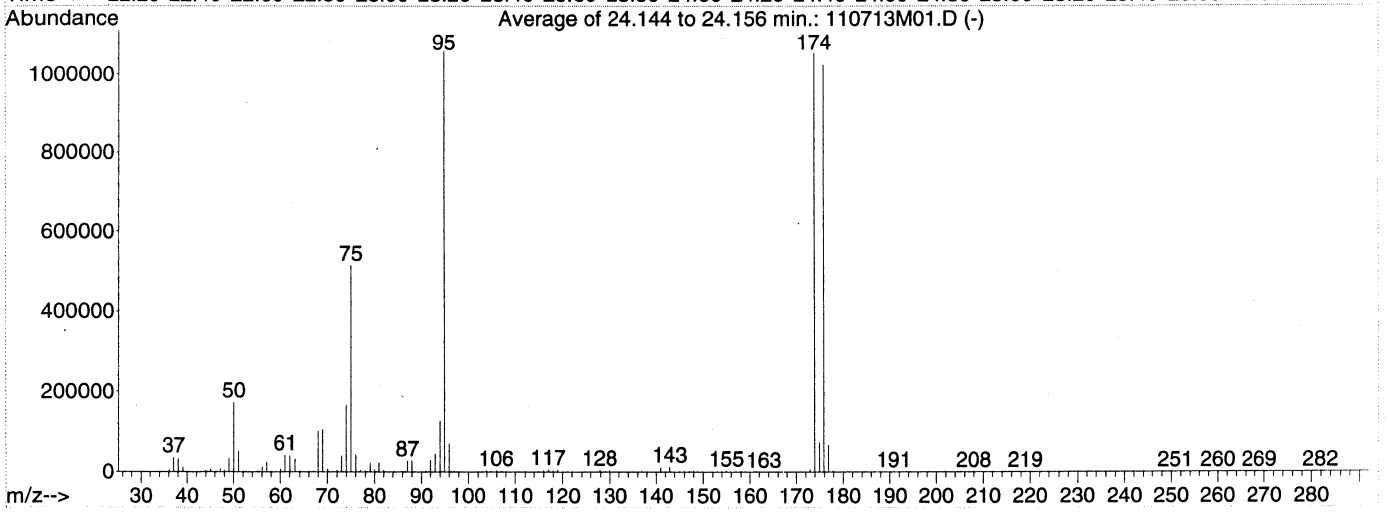
BFB

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M01.D
Acq On : 7 Nov 2013 12:20 pm
Operator : EM
Sample : S13K0XX-TUN1
Misc : BFB 1305020/IS 1311120/1345091
ALS Vial : 32 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Title : TO15
Last Update : Tue Oct 08 16:43:21 2013





AutoFind: Scans 3379, 3380, 3381; Background Corrected with Scan 3367

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.3	172964	PASS
75	95	30	66	48.6	514536	PASS
95	95	100	100	100.0	1059370	PASS
96	95	5	9	6.6	70440	PASS
173	174	0.00	2	0.6	5851	PASS
174	95	50	120	99.6	1054762	PASS
175	174	4	9	6.9	73250	PASS
176	174	93	101	97.1	1024064	PASS
177	176	5	9	6.6	67112	PASS

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M02.D
Acq On : 7 Nov 2013 1:17 pm
Operator : EM
Sample : S13K0XX-CCV1
Misc : BFB 1305020/IS 1311120/1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 14:01:58 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	94	0.00
2	T	Propene	0.453	0.458	-1.1	100	0.00
3	T	Dichlorodifluoromethane	2.190	2.586	-18.1	117	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.964	2.075	-5.7	104	0.00
5	T	Chloromethane	0.560	0.604	-7.9	103	0.00
6	T	Vinyl chloride	0.697	0.695	0.3	99	0.00
7	T	1,3-Butadiene	0.514	0.501	2.5	97	0.00
8	T	Bromomethane	0.739	0.706	4.5	95	0.00
9	T	Chloroethane	0.378	0.365	3.4	97	0.00
10	T	Bromoethene	0.836	0.772	7.7	92	0.00
11	T	Trichlorofluoromethane	2.751	3.038	-10.4	107	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	2.074	2.010	3.1	95	0.00
13	T	1,1-Dichloroethene	1.381	1.497	-8.4	107	0.00
14	T	Acetone	1.110	1.180	-6.3	104	0.00
15	T	Carbon disulfide	2.008	1.894	5.7	94	0.00
16	T	2-Propanol	1.059	0.933	11.9	86	0.00
17	T	Allyl chloride	0.848	0.852	-0.5	100	0.00
18	T	Dichloromethane	0.870	0.880	-1.1	106	0.00
19	T	tert-Butyl methyl ether (MT	2.330	2.308	0.9	91	0.00
20	T	trans-1,2-Dichloroethene	1.165	1.121	3.8	96	0.00
21	T	Hexane	1.201	1.112	7.4	92	-0.01
22	T	1,1-Dichloroethane	1.594	1.578	1.0	99	0.00
23	T	Vinyl acetate	1.617	1.586	1.9	95	0.00
24	T	cis-1,2-Dichloroethene	1.241	1.231	0.8	99	0.00
25	T	2-Butanone (MEK)	1.237	1.255	-1.5	90	0.00
26	T	Ethyl acetate	1.472	1.510	-2.6	96	0.00
27	T	Tetrahydrofuran	0.695	0.665	4.3	87	-0.01
28	T	Chloroform	2.115	2.144	-1.4	102	0.00
29	T	Cyclohexane	1.200	1.094	8.8	90	0.00
30	T	1,1,1-Trichloroethane	2.452	2.512	-2.4	101	0.00
31	T	Carbon tetrachloride	2.776	2.866	-3.2	101	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	84	0.00
33	T	Benzene	0.603	0.610	-1.2	90	0.00
34	T	2,2,4-Trimethylpentane	0.783	0.803	-2.6	90	0.00
35	T	1,2-Dichloroethane	0.295	0.359	-21.7	107	0.00
36	T	Heptane	0.267	0.283	-6.0	94	0.00
37	T	Trichloroethene	0.345	0.341	1.2	88	0.00
38	T	1,2-Dichloropropane	0.190	0.206	-8.4	97	0.00
39	T	1,4-Dioxane	0.107	0.096	10.3	78	0.00
40	T	Bromodichloromethane	0.447	0.511	-14.3	100	0.00
41	T	cis-1,3-Dichloropropene	0.340	0.377	-10.9	97	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.298	0.326	-9.4	89	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	86	0.00
44	T	Toluene	0.918	0.916	0.2	88	0.00
45	T	trans-1,3-Dichloropropene	0.404	0.449	-11.1	98	0.00
46	T	1,1,2-Trichloroethane	0.301	0.299	0.7	89	0.00
47	T	Tetrachloroethene	0.599	0.579	3.3	86	0.00
48	T	2-Hexanone	0.337	0.354	-5.0	89	0.00
49	T	Chlorodibromomethane	0.628	0.675	-7.5	94	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M02.D
Acq On : 7 Nov 2013 1:17 pm
Operator : EM
Sample : S13K0XX-CCV1
Misc : BFB 1305020/IS 1311120/1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 14:01:58 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
50	T	1,2-Dibromoethane (EDB)	0.487	0.498	-2.3	90	0.00	
51	T	Chlorobenzene	0.810	0.807	0.4	87	0.00	
52	T	Ethylbenzene	1.227	1.288	-5.0	89	0.00	
53	T	m&p-Xylene	0.964	1.033	-7.2	89	0.00	
54	T	o-Xylene	0.974	1.037	-6.5	88	0.00	
55	T	Styrene	0.793	0.835	-5.3	85	0.00	
56	T	Bromoform	0.710	0.768	-8.2	88	0.00	
57	T	1,1,2,2-Tetrachloroethane	0.581	0.630	-8.4	88	0.00	
~~58~~	~~T~~	~~1,2,3-Trichloropropane~~	~~0.336~~	~~0.535~~	~~59.2#~~	~~121~~	~~0.00~~	NA
59	T	4-Ethyltoluene	1.346	1.421	-5.6	84	0.00	
60	T	1,3,5-Trimethylbenzene	1.220	1.323	-8.4	85	0.00	
61	T	1,2,4-Trimethylbenzene	1.179	1.278	-8.4	85	0.00	
62	T	1,3-Dichlorobenzene	0.945	0.999	-5.7	83	0.00	
63	T	1,4-Dichlorobenzene	0.937	0.992	-5.9	83	0.00	
64	T	Benzyl chloride	0.922	0.992	-7.6	84	0.00	
65	T	1,2-Dichlorobenzene	0.869	0.920	-5.9	83	0.00	
66	T	1,2,4-Trichlorobenzene	0.918	0.882	3.9	79	0.00	
67	T	Hexachlorobutadiene	1.028	0.998	2.9	81	0.00	
~~68~~		~~Naphthalene~~	~~0.160~~	~~0.017~~	~~89.4#~~	~~9#~~	~~0.00~~	NA

Can 11/14/13

(#) = Out of Range SPCC's out = 0 CCC's out = 0

00492

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M02.D
Acq On : 7 Nov 2013 1:17 pm
Operator : EM
Sample : S13K0XX-CCV1
Misc : BFB 1305020/IS 1311120/1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 14:01:58 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	841817	18.80	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3843059	20.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.30	117	3465607	20.80	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.14	41	219419	10.83	ppbv	97
3) Dichlorodifluoromethane	4.23	85	1170027	11.93	ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.59	85	966489	10.99	ppbv	97
5) Chloromethane	4.78	50	278859	11.12	ppbv	99
6) Vinyl chloride	5.11	62	326908	10.48	ppbv	100
7) 1,3-Butadiene	5.21	54	228746	9.95	ppbv	94
8) Bromomethane	6.14	94	328957	9.95	ppbv	99
9) Chloroethane	6.46	64	169889	10.05	ppbv	98
10) Bromoethene	7.04	106	356201	9.52	ppbv	100
11) Trichlorofluoromethane	7.19	101	1428702	11.60	ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.01	151	837361	9.02	ppbv	94
13) 1,1-Dichloroethene	9.07	61	630439	10.19	ppbv	94
14) Acetone	9.56	43	560439	11.27	ppbv	95
15) Carbon disulfide	9.79	76	865441	9.63	ppbv	97
16) 2-Propanol	10.17	45	396922	8.37	ppbv	95
17) Allyl chloride	10.65	41	385196	10.15	ppbv	95
18) Dichloromethane	11.20	49	378339	9.71	ppbv	92
19) tert-Butyl methyl ether (M	11.92	73	1126737	10.80	ppbv	100
20) trans-1,2-Dichloroethene	11.95	61	476801	9.14	ppbv	93
21) Hexane	12.60	57	508096	9.45	ppbv	94
22) 1,1-Dichloroethane	13.32	63	692690	9.70	ppbv	99
23) Vinyl acetate	13.47	43	710358	9.81	ppbv	96
24) cis-1,2-Dichloroethene	14.79	61	556918	10.02	ppbv	93
25) 2-Butanone (MEK)	14.88	43	584658	10.55	ppbv	97
26) Ethyl acetate	14.94	43	703325	10.67	ppbv	96
27) Tetrahydrofuran	15.34	42	306553	9.85	ppbv	95
28) Chloroform	15.50	83	969722	10.24	ppbv	99
29) Cyclohexane	15.75	56	509553	9.48	ppbv	95
30) 1,1,1-Trichloroethane	15.79	97	1125234	10.25	ppbv	98
31) Carbon tetrachloride	16.06	117	1283721	10.33	ppbv	100
33) Benzene	16.55	78	1208522	10.43	ppbv	98
34) 2,2,4-Trimethylpentane	16.53	57	1619816	10.77	ppbv	98
35) 1,2-Dichloroethane	16.73	62	689308	12.15	ppbv	100
36) Heptane	16.92	43	571833	11.15	ppbv	96
37) Trichloroethene	17.79	130	674113	10.17	ppbv	98
38) 1,2-Dichloropropane	18.29	63	418746	11.49	ppbv	95
39) 1,4-Dioxane	18.47	88	195489	9.47	ppbv	93
40) Bromodichloromethane	18.75	83	1040469	12.10	ppbv	99
41) cis-1,3-Dichloropropene	19.53	75	746880	11.44	ppbv	94
42) 4-Methyl-2-pentanone (MIBK	19.76	43	658546	11.51	ppbv	95
44) Toluene	20.02	91	1586825	10.38	ppbv	100
45) trans-1,3-Dichloropropene	20.48	75	824035	12.24	ppbv	95
46) 1,1,2-Trichloroethane	20.78	97	537939	10.73	ppbv	93
47) Tetrachloroethene	20.88	166	1004211	10.07	ppbv	98
48) 2-Hexanone	21.11	43	607022	10.80	ppbv	96
49) Chlorodibromomethane	21.39	129	1169433	11.18	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.62	107	888167	10.95	ppbv	100
51) Chlorobenzene	22.35	112	1425945	10.57	ppbv	97
52) Ethylbenzene	22.45	91	2254330	11.03	ppbv	98
53) m&p-Xylene	22.64	91	3648406	22.71	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M02.D
Acq On : 7 Nov 2013 1:17 pm
Operator : EM
Sample : S13K0XX-CCV1
Misc : BFB 1305020/IS 1311120/1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 14:01:58 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

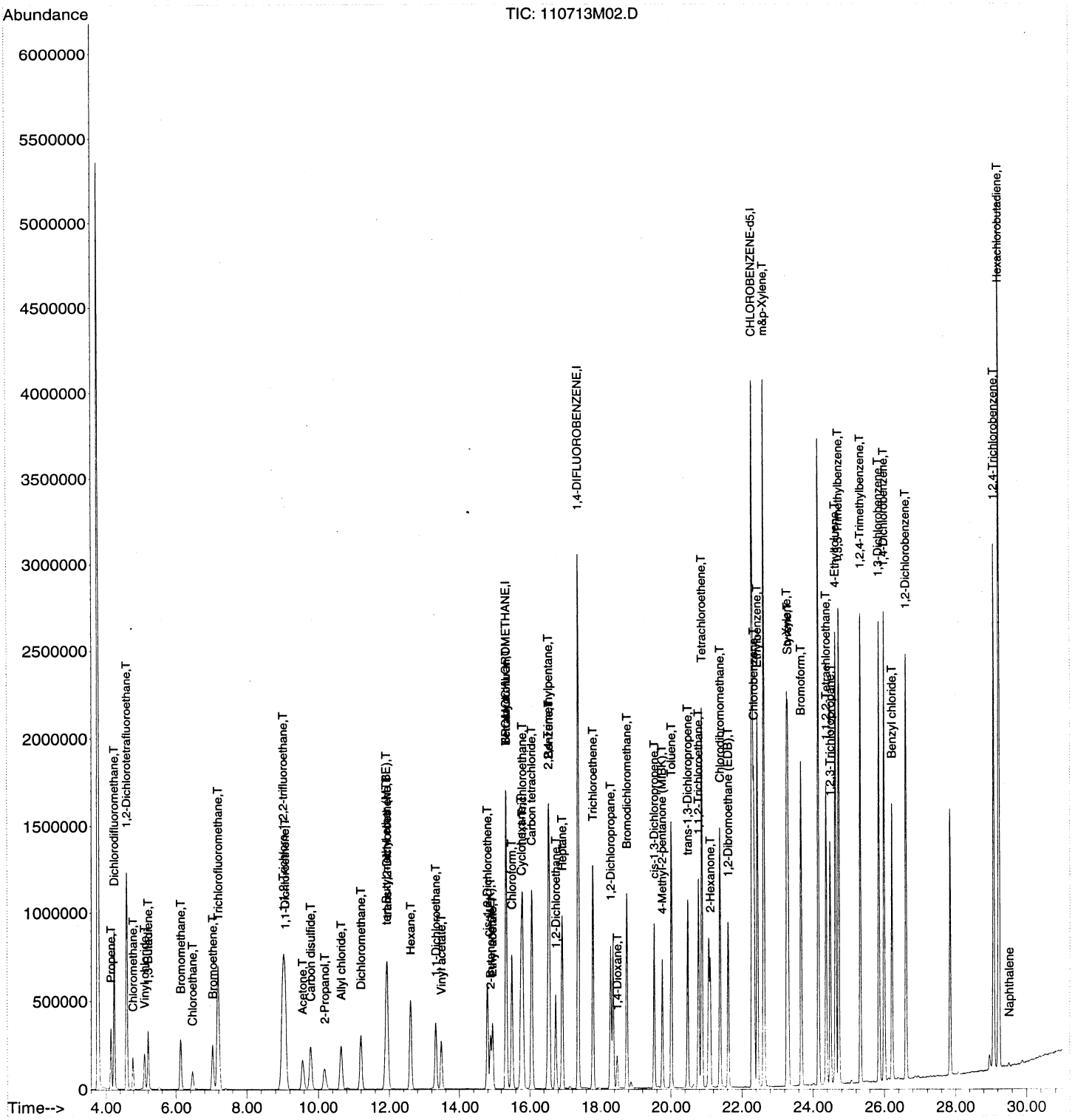
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.27	91	1850073	11.40 ppbv	97
55) Styrene	23.31	104	1446638	10.95 ppbv	97
56) Bromoform	23.68	173	1318709	11.15 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.38	83	1113206	11.50 ppbv	99
58) 1,2,3-Trichloropropane	24.48	75	847310	15.15 ppbv #	94
59) 4-Ethyltoluene	24.64	105	2485863	11.08 ppbv	98
60) 1,3,5-Trimethylbenzene	24.73	105	2293561	11.29 ppbv	97
61) 1,2,4-Trimethylbenzene	25.34	105	2279520	11.60 ppbv	97
62) 1,3-Dichlorobenzene	25.86	146	1715327	10.90 ppbv	99
63) 1,4-Dichlorobenzene	26.01	146	1719130	11.02 ppbv	99
64) Benzyl chloride	26.22	91	1702722	11.09 ppbv	96
65) 1,2-Dichlorobenzene	26.61	146	1595252	11.01 ppbv	99
66) 1,2,4-Trichlorobenzene	29.09	180	1499024	9.80 ppbv	100
67) Hexachlorobutadiene	29.24	225	1713322	10.01 ppbv	100
68) Naphthalene	29.51	128	24917	0.93 ppbv	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M02.D
Acq On : 7 Nov 2013 1:17 pm
Operator : EM
Sample : S13K0XX-CCV1
Misc : BFB 1305020/IS 1311120/1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 14:01:58 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration



LCS REPORT

Instrument Name: Morpheus
Sample Name: B13K0XX-BS1
Misc Info: 10ppbv 1345091
Date Acquired: 11/7/2013 14:12
QLast Update: Tue Oct 08 16:43:21 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.33	#N/A	18.80	#N/A	70.0	130.0	#N/A
2)	Propene	4.14	10.70	11.07	103%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.23	10.10	11.17	111%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.59	10.40	10.07	97%	68.0	147.0	pass
5)	Chloromethane	4.78	10.30	11.56	112%	64.0	141.0	pass
6)	Vinyl chloride	5.10	10.50	10.68	102%	65.0	141.0	pass
7)	1,3-Butadiene	5.21	10.20	10.07	99%	61.0	154.0	pass
8)	Bromomethane	6.13	10.40	10.07	97%	71.0	132.0	pass
9)	Chloroethane	6.46	10.40	10.10	97%	70.0	134.0	pass
10)	Bromoethene	7.04	10.30	9.47	92%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.19	10.50	11.61	111%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.01	9.30	9.13	98%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.07	9.40	10.08	107%	81.0	127.0	pass
14)	Acetone	9.56	10.60	11.29	107%	77.0	150.0	pass
15)	Carbon disulfide	9.79	10.20	9.55	94%	75.0	138.0	pass
16)	2-Propanol	10.17	9.50	9.64	101%	71.0	142.0	pass
17)	Allyl chloride	10.65	10.10	10.14	100%	84.0	143.0	pass
18)	Dichloromethane	11.19	9.60	9.62	100%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	11.92	10.90	10.96	101%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	11.95	9.50	9.04	95%	82.0	136.0	pass
21)	Hexane	12.60	10.20	9.34	92%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.32	9.80	9.58	98%	82.0	123.0	pass
23)	Vinyl acetate	13.47	10.00	9.72	97%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.79	10.10	9.84	97%	83.0	126.0	pass
25)	2-Butanone (MEK)	14.88	10.40	10.93	105%	76.0	138.0	pass
26)	Ethyl acetate	14.94	10.40	10.08	97%	83.0	136.0	pass
27)	Tetrahydrofuran	15.34	10.30	10.37	101%	74.0	132.0	pass
28)	Chloroform	15.50	10.10	9.90	98%	81.0	127.0	pass
29)	Cyclohexane	15.75	10.40	9.43	91%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.79	10.00	10.19	102%	80.0	131.0	pass
31)	Carbon tetrachloride	16.06	10.00	10.23	102%	77.0	136.0	pass
32)	1,4-DIFLUOROBENZENE	17.37	#N/A	20.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.55	10.30	10.49	102%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.53	10.50	10.95	104%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.74	10.00	12.10	121%	70.0	149.0	pass
36)	Heptane	16.92	10.50	11.24	107%	62.0	159.0	pass
37)	Trichloroethene	17.79	10.30	10.01	97%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.29	10.60	11.40	108%	74.0	135.0	pass
40)	Bromodichloromethane	18.75	10.60	12.10	114%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.53	10.30	11.40	111%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.76	10.50	12.73	121%	59.0	147.0	pass
43)	CHLOROBENZENE-d5	22.31	#N/A	20.80	#N/A	70.0	130.0	#N/A
44)	Toluene	20.02	10.40	10.81	104%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.48	11.00	12.84	117%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.78	10.80	11.11	103%	76.0	124.0	pass
47)	Tetrachloroethene	20.88	10.40	10.43	100%	80.0	122.0	pass
48)	2-Hexanone	21.11	10.30	12.91	125%	55.0	149.0	pass

50)	1,2-Dibromoethane (EDB)	21.62	10.70	11.55	108%	78.0	124.0	pass
51)	Chlorobenzene	22.35	10.60	11.11	105%	76.0	120.0	pass
52)	Ethylbenzene	22.45	10.50	11.67	111%	75.0	125.0	pass
53)	m&p-Xylene	22.64	21.20	24.08	114%	75.0	128.0	pass
54)	o-Xylene	23.28	10.70	12.16	114%	74.0	128.0	pass
55)	Styrene	23.31	10.40	11.71	113%	69.0	122.0	pass
56)	Bromoform	23.68	10.30	11.90	116%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.38	10.60	12.41	117%	70.0	130.0	pass
59)	4-Ethyltoluene	24.64	10.50	11.89	113%	69.0	138.0	pass
61)	1,2,4-Trimethylbenzene	25.34	10.70	12.65	118%	65.0	129.0	pass
62)	1,3-Dichlorobenzene	25.86	10.30	11.86	115%	62.0	130.0	pass
63)	1,4-Dichlorobenzene	26.01	10.40	12.01	116%	61.0	131.0	pass
64)	Benzyl chloride	26.22	10.30	12.26	119%	61.0	153.0	pass
65)	1,2-Dichlorobenzene	26.61	10.40	12.08	116%	60.0	130.0	pass
66)	1,2,4-Trichlorobenzene	29.09	10.20	11.01	108%	38.0	128.0	pass
67)	Hexachlorobutadiene	29.24	10.30	11.31	110%	37.0	124.0	pass

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M03.D
Acq On : 7 Nov 2013 2:12 pm
Operator : EM
Sample : B13K0XX-BS1
Misc : 10ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 15:21:01 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	843821	18.80	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3753058	20.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	3230799	20.80	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.14	41	224871	11.07	ppbv	97
3) Dichlorodifluoromethane	4.23	85	1098495	11.17	ppbv	100
4) 1,2-Dichlorotetrafluoroeth	4.59	85	888164	10.07	ppbv	98
5) Chloromethane	4.78	50	290725	11.56	ppbv	100
6) Vinyl chloride	5.10	62	334122	10.68	ppbv	100
7) 1,3-Butadiene	5.21	54	232066	10.07	ppbv	95
8) Bromomethane	6.13	94	333748	10.07	ppbv	100
9) Chloroethane	6.46	64	171170	10.10	ppbv	99
10) Bromoethene	7.04	106	355176	9.47	ppbv	99
11) Trichlorofluoromethane	7.19	101	1433012	11.61	ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.01	151	850058	9.13	ppbv	95
13) 1,1-Dichloroethene	9.07	61	625046	10.08	ppbv	94
14) Acetone	9.56	43	562764	11.29	ppbv	94
15) Carbon disulfide	9.79	76	860899	9.55	ppbv	97
16) 2-Propanol	10.17	45	458267	9.64	ppbv	96
17) Allyl chloride	10.65	41	385957	10.14	ppbv	94
18) Dichloromethane	11.19	49	375791	9.62	ppbv	92
19) tert-Butyl methyl ether (M	11.92	73	1146143	10.96	ppbv	100
20) trans-1,2-Dichloroethene	11.95	61	472496	9.04	ppbv	93
21) Hexane	12.60	57	503458	9.34	ppbv	94
22) 1,1-Dichloroethane	13.32	63	685771	9.58	ppbv	99
23) Vinyl acetate	13.47	43	705641	9.72	ppbv	95
24) cis-1,2-Dichloroethene	14.79	61	547754	9.84	ppbv	92
25) 2-Butanone (MEK)	14.88	43	607070	10.93	ppbv	97
26) Ethyl acetate	14.94	43	666001	10.08	ppbv	98
27) Tetrahydrofuran	15.34	42	323292	10.37	ppbv	95
28) Chloroform	15.50	83	940115	9.90	ppbv	99
29) Cyclohexane	15.75	56	508191	9.43	ppbv	94
30) 1,1,1-Trichloroethane	15.79	97	1121304	10.19	ppbv	99
31) Carbon tetrachloride	16.06	117	1274806	10.23	ppbv	100
33) Benzene	16.55	78	1188043	10.49	ppbv	98
34) 2,2,4-Trimethylpentane	16.53	57	1608274	10.95	ppbv	97
35) 1,2-Dichloroethane	16.74	62	670233	12.10	ppbv	100
36) Heptane	16.92	43	563150	11.24	ppbv	95
37) Trichloroethene	17.79	130	648052	10.01	ppbv	97
38) 1,2-Dichloropropane	18.29	63	406079	11.40	ppbv	94
39) 1,4-Dioxane	18.47	88	208066	10.32	ppbv	93
40) Bromodichloromethane	18.75	83	1015725	12.10	ppbv	99
41) cis-1,3-Dichloropropene	19.53	75	726901	11.40	ppbv	93
42) 4-Methyl-2-pentanone (MIBK	19.76	43	711814	12.73	ppbv	95
44) Toluene	20.02	91	1540971	10.81	ppbv	99
45) trans-1,3-Dichloropropene	20.48	75	805660	12.84	ppbv	95
46) 1,1,2-Trichloroethane	20.78	97	519224	11.11	ppbv	92
47) Tetrachloroethene	20.88	166	969879	10.43	ppbv	98
48) 2-Hexanone	21.11	43	676391	12.91	ppbv	95
49) Chlorodibromomethane	21.39	129	1132154	11.61	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.62	107	872888	11.55	ppbv	99
51) Chlorobenzene	22.35	112	1397777	11.11	ppbv	97
52) Ethylbenzene	22.45	91	2223991	11.67	ppbv	98
53) m&p-Xylene	22.64	91	3607197	24.08	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M03.D
Acq On : 7 Nov 2013 2:12 pm
Operator : EM
Sample : B13K0XX-BS1
Misc : 10ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 15:21:01 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

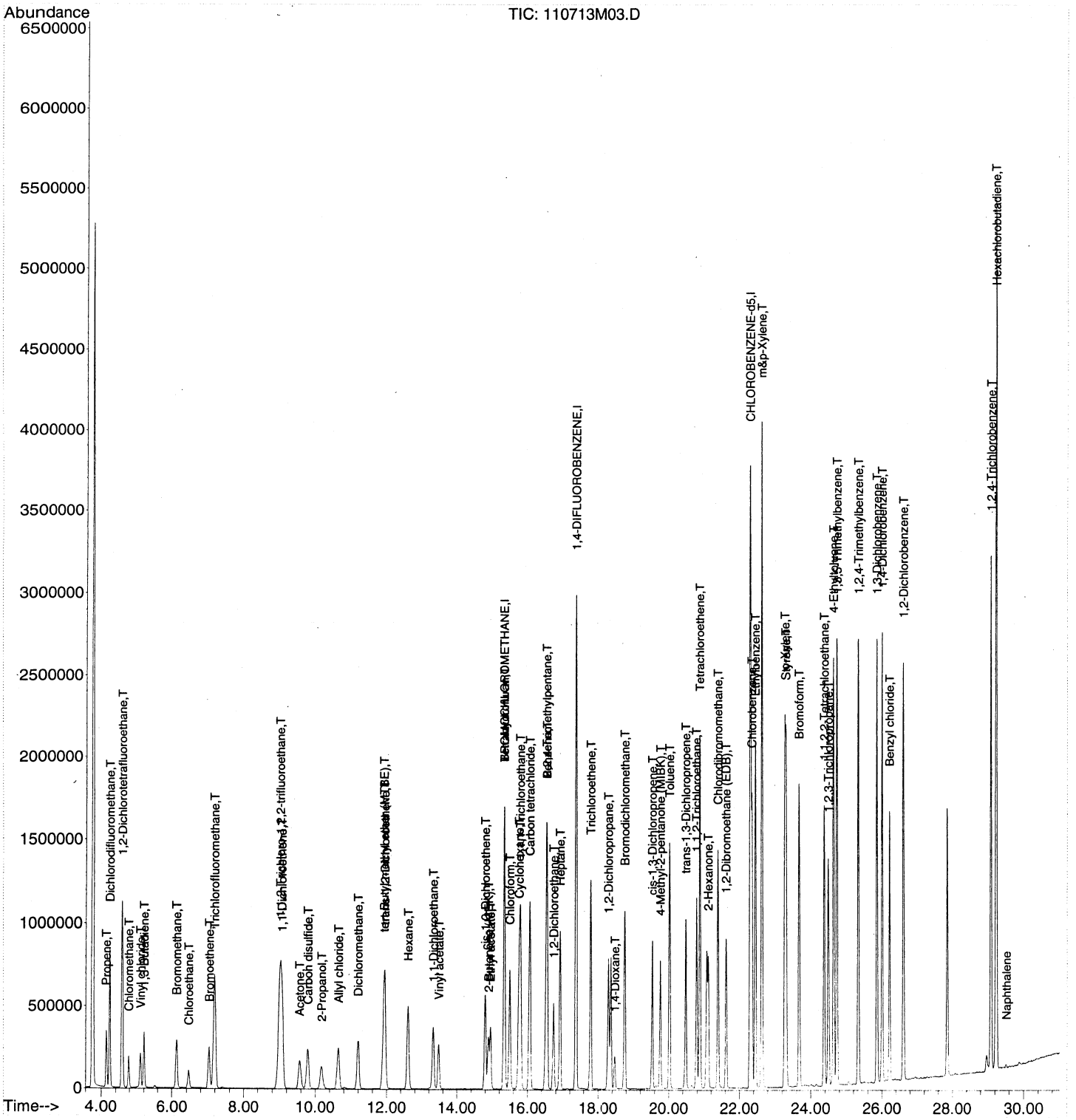
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.28	91	1839516	12.16 ppbv	97
55) Styrene	23.31	104	1442574	11.71 ppbv	96
56) Bromoform	23.68	173	1312431	11.90 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.38	83	1119628	12.41 ppbv	100
58) 1,2,3-Trichloropropane	24.49	75	854742	16.39 ppbv #	93
59) 4-Ethyltoluene	24.64	105	2485818	11.89 ppbv	98
60) 1,3,5-Trimethylbenzene	24.73	105	2313862	12.21 ppbv	97
61) 1,2,4-Trimethylbenzene	25.34	105	2316254	12.65 ppbv	97
62) 1,3-Dichlorobenzene	25.86	146	1739870	11.86 ppbv	98
63) 1,4-Dichlorobenzene	26.01	146	1747331	12.01 ppbv	99
64) Benzyl chloride	26.22	91	1754838	12.26 ppbv	96
65) 1,2-Dichlorobenzene	26.61	146	1630692	12.08 ppbv	99
66) 1,2,4-Trichlorobenzene	29.09	180	1569446	11.01 ppbv	100
67) Hexachlorobutadiene	29.24	225	1804838	11.31 ppbv	100
68) Naphthalene	29.52	128	24526	0.98 ppbv	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M03.D
Acq On : 7 Nov 2013 2:12 pm
Operator : EM
Sample : B13K0XX-BS1
Misc : 10ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 15:21:01 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration



QLS REPORT

Instrument Name: Morpheus
Sample Name: S13J1XX-CRL1
Misc Info: 1.0ppbv 1345091
Date Acquired: 11/7/2013 15:28
QLast Update: Tue Oct 08 16:43:21 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
2)	Propene	4.13	1.07	1.08	100%	60.0	140.0	pass	Subset
3)	Dichlorodifluoromethane	4.23	1.01	1.06	105%	60.0	140.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.59	1.04	0.99	96%	60.0	140.0	pass	Primary
5)	Chloromethane	4.78	1.03	1.01	98%	60.0	140.0	pass	Primary
6)	Vinyl chloride	5.10	1.05	0.99	95%	60.0	140.0	pass	Primary
7)	1,3-Butadiene	5.21	1.02	0.95	93%	60.0	140.0	pass	Subset
8)	Bromomethane	6.13	1.04	0.93	90%	60.0	140.0	pass	Primary
9)	Chloroethane	6.46	1.04	0.97	93%	60.0	140.0	pass	Primary
10)	Bromoethene	7.03	1.03	0.88	85%	60.0	140.0	pass	Subset
11)	Trichlorofluoromethane	7.19	1.05	0.99	94%	60.0	140.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.02	0.93	0.79	85%	60.0	140.0	pass	Primary
13)	1,1-Dichloroethene	9.07	0.94	0.90	96%	60.0	140.0	pass	Primary
14)	Acetone	9.57	1.06	0.95	89%	60.0	140.0	pass	Subset
15)	Carbon disulfide	9.78	1.02	0.89	87%	60.0	140.0	pass	Subset
16)	2-Propanol	10.18	0.95	0.70	73%	60.0	140.0	pass	Subset
17)	Allyl chloride	10.64	1.01	0.89	88%	60.0	140.0	pass	Subset
18)	Dichloromethane	11.19	0.96	1.13	118%	60.0	140.0	pass	Primary
19)	tert-Butyl methyl ether (MTBE)	11.93	1.09	0.69	63%	60.0	140.0	pass	Subset
20)	trans-1,2-Dichloroethene	11.95	0.95	0.82	86%	60.0	140.0	pass	Subset
21)	Hexane	12.60	1.02	0.81	80%	60.0	140.0	pass	Subset
22)	1,1-Dichloroethane	13.32	0.98	0.89	91%	60.0	140.0	pass	Primary
23)	Vinyl acetate	13.47	1.00	0.69	69%	60.0	140.0	pass	Subset
24)	cis-1,2-Dichloroethene	14.79	1.01	0.88	87%	60.0	140.0	pass	Primary
25)	2-Butanone (MEK)	14.88	1.04	0.68	65%	60.0	140.0	pass	Subset
26)	Ethyl acetate	14.95	1.04	0.77	74%	60.0	140.0	pass	Subset
27)	Tetrahydrofuran	15.36	1.03	0.73	71%	60.0	140.0	pass	Subset
28)	Chloroform	15.49	1.01	0.92	91%	60.0	140.0	pass	Primary
29)	Cyclohexane	15.75	1.04	0.78	75%	60.0	140.0	pass	Subset
30)	1,1,1-Trichloroethane	15.79	1.00	0.91	91%	60.0	140.0	pass	Primary
31)	Carbon tetrachloride	16.05	1.00	0.89	89%	60.0	140.0	pass	Primary
33)	Benzene	16.55	1.03	0.99	96%	60.0	140.0	pass	Primary
34)	2,2,4-Trimethylpentane	16.53	1.05	0.94	89%	60.0	140.0	pass	Subset
35)	1,2-Dichloroethane	16.73	1.00	1.12	112%	60.0	140.0	pass	Primary
36)	Heptane	16.92	1.05	0.97	93%	60.0	140.0	pass	Subset
37)	Trichloroethene	17.79	1.03	0.93	90%	60.0	140.0	pass	Primary
38)	1,2-Dichloropropane	18.29	1.06	1.08	101%	60.0	140.0	pass	Primary
39)	1,4-Dioxane	18.49	1.06	0.76	72%	60.0	140.0	pass	Subset
40)	Bromodichloromethane	18.75	1.06	1.05	99%	60.0	140.0	pass	Subset
41)	cis-1,3-Dichloropropene	19.53	1.03	0.95	93%	60.0	140.0	pass	Primary
42)	4-Methyl-2-pentanone (MIBK)	19.76	1.05	0.81	78%	60.0	140.0	pass	Subset
43)	CHLOROBENZENE-d5	22.30	20.80	20.80	100%	60.0	140.0	pass	Subset
45)	trans-1,3-Dichloropropene	20.48	1.10	1.07	97%	60.0	140.0	pass	Primary
46)	1,1,2-Trichloroethane	20.78	1.08	0.95	88%	60.0	140.0	pass	Primary
47)	Tetrachloroethene	20.88	1.04	0.87	84%	60.0	140.0	pass	Primary
48)	2-Hexanone	21.11	1.03	0.93	91%	60.0	140.0	pass	Subset
49)	Chlorodibromomethane	21.39	1.04	0.89	85%	60.0	140.0	pass	Subset
50)	1,2-Dibromoethane (EDB)	21.62	1.07	0.96	90%	60.0	140.0	pass	Primary
51)	Chlorobenzene	22.35	1.06	0.86	81%	60.0	140.0	pass	Primary
52)	Ethylbenzene	22.45	1.05	0.82	78%	60.0	140.0	pass	Primary
53)	m&p-Xylene	22.64	2.12	1.60	75%	60.0	140.0	pass	Primary

54)	o-Xylene	23.27	1.07	0.77	72%	60.0	140.0	pass	Primary
55)	Styrene	23.32	1.04	0.67	65%	60.0	140.0	pass	Primary
56)	Bromoform	23.68	1.03	0.70	68%	60.0	140.0	pass	Subset
57)	1,1,2,2-Tetrachloroethane	24.37	1.06	0.79	74%	60.0	140.0	pass	Primary
58)	1,2,3-Trichloropropane	24.49	0.95	1.11	117%	60.0	140.0	pass	Subset
59)	4-Ethyltoluene	24.64	1.05	0.68	64%	60.0	140.0	pass	Subset
60)	1,3,5-Trimethylbenzene	24.73	1.04	0.69	66%	60.0	140.0	pass	Primary
61)	1,2,4-Trimethylbenzene	25.33	1.07	0.70	66%	60.0	140.0	pass	Primary
62)	1,3-Dichlorobenzene	25.86	1.03	0.70	68%	60.0	140.0	pass	Primary
63)	1,4-Dichlorobenzene	26.01	1.04	0.69	66%	60.0	140.0	pass	Subset
64)	Benzyl chloride	26.22	1.03	0.70	68%	60.0	140.0	pass	Primary
65)	1,2-Dichlorobenzene	26.61	1.04	0.73	70%	60.0	140.0	pass	Primary
66)	1,2,4-Trichlorobenzene	29.08	1.02	0.84	82%	60.0	140.0	pass	Primary
67)	Hexachlorobutadiene	29.24	1.03	0.81	79%	60.0	140.0	pass	Primary

Quantitation Report

☐ Before Manual Integration(s) (...)
Peak Integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☐ Other: _____
☑ After Manual Integration
Manual integration(s) performed by:
Analyst: [illegible] Date: 11/14/13
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 1/16/14

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13K0XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:30:18 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	860945	18.80	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3782645	20.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.30	117	3223008	20.80	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.13	41	22281	1.08	ppbv	96
3) Dichlorodifluoromethane	4.23	85	106227	1.06	ppbv	98
4) 1,2-Dichlorotetrafluoroeth	4.59	85	89389	0.99	ppbv	100
5) Chloromethane	4.78	50	26002	1.01	ppbv	98
6) Vinyl chloride	5.10	62	31684	0.99	ppbv	99
7) 1,3-Butadiene	5.21	54	22407	0.95	ppbv	95
8) Bromomethane	6.13	94	31498	0.93	ppbv	99
9) Chloroethane	6.46	64	16720	0.97	ppbv	96
10) Bromoethene	7.03	106	33677	0.88	ppbv	99
11) Trichlorofluoromethane	7.19	101	124602	0.99	ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.02	151	74729	0.79	ppbv #	8
13) 1,1-Dichloroethene	9.07	61	56952	0.90	ppbv	95
14) Acetone	9.57	43	48193	0.95	ppbv	96
15) Carbon disulfide	9.78	76	81927	0.89	ppbv	96
16) 2-Propanol	10.18	45	33873	0.70	ppbv	81
17) Allyl chloride	10.64	41	34386	0.89	ppbv	95
18) Dichloromethane	11.19	49	44995	1.13	ppbv	91
19) tert-Butyl methyl ether (M	11.93	73	73765	0.69	ppbv	100
20) trans-1,2-Dichloroethene	11.95	61	43575	0.82	ppbv	94
21) Hexane	12.60	57	44733	0.81	ppbv	93
22) 1,1-Dichloroethane	13.32	63	64823	0.89	ppbv	99
23) Vinyl acetate	13.47	43	50860	0.69	ppbv	97
24) cis-1,2-Dichloroethene	14.79	61	50148	0.88	ppbv	92
25) 2-Butanone (MEK)	14.88	43	38540	0.68	ppbv	99
26) Ethyl acetate	14.95	43	51979m	0.77	ppbv	
27) Tetrahydrofuran	15.36	42	23298	0.73	ppbv	91
28) Chloroform	15.49	83	89427	0.92	ppbv	98
29) Cyclohexane	15.75	56	43105	0.78	ppbv	94
30) 1,1,1-Trichloroethane	15.79	97	101827	0.91	ppbv	98
31) Carbon tetrachloride	16.05	117	113046	0.89	ppbv	98
33) Benzene	16.55	78	113271	0.99	ppbv	98
34) 2,2,4-Trimethylpentane	16.53	57	138642	0.94	ppbv	96
35) 1,2-Dichloroethane	16.73	62	62396	1.12	ppbv	98
36) Heptane	16.92	43	49221	0.97	ppbv	93
37) Trichloroethene	17.79	130	60809	0.93	ppbv	97
38) 1,2-Dichloropropane	18.29	63	38593	1.08	ppbv	93
39) 1,4-Dioxane	18.49	88	15493	0.76	ppbv	92
40) Bromodichloromethane	18.75	83	88427	1.05	ppbv	99
41) cis-1,3-Dichloropropene	19.53	75	61224	0.95	ppbv	93
42) 4-Methyl-2-pentanone (MIBK	19.76	43	45913	0.81	ppbv	94
44) Toluene	20.02	91	128899	0.91	ppbv	98
45) trans-1,3-Dichloropropene	20.48	75	66986	1.07	ppbv	93
46) 1,1,2-Trichloroethane	20.78	97	44377	0.95	ppbv	91
47) Tetrachloroethene	20.88	166	80947	0.87	ppbv	99
48) 2-Hexanone	21.11	43	48783	0.93	ppbv	92
49) Chlorodibromomethane	21.39	129	86477	0.89	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.62	107	72402	0.96	ppbv	98
51) Chlorobenzene	22.35	112	107756	0.86	ppbv #	73
52) Ethylbenzene	22.45	91	155039	0.82	ppbv	98
53) m&p-Xylene	22.64	91	238713	1.60	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13K0XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:30:18 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

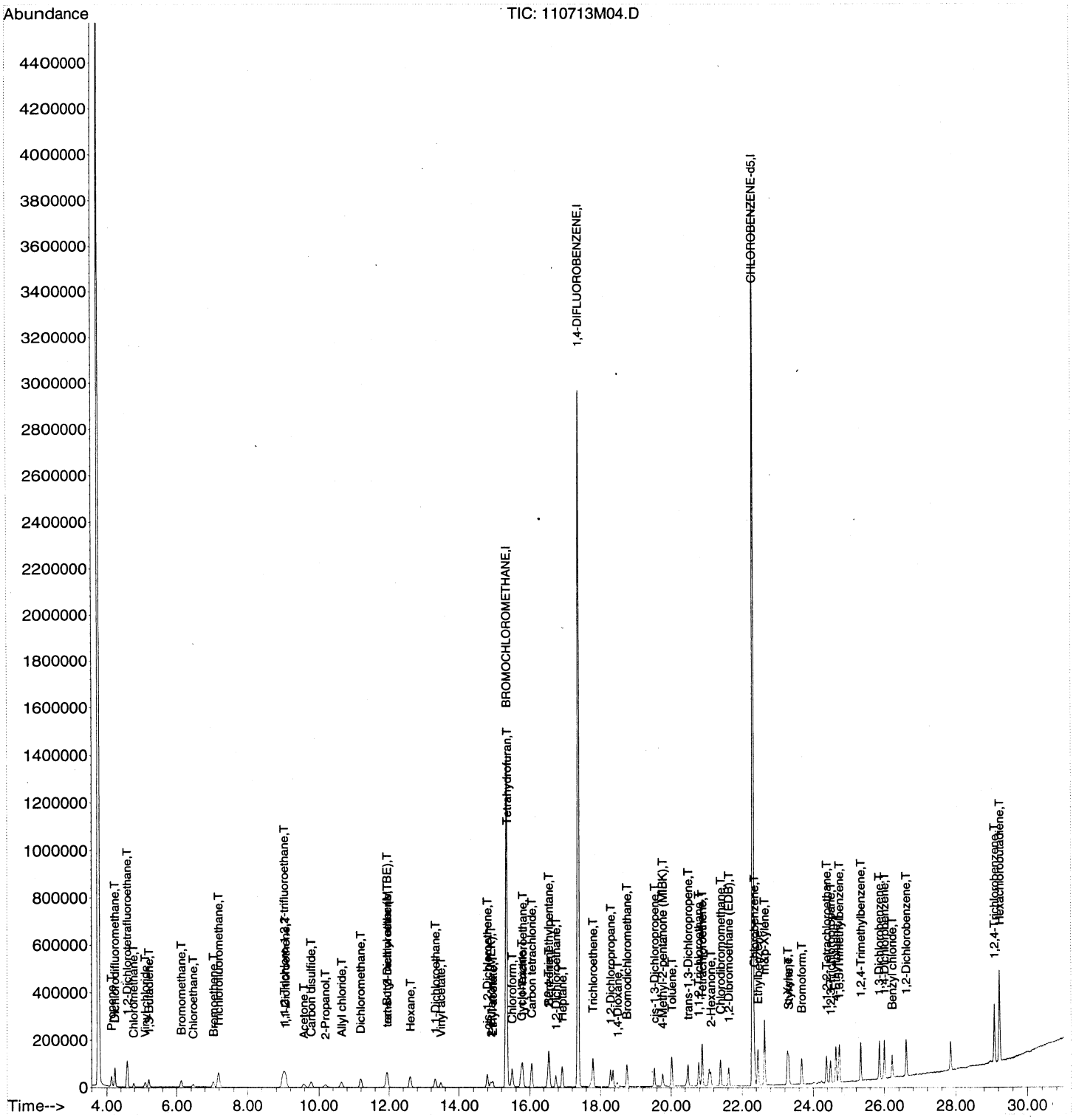
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.27	91	116747	0.77 ppbv	94
55) Styrene	23.32	104	82727	0.67 ppbv	94
56) Bromoform	23.68	173	77211	0.70 ppbv	97
57) 1,1,2,2-Tetrachloroethane	24.37	83	70943	0.79 ppbv	100
58) 1,2,3-Trichloropropane	24.49	75	57571	1.11 ppbv #	91
59) 4-Ethyltoluene	24.64	105	141272	0.68 ppbv	99
60) 1,3,5-Trimethylbenzene	24.73	105	130532	0.69 ppbv	95
61) 1,2,4-Trimethylbenzene	25.33	105	128786	0.70 ppbv	95
62) 1,3-Dichlorobenzene	25.86	146	101951	0.70 ppbv	98
63) 1,4-Dichlorobenzene	26.01	146	99932	0.69 ppbv	98
64) Benzyl chloride	26.22	91	100588	0.70 ppbv	95
65) 1,2-Dichlorobenzene	26.61	146	97959	0.73 ppbv	98
66) 1,2,4-Trichlorobenzene	29.08	180	118898	0.84 ppbv	100
67) Hexachlorobutadiene	29.23	225	129441	0.81 ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13K0XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

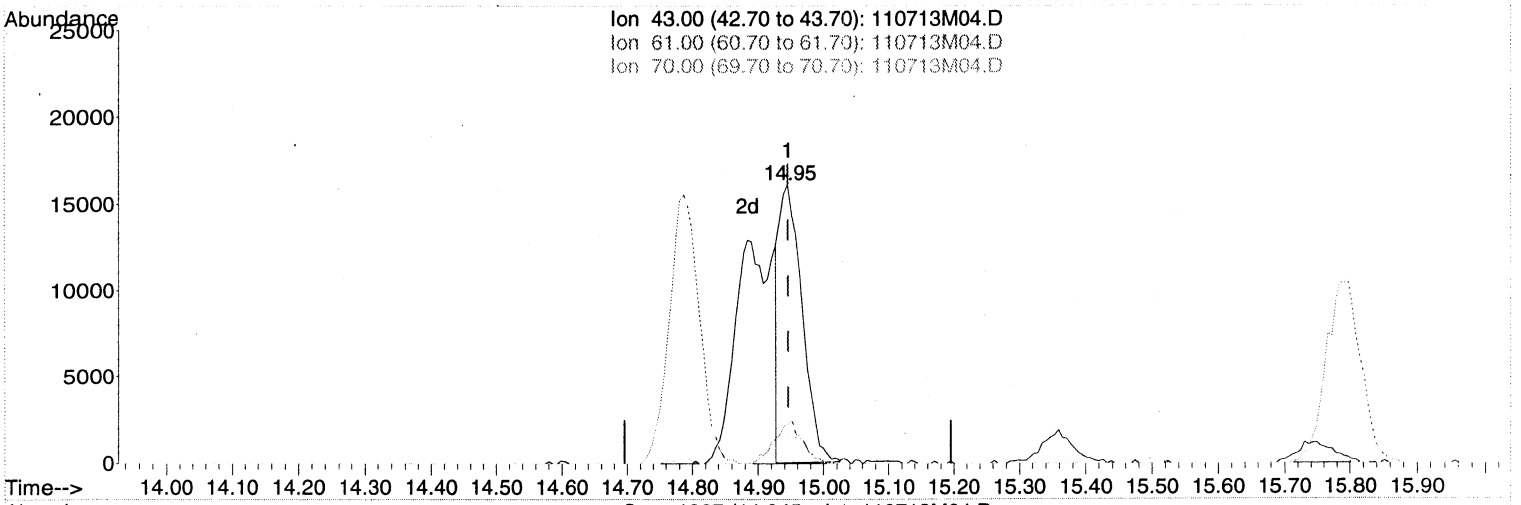
Quant Time: Nov 07 16:30:18 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

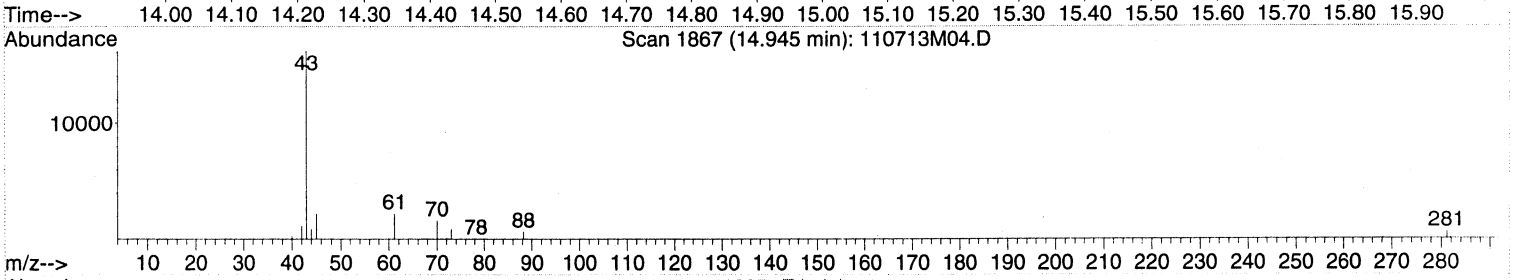


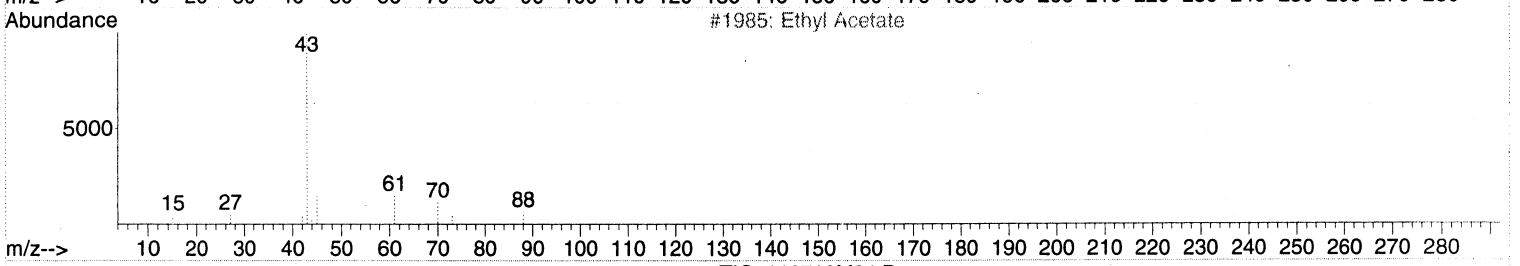
Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13J1XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:29:54 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration







TIC: 110713M04.D

(26) Ethyl acetate (T)

14.945min (0.000) 0.58ppbv

response 38874

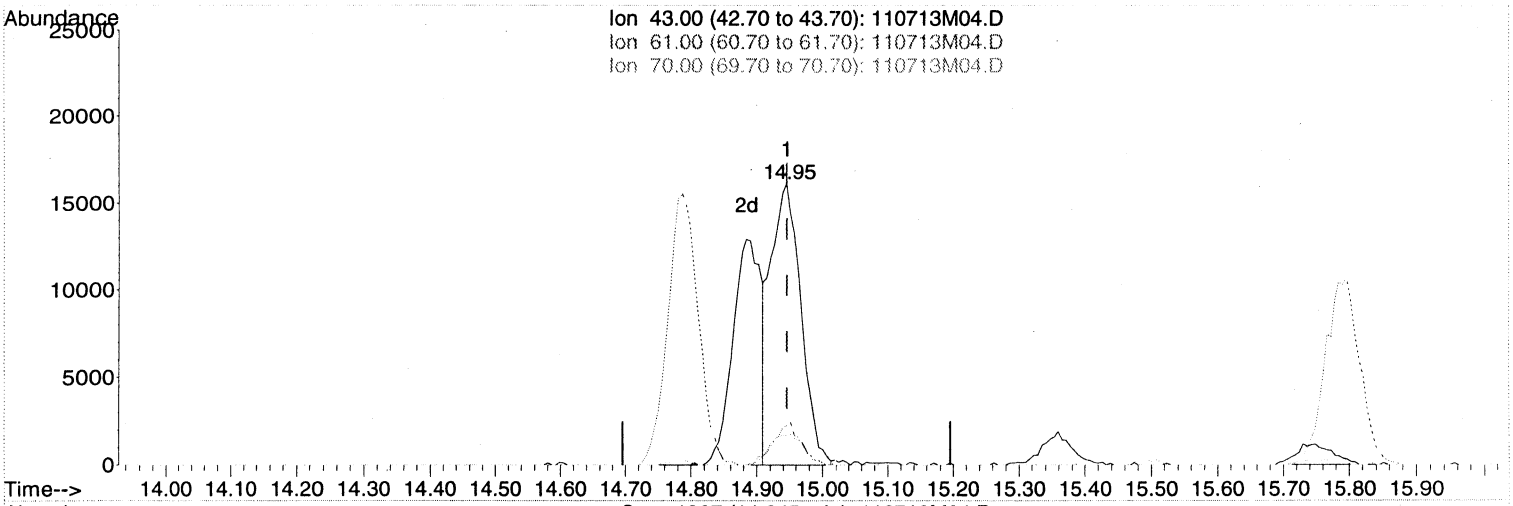
Ion	Exp%	Act%
43.00	100	100
61.00	15.70	18.47
70.00	13.70	16.03
0.00	0.00	0.00

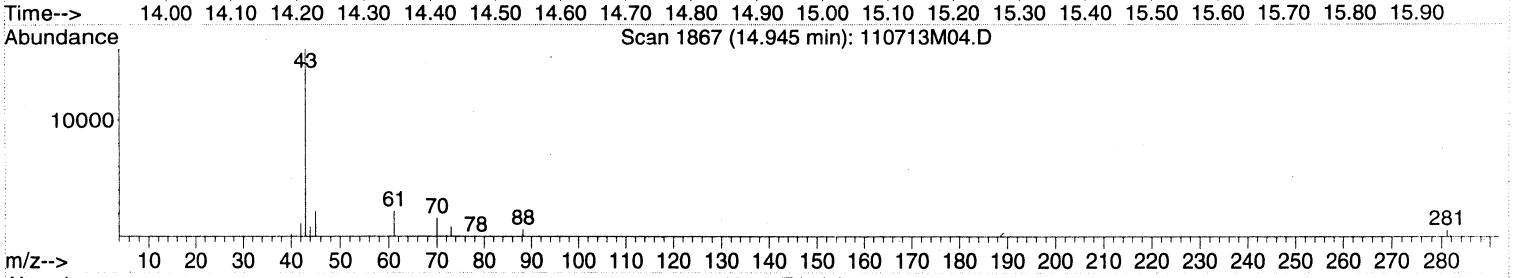
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☑ Cropped ☐ Improper Baseline
☐ Other: _____
☐ After Manual Integration
Manual integration(s) performed by
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

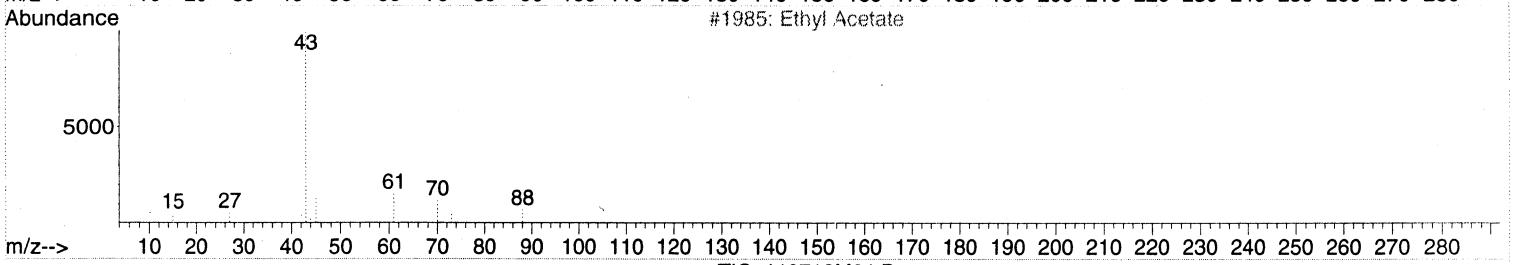
Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13J1XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:29:54 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration







TIC: 110713M04.D

(26) Ethyl acetate (T)

14.945min (0.000) 0.77ppbv m

response 51979

Ion	Exp%	Act%
43.00	100	100
61.00	15.70	13.82
70.00	13.70	11.99
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: _____ Date: 11/14/13

Manual integration(s) reviewed by:

Reviewer: _____ Date: 11/18/14

00597

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13J1XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:29:54 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

pll MT
em 11/14/13

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	860945	18.80	ppbv		0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3782645	20.00	ppbv		0.00
43) CHLOROBENZENE-d5	22.30	117	3223008	20.80	ppbv		0.00

Target Compounds							Qvalue
2) Propene	4.13	41	22281	1.08	ppbv		96
3) Dichlorodifluoromethane	4.23	85	106227	1.06	ppbv		98
4) 1,2-Dichlorotetrafluoroeth	4.59	85	89389	0.99	ppbv		100
5) Chloromethane	4.78	50	26002	1.01	ppbv		98
6) Vinyl chloride	5.10	62	31684	0.99	ppbv		99
7) 1,3-Butadiene	5.21	54	22407	0.95	ppbv		95
8) Bromomethane	6.13	94	31498	0.93	ppbv		99
9) Chloroethane	6.46	64	16720	0.97	ppbv		96
10) Bromoethene	7.03	106	33677	0.88	ppbv		99
11) Trichlorofluoromethane	7.19	101	124602	0.99	ppbv		99
12) 1,1,2-Trichloro-1,2,2-trif	9.02	151	74729	0.79	ppbv	#	8
13) 1,1-Dichloroethene	9.07	61	56952	0.90	ppbv		95
14) Acetone	9.57	43	48193	0.95	ppbv		96
15) Carbon disulfide	9.78	76	81927	0.89	ppbv		96
16) 2-Propanol	10.18	45	33873	0.70	ppbv		81
17) Allyl chloride	10.64	41	34386	0.89	ppbv		95
18) Dichloromethane	11.19	49	44995	1.13	ppbv		91
19) tert-Butyl methyl ether (M	11.93	73	73765	0.69	ppbv		100
20) trans-1,2-Dichloroethene	11.95	61	43575	0.82	ppbv		94
21) Hexane	12.60	57	44733	0.81	ppbv		93
22) 1,1-Dichloroethane	13.32	63	64823	0.89	ppbv		99
23) Vinyl acetate	13.47	43	50860	0.69	ppbv		97
24) cis-1,2-Dichloroethene	14.79	61	50148	0.88	ppbv		92
25) 2-Butanone (MEK)	14.88	43	38540	0.68	ppbv		99
26) Ethyl acetate	14.95	43	38874	0.58	ppbv		94
27) Tetrahydrofuran	15.36	42	23298	0.73	ppbv		91
28) Chloroform	15.49	83	89427	0.92	ppbv		98
29) Cyclohexane	15.75	56	43105	0.78	ppbv		94
30) 1,1,1-Trichloroethane	15.79	97	101827	0.91	ppbv		98
31) Carbon tetrachloride	16.05	117	113046	0.89	ppbv		98
33) Benzene	16.55	78	113271	0.99	ppbv		98
34) 2,2,4-Trimethylpentane	16.53	57	138642	0.94	ppbv		96
35) 1,2-Dichloroethane	16.73	62	62396	1.12	ppbv		98
36) Heptane	16.92	43	49221	0.97	ppbv		93
37) Trichloroethene	17.79	130	60809	0.93	ppbv		97
38) 1,2-Dichloropropane	18.29	63	38593	1.08	ppbv		93
39) 1,4-Dioxane	18.49	88	15493	0.76	ppbv		92
40) Bromodichloromethane	18.75	83	88427	1.05	ppbv		99
41) cis-1,3-Dichloropropene	19.53	75	61224	0.95	ppbv		93
42) 4-Methyl-2-pentanone (MIBK	19.76	43	45913	0.81	ppbv		94
44) Toluene	20.02	91	128899	0.91	ppbv		98
45) trans-1,3-Dichloropropene	20.48	75	66986	1.07	ppbv		93
46) 1,1,2-Trichloroethane	20.78	97	44377	0.95	ppbv		91
47) Tetrachloroethene	20.88	166	80947	0.87	ppbv		99
48) 2-Hexanone	21.11	43	48783	0.93	ppbv		92
49) Chlorodibromomethane	21.39	129	86477	0.89	ppbv		99
50) 1,2-Dibromoethane (EDB)	21.62	107	72402	0.96	ppbv		98
51) Chlorobenzene	22.35	112	107756	0.86	ppbv	#	73
52) Ethylbenzene	22.45	91	155039	0.82	ppbv		98
53) m&p-Xylene	22.64	91	238713	1.60	ppbv		96

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13J1XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:29:54 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

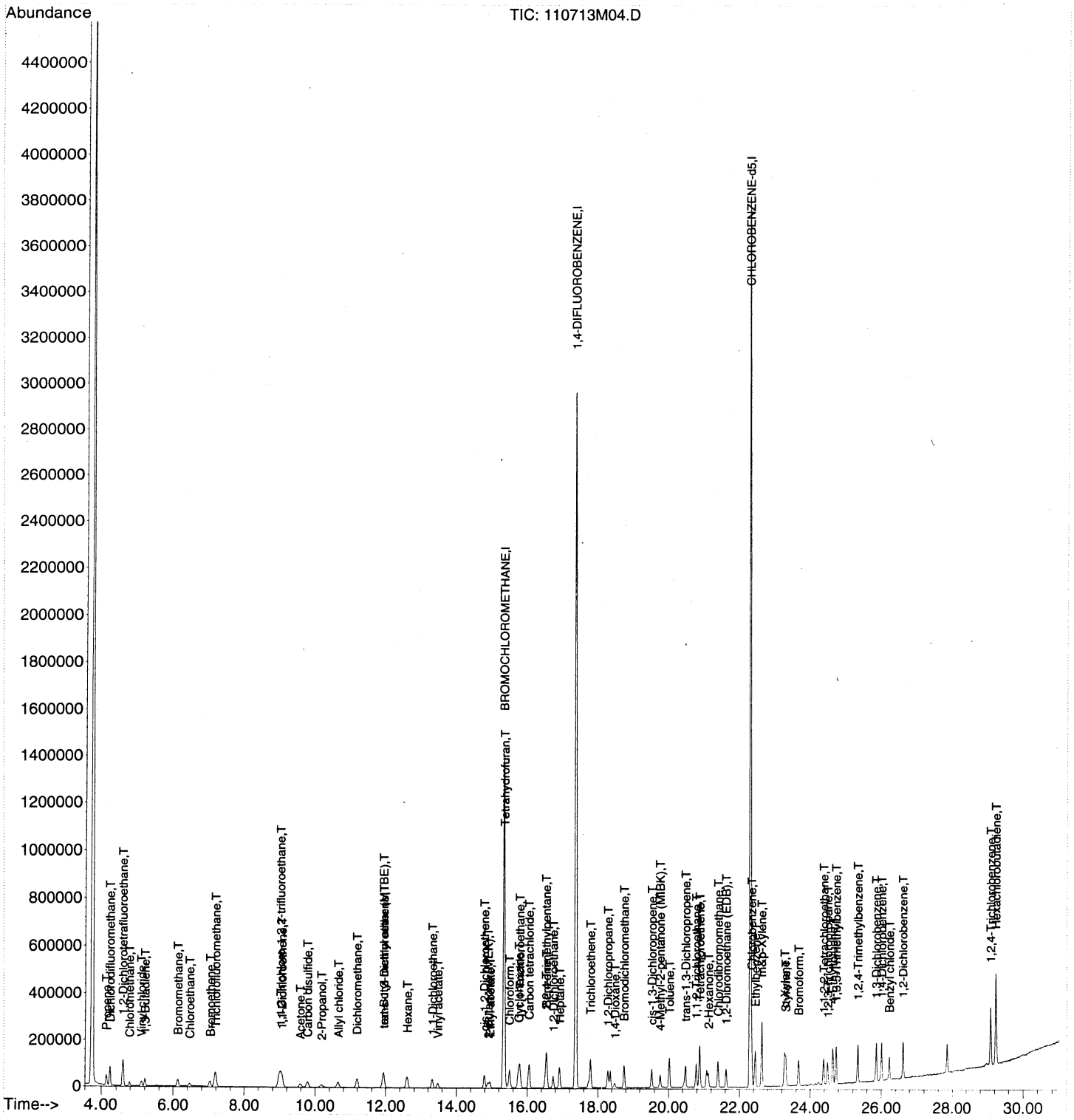
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
54) o-Xylene	23.27	91	116747	0.77 ppbv	94
55) Styrene	23.32	104	82727	0.67 ppbv	94
56) Bromoform	23.68	173	77211	0.70 ppbv	97
57) 1,1,2,2-Tetrachloroethane	24.37	83	70943	0.79 ppbv	100
58) 1,2,3-Trichloropropane	24.49	75	57571	1.11 ppbv #	91
59) 4-Ethyltoluene	24.64	105	141272	0.68 ppbv	99
60) 1,3,5-Trimethylbenzene	24.73	105	130532	0.69 ppbv	95
61) 1,2,4-Trimethylbenzene	25.33	105	128786	0.70 ppbv	95
62) 1,3-Dichlorobenzene	25.86	146	101951	0.70 ppbv	98
63) 1,4-Dichlorobenzene	26.01	146	99932	0.69 ppbv	98
64) Benzyl chloride	26.22	91	100588	0.70 ppbv	95
65) 1,2-Dichlorobenzene	26.61	146	97959	0.73 ppbv	98
66) 1,2,4-Trichlorobenzene	29.08	180	118898	0.84 ppbv	100
67) Hexachlorobutadiene	29.23	225	129441	0.81 ppbv	99
68) Naphthalene	29.51	128	3713	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\2013\Data\110713TO15\
Data File : 110713M04.D
Acq On : 7 Nov 2013 3:28 pm
Operator : EM
Sample : S13J1XX-CRL1
Misc : 1.0ppbv 1345091
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Nov 07 16:29:54 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M18.D
Acq On : 8 Nov 2013 2:54 am
Operator : EM
Sample : CAN 1980
Misc : CAN 1980
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Nov 08 10:05:33 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	807561	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3435925	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	2937069	20.80 ppbv	0.00

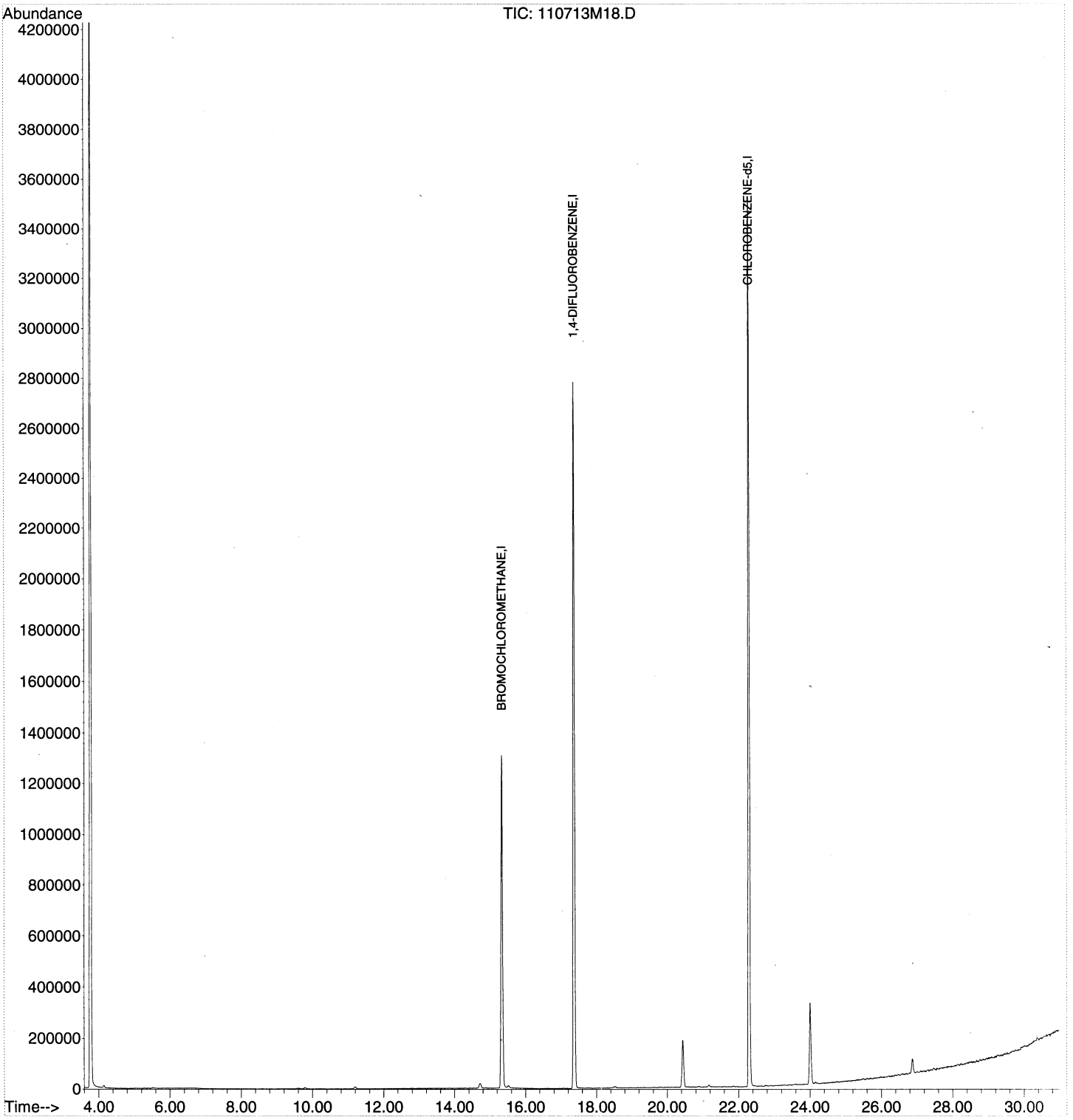
Target Compounds	Qvalue

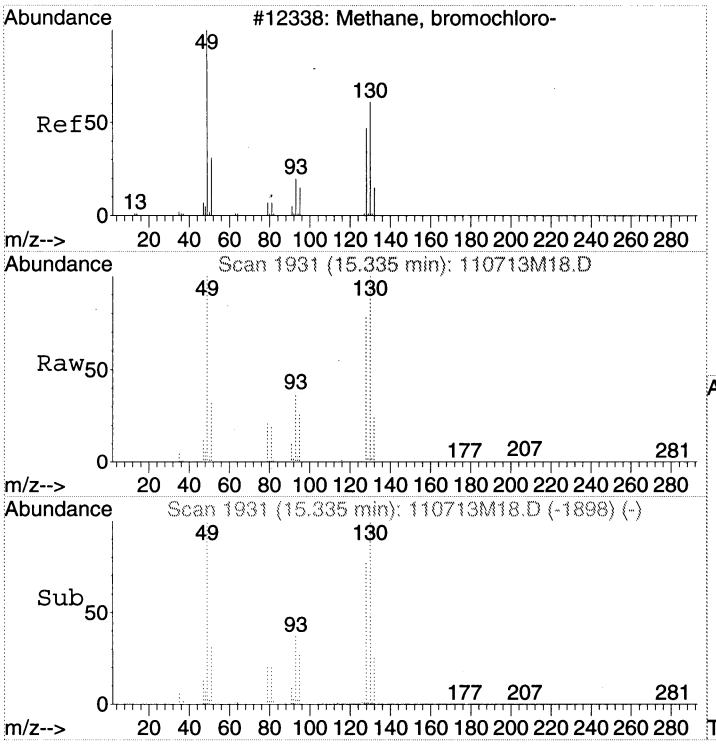
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M18.D
Acq On : 8 Nov 2013 2:54 am
Operator : EM
Sample : CAN 1980
Misc : CAN 1980
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Nov 08 10:05:33 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

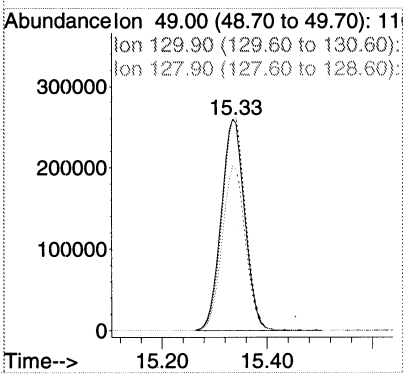


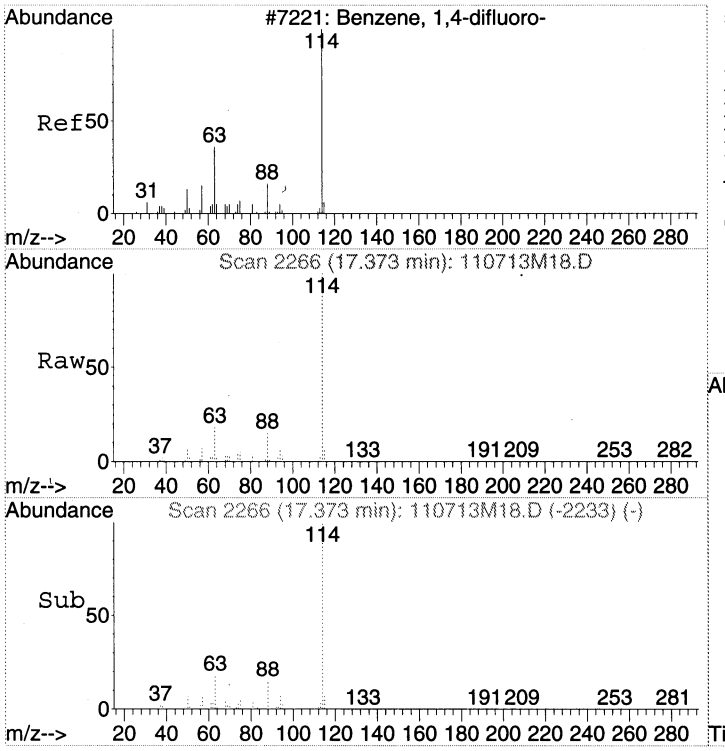


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. -0.00 min
Lab File: 110713M18.D
Acq: 8 Nov 2013 2:54 am

Tgt Ion: 49 Resp: 807561

Ion	Ratio	Lower	Upper
49	100		
130	100.1	97.9	137.9
128	77.2	70.6	110.6

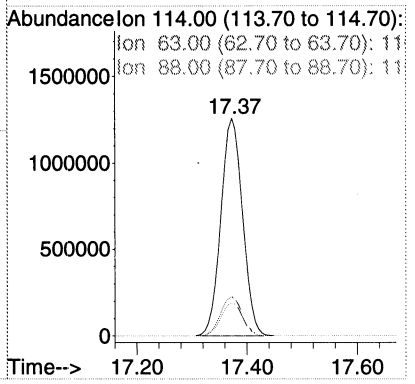


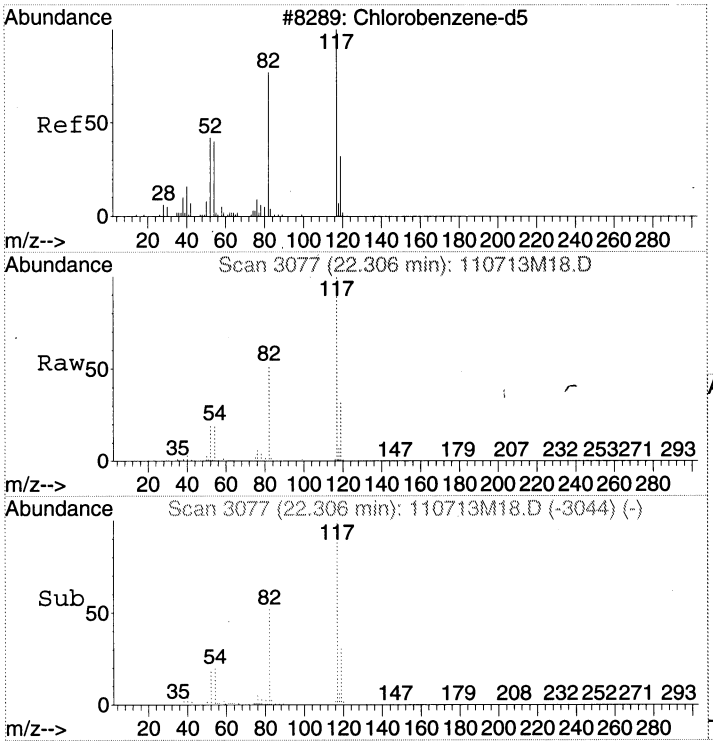


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. -0.00 min
Lab File: 110713M18.D
Acq: 8 Nov 2013 2:54 am

Tgt Ion:114 Resp: 3435925

Ion	Ratio	Lower	Upper
114	100		
63	18.2	0.0	35.8
88	15.3	0.0	34.6

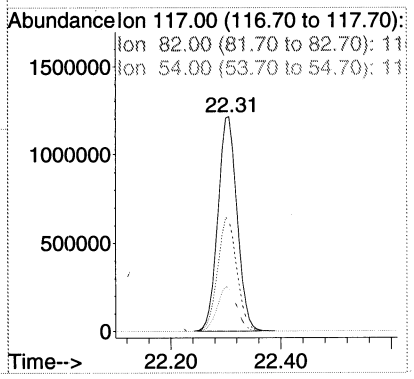




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. -0.00 min
Lab File: 110713M18.D
Acq: 8 Nov 2013 2:54 am

Tgt Ion:117 Resp: 2937069

Ion	Ratio	Lower	Upper
117	100		
82	53.2	28.9	68.9
54	21.3	0.0	36.9



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M18.D
Acq On : 8 Nov 2013 2:54 am
Operator : EM
Sample : CAN 1980
Misc : CAN 1980
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Title : TO15

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	15.335	1918	1931	1950	rBV	1305264	4022823	46.64%	18.222%
2	17.373	2253	2266	2282	rBV	2781239	7648104	88.68%	34.643%
3	20.439	2757	2770	2785	rBV2	185414	615513	7.14%	2.788%
4	22.300	3065	3076	3092	rBV	3513561	8624597	100.00%	39.066%
5	24.010	3344	3357	3371	rBV	320901	1002570	11.62%	4.541%
6	26.875	3821	3828	3838	rVB3	54669	163293	1.89%	0.740%

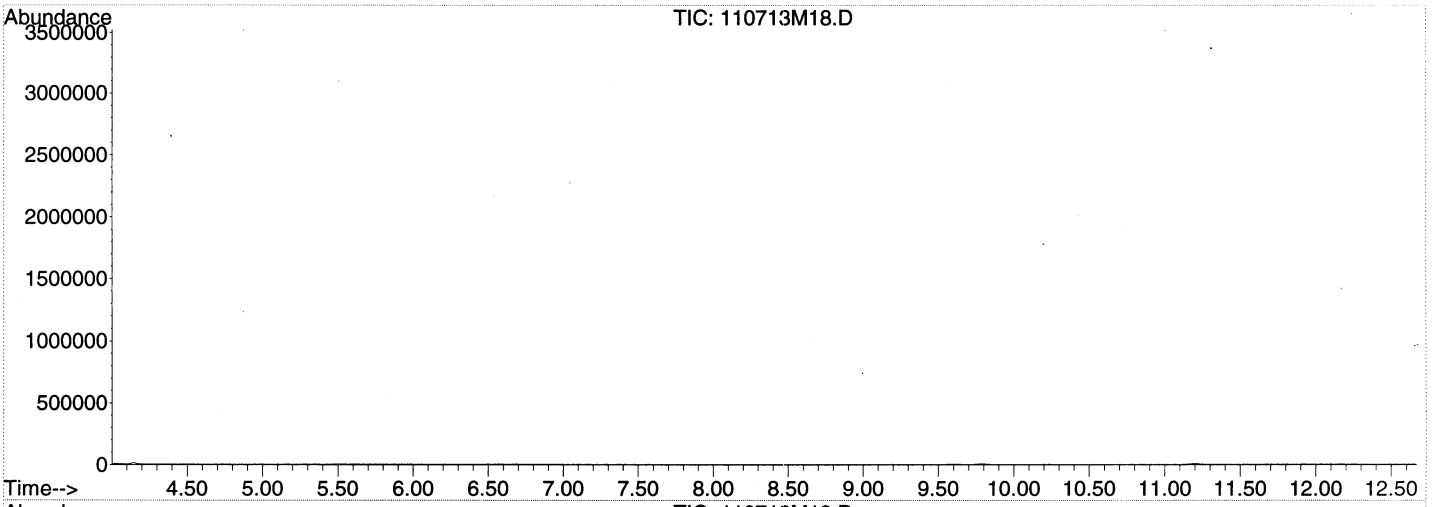
Sum of corrected areas: 22076900

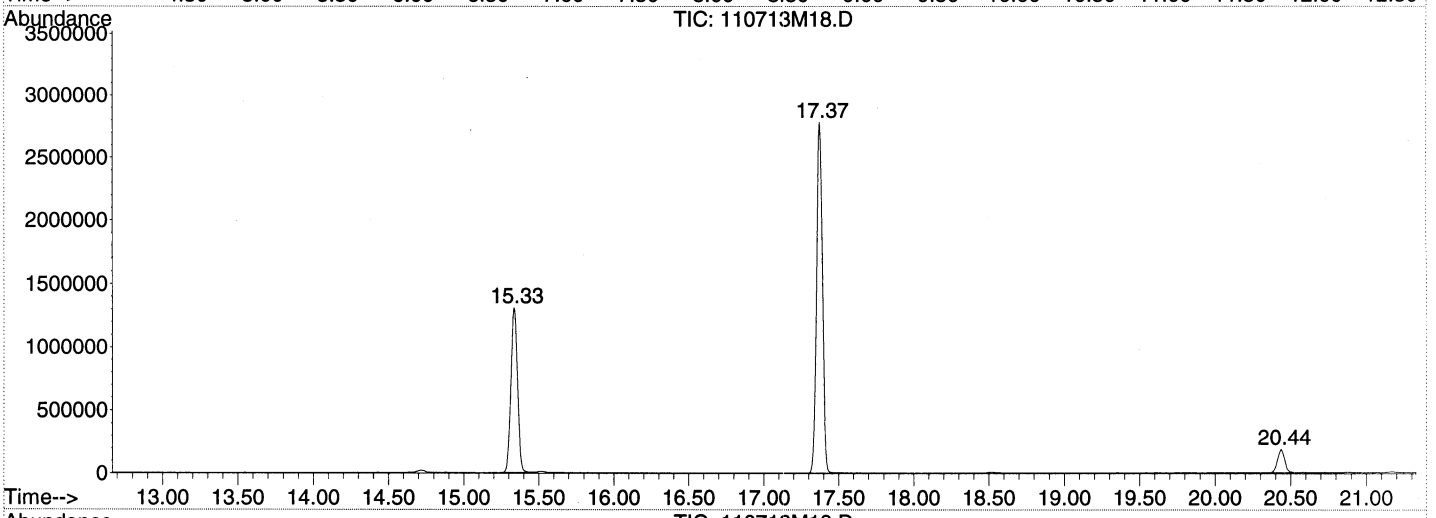
LSC Report - Integrated Chromatogram

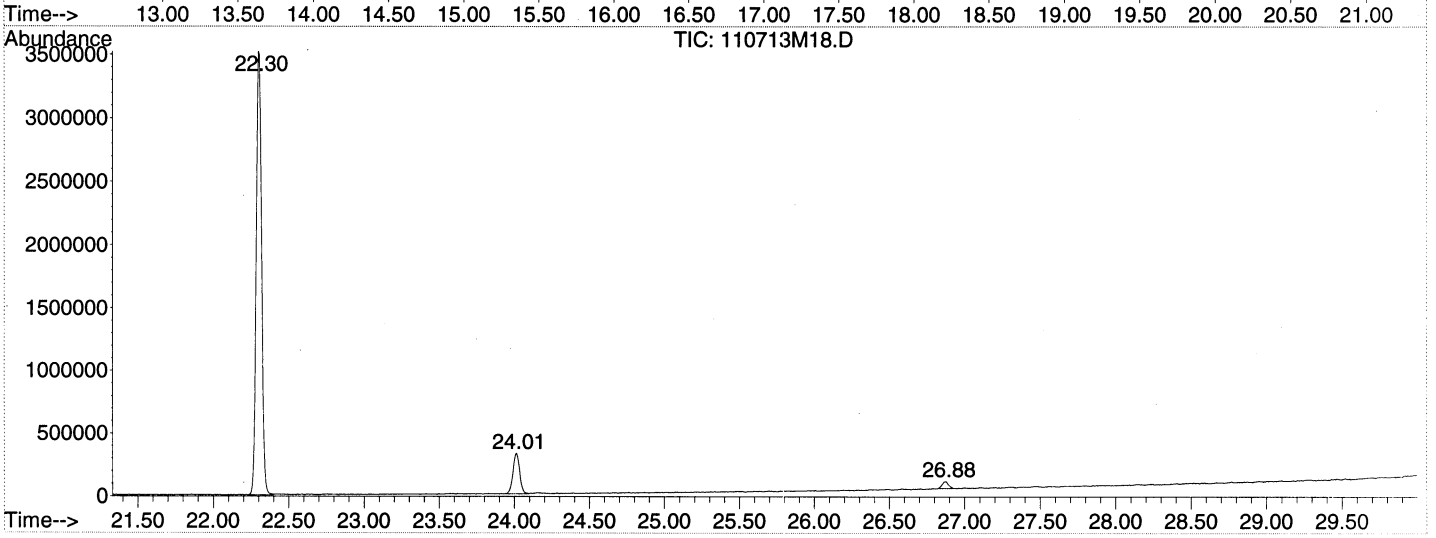
Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M18.D
Acq On : 8 Nov 2013 2:54 am
Operator : EM
Sample : CAN 1980
Misc : CAN 1980
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







00516

Library Search Compound Report

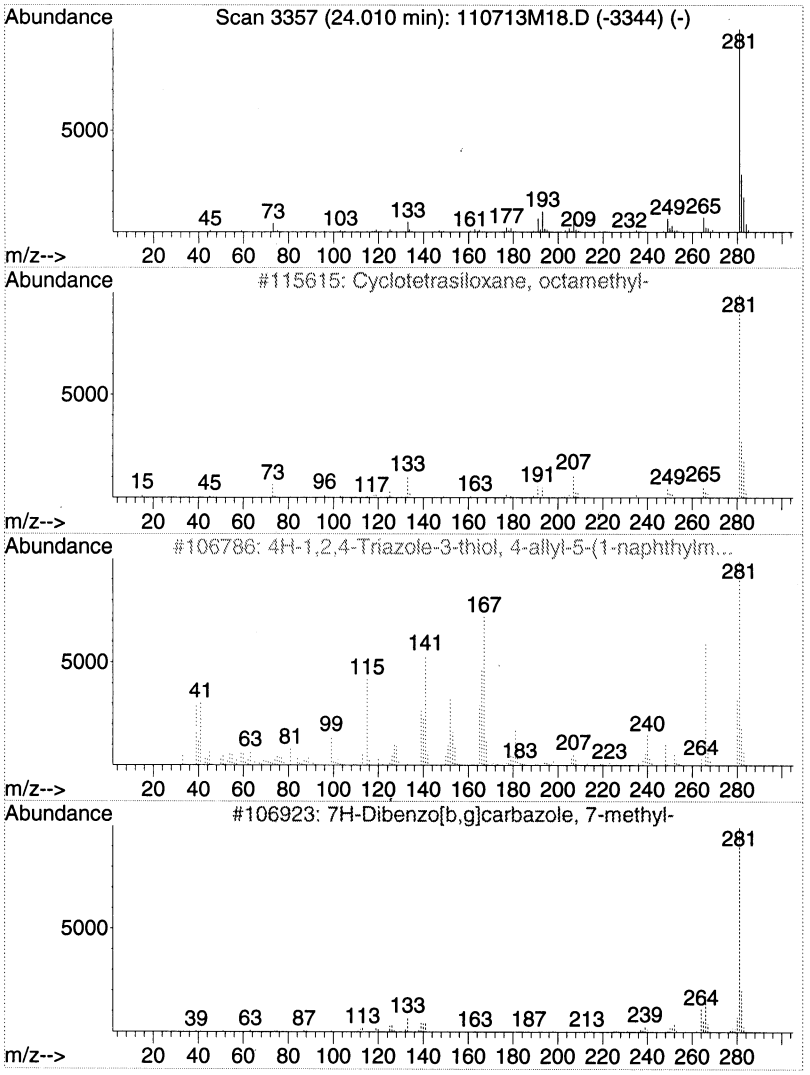
```
Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M18.D
Acq On    :  8 Nov 2013   2:54 am
Operator  : EM
Sample    : CAN 1980
Misc      : CAN 1980
ALS Vial  : 45   Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title  : TO15

TIC Library    : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P
```

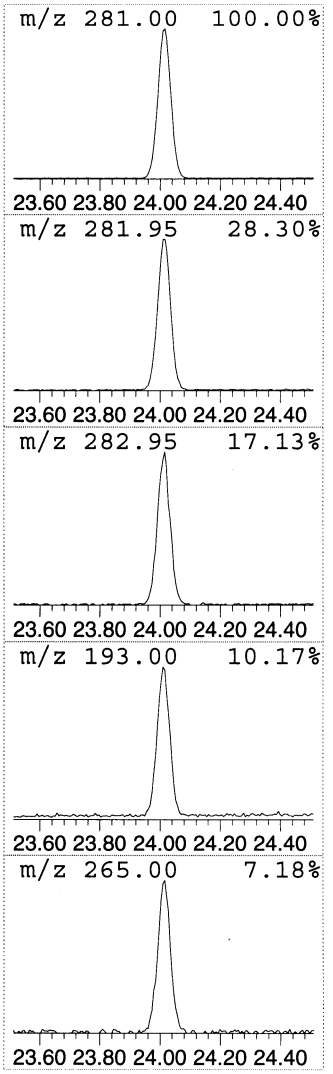
****

Peak Number 1 Cyclotetrasiloxane, octamet... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.01	2.42 ppbv	1002570	CHLOROBENZENE-d5	22.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	64
2	4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	53
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	53
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49
5	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M18.D
Acq On : 8 Nov 2013 2:54 am
Operator : EM
Sample : CAN 1980
Misc : CAN 1980
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Cyclotetrasiloxan...	24.01	2.4	ppbv	1002570	3	22.31	8624600	20.8

column bleed

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M19.D
Acq On : 8 Nov 2013 3:43 am
Operator : EM
Sample : CAN 1983
Misc : CAN 1983
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Nov 08 10:05:41 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.33	49	832838	18.80 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.37	114	3566303	20.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.31	117	3086191	20.80 ppbv	0.00

Target Compounds	Qvalue

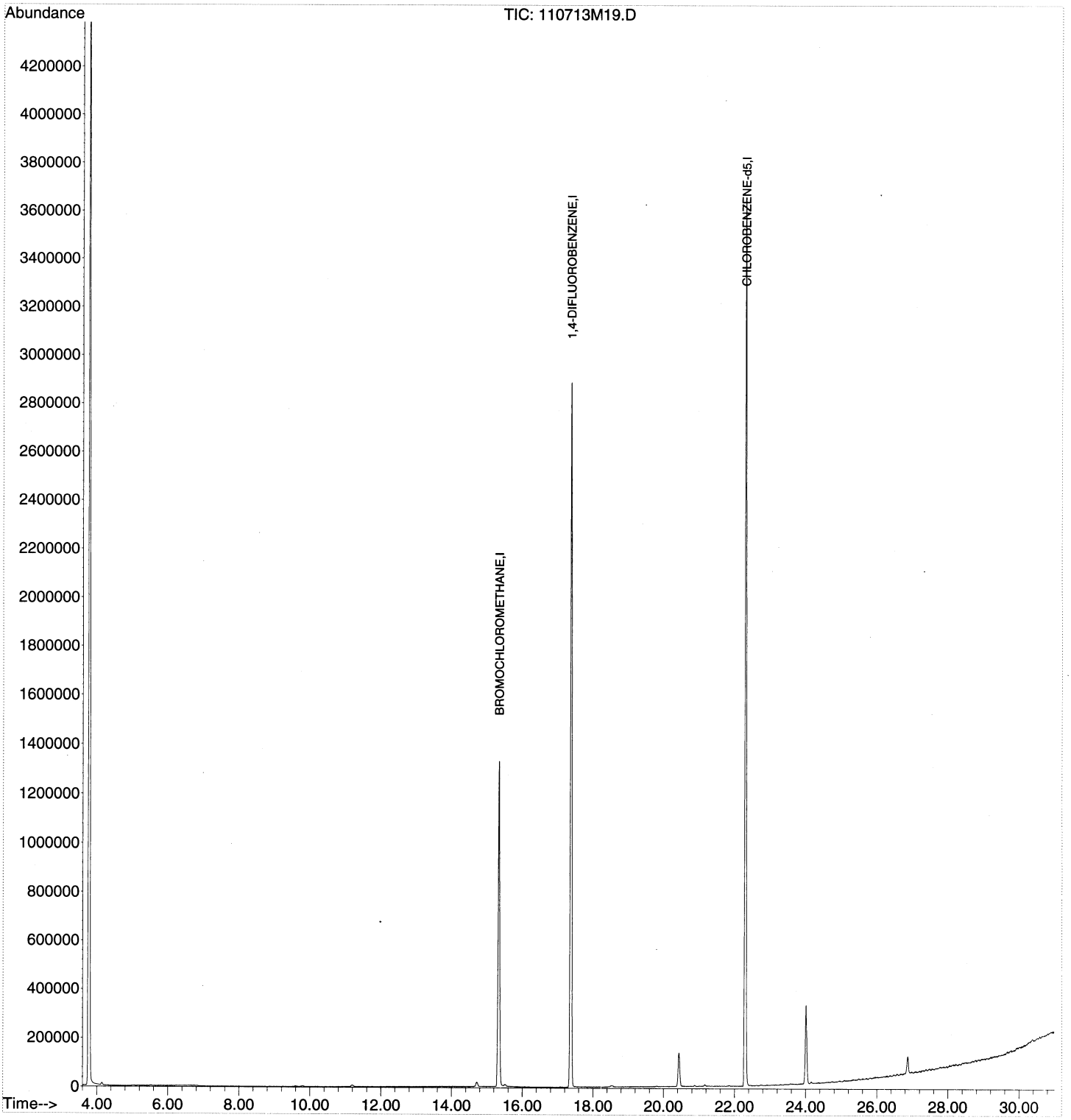
(#) = qualifier out of range (m) = manual integration (+) = signals summed

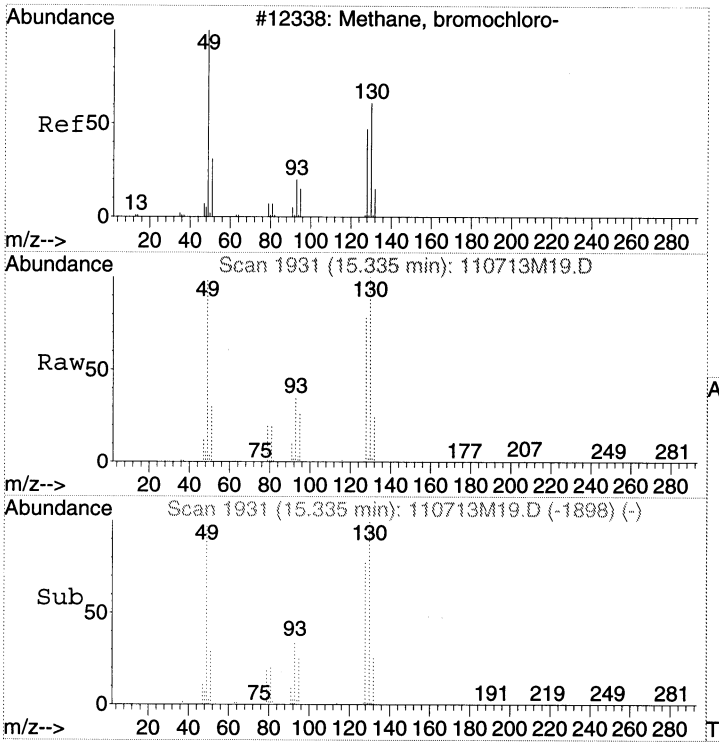
00517

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M19.D
Acq On : 8 Nov 2013 3:43 am
Operator : EM
Sample : CAN 1983
Misc : CAN 1983
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Nov 08 10:05:41 2013
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15
QLast Update : Tue Oct 08 16:43:21 2013
Response via : Initial Calibration

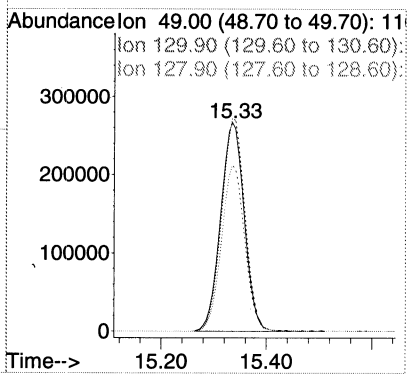


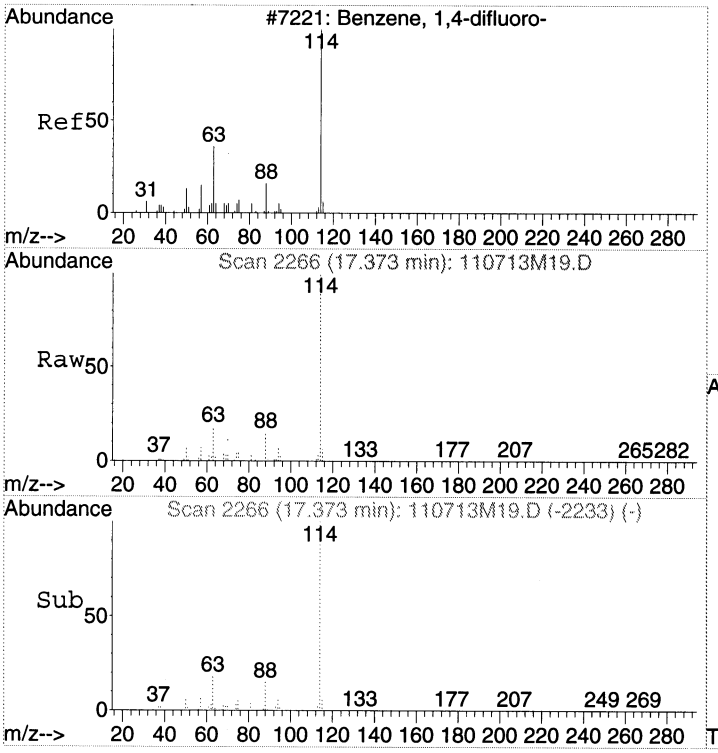


#1
BROMOCHLOROMETHANE
Concen: 18.80 ppbv
RT: 15.33 min Scan# 1931
Delta R.T. -0.00 min
Lab File: 110713M19.D
Acq: 8 Nov 2013 3:43 am

Tgt Ion: 49 Resp: 832838

Ion	Ratio	Lower	Upper
49	100		
130	100.6	97.9	137.9
128	78.0	70.6	110.6

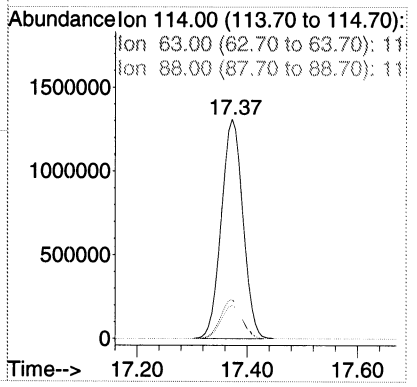


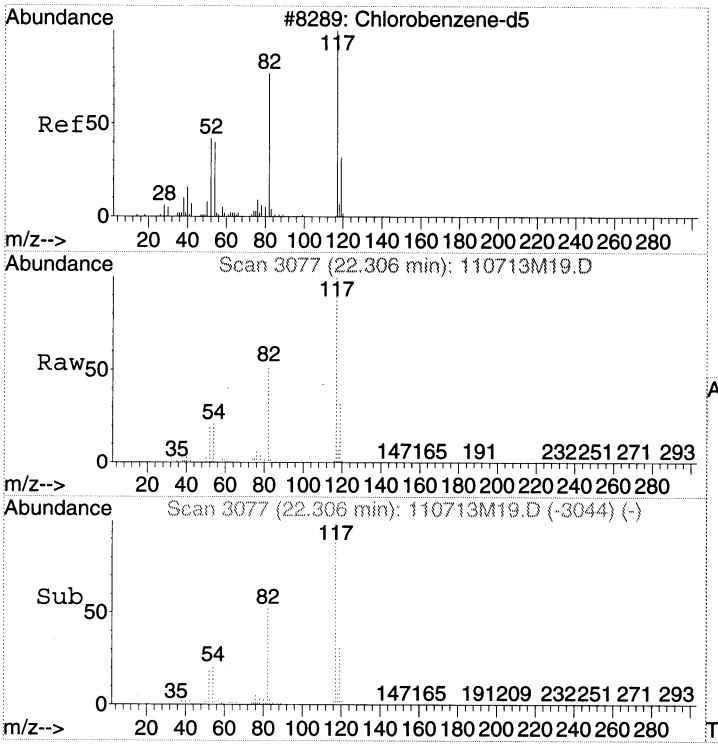


#32
1,4-DIFLUOROBENZENE
Concen: 20.00 ppbv
RT: 17.37 min Scan# 2266
Delta R.T. -0.00 min
Lab File: 110713M19.D
Acq: 8 Nov 2013 3:43 am

Tgt Ion:114 Resp: 3566303

Ion	Ratio	Lower	Upper
114	100		
63	18.0	0.0	35.8
88	15.2	0.0	34.6

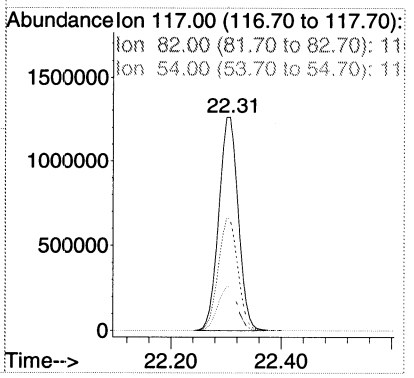




#43
CHLOROBENZENE-d5
Concen: 20.80 ppbv
RT: 22.31 min Scan# 3077
Delta R.T. -0.00 min
Lab File: 110713M19.D
Acq: 8 Nov 2013 3:43 am

Tgt Ion:117 Resp: 3086191

Ion	Ratio	Lower	Upper
117	100		
82	53.0	28.9	68.9
54	21.1	0.0	36.9



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M19.D
Acq On : 8 Nov 2013 3:43 am
Operator : EM
Sample : CAN 1983
Misc : CAN 1983
ALS Vial : 46 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Title : TO15

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	15.335	1917	1931	1951	rBV	1331388	4145740	45.81%	18.244%
2	17.373	2253	2266	2284	rBV	2884469	7898161	87.27%	34.757%
3	20.439	2758	2770	2783	rVB3	136775	456695	5.05%	2.010%
4	22.306	3066	3077	3093	rBV	3645786	9049818	100.00%	39.825%
5	24.016	3347	3358	3374	rVB	320077	978696	10.81%	4.307%
6	26.875	3821	3828	3839	rVB2	67480	194682	2.15%	0.857%

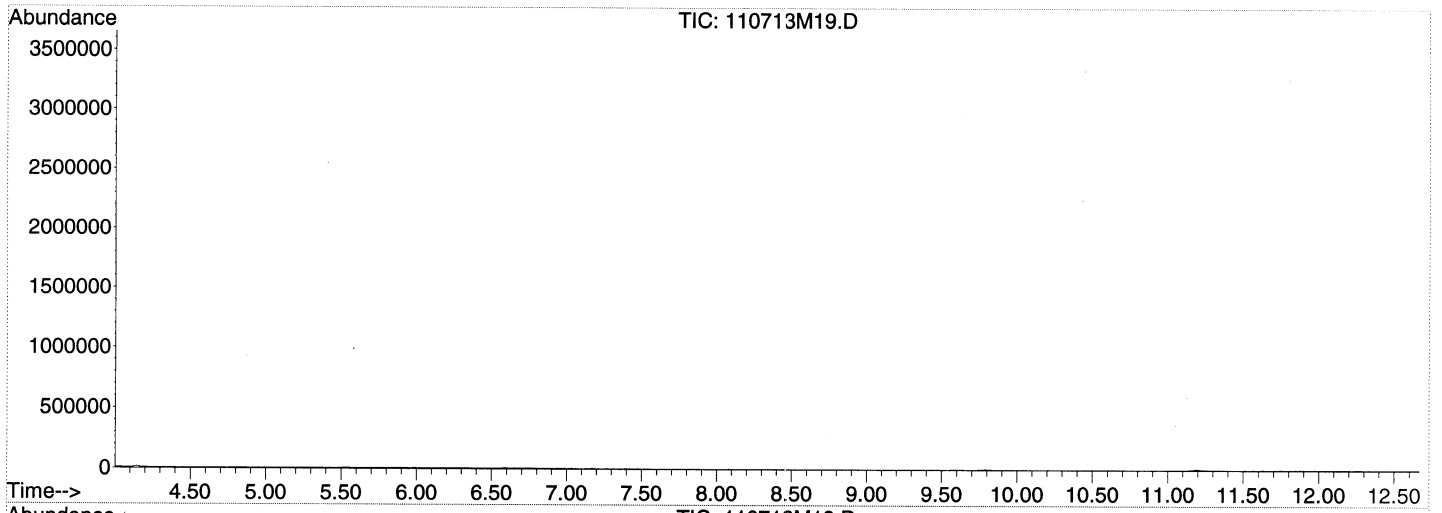
Sum of corrected areas: 22723792

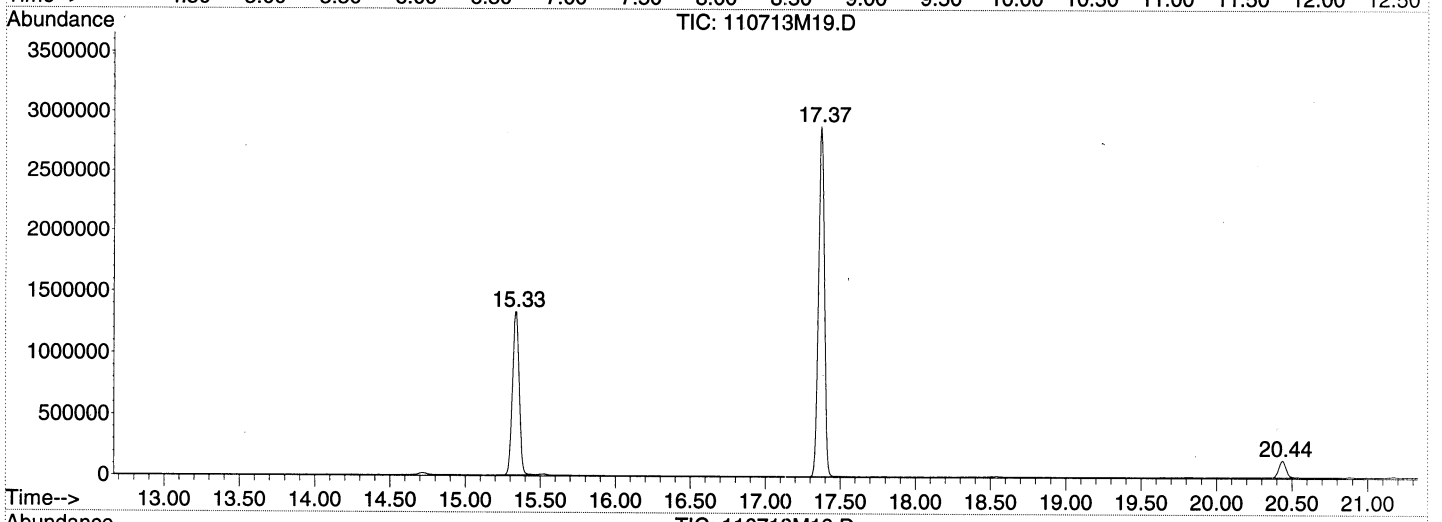
LSC Report - Integrated Chromatogram

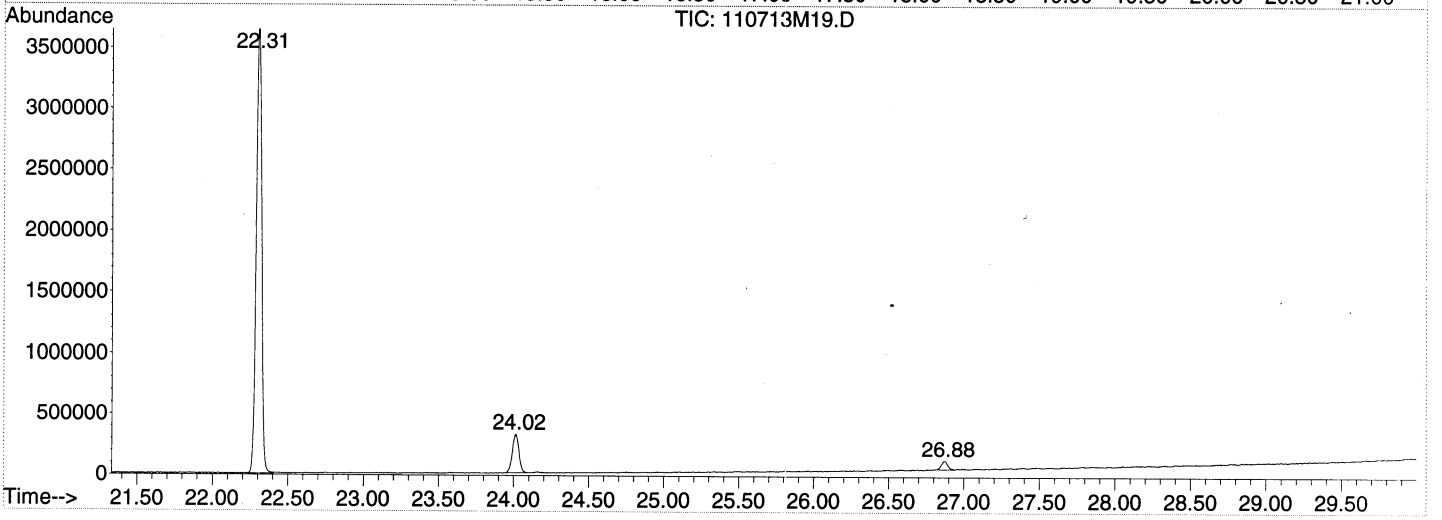
Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M19.D
Acq On : 8 Nov 2013 3:43 am
Operator : EM
Sample : CAN 1983
Misc : CAN 1983
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M19.D
Acq On : 8 Nov 2013 3:43 am
Operator : EM
Sample : CAN 1983
Misc : CAN 1983
ALS Vial : 46 Sample Multiplier: 1

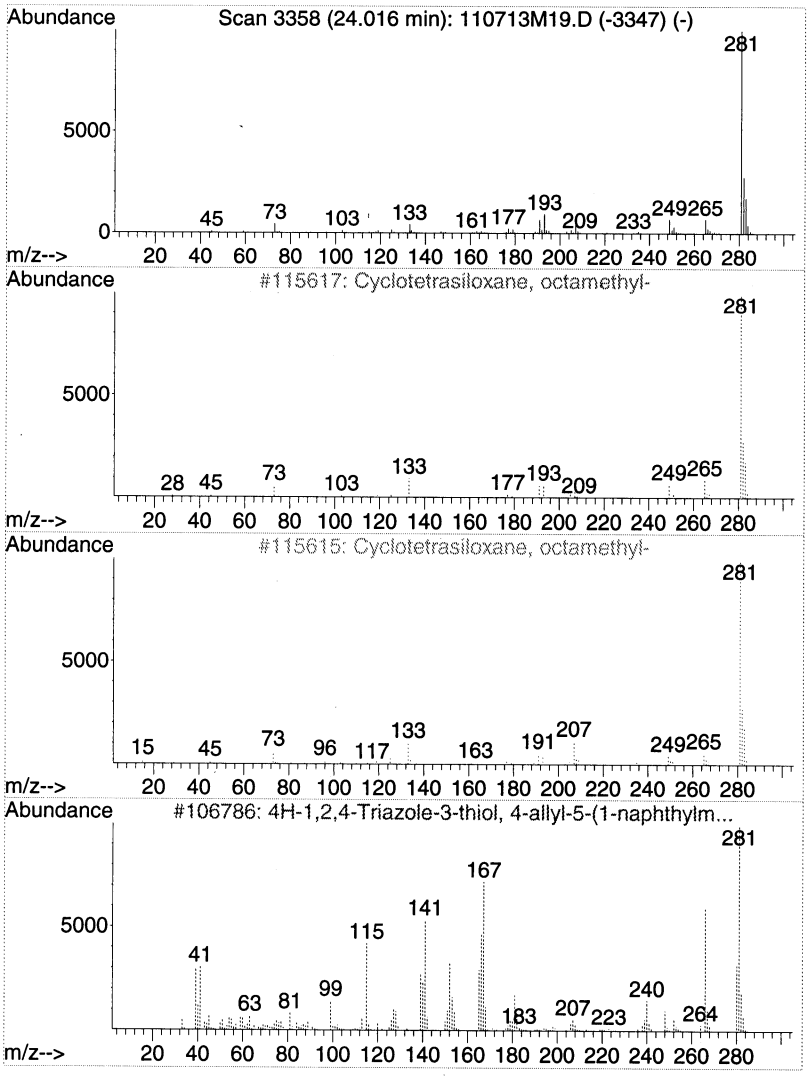
Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15

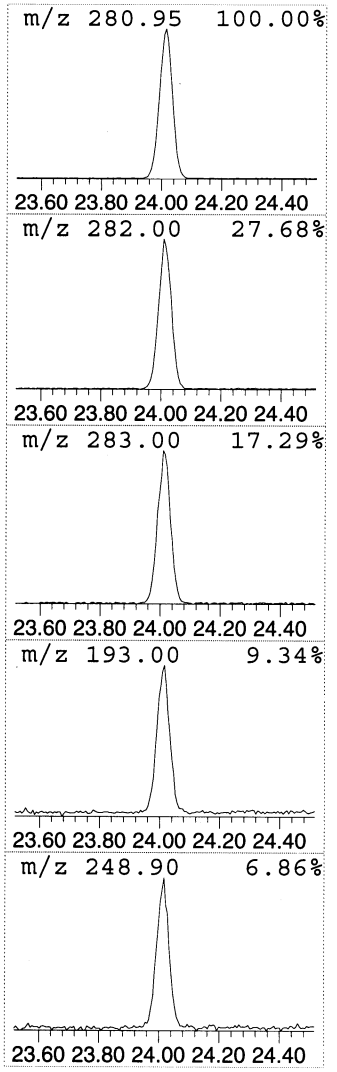
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 Cyclotetrasiloxane, octamet... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.02	2.25 ppbv	978696	CHLOROBENZENE-d5	22.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	78
3	4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	53
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49
5	4-Nitro-4'-chlorodiphenylsulfoxide	281	C12H8ClNO3S	024535-53-3	40





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\2013\DATA\110713TO15\
Data File : 110713M19.D
Acq On : 8 Nov 2013 3:43 am
Operator : EM
Sample : CAN 1983
Misc : CAN 1983
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\2013\METHOD\110713TMAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Cy~~clotetrasiloxan~~...	24.02	2.2	ppbv	978696	3	22.31	9049820	20.8

column bleed

00521

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO-15	**Analyst Initial**	FM	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	NA NA
Instrument ID	HP5973K	**Date Analyzed**	11/13/13	**Date**	11/27/13	**Chemstation Last Update**	11/25/13 12:01:55
Cases	BLANK CERTIFICATION			**SDGs**	BLANK CERTIFICATION		

Review each item listed below. As problems are discovered list them in the non-conformance section of the form and provide and explanation in the discussion part of the table.

NA	A	PR	Item Description
	✓	✓	Runlog (Present, legible, peer reviewed)
	✓	✓	Tune/ Degradation Standard
	✓	✓	Initial Calibration (SOP criteria for number of levels, concentration, and %RSD). Manual calculation. Include summary for daily review.
	✓	✓	Continuing Calibration Verification (frequency, recovery, and %D). Manual calculation.
	✓	✓	QLS (level, frequency, and recovery) (include Chemstation summary)
✓			Method / Extraction / Storage Blanks (frequency and contamination levels)
✓			Surrogate Recoveries
	✓	✓	IS Areas (SOP criteria met)
	✓	✓	LCS (level, frequency, and recovery) (include Chemstation summary)
✓			MS/MSD
✓			Samples (within calibration range, results calculated correctly)
	✓	✓	Manual Integration Verified
✓			Standard Prep Log (all pages present, legible, peer reviewed, legible)
✓			Sample Prep/Extraction (all pages present, legible, peer reviewed)
			Others:

NA = not applicable A = Analyst check PR = Peer Review Check

Non-conformance Report

QC	File ID	Result	QC Limit	High Bias	Low Bias	Flag ND	Flag Hits	Discussion
CRL1	111313K04	171%	60-140%	✓			✓	Hexachlorobutadiene
CRL2	↓ 05	30%	↓		✓	✓	✓	1,4-Dioxane
↓	↓ 05	23%	↓		✓	✓	✓	2-Hexanone

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\2013\111313KAA.SEQ
Date: 11-25-2013
Time: 09:43:39
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Samp Pos	Cal Vol.	Std Vol.	Method	Time
BFB 1335020	3	2	100	40	C:\Smart\TO15.CTD	12:00
10ppbv 1345091	3	2	100	40	C:\Smart\TO15.CTD	12:00
10ppbv 1345091	3	2	100	0	C:\Smart\TO15.CTD	12:00
1.0ppbv 1345089	1	2	30	0	C:\Smart\Loop40.CTD	12:00
1.0ppbv 1309037	1	3	30	0	C:\Smart\Loop40.CTD	12:00
CAN 626	4	1	200	0	C:\Smart\TO15.CTD	12:00
CAN 629	4	2	200	0	C:\Smart\TO15.CTD	12:00
CAN 630	4	3	200	0	C:\Smart\TO15.CTD	12:00
CAN 649	4	4	200	0	C:\Smart\TO15.CTD	12:00
CAN 650	4	5	200	0	C:\Smart\TO15.CTD	12:00
CAN 656	4	6	200	0	C:\Smart\TO15.CTD	12:00
CAN 662	3	4	200	0	C:\Smart\TO15.CTD	12:00
CAN 846	3	5	200	0	C:\Smart\TO15.CTD	12:00
CAN 870	3	6	200	0	C:\Smart\TO15.CTD	12:00
CAN 889	3	7	200	0	C:\Smart\TO15.CTD	12:00
CAN 896	3	8	200	0	C:\Smart\TO15.CTD	12:00
CAN 1054	3	9	200	0	C:\Smart\TO15.CTD	12:00
CAN 1061	3	10	200	0	C:\Smart\TO15.CTD	12:00
CAN 1097	3	11	200	0	C:\Smart\TO15.CTD	12:00
CAN 1098	3	12	200	0	C:\Smart\TO15.CTD	12:00
CAN 1115	4	1	200	0	C:\Smart\TO15.CTD	12:00
CAN 1121	4	2	200	0	C:\Smart\TO15.CTD	12:00
CAN 1968	4	3	200	0	C:\Smart\TO15.CTD	12:00
CAN 1976	4	4	200	0	C:\Smart\TO15.CTD	12:00
CAN 1990	4	5	200	0	C:\Smart\TO15.CTD	12:00

Injection Log

Directory: C:\msdchem\1\DATA\2013\111313KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	111313K01.D	1.	S13K0XX-TUN1	BFB STD/IS/10ppbv STD	13 Nov 2013 00:42
2	32	111313K02.D	1.	S13K0XX-CCV1	10 ppbv 1345091	13 Nov 2013 01:30
3	32	111313K03.D	1.	B13K0XX-BS1	10 ppbv 1345091	13 Nov 2013 02:16
4	12	111313K04.D	1.	S13K0XX-CRL1	1.0 ppbv 1345089	13 Nov 2013 03:05
5	13	111313K05.D	1.	S13K0XX-CRL2	1.0 ppbv 1309037	13 Nov 2013 03:53
6	41	111313K06.D	1.	CAN 626	CAN 626	13 Nov 2013 04:42
7	42	111313K07.D	1.	CAN 629	CAN 629	13 Nov 2013 05:31
8	43	111313K08.D	1.	CAN 630	CAN 630	13 Nov 2013 06:20
9	44	111313K09.D	1.	CAN 649	CAN 649	13 Nov 2013 07:09
10	45	111313K10.D	1.	CAN 650	CAN 650	13 Nov 2013 07:58
11	46	111313K11.D	1.	CAN 656	CAN 656	13 Nov 2013 08:47
12	34	111313K12.D	1.	CAN 662	CAN 662	13 Nov 2013 11:08
13	35	111313K13.D	1.	CAN 846	CAN 846	13 Nov 2013 11:58
14	36	111313K14.D	1.	CAN 870	CAN 870	13 Nov 2013 12:47
15	37	111313K15.D	1.	CAN 889	CAN 889	13 Nov 2013 13:37
16	38	111313K16.D	1.	CAN 896	CAN 896	13 Nov 2013 14:27
17	39	111313K17.D	1.	CAN 1054	CAN 1054	13 Nov 2013 15:16
18	10	111313K18.D	1.	CAN 1061	CAN 1061	13 Nov 2013 16:05
19	11	111313K19.D	1.	CAN 1097	CAN 1097	13 Nov 2013 16:55
20	12	111313K20.D	1.	CAN 1098	CAN 1098	13 Nov 2013 17:44
21	41	111313K21.D	1.	CAN 1115	CAN 1115	13 Nov 2013 18:34
22	42	111313K22.D	1.	CAN 1121	CAN 1121	13 Nov 2013 19:23
23	43	111313K23.D	1.	CAN 1968	CAN 1968	13 Nov 2013 20:12
24	44	111313K24.D	1.	CAN 1976	CAN 1976	13 Nov 2013 21:02
25	45	111313K25.D	1.	CAN 1990	CAN 1990	13 Nov 2013 21:51

15 Nov 2013 17:14

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2013\111313KA\111313K01.D
Tune Time : 13 Nov 2013 00:42

Daily Calibration File : C:\msdchem\1\DATA\2013\111313KA\111313K02.D

File	Sample	Surrogate Recovery %		Internal Standard Responses
		939780	4184640	3693110
111313K02.D	S13K0XX-CCV1	939780	4184638	3693112
111313K03.D	B13K0XX-BS1	878355	3848024	3405485
111313K04.D	S13K0XX-CRL1	945940	4081911	3610611
111313K05.D	S13K0XX-CRL2	923592	4010384	3562945
111313K06.D	CAN 626	848009	3672640	3238116
111313K07.D	CAN 629	862711	3740803	3285573
111313K08.D	CAN 630	862429	3728982	3290304
111313K09.D	CAN 649	847247	3611644	3191401
111313K10.D	CAN 650	837265	3552756	3148230
111313K11.D	CAN 656	840646	3556806	3154550
111313K12.D	CAN 662	820021	3466711	3028801
111313K13.D	CAN 846	844726	3542233	3120021
111313K14.D	CAN 870	851618	3515457	3093163
111313K15.D	CAN 889	859536	3594841	3183316
111313K16.D	CAN 896	862000	3622737	3214738
111313K17.D	CAN 1054	857518	3484988	3085792
111313K18.D	CAN 1061	855068	3450880	3063274
111313K19.D	CAN 1097	866637	3555829	3160453
111313K20.D	CAN 1098	854709	3439209	3061885

111313K21.D

CAN 1115	855201	3456289	3052468

111313K22.D

CAN 1121	859164	3459848	3063411

111313K23.D

CAN 1968	867949	3498922	3107637

111313K24.D

CAN 1976	869073	3463325	3069954

111313K25.D

CAN 1990	862453	3367851	2989263

(fails) - fails 24hr time check * - fails criteria

Created: Mon Nov 25 14:12:49 2013 HP5973K

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 111213AMBKAA.M
Title : TO15
Last Update : Mon Nov 25 12:01:55 2013
Response Via : Initial Calibration

Calibration Files
1 =111213K09.D 2 =111213K10.D 5 =111213K11.D 10 =111213K12.D 15 =111213K13.D
20 =111213K14.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.600	0.520	0.487	0.473	0.464	0.457	0.500	10.72
3)	T	Dichlorodifluo...	2.350	2.139	2.032	1.989	1.930	1.866	2.051	8.45
4)	T	1,2-Dichlorote...	2.482	2.242	2.152	2.141	2.101	2.072	2.199	6.84
5)	T	Chloromethane	0.771	0.672	0.649	0.637	0.625	0.622	0.663	8.48
6)	T	Vinyl chloride	1.003	0.878	0.847	0.831	0.818	0.817	0.866	8.19
7)	T	1,3-Butadiene	0.712	0.609	0.597	0.587	0.583	0.578	0.611	8.33
8)	T	Bromomethane	1.060	0.908	0.868	0.851	0.844	0.829	0.893	9.62
9)	T	Chloroethane	0.593	0.524	0.491	0.478	0.473	0.472	0.505	9.33
10)	T	Bromoethene	1.045	0.924	0.880	0.864	0.856	0.838	0.901	8.46
11)	T	Trichlorofluor...	2.577	2.259	2.167	2.122	2.106	2.078	2.218	8.42
12)	T	1,1,2-Trichlor...	2.250	1.973	1.888	1.854	1.832	1.796	1.932	8.64
13)	T	1,1-Dichloroet...	1.665	1.452	1.403	1.373	1.376	1.360	1.438	8.05
14)	T	Acetone	1.077	0.985	1.015	0.995	0.989	0.981	1.007	3.61
15)	T	Carbon disulfide	3.207	2.617	2.345	2.232	2.203	2.176	2.463	16.18
16)	T	2-Propanol	1.318	1.062	1.116	1.075	1.079	1.074	1.121	8.78
17)	T	Allyl chloride	0.993	0.903	0.870	0.844	0.852	0.848	0.885	6.47
18)	T	Dichloromethane	1.271	1.057	0.948	0.904	0.889	0.869	0.990	15.48
19)	T	tert-Butyl met...	2.640	2.311	2.417	2.389	2.376	2.370	2.417	4.74
20)	T	trans-1,2-Dich...	1.313	1.176	1.154	1.129	1.123	1.119	1.169	6.30
21)	T	Hexane	1.612	1.485	1.427	1.397	1.391	1.386	1.450	6.05
22)	T	1,1-Dichloroet...	1.956	1.814	1.734	1.683	1.676	1.665	1.755	6.43
23)	T	Vinyl acetate	1.640	1.608	1.628	1.613	1.607	1.613	1.618	0.79
24)	T	cis-1,2-Dichlo...	1.445	1.323	1.282	1.246	1.244	1.237	1.296	6.17
25)	T	2-Butanone (MEK)	1.756	1.180	1.363	1.395	1.268	1.279	1.374	14.71
26)	T	Ethyl acetate	1.642	1.713	1.695	1.590	1.707	1.712	1.676	2.99
27)	T	Tetrahydrofuran	0.996	0.841	0.873	0.850	0.837	0.842	0.873	7.04
28)	T	Chloroform	2.172	2.004	1.935	1.897	1.871	1.863	1.957	5.99
29)	T	Cyclohexane	1.585	1.459	1.444	1.415	1.397	1.399	1.450	4.86
30)	T	1,1,1-Trichlor...	2.217	2.044	1.987	1.936	1.935	1.915	2.006	5.67
31)	T	Carbon tetrach...	2.316	2.137	2.078	2.043	2.058	2.028	2.110	5.10
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.790	0.755	0.736	0.729	0.727	0.730	0.744	3.29
34)	T	2,2,4-Trimethy...	1.016	0.996	0.993	0.979	0.977	0.986	0.991	1.43
35)	T	1,2-Dichloroet...	0.261	0.256	0.249	0.245	0.244	0.246	0.250	2.79
36)	T	Heptane	0.312	0.308	0.307	0.305	0.305	0.309	0.308	0.88
37)	T	Trichloroethene	0.389	0.374	0.364	0.357	0.356	0.357	0.366	3.65
38)	T	1,2-Dichloropr...	0.265	0.265	0.261	0.255	0.253	0.257	0.259	1.98
39)	T	1,4-Dioxane	0.135	0.083	0.100	0.121	0.132	0.138	0.118	18.63
40)	T	Bromodichlorom...	0.440	0.435	0.434	0.431	0.432	0.434	0.434	0.72
41)	T	cis-1,3-Dichlo...	0.394	0.388	0.397	0.393	0.393	0.396	0.394	0.81
42)	T	4-Methyl-2-pen...	0.400	0.347	0.371	0.375	0.379	0.386	0.376	4.64
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.075	1.063	1.065	1.050	1.043	1.055	1.058	1.06
45)	T	trans-1,3-Dich...	0.394	0.404	0.417	0.415	0.420	0.427	0.413	2.82
46)	T	1,1,2-Trichlor...	0.354	0.349	0.352	0.346	0.343	0.347	0.349	1.18
47)	T	Tetrachloroethene	0.636	0.592	0.582	0.575	0.573	0.576	0.589	4.08
48)	T	2-Hexanone	0.391	0.310	0.367	0.396	0.407	0.419	0.381	10.30
49)	T	Chlorodibromom...	0.569	0.570	0.587	0.587	0.590	0.598	0.584	1.96
50)	T	1,2-Dibromoeth...	0.542	0.535	0.541	0.537	0.533	0.539	0.538	0.63
51)	T	Chlorobenzene	0.870	0.863	0.878	0.858	0.861	0.864	0.866	0.83
52)	T	Ethylbenzene	1.377	1.342	1.382	1.361	1.361	1.375	1.366	1.06
53)	T	m&p-Xylene	1.052	1.020	1.052	1.037	1.042	1.047	1.042	1.19
54)	T	o-Xylene	1.066	1.021	1.060	1.049	1.049	1.057	1.051	1.52
55)	T	Styrene	0.881	0.857	0.904	0.899	0.900	0.906	0.891	2.12
56)	T	Bromoform	0.609	0.593	0.632	0.638	0.644	0.646	0.627	3.39

Method Path : C:\msdchem\1\METHODS\2013\
Method File : 111213AMBKAA.M
Title : TO15

57)	T	1,1,2,2-Tetrac...	0.854	0.736	0.781	0.771	0.763	0.775	0.780	5.08
58)	T	1,2,3-Trichlor...	0.616	0.544	0.583	0.573	0.573	0.582	0.578	4.04
59)	T	4-Ethyltoluene	1.576	1.349	1.433	1.426	1.429	1.445	1.443	5.11
60)	T	1,3,5-Trimethy...	1.392	1.211	1.290	1.288	1.293	1.304	1.296	4.44
61)	T	1,2,4-Trimethy...	1.426	1.247	1.323	1.314	1.308	1.321	1.323	4.38
62)	T	1,3-Dichlorobe...	1.114	0.954	0.996	0.991	0.988	0.995	1.006	5.44
63)	T	1,4-Dichlorobe...	1.087	0.938	0.986	0.987	0.984	0.993	0.996	4.89
64)	T	Benzyl chloride	1.003	0.827	0.904	0.908	0.905	0.917	0.911	6.13
65)	T	1,2-Dichlorobe...	1.105	0.919	0.966	0.949	0.941	0.947	0.971	6.94
66)	T	1,2,4-Trichlor...	1.189	1.027	1.033	1.039	1.049	1.080	1.070	5.74
67)	T	Hexachlorobuta...	1.113	0.934	0.895	0.835	0.828	0.817	0.904	12.37
68)	T	~~Naphthalene~~	~~0.017~~	~~0.010~~	~~0.005~~	~~0.019~~	~~0.019~~	~~0.019~~	~~0.015~~	~~40.14~~

Can 11/27/13

(#) = Out of Range

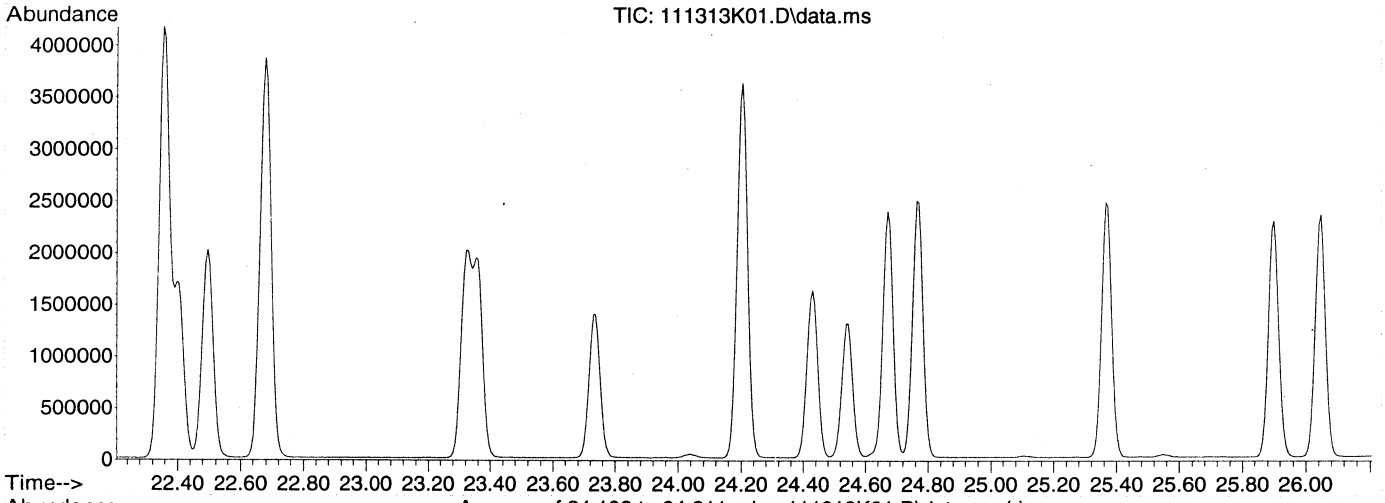
00528

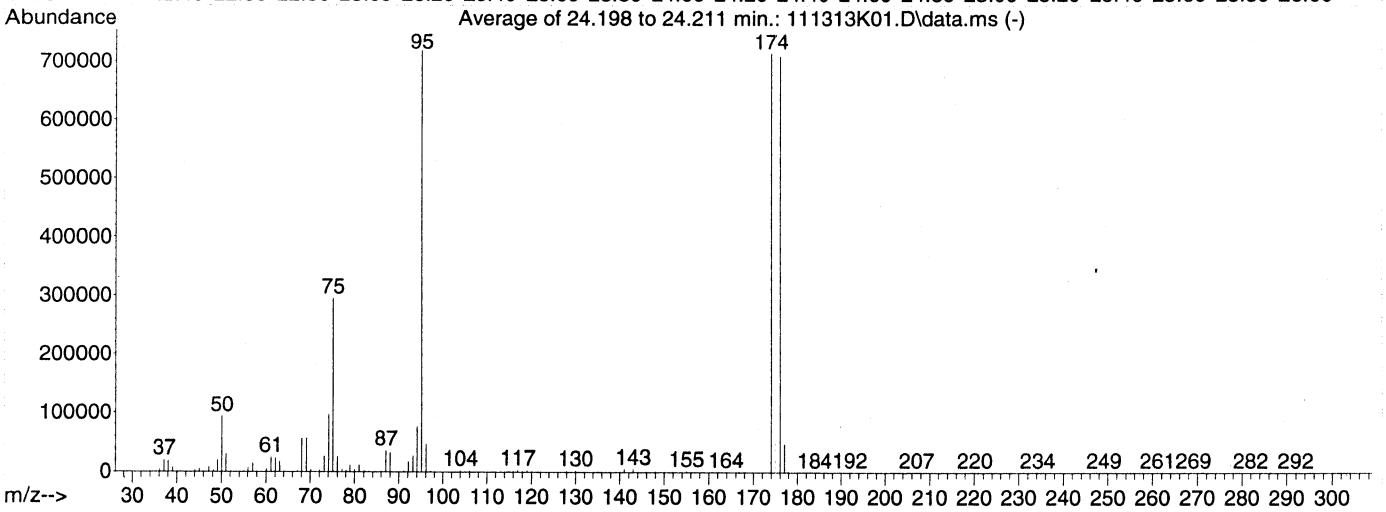
BFB

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K01.D
Acq On : 13 Nov 2013 00:42
Operator : EM
Sample : S13K0XX-TUN1
Misc : BFB STD/IS/10ppbv STD
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Title : TO15
Last Update : Mon Nov 25 12:01:55 2013





AutoFind: Scans 3389, 3390, 3391; Background Corrected with Scan 3373

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.0	93401	PASS
75	95	30	66	41.1	295274	PASS
95	95	100	100	100.0	718508	PASS
96	95	5	9	6.5	46635	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	99.3	713664	PASS
175	174	4	9	7.6	53895	PASS
176	174	93	101	99.2	707849	PASS
177	176	5	9	6.6	46547	PASS

Average of 24.198 to 24.211 min.: 111313K01.D\data.ms
S13K0XX-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	3747	47.15	7869	58.05	627	69.10	56388
37.15	19906	48.10	3029	58.95	188	70.10	3731
38.10	17688	49.10	19651	60.10	5056	71.20	264
39.10	6727	50.10	93401	61.05	24012	72.10	3255
40.15	262	51.05	29729	62.10	23421	73.10	25617
41.15	123	52.10	1304	63.10	17276	74.10	95299
42.10	35	53.00	38	64.10	1612	75.05	295274
43.10	90	54.10	9	65.10	214	76.05	25540
44.10	2252	55.10	1365	66.10	111	77.10	3903
45.10	4316	56.05	6737	67.10	1788	78.00	1239
46.15	217	57.10	13453	68.05	55989	78.15	1980

Average of 24.198 to 24.211 min.: 111313K01.D\data.ms
S13K0XX-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.00	10987	91.05	1792	104.00	2235	112.95	356
80.00	3628	92.10	16568	105.00	593	114.00	69
81.00	11080	93.10	26632	106.00	2110	114.95	624
82.05	2354	94.10	75870	107.05	505	116.00	1991
83.15	411	95.10	718508	107.90	9	117.00	3460
84.05	3	96.05	46635	108.10	36	118.00	1934
85.10	46	97.10	1363	108.45	70	119.00	2828
86.05	671	98.15	112	109.05	33	119.80	41
87.10	35369	100.90	14	109.95	298	120.10	37
88.05	32445	101.90	10	111.05	451	121.40	15
89.75	2	103.00	134	112.00	286	122.05	63

Average of 24.198 to 24.211 min.: 111313K01.D\data.ms
S13K0XX-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	244	132.10	1	139.15	206	150.00	618
123.95	302	133.10	28	140.10	309	151.05	121
124.95	222	134.00	102	141.00	5162	152.00	381
126.00	189	134.15	97	142.05	772	153.00	515
126.25	15	135.00	898	143.00	5345	154.00	339
127.10	289	135.90	119	144.00	326	155.00	1790
128.00	2184	136.10	105	145.05	445	155.95	259
128.95	1017	136.95	981	145.90	921	156.95	1318
130.00	2407	137.80	36	147.05	473	158.15	184
130.95	869	138.20	25	148.00	1435	159.00	908
131.75	30	138.90	6	148.95	418	160.05	52

Average of 24.198 to 24.211 min.: 111313K01.D\data.ms
S13K0XX-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
160.95	652	169.00	27	183.50	9	201.20	15
162.05	72	170.00	37	183.95	24	201.90	32
162.90	43	170.30	23	186.00	7	202.10	3
163.10	54	170.95	12	188.00	12	202.40	7
163.85	70	174.00	713664	189.90	36	203.00	10
164.80	69	174.95	53895	191.00	14	204.60	19
165.90	10	176.00	707849	192.00	96	207.10	98
166.15	43	177.00	46547	193.10	36	209.15	73
166.90	13	178.00	1159	197.30	7	209.90	4
167.45	30	182.05	18	198.10	17	211.05	51
168.20	42	183.00	8	200.80	9	211.90	21

Average of 24.198 to 24.211 min.: 111313K01.D\data.ms
S13K0XX-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
217.20	31	232.05	25	239.15	56	252.05	25
217.80	23	233.05	34	239.70	15	253.00	81
219.05	27	233.30	7	240.10	36	254.05	35
220.15	49	234.25	69	244.10	8	254.80	78
221.50	10	235.20	14	247.20	55	256.20	17
222.40	8	236.30	29	248.00	24	256.80	13
222.95	10	236.70	19	248.20	15	257.80	19
224.00	10	237.00	10	249.15	128	260.10	73
225.05	25	237.50	15	249.90	21	261.15	151

227.10	7	237.85	26	251.20	84	261.90	28
231.10	9	238.25	16	251.50	20	263.30	29

Average of 24.198 to 24.211 min.: 111313K01.D\data.ms
S13K0XX-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.80	24	281.90	79	294.10	31		
267.00	62	282.10	17	294.40	13		
269.10	102	282.70	13	297.30	7		
270.10	84	283.35	67	297.70	8		
271.15	47	284.00	36	298.70	7		
272.00	23	285.10	8				
274.05	29	286.20	7				
277.50	9	287.00	13				
277.80	7	290.20	13				
279.20	16	291.95	35				
280.10	7	293.15	5				

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:13 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	BROMOCHLOROMETHANE	1.000	1.000	0.0	112	0.00
2	T	Propene	0.500	0.446	10.8	105	0.00
3	T	Dichlorodifluoromethane	2.051	1.848	9.9	104	0.00
4	T	1,2-Dichlorotetrafluoroetha	2.199	1.982	9.9	103	0.00
5	T	Chloromethane	0.663	0.596	10.1	104	0.00
6	T	Vinyl chloride	0.866	0.785	9.4	105	0.00
7	T	1,3-Butadiene	0.611	0.551	9.8	105	0.00
8	T	Bromomethane	0.893	0.800	10.4	105	0.00
9	T	Chloroethane	0.505	0.454	10.1	106	0.00
10	T	Bromoethene	0.901	0.807	10.4	104	0.00
11	T	Trichlorofluoromethane	2.218	1.983	10.6	104	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	1.932	1.777	8.0	107	0.00
13	T	1,1-Dichloroethene	1.438	1.284	10.7	104	0.00
14	T	Acetone	1.007	0.948	5.9	106	0.00
15	T	Carbon disulfide	2.463	2.093	15.0	105	0.00
16	T	2-Propanol	1.121	1.024	8.7	106	0.00
17	T	Allyl chloride	0.885	0.803	9.3	106	0.00
18	T	Dichloromethane	0.990	0.848	14.3	105	0.00
19	T	tert-Butyl methyl ether (MT	2.417	2.239	7.4	105	0.00
20	T	trans-1,2-Dichloroethene	1.169	1.054	9.8	104	0.00
21	T	Hexane	1.450	1.309	9.7	105	0.00
22	T	1,1-Dichloroethane	1.755	1.590	9.4	105	0.00
23	T	Vinyl acetate	1.618	1.530	5.4	106	0.00
24	T	cis-1,2-Dichloroethene	1.296	1.169	9.8	105	0.00
25	T	2-Butanone (MEK)	1.374	1.319	4.0	106	0.00
26	T	Ethyl acetate	1.676	1.516	9.5	106	0.00
27	T	Tetrahydrofuran	0.873	0.802	8.1	105	0.00
28	T	Chloroform	1.957	1.761	10.0	104	0.00
29	T	Cyclohexane	1.450	1.317	9.2	104	0.00
30	T	1,1,1-Trichloroethane	2.006	1.810	9.8	104	0.00
31	T	Carbon tetrachloride	2.110	1.897	10.1	104	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	110	0.00
33	T	Benzene	0.744	0.690	7.3	104	0.00
34	T	2,2,4-Trimethylpentane	0.991	0.930	6.2	105	0.00
35	T	1,2-Dichloroethane	0.250	0.233	6.8	105	0.00
36	T	Heptane	0.308	0.292	5.2	106	0.00
37	T	Trichloroethene	0.366	0.336	8.2	104	0.00
38	T	1,2-Dichloropropane	0.259	0.243	6.2	105	0.00
39	T	1,4-Dioxane	0.118	0.118	0.0	107	0.00
40	T	Bromodichloromethane	0.434	0.409	5.8	105	0.00
41	T	cis-1,3-Dichloropropene	0.394	0.375	4.8	105	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.376	0.365	2.9	107	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	111	0.00
44	T	Toluene	1.058	0.990	6.4	104	0.00
45	T	trans-1,3-Dichloropropene	0.413	0.395	4.4	105	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:13 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	1,1,2-Trichloroethane	0.349	0.326	6.6	104	0.00
47	T	Tetrachloroethene	0.589	0.537	8.8	103	0.00
48	T	2-Hexanone	0.381	0.388	-1.8	108	0.00
49	T	Chlorodibromomethane	0.584	0.552	5.5	104	0.00
50	T	1,2-Dibromoethane (EDB)	0.538	0.505	6.1	104	0.00
51	T	Chlorobenzene	0.866	0.812	6.2	105	0.00
52	T	Ethylbenzene	1.366	1.289	5.6	105	0.00
53	T	m&p-Xylene	1.042	0.982	5.8	105	0.00
54	T	o-Xylene	1.051	0.994	5.4	105	0.00
55	T	Styrene	0.891	0.847	4.9	104	0.00
56	T	Bromoform	0.627	0.601	4.1	104	0.00
57	T	1,1,2,2-Tetrachloroethane	0.780	0.732	6.2	105	0.00
58	T	1,2,3-Trichloropropane	0.578	0.544	5.9	105	0.00
59	T	4-Ethyltoluene	1.443	1.354	6.2	105	0.00
60	T	1,3,5-Trimethylbenzene	1.296	1.208	6.8	104	0.00
61	T	1,2,4-Trimethylbenzene	1.323	1.237	6.5	104	0.00
62	T	1,3-Dichlorobenzene	1.006	0.939	6.7	105	0.00
63	T	1,4-Dichlorobenzene	0.996	0.932	6.4	104	0.00
64	T	Benzyl chloride	0.911	0.862	5.4	105	0.00
65	T	1,2-Dichlorobenzene	0.971	0.898	7.5	105	0.00
66	T	1,2,4-Trichlorobenzene	1.070	0.998	6.7	106	0.00
67	T	Hexachlorobutadiene	0.904	0.801	11.4	106	0.00
68	T	Naphthalene	0.015	0.019	~~26.7~~	108	0.00

em 11/25/13

(#) = Out of Range SPCC's out = 0 CCC's out = 0

(67) HCB

$$\% \text{ Dev} = \frac{0.904 - 0.801}{0.904} \times 100 = 11.4\% \checkmark$$

em 11/25/13

$$RF_{\#67} = \frac{1277168 \ (22)}{3693112 \ (9.50 - \cancel{10.3})} = 0.801 \checkmark$$

em 11/25/13

em 11/25/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:13 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: _____ Date: 11/21/13

Manual integration(s) reviewed by:

Reviewer: _____ Date: 11/27/13

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	939780	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4184638	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3693112	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	203729	9.54	ppbv	100
3) Dichlorodifluoromethane	4.463	85	813171	9.28	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	889411	9.47	ppbv	99
5) Chloromethane	5.011	50	267566	9.45	ppbv	100
6) Vinyl chloride	5.333	62	352340	9.53	ppbv	99
7) 1,3-Butadiene	5.437	54	240345	9.21	ppbv	100
8) Bromomethane	6.368	94	352250	9.23	ppbv	99
9) Chloroethane	6.696	64	199747	9.26	ppbv	100
10) Bromoethene	7.262	106	355102	9.22	ppbv	100
11) Trichlorofluoromethane	7.408	101	906650	9.57	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	736366	8.92	ppbv	100
13) 1,1-Dichloroethene	9.300	61	526536	8.57	ppbv	99
14) Acetone	9.823	43	429423	9.98	ppbv	99
15) Carbon disulfide	10.018	76	912245	8.67	ppbv	99
16) 2-Propanol	10.444	45	415499	8.68	ppbv	99
17) Allyl chloride	10.851	41	346615	9.17	ppbv	99
18) Dichloromethane	11.386	49	355082	8.40	ppbv	99
19) tert-Butyl methyl ethe...	12.074	73	1042893	10.10	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	427821	8.57	ppbv	99
21) Hexane	12.719	57	570629	9.21	ppbv	100
22) 1,1-Dichloroethane	13.455	63	658824	8.79	ppbv	99
23) Vinyl acetate	13.595	43	653668	9.46	ppbv	100
24) cis-1,2-Dichloroethene	14.903	61	504405	9.11	ppbv	99
25) 2-Butanone (MEK)	15.000	43	586319	9.99	ppbv	99
26) Ethyl acetate	15.043	43	673583m	9.41	ppbv	
27) Tetrahydrofuran	15.450	42	353010	9.47	ppbv	100
28) Chloroform	15.602	83	767350	9.18	ppbv	100
29) Cyclohexane	15.834	56	585077	9.45	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	781053	9.12	ppbv	100
31) Carbon tetrachloride	16.144	117	834665	9.26	ppbv	100
33) Benzene	16.637	78	1325292	9.36	ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	1858457	9.86	ppbv	100
35) 1,2-Dichloroethane	16.831	62	433807	9.11	ppbv	100
36) Heptane	16.977	43	583932	9.97	ppbv	99
37) Trichloroethene	17.865	130	646544	9.29	ppbv	100
38) 1,2-Dichloropropane	18.364	63	475664	9.65	ppbv	100
39) 1,4-Dioxane	18.559	88	238059	10.60	ppbv	99
40) Bromodichloromethane	18.827	83	825441	9.99	ppbv	100
41) cis-1,3-Dichloropropene	19.599	75	734306	9.80	ppbv	100
42) 4-Methyl-2-pentanone (...	19.830	43	729744	10.20	ppbv	99
44) Toluene	20.074	91	1695725	9.54	ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	709429	10.23	ppbv	99
46) 1,1,2-Trichloroethane	20.846	97	563270	9.62	ppbv	99
47) Tetrachloroethene	20.932	166	901391	9.12	ppbv	100
48) 2-Hexanone	21.187	43	671351	10.48	ppbv	99

00534

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:13 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	963526	9.83 ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	872540	9.66 ppbv	100
51) Chlorobenzene	22.404	112	1418764	9.76 ppbv	99
52) Ethylbenzene	22.495	91	2208466	9.63 ppbv	100
53) m&p-Xylene	22.678	91	3364074	19.24 ppbv	99
54) o-Xylene	23.322	91	1718881	9.75 ppbv	99
55) Styrene	23.359	104	1435617	9.60 ppbv	100
56) Bromoform	23.730	173	1039366	9.88 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.430	83	1252907	9.57 ppbv	100
58) 1,2,3-Trichloropropane	24.539	75	867317	8.93 ppbv	100
59) 4-Ethyltoluene	24.673	105	2387029	9.85 ppbv	99
60) 1,3,5-Trimethylbenzene	24.764	105	2089602	9.60 ppbv	100
61) 1,2,4-Trimethylbenzene	25.367	105	2097364	9.44 ppbv	100
62) 1,3-Dichlorobenzene	25.902	146	1560242	9.24 ppbv	100
63) 1,4-Dichlorobenzene	26.048	146	1549386	9.27 ppbv	100
64) Benzyl chloride	26.261	91	1491524	9.76 ppbv	99
65) 1,2-Dichlorobenzene	26.650	146	1493221	9.16 ppbv	99
66) 1,2,4-Trichlorobenzene	29.114	180	1524568	8.49 ppbv	100
67) Hexachlorobutadiene	29.248	225	1277168	8.42 ppbv	100
68) Naphthalene	29.534	128	28293	11.34 ppbv	97

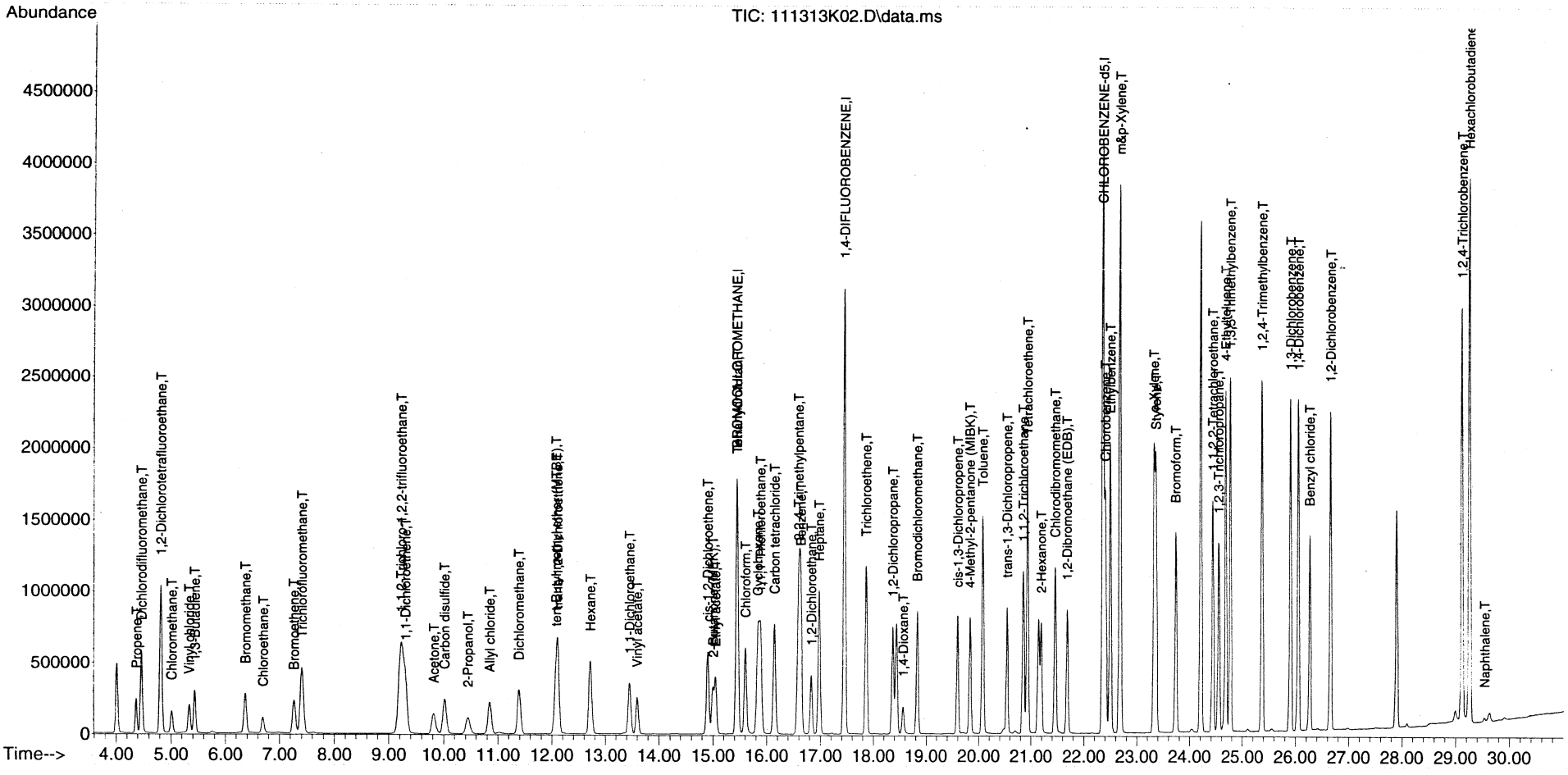
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:13 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

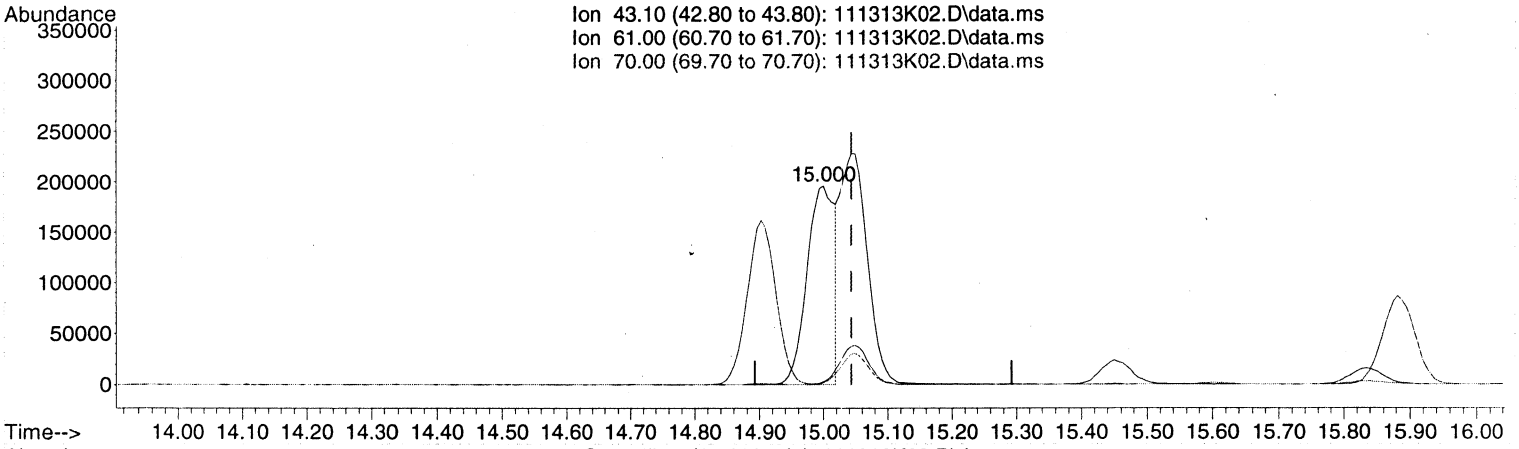


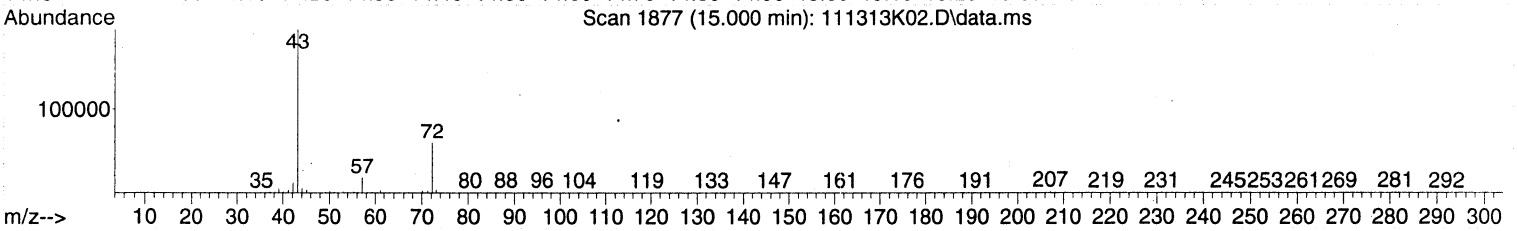
Quantitation Report (Qedit)

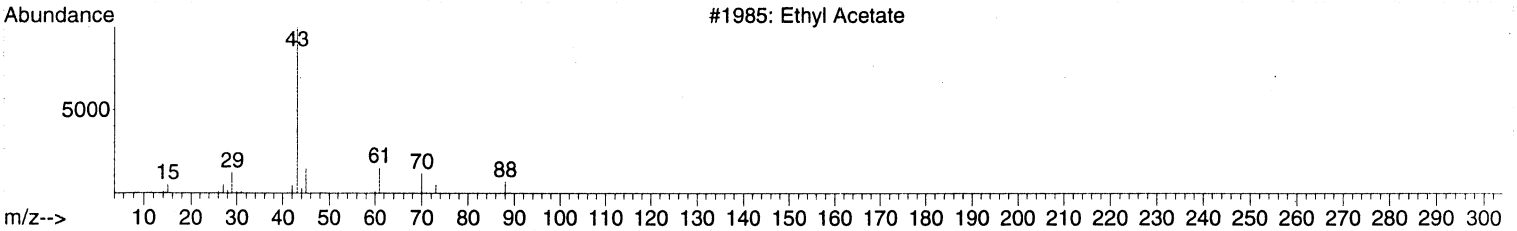
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:31:52 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M







TIC: 111313K02.D\data.ms

(26) Ethyl acetate (T)

15.000min (-0.043) 8.19 ppbv

response 586319

Ion	Exp%	Act%
43.10	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

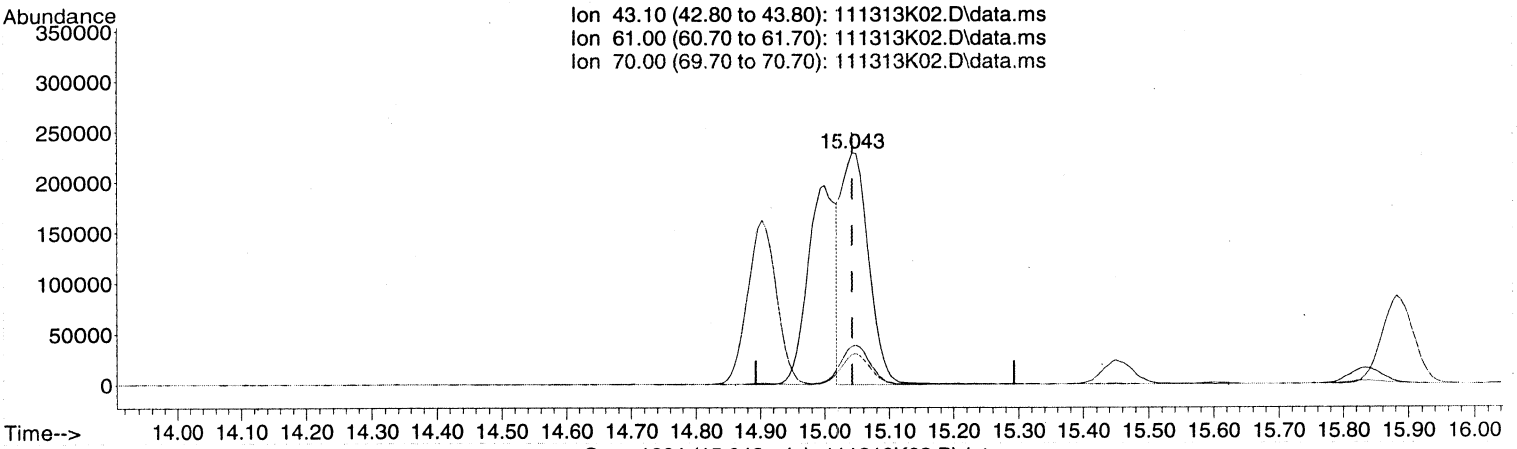
MANUAL INTEGRATION VERIFICATION
☒ Before Manual Integration(s) (not used)
Peak integrated due to being:
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☒ Other: RT off
☐ After Manual Integration
Manual integration(s) performed by:
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

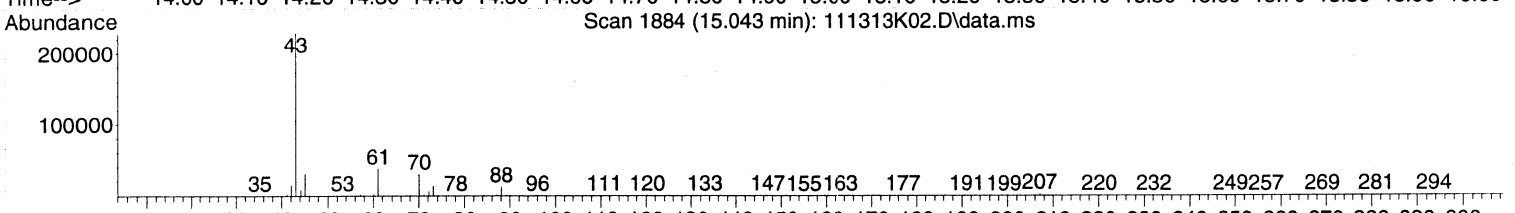
Quantitation Report (Qedit)

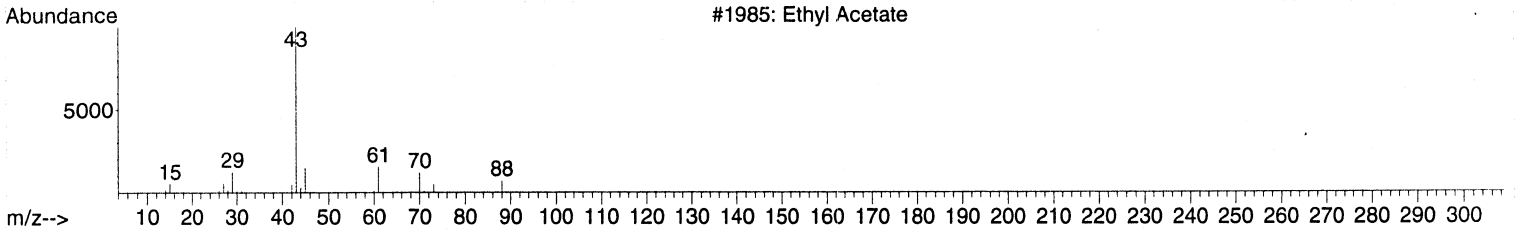
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:31:52 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M







TIC: 111313K02.D\data.ms

(26) Ethyl acetate (T)

15.043min (+0.000) 9.41 ppbv m

response 673583

Ion	Exp%	Act%
43.10	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION	
☐ Before Manual Integration(s) (not used)	
Peak integrated due to being:	
☐ Missed	☐ Summed
☐ Cropped	☐ Improper Baseline
☐ Other:	
☑ After Manual Integration	
Manual integration(s) performed by	
Analyst: [illegible]	Date: 11/27/13
Manual integration(s) reviewed by:	
Reviewer: [illegible]	Date: 11/27/13

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:31:52 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

Rec 1E
Jem 11/25/13

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	939780	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4184638	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3693112	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	203729	9.54	ppbv	100
3) Dichlorodifluoromethane	4.463	85	813171	9.28	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	889411	9.47	ppbv	99
5) Chloromethane	5.011	50	267566	9.45	ppbv	100
6) Vinyl chloride	5.333	62	352340	9.53	ppbv	99
7) 1,3-Butadiene	5.437	54	240345	9.21	ppbv	100
8) Bromomethane	6.368	94	352250	9.23	ppbv	99
9) Chloroethane	6.696	64	199747	9.26	ppbv	100
10) Bromoethene	7.262	106	355102	9.22	ppbv	100
11) Trichlorofluoromethane	7.408	101	906650	9.57	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	736366	8.92	ppbv	100
13) 1,1-Dichloroethene	9.300	61	526536	8.57	ppbv	99
14) Acetone	9.823	43	429423	9.98	ppbv	99
15) Carbon disulfide	10.018	76	912245	8.67	ppbv	99
16) 2-Propanol	10.444	45	415499	8.68	ppbv	99
17) Allyl chloride	10.851	41	346615	9.17	ppbv	99
18) Dichloromethane	11.386	49	355082	8.40	ppbv	99
19) tert-Butyl methyl ethe...	12.074	73	1042893	10.10	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	427821	8.57	ppbv	99
21) Hexane	12.719	57	570629	9.21	ppbv	100
22) 1,1-Dichloroethane	13.455	63	658824	8.79	ppbv	99
23) Vinyl acetate	13.595	43	653668	9.46	ppbv	100
24) cis-1,2-Dichloroethene	14.903	61	504405	9.11	ppbv	99
25) 2-Butanone (MEK)	15.000	43	586319	9.99	ppbv	99
26) Ethyl acetate	15.000	43	586319	8.19	ppbv #	100
27) Tetrahydrofuran	15.450	42	353010	9.47	ppbv	100
28) Chloroform	15.602	83	767350	9.18	ppbv	100
29) Cyclohexane	15.834	56	585077	9.45	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	781053	9.12	ppbv	100
31) Carbon tetrachloride	16.144	117	834665	9.26	ppbv	100
33) Benzene	16.637	78	1325292	9.36	ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	1858457	9.86	ppbv	100
35) 1,2-Dichloroethane	16.831	62	433807	9.11	ppbv	100
36) Heptane	16.977	43	583932	9.97	ppbv	99
37) Trichloroethene	17.865	130	646544	9.29	ppbv	100
38) 1,2-Dichloropropane	18.364	63	475664	9.65	ppbv	100
39) 1,4-Dioxane	18.559	88	238059	10.60	ppbv	99
40) Bromodichloromethane	18.827	83	825441	9.99	ppbv	100
41) cis-1,3-Dichloropropene	19.599	75	734306	9.80	ppbv	100
42) 4-Methyl-2-pentanone (...	19.830	43	729744	10.20	ppbv	99
44) Toluene	20.074	91	1695725	9.54	ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	709429	10.23	ppbv	99
46) 1,1,2-Trichloroethane	20.846	97	563270	9.62	ppbv	99
47) Tetrachloroethene	20.932	166	901391	9.12	ppbv	100
48) 2-Hexanone	21.187	43	671351	10.48	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:31:52 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	963526	9.83	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	872540	9.66	ppbv	100
51) Chlorobenzene	22.404	112	1418764	9.76	ppbv	99
52) Ethylbenzene	22.495	91	2208466	9.63	ppbv	100
53) m&p-Xylene	22.678	91	3364074	19.24	ppbv	99
54) o-Xylene	23.322	91	1718881	9.75	ppbv	99
55) Styrene	23.359	104	1435617	9.60	ppbv	100
56) Bromoform	23.730	173	1039366	9.88	ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.430	83	1252907	9.57	ppbv	100
58) 1,2,3-Trichloropropane	24.539	75	867317	8.93	ppbv	100
59) 4-Ethyltoluene	24.673	105	2387029	9.85	ppbv	99
60) 1,3,5-Trimethylbenzene	24.764	105	2089602	9.60	ppbv	100
61) 1,2,4-Trimethylbenzene	25.367	105	2097364	9.44	ppbv	100
62) 1,3-Dichlorobenzene	25.902	146	1560242	9.24	ppbv	100
63) 1,4-Dichlorobenzene	26.048	146	1549386	9.27	ppbv	100
64) Benzyl chloride	26.261	91	1491524	9.76	ppbv	99
65) 1,2-Dichlorobenzene	26.650	146	1493221	9.16	ppbv	99
66) 1,2,4-Trichlorobenzene	29.114	180	1524568	8.49	ppbv	100
67) Hexachlorobutadiene	29.248	225	1277168	8.42	ppbv	100
68) Naphthalene	29.534	128	28293	11.34	ppbv	97

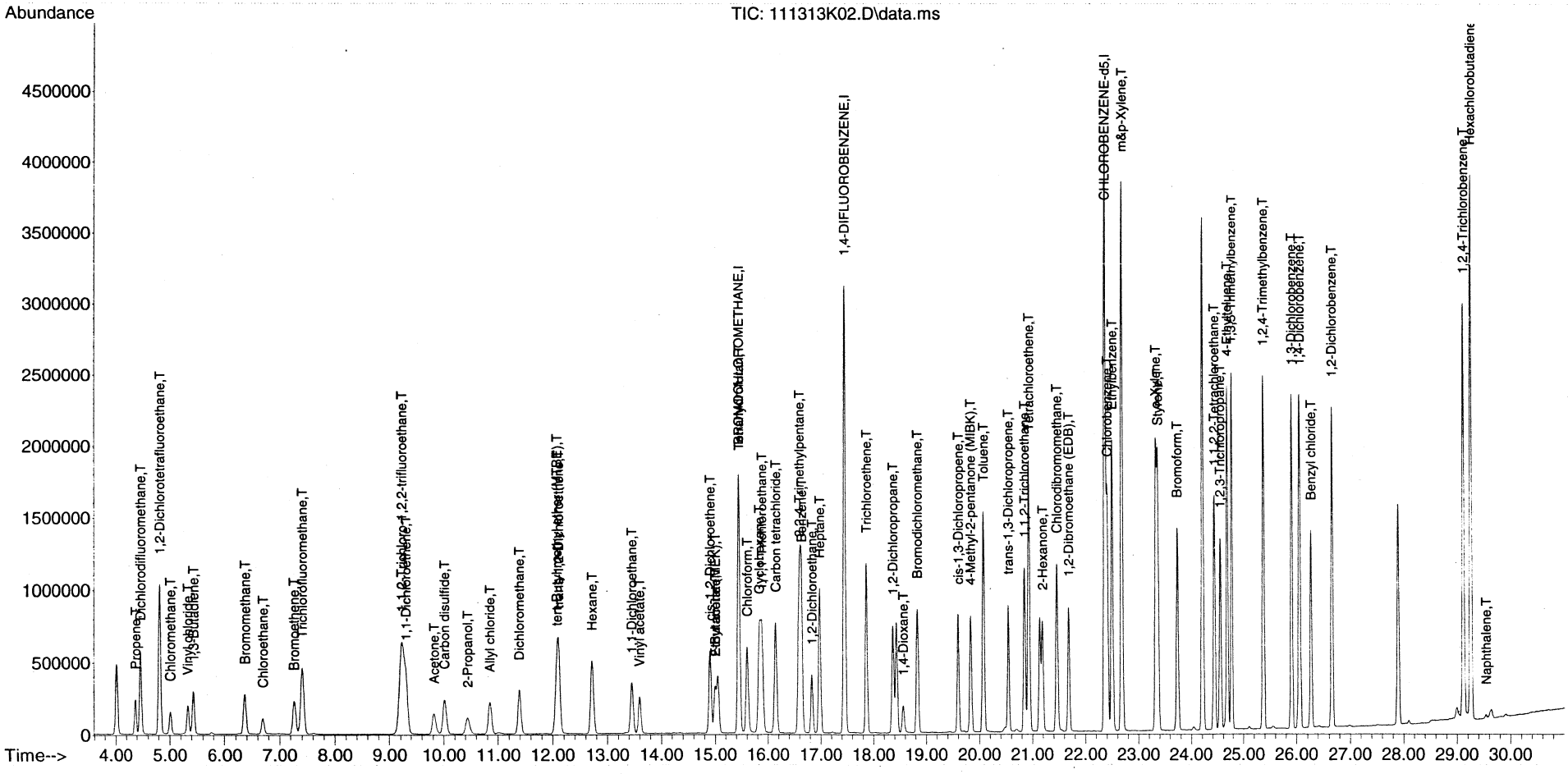
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K02.D
Acq On : 13 Nov 2013 1:30
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CCV1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:31:52 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M



LCS REPORT

Instrument Name: HP5973K
Sample Name: B13K0XX-BS1
Misc Info: 10 ppbv 1345091
Date Acquired: 11/13/2013 2:16
QLast Update: Mon Nov 25 12:01:55 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.37	10.70	10.41	97%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.46	10.30	10.02	97%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.82	10.50	10.27	98%	68.0	147.0	pass
5)	Chloromethane	5.01	10.50	10.39	99%	64.0	141.0	pass
6)	Vinyl chloride	5.33	10.50	10.35	99%	65.0	141.0	pass
7)	1,3-Butadiene	5.43	10.20	10.07	99%	61.0	154.0	pass
8)	Bromomethane	6.36	10.30	10.03	97%	71.0	132.0	pass
9)	Chloroethane	6.70	10.30	10.16	99%	70.0	134.0	pass
10)	Bromoethene	7.26	10.30	9.99	97%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.41	10.70	10.33	97%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.22	9.70	9.22	95%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.30	9.60	9.36	97%	81.0	127.0	pass
14)	Acetone	9.82	10.60	10.79	102%	77.0	150.0	pass
15)	Carbon disulfide	10.01	10.20	9.42	92%	75.0	138.0	pass
16)	2-Propanol	10.44	9.50	9.40	99%	71.0	142.0	pass
17)	Allyl chloride	10.85	10.10	10.02	99%	84.0	143.0	pass
18)	Dichloromethane	11.39	9.80	9.15	93%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.08	10.90	10.90	100%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	12.11	9.50	9.31	98%	82.0	136.0	pass
21)	Hexane	12.72	10.20	10.11	99%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.45	9.70	9.55	98%	82.0	123.0	pass
23)	Vinyl acetate	13.59	10.00	10.33	103%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.90	10.10	9.91	98%	83.0	126.0	pass
25)	2-Butanone (MEK)	14.99	10.40	10.82	104%	76.0	138.0	pass
26)	Ethyl acetate	15.05	10.40	10.30	99%	83.0	136.0	pass
27)	Tetrahydrofuran	15.45	10.30	10.30	100%	74.0	132.0	pass
28)	Chloroform	15.60	10.20	9.95	98%	81.0	127.0	pass
29)	Cyclohexane	15.83	10.40	10.35	100%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.88	10.10	9.88	98%	80.0	131.0	pass
31)	Carbon tetrachloride	16.14	10.30	9.99	97%	77.0	136.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.64	10.10	10.30	102%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.59	10.50	10.89	104%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.83	9.80	10.09	103%	70.0	149.0	pass
36)	Heptane	16.98	10.50	10.95	104%	62.0	159.0	pass
37)	Trichloroethene	17.87	10.10	10.15	100%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.36	10.30	10.64	103%	74.0	135.0	pass
39)	1,4-Dioxane	18.56	10.60	11.71	110%	67.0	134.0	pass
40)	Bromodichloromethane	18.83	10.60	10.98	104%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.59	10.30	10.77	105%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.83	10.50	11.24	107%	59.0	147.0	pass
43)	CHLOROBENZENE-d5	22.36	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.07	10.20	10.53	103%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.54	10.70	11.20	105%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.85	10.30	10.53	102%	76.0	124.0	pass
47)	Tetrachloroethene	20.93	10.00	9.89	99%	80.0	122.0	pass

48)	2-Hexanone	21.19	10.30	11.56	112%	55.0	149.0	pass
49)	Chlorodibromomethane	21.45	10.40	10.73	103%	76.0	145.0	pass
50)	1,2-Dibromoethane (EDB)	21.69	10.30	10.58	103%	78.0	124.0	pass
51)	Chlorobenzene	22.40	10.40	10.71	103%	76.0	120.0	pass
52)	Ethylbenzene	22.50	10.20	10.52	103%	75.0	125.0	pass
53)	m&p-Xylene	22.68	20.40	20.99	103%	75.0	128.0	pass
54)	o-Xylene	23.32	10.30	10.62	103%	74.0	128.0	pass
55)	Styrene	23.36	10.10	10.45	103%	69.0	122.0	pass
56)	Bromoform	23.74	10.30	10.70	104%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.43	10.20	10.37	102%	70.0	130.0	pass
58)	1,2,3-Trichloropropane	24.54	#N/A	9.73	#N/A	67.0	131.0	#N/A
59)	4-Ethyltoluene	24.67	10.50	10.62	101%	69.0	138.0	pass
60)	1,3,5-Trimethylbenzene	24.76	10.30	10.46	102%	70.0	134.0	pass
61)	1,2,4-Trimethylbenzene	25.37	10.10	10.16	101%	65.0	129.0	pass
62)	1,3-Dichlorobenzene	25.90	9.90	9.89	100%	62.0	130.0	pass
63)	1,4-Dichlorobenzene	26.05	9.90	9.95	101%	61.0	131.0	pass
64)	Benzyl chloride	26.26	10.30	10.66	104%	61.0	153.0	pass
65)	1,2-Dichlorobenzene	26.65	9.90	9.81	99%	60.0	130.0	pass
66)	1,2,4-Trichlorobenzene	29.11	9.10	9.09	100%	38.0	128.0	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:56 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: _____ Date: 11/25/13

Manual integration(s) reviewed by:

Reviewer: _____ Date: 11/27/13

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	878355	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	3848024	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3405485	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	207890	10.41	ppbv	99
3) Dichlorodifluoromethane	4.463	85	820618	10.02	ppbv	100
4) 1,2-Dichlorotetrafluor...	4.816	85	901157	10.27	ppbv	100
5) Chloromethane	5.011	50	274851	10.39	ppbv	100
6) Vinyl chloride	5.333	62	357892	10.35	ppbv	99
7) 1,3-Butadiene	5.431	54	245492	10.07	ppbv	99
8) Bromomethane	6.361	94	357795	10.03	ppbv	99
9) Chloroethane	6.696	64	204833	10.16	ppbv	100
10) Bromoethene	7.262	106	359605	9.99	ppbv	100
11) Trichlorofluoromethane	7.408	101	914610	10.33	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	711460	9.22	ppbv	98
13) 1,1-Dichloroethene	9.300	61	537284	9.36	ppbv	99
14) Acetone	9.817	43	433605	10.79	ppbv	100
15) Carbon disulfide	10.012	76	926375	9.42	ppbv	100
16) 2-Propanol	10.444	45	420754	9.40	ppbv	100
17) Allyl chloride	10.845	41	354124	10.02	ppbv	98
18) Dichloromethane	11.387	49	361293	9.15	ppbv	99
19) tert-Butyl methyl ethe...	12.080	73	1051607	10.90	ppbv	100
20) trans-1,2-Dichloroethene	12.110	61	434370	9.31	ppbv	100
21) Hexane	12.719	57	585335	10.11	ppbv	100
22) 1,1-Dichloroethane	13.455	63	669143	9.55	ppbv	99
23) Vinyl acetate	13.595	43	667119	10.33	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	512661	9.91	ppbv	99
25) 2-Butanone (MEK)	14.994	43	593556	10.82	ppbv	99
26) Ethyl acetate	15.049	43	689315m	10.30	ppbv	
27) Tetrahydrofuran	15.450	42	359143	10.30	ppbv	99
28) Chloroform	15.602	83	777023	9.95	ppbv	100
29) Cyclohexane	15.834	56	599267	10.35	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	791308	9.88	ppbv	100
31) Carbon tetrachloride	16.144	117	841480	9.99	ppbv	99
33) Benzene	16.637	78	1340685	10.30	ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	1887808	10.89	ppbv	100
35) 1,2-Dichloroethane	16.831	62	441745	10.09	ppbv	99
36) Heptane	16.977	43	589701	10.95	ppbv	99
37) Trichloroethene	17.866	130	649631	10.15	ppbv	100
38) 1,2-Dichloropropane	18.364	63	482649	10.64	ppbv	99
39) 1,4-Dioxane	18.559	88	241797	11.71	ppbv	100
40) Bromodichloromethane	18.827	83	834495	10.98	ppbv	100
41) cis-1,3-Dichloropropene	19.593	75	741849	10.77	ppbv	100
42) 4-Methyl-2-pentanone (...	19.831	43	739591	11.24	ppbv	99
44) Toluene	20.074	91	1724347	10.53	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	715594	11.20	ppbv	100
46) 1,1,2-Trichloroethane	20.846	97	568337	10.53	ppbv	100
47) Tetrachloroethene	20.932	166	901982	9.89	ppbv	100
48) 2-Hexanone	21.187	43	682412	11.56	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:56 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	969035	10.73 ppbv	100
50) 1,2-Dibromoethane (EDB)	21.686	107	881253	10.58 ppbv	100
51) Chlorobenzene	22.404	112	1435810	10.71 ppbv	100
52) Ethylbenzene	22.495	91	2223837	10.52 ppbv	99
53) m&p-Xylene	22.678	91	3384658	20.99 ppbv	99
54) o-Xylene	23.322	91	1727398	10.62 ppbv	99
55) Styrene	23.359	104	1441641	10.45 ppbv	100
56) Bromoform	23.736	173	1038184	10.70 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.430	83	1252622	10.37 ppbv	99
58) 1,2,3-Trichloropropane	24.539	75	871467	9.73 ppbv	99
59) 4-Ethyltoluene	24.673	105	2372898	10.62 ppbv	99
60) 1,3,5-Trimethylbenzene	24.764	105	2098977	10.46 ppbv	100
61) 1,2,4-Trimethylbenzene	25.367	105	2081739	10.16 ppbv	100
62) 1,3-Dichlorobenzene	25.902	146	1541088	9.89 ppbv	100
63) 1,4-Dichlorobenzene	26.048	146	1533815	9.95 ppbv	100
64) Benzyl chloride	26.261	91	1503147	10.66 ppbv	99
65) 1,2-Dichlorobenzene	26.650	146	1475342	9.81 ppbv	100
66) 1,2,4-Trichlorobenzene	29.114	180	1504541	9.09 ppbv	100
67) Hexachlorobutadiene	29.248	225	1271122	9.09 ppbv	100
68) Naphthalene	29.540	128	26625	11.57 ppbv	97

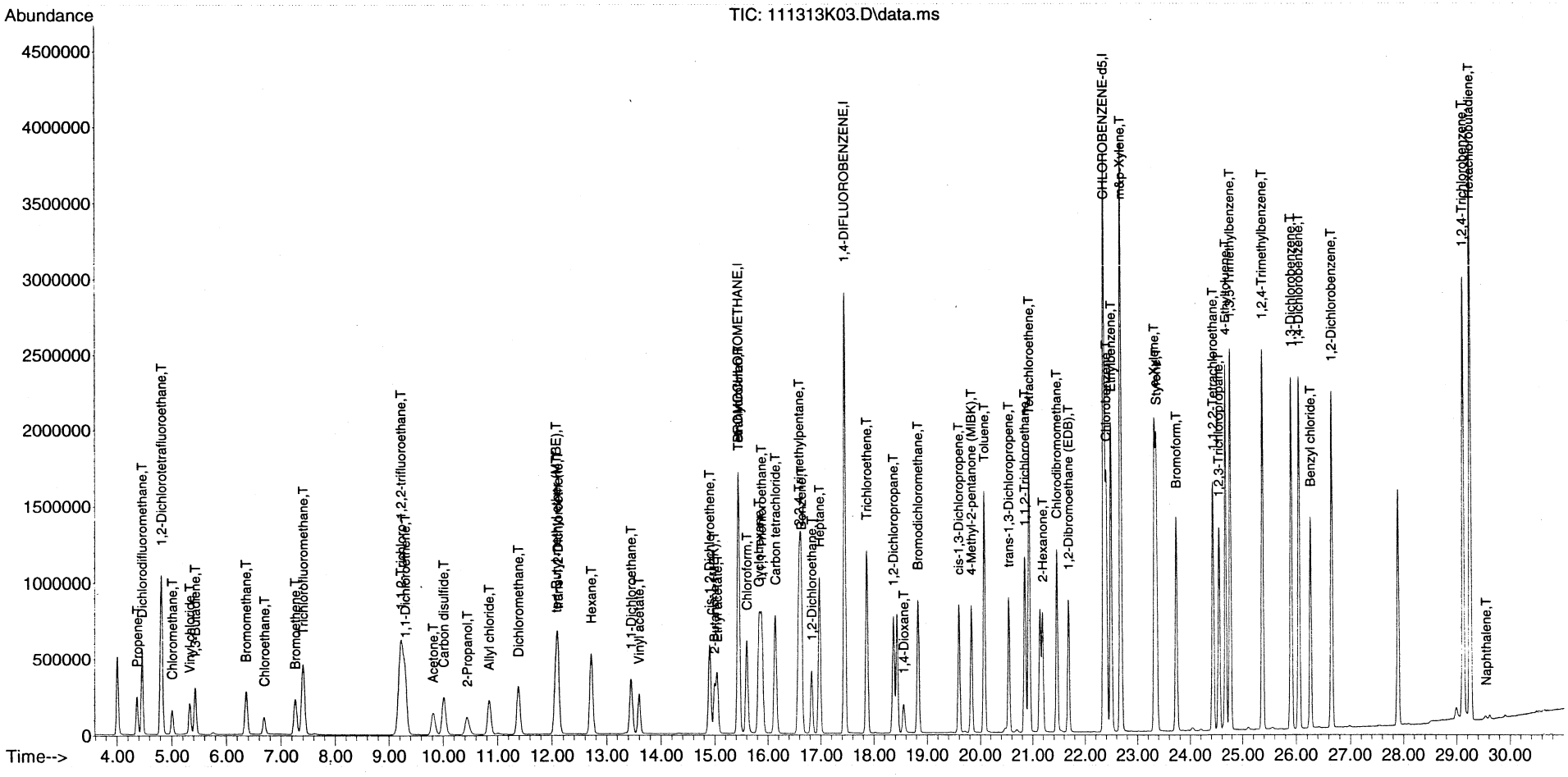
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:56 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

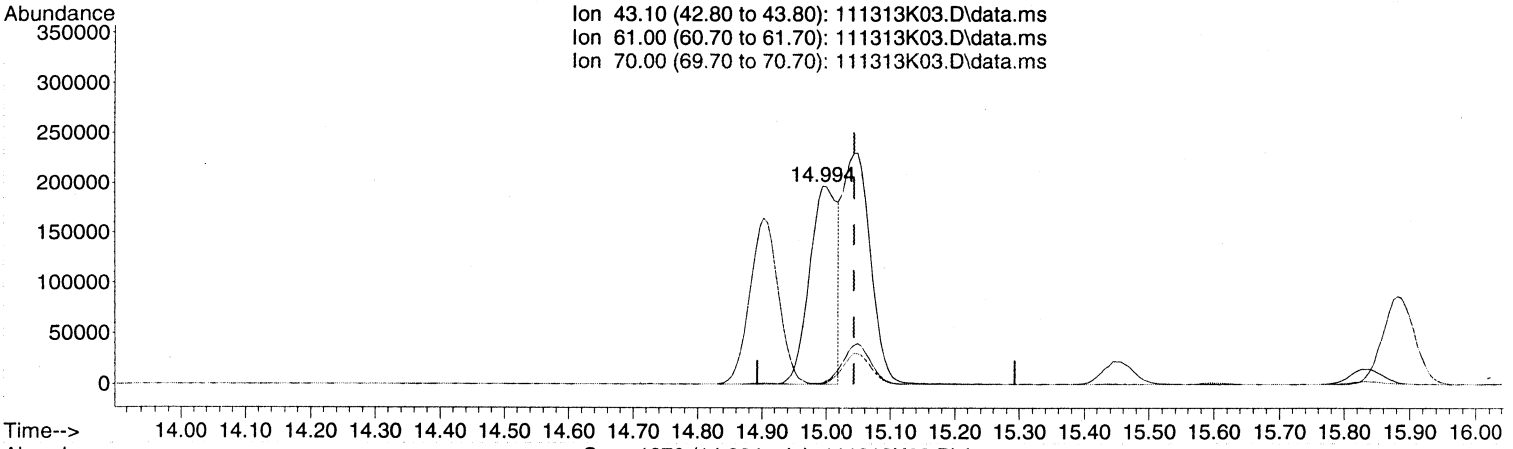


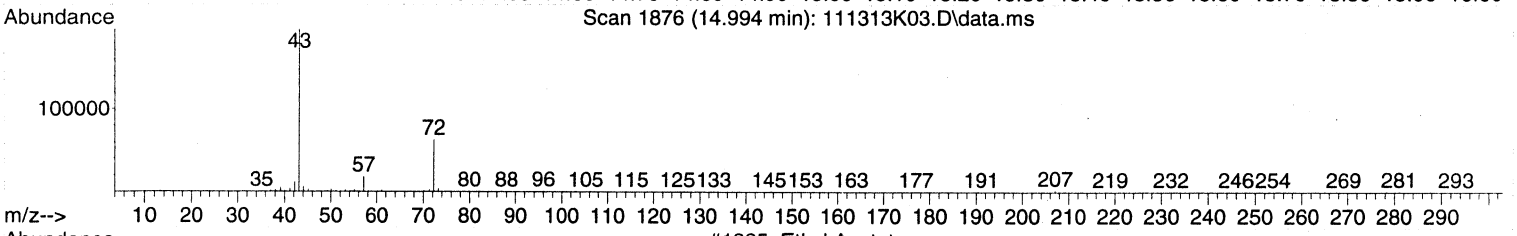
Quantitation Report (Qedit)

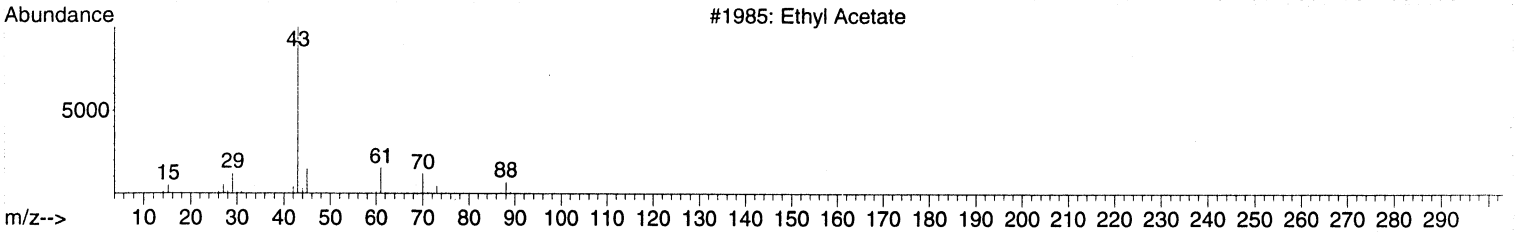
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:41 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M







TIC: 111313K03.D\data.ms

(26) Ethyl acetate (T)

14.994min (-0.049) 8.87 ppbv

response 593556

Ion	Exp%	Act%
43.10	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

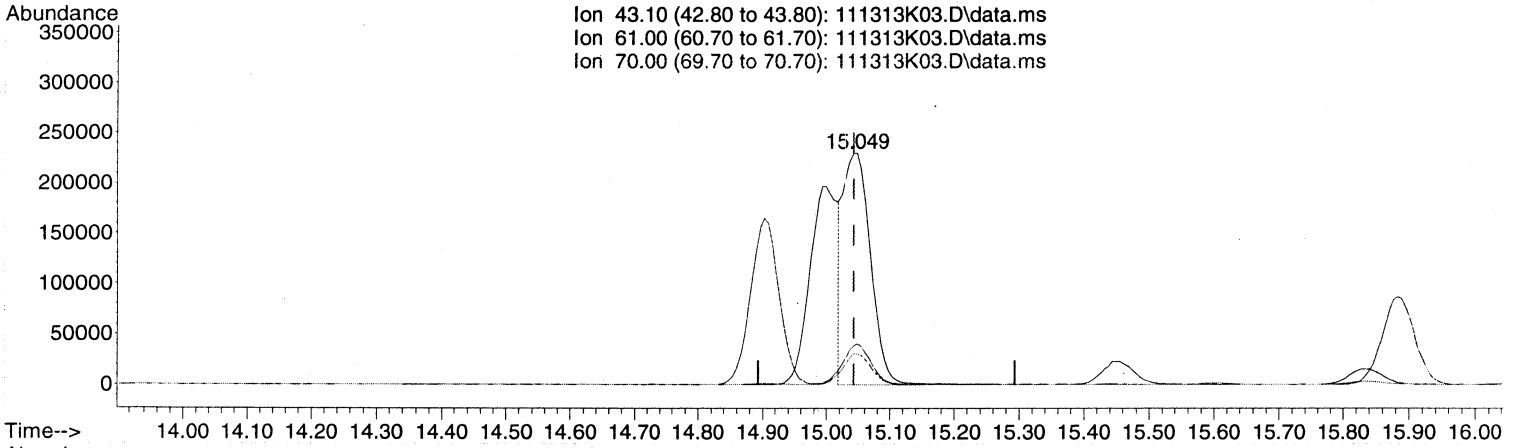
MANUAL INTEGRATION VERIFICATION
☑ Before Manual Integration(s) (not used)
Peak integrated due to being.
☐ Missed ☐ Summed
☐ Cropped ☐ Improper Baseline
☑ Other: RT off
☐ After Manual Integration
Manual integration(s) performed by
Analyst: _____ Date: _____
Manual integration(s) reviewed by.
Reviewer: _____ Date: _____

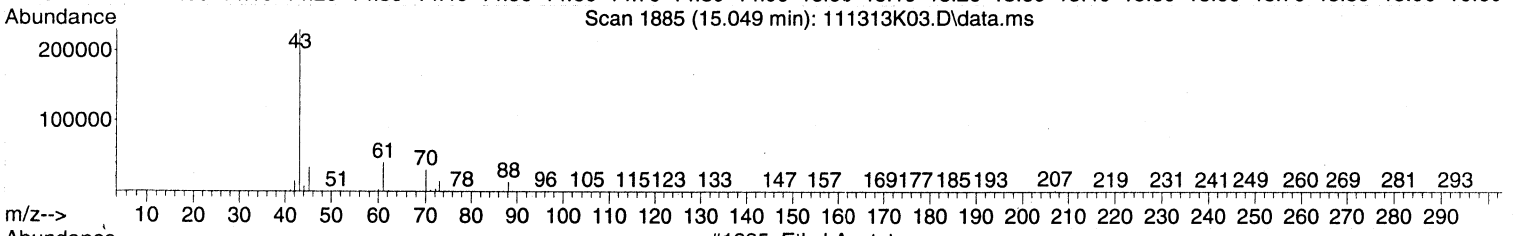
Quantitation Report (Qedit)

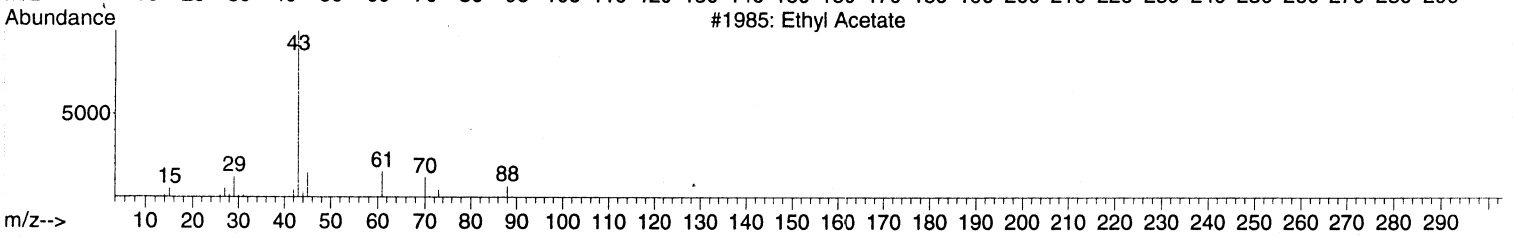
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:41 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M







TIC: 111313K03.D\data.ms

(26) Ethyl acetate (T)

15.049min (+0.006) 10.30 ppbv m

response 689315

Ion	Exp%	Act%
43.10	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by

Analyst: EM Date: 11/25/13

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 11/27/13

00548

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:41 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	878355	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	3848024	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3405485	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	207890	10.41	ppbv	99
3) Dichlorodifluoromethane	4.463	85	820618	10.02	ppbv	100
4) 1,2-Dichlorotetrafluor...	4.816	85	901157	10.27	ppbv	100
5) Chloromethane	5.011	50	274851	10.39	ppbv	100
6) Vinyl chloride	5.333	62	357892	10.35	ppbv	99
7) 1,3-Butadiene	5.431	54	245492	10.07	ppbv	99
8) Bromomethane	6.361	94	357795	10.03	ppbv	99
9) Chloroethane	6.696	64	204833	10.16	ppbv	100
10) Bromoethene	7.262	106	359605	9.99	ppbv	100
11) Trichlorofluoromethane	7.408	101	914610	10.33	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	711460	9.22	ppbv	98
13) 1,1-Dichloroethene	9.300	61	537284	9.36	ppbv	99
14) Acetone	9.817	43	433605	10.79	ppbv	100
15) Carbon disulfide	10.012	76	926375	9.42	ppbv	100
16) 2-Propanol	10.444	45	420754	9.40	ppbv	100
17) Allyl chloride	10.845	41	354124	10.02	ppbv	98
18) Dichloromethane	11.387	49	361293	9.15	ppbv	99
19) tert-Butyl methyl ethe...	12.080	73	1051607	10.90	ppbv	100
20) trans-1,2-Dichloroethene	12.110	61	434370	9.31	ppbv	100
21) Hexane	12.719	57	585335	10.11	ppbv	100
22) 1,1-Dichloroethane	13.455	63	669143	9.55	ppbv	99
23) Vinyl acetate	13.595	43	667119	10.33	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	512661	9.91	ppbv	99
25) 2-Butanone (MEK)	14.994	43	593556	10.82	ppbv	99
26) Ethyl acetate	14.994	43	593556	8.87	ppbv #	100
27) Tetrahydrofuran	15.450	42	359143	10.30	ppbv	99
28) Chloroform	15.602	83	777023	9.95	ppbv	100
29) Cyclohexane	15.834	56	599267	10.35	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	791308	9.88	ppbv	100
31) Carbon tetrachloride	16.144	117	841480	9.99	ppbv	99
33) Benzene	16.637	78	1340685	10.30	ppbv	100
34) 2,2,4-Trimethylpentane	16.594	57	1887808	10.89	ppbv	100
35) 1,2-Dichloroethane	16.831	62	441745	10.09	ppbv	99
36) Heptane	16.977	43	589701	10.95	ppbv	99
37) Trichloroethene	17.866	130	649631	10.15	ppbv	100
38) 1,2-Dichloropropane	18.364	63	482649	10.64	ppbv	99
39) 1,4-Dioxane	18.559	88	241797	11.71	ppbv	100
40) Bromodichloromethane	18.827	83	834495	10.98	ppbv	100
41) cis-1,3-Dichloropropene	19.593	75	741849	10.77	ppbv	100
42) 4-Methyl-2-pentanone (...	19.831	43	739591	11.24	ppbv	99
44) Toluene	20.074	91	1724347	10.53	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	715594	11.20	ppbv	100
46) 1,1,2-Trichloroethane	20.846	97	568337	10.53	ppbv	100
47) Tetrachloroethene	20.932	166	901982	9.89	ppbv	100
48) 2-Hexanone	21.187	43	682412	11.56	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:41 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	969035	10.73	ppbv	100
50)	1,2-Dibromoethane (EDB)	21.686	107	881253	10.58	ppbv	100
51)	Chlorobenzene	22.404	112	1435810	10.71	ppbv	100
52)	Ethylbenzene	22.495	91	2223837	10.52	ppbv	99
53)	m&p-Xylene	22.678	91	3384658	20.99	ppbv	99
54)	o-Xylene	23.322	91	1727398	10.62	ppbv	99
55)	Styrene	23.359	104	1441641	10.45	ppbv	100
56)	Bromoform	23.736	173	1038184	10.70	ppbv	100
57)	1,1,2,2-Tetrachloroethane	24.430	83	1252622	10.37	ppbv	99
58)	1,2,3-Trichloropropane	24.539	75	871467	9.73	ppbv	99
59)	4-Ethyltoluene	24.673	105	2372898	10.62	ppbv	99
60)	1,3,5-Trimethylbenzene	24.764	105	2098977	10.46	ppbv	100
61)	1,2,4-Trimethylbenzene	25.367	105	2081739	10.16	ppbv	100
62)	1,3-Dichlorobenzene	25.902	146	1541088	9.89	ppbv	100
63)	1,4-Dichlorobenzene	26.048	146	1533815	9.95	ppbv	100
64)	Benzyl chloride	26.261	91	1503147	10.66	ppbv	99
65)	1,2-Dichlorobenzene	26.650	146	1475342	9.81	ppbv	100
66)	1,2,4-Trichlorobenzene	29.114	180	1504541	9.09	ppbv	100
67)	Hexachlorobutadiene	29.248	225	1271122	9.09	ppbv	100
68)	Naphthalene	29.540	128	26625	11.57	ppbv	97

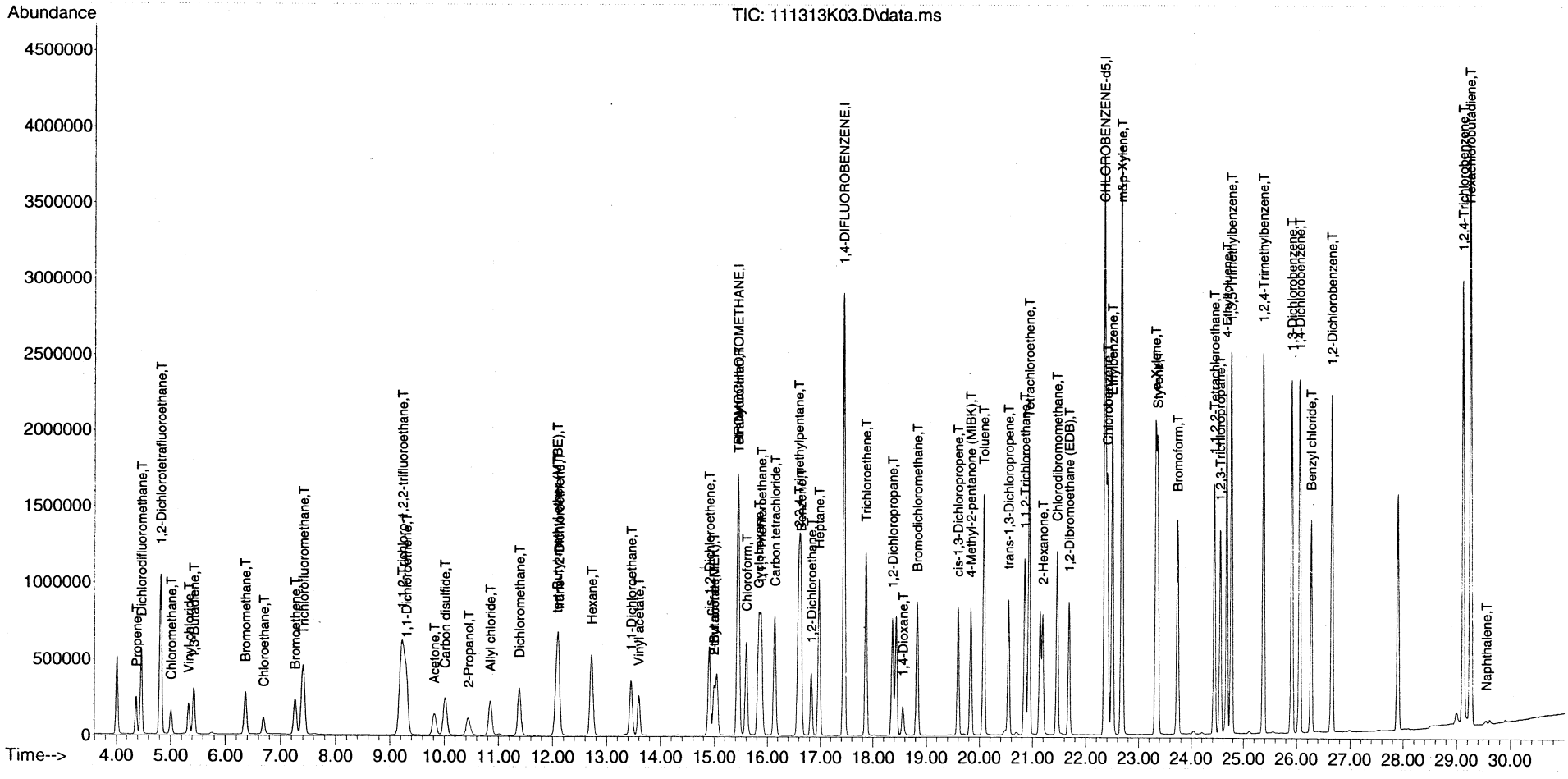
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K03.D
Acq On : 13 Nov 2013 2:16
Instrument: HP5973K
Operator : EM
Sample : B13K0XX-BS1
Misc : 10 ppbv 1345091
ALS Vial : 32
Multiplier: 1

Quant Time: Nov 25 13:32:41 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M



QLS REPORT

1 out (high)
EM 11/21/13

Instrument Name: HP5973K
Sample Name: S13K0XX-CRL1
Misc Info: 1.0 ppbv 1345089
Date Acquired: 11/13/2013 3:05
QLast Update: Mon Nov 25 12:01:55 201:
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
3)	Dichlorodifluoromethane	4.46	1.03	1.07	104%	60.0	140.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.82	1.05	1.08	103%	60.0	140.0	pass	Primary
5)	Chloromethane	5.01	1.05	1.11	106%	60.0	140.0	pass	Primary
6)	Vinyl chloride	5.33	1.05	1.08	103%	60.0	140.0	pass	Primary
8)	Bromomethane	6.36	1.03	1.07	103%	60.0	140.0	pass	Primary
9)	Chloroethane	6.70	1.03	1.05	102%	60.0	140.0	pass	Primary
11)	Trichlorofluoromethane	7.40	1.07	1.11	104%	60.0	140.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.21	0.97	0.97	100%	60.0	140.0	pass	Primary
13)	1,1-Dichloroethene	9.30	0.96	0.98	102%	60.0	140.0	pass	Primary
18)	Dichloromethane	11.39	0.98	1.17	119%	60.0	140.0	pass	Primary
22)	1,1-Dichloroethane	13.45	0.97	1.01	104%	60.0	140.0	pass	Primary
24)	cis-1,2-Dichloroethene	14.90	1.01	1.00	99%	60.0	140.0	pass	Primary
28)	Chloroform	15.60	1.02	1.06	104%	60.0	140.0	pass	Primary
30)	1,1,1-Trichloroethane	15.88	1.01	1.06	105%	60.0	140.0	pass	Primary
31)	Carbon tetrachloride	16.14	1.03	1.04	101%	60.0	140.0	pass	Primary
33)	Benzene	16.63	1.01	1.09	108%	60.0	140.0	pass	Primary
35)	1,2-Dichloroethane	16.83	0.98	1.09	111%	60.0	140.0	pass	Primary
37)	Trichloroethene	17.86	1.01	1.12	111%	60.0	140.0	pass	Primary
38)	1,2-Dichloropropane	18.36	1.03	1.10	106%	60.0	140.0	pass	Primary
41)	cis-1,3-Dichloropropene	19.59	1.03	1.11	108%	60.0	140.0	pass	Primary
45)	trans-1,3-Dichloropropene	20.54	1.07	1.16	109%	60.0	140.0	pass	Primary
46)	1,1,2-Trichloroethane	20.85	1.03	1.15	112%	60.0	140.0	pass	Primary
47)	Tetrachloroethene	20.93	1.00	1.16	116%	60.0	140.0	pass	Primary
50)	1,2-Dibromoethane (EDB)	21.68	1.03	1.17	113%	60.0	140.0	pass	Primary
51)	Chlorobenzene	22.40	1.04	1.21	117%	60.0	140.0	pass	Primary
52)	Ethylbenzene	22.50	1.02	1.17	115%	60.0	140.0	pass	Primary
53)	m&p-Xylene	22.68	2.04	2.34	115%	60.0	140.0	pass	Primary
54)	o-Xylene	23.32	1.03	1.20	116%	60.0	140.0	pass	Primary
55)	Styrene	23.36	1.01	1.17	116%	60.0	140.0	pass	Primary
57)	1,1,2,2-Tetrachloroethane	24.43	1.02	1.19	117%	60.0	140.0	pass	Primary
60)	1,3,5-Trimethylbenzene	24.76	1.03	1.23	119%	60.0	140.0	pass	Primary
61)	1,2,4-Trimethylbenzene	25.37	1.01	1.23	122%	60.0	140.0	pass	Primary
62)	1,3-Dichlorobenzene	25.90	0.99	1.23	124%	60.0	140.0	pass	Primary
63)	1,4-Dichlorobenzene	26.04	0.99	1.22	124%	60.0	140.0	pass	Primary
65)	1,2-Dichlorobenzene	26.65	0.99	1.26	127%	60.0	140.0	pass	Primary
66)	1,2,4-Trichlorobenzene	29.11	0.91	1.25	138%	60.0	140.0	pass	Primary
67)	Hexachlorobutadiene	29.25	0.95	1.63	171%	60.0	140.0	FAIL	Primary

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K04.D
Acq On : 13 Nov 2013 3:05
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL1
Misc : 1.0 ppbv 1345089
ALS Vial : 12
Multiplier: 1

Quant Time: Nov 25 13:35:08 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	945940	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	4081911	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3610611	22.00	ppbv	0.00
Target Compounds						Qvalue
3) Dichlorodifluoromethane	4.463	85	94587	1.07	ppbv	100
4) 1,2-Dichlorotetrafluor...	4.816	85	102536	1.08	ppbv	100
5) Chloromethane	5.011	50	31580	1.11	ppbv	99
6) Vinyl chloride	5.333	62	40175	1.08	ppbv	99
8) Bromomethane	6.362	94	40919	1.07	ppbv	98
9) Chloroethane	6.702	64	22752	1.05	ppbv	94
11) Trichlorofluoromethane	7.402	101	105818	1.11	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.215	151	80471	0.97	ppbv	98
13) 1,1-Dichloroethene	9.300	61	60498	0.98	ppbv	99
18) Dichloromethane	11.387	49	49812	1.17	ppbv	98
22) 1,1-Dichloroethane	13.449	63	75982	1.01	ppbv	99
24) cis-1,2-Dichloroethene	14.897	61	55502	1.00	ppbv	99
28) Chloroform	15.596	83	89157	1.06	ppbv	99
30) 1,1,1-Trichloroethane	15.882	97	91226	1.06	ppbv	97
31) Carbon tetrachloride	16.138	117	93970	1.04	ppbv	99
33) Benzene	16.631	78	151046	1.09	ppbv	100
35) 1,2-Dichloroethane	16.825	62	50522	1.09	ppbv	99
37) Trichloroethene	17.860	130	76393	1.12	ppbv	98
38) 1,2-Dichloropropane	18.364	63	52708	1.10	ppbv	97
41) cis-1,3-Dichloropropene	19.593	75	81004	1.11	ppbv	97
44) Toluene	20.074	91	194499	1.12	ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	78884	1.16	ppbv	97
46) 1,1,2-Trichloroethane	20.847	97	66020	1.15	ppbv	99
47) Tetrachloroethene	20.932	166	112291	1.16	ppbv	99
50) 1,2-Dibromoethane (EDB)	21.680	107	103045	1.17	ppbv	100
51) Chlorobenzene	22.404	112	172484	1.21	ppbv	88
52) Ethylbenzene	22.495	91	262556	1.17	ppbv	100
53) m&p-Xylene	22.678	91	399383	2.34	ppbv	100
54) o-Xylene	23.323	91	206585	1.20	ppbv	99
55) Styrene	23.359	104	171687	1.17	ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.430	83	152316	1.19	ppbv	98
60) 1,3,5-Trimethylbenzene	24.764	105	261666	1.23	ppbv	100
61) 1,2,4-Trimethylbenzene	25.367	105	267042	1.23	ppbv	100
62) 1,3-Dichlorobenzene	25.902	146	202616	1.23	ppbv	99
63) 1,4-Dichlorobenzene	26.042	146	200126	1.22	ppbv	100
65) 1,2-Dichlorobenzene	26.650	146	200972	1.26	ppbv	98
66) 1,2,4-Trichlorobenzene	29.108	180	220194	1.25	ppbv	100
67) Hexachlorobutadiene	29.248	225	241146	1.63	ppbv	99
68) Naphthalene	29.546	128	2541	1.04	ppbv #	84

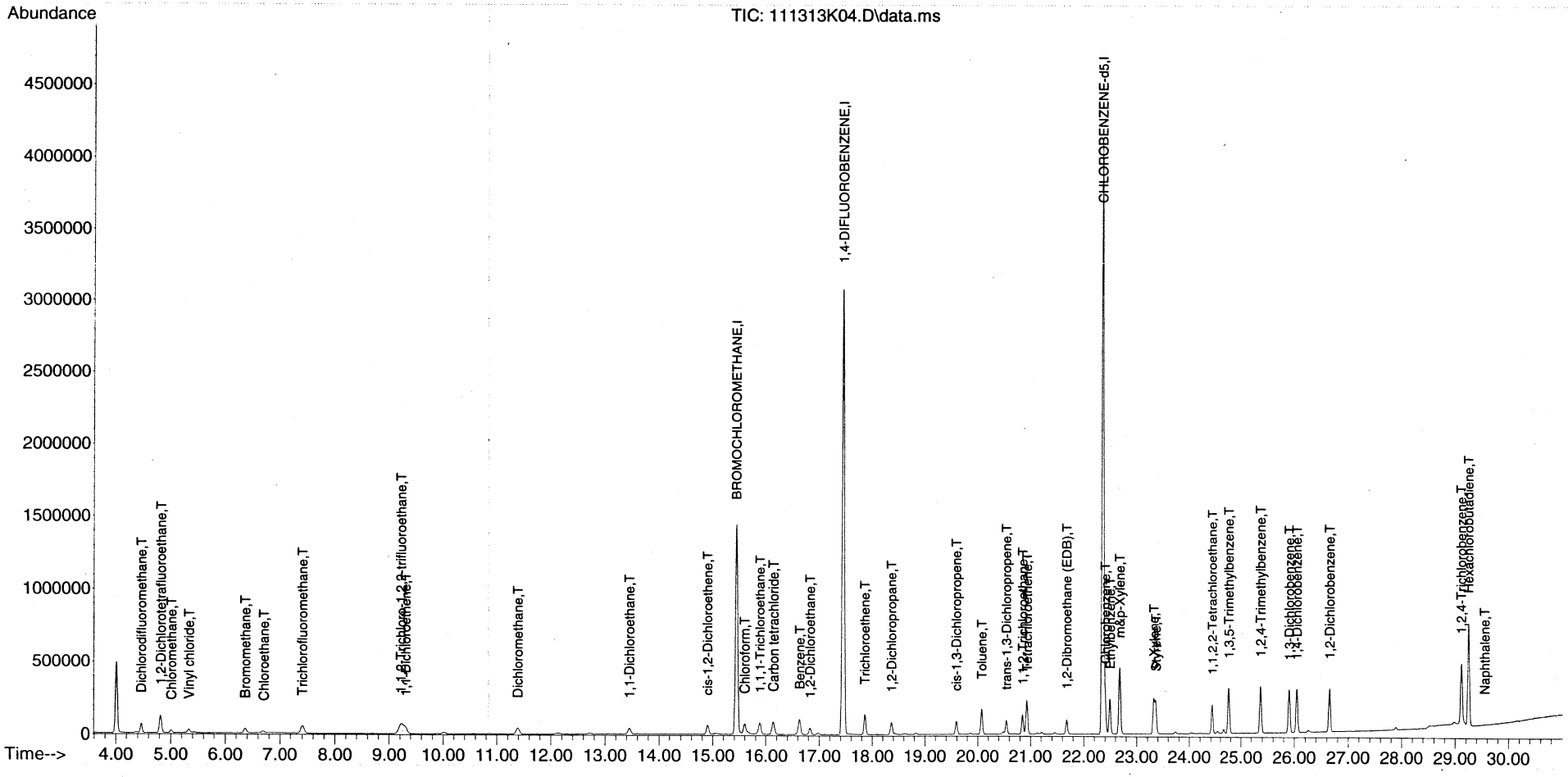
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K04.D
Acq On : 13 Nov 2013 3:05
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL1
Misc : 1.0 ppbv 1345089
ALS Vial : 12
Multiplier: 1

Quant Time: Nov 25 13:35:08 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M



QLS REPORT

2 out
EM 11/25/13

Instrument Name: HP5973K
Sample Name: S13K0XX-CRL2
Misc Info: 1.0 ppbv 1309037
Date Acquired: 11/13/2013 3:53
QLast Update: Mon Nov 25 12:01:55 2013
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
2)	Propene	4.37	1.07	1.29	120%	60.0	140.0	pass	Subset
7)	1,3-Butadiene	5.44	1.02	1.15	113%	60.0	140.0	pass	Subset
10)	Bromoethene	7.26	1.03	1.08	105%	60.0	140.0	pass	Subset
14)	Acetone	9.86	1.06	1.23	116%	60.0	140.0	pass	Subset
15)	Carbon disulfide	10.02	1.02	1.23	121%	60.0	140.0	pass	Subset
16)	2-Propanol	10.50	0.95	0.98	103%	60.0	140.0	pass	Subset
17)	Allyl chloride	10.84	1.01	1.12	111%	60.0	140.0	pass	Subset
19)	tert-Butyl methyl ether (MTBE)	12.12	1.09	1.18	108%	60.0	140.0	pass	Subset
20)	trans-1,2-Dichloroethene	12.10	0.95	1.01	107%	60.0	140.0	pass	Subset
21)	Hexane	12.72	1.02	1.09	107%	60.0	140.0	pass	Subset
23)	Vinyl acetate	13.61	1.00	1.02	102%	60.0	140.0	pass	Subset
25)	2-Butanone (MEK)	15.02	1.04	0.87	84%	60.0	140.0	pass	Subset
26)	Ethyl acetate	15.06	1.04	1.25	120%	60.0	140.0	pass	Subset
27)	Tetrahydrofuran	15.49	1.03	1.13	109%	60.0	140.0	pass	Subset
29)	Cyclohexane	15.83	1.04	1.13	108%	60.0	140.0	pass	Subset
34)	2,2,4-Trimethylpentane	16.59	1.05	1.20	115%	60.0	140.0	pass	Subset
36)	Heptane	16.98	1.05	1.19	114%	60.0	140.0	pass	Subset
39)	1,4-Dioxane	18.63	1.06	0.32	30%	60.0	140.0	FAIL	Subset
40)	Bromodichloromethane	18.83	1.06	1.19	112%	60.0	140.0	pass	Subset
42)	4-Methyl-2-pentanone (MIBK)	19.85	1.05	0.89	85%	60.0	140.0	pass	Subset
43)	CHLOROBENZENE-d5	22.36	22.00	22.00	100%	60.0	140.0	pass	Subset
48)	2-Hexanone	21.21	1.03	0.23	23%	60.0	140.0	FAIL	Subset
49)	Chlorodibromomethane	21.45	1.04	1.14	110%	60.0	140.0	pass	Subset
56)	Bromoform	23.73	1.03	1.17	114%	60.0	140.0	pass	Subset
59)	4-Ethyltoluene	24.67	1.05	1.28	122%	60.0	140.0	pass	Subset
64)	Benzyl chloride	26.26	1.03	1.23	119%	60.0	140.0	pass	Subset

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K05.D
Acq On : 13 Nov 2013 3:53
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL2
Misc : 1.0 ppbv 1309037
ALS Vial : 13
Multiplier: 1

Quant Time: Nov 25 13:39:14 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: [illegible] Date: 11/25/13

Manual integration(s) reviewed by:

Reviewer: [illegible] Date: 11/27/13

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	923592	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	4010384	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3562945	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	26982	1.29	ppbv	97
7) 1,3-Butadiene	5.437	54	29603	1.15	ppbv	99
10) Bromoethene	7.262	106	40748	1.08	ppbv	99
14) Acetone	9.859	43	51865	1.23	ppbv	97
15) Carbon disulfide	10.018	76	127554	1.23	ppbv	99
16) 2-Propanol	10.498	45	46241	0.98	ppbv	94
17) Allyl chloride	10.845	41	41523	1.12	ppbv	100
18) Dichloromethane	11.380	49	13573	0.33	ppbv	98
19) tert-Butyl methyl ethe...	12.116	73	119557	1.18	ppbv	98
20) trans-1,2-Dichloroethene	12.104	61	49667	1.01	ppbv	99
21) Hexane	12.719	57	66453	1.09	ppbv	99
23) Vinyl acetate	13.607	43	69576	1.02	ppbv	99
25) 2-Butanone (MEK)	15.018	43	50215	0.87	ppbv	96
26) Ethyl acetate	15.061	43	87766m	1.25	ppbv	
27) Tetrahydrofuran	15.487	42	41339	1.13	ppbv	99
29) Cyclohexane	15.827	56	68615	1.13	ppbv	97
34) 2,2,4-Trimethylpentane	16.594	57	217538	1.20	ppbv	99
36) Heptane	16.977	43	67046	1.19	ppbv	99
39) 1,4-Dioxane	18.626	88	6818	0.32	ppbv	95
40) Bromodichloromethane	18.827	83	94112	1.19	ppbv	99
42) 4-Methyl-2-pentanone (...	19.849	43	61268	0.89	ppbv	97
48) 2-Hexanone	21.211	43	14485	0.23	ppbv	97
49) Chlorodibromomethane	21.455	129	108048	1.14	ppbv	99
53) m&p-Xylene	22.671	91	35335	0.21	ppbv	98
56) Bromoform	23.730	173	118930	1.17	ppbv	100
59) 4-Ethyltoluene	24.673	105	298565	1.28	ppbv	100
64) Benzyl chloride	26.261	91	181562	1.23	ppbv	98

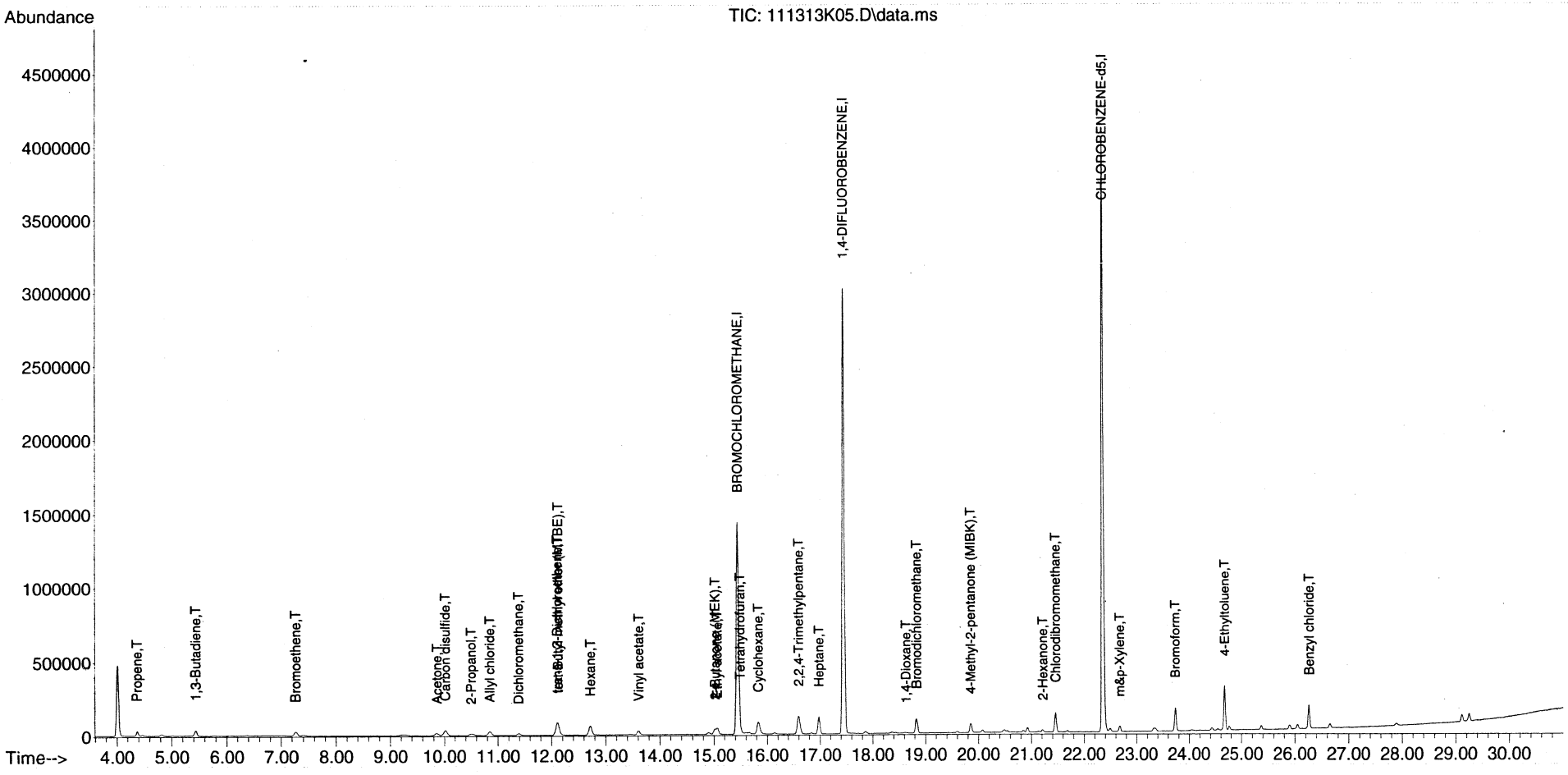
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K05.D
Acq On : 13 Nov 2013 3:53
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL2
Misc : 1.0 ppbv 1309037
ALS Vial : 13
Multiplier: 1

Quant Time: Nov 25 13:39:14 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

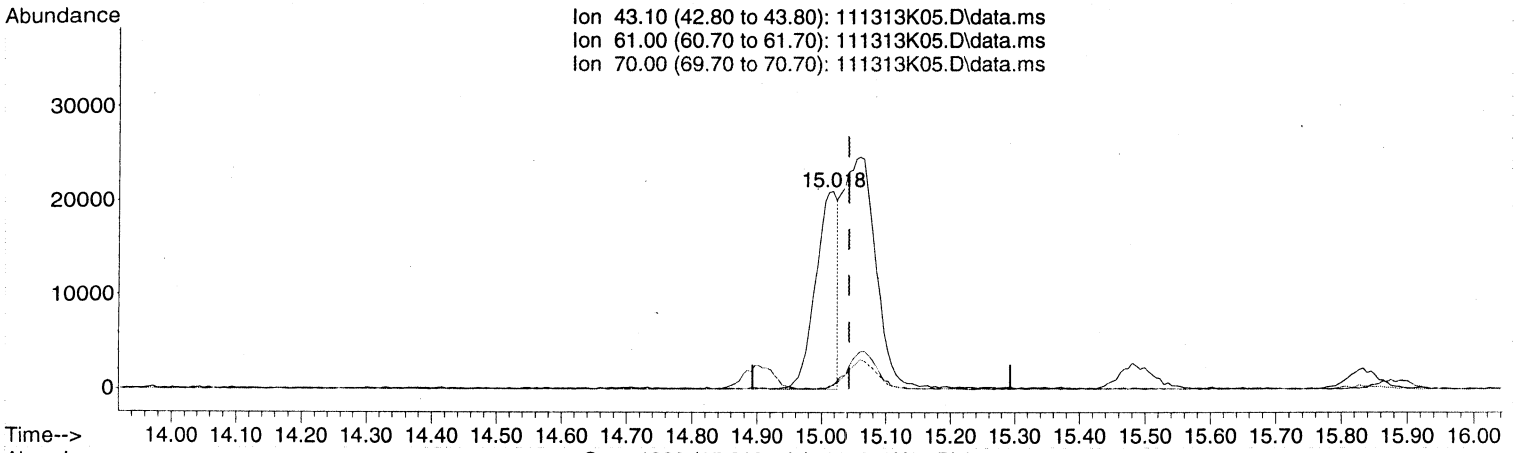


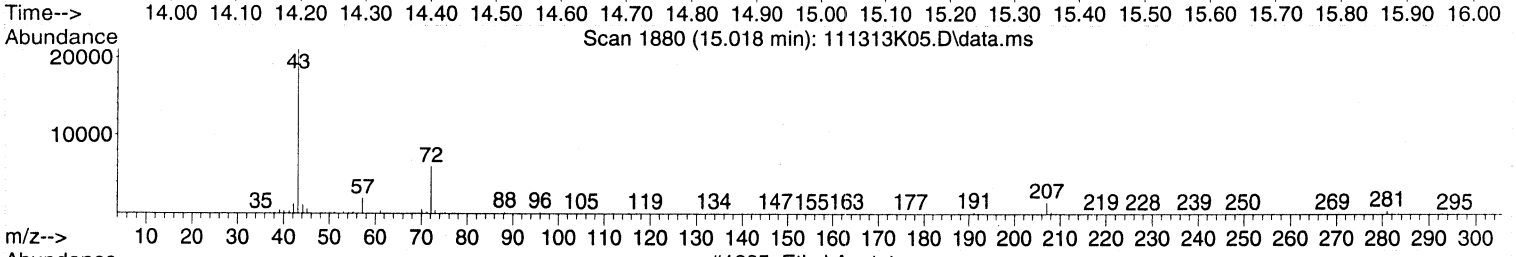
Quantitation Report (Qedit)

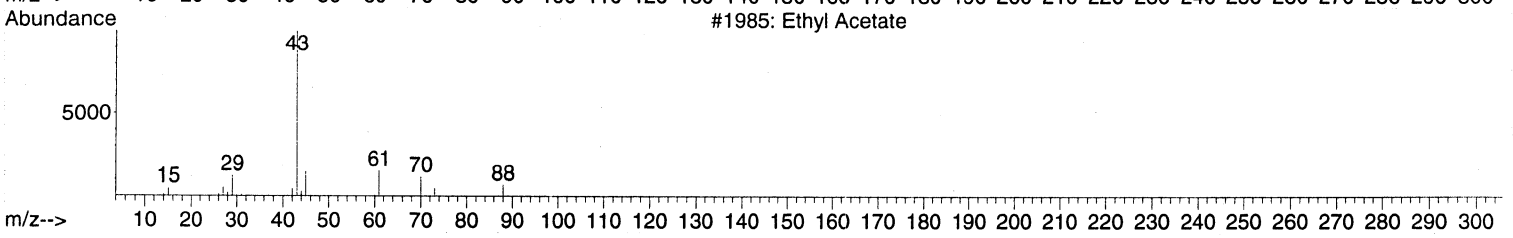
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K05.D
Acq On : 13 Nov 2013 3:53
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL2
Misc : 1.0 ppbv 1309037
ALS Vial : 13
Multiplier: 1

Quant Time: Nov 25 13:38:24 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M







TIC: 111313K05.D\data.ms

(26) Ethyl acetate (T)

15.018min (-0.024) 0.71 ppbv

response 50215

Ion	Exp%	Act%
43.10	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☑ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☑ Other: RT off

☐ After Manual Integration

Manual integration(s) performed by

Analyst: _____ Date: _____

Manual integration(s) reviewed by:

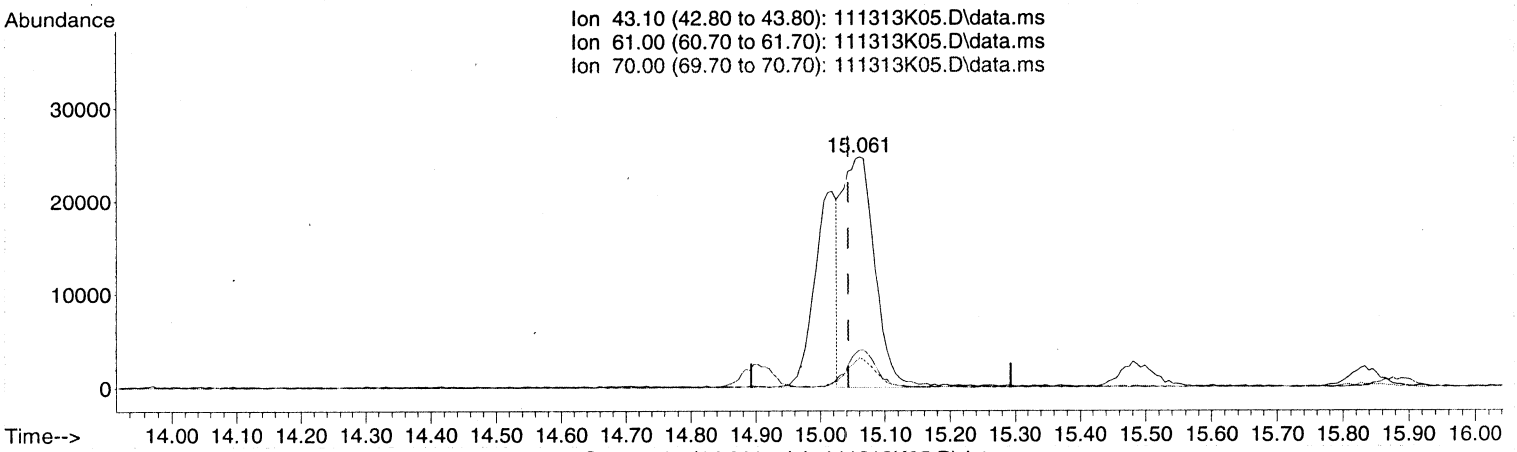
Reviewer: _____ Date: _____

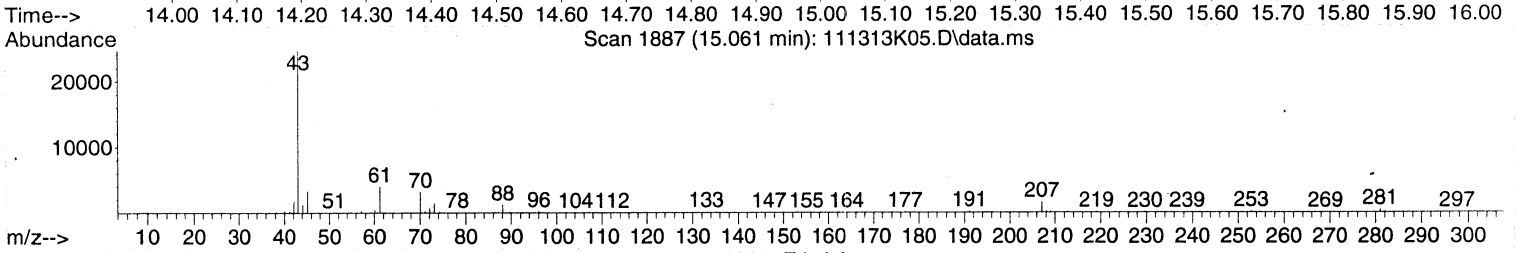
Quantitation Report (Qedit)

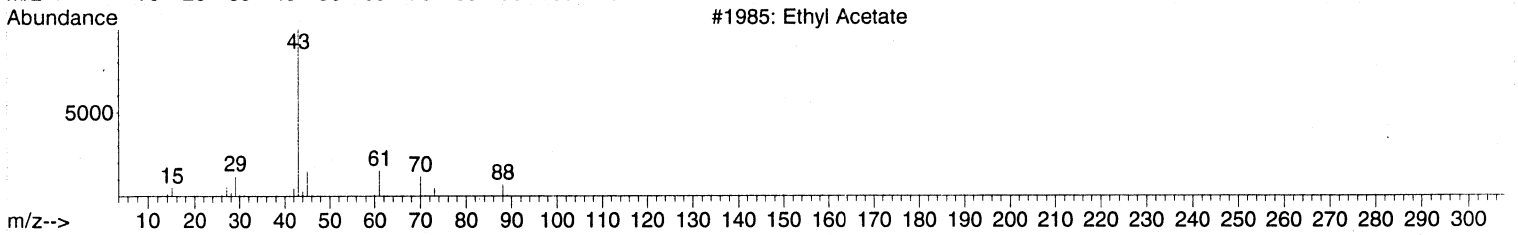
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K05.D
Acq On : 13 Nov 2013 3:53
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL2
Misc : 1.0 ppbv 1309037
ALS Vial : 13
Multiplier: 1

Quant Time: Nov 25 13:38:24 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M







TIC: 111313K05.D\data.ms

(26) Ethyl acetate (T)

15.061min (+0.018) 1.25 ppbv m

response 87766

Ion	Exp%	Act%
43.10	100	100
61.00	0.00	0.00
70.00	0.00	0.00
0.00	0.00	0.00

MANUAL INTEGRATION VERIFICATION

☐ Before Manual Integration(s) (not used)

Peak integrated due to being:

☐ Missed ☐ Summed

☐ Cropped ☐ Improper Baseline

☐ Other: _____

☑ After Manual Integration

Manual integration(s) performed by:

Analyst: _____ Date: 11/21/13

Manual integration(s) reviewed by:

Reviewer: _____ Date: 11/21/13

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K05.D
Acq On : 13 Nov 2013 3:53
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL2
Misc : 1.0 ppbv 1309037
ALS Vial : 13
Multiplier: 1

All MT
lm 11/25/13

Quant Time: Nov 25 13:38:24 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	923592	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	4010384	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3562945	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.366	41	26982	1.29	ppbv	97
7) 1,3-Butadiene	5.437	54	29603	1.15	ppbv	99
10) Bromoethene	7.262	106	40748	1.08	ppbv	99
14) Acetone	9.859	43	51865	1.23	ppbv	97
15) Carbon disulfide	10.018	76	127554	1.23	ppbv	99
16) 2-Propanol	10.498	45	46241	0.98	ppbv	94
17) Allyl chloride	10.845	41	41523	1.12	ppbv	100
19) tert-Butyl methyl ethe...	12.116	73	119557	1.18	ppbv	98
20) trans-1,2-Dichloroethene	12.104	61	49667	1.01	ppbv	99
21) Hexane	12.719	57	66453	1.09	ppbv	99
23) Vinyl acetate	13.607	43	69576	1.02	ppbv	99
25) 2-Butanone (MEK)	15.018	43	50215	0.87	ppbv	96
26) Ethyl acetate	15.018	43	50215	0.71	ppbv #	100
27) Tetrahydrofuran	15.487	42	41339	1.13	ppbv	99
29) Cyclohexane	15.827	56	68615	1.13	ppbv	97
34) 2,2,4-Trimethylpentane	16.594	57	217538	1.20	ppbv	99
36) Heptane	16.977	43	67046	1.19	ppbv	99
40) Bromodichloromethane	18.827	83	94112	1.19	ppbv	99
42) 4-Methyl-2-pentanone (...	19.849	43	61268	0.89	ppbv	97
49) Chlorodibromomethane	21.455	129	108048	1.14	ppbv	99
56) Bromoform	23.730	173	118930	1.17	ppbv	100
59) 4-Ethyltoluene	24.673	105	298565	1.28	ppbv	100
64) Benzyl chloride	26.261	91	181562	1.23	ppbv	98
68) Naphthalene	29.534	128	3013	1.25	ppbv #	83

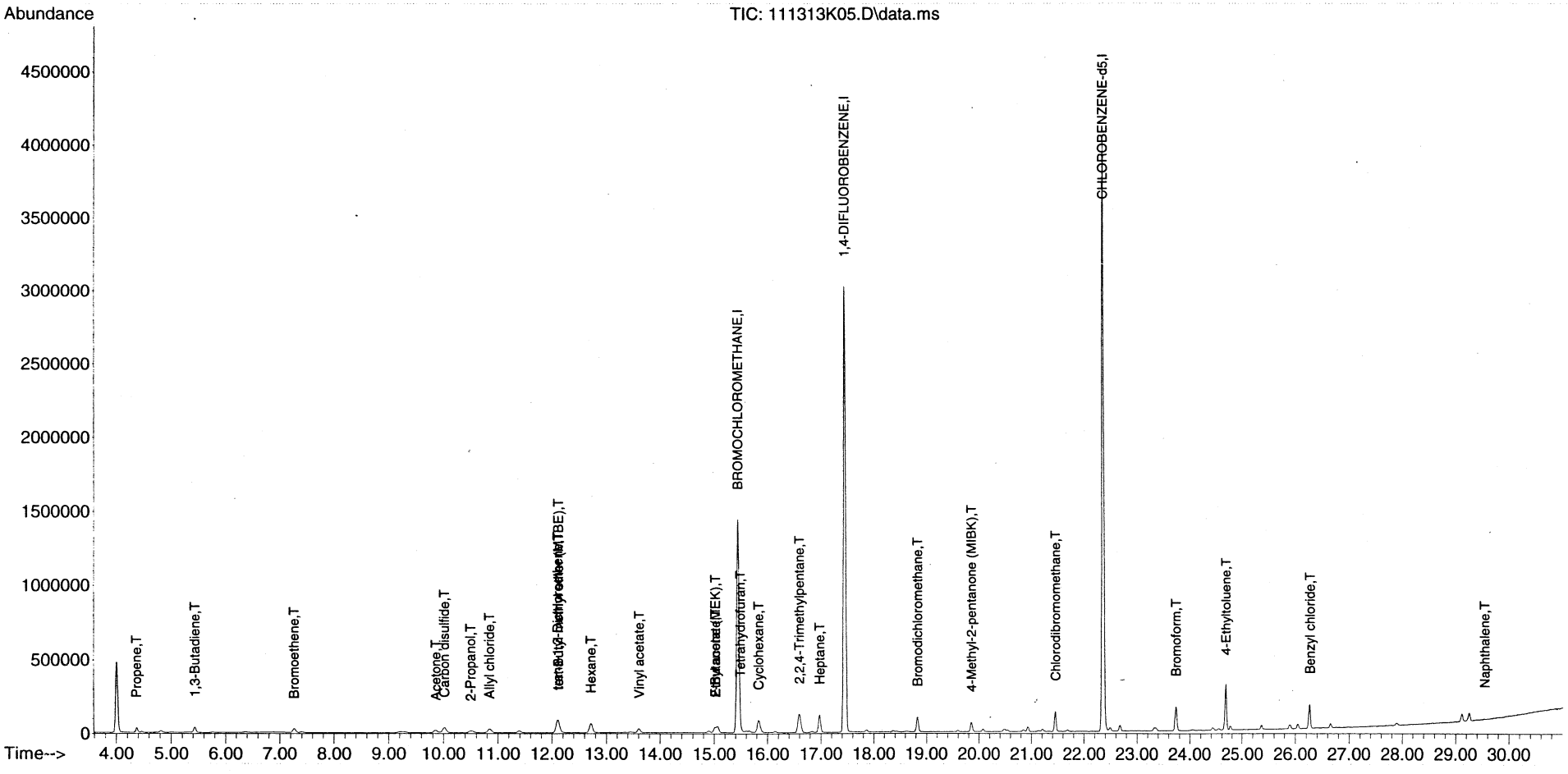
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K05.D
Acq On : 13 Nov 2013 3:53
Instrument: HP5973K
Operator : EM
Sample : S13K0XX-CRL2
Misc : 1..0 ppbv 1309037
ALS Vial : 13
Multiplier: 1

Quant Time: Nov 25 13:38:24 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Instrument: HP5973K
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41
Multiplier: 1

Quant Time: Nov 25 14:03:22 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	848009	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	3672640	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3238116	22.00	ppbv	0.00
Target Compounds						Qvalue
~~68) Naphthalene~~	~~29.552~~	~~128~~	~~1547~~	~~0.71~~	~~ppbv #~~	68

em 11/24/13

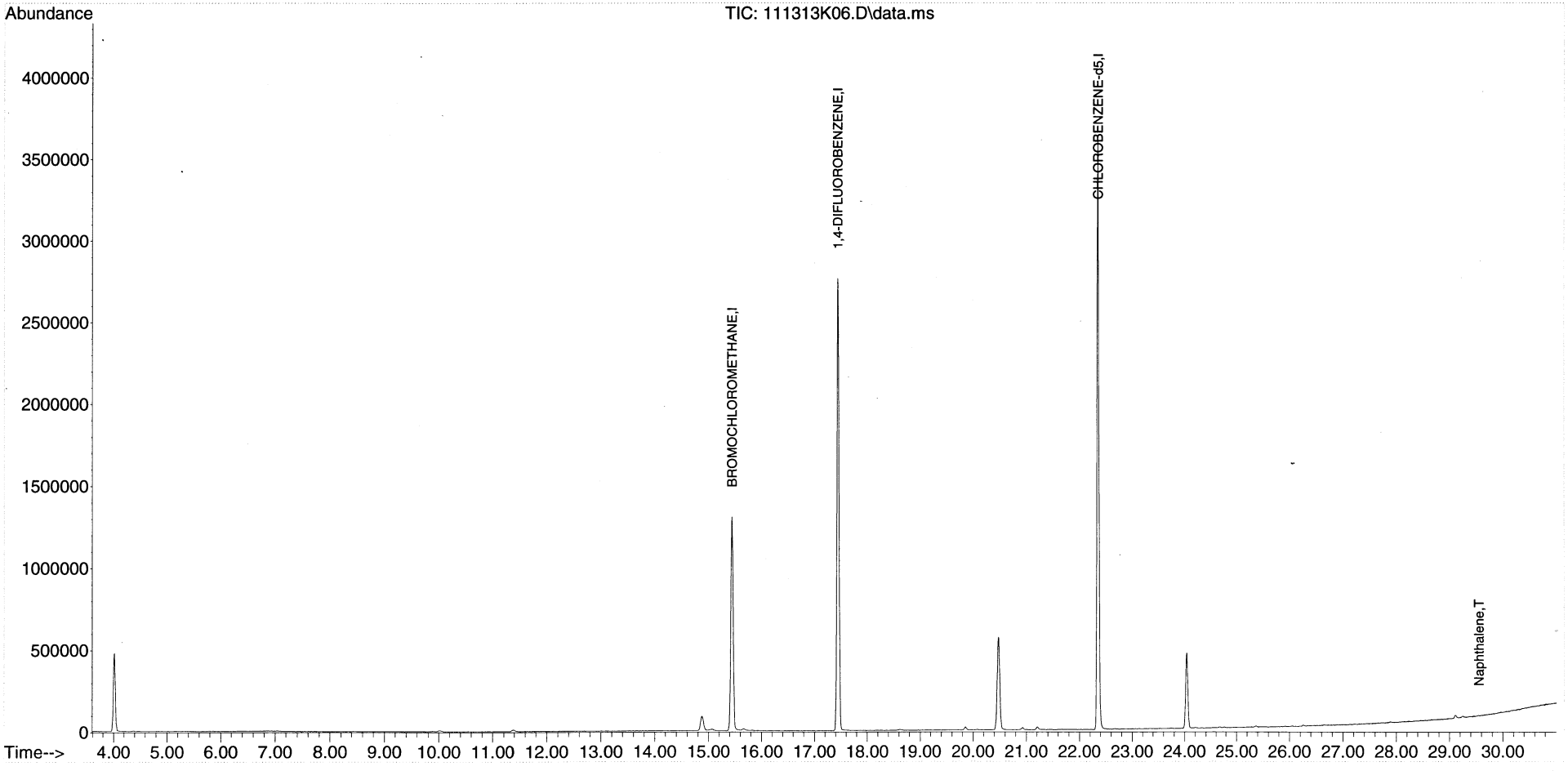
(#) = qualifier out of range (m) = manual integration (+) = signals summed

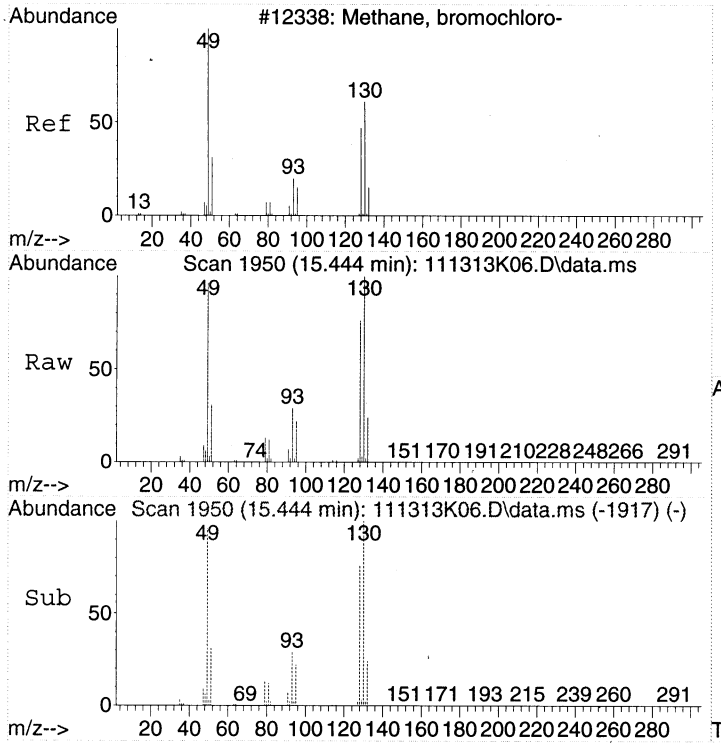
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Instrument: HP5973K
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41
Multiplier: 1

Quant Time: Nov 25 14:03:22 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

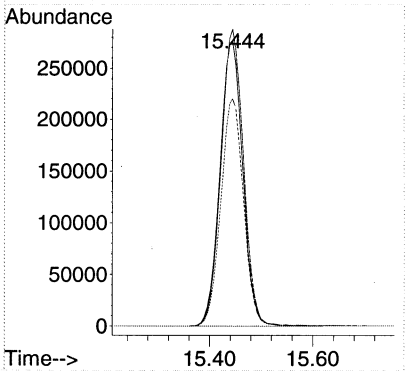


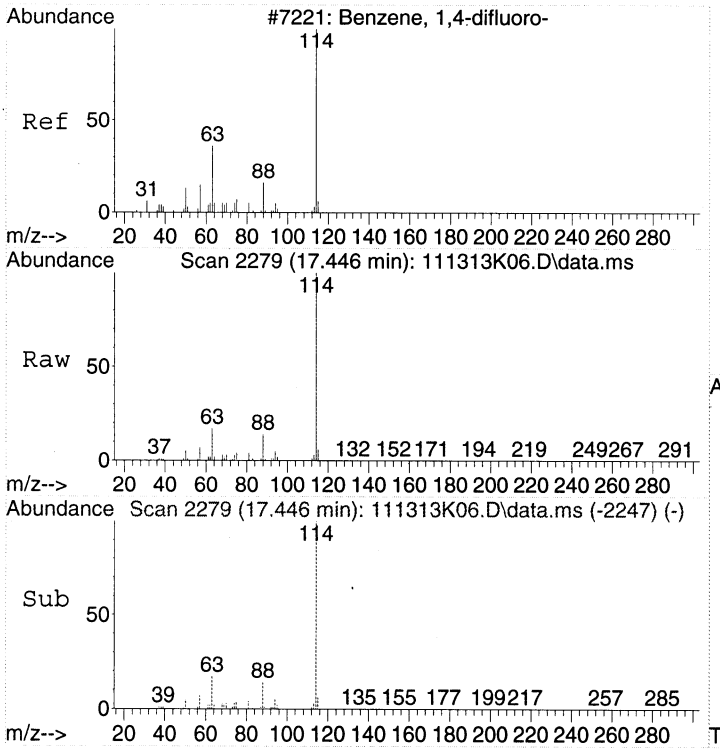


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.444 min Scan# 1950
Delta R.T. 0.000 min
Lab File: 111313K06.D
Acq: 13 Nov 2013 4:42

Tgt Ion: 49 Resp: 848009

Ion	Ratio	Lower	Upper
49	100		
130	103.1	85.4	125.4
128	79.5	62.1	102.1

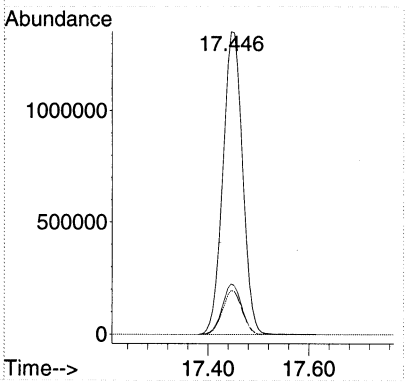


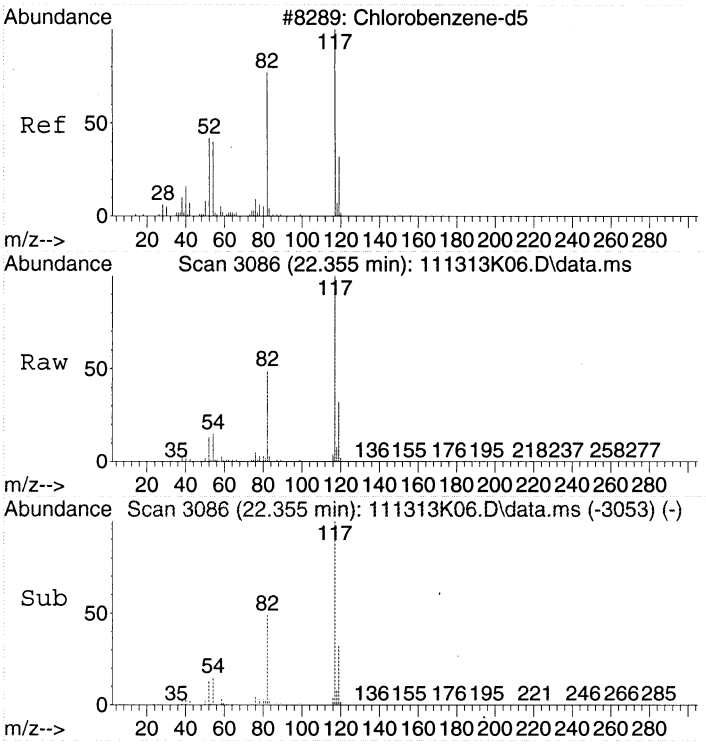


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.006 min
Lab File: 111313K06.D
Acq: 13 Nov 2013 4:42

Tgt Ion:114 Resp: 3672640

Ion	Ratio	Lower	Upper
114	100		
63	16.4	0.0	36.2
88	14.2	0.0	34.2

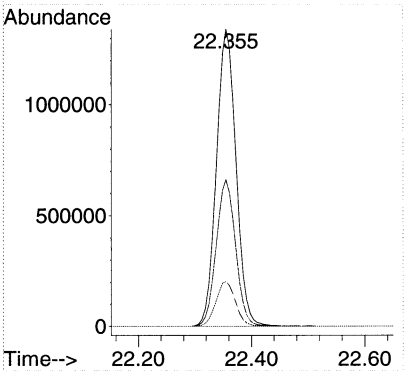


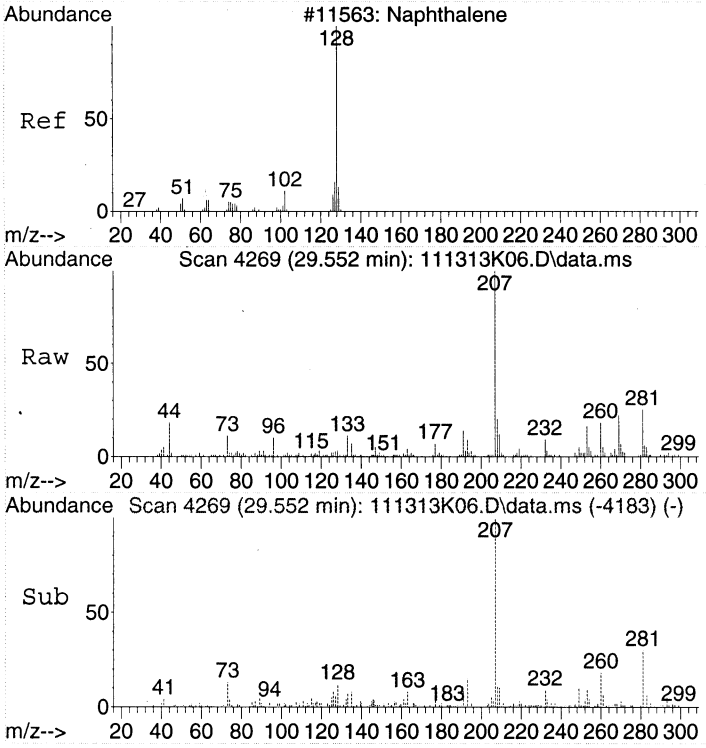


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. 0.000 min
Lab File: 111313K06.D
Acq: 13 Nov 2013 4:42

Tgt Ion:117 Resp: 3238116

Ion	Ratio	Lower	Upper
117	100		
82	48.9	29.1	69.1
54	15.2	0.0	35.1

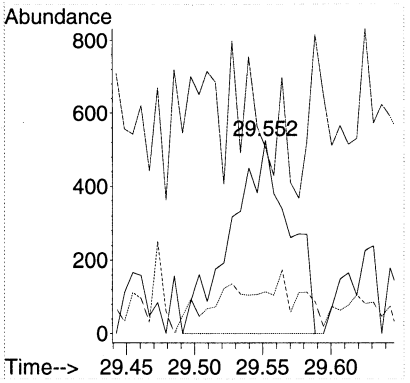




#68
Naphthalene
Concen: 0.71 ppbv
RT: 29.552 min Scan# 4269
Delta R.T. 0.024 min
Lab File: 111313K06.D
Acq: 13 Nov 2013 4:42

Tgt Ion:128 Resp: 1547

Ion	Ratio	Lower	Upper
128	100		
127	0.0	10.4	15.6#
129	0.0	9.7	14.5#



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Title : TO15

Signal : TIC: 111313K06.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	14.872	1845	1856	1871	rBV	86393	336045	3.86%	1.422%
2	15.444	1934	1950	1968	rBV	1304034	3971064	45.56%	16.804%
3	17.446	2266	2279	2296	rBV	2760629	7448298	85.45%	31.518%
4	20.475	2765	2777	2795	rVB	562690	1783408	20.46%	7.547%
5	22.355	3075	3086	3107	rBV	3599552	8716842	100.00%	36.885%
6	24.040	3352	3363	3377	rBV	457361	1376581	15.79%	5.825%

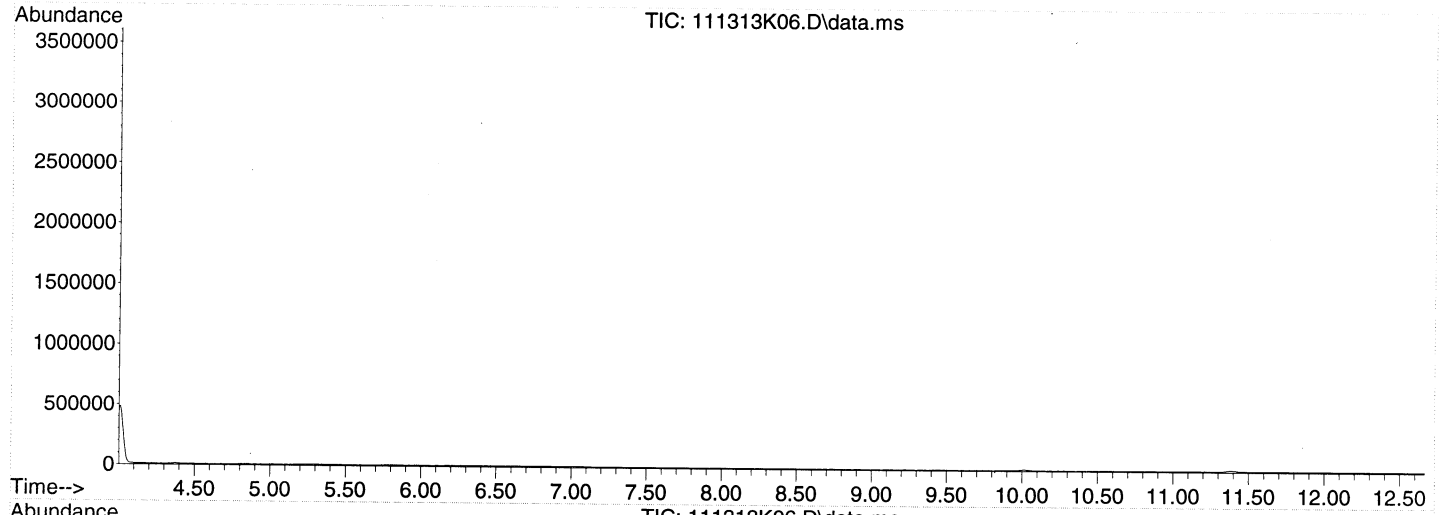
Sum of corrected areas: 23632238

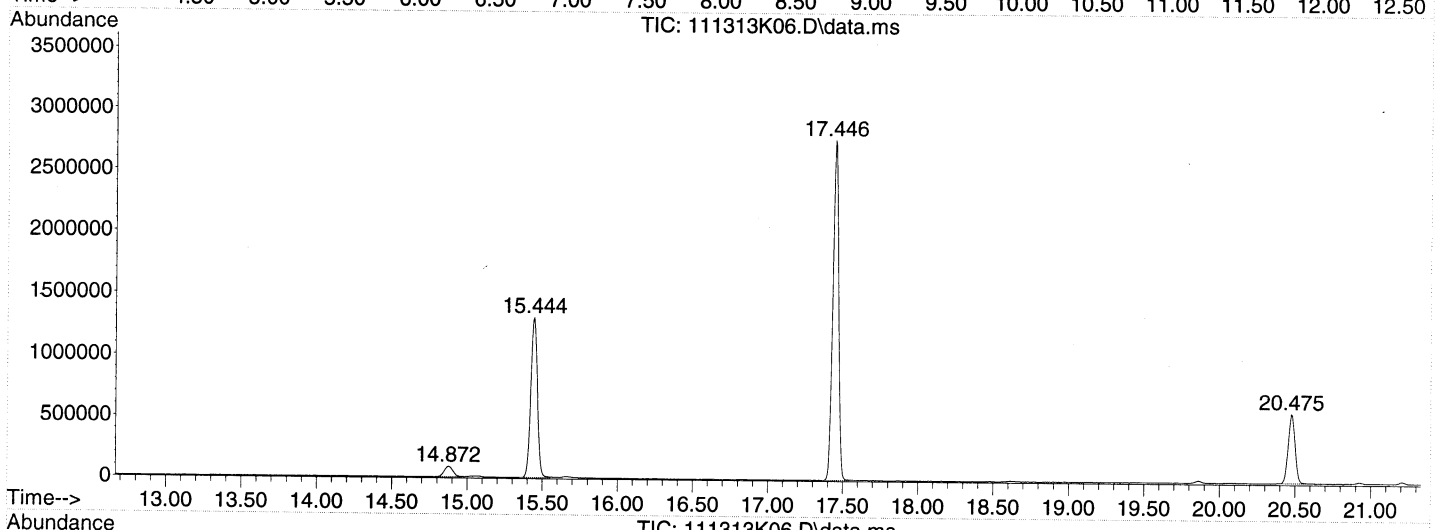
LSC Report - Integrated Chromatogram

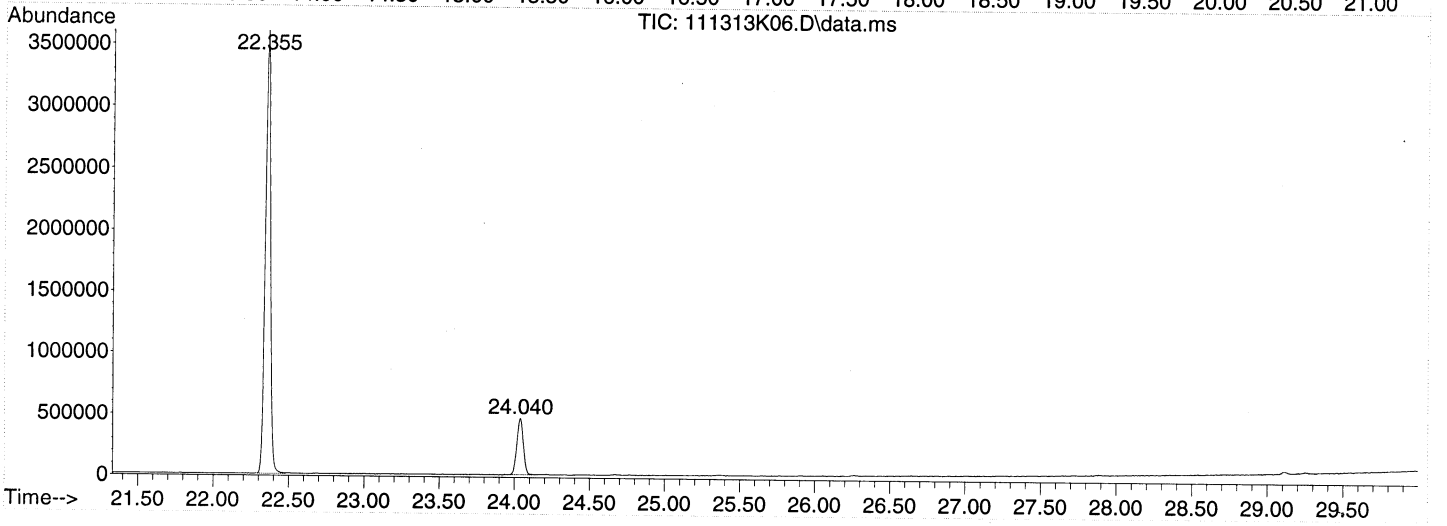
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41 Sample Multiplier: 1

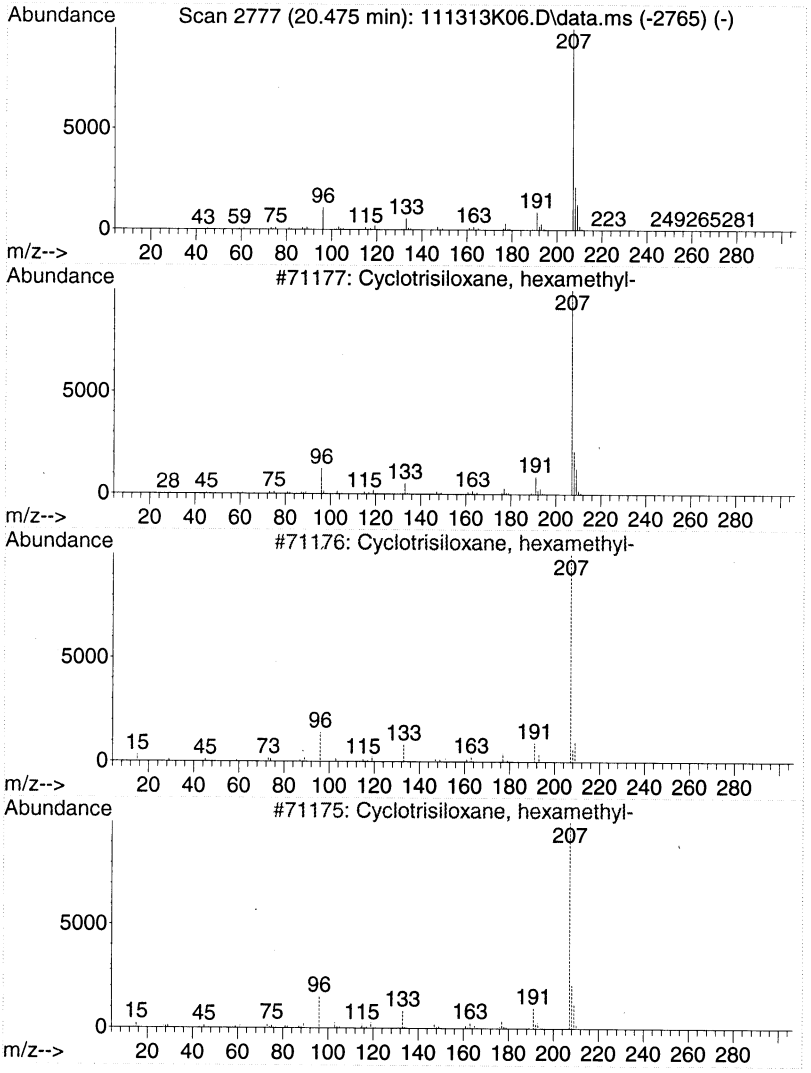
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

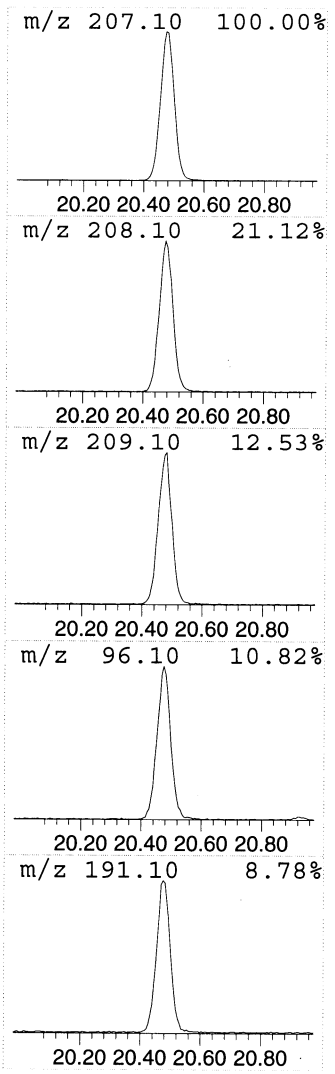
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 Cyclotrisiloxane, hexamethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.475	4.50 ppbv	1783410	CHLOROBENZENE-d5	22.355

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	64
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	49
4	1H-Indole, 5-methyl-2-phenyl-	207	C15H13N	013228-36-9	45
5	1H-Indole, 1-methyl-2-phenyl-	207	C15H13N	003558-24-5	38





Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41 Sample Multiplier: 1

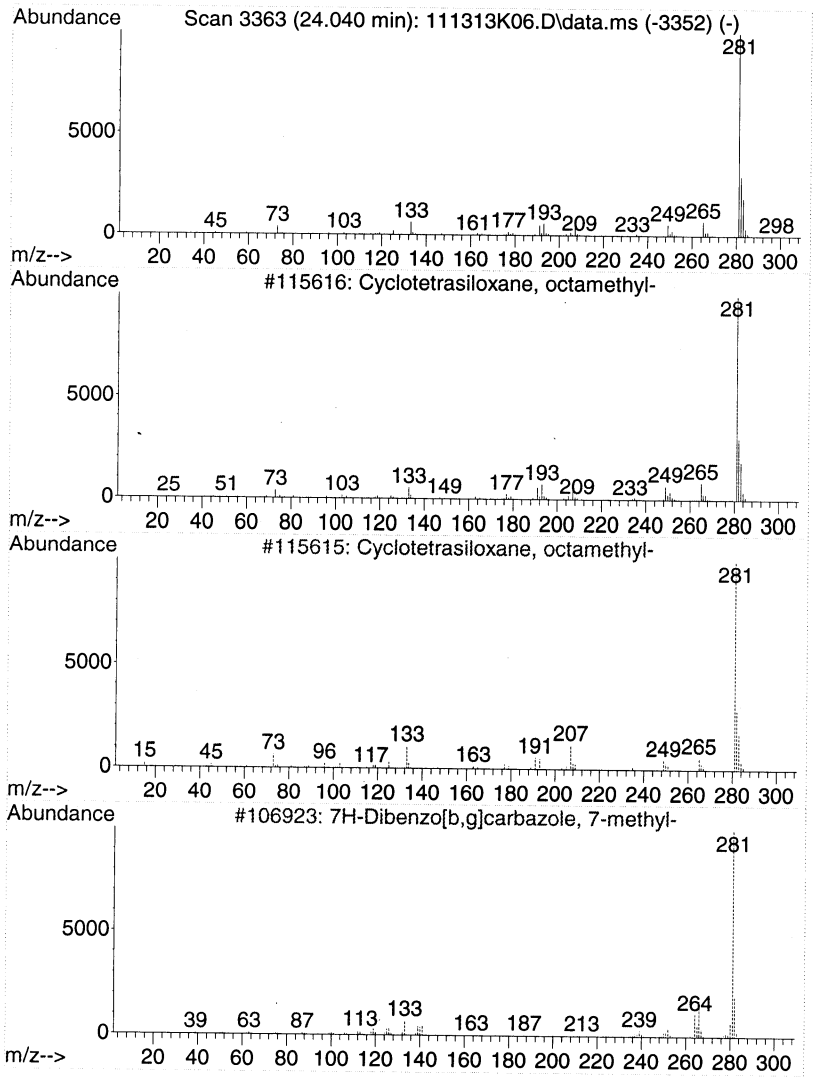
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

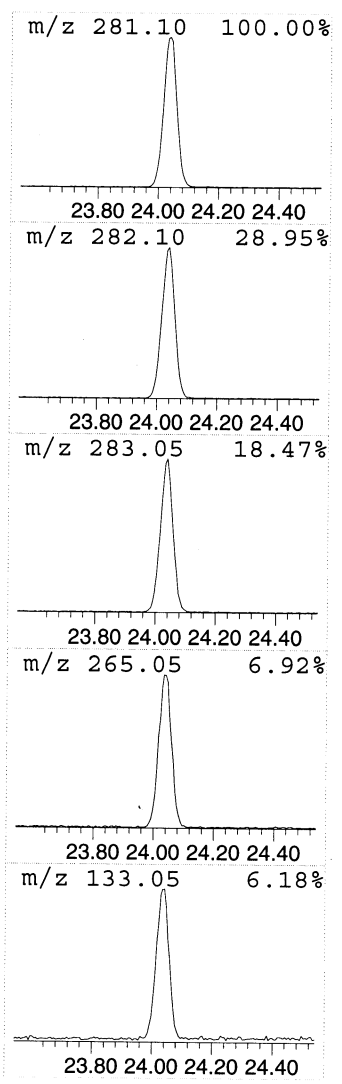
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Cyclotetrasiloxane, octamet... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.040	3.47 ppbv	1376580	CHLOROBENZENE-d5	22.355

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	87
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	64
3	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	59
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	53
5	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45





Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K06.D
Acq On : 13 Nov 2013 4:42
Operator : EM
Sample : CAN 626
Misc : CAN 626
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Cyclotrisiloxan...	20.475	4.5	ppbv	1783410	3	22.355	8716840	22.0
Cyclotetrasilox...	24.040	3.5	ppbv	1376580	3	22.355	8716840	22.0

Column bleed - em 11/25/13

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Instrument: HP5973K
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42
Multiplier: 1

Quant Time: Nov 25 14:03:31 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	862711	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	3740803	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	3285573	22.00	ppbv	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

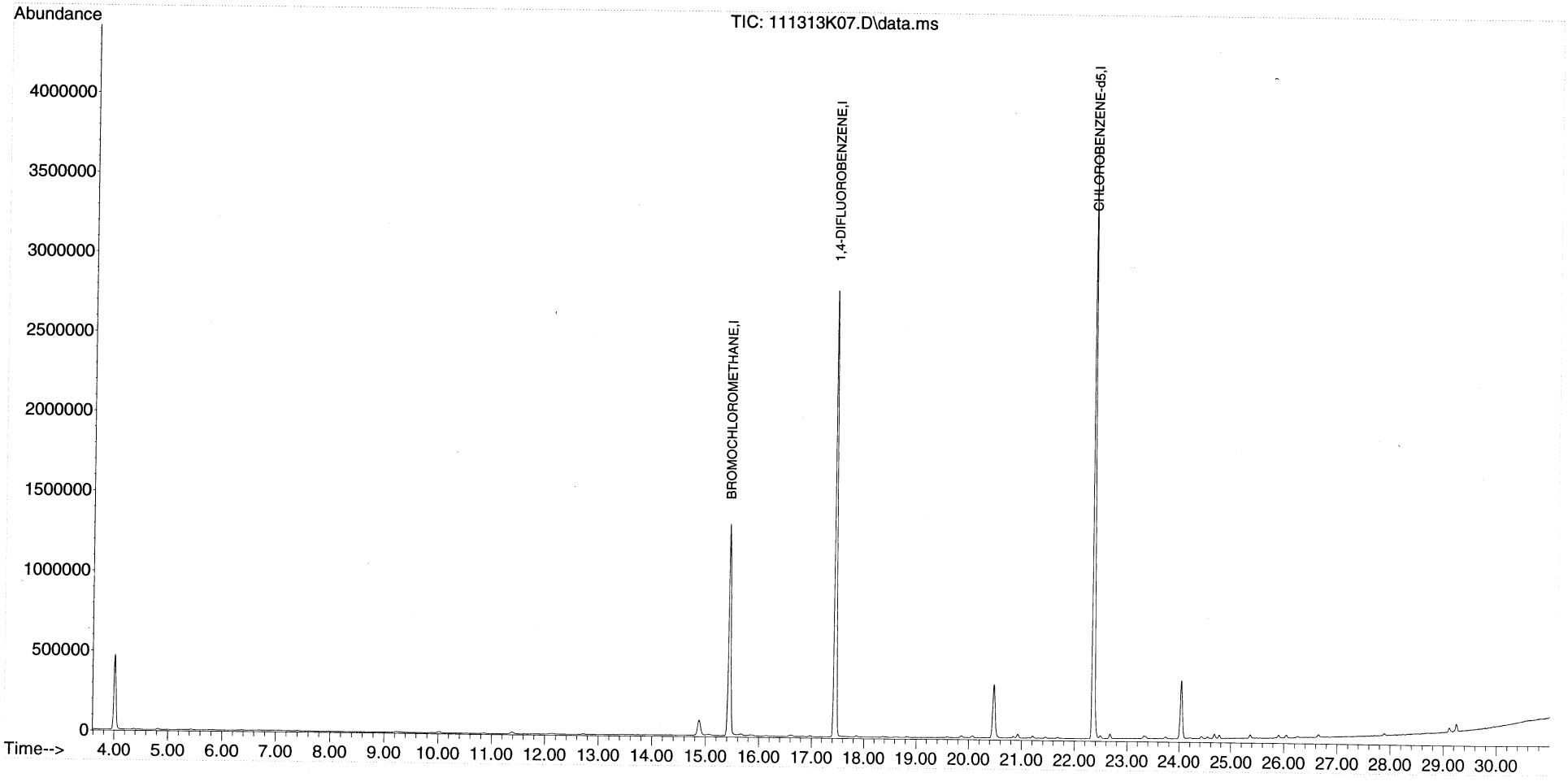
088571

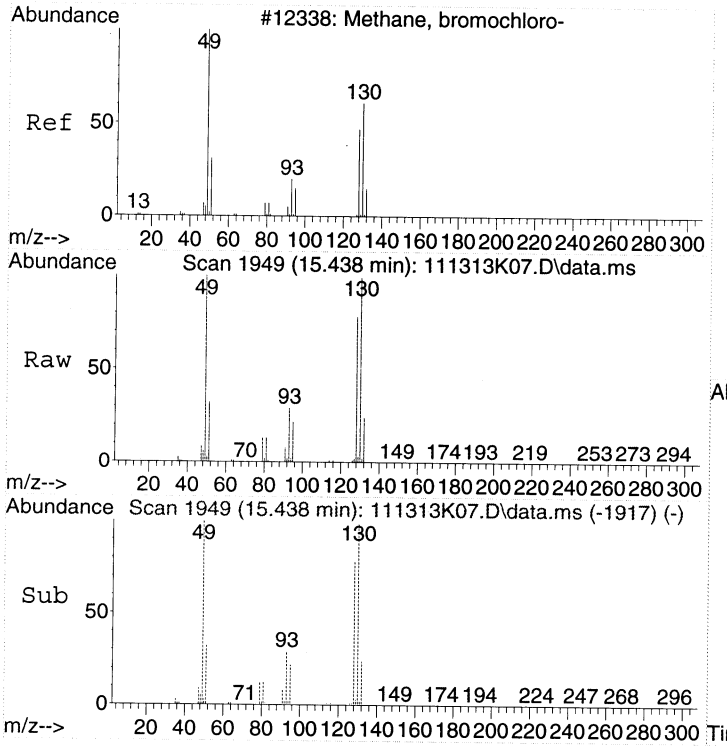
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Instrument: HP5973K
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42
Multiplier: 1

Quant Time: Nov 25 14:03:31 2013
Quant Title : TO15
QLast Update : Mon Nov 25 12:01:55 2013
Response via : Initial Calibration

DataAcq Meth:111213KAA.M
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M

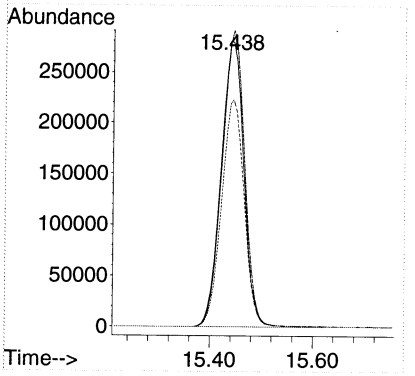


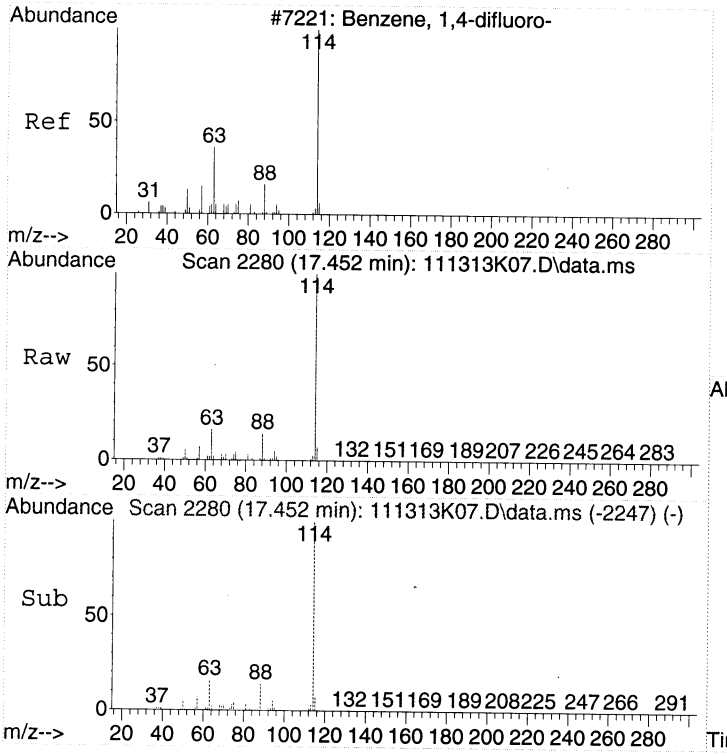


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. -0.006 min
Lab File: 111313K07.D
Acq: 13 Nov 2013 5:31

Tgt Ion: 49 Resp: 862711

Ion	Ratio	Lower	Upper
49	100		
130	102.4	85.4	125.4
128	78.9	62.1	102.1

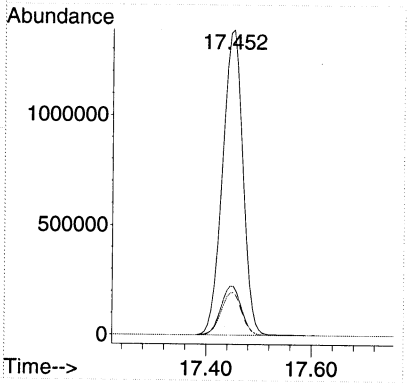


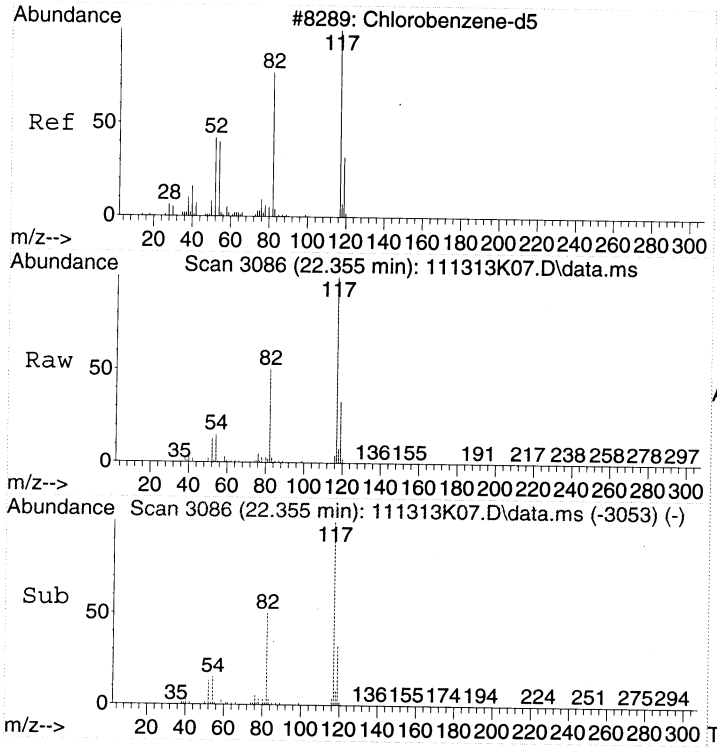


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.452 min Scan# 2280
Delta R.T. 0.000 min
Lab File: 111313K07.D
Acq: 13 Nov 2013 5:31

Tgt Ion:114 Resp: 3740803

Ion	Ratio	Lower	Upper
114	100		
63	16.4	0.0	36.2
88	14.2	0.0	34.2

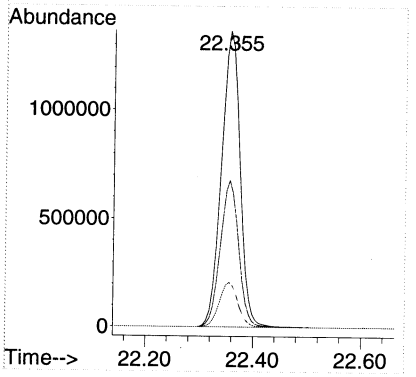




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. 0.000 min
Lab File: 111313K07.D
Acq: 13 Nov 2013 5:31

Tgt Ion:117 Resp: 3285573

Ion	Ratio	Lower	Upper
117	100		
82	49.1	29.1	69.1
54	15.3	0.0	35.1



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : OFF
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Title : TO15

Signal : TIC: 111313K07.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	14.885	1844	1858	1873	rBV	93768	372250	4.19%	1.610%
2	15.444	1937	1950	1969	rBV	1321666	4023017	45.34%	17.400%
3	17.452	2266	2280	2294	rBV	2791282	7585034	85.48%	32.806%
4	20.481	2764	2778	2795	rBV	332185	1084220	12.22%	4.689%
5	22.355	3075	3086	3102	rBV	3669859	8873932	100.00%	38.380%
6	24.034	3351	3362	3374	rBV	362082	1086610	12.24%	4.700%
7	29.248	4215	4219	4227	rVB3	44169	96091	1.08%	0.416%

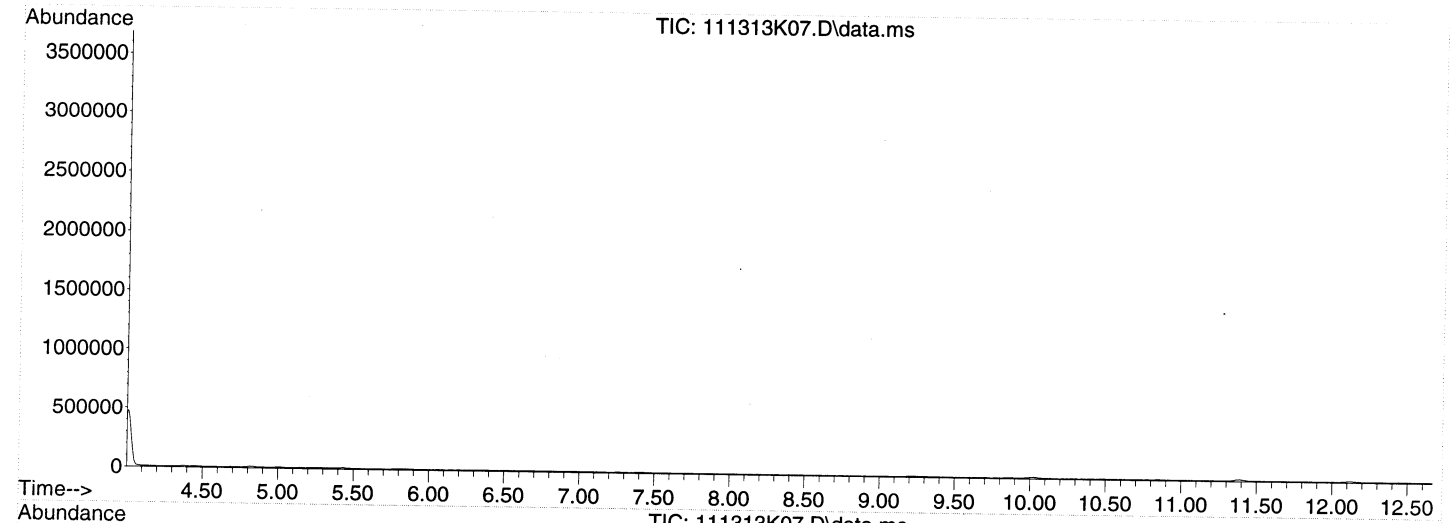
Sum of corrected areas: 23121154

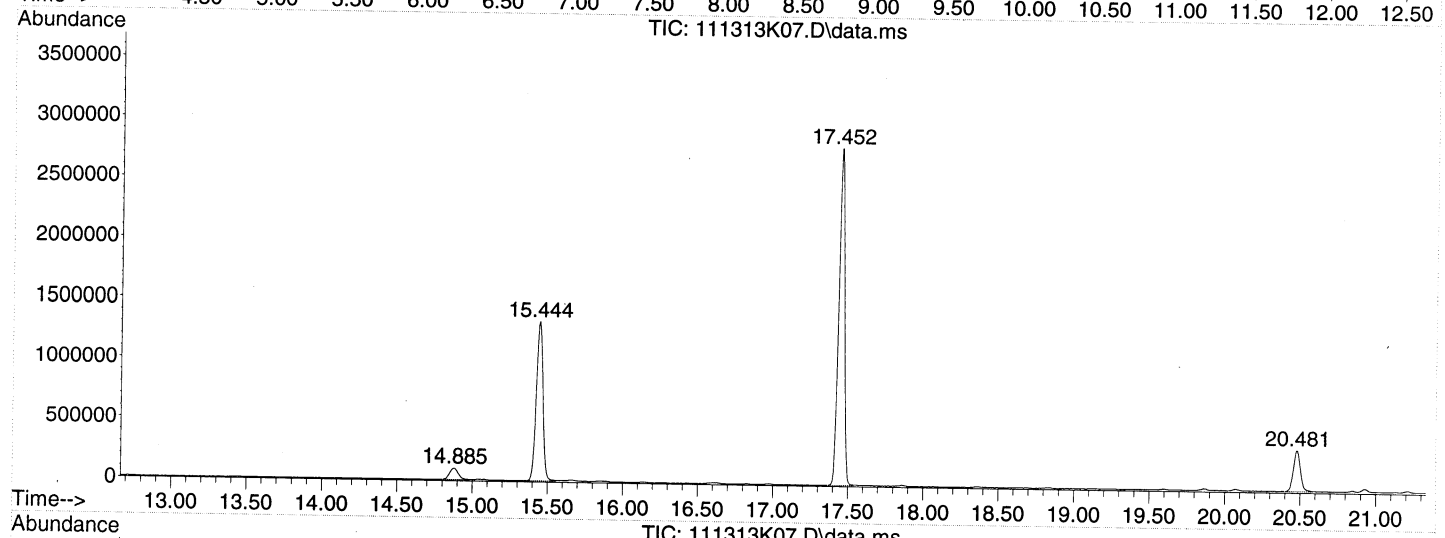
LSC Report - Integrated Chromatogram

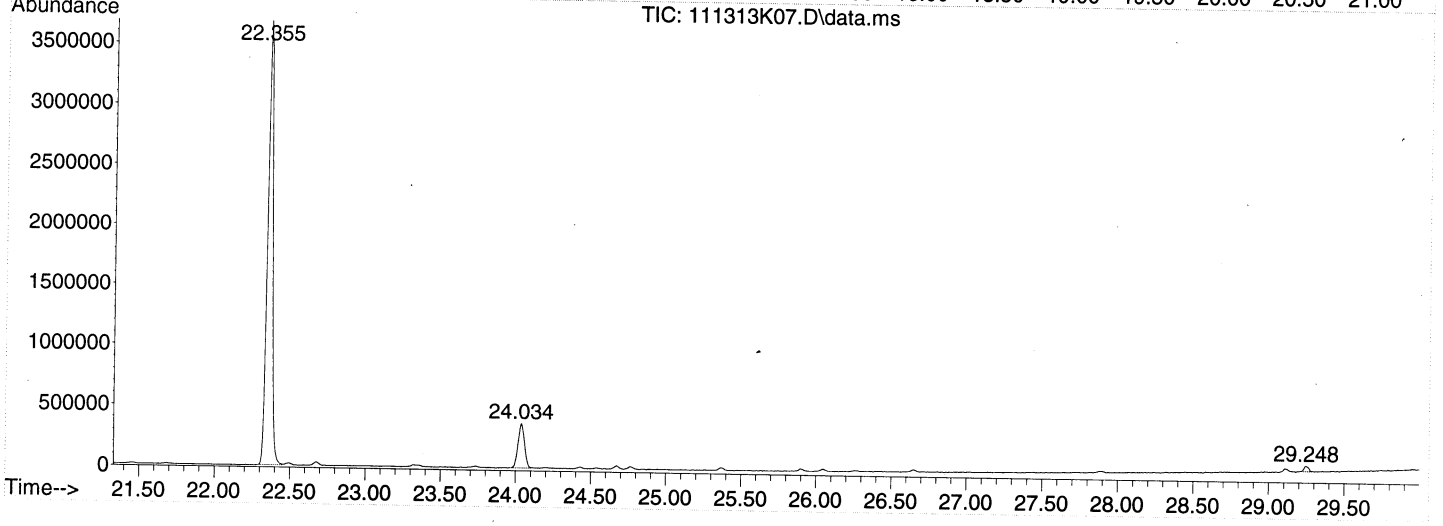
Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42 Sample Multiplier: 1

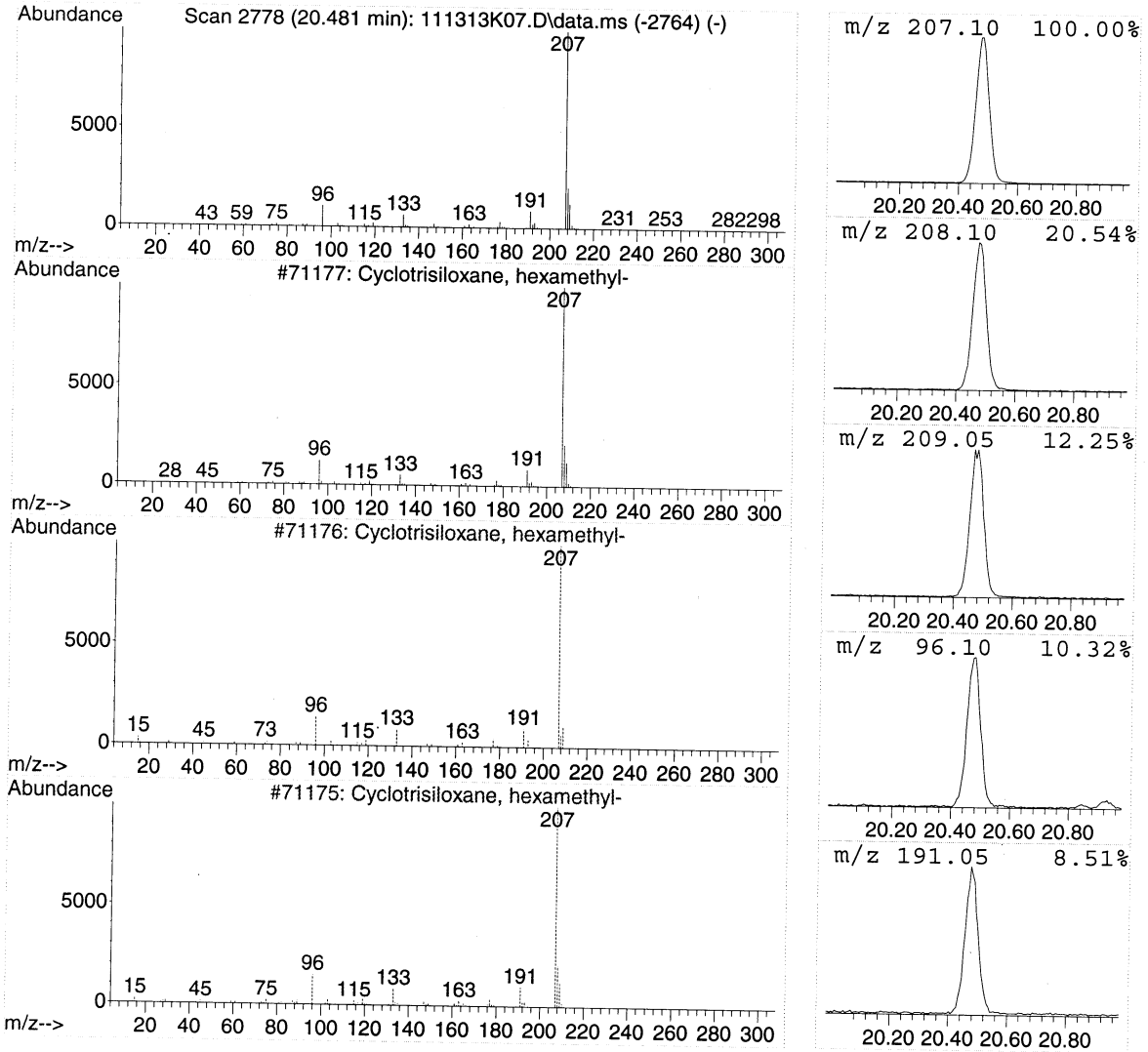
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 Cyclotrisiloxane, hexamethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.481	2.69 ppbv	1084220	CHLOROBENZENE-d5	22.355

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	64
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	47
4	1H-Indole, 5-methyl-2-phenyl-	207	C15H13N	013228-36-9	45
5	Benzo[h]quinoline, 2,4-dimethyl-	207	C15H13N	000605-67-4	38



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42 Sample Multiplier: 1

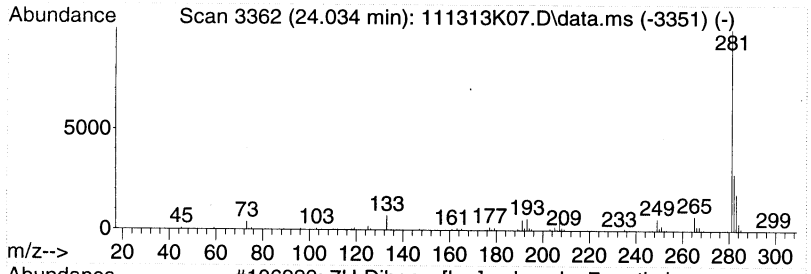
Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

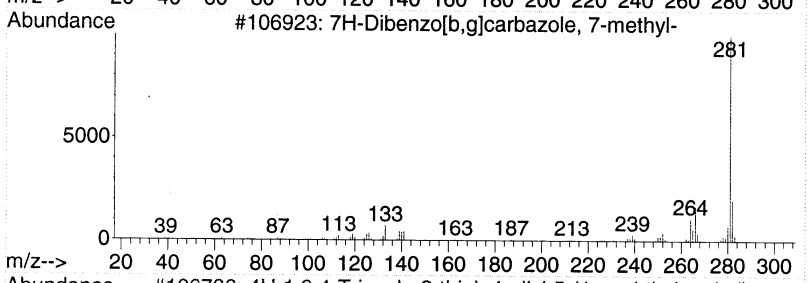
TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

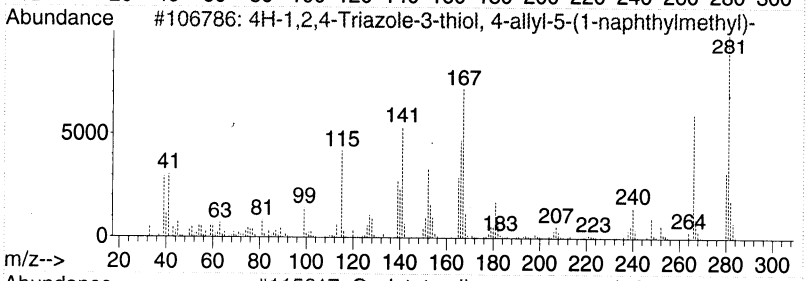
****
Peak Number 2 7H-Dibenzo[b,g]carbazole, 7... Concentration Rank 1

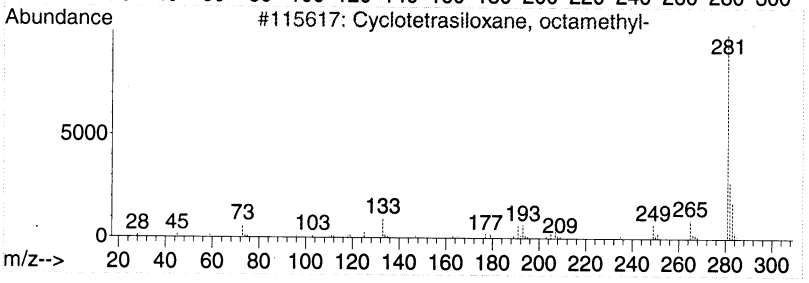
R.T.	EstConc	Area	Relative to ISTD	R.T.
24.034	2.69 ppbv	1086610	CHLOROBENZENE-d5	22.355

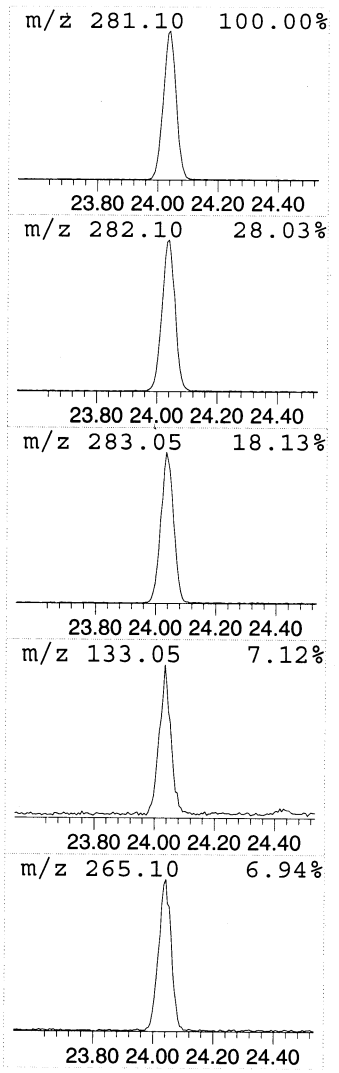
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	7H-Dibenzo[b,g]carbazole, 7-methyl-	281	C21H15N	003557-49-1	59
2	4H-1,2,4-Triazole-3-thiol, 4-all...	281	C16H15N3S	031803-13-1	59
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	53
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	46
5	5H-Naphtho[2,3-c]carbazole, 5-me...	281	C21H15N	100025-44-3	45











000575

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2013\111313KA\
Data File : 111313K07.D
Acq On : 13 Nov 2013 5:31
Operator : EM
Sample : CAN 629
Misc : CAN 629
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\2013\111213AMBKAA.M
Quant Title : TO15

TIC Library : C:\DATABASE\NIST02.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
~~Cyclotrisiloxan...~~	20.481	2.7	ppbv	1084220	3	22.355	8873930	22.0
~~7H-Dibenzo[b,g]~~...	24.034	2.7	ppbv	1086610	3	22.355	8873930	22.0

Column bleed em 11/25/13

00577