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2397720

United States Environmental Protection Agency
Region 9 Laboratory

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

Date: 6/26/2014

Subject: **Analytical Testing Results - Project R14S39**
SDG: 14149A

From: **Duane James, Acting 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:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
MH84	1405053-01	Air	05/28/14 10:50	05/29/14 09:45
F6-025	1405053-02	Air	05/28/14 10:57	05/29/14 09:45
TR-01	1405053-03	Air	05/28/14 11:02	05/29/14 09:45
F6-027	1405053-04	Air	05/28/14 11:08	05/29/14 09:45
F6-029	1405053-05	Air	05/28/14 11:22	05/29/14 09:45
F6-031	1405053-06	Air	05/28/14 11:28	05/29/14 09:45
F7-002	1405053-07	Air	05/28/14 11:42	05/29/14 09:45
G6-040	1405053-08	Air	05/28/14 11:53	05/29/14 09:45
E5-005	1405053-09	Air	05/28/14 12:47	05/29/14 09:45
E5-005D	1405053-10	Air	05/28/14 12:49	05/29/14 09:45
E5-016	1405053-11	Air	05/28/14 13:02	05/29/14 09:45
E5-014	1405053-12	Air	05/28/14 13:09	05/29/14 09:45

SDG ID 14149A

Work Order(s)

1405053

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Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-01									**Air - Sampled: 05/28/14 10:50**
Sample ID: MH84									
							Volatile Organic Compounds by TO-15		
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/30/14	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	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		4	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		ND	U	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		6	C1, J	10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	9	"	"	"	"	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	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	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	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:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: **1405053-01** **Air - Sampled: 05/28/14 10:50**

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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: 1405053-02									**Air - Sampled: 05/28/14 10:57**
Sample ID: F6-025									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/30/14	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	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		4	C1, J	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		9		8	"	"	"	"	TO-15/SOP311
Chloroform		10	C1	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		60		10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	"	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
Toluene		5	C1, J	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-03									**Air - Sampled: 05/28/14 11:02**
Sample ID: TR-01									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/30/14	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	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		4	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		ND	U	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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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: **1405053-03** **Air - Sampled: 05/28/14 11:02**

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Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1405053-04									**Air - Sampled: 05/28/14 11:08**
Sample ID: F6-027									
							Volatile Organic Compounds by TO-15		
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/30/14	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	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		ND	U	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroform		ND	U	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		ND	U	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	U	20	"	"	"	"	TO-15/SOP311

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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: 1405053-04									**Air - Sampled: 05/28/14 11:08**
Sample ID: F6-027									**Volatile Organic Compounds by TO-15**
Hexachlorobutadiene		ND	U	20	ug/m³ Air	B14E113	05/30/14	05/30/14	TO-15/SOP311
Lab ID: 1405053-05									**Air - Sampled: 05/28/14 11:22**
Sample ID: F6-029									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/30/14	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	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		ND	U	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroform		ND	U	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		10		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

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:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-05									**Air - Sampled: 05/28/14 11:22**
Sample ID: F6-029									
							Volatile Organic Compounds by TO-15		
1,4-Dichlorobenzene		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/30/14	TO-15/SOP311
1,2-Dichlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
1,2,4-Trichlorobenzene		ND	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-06									**Air - Sampled: 05/28/14 11:28**
Sample ID: F6-031									
							Volatile Organic Compounds by TO-15		
1,2-Dichlorotetrafluoroethane		ND	U	20	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Chloromethane		ND	U	5	"	"	"	"	TO-15/SOP311
Vinyl chloride		ND	U	6	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	9	"	"	"	"	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	9	"	"	"	"	TO-15/SOP311
Dichloromethane		5	C1, J	8	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	9	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		10		9	"	"	"	"	TO-15/SOP311
Chloroform		60		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	9	"	"	"	"	TO-15/SOP311
Trichloroethene		70		10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	"	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
Toluene		30		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		60		10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	10	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	20	"	"	"	"	TO-15/SOP311
1,3,5-Trimethylbenzene		ND	U	10	"	"	"	"	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:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-06									**Air - Sampled: 05/28/14 11:28**
Sample ID: F6-031									**Volatile Organic Compounds by TO-15**
1,2,4-Trimethylbenzene		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/31/14	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-07									**Air - Sampled: 05/28/14 11:42**
Sample ID: F7-002									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/31/14	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	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		ND	U	7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroform		ND	U	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		ND	U	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

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-07									**Air - Sampled: 05/28/14 11:42**
Sample ID: F7-002									**Volatile Organic Compounds by TO-15**
Styrene		ND	U	9	ug/m³ Air	B14E113	05/30/14	05/31/14	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-08									**Air - Sampled: 05/28/14 11:53**
Sample ID: G6-040									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Chloromethane		3	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		10		7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		ND	U	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		ND	U	8	"	"	"	"	TO-15/SOP311
Chloroform	RE1	200		100	"	"	"	05/31/14	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	05/31/14	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		20		10	"	"	"	"	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	"	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
Toluene		100		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	9	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	9	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-08									**Air - Sampled: 05/28/14 11:53**
Sample ID: G6-040									**Volatile Organic Compounds by TO-15**
m&p-Xylene		ND	U	20	ug/m³ Air	B14E113	05/30/14	05/31/14	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-09									**Air - Sampled: 05/28/14 12:47**
Sample ID: E5-005									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	20	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Chloromethane		ND	U	5	"	"	"	"	TO-15/SOP311
Vinyl chloride		4	C1, J	6	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	9	"	"	"	"	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		8	C1, J	9	"	"	"	"	TO-15/SOP311
Dichloromethane		8		8	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		5	C1, J	9	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		70		9	"	"	"	"	TO-15/SOP311
Chloroform	RE1	100		100	"	"	"	05/31/14	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	05/31/14	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	200		100	"	"	"	05/31/14	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	05/31/14	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
Toluene		20		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		40		20	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-09									**Air - Sampled: 05/28/14 12:47**
Sample ID: E5-005									**Volatile Organic Compounds by TO-15**
Chlorobenzene		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Ethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	10	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	20	"	"	"	"	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-10									**Air - Sampled: 05/28/14 12:49**
Sample ID: E5-005D									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Chloromethane		ND	U	4	"	"	"	"	TO-15/SOP311
Vinyl chloride		4	C1, J	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		9		8	"	"	"	"	TO-15/SOP311
Dichloromethane		8		7	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		6	C1, J	8	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		80		8	"	"	"	"	TO-15/SOP311
Chloroform	RE1	200		100	"	"	"	05/31/14	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	05/31/14	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	300		100	"	"	"	05/31/14	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	05/31/14	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
Toluene		20		8	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-10									**Air - Sampled: 05/28/14 12:49**
Sample ID: E5-005D									**Volatile Organic Compounds by TO-15**
Tetrachloroethene		40		10	ug/m³ Air	B14E113	05/30/14	05/31/14	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-11									**Air - Sampled: 05/28/14 13:02**
Sample ID: E5-016									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	20	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Chloromethane		ND	U	5	"	"	"	"	TO-15/SOP311
Vinyl chloride		7		6	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	9	"	"	"	"	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		9	C1, J	20	"	"	"	"	TO-15/SOP311
1,1-Dichloroethene		10		9	"	"	"	"	TO-15/SOP311
Dichloromethane		10		8	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		7	C1, J	9	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		100		9	"	"	"	"	TO-15/SOP311
Chloroform	RE1	300		100	"	"	"	05/31/14	TO-15/SOP311
1,1,1-Trichloroethane		7	C1, J	10	"	"	"	05/31/14	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	400		100	"	"	"	05/31/14	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	05/31/14	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
Toluene		20		8	"	"	"	"	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311

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:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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: 1405053-11									**Air - Sampled: 05/28/14 13:02**
Sample ID: E5-016									**Volatile Organic Compounds by TO-15**
1,1,2-Trichloroethane		ND	U	10	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Tetrachloroethene		70		20	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	10	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	20	"	"	"	"	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311
Lab ID: 1405053-12									**Air - Sampled: 05/28/14 13:09**
Sample ID: E5-014									**Volatile Organic Compounds by TO-15**
1,2-Dichlorotetrafluoroethane		ND	U	20	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
Chloromethane		ND	U	5	"	"	"	"	TO-15/SOP311
Vinyl chloride		5	C1, J	6	"	"	"	"	TO-15/SOP311
Bromomethane		ND	U	9	"	"	"	"	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		9		9	"	"	"	"	TO-15/SOP311
Dichloromethane		9		8	"	"	"	"	TO-15/SOP311
1,1-Dichloroethane		5	C1, J	9	"	"	"	"	TO-15/SOP311
cis-1,2-Dichloroethene		70		9	"	"	"	"	TO-15/SOP311
Chloroform	RE1	200		100	"	"	"	05/31/14	TO-15/SOP311
1,1,1-Trichloroethane		ND	U	10	"	"	"	05/31/14	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	300		100	"	"	"	05/31/14	TO-15/SOP311
1,2-Dichloropropane		ND	U	10	"	"	"	05/31/14	TO-15/SOP311
cis-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
Project: MEW 2014 Manhole Screening Investigation	**San Francisco CA, 94105**	

Sample Results

Lab ID: 1405053-12 — **Air - Sampled: 05/28/14 13:09**

Sample ID: E5-014 — **Volatile Organic Compounds by TO-15**

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Toluene		20		8	ug/m³ Air	B14E113	05/30/14	05/31/14	TO-15/SOP311
trans-1,3-Dichloropropene		ND	U	10	"	"	"	"	TO-15/SOP311
1,1,2-Trichloroethane		ND	U	10	"	"	"	"	TO-15/SOP311
Tetrachloroethene		50		10	"	"	"	"	TO-15/SOP311
1,2-Dibromoethane (EDB)		ND	U	20	"	"	"	"	TO-15/SOP311
Chlorobenzene		ND	U	10	"	"	"	"	TO-15/SOP311
Ethylbenzene		ND	U	10	"	"	"	"	TO-15/SOP311
m&p-Xylene		ND	U	20	"	"	"	"	TO-15/SOP311
o-Xylene		ND	U	10	"	"	"	"	TO-15/SOP311
Styrene		ND	U	9	"	"	"	"	TO-15/SOP311
1,1,2,2-Tetrachloroethane		ND	U	20	"	"	"	"	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	U	20	"	"	"	"	TO-15/SOP311
Hexachlorobutadiene		ND	U	20	"	"	"	"	TO-15/SOP311

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Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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 B14E113 - - General Air prep - VOCs, Soil Gas										**Prepared & Analyzed: 05/30/14**
										Volatile Organic Compounds by TO-15 - Quality Control
Blank (B14E113-BLK1)										
1,2-Dichlorotetrafluoroethane	ND	U	7	ug/m³ Air						
Chloromethane	ND	U	2.1	"						
Vinyl chloride	ND	U	2.6	"						
Bromomethane	ND	U	3.9	"						
Chloroethane	ND	U	2.6	"						
Trichlorofluoromethane	ND	U	5.6	"						
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	U	7.7	"						
1,1-Dichloroethene	ND	U	4	"						
Dichloromethane	ND	U	3.5	"						
1,1-Dichloroethane	ND	U	4	"						
cis-1,2-Dichloroethene	ND	U	4	"						
Chloroform	ND	U	4.9	"						
1,1,1-Trichloroethane	ND	U	5.5	"						
Carbon tetrachloride	ND	U	6.3	"						
Benzene	ND	U	3.2	"						
1,2-Dichloroethane	ND	U	4	"						
Trichloroethene	ND	U	5.4	"						
1,2-Dichloropropane	ND	U	4.6	"						
cis-1,3-Dichloropropene	ND	U	4.5	"						
Toluene	ND	U	3.8	"						
trans-1,3-Dichloropropene	ND	U	4.5	"						
1,1,2-Trichloroethane	ND	U	5.5	"						
Tetrachloroethene	ND	U	6.8	"						
1,2-Dibromoethane (EDB)	ND	U	7.7	"						
Chlorobenzene	ND	U	4.6	"						
Ethylbenzene	ND	U	4.3	"						
m&p-Xylene	ND	U	8.7	"						
o-Xylene	ND	U	4.3	"						
Styrene	ND	U	4.3	"						
1,1,2,2-Tetrachloroethane	ND	U	6.9	"						
1,3,5-Trimethylbenzene	ND	U	4.9	"						
1,2,4-Trimethylbenzene	ND	U	4.9	"						
1,3-Dichlorobenzene	ND	U	6	"						
1,4-Dichlorobenzene	ND	U	6	"						
1,2-Dichlorobenzene	ND	U	6	"						
1,2,4-Trichlorobenzene	ND	U	7.4	"						
Hexachlorobutadiene	ND	U	11	"						
LCS (B14E113-BS1)										
1,2-Dichlorotetrafluoroethane	99		7	ug/m³ Air	73.3		**135**	67-127		200
Chloromethane	24		2.1	"	21.7		110	70-123		200

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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 B14E113 - - General Air prep - VOCs, Soil Gas										**Prepared & Analyzed: 05/30/14**
								Volatile Organic Compounds by TO-15 - Quality Control		
LCS (B14E113-BS1)										
Vinyl chloride	28		2.6	"	26.8		104	69-125		200
Bromomethane	41		3.9	"	40.0		103	66-125		200
Chloroethane	27		2.6	"	27.2		99	67-125		200
Trichlorofluoromethane	69		5.6	"	60.1		115	68-133		200
1,1,2-Trichloro-1,2,2-trifluoroethane	78		7.7	"	74.3		106	64-125		200
1,1-Dichloroethene	41		4	"	38.0		108	73-128		200
Dichloromethane	32		3.5	"	34.0		93	73-116		200
1,1-Dichloroethane	41		4	"	39.2		104	72-125		200
cis-1,2-Dichloroethene	47		4	"	40.0		117	77-129		200
Chloroform	52		4.9	"	49.8		105	77-126		200
1,1,1-Trichloroethane	58		5.5	"	55.1		106	74-133		200
Carbon tetrachloride	68		6.3	"	64.7		106	71-141		200
Benzene	32		3.2	"	32.2		98	81-125		200
1,2-Dichloroethane	41		4	"	39.6		103	61-153		200
Trichloroethene	57		5.4	"	54.2		106	73-128		200
1,2-Dichloropropane	48		4.6	"	47.6		102	77-129		200
cis-1,3-Dichloropropene	49		4.5	"	46.7		104	80-136		200
Toluene	38		3.8	"	38.4		99	78-133		200
trans-1,3-Dichloropropene	54		4.5	"	48.5		110	79-146		200
1,1,2-Trichloroethane	56		5.5	"	56.2		100	74-134		200
Tetrachloroethene	70		6.8	"	67.8		103	73-130		200
1,2-Dibromoethane (EDB)	85		7.7	"	79.1		107	78-133		200
Chlorobenzene	48		4.6	"	47.8		100	81-126		200
Ethylbenzene	44		4.3	"	44.3		99	82-130		200
m&p-Xylene	86		8.7	"	88.5		98	82-131		200
o-Xylene	45		4.3	"	44.7		102	82-132		200
Styrene	44		4.3	"	43.0		102	65-141		200
1,1,2,2-Tetrachloroethane	71		6.9	"	70.0		102	73-127		200
1,3,5-Trimethylbenzene	52		4.9	"	50.6		102	77-132		200
1,2,4-Trimethylbenzene	51		4.9	"	49.6		103	78-131		200
1,3-Dichlorobenzene	61		6	"	59.5		102	79-124		200
1,4-Dichlorobenzene	61		6	"	59.5		102	75-127		200
1,2-Dichlorobenzene	62		6	"	59.5		104	77-124		200
1,2,4-Trichlorobenzene	71		7.4	"	67.5		106	55-132		200
Hexachlorobutadiene	109		11	"	101		107	52-131		200
Duplicate (B14E113-DUP1)		**Source: 1405053-04**								
1,2-Dichlorotetrafluoroethane	ND	U	15	ug/m³ Air		ND				20
Chloromethane	ND	U	4.3	"		ND				20
Vinyl chloride	ND	U	5.3	"		ND				20
Bromomethane	ND	U	8.1	"		ND				20
Chloroethane	ND	U	5.5	"		ND				20

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**SDG:** 14149A
Project Number: R14S39	**75 Hawthorne Street**	**Reported:** 06/26/14 13:47
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 B14E113 - - General Air prep - VOCs, Soil Gas										**Prepared & Analyzed: 05/30/14**
										Volatile Organic Compounds by TO-15 - Quality Control
Duplicate (B14E113-DUP1)		**Source: 1405053-04**								
Trichlorofluoromethane	ND	U	12	"		ND				20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	U	16	"		ND				20
1,1-Dichloroethene	ND	U	8.2	"		ND				20
Dichloromethane	ND	U	7.2	"		ND				20
1,1-Dichloroethane	ND	U	8.4	"		ND				20
cis-1,2-Dichloroethene	ND	U	8.2	"		ND				20
Chloroform	ND	U	10	"		ND				20
1,1,1-Trichloroethane	ND	U	11	"		ND				20
Carbon tetrachloride	ND	U	13	"		ND				20
Benzene	ND	U	6.6	"		ND				20
1,2-Dichloroethane	ND	U	8.4	"		ND				20
Trichloroethene	ND	U	11	"		ND				20
1,2-Dichloropropane	ND	U	9.6	"		ND				20
cis-1,3-Dichloropropene	ND	U	9.4	"		ND				20
Toluene	ND	U	7.8	"		ND				20
trans-1,3-Dichloropropene	ND	U	9.4	"		ND				20
1,1,2-Trichloroethane	ND	U	11	"		ND				20
Tetrachloroethene	ND	U	14	"		ND				20
1,2-Dibromoethane (EDB)	ND	U	16	"		ND				20
Chlorobenzene	ND	U	9.6	"		ND				20
Ethylbenzene	ND	U	9	"		ND				20
m&p-Xylene	ND	U	18	"		ND				20
o-Xylene	ND	U	9	"		ND				20
Styrene	ND	U	8.9	"		ND				20
1,1,2,2-Tetrachloroethane	ND	U	14	"		ND				20
1,3,5-Trimethylbenzene	ND	U	10	"		ND				20
1,2,4-Trimethylbenzene	ND	U	10	"		ND				20
1,3-Dichlorobenzene	ND	U	12	"		ND				20
1,4-Dichlorobenzene	ND	U	12	"		ND				20
1,2-Dichlorobenzene	ND	U	12	"		ND				20
1,2,4-Trichlorobenzene	ND	U	15	"		ND				20
Hexachlorobutadiene	ND	U	22	"		ND				20

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Project Manager: Alana Lee **Project Number:** R14S39 **Project:** MEW 2014 Manhole Screening Investigation	**California Site Cleanup Section 3** **75 Hawthorne Street** **San Francisco CA, 94105**	**SDG:** 14149A **Reported:** 06/26/14 13:47

Qualifiers and Comments

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

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

U Not Detected

NR Not Reported

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

B1

ICF International
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
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DATE: June ~~16~~ 24, 2014

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 14149A, Work Order 1405053 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.

B1

EPA Region 9 Laboratory

DATA PACKAGE

Analysis:	**VOCs**
Project Number:	**R14S39**
SDG Number:	**14149A**
Work Order:	**1405053**
ESAT DCN:	**17013**

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: 14149A

Analysis: TO 15 Number of Pages: 366

Reviewer: Christopher Caguerangan

- ☑ 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:

06/26/14

Reviewer Signature Date 06/26/14

G:\USER\ESAT\# LAB DATA Deliverables\R14S39\14149A-TO15-17013.docx

WORK ORDER NOTES - 1405053

1405053 - California Site Cleanup Section 3
MEW 2014 Manhole Screening Investigation

Edit Done

Sample Receiving:
Sample ID discrepancies noted below - awaiting response to 5/29/14 email inquiry to Alana Lee for correct sample ID information.
1) Can 1136 - COC lists F6-025, while label lists MH85. Entered F6-025 as placeholder.
2) Can 1099 - COC lists F6-029, while label lists F6-27. Entered F6-027 as placeholder (consistent with manhole ID and has matching sample time information).
3) E5-005 and E5-005D missing sample dates on labels - used 5/28/2014 as sample date, as identified on COC and consistent with other sample dates on COC.
4) Samples TR-01, F6-027, and F6-029 are labeled as collected on 10/28/14 instead of 5/28/14 as noted on COC. Entered as 5/28/2014 given consistency with COC. - SMS 5/29/14

A. Lee confirmed via 5/29/14 email that the sample IDs should be F6-025 for can 1136 and F6-027 for can 1099. Placeholder information is correct and no updates needed. -SMS 5/29/14

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO15	**Analyst Initial**	EM	**Reviewer Initial**	NGK	**Batch/ Sequence**	NA S14E034
Instrument ID	AG5973N	**Date Analyzed**	5/7/14	**Date**	6/20/14	**Chemstation Last Update**	5/8/14 9:55:23
Cases	INITIAL CALIBRATION			**SDGs**	ICAL		

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) SCV
✓			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

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	**TO15**	**Analyst Initial**	**EM**	**Reviewer Initial**	NEK	**Batch/ Sequence**	B14E113 S14E108
Instrument ID	**AG5973N**	**Date Analyzed**	**5/30/2014**	**Date**	6/20/14	**Chemstation Last Update**	May 08 09:55:23 2014
Cases	**R14S39**			**SDGs**	**14149A**		

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:

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
CCV1	053014AN02	35.0%	+30.0%	X			X	1,2-Dichlorotetraflouroethane
BS1	053014AN02	135%	67-127%	X			X	1,2-Dichlorotetraflouroethane
BS1	053014AN02	81.0%	82-125%		X	X	X	2,2,4-Trimethylbenzene
BS1	053014AN02	79.0%	81-127%		X	X	X	4-Ethyltoluene
CRL1	053014AN03	146%	60-140%	X			X	1,2-Dichlorotetraflouroethane

ESAT Region 9
Case: R14S39
DCN: 17013

Analysis: VOCs
Site: Middlefield-Ellis-Whisman

TDF: 10101071

ICF International
Matrix: soil gas
SDG: 14149A

ESAT REGION 9 DATA PACKAGE TECHNICAL REVIEW GUIDE

Reviewer:	Package Prep (P): EM	Technical (T): NGK	Final (F): ZK
	Date: 6/12/14	Date: 6/20/14	Date: 6/24/14

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
Case: R14S39 **Analysis:** VOCs **TDF:** 10101071 **ICF International**
DCN: 17013 **Site:** Middlefield-Ellis-Whisman **Matrix:** soil gas
SDG: 14149A

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\R14S39-14149A-VOCSoilGas.pdf

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

USEPA Region 9 Laboratory
Organic Analysis Summary

Case: R13S39
SDG: 14149A
Analysis: TO-15

Analyst: EM
Reviewed by: NGA
Workorder: 1405053

Sample ID						
Instrument	CAN	Dilution	SAMPLE ID	AG5973N	Dilution	INSTRUMENT
Analysis Date		5/30/2014		5/30/2014		
Sequence				S14E108		
Batch				B14E113		
1405053-01	892	2.05	MH84	200mL RPT		
1405053-02	1136	2.08	F6-025	200mL RPT		
1405053-03	1090	2.07	TR-01	200mL RPT		
1405053-04	1099	2.08	F6-027	200mL RPT 200mL DUP1 RPT		
1405053-05	895	2.07	F6-029	200mL RPT 20mL RE1 NU		
1405053-06	1075	2.2	F6-031	200mL RPT 20mL RE1 NU		
1405053-07	876	2.07	F7-002	200mL RPT 20mL RE1 NU		
1405053-08	1179	2.06	G6-040	200mL RPT CHCL3 OC 20mL RE1 RPT CHCL3		
1405053-09	1101	2.22	E5-005	200mL RPT TCE OC 20mL RE1 RPT TCE		
1405053-10	1137	2.09	E5-005D	200mL RPT CHCL3 & TCE OC 20mL RE1 RPT CHCL3 & TCE		
1405053-11	852	2.23	E5-016	200mL RPT CHCL3 & TCE OC 20mL RE1 RPT CHCL3 & TCE		
1405053-12	883	2.21	E5-014	200mL RPT CHCL3 & TCE OC 20mL RE1 RPT CHCL3 & TCE		
Blank				B14E113-BLK1		-BLK1
Blank Spike				B14E113-BS1		-BS1
Duplicate				B14E113-DUP1		-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

Sample Tracking Forms

WORK ORDER

Printed: 6/3/2014 1:47:33PM

1405053

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	Default Cooler	22	No	Yes	No	No	No	

Date Due:	06/28/14 15:00 (30 day TAT)	SDG:	14149A
Received By:	Susan Sturges	Date Received:	05/29/14 09:45
Logged In By:	Susan Sturges	Date Logged In:	05/29/14 09:58

Analysis	Hold Time Expires	Comments	
1405053-01 MH84 [Air] Sampled 05/28/14 10:50 Pacific			**Can 892**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-02 F6-025 [Air] Sampled 05/28/14 10:57 Pacific			**Can 1136**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-03 TR-01 [Air] Sampled 05/28/14 11:02 Pacific			**Can 1090**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-04 F6-027 [Air] Sampled 05/28/14 11:08 Pacific			**Can 1099**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-05 F6-029 [Air] Sampled 05/28/14 11:22 Pacific			**Can 895**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-06 F6-031 [Air] Sampled 05/28/14 11:28 Pacific			**Can 1075**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-07 F7-002 [Air] Sampled 05/28/14 11:42 Pacific			**Can 876**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	
1405053-08 G6-040 [Air] Sampled 05/28/14 11:53 Pacific			**Can 1179**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final	

00011

WORK ORDER

Printed: 6/3/2014 1:47:33PM

1405053

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
1405053-09 E5-005 [Air] Sampled 05/28/14 12:47 Pacific		**Can 1101**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final
1405053-10 E5-005D [Air] Sampled 05/28/14 12:49 Pacific		**Can 1137**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final
1405053-11 E5-016 [Air] Sampled 05/28/14 13:02 Pacific		**Can 852**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final
1405053-12 E5-014 [Air] Sampled 05/28/14 13:09 Pacific		**Can 883**
VOCs, Soil Gas	06/27/14	14 day prelim - 28 day final

Reviewed By _____ Date _____

00012

U.S. Environmental Protection Agency

CHAIN OF CUSTODY RECORD

EPA REGION 9
75 Hawthorne Street
San Francisco, California 94105

Project / Case Number R14S39

MEW - N6

Project: MEW Manhole Sampling - May 2014

EPA Project Manager contact:
Alana Lee, 415-972-3141 Lee.Alana@epa.gov

EPA R9 Laboratory

Samplers: (Signature)

Analysis Requested: TO15

Lab ID	Field Sample ID (Location)	Manhole ID	Canister ID	Comp	Grab	Sample Date	Sample Time	Initial Pressure	Final Pressure	PID reading	COMMENTS
	MH84	F6-021	892		X	5/28/2014	1050	-30	0"	N/A	
	~~MH85~~ F6-025	F6-025	1136		X	5/28/2014	1057	-30	0"		
	TR-01	—	1090		X	5/28/2014	1102	-30	0"		P626 trench 313/323 Fairchild Near F6-025 + F6-027
	~~MH~~ F6-029	F6-027	1099		X	5/28/2014	1109	-30	0"		
	F6-029	F6-029	895		X	5/28/2014	1122	-30	0"		labeled as 10/28/14 SLLS 5/29/14
	F6-031	F6-031	1075		X	5/28/2014	1128	-30	0"		
	F7-002	F7-002	876		X	5/28/2014	1142	-30	0"		
	G6-040	G6-040	1179		X	5/28/2014	1153	-30	0"		
	E5-005	E5-005	1101		X	5/28/2014	1247	-30	0"		Date missing from labels SLLS 5/29/14
	E5-005D	E5-005D	1137		X	5/28/2014	1249	-30	0"		
	E5-016	E5-016	882		X	5/28/2014	1302	-30	0"		
	E5-014	E5-014	883		X	5/28/2014	1309	-30	0"		

Relinquished by: (Signature) Alana Lee Date/Time 5/28/14 1314

Received by: (Signature) Date/Time 5/28/14 1314

Received for Laboratory by: (Signature) Date/Time 5/29/14 0945

Temp 22°C - hand delivered - no custody seals

C1006

SAMPLE PREPARATION

PREPARATION BENCH SHEET

B14E113

EPA Region 9 Laboratory

Printed: 6/3/2014 1:25:39PM

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
1405053-01 A	MH84	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-02 A	F6-025	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-03 A	TR-01	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-04 A	F6-027	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-05 A	F6-029	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-06 A	F6-031	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-07 A	F7-002	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-08 A	G6-040	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-08RE1 A	G6-040	05/30/14 14:54	20	200					EM	14 day prelim - 28 day final
1405053-09 A	E5-005	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-09RE1 A	E5-005	05/30/14 14:54	20	200					EM	14 day prelim - 28 day final
1405053-10 A	E5-005D	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-10RE1 A	E5-005D	05/30/14 14:54	20	200					EM	14 day prelim - 28 day final
1405053-11 A	E5-016	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-11RE1 A	E5-016	05/30/14 14:54	20	200					EM	14 day prelim - 28 day final
1405053-12 A	E5-014	05/30/14 14:54	200	200					EM	14 day prelim - 28 day final
1405053-12RE1 A	E5-014	05/30/14 14:54	20	200					EM	14 day prelim - 28 day final
B14E113-BLK1	Blank	05/30/14 14:54	200	200					EM	
B14E113-BS1	LCS	05/30/14 14:54	200	200	1421056		100000		EM	
B14E113-DUP1	Duplicate	05/30/14 14:54	200	200		1405053-04			EM	

NEK 6/20/14

Preparation Reviewed By Date

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
5/30/14EM	1255	1405053-01	MH84	892	14.6	400	400	30.0	29.80/14.64	2.05
	1259	-02	F6-025	1136	14.4	400	400	30.0	–	2.08
	1301	-03	TR-01	1090	14.4	400	400	29.9	–	2.07
	1303	-04	F6-027	1099	14.3	400	400	29.8	–	2.08
	1305	-05	F6-029	895	14.4	400	400	29.9	–	2.07
	1307	-06	F6-031	1075	14.3	400	400	31.5	–	2.20
	1309	-07	F7-002	876	14.3	400	400	29.7	–	2.07
	1311	-08	G6-040	1179	14.4	400	400	29.8	–	2.06
	1313	-09	E5-005	1101	14.0	400	400	31.2	–	2.22
	1315	-10	E5-005D	1137	14.1	400	400	29.6	–	2.09
	1317	-11	E5-016	852	14.0	400	400	31.3	–	2.23
	1319	-12	E5-014	883	14.2	400	400	31.5	–	2.21

EM 5/30/14

USEPA REGION 9 LABORATORY

SOIL GAS DILUTION LOG 2-6.xls

Reviewed by: TD

Date: 06-05-14

Instrument: AG5973N

Analysis Date: 5/7/14

INITIAL CALIBRATION DATA

ANALYSIS SEQUENCE

S14E034

Instrument: AG5973N

Calibration ID: 1406004

Printed: 6/12/2014 6:26:10PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S14E034-TUN1	QC		1		1346075			
S14E034-CAL1	QC		2		1416082			
S14E034-CAL2	QC		3		1416083			
S14E034-CAL3	QC		4		1416084			
S14E034-CAL4	QC		5		1416085			
S14E034-CAL5	QC		6		1416086			
S14E034-CAL6	QC		7		1416087			
S14E034-SCV1	QC		8		1417125			

Samples Loaded By Date

Data Processed By Date

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

Sequence Name: C:\Smart\2014\0507914TO15NAA.SEQ
Date: 06-05-2014
Time: 17:53:10
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
PRIME	3	2	100	40	C:\Smart\TO15NA.CTD	12:00
BFB 1346075	3	2	100	40	C:\Smart\TO15NA.CTD	12:00
10ppbv CAL4	3	2	200	40	C:\Smart\TO15NA.CTD	12:00
1.0ppbv CAL1	3	2	20	0	C:\Smart\TO15NA.CTD	12:00
2.0ppbv CAL2	3	2	40	0	C:\Smart\TO15NA.CTD	12:00
5.0ppbv CAL3	3	2	100	0	C:\Smart\TO15NA.CTD	12:00
15ppbv CAL5	3	3	150	0	C:\Smart\TO15NA.CTD	12:00
20ppbv CAL6	3	3	200	0	C:\Smart\TO15NA.CTD	12:00
10ppbv SCV	3	4	100	0	C:\Smart\TO15NA.CTD	12:00
10ppbv SCV	3	4	100	0	C:\Smart\TO15NA.CTD	12:00

Injection Log

Directory: D:\MSDCHEM\1\2014\DATA\050714TO15NA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	050714an01.d	1.	S14E034-PRM1	BFB 1346075/40mL ...	7 May 2014 15:27
2	32	050714an02.d	1.	S14E034-TUN1	10ppbv	7 May 2014 16:18
3	32	050714an03.d	1.	S14E034-CAL4	10ppbv	7 May 2014 17:10
4	32	050714an04.d	1.	S14E034-CAL1	1 ppbv	7 May 2014 17:58
5	32	050714an05.d	1.	S14E034-CAL2	2 ppbv	7 May 2014 18:46
6	32	050714an06.d	1.	S14E034-CAL3	5 ppbv	7 May 2014 19:35
7	33	050714an07.d	1.	S14E034-CAL5	15 ppbv	7 May 2014 20:25
8	33	050714an08.d	1.	S14E034-CAL6	20 ppbv	7 May 2014 21:17
9	34	050714an09.d	1.	S14E034-SCV1	10 ppbv	7 May 2014 22:06
10	34	050714an10.d	1.	S14E034-SCV1	10 ppbv	7 May 2014 22:56

GC/MS QA-QC Check Report

Tune File : D:\MSDCHEM\1\2014\DATA\050714TO15NA\050714AN02.D
Tune Time : 7 May 2014 4:18 pm

Daily Calibration File : D:\MSDCHEM\1\2014\DATA\050714TO15NA\050714AN03.D

File	Sample	Surrogate Recovery %	Internal Standard Responses	
		331075	1966560	1811310
050714AN03.D				
	S14E034-CAL4	331075	1966559	1811311
050714AN04.D				
	S14E034-CAL1	294803	1775548	1538749
050714AN05.D				
	S14E034-CAL2	297674	1768624	1532112
050714AN06.D				
	S14E034-CAL3	304384	1790068	1568110
050714AN07.D				
	S14E034-CAL5	316264	1843255	1618420
050714AN08.D				
	S14E034-CAL6	312155	1837526	1603457
050714AN09.D				
	S14E034-SCV1	284888	1734383	1442514
050714AN10.D				
	S14E034-SCV1	299732	1795053	1471584

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

Created: Thu May 08 10:17:28 2014 AG5973N

Response Factor Report AG5973N

Method Path : D:\MSDCHEM\1\2014\METHOD\
Method File : 050714TO15HNAA.M
Title : TO15
Last Update : Thu May 08 09:55:23 2014
Response Via : Initial Calibration

Calibration Files
1 =050714AN04.D 2 =050714AN05.D 5 =050714AN06.D
10 =050714AN03.D 15 =050714AN07.D 20 =050714AN08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.499	0.504	0.507	0.453	0.548	0.560	0.512	7.50
3)	T	Dichlorodifluorom	4.049	4.047	3.824	3.397	2.972	2.793	3.513	15.56
4)	T	1,2-Dichlorotetra	2.797	2.773	2.501	1.841	1.725	1.469	2.184	26.40
5)	T	Chloromethane	0.528	0.544	0.526	0.482	0.426	0.428	0.489	10.70
6)	T	Vinyl chloride	0.769	0.792	0.761	0.697	0.629	0.631	0.713	10.06
7)	T	1,3-Butadiene	0.627	0.605	0.580	0.530	0.640	0.647	0.605	7.29
8)	T	Bromomethane	1.138	1.090	1.062	0.966	0.871	0.869	0.999	11.50
9)	T	Chloroethane	0.477	0.444	0.437	0.394	0.354	0.351	0.410	12.55
10)	T	Bromoethene	1.377	1.305	1.270	1.187	1.441	1.432	1.335	7.44
11)	T	Trichlorofluorome	5.261	5.300	5.269	4.851	4.346	4.265	4.882	9.77
12)	T	1,1,2-Trichloro-1	3.613	3.431	3.462	3.200	2.888	2.885	3.247	9.51
13)	T	1,1-Dichloroethen	2.074	1.921	1.930	1.836	1.638	1.641	1.840	9.41
14)	T	Acetone	1.374	1.368	1.344	1.265	1.555	1.552	1.410	8.39
15)	T	Carbon disulfide	3.168	2.903	2.868	2.690	3.237	3.223	3.015	7.50
16)	T	2-Propanol	0.941	0.788	0.924	0.922	1.202	1.234	1.002	17.60
17)	T	Allyl chloride	0.881	0.839	0.864	0.822	1.008	1.016	0.905	9.41
18)	T	Dichloromethane	1.594	1.266	1.096	0.986	0.863	0.850	1.109	25.58
19)	T	tert-Butyl methyl	3.213	3.230	3.554	3.435	4.330	4.356	3.686	14.23
20)	T	trans-1,2-Dichlor	1.695	1.614	1.575	1.531	1.845	1.836	1.683	7.94
21)	T	Hexane	1.275	1.177	1.225	1.191	1.458	1.466	1.299	10.08
22)	T	1,1-Dichloroethan	2.122	1.917	1.890	1.763	1.599	1.599	1.815	11.19
23)	T	Vinyl acetate	1.725	1.698	1.838	1.824	2.269	2.280	1.939	13.70
24)	T	cis-1,2-Dichloroe	1.493	1.425	1.426	1.369	1.237	1.227	1.363	7.98
25)	T	2-Butanone (MEK)	0.443	0.435	0.469	0.435	0.561	0.566	0.485	12.81
26)	T	Ethyl acetate	0.248	0.268	0.267	0.246	0.301	0.305	0.273	9.35
27)	T	Tetrahydrofuran	0.685	0.673	0.752	0.715	0.907	0.912	0.774	14.01
28)	T	Chloroform	3.536	3.263	3.188	3.017	2.704	2.698	3.068	10.75
29)	T	Cyclohexane	1.371	1.332	1.334	1.278	1.562	1.576	1.409	9.07
30)	T	1,1,1-Trichloroet	4.651	4.454	4.391	4.098	3.727	3.745	4.177	9.23
31)	T	Carbon tetrachlor	5.623	5.362	5.360	5.027	4.550	4.544	5.077	8.91
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.609	0.591	0.587	0.552	0.511	0.516	0.561	7.38
34)	T	2,2,4-Trimethylpe	0.722	0.692	0.723	0.689	0.865	0.866	0.760	10.95
35)	T	1,2-Dichloroethan	0.438	0.425	0.422	0.400	0.364	0.356	0.401	8.46
36)	T	Heptane	0.239	0.228	0.239	0.228	0.283	0.282	0.250	10.23
37)	T	Trichloroethene	0.401	0.391	0.390	0.374	0.342	0.340	0.373	7.04
38)	T	1,2-Dichloropropa	0.172	0.155	0.162	0.154	0.140	0.140	0.154	8.15
39)	T	1,4-Dioxane	0.109	0.094	0.104	0.104	0.149	0.152	0.119	20.91
40)	T	Bromodichlorometh	0.688	0.655	0.658	0.623	0.754	0.750	0.688	7.79
41)	T	cis-1,3-Dichlorop	0.361	0.342	0.365	0.352	0.319	0.321	0.343	5.73
42)	T	4-Methyl-2-pentan	0.295	0.293	0.336	0.318	0.424	0.424	0.348	17.36
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	0.971	0.949	0.977	0.891	0.870	0.883	0.923	5.16
45)	T	trans-1,3-Dichlor	0.417	0.419	0.441	0.408	0.387	0.386	0.410	5.08
46)	T	1,1,2-Trichloroet	0.342	0.327	0.324	0.296	0.284	0.285	0.310	8.03
47)	T	Tetrachloroethene	0.802	0.784	0.801	0.720	0.697	0.710	0.752	6.45
48)	T	2-Hexanone	0.342	0.332	0.381	0.349	0.490	0.500	0.399	19.10
49)	T	Chlorodibromometh	0.930	0.909	0.937	0.849	1.105	1.116	0.974	11.31
50)	T	1,2-Dibromoethane	0.526	0.522	0.544	0.495	0.474	0.481	0.507	5.49
51)	T	Chlorobenzene	0.863	0.866	0.920	0.824	0.788	0.801	0.844	5.82
52)	T	Ethylbenzene	1.306	1.375	1.477	1.351	1.317	1.340	1.361	4.56
53)	T	m&p-Xylene	1.094	1.166	1.260	1.138	1.112	1.136	1.151	5.11
54)	T	o-Xylene	1.068	1.119	1.234	1.115	1.096	1.118	1.125	5.04
55)	T	Styrene	0.761	0.818	0.924	0.842	0.814	0.844	0.834	6.40
56)	T	Bromoform	1.080	1.149	1.225	1.128	1.470	1.507	1.260	14.57

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Response Factor Report AG5973N

Method Path : D:\MSDCHEM\1\2014\METHOD\
Method File : 050714TO15HNAA.M
Title : TO15
Last Update : Thu May 08 09:55:23 2014
Response Via : Initial Calibration

Calibration Files
1 =050714AN04.D 2 =050714AN05.D 5 =050714AN06.D
10 =050714AN03.D 15 =050714AN07.D 20 =050714AN08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
57)	T	1,1,2,2-Tetrachlo	0.551	0.573	0.626	0.564	0.547	0.554	0.569	5.20
58)	T	4-Ethyltoluene	1.788	1.862	1.993	1.813	2.388	2.428	2.045	14.18
59)	T	1,3,5-Trimethylbe	1.320	1.482	1.674	1.527	1.512	1.550	1.511	7.59
60)	T	1,2,4-Trimethylbe	1.355	1.489	1.676	1.536	1.518	1.572	1.524	6.90
61)	T	1,3-Dichlorobenze	1.136	1.210	1.332	1.200	1.142	1.195	1.203	5.86
62)	T	1,4-Dichlorobenze	1.107	1.193	1.321	1.196	1.126	1.178	1.187	6.32
63)	T	Benzyl chloride	1.336	1.398	1.572	1.419	1.776	1.862	1.560	13.87
64)	T	1,2-Dichlorobenze	1.122	1.146	1.253	1.134	1.093	1.158	1.151	4.74
65)	T	1,2,4-Trichlorobe	1.573	1.355	1.455	1.286	1.051	1.219	1.323	13.83
66)	T	Hexachlorobutadie	2.051	1.803	1.828	1.586	1.319	1.584	1.695	14.97

(#) = Out of Range

RT DUPLICATE REPORT

Instrument Name: AG5973N
Sample Name: S14E034-CAL4
Misc Info: 10ppbv
Date Acquired: 5/7/2014 17:10
QLast Update: Thu May 08 09:53:49 2014
Operator: EM

#	Name	RT	CONC	Qion	
1)	BROMOCHLOROMETHANE	15.538	22.000	49	15.526
2)	Propene	4.474	9.712	41	
3)	Dichlorodifluoromethane	4.569	8.333	84.9	
4)	1,2-Dichlorotetrafluoroethane	4.925	6.357	84.9	
5)	Chloromethane	5.126	8.241	50	
6)	Vinyl chloride	5.458	8.416	62	
7)	1,3-Butadiene	5.553	9.307	54	
8)	Bromomethane	6.502	8.760	93.9	
9)	Chloroethane	6.846	8.489	64	
10)	Bromoethene	7.427	10.121	106	
11)	Trichlorofluoromethane	7.569	10.316	100.9	
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.407	9.381	150.9	
13)	1,1-Dichloroethene	9.490	9.302	61	
14)	Acetone	10.012	10.255	43	
15)	Carbon disulfide	10.214	10.325	76	
16)	2-Propanol	10.593	9.241	45	
17)	Allyl chloride	11.032	10.634	41	
18)	Dichloromethane	11.554	8.416	49	
19)	tert-Butyl methyl ether (MTBE)	12.206	11.427	73	
20)	trans-1,2-Dichloroethene	12.253	10.732	61	
21)	Hexane	12.846	9.981	57	
22)	1,1-Dichloroethane	13.581	8.558	63	
23)	Vinyl acetate	13.712	10.915	43	
24)	cis-1,2-Dichloroethene	15.004	8.866	61	
25)	2-Butanone (MEK)	15.087	9.962	72	
26)	Ethyl acetate	15.135	10.090	61	
27)	Tetrahydrofuran	15.526	10.208	42	
28)	Chloroform	15.692	9.716	82.9	
29)	Cyclohexane	15.917	10.366	56	
30)	1,1,1-Trichloroethane	15.965	9.893	96.9	
31)	Carbon tetrachloride	16.226	10.664	116.9	
32)	1,4-DIFLUOROBENZENE	17.518	22.000	114	17.032
33)	Benzene	16.712	9.024	78	16.665
34)	2,2,4-Trimethylpentane	16.665	10.481	57	
35)	1,2-Dichloroethane	16.902	9.902	62	
36)	Heptane	17.032	10.849	43	
37)	Trichloroethene	17.922	9.677	129.9	
38)	1,2-Dichloropropane	18.420	8.986	63	
39)	1,4-Dioxane	18.609	9.422	88	
40)	Bromodichloromethane	18.882	10.957	83	
41)	cis-1,3-Dichloropropene	19.641	10.057	75	
42)	4-Methyl-2-pentanone (MIBK)	19.866	11.161	43	

43)	CHLOROBENZENE-d5	22.404	22.000	117	21.728
44)	Toluene	20.127	9.512	91	
45)	trans-1,3-Dichloropropene	20.590	9.767	75	
46)	1,1,2-Trichloroethane	20.886	9.147	96.9	
47)	Tetrachloroethene	20.969	9.847	165.9	
48)	2-Hexanone	21.206	10.974	43	
49)	Chlorodibromomethane	21.503	10.841	129	
50)	1,2-Dibromoethane (EDB)	21.728	9.057	106.9	
51)	Chlorobenzene	22.452	9.700	112	
52)	Ethylbenzene	22.535	9.975	91	
53)	m&p-Xylene	22.724	20.426	91	
54)	o-Xylene	23.365	10.110	91	
55)	Styrene	23.400	9.624	104	
56)	Bromoform	23.780	11.333	173	
57)	1,1,2,2-Tetrachloroethane	24.467	8.742	82.9	
58)	4-Ethyltoluene	24.716	10.973	105	
59)	1,3,5-Trimethylbenzene	24.811	10.389	105	
60)	1,2,4-Trimethylbenzene	25.416	10.063	105	
61)	1,3-Dichlorobenzene	25.950	9.579	146	
62)	1,4-Dichlorobenzene	26.104	9.560	146	
63)	Benzyl chloride	26.317	10.868	91	0.000
64)	1,2-Dichlorobenzene	26.709	9.290	146	0.000
65)	1,2,4-Trichlorobenzene	29.187	7.673	179.9	0.000
66)	Hexachlorobutadiene	29.318	8.697	224.9	0.000
)	0	0.000	0.000	0	0.000
)	0	0.000	0.000	0	0.000
)	0	0.000	0.000	0	0.000
)	0	0.000	0.000	0	

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CHEMSTATION CONCENTRATION REPORT

Instrument Name: AG5973N
Sample Name: S14E034-SCV1
Misc Info: 10 ppbv
Date Acquired: 5/7/2014 22:06
QLast Update: Thu May 08 09:55:23 2(
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
)	0	0.00	0.00	0.00	0.00	0.00	0.00
)	0	0.00	0.00	0.00	0.00	0.00	0.00

CALIBRATION AREA REPORT

Instrument Name: AG5973N
Sample Name: S14E034-SCV1
Misc Info: 10 ppbv
Date Acquired: 5/7/2014 22:06
QLast Update: Thu May 08 09:55:23 20
Operator: EM

#	Name	L1	L2	L3	L4	L5	L6
1)	BROMOCHLOROMETHANE	294803	297674	304384	331075	316264	312155
2)	Propene	6893	14044	36133	70173	121654	163726
3)	Dichlorodifluoromethane	55896	112822	272557	526607	660148	816411
4)	1,2-Dichlorotetrafluoroethane	39359	78819	181694	291052	390650	437610
5)	Chloromethane	7436	15452	38185	76176	96419	127428
6)	Vinyl chloride	10823	22515	55326	110147	142460	188059
7)	1,3-Butadiene	8407	16363	40157	79794	138097	183571
8)	Bromomethane	15714	30402	75688	149810	193568	253881
9)	Chloroethane	6587	12377	31130	61076	78693	102657
10)	Bromoethene	19198	36747	91399	185815	323171	422693
11)	Trichlorofluoromethane	75455	153504	390126	781267	1002982	1295094
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	46980	90089	232363	467210	604240	794130
13)	1,1-Dichloroethene	26689	49924	128174	265354	339170	447063
14)	Acetone	19341	38888	97635	199872	352201	462547
15)	Carbon disulfide	44581	82516	208351	425202	733121	960455
16)	2-Propanol	13369	22619	67783	147136	274773	371075
17)	Allyl chloride	12632	24312	63965	132465	232619	308499
18)	Dichloromethane	20938	33583	74297	145512	182459	236344
19)	tert-Butyl methyl ether (MTBE)	46081	93559	263114	553298	999377	1322727
20)	trans-1,2-Dichloroethene	23175	44562	111129	235048	405906	531322
21)	Hexane	17607	32826	87322	184651	323972	428421
22)	1,1-Dichloroethane	27588	50327	126873	257463	334452	440273
23)	Vinyl acetate	24501	48698	134803	291028	518634	685918
24)	cis-1,2-Dichloroethene	20214	38957	99685	208075	269426	351765
25)	2-Butanone (MEK)	6240	12353	34101	68768	127047	168544
26)	Ethyl acetate	3452	7553	19242	38496	67436	90141
27)	Tetrahydrofuran	9452	18768	53610	110863	201562	266450
28)	Chloroform	48347	90091	225023	463234	594969	780951
29)	Cyclohexane	19295	37850	96937	201943	353772	469678
30)	1,1,1-Trichloroethane	62957	121754	306895	623009	811834	1073276
31)	Carbon tetrachloride	77625	149491	382035	779372	1010721	1328074
32)	1,4-DIFLUOROBENZENE	1775548	1768624	1790068	1966559	1843255	1837526
33)	Benzene	49661	96050	241103	498413	648291	870154
34)	2,2,4-Trimethylpentane	61226	116873	308887	647249	1141737	1518659
35)	1,2-Dichloroethane	34660	66917	168094	350607	447812	583485
36)	Heptane	20278	38584	102192	214242	373012	495039
37)	Trichloroethene	32720	63529	160273	337845	434258	574099
38)	1,2-Dichloropropane	14325	25699	67987	142185	181156	241448
39)	1,4-Dioxane	9264	15953	44493	97874	196060	266256
40)	Bromodichloromethane	57756	109585	278674	579463	985899	1303047
41)	cis-1,3-Dichloropropene	30031	56717	152896	324299	413448	552180
42)	4-Methyl-2-pentanone (MIBK)	25032	49511	143730	298398	559102	743384

43)	CHLOROBENZENE-d5	1538749	1532112	1568110	1811311	1618420	1603457
44)	Toluene	69273	134874	355210	748450	979110	1312496
45)	trans-1,3-Dichloropropene	31193	62448	168124	359612	457078	602475
46)	1,1,2-Trichloroethane	24678	46976	118941	250701	322505	427422
47)	Tetrachloroethene	56135	109202	285642	593306	768942	1035138
48)	2-Hexanone	24884	48089	141276	299088	562829	757738
49)	Chlorodibromomethane	67700	131640	347525	726806	1268525	1692589
50)	1,2-Dibromoethane (EDB)	37906	74853	199634	419507	538347	722389
51)	Chlorobenzene	62804	125420	341124	705560	904740	1213566
52)	Ethylbenzene	93165	195349	537194	1134967	1483255	1992478
53)	m&p-Xylene	156077	331369	916135	1911868	2504196	3378472
54)	o-Xylene	76959	160543	452976	945543	1245872	1678802
55)	Styrene	53792	115164	332811	700269	907737	1243055
56)	Bromoform	77847	164815	449657	956684	1671201	2262182
57)	1,1,2,2-Tetrachloroethane	39322	81470	227788	473805	615684	824088
58)	4-Ethyltoluene	130086	269726	738971	1552361	2741075	3680516
59)	1,3,5-Trimethylbenzene	95088	212697	614679	1295002	1718949	2327004
60)	1,2,4-Trimethylbenzene	95750	209529	603382	1277473	1692665	2314863
61)	1,3-Dichlorobenzene	78709	166820	470081	978042	1248352	1724860
62)	1,4-Dichlorobenzene	76699	164566	466212	975328	1230748	1700382
63)	Benzyl chloride	97186	202542	582768	1215471	2038580	2822197
64)	1,2-Dichlorobenzene	77732	158063	442038	924652	1194334	1671823
65)	1,2,4-Trichlorobenzene	100167	171785	472063	964006	1055381	1616947
66)	Hexachlorobutadiene	136318	238652	619143	1240596	1382975	2193651
)	0	0	0	0	0	0	0
)	0	0	0	0	0	0	0

CHEMSTATION VS LIMS CONCENTRATION REPORT

Instrument Name: AG5973N
Sample Name: S14E034-SCV1
Misc Info: 10 ppbv
Date Acquired: 5/7/2014 22:06
QLast Update: Thu May 08 09:55:23 2
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
)	0						
)	0						

LIMS CONCENTRATION REPORT

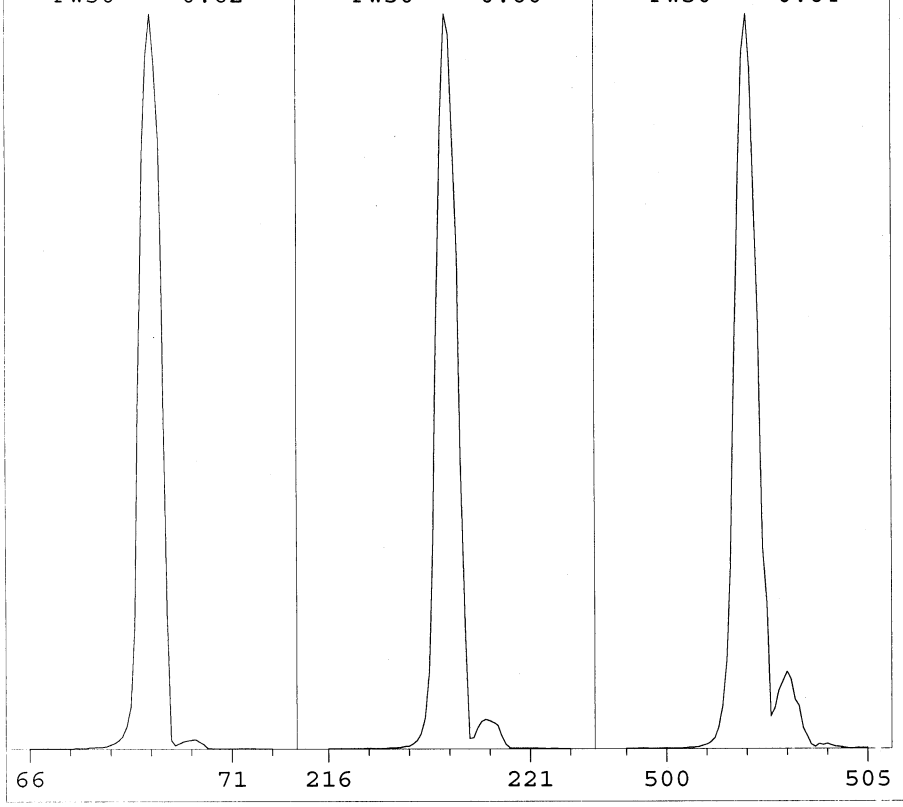
Instrument Name: AG5973N
Sample Name: S14E034-SCV1
Misc Info: 10 ppbv
Date Acquired: 5/7/2014 22:06
QLast Update: Thu May 08 09:55:23 2
Operator: EM

#	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

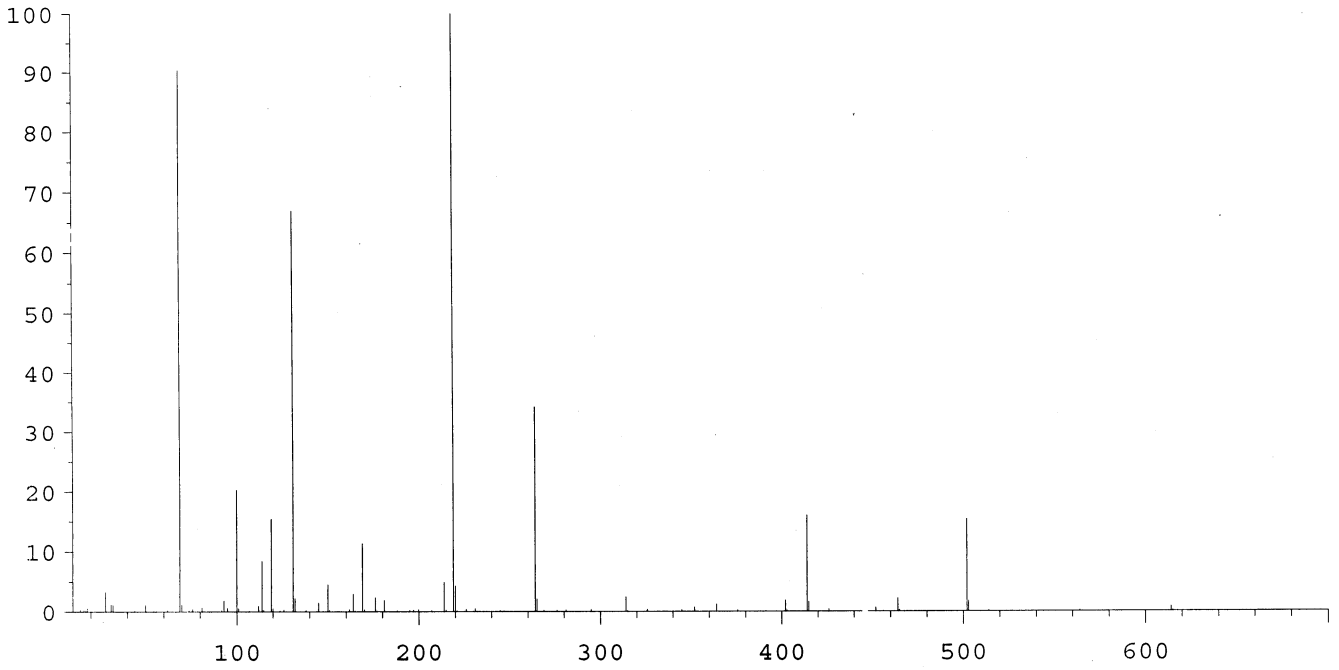
Wed May 07 14:25:03 2014 Instrument: AG5973N
C:\MSDCHEM\1\5973N\BFB050714TO15NAA.U

Mass	69.00	Mass	218.90	Mass	502.00
Ab	128896	Ab	139680	Ab	20416
Pw50	0.62	Pw50	0.60	Pw50	0.64



Ion Pol	POS	MassGain	146
		MassOffs	-10
Emission	34.6	AmuGain	2536
ElEnrgy	69.9	AmuOffs	133
Filament	2	Wid219	-0.018
		DC Pol	NEG
Repeller	31.97		
IonFcus	90.2	HEDEnab	ON
EntLens	18.5	EMVolts	976
EntOffs	17.82		
		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
83 peaks Base: 219.00 Abundance: 112576



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	101688	100.00	70.00	1231	1.21
219.00	112576	110.71	220.00	4785	4.25
502.00	17304	17.02	503.00	1843	10.65

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN01.D
Acq On : 7 May 2014 3:27 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-PRM1
Misc : BFB 1346075/40mL ISTD/10ppbv VOC STD
ALS Vial : 32
Multiplier: 1

Quant Time: May 07 17:47:24 2014
Quant Title : TO15
QLast Update : Sat Apr 19 17:08:45 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\041814TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	303840	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1774922	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1623311	22.00	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.474	41	35587	5.366	ppbv	94
3) Dichlorodifluoromethane	4.569	85	270457	4.523	ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.925	85	150650	3.341	ppbv	99
5) Chloromethane	5.126	50	37727	4.323	ppbv	100
6) Vinyl chloride	5.458	62	52679	4.272	ppbv	100
7) 1,3-Butadiene	5.553	54	38530	4.874	ppbv	86
8) Bromomethane	6.502	94	70820	4.436	ppbv	100
9) Chloroethane	6.834	64	29253	4.341	ppbv	100
10) Bromoethene	7.415	106	87009	5.188	ppbv	97
11) Trichlorofluoromethane	7.569	101	375208	5.406	ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	215596	4.738	ppbv	97
13) 1,1-Dichloroethene	9.502	61	125059	4.785	ppbv	96
14) Acetone	10.024	43	98234	5.508	ppbv	92
15) Carbon disulfide	10.213	76	201144	5.359	ppbv	92
16) 2-Propanol	10.593	45	59428	3.966	ppbv	88
17) Allyl chloride	11.032	41	62792	5.514	ppbv	96
18) Dichloromethane	11.553	49	72821	4.598	ppbv	90
19) tert-Butyl methyl ether (M	12.206	73	245454	5.561	ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	110914	5.625	ppbv	95
21) Hexane	12.846	57	83899	4.921	ppbv	90
22) 1,1-Dichloroethane	13.569	63	121334	4.340	ppbv	98
23) Vinyl acetate	13.712	43	131035	5.348	ppbv	98
24) cis-1,2-Dichloroethene	15.004	61	97542	4.452	ppbv	94
25) 2-Butanone (MEK)	15.087	72	31295	4.870	ppbv #	100
26) Ethyl acetate	15.123	61	18713	5.309	ppbv #	98
27) Tetrahydrofuran	15.538	42	48470	4.828	ppbv	100
28) Chloroform	15.692	83	222951	5.098	ppbv	98
29) Cyclohexane	15.917	56	90134	5.040	ppbv	94
30) 1,1,1-Trichloroethane	15.977	97	288215	5.008	ppbv	99
31) Carbon tetrachloride	16.226	117	363332	5.500	ppbv	98
33) Benzene	16.712	78	231792	4.586	ppbv	96
34) 2,2,4-Trimethylpentane	16.664	57	293119	5.255	ppbv	94
35) 1,2-Dichloroethane	16.902	62	167261	5.284	ppbv	100
36) Heptane	17.044	43	98457	5.552	ppbv	97
37) Trichloroethene	17.921	130	156928	4.962	ppbv	99
38) 1,2-Dichloropropane	18.431	63	64617	4.431	ppbv #	87
39) 1,4-Dioxane	18.609	88	39536	4.141	ppbv	96
40) Bromodichloromethane	18.882	83	270278	5.748	ppbv	99
41) cis-1,3-Dichloropropene	19.641	75	146799	5.008	ppbv	89
42) 4-Methyl-2-pentanone (MIBK	19.866	43	125522	5.216	ppbv	96
44) Toluene	20.127	91	337780	4.718	ppbv	99
45) trans-1,3-Dichloropropene	20.590	75	162762	4.818	ppbv	92
46) 1,1,2-Trichloroethane	20.898	97	113392	4.512	ppbv	93
47) Tetrachloroethene	20.981	166	272543	5.027	ppbv	99
48) 2-Hexanone	21.206	43	120929	4.963	ppbv	94
49) Chlorodibromomethane	21.503	129	337297	5.653	ppbv	99

00035

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN01.D
Acq On : 7 May 2014 3:27 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-PRM1
Misc : BFB 1346075/40mL ISTD/10ppbv VOC STD
ALS Vial : 32
Multiplier: 1

Quant Time: May 07 17:47:24 2014
Quant Title : TO15
QLast Update : Sat Apr 19 17:08:45 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\041814TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	191874	4.509 ppbv	99
51) Chlorobenzene	22.451	112	321261	4.852 ppbv	95
52) Ethylbenzene	22.534	91	511379	4.959 ppbv	99
53) m&p-Xylene	22.724	91	859133	10.155 ppbv	97
54) o-Xylene	23.365	91	417427	4.895 ppbv	98
55) Styrene	23.400	104	305974	4.585 ppbv	96
56) Bromoform	23.780	173	427420	5.713 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.467	83	209819	4.162 ppbv	99
58) 4-Ethyltoluene	24.716	105	673366	5.314 ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	552783	4.882 ppbv	98
60) 1,2,4-Trimethylbenzene	25.416	105	543352	4.688 ppbv	98
61) 1,3-Dichlorobenzene	25.950	146	420954	4.503 ppbv	100
62) 1,4-Dichlorobenzene	26.104	146	416426	4.458 ppbv	99
63) Benzyl chloride	26.317	91	519450	5.160 ppbv	99
64) 1,2-Dichlorobenzene	26.709	146	397418	4.346 ppbv	100
65) 1,2,4-Trichlorobenzene	29.187	180	412594	3.514 ppbv	100
66) Hexachlorobutadiene	29.329	225	537980	4.133 ppbv	99

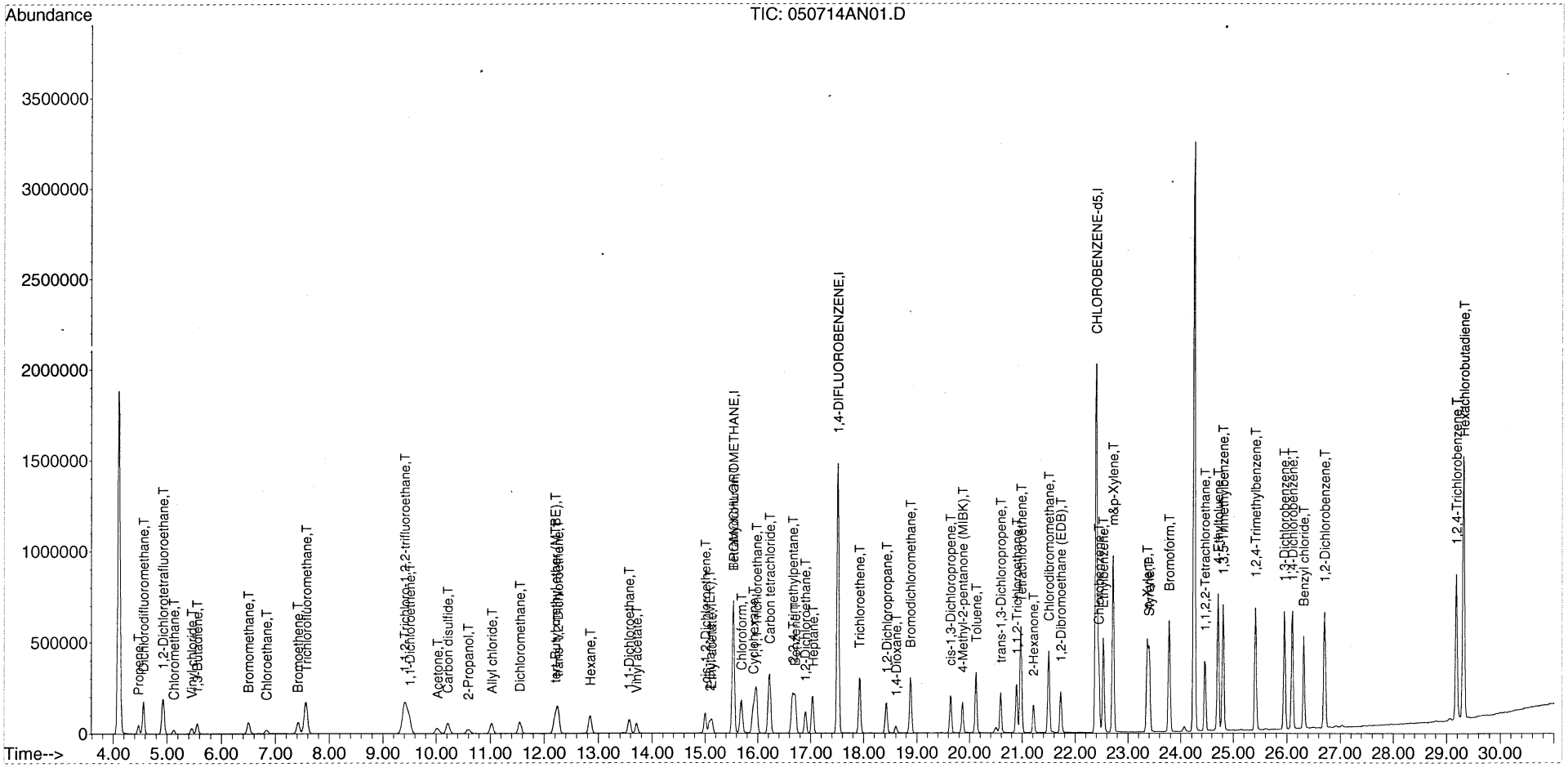
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN01.D
Acq On : 7 May 2014 3:27 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-PRM1
Misc : BFB 1346075/40mL ISTD/10ppbv VOC STD
ALS Vial : 32
Multiplier: 1

Quant Time: May 07 17:47:24 2014
Quant Title : TO15
QLast Update : Sat Apr 19 17:08:45 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\041814TO15HNAA.M

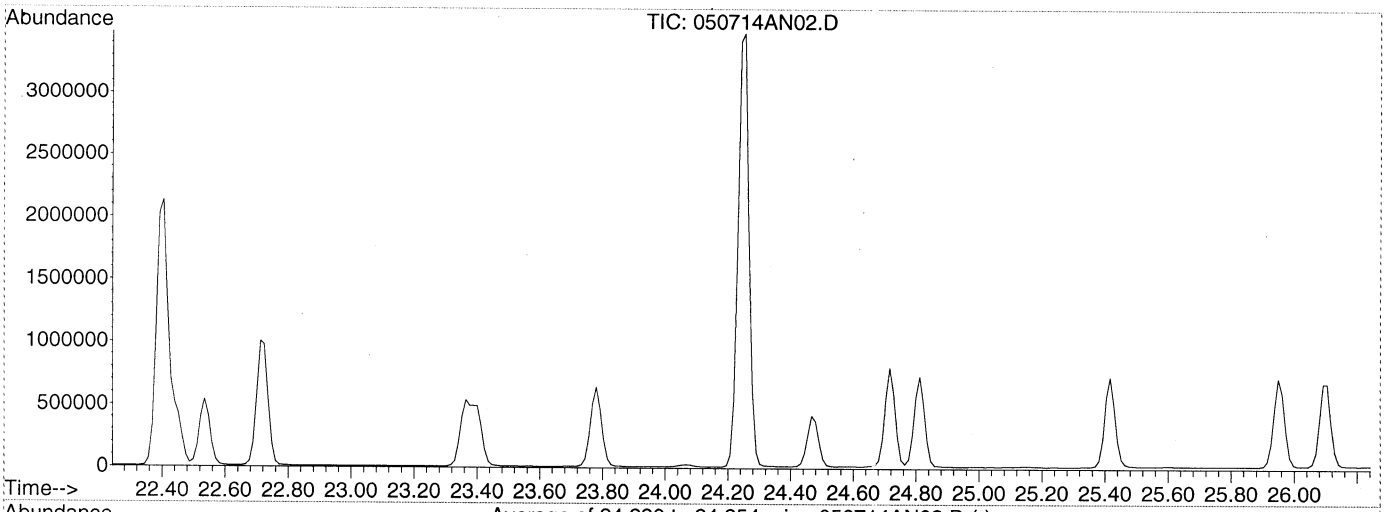


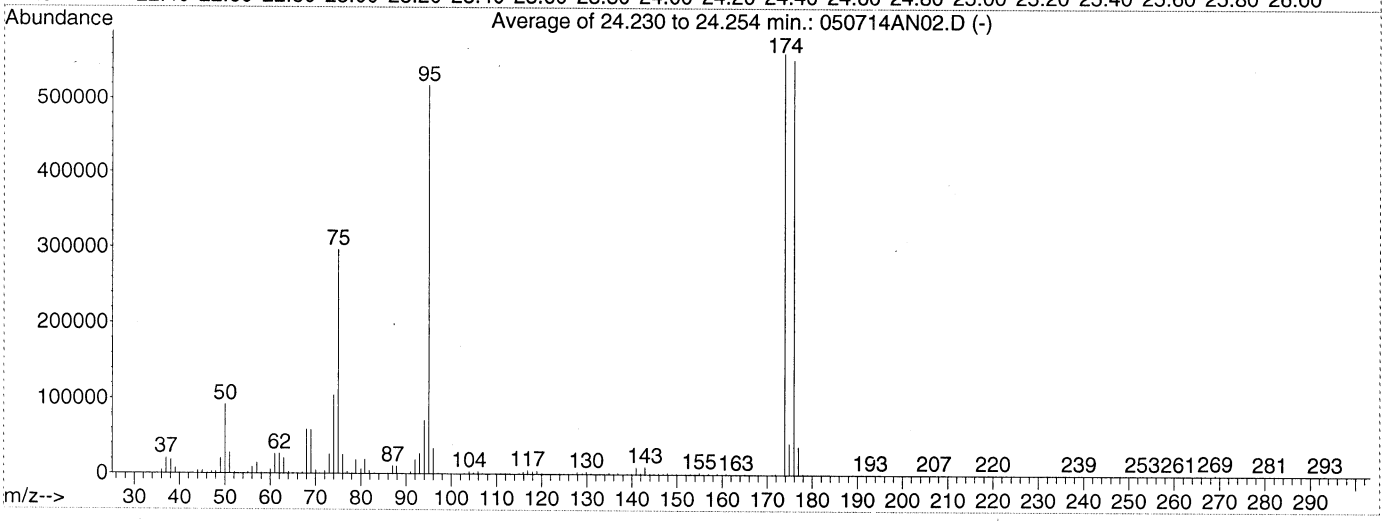
BFB

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN02.D
Acq On : 7 May 2014 4:18 pm
Operator : EM
Sample : S14E034-TUN1
Misc : 10ppbv
ALS Vial : 32 Sample Multiplier: 1

Integration File: lscint.p

Method : I:\DATA\ROOM201\AG5973N\2014\METHOD\050714TO15HNAA.M
Title : TO15
Last Update : Thu May 08 09:55:23 2014





AutoFind: Scans 1742, 1743, 1744; Background Corrected with Scan 1737

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.7	91461	PASS
75	95	30	66	57.3	296469	PASS
95	95	100	100	100.0	517738	PASS
96	95	5	9	6.5	33496	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	108.7	562666	PASS
175	174	4	9	7.3	41208	PASS
176	174	93	101	98.3	553365	PASS
177	176	5	9	6.7	36862	PASS

Average of 24.230 to 24.254 min.: 050714AN02.D
S14E034-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	52	46.15	348	57.00	14282	66.10	54
36.05	3881	47.05	2357	58.05	544	67.10	1712
37.05	20468	48.00	2994	58.80	41	68.00	58581
38.05	18174	49.05	20359	59.10	69	69.00	58160
39.05	6645	50.05	91461	60.00	5028	70.05	4097
40.00	271	51.05	27610	61.00	25786	70.90	157
41.05	154	52.05	1318	62.00	26133	72.00	3105
42.90	116	52.95	82	63.00	20473	73.00	25428
43.10	195	54.00	37	64.05	1896	74.00	103984
44.00	3009	55.05	1401	65.05	566	75.00	296469
45.00	3736	56.00	8428	65.85	73	76.00	25090

Average of 24.230 to 24.254 min.: 050714AN02.D
S14E034-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.95	2147	90.95	2377	106.85	587	120.10	54
78.00	684	92.00	18691	109.85	478	122.00	113
78.90	18003	93.00	26661	110.90	579	122.75	164
80.00	5592	94.00	70912	111.95	454	123.00	37
80.90	18801	95.00	517738	112.95	690	123.95	453
81.85	3843	96.00	33496	114.95	827	124.95	213
82.90	106	97.05	872	115.90	2419	125.85	331
83.05	312	102.90	309	116.90	4288	126.85	377
85.95	240	103.95	2981	117.90	2599	127.85	2508
87.00	10223	104.90	1032	118.90	3755	128.95	1304
87.90	9747	105.90	2822	119.90	87	129.90	2592

Average of 24.230 to 24.254 min.: 050714AN02.D
S14E034-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
130.80	274	139.85	508	151.00	63	160.90	1094
130.95	789	140.90	8779	151.80	383	161.70	36
132.00	109	141.90	1046	152.95	544	163.05	112
132.90	222	142.90	9563	153.80	277	164.10	34
133.80	49	143.95	557	154.00	160	164.90	41
133.95	246	144.90	890	154.95	1871	165.10	37
134.90	1429	145.90	1169	155.90	281	171.10	40
135.95	302	146.95	460	156.95	1269	171.85	952
136.90	1452	147.85	2004	157.95	97	173.90	562666
138.85	237	148.95	552	158.90	1133	174.90	41208
139.10	70	149.85	802	159.95	83	175.90	553365

Average of 24.230 to 24.254 min.: 050714AN02.D
S14E034-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.90	36862	208.95	195	255.00	50	281.05	238
177.90	1007	219.10	43	259.95	25	282.00	64
178.90	86	220.00	48	260.90	61	293.20	34
189.00	38	223.00	39	262.00	71		
190.95	156	231.95	39	265.00	33		
191.95	16	238.95	90	265.90	36		
192.85	197	248.10	38	266.85	87		
193.90	49	250.00	42	269.00	919		
194.95	66	250.95	130	270.00	231		
207.00	406	253.00	295	270.90	80		
207.95	117	253.95	79	271.10	31		

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:53:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.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	0.512	0.453	11.5	100	0.00
3	T	Dichlorodifluoromethane	3.513	3.397	3.3	100	0.00
4	T	1,2-Dichlorotetrafluoroetha	2.184	1.841	15.7	100	0.00
5	T	Chloromethane	0.489	0.482	1.4	100	0.00
6	T	Vinyl chloride	0.713	0.697	2.2	100	0.00
7	T	1,3-Butadiene	0.605	0.530	12.4	100	0.00
8	T	Bromomethane	0.999	0.966	3.3	100	0.00
9	T	Chloroethane	0.410	0.394	3.9	100	0.00
10	T	Bromoethene	1.335	1.187	11.1	100	0.00
11	T	Trichlorofluoromethane	4.882	4.851	0.6	100	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	3.247	3.200	1.4	100	0.00
13	T	1,1-Dichloroethene	1.840	1.836	0.2	100	0.00
14	T	Acetone	1.410	1.265	10.3	100	0.00
15	T	Carbon disulfide	3.015	2.690	10.8	100	0.00
16	T	2-Propanol	1.002	0.922	8.0	100	0.00
17	T	Allyl chloride	0.905	0.822	9.2	100	0.00
18	T	Dichloromethane	1.109	0.986	11.1	100	0.00
19	T	tert-Butyl methyl ether (MT	3.686	3.435	6.8	100	0.00
20	T	trans-1,2-Dichloroethene	1.683	1.531	9.0	100	0.00
21	T	Hexane	1.299	1.191	8.3	100	0.00
22	T	1,1-Dichloroethane	1.815	1.763	2.9	100	0.00
23	T	Vinyl acetate	1.939	1.824	5.9	100	0.00
24	T	cis-1,2-Dichloroethene	1.363	1.369	-0.4	100	0.00
25	T	2-Butanone (MEK)	0.485	0.435	10.3	100	0.00
26	T	Ethyl acetate	0.273	0.246	9.9	100	0.00
27	T	Tetrahydrofuran	0.774	0.715	7.6	100	0.00
28	T	Chloroform	3.068	3.017	1.7	100	0.00
29	T	Cyclohexane	1.409	1.278	9.3	100	0.00
30	T	1,1,1-Trichloroethane	4.177	4.098	1.9	100	0.00
31	T	Carbon tetrachloride	5.077	5.027	1.0	100	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	100	0.00
33	T	Benzene	0.561	0.552	1.6	100	0.00
34	T	2,2,4-Trimethylpentane	0.760	0.689	9.3	100	0.00
35	T	1,2-Dichloroethane	0.401	0.400	0.2	100	0.00
36	T	Heptane	0.250	0.228	8.8	100	0.00
37	T	Trichloroethene	0.373	0.374	-0.3	100	0.00
38	T	1,2-Dichloropropane	0.154	0.154	0.0	100	0.00
39	T	1,4-Dioxane	0.119	0.104	12.6	100	0.00
40	T	Bromodichloromethane	0.688	0.623	9.4	100	0.00
41	T	cis-1,3-Dichloropropene	0.343	0.352	-2.6	100	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.348	0.318	8.6	100	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	100	0.00
44	T	Toluene	0.923	0.891	3.5	100	0.00
45	T	trans-1,3-Dichloropropene	0.410	0.408	0.5	100	0.00

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:53:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.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	0.310	0.296	4.5	100	0.00
47	T	Tetrachloroethene	0.752	0.720	4.3	100	0.00
48	T	2-Hexanone	0.399	0.349	12.5	100	0.00
49	T	Chlorodibromomethane	0.974	0.849	12.8	100	0.00
50	T	1,2-Dibromoethane (EDB)	0.507	0.495	2.4	100	0.00
51	T	Chlorobenzene	0.844	0.824	2.4	100	0.00
52	T	Ethylbenzene	1.361	1.351	0.7	100	0.00
53	T	m&p-Xylene	1.151	1.138	1.1	100	0.00
54	T	o-Xylene	1.125	1.115	0.9	100	0.00
55	T	Styrene	0.834	0.842	-1.0	100	0.00
56	T	Bromoform	1.260	1.128	10.5	100	0.00
57	T	1,1,2,2-Tetrachloroethane	0.569	0.564	0.9	100	0.00
58	T	4-Ethyltoluene	2.045	1.813	11.3	100	0.00
59	T	1,3,5-Trimethylbenzene	1.511	1.527	-1.1	100	0.00
60	T	1,2,4-Trimethylbenzene	1.524	1.536	-0.8	100	0.00
61	T	1,3-Dichlorobenzene	1.203	1.200	0.2	100	0.00
62	T	1,4-Dichlorobenzene	1.187	1.196	-0.8	100	0.00
63	T	Benzyl chloride	1.560	1.419	9.0	100	0.00
64	T	1,2-Dichlorobenzene	1.151	1.134	1.5	100	0.00
65	T	1,2,4-Trichlorobenzene	1.323	1.286	2.8	100	0.00
66	T	Hexachlorobutadiene	1.695	1.586	6.4	100	0.00

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

~~Avg RF~~ Dev = $\frac{1.695 - 1.586}{1.695} \times 100 =$

em HB

= 6.4% ✓

em 5/8/14

00041

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:53:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	331075	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1966559	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1811311	22.00	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.474	41	70173	9.712	ppbv	100
3) Dichlorodifluoromethane	4.569	85	526607	8.333	ppbv	100
4) 1,2-Dichlorotetrafluoroeth	4.925	85	291052	6.357	ppbv	100
5) Chloromethane	5.126	50	76176	8.241	ppbv	100
6) Vinyl chloride	5.458	62	110147	8.416	ppbv	100
7) 1,3-Butadiene	5.553	54	79794	9.307	ppbv	100
8) Bromomethane	6.502	94	149810	8.760	ppbv	100
9) Chloroethane	6.846	64	61076	8.489	ppbv	100
10) Bromoethene	7.427	106	185815	10.121	ppbv	100
11) Trichlorofluoromethane	7.569	101	781267	10.316	ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	467210	9.381	ppbv	100
13) 1,1-Dichloroethene	9.490	61	265354	9.302	ppbv	100
14) Acetone	10.012	43	199872	10.255	ppbv	100
15) Carbon disulfide	10.214	76	425202	10.325	ppbv	100
16) 2-Propanol	10.593	45	147136	9.241	ppbv	100
17) Allyl chloride	11.032	41	132465	10.634	ppbv	100
18) Dichloromethane	11.554	49	145512	8.416	ppbv	100
19) tert-Butyl methyl ether (M	12.206	73	553298	11.427	ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	235048	10.732	ppbv	100
21) Hexane	12.846	57	184651	9.981	ppbv	100
22) 1,1-Dichloroethane	13.581	63	257463	8.558	ppbv	100
23) Vinyl acetate	13.712	43	291028	10.915	ppbv	100
24) cis-1,2-Dichloroethene	15.004	61	208075	8.866	ppbv	100
25) 2-Butanone (MEK)	15.087	72	68768	9.962	ppbv #	100
26) Ethyl acetate	15.135	61	38496	10.090	ppbv	100
27) Tetrahydrofuran	15.526	42	110863	10.208	ppbv	100
28) Chloroform	15.692	83	463234	9.716	ppbv	100
29) Cyclohexane	15.917	56	201943	10.366	ppbv	100
30) 1,1,1-Trichloroethane	15.965	97	623009	9.893	ppbv	100
31) Carbon tetrachloride	16.226	117	779372	10.664	ppbv	100
33) Benzene	16.712	78	498413	9.024	ppbv	100
34) 2,2,4-Trimethylpentane	16.665	57	647249	10.481	ppbv	100
35) 1,2-Dichloroethane	16.902	62	350607	9.902	ppbv	100
36) Heptane	17.032	43	214242	10.849	ppbv	100
37) Trichloroethene	17.922	130	337845	9.677	ppbv	100
38) 1,2-Dichloropropane	18.420	63	142185	8.986	ppbv	100
39) 1,4-Dioxane	18.609	88	97874	9.422	ppbv	100
40) Bromodichloromethane	18.882	83	579463	10.957	ppbv	100
41) cis-1,3-Dichloropropene	19.641	75	324299	10.057	ppbv	100
42) 4-Methyl-2-pentanone (MIBK	19.866	43	298398	11.161	ppbv	100
44) Toluene	20.127	91	748450	9.512	ppbv	100
45) trans-1,3-Dichloropropene	20.590	75	359612	9.767	ppbv	100
46) 1,1,2-Trichloroethane	20.886	97	250701	9.147	ppbv	100
47) Tetrachloroethene	20.969	166	593306	9.847	ppbv	100
48) 2-Hexanone	21.206	43	299088	10.974	ppbv	100
49) Chlorodibromomethane	21.503	129	726806	10.841	ppbv	100

000042

Quantitation Report (Not Reviewed)

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:53:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	419507	9.057	ppbv	100
51) Chlorobenzene	22.451	112	705560	9.700	ppbv	100
52) Ethylbenzene	22.535	91	1134967	9.975	ppbv	100
53) m&p-Xylene	22.724	91	1911868	20.426	ppbv	100
54) o-Xylene	23.365	91	945543	10.110	ppbv	100
55) Styrene	23.400	104	700269	9.624	ppbv	100
56) Bromoform	23.780	173	956684	11.333	ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.467	83	473805	8.742	ppbv	100
58) 4-Ethyltoluene	24.716	105	1552361	10.973	ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	1295002	10.389	ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	1277473	10.063	ppbv	100
61) 1,3-Dichlorobenzene	25.950	146	978042	9.579	ppbv	100
62) 1,4-Dichlorobenzene	26.104	146	975328	9.560	ppbv	100
63) Benzyl chloride	26.317	91	1215471	10.868	ppbv	100
64) 1,2-Dichlorobenzene	26.709	146	924652	9.290	ppbv	100
65) 1,2,4-Trichlorobenzene	29.187	180	964006	7.673	ppbv	100
66) Hexachlorobutadiene	29.318	225	1240596	8.697	ppbv	100

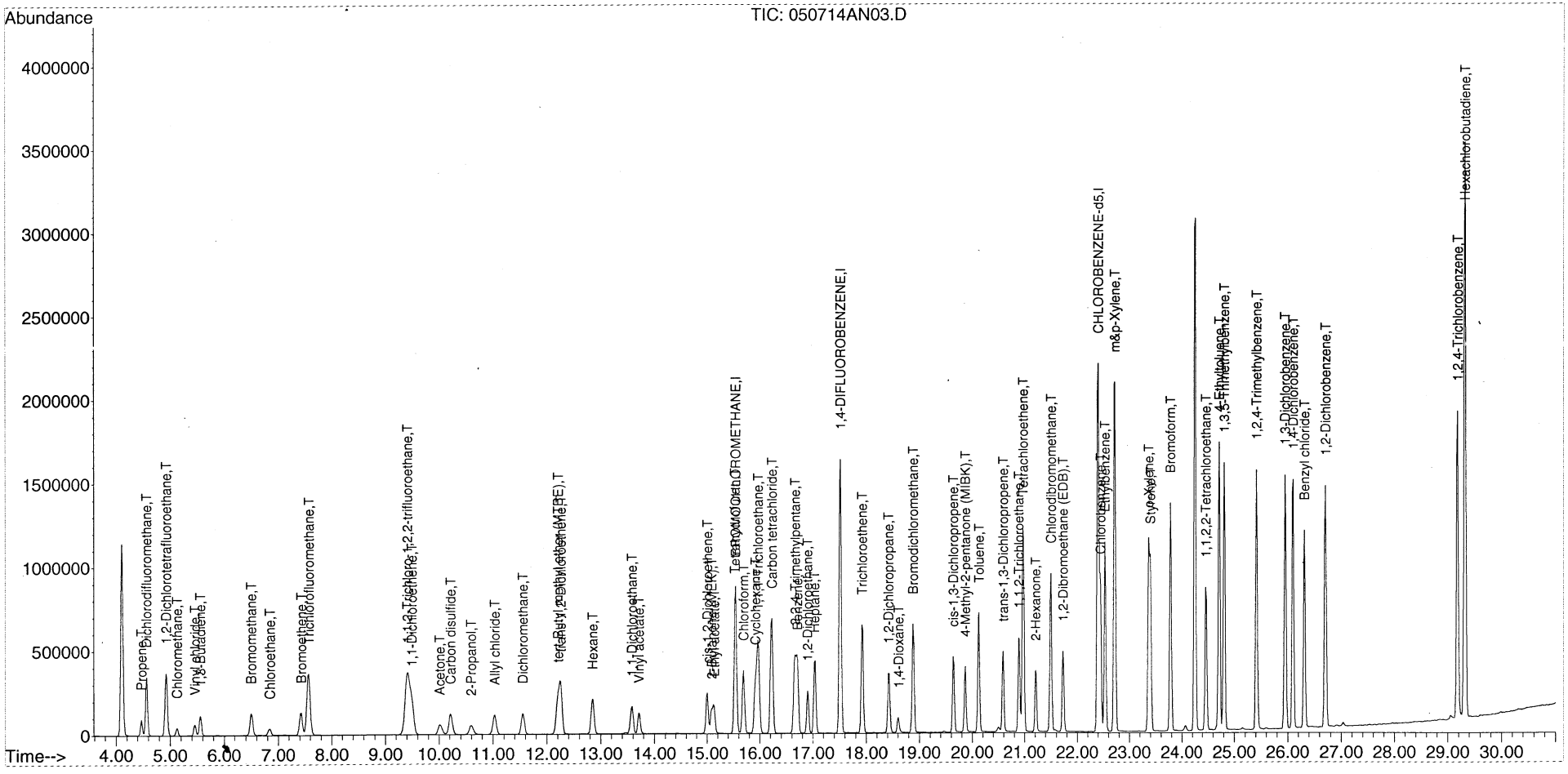
(#) = qualifier out of range (m) = manual integration (+) = signals summed

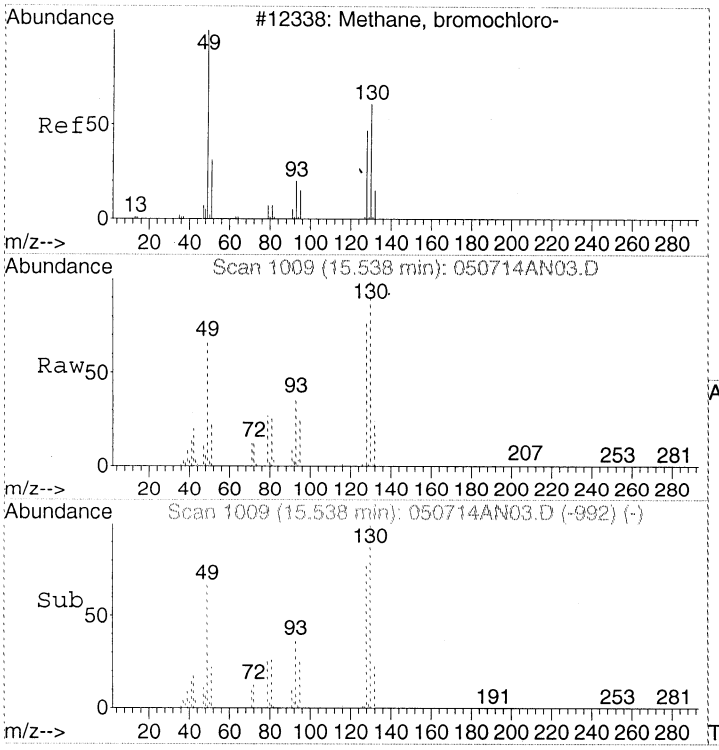
Quantitation Report (Not Reviewed)

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:53:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

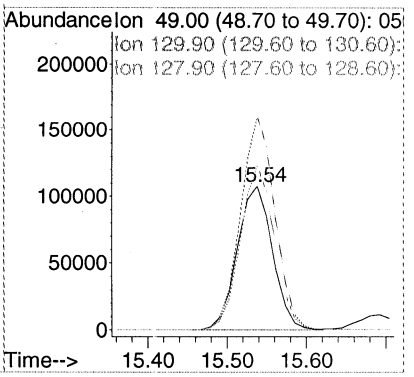


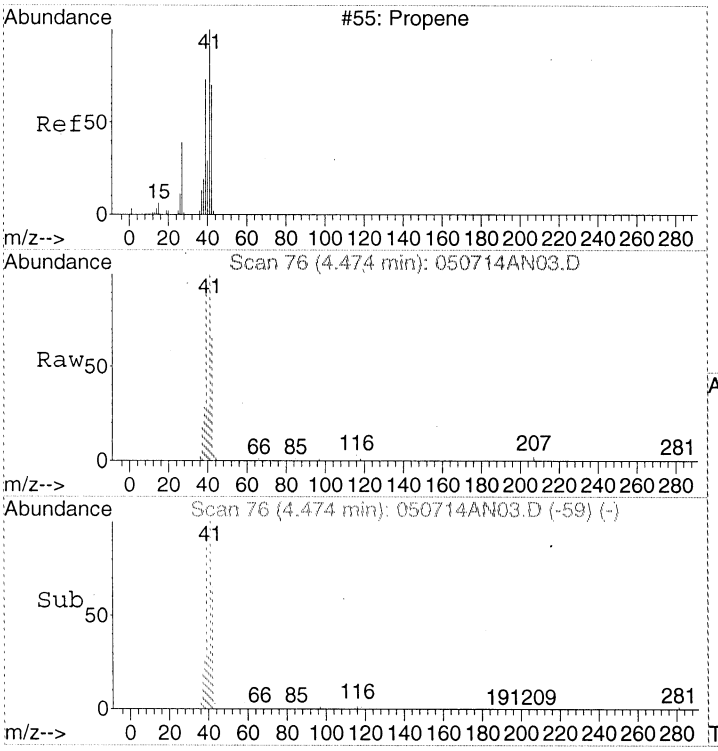


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 49 Resp: 331075

Ion	Ratio	Lower	Upper
49	100		
130	145.1	125.1	165.1
128	111.6	91.6	131.6

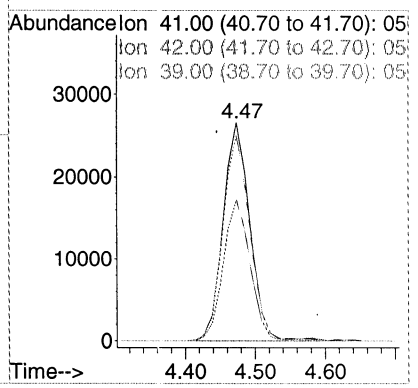


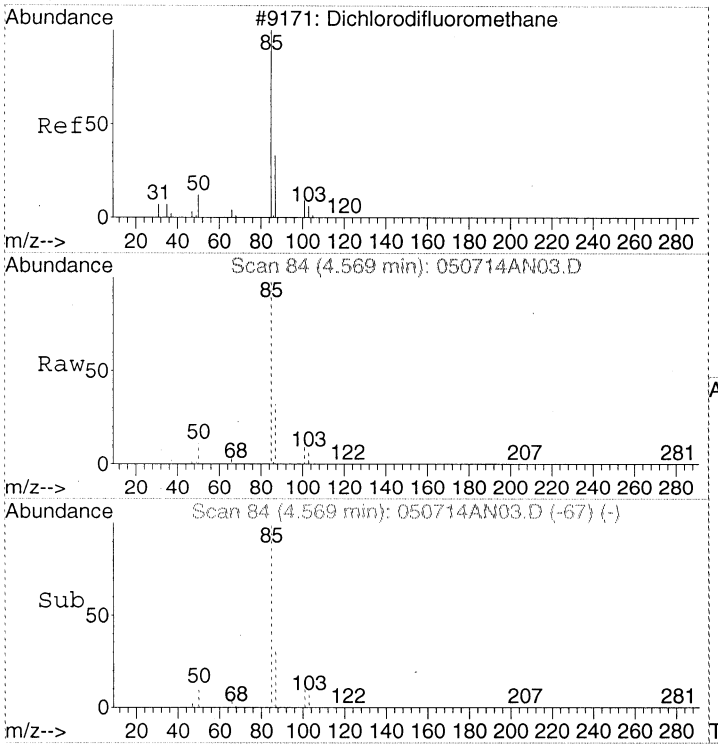


#2
Propene
Concen: 9.71 ppbv
RT: 4.47 min Scan# 76
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 41 Resp: 70173

Ion	Ratio	Lower	Upper
41	100		
42	64.9	44.9	84.9
39	94.8	74.8	114.8

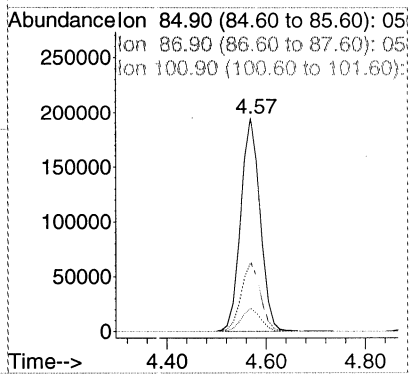


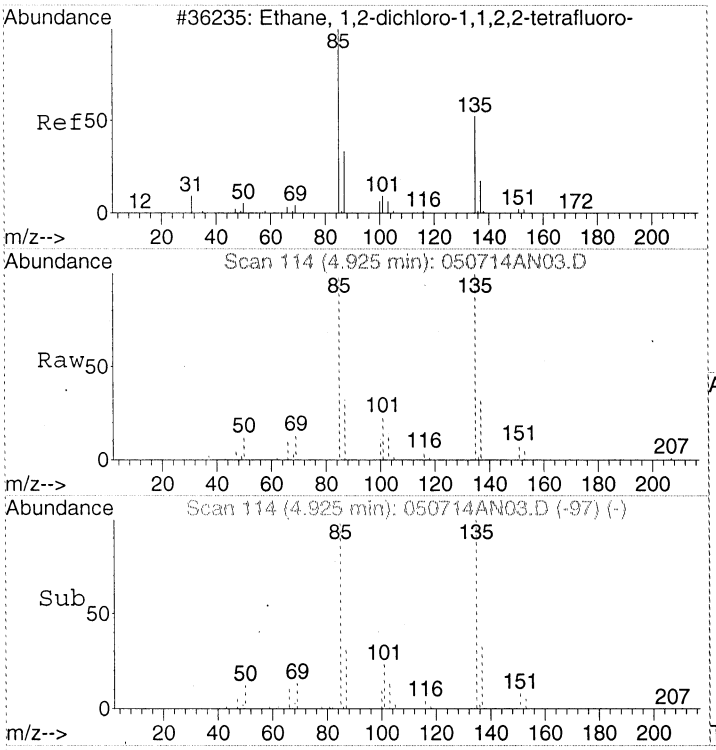


#3
Dichlorodifluoromethane
Concen: 8.33 ppbv
RT: 4.57 min Scan# 84
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 85 Resp: 526607

Ion	Ratio	Lower	Upper
85	100		
87	32.1	12.1	52.1
101	10.8	0.0	30.8

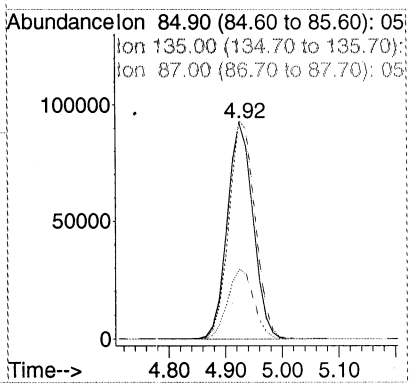


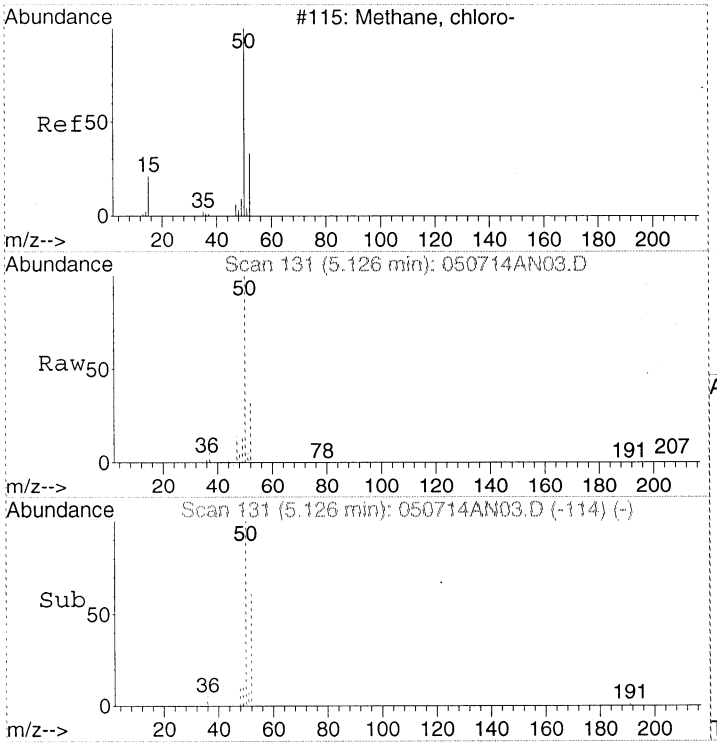


#4
1,2-Dichlorotetrafluoroethane
Concen: 6.36 ppbv
RT: 4.92 min Scan# 114
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 85 Resp: 291052

Ion	Ratio	Lower	Upper
85	100		
135	102.5	82.5	122.5
87	32.4	12.4	52.4

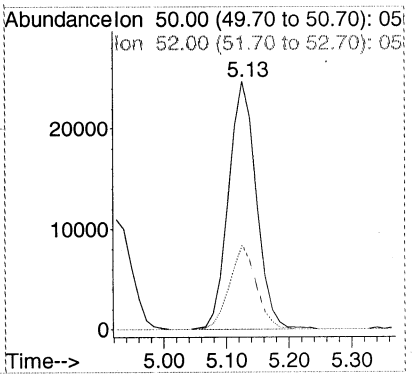


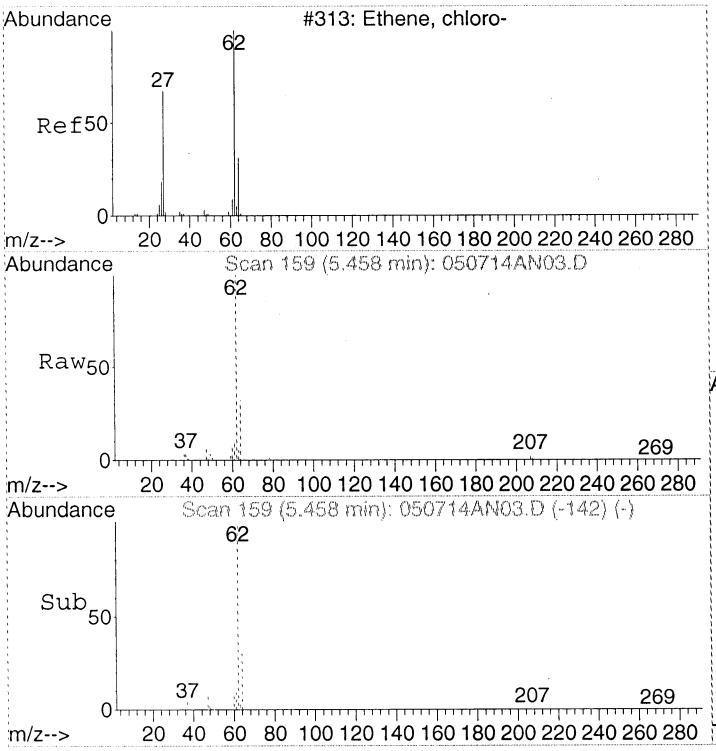


#5
Chloromethane
Concen: 8.24 ppbv
RT: 5.13 min Scan# 131
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 50 Resp: 76176

Ion	Ratio	Lower	Upper
50	100		
52	32.7	12.7	52.7

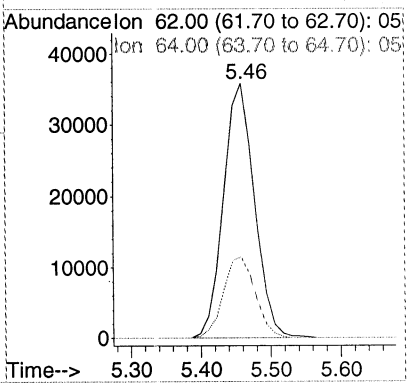


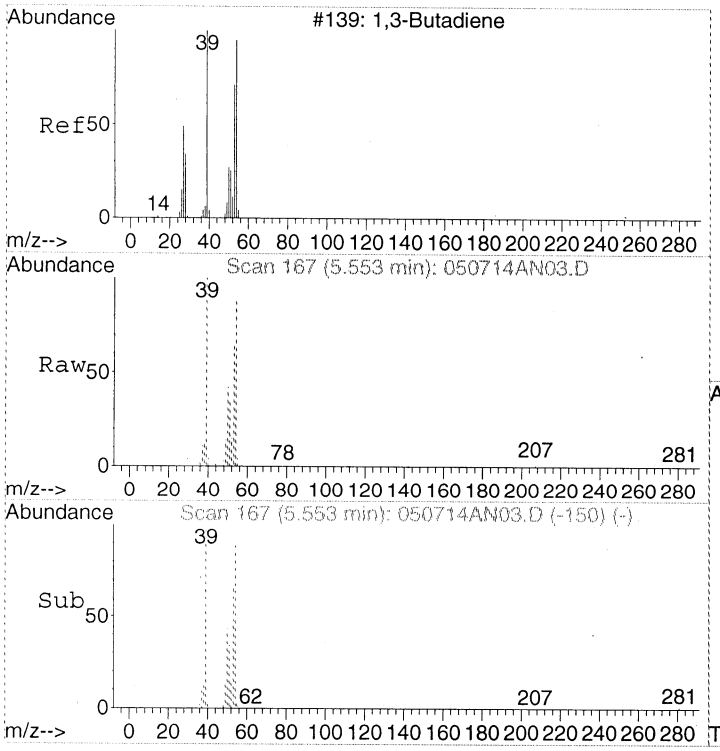


#6
Vinyl chloride
Concen: 8.42 ppbv
RT: 5.46 min Scan# 159
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 62 Resp: 110147

Ion	Ratio	Lower	Upper
62	100		
64	32.9	12.9	52.9

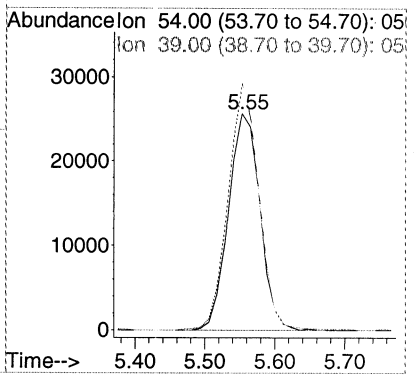


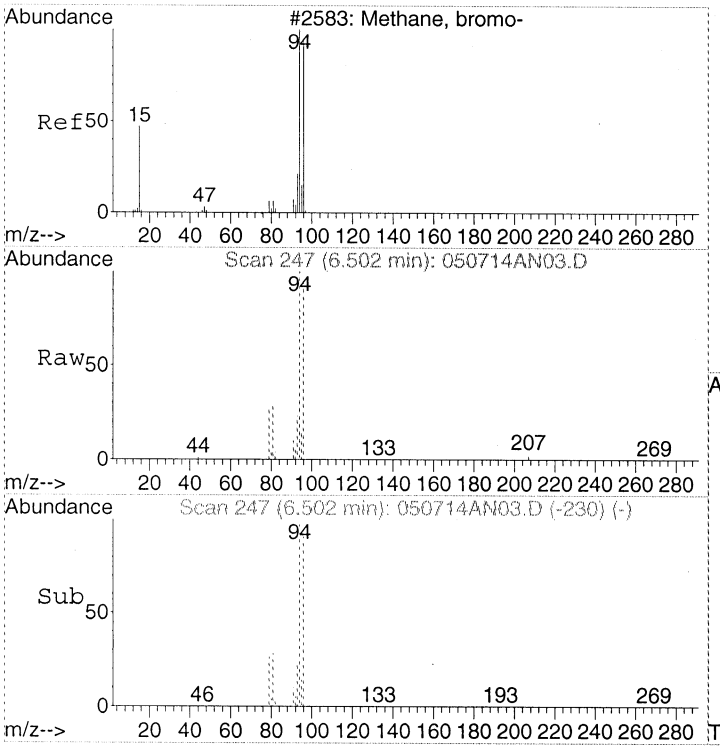


#7
1,3-Butadiene
Concen: 9.31 ppbv
RT: 5.55 min Scan# 167
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 54 Resp: 79794

Ion	Ratio	Lower	Upper
54	100		
39	111.2	91.2	131.2

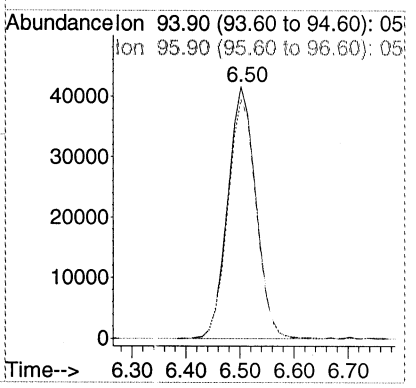


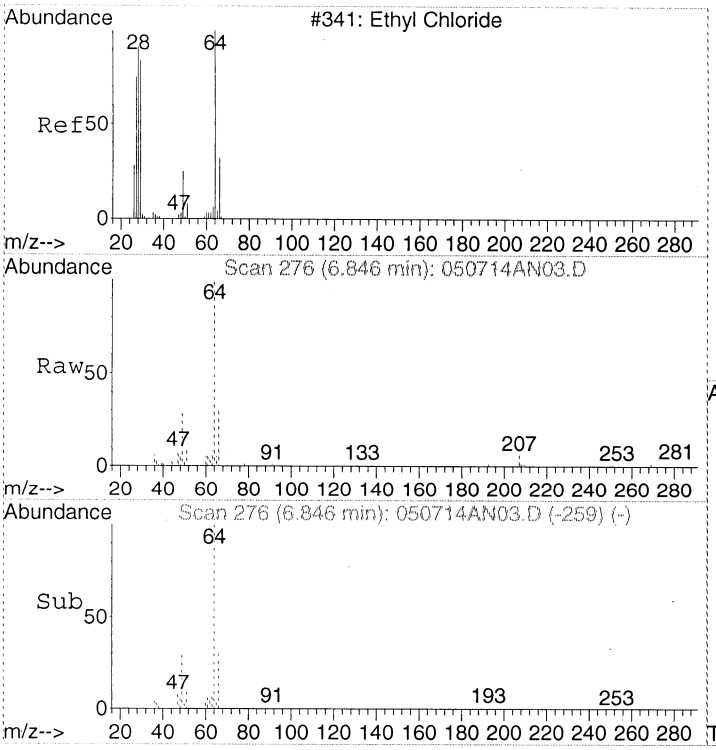


#8
Bromomethane
Concen: 8.76 ppbv
RT: 6.50 min Scan# 247
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 94 Resp: 149810

Ion	Ratio	Lower	Upper
94	100		
96	96.0	76.0	116.0

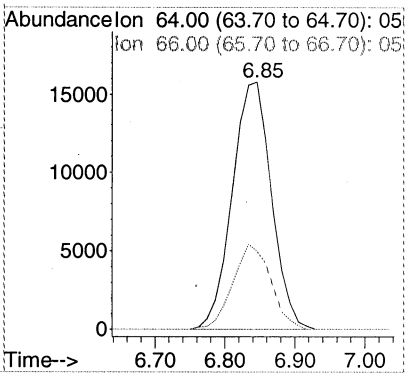


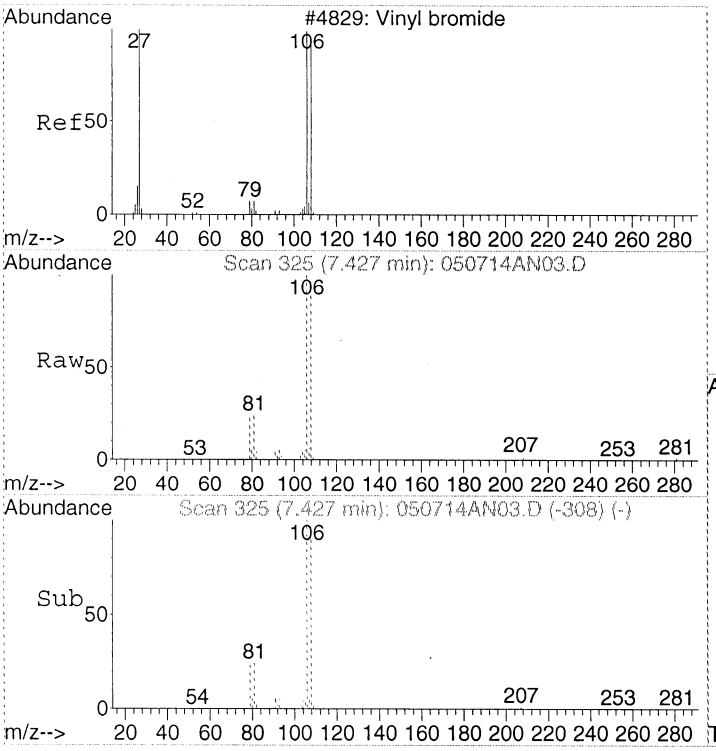


#9
Chloroethane
Concen: 8.49 ppbv
RT: 6.85 min Scan# 276
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 64 Resp: 61076

Ion	Ratio	Lower	Upper
64	100		
66	33.3	13.3	53.3

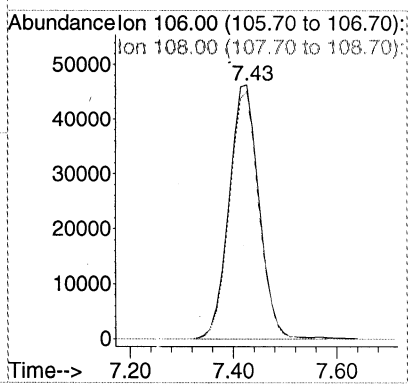


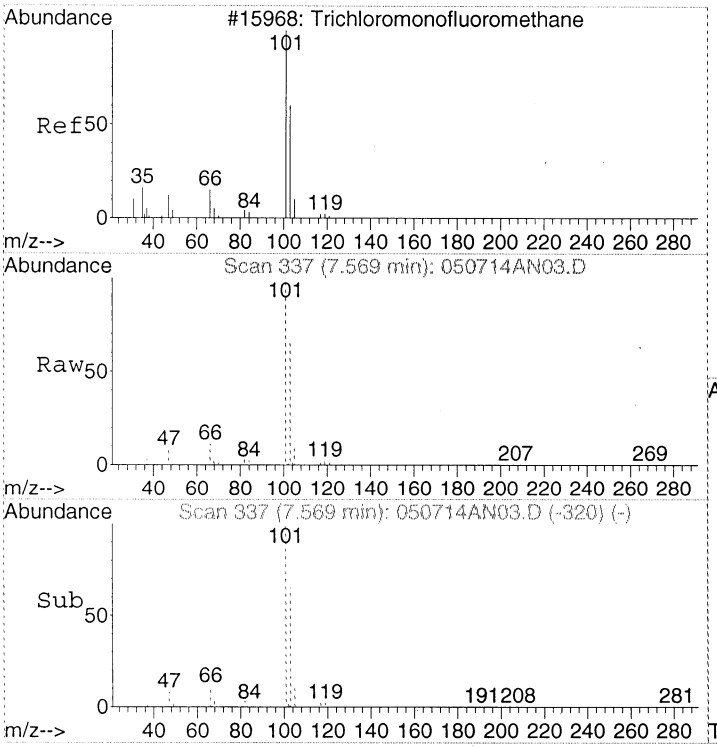


#10
Bromoethene
Concen: 10.12 ppbv
RT: 7.43 min Scan# 325
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:106 Resp: 185815

Ion	Ratio	Lower	Upper
106	100		
108	95.2	0.0	215.2

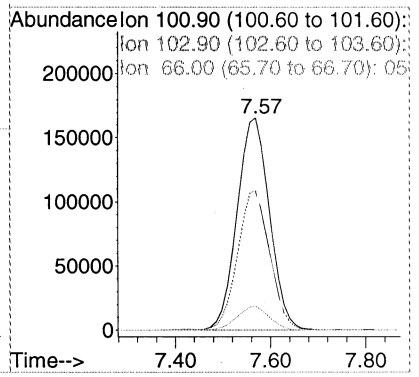


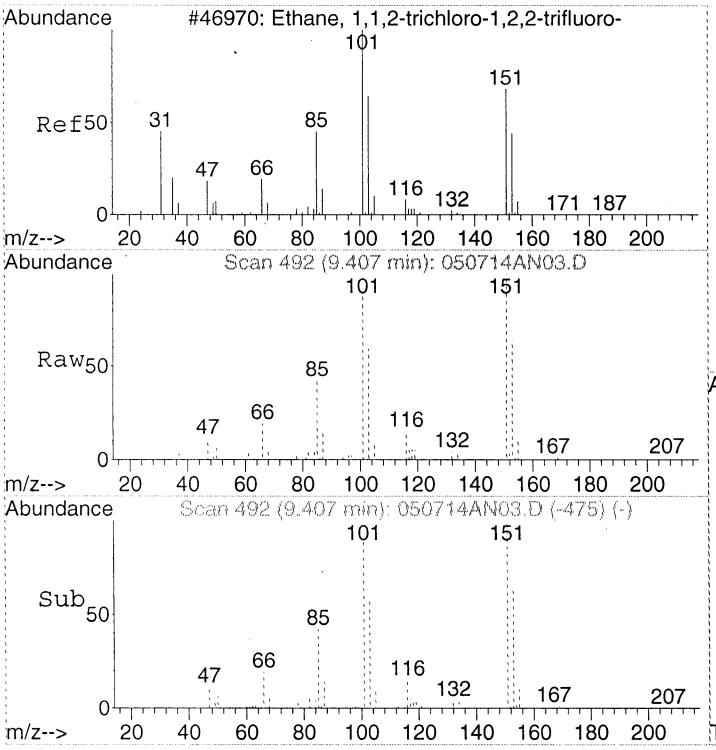


#11
Trichlorofluoromethane
Concen: 10.32 ppbv
RT: 7.57 min Scan# 337
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:101 Resp: 781267

Ion	Ratio	Lower	Upper
101	100		
103	64.5	44.5	84.5
66	11.1	0.0	31.1

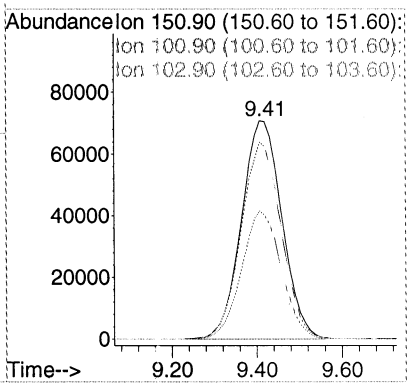


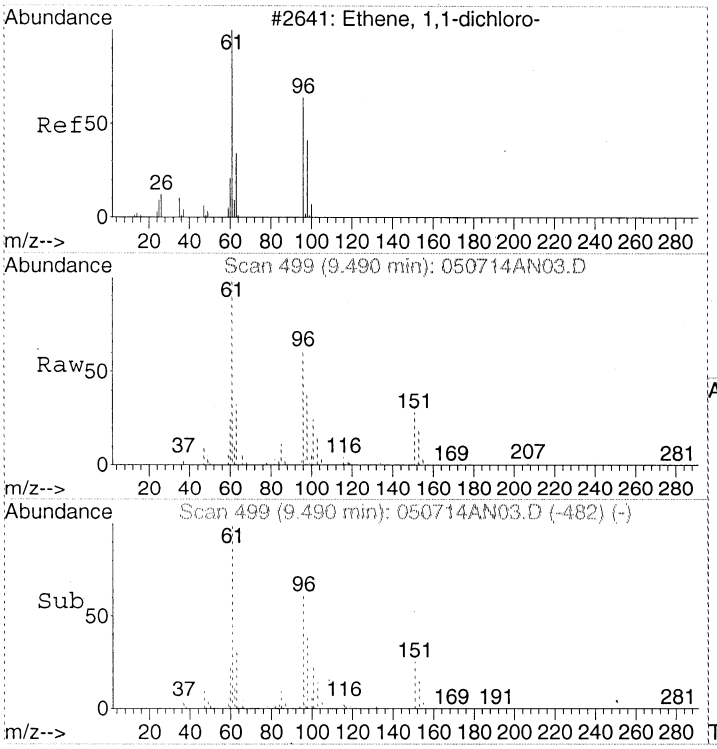


#12
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 9.38 ppbv
RT: 9.41 min Scan# 492
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:151 Resp: 467210

Ion	Ratio	Lower	Upper
151	100		
101	89.5	69.5	109.5
103	57.8	37.8	77.8

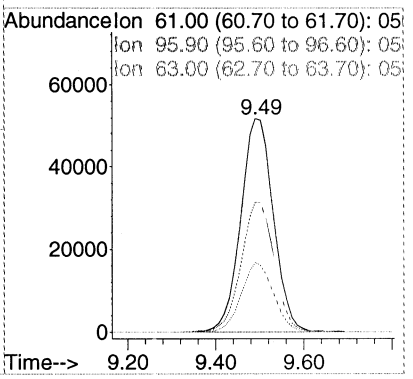


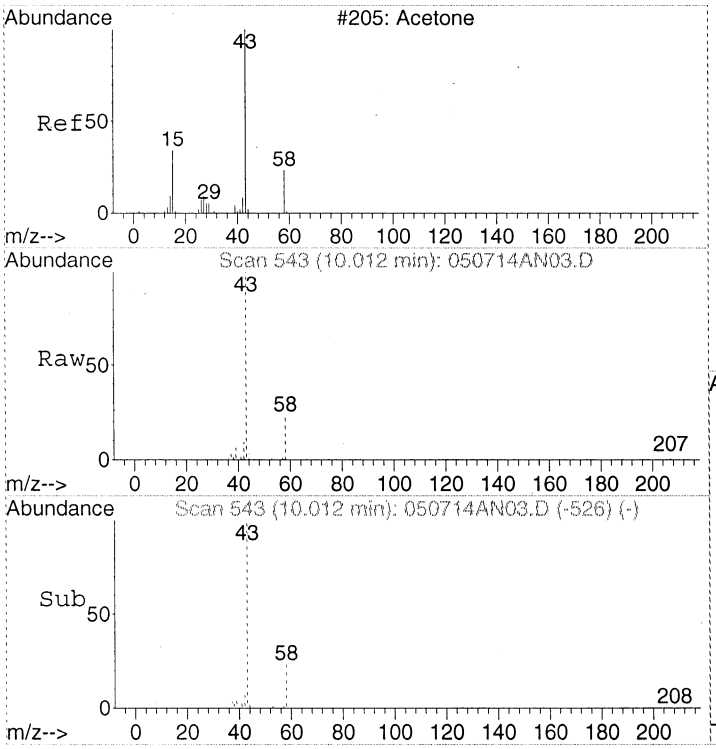


#13
1,1-Dichloroethene
Concen: 9.30 ppbv
RT: 9.49 min Scan# 499
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 61 Resp: 265354

Ion	Ratio	Lower	Upper
61	100		
96	61.0	41.0	81.0
63	31.8	11.8	51.8

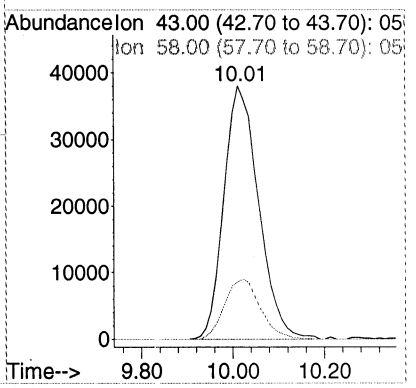




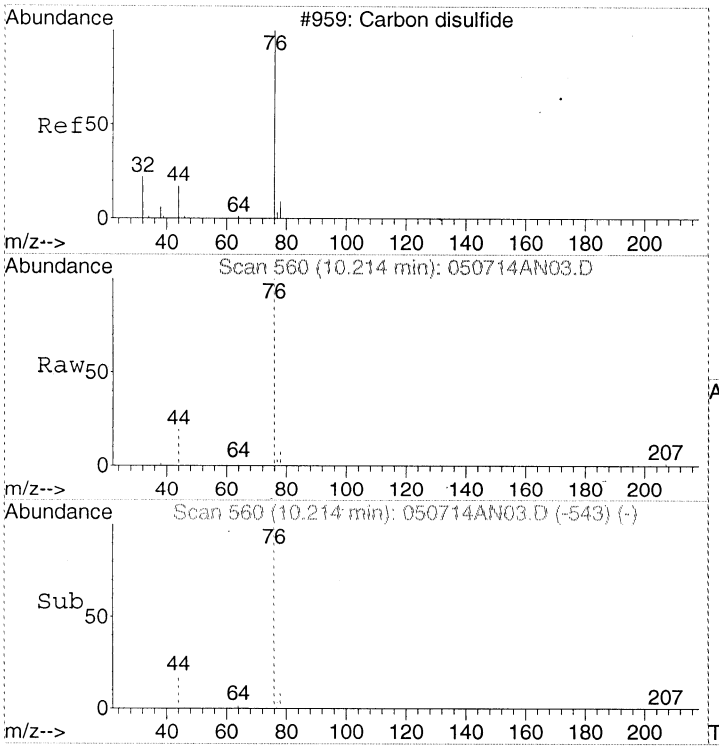
#14
Acetone
Concen: 10.26 ppbv
RT: 10.01 min Scan# 543
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 43 Resp: 199872

Ion	Ratio	Lower	Upper
43	100		
58	24.2	4.2	44.2



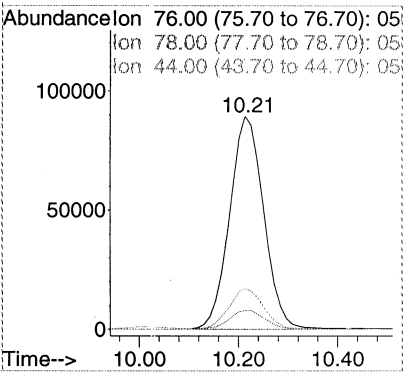
00051

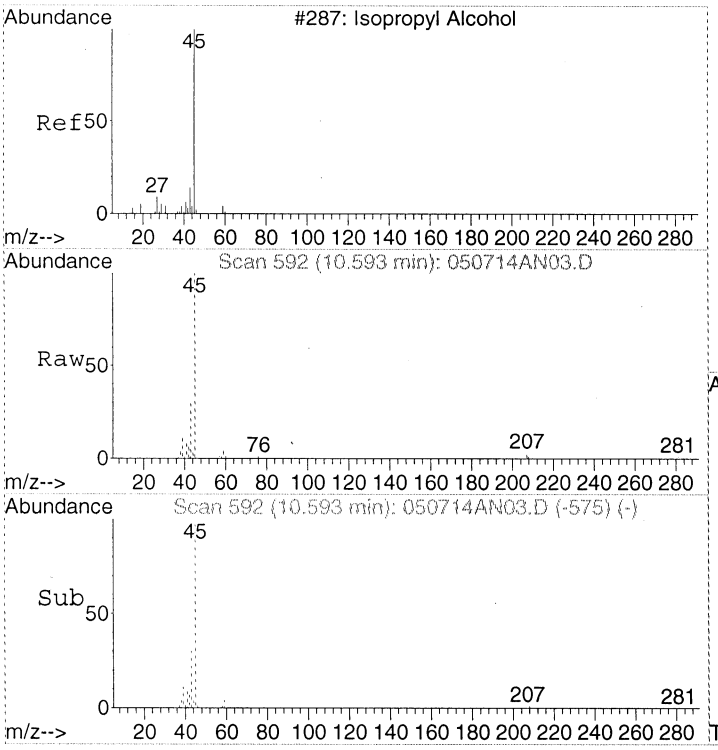


#15
Carbon disulfide
Concen: 10.32 ppbv
RT: 10.21 min Scan# 560
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 76 Resp: 425202

Ion	Ratio	Lower	Upper
76	100		
78	9.4	0.0	29.4
44	19.2	0.0	39.2

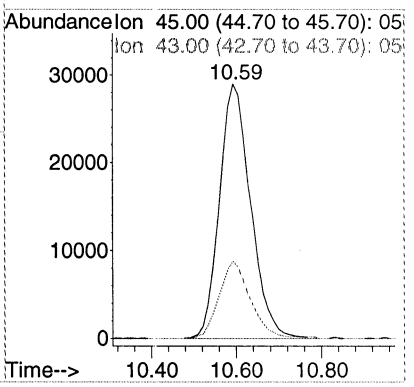


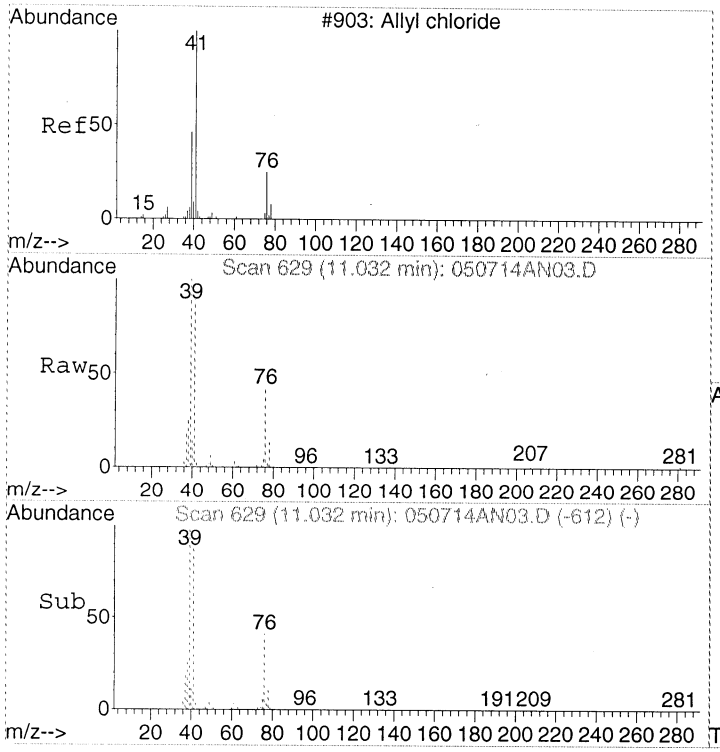


#16
2-Propanol
Concen: 9.24 ppbv
RT: 10.59 min Scan# 592
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 45 Resp: 147136

Ion	Ratio	Lower	Upper
45	100		
43	30.3	10.3	50.3

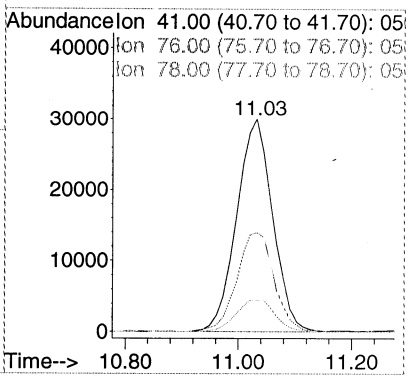


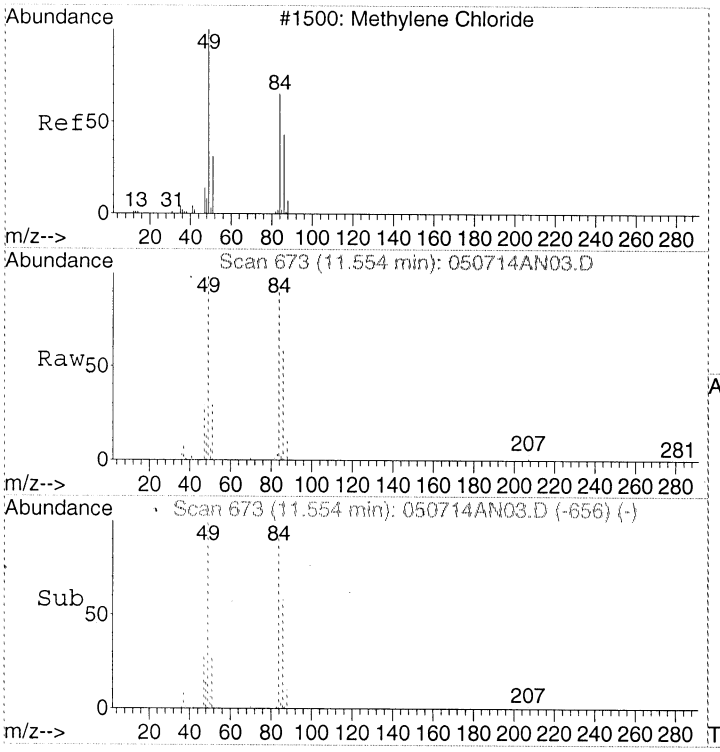


#17
Allyl chloride
Concen: 10.63 ppbv
RT: 11.03 min Scan# 629
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 41 Resp: 132465

Ion	Ratio	Lower	Upper
41	100		
76	48.5	28.5	68.5
78	16.2	0.0	36.2

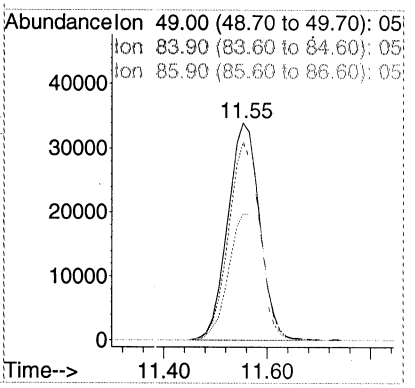


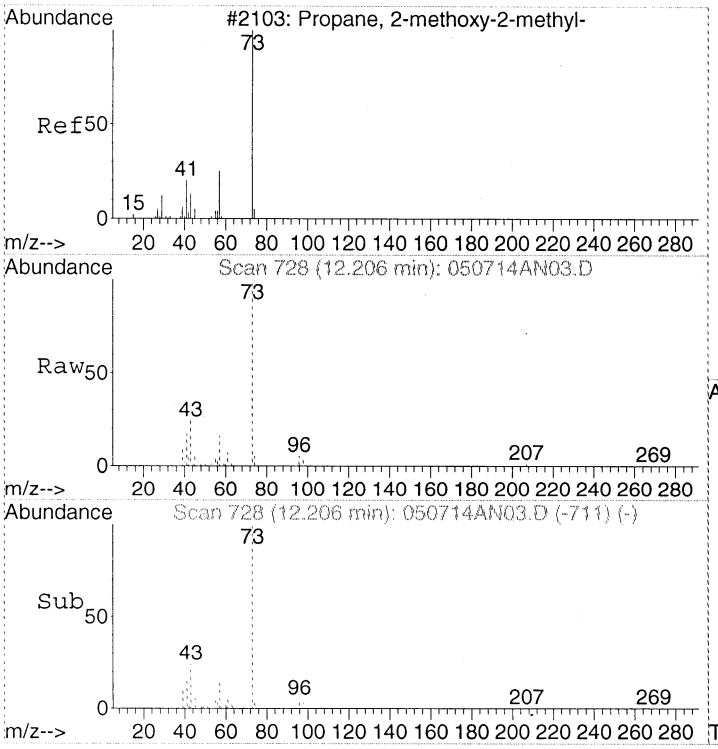


#18
Dichloromethane
Concen: 8.42 ppbv
RT: 11.55 min Scan# 673
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 49 Resp: 145512

Ion	Ratio	Lower	Upper
49	100		
84	89.9	69.9	109.9
86	58.3	38.3	78.3

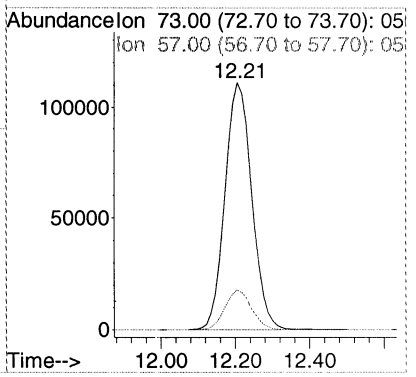


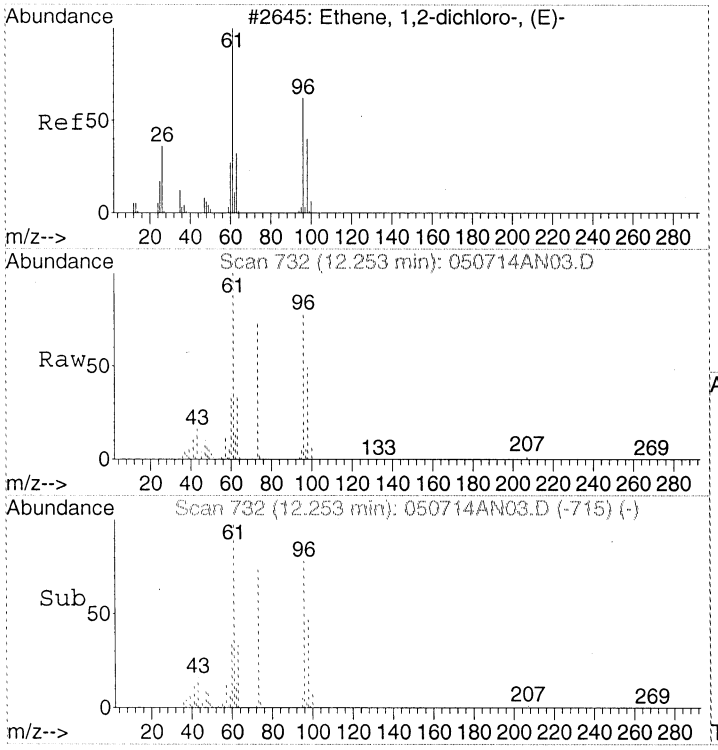


#19
tert-Butyl methyl ether (MTBE)
Concen: 11.43 ppbv
RT: 12.21 min Scan# 728
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 73 Resp: 553298

Ion	Ratio	Lower	Upper
73	100		
57	15.9	0.0	35.9

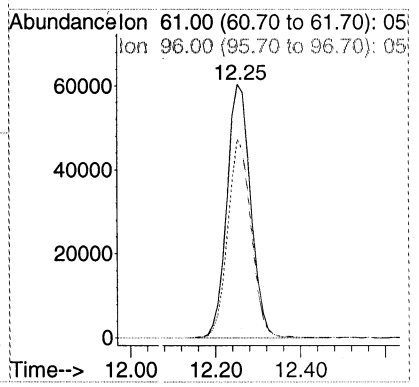


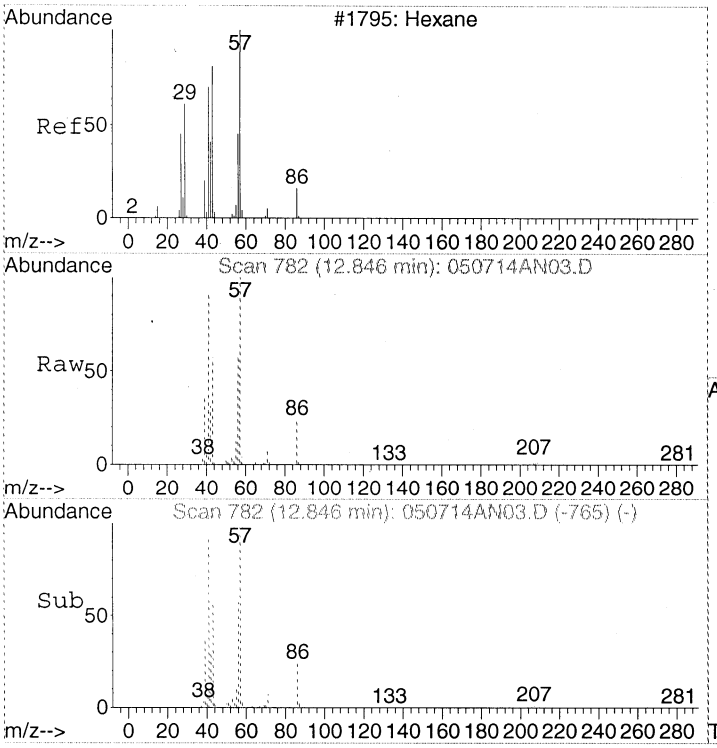


#20
trans-1,2-Dichloroethene
Concen: 10.73 ppbv
RT: 12.25 min Scan# 732
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 61 Resp: 235048

Ion	Ratio	Lower	Upper
61	100		
96	77.2	57.2	97.2

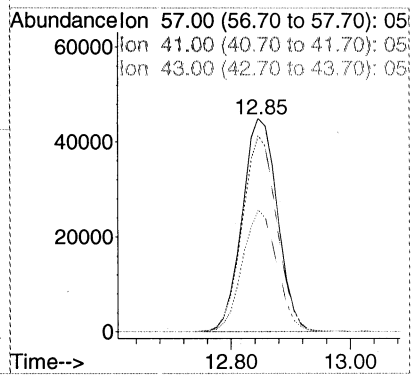


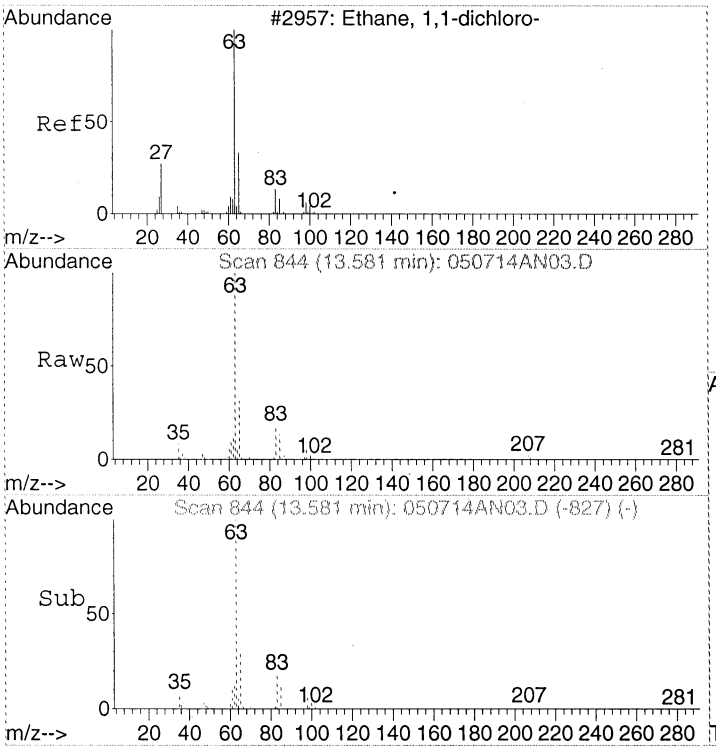


#21
Hexane
Concen: 9.98 ppbv
RT: 12.85 min Scan# 782
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 57 Resp: 184651

Ion	Ratio	Lower	Upper
57	100		
41	90.7	70.7	110.7
43	55.7	35.7	75.7

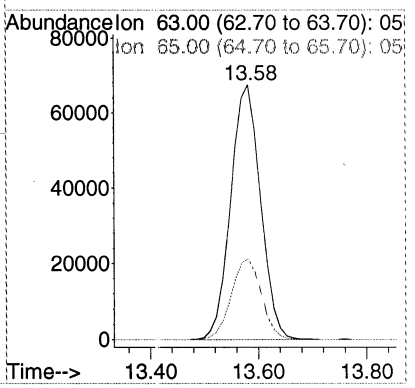


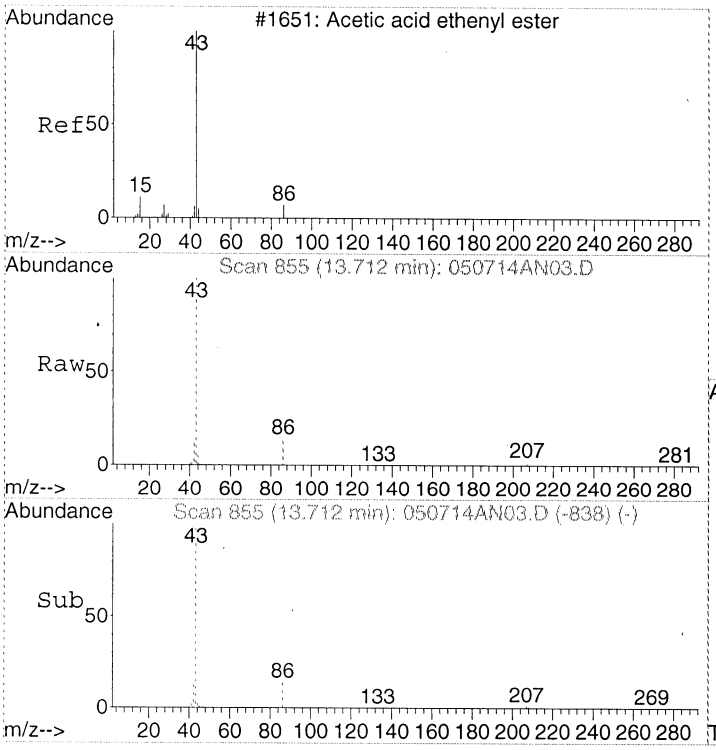


#22
1,1-Dichloroethane
Concen: 8.56 ppbv
RT: 13.58 min Scan# 844
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 63 Resp: 257463

Ion	Ratio	Lower	Upper
63	100		
65	31.6	11.6	51.6

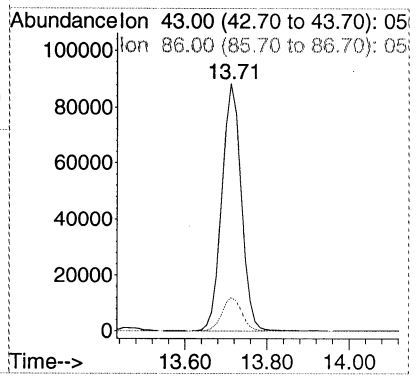


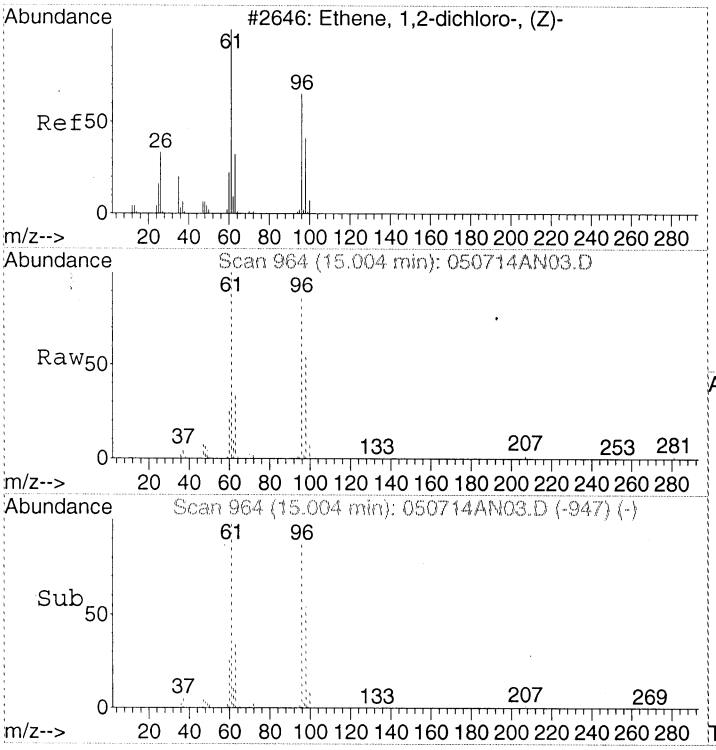


#23
Vinyl acetate
Concen: 10.92 ppbv
RT: 13.71 min Scan# 855
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 43 Resp: 291028

Ion	Ratio	Lower	Upper
43	100		
86	13.6	0.0	33.6

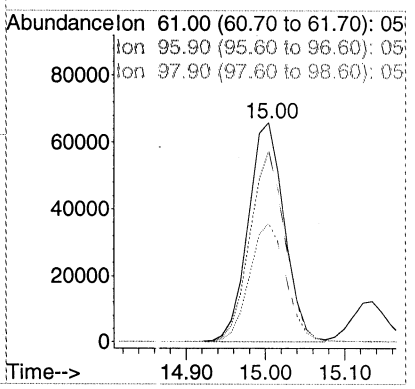


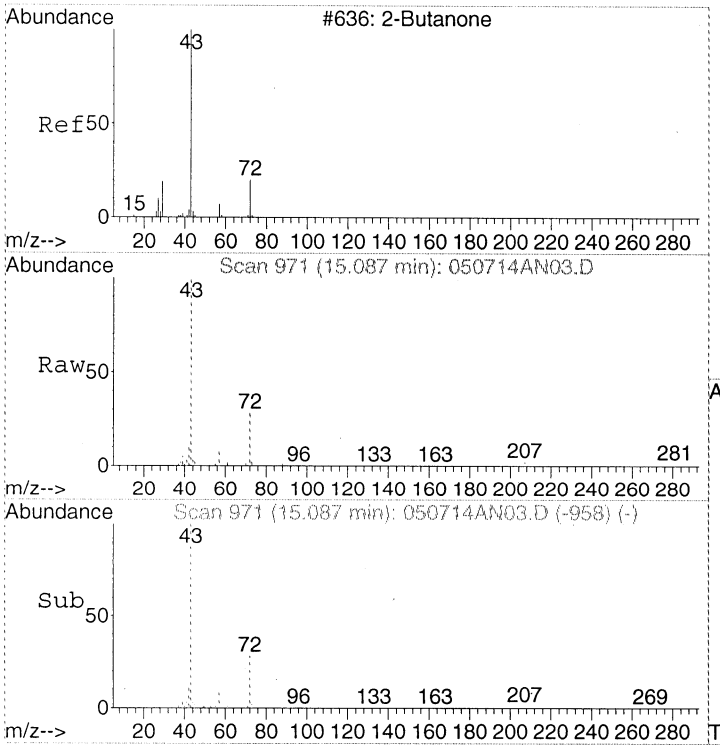


#24
cis-1,2-Dichloroethene
Concen: 8.87 ppbv
RT: 15.00 min Scan# 964
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 61 Resp: 208075

Ion	Ratio	Lower	Upper
61	100		
96	85.5	65.5	105.5
98	54.8	34.8	74.8

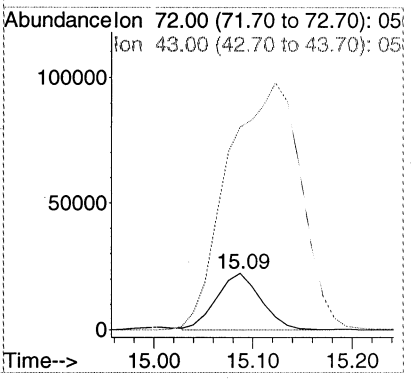


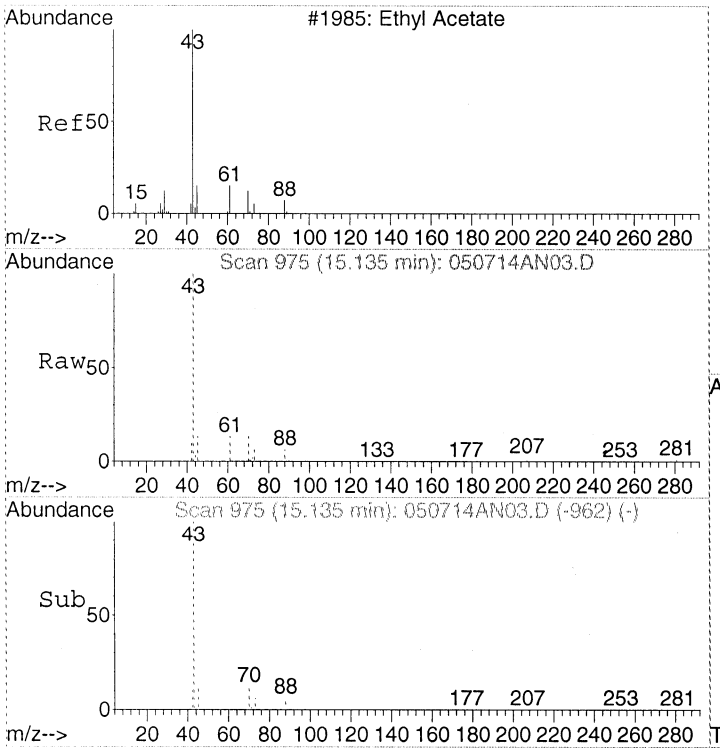


#25
2-Butanone (MEK)
Concen: 9.96 ppbv
RT: 15.09 min Scan# 971
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 72 Resp: 68768

Ion	Ratio	Lower	Upper
72	100		
43	0.0	0.0	10.0

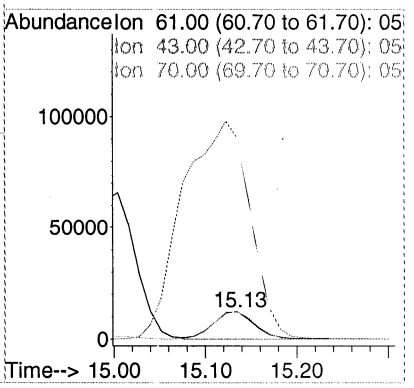


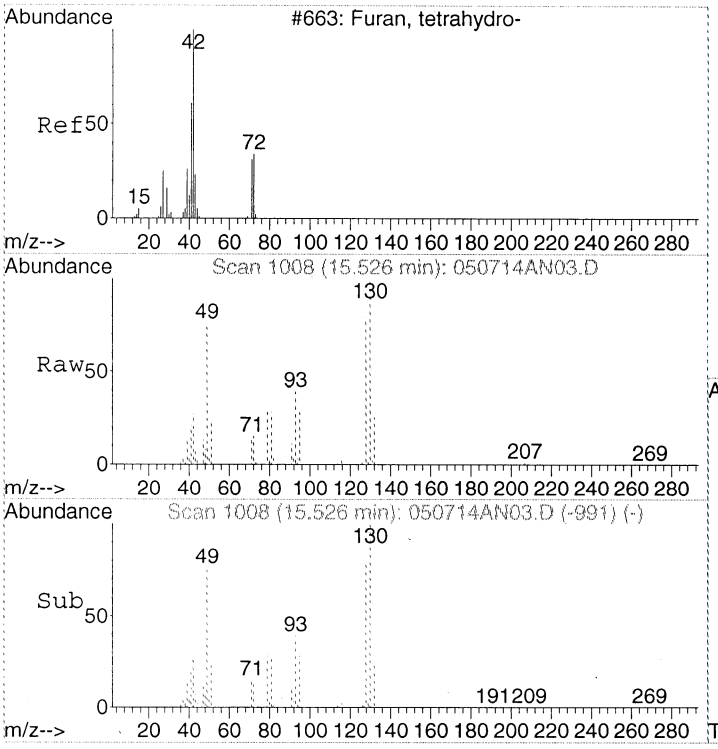


#26
Ethyl acetate
Concen: 10.09 ppbv
RT: 15.13 min Scan# 975
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 61 Resp: 38496

Ion	Ratio	Lower	Upper
61	100		
43	1299.4	1289.4	1309.4
70	101.8	91.8	111.8

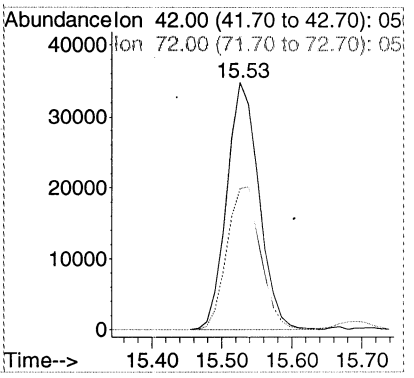


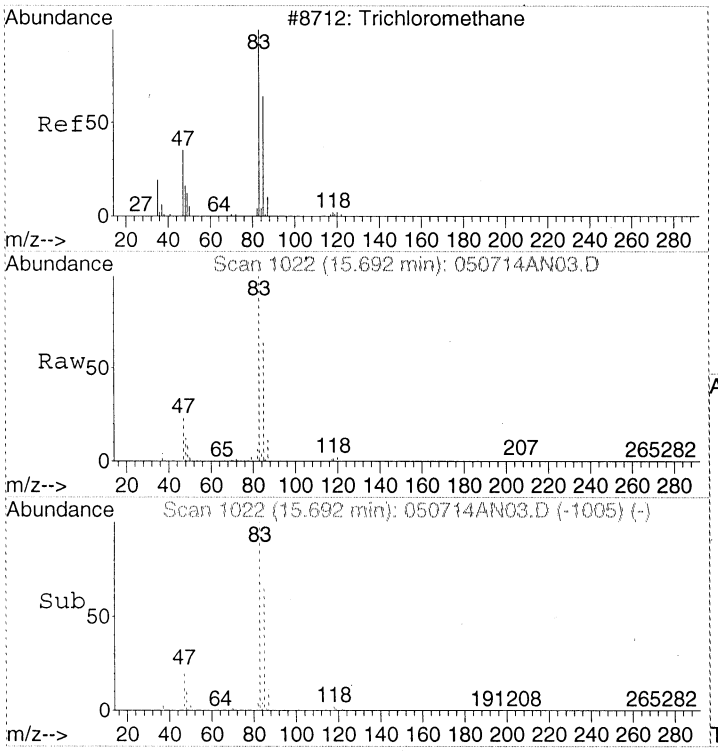


#27
Tetrahydrofuran
Concen: 10.21 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 42 Resp: 110863

Ion	Ratio	Lower	Upper
42	100		
72	60.3	40.3	80.3

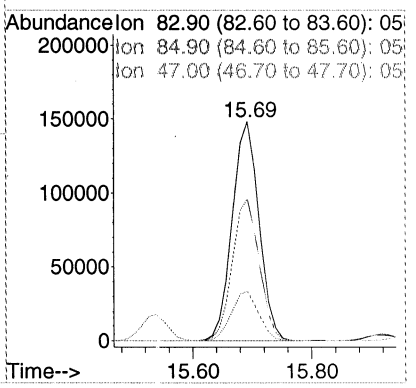


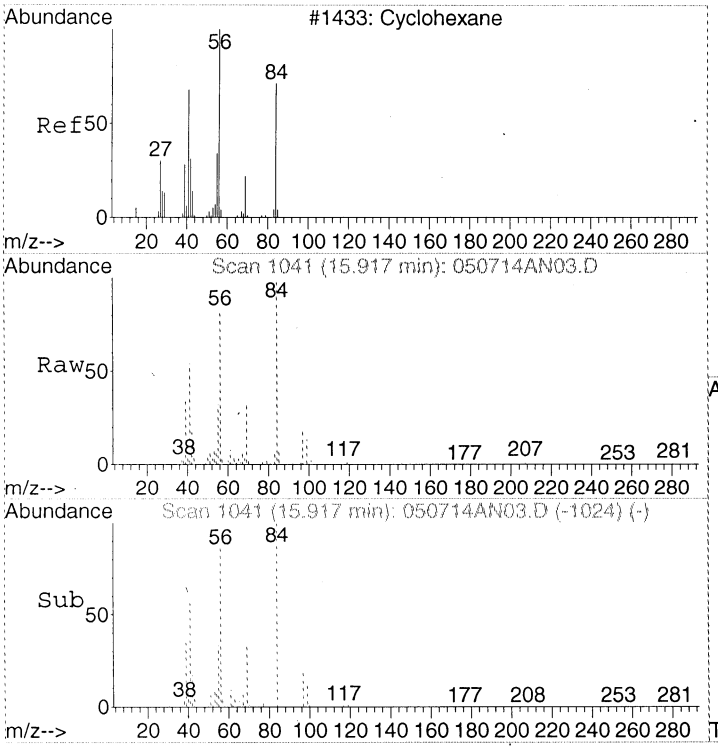


#28
Chloroform
Concen: 9.72 ppbv
RT: 15.69 min Scan# 1022
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 83 Resp: 463234

Ion	Ratio	Lower	Upper
83	100		
85	65.0	45.0	85.0
47	23.2	3.2	43.2

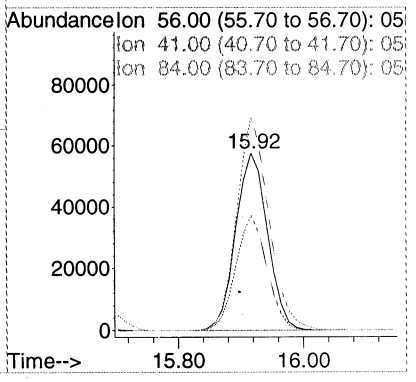


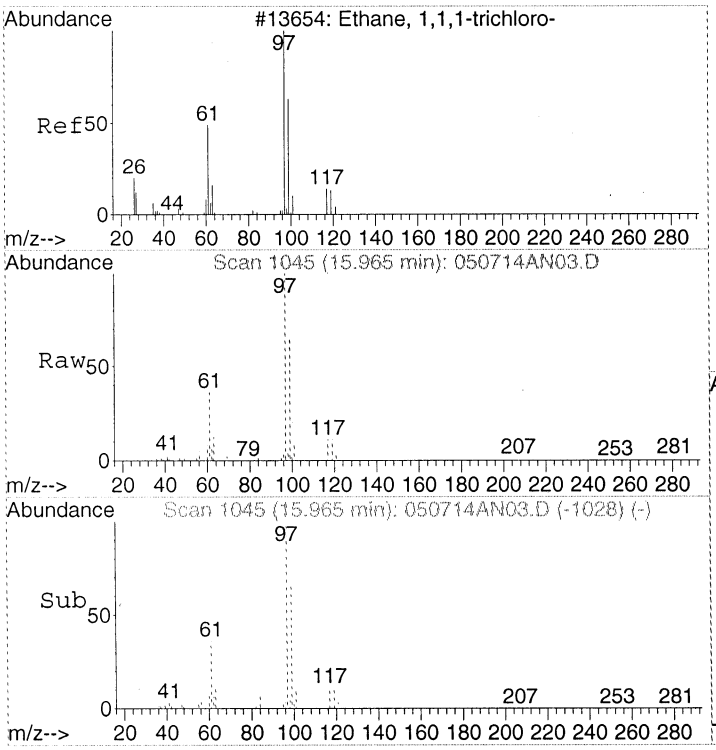


#29
Cyclohexane
Concen: 10.37 ppbv
RT: 15.92 min Scan# 1041
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 56 Resp: 201943

Ion	Ratio	Lower	Upper
56	100		
41	63.2	43.2	83.2
84	121.4	101.4	141.4

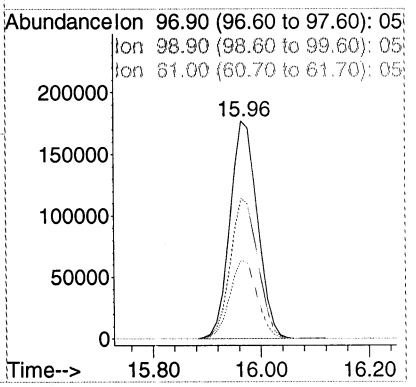


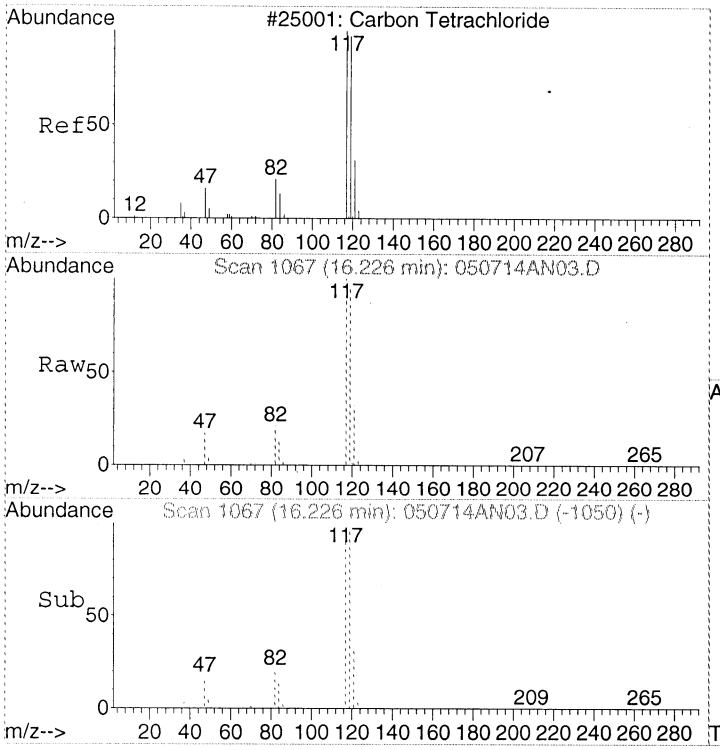


#30
1,1,1-Trichloroethane
Concen: 9.89 ppbv
RT: 15.96 min Scan# 1045
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 97 Resp: 623009

Ion	Ratio	Lower	Upper
97	100		
99	64.6	44.6	84.6
61	35.9	15.9	55.9

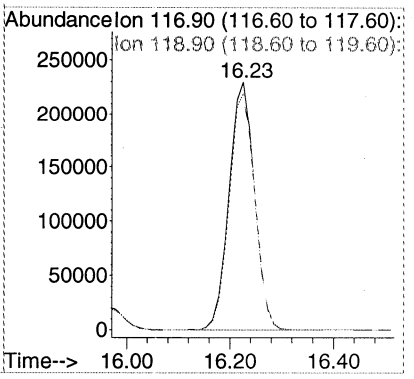


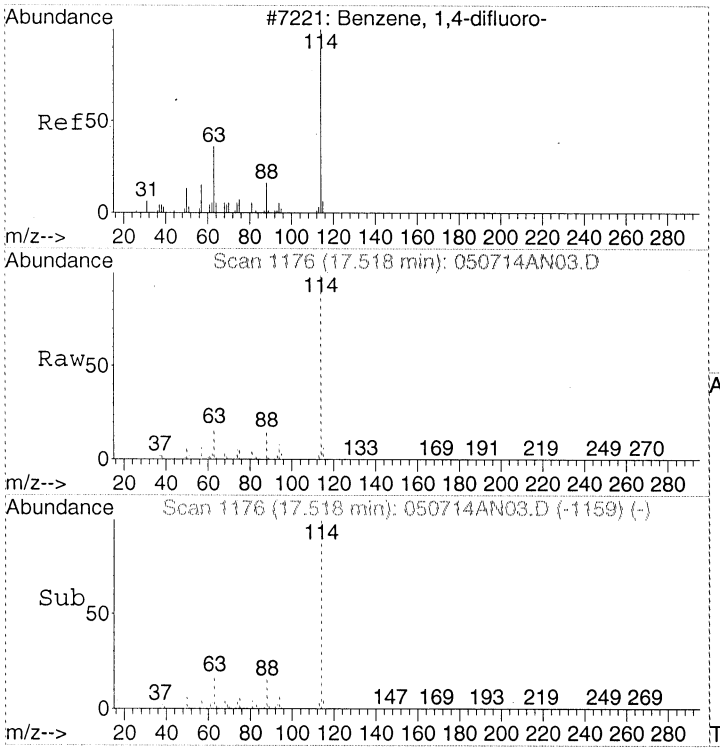


#31
Carbon tetrachloride
Concen: 10.66 ppbv
RT: 16.23 min Scan# 1067
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:117 Resp: 779372

Ion	Ratio	Lower	Upper
117	100		
119	96.6	76.6	116.6

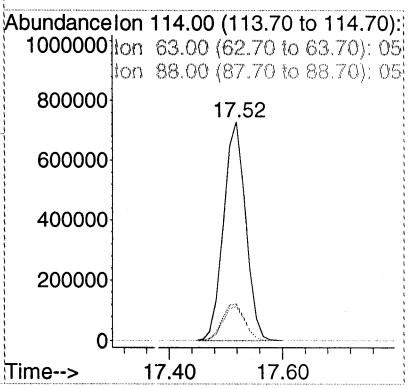


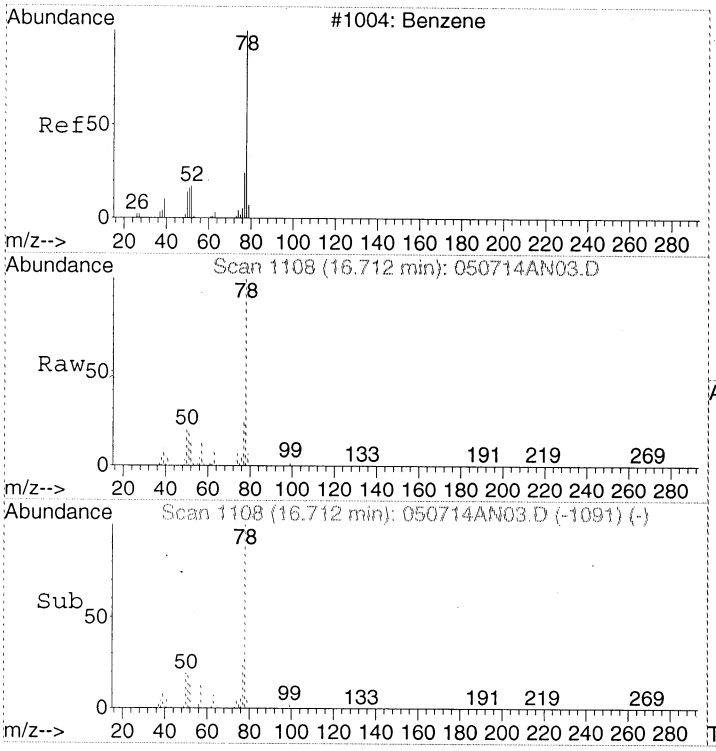


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.52 min Scan# 1176
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:114 Resp: 1966559

Ion	Ratio	Lower	Upper
114	100		
63	17.2	0.0	37.2
88	15.6	0.0	35.6

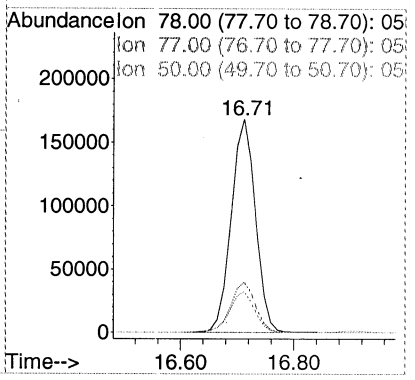


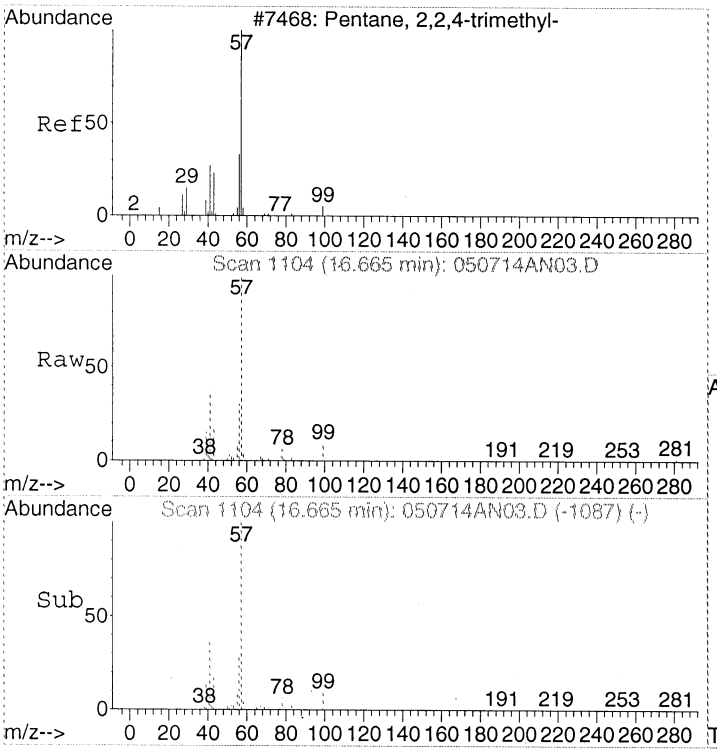


#33
Benzene
Concen: 9.02 ppbv
RT: 16.71 min Scan# 1108
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 78 Resp: 498413

Ion	Ratio	Lower	Upper
78	100		
77	24.2	4.2	44.2
50	19.9	0.0	39.9

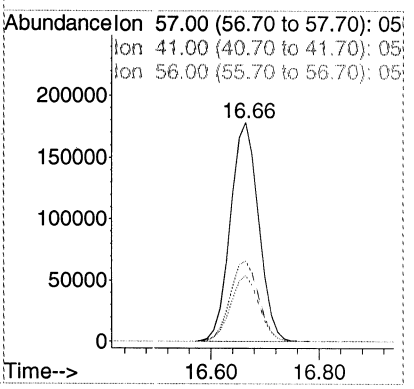


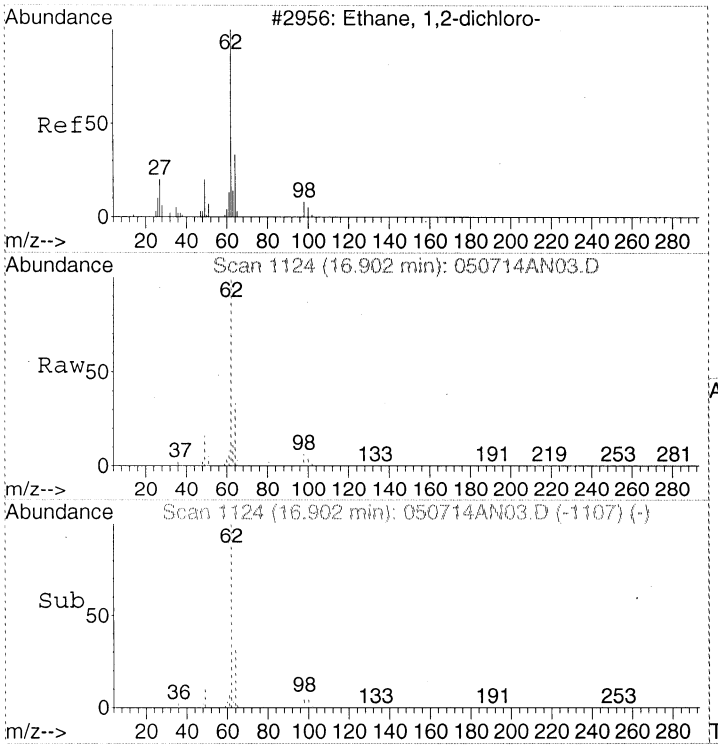


#34
2,2,4-Trimethylpentane
Concen: 10.48 ppbv
RT: 16.66 min Scan# 1104
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 57 Resp: 647249

Ion	Ratio	Lower	Upper
57	100		
41	37.6	17.6	57.6
56	30.4	10.4	50.4

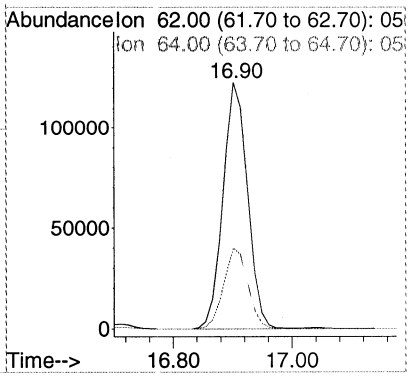


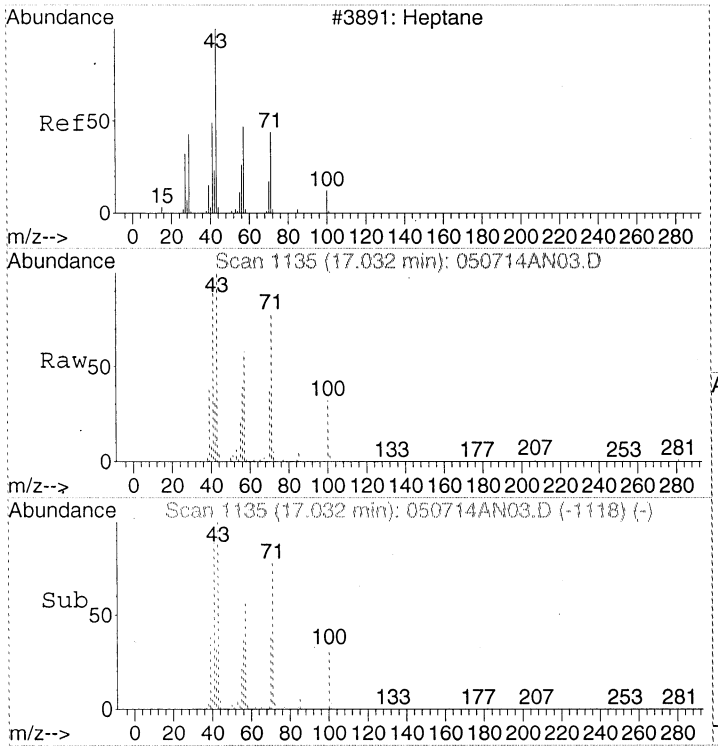


#35
1,2-Dichloroethane
Concen: 9.90 ppbv
RT: 16.90 min Scan# 1124
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 62 Resp: 350607

Ion	Ratio	Lower	Upper
62	100		
64	32.1	12.1	52.1

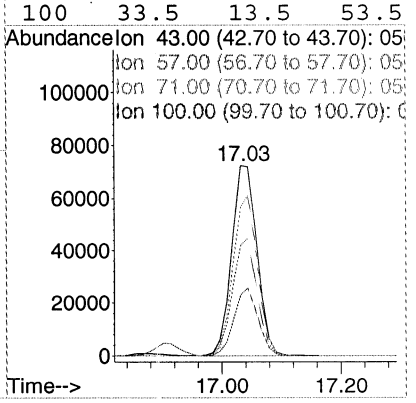




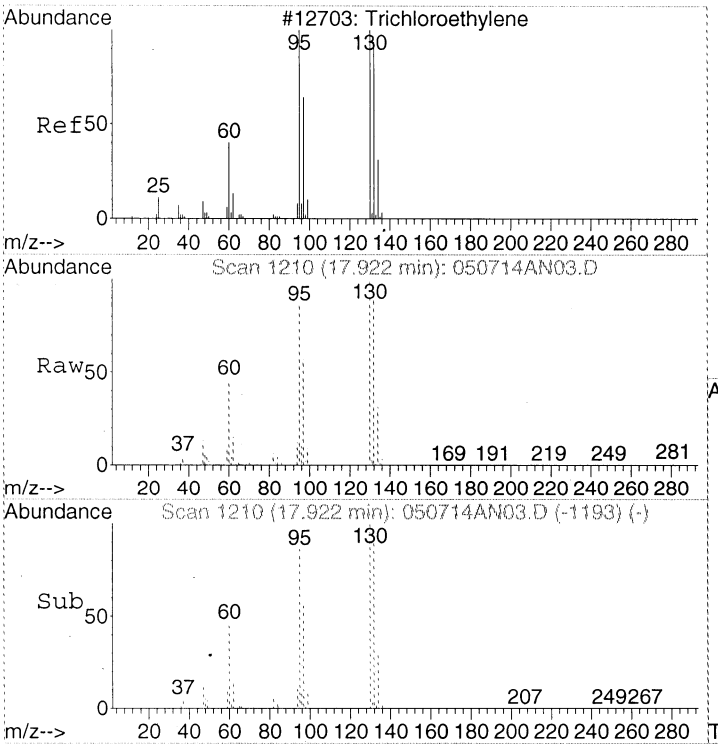
#36
Heptane
Concen: 10.85 ppbv
RT: 17.03 min Scan# 1135
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 43 Resp: 214242

Ion	Ratio	Lower	Upper
43	100		
57	59.4	39.4	79.4
71	81.4	61.4	101.4
100	33.5	13.5	53.5



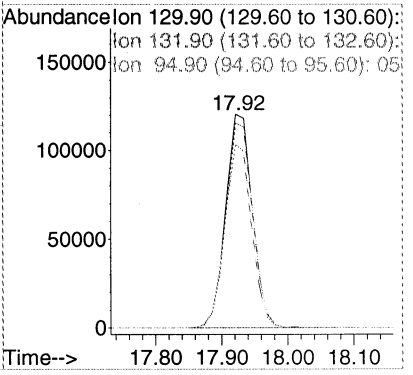
000062

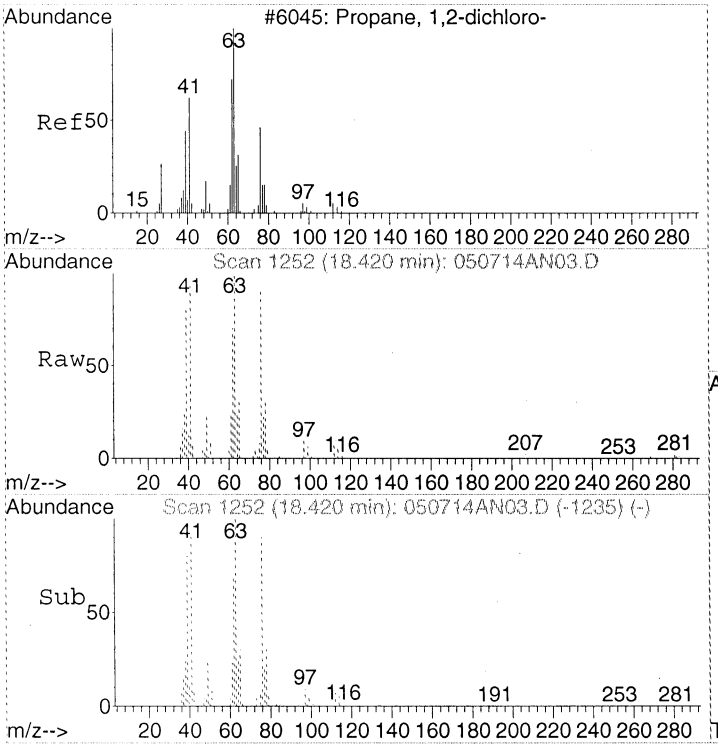


#37
Trichloroethene
Concen: 9.68 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:130 Resp: 337845

Ion	Ratio	Lower	Upper
130	100		
132	96.1	76.1	116.1
95	86.3	66.3	106.3

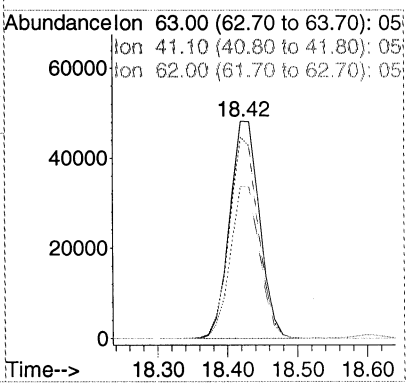


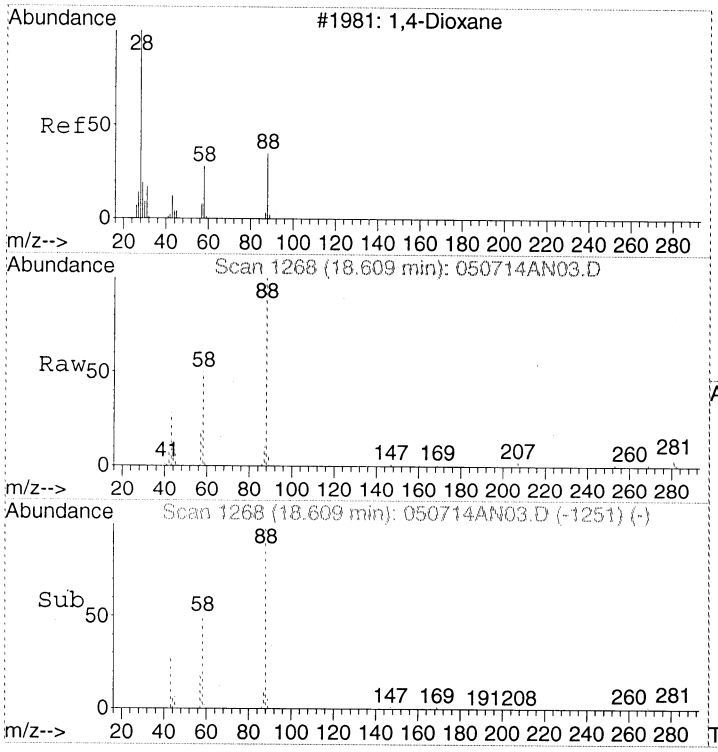


#38
1,2-Dichloropropane
Concen: 8.99 ppbv
RT: 18.42 min Scan# 1252
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 63 Resp: 142185

Ion	Ratio	Lower	Upper
63	100		
41	89.9	69.9	109.9
62	68.8	48.8	88.8

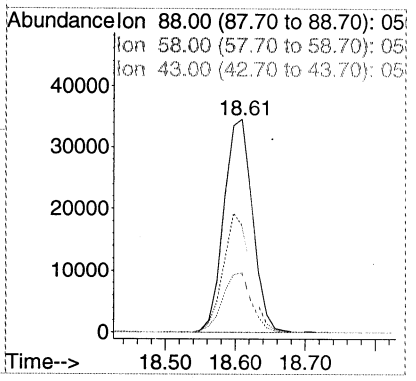


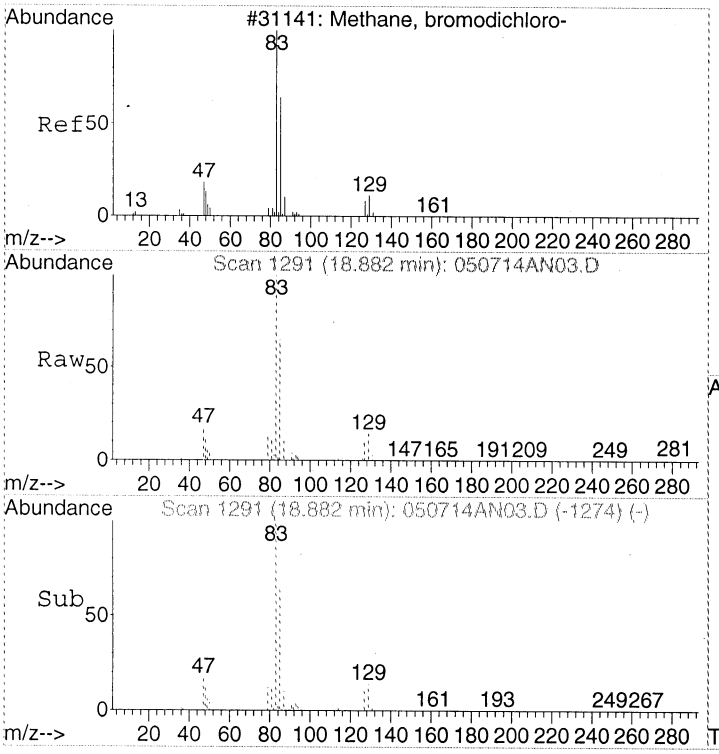


#39
1,4-Dioxane
Concen: 9.42 ppbv
RT: 18.61 min Scan# 1268
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 88 Resp: 97874

Ion	Ratio	Lower	Upper
88	100		
58	52.7	32.7	72.7
43	28.0	8.0	48.0

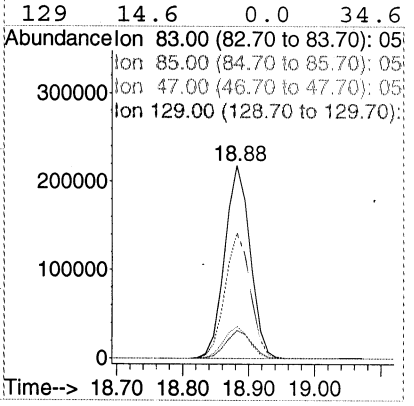


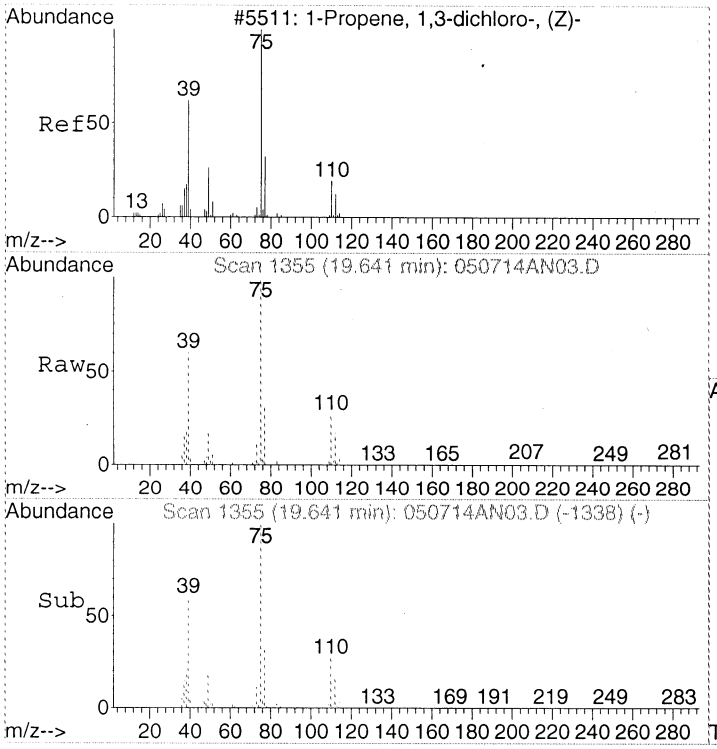


#40
Bromodichloromethane
Concen: 10.96 ppbv
RT: 18.88 min Scan# 1291
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 83 Resp: 579463

Ion	Ratio	Lower	Upper
83	100		
85	64.7	44.7	84.7
47	16.5	0.0	36.5
129	14.6	0.0	34.6

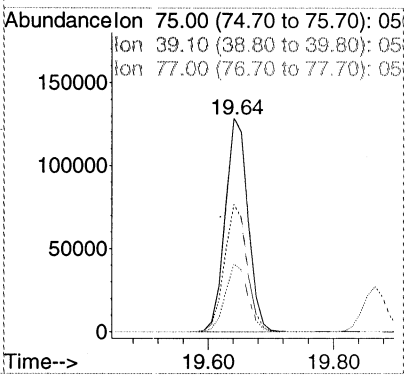


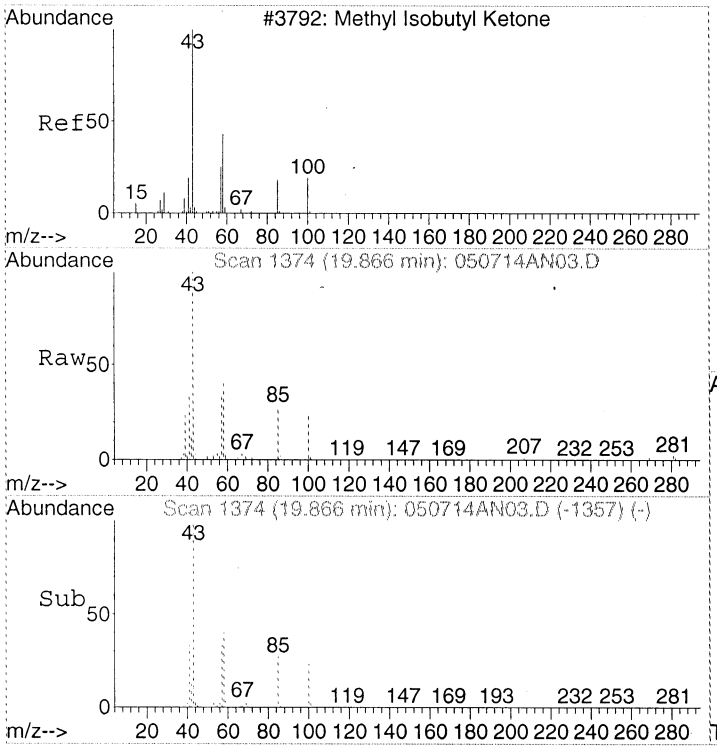


#41
cis-1,3-Dichloropropene
Concen: 10.06 ppbv
RT: 19.64 min Scan# 1355
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 75 Resp: 324299

Ion	Ratio	Lower	Upper
75	100		
39	59.1	39.1	79.1
77	31.4	11.4	51.4

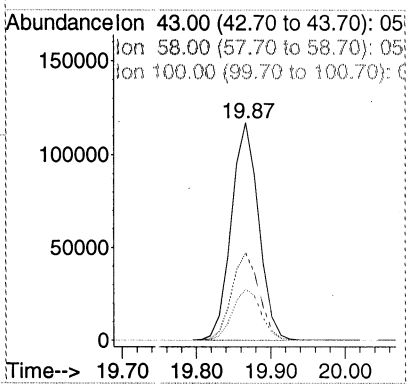


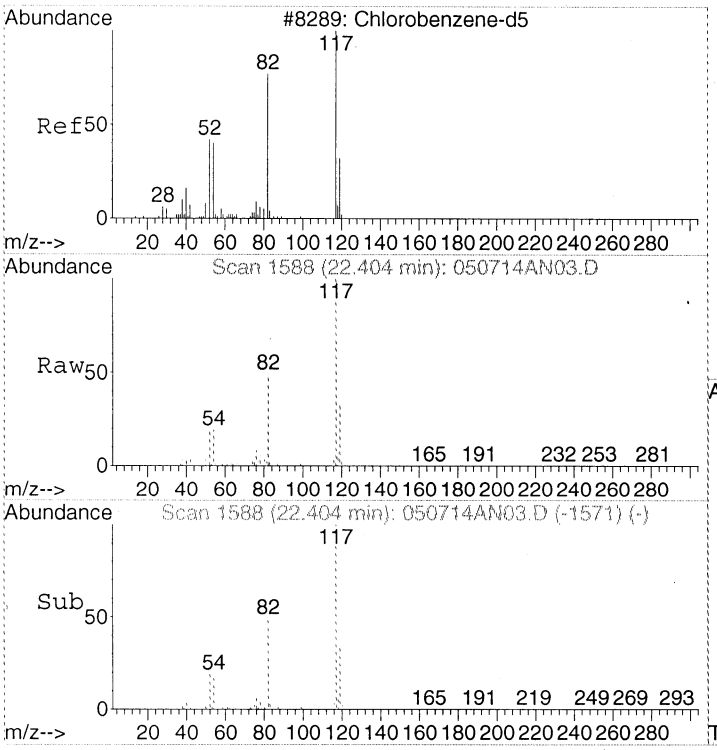


#42
4-Methyl-2-pentanone (MIBK)
Concen: 11.16 ppbv
RT: 19.87 min Scan# 1374
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 43 Resp: 298398

Ion	Ratio	Lower	Upper
43	100		
58	40.2	20.2	60.2
100	24.3	4.3	44.3

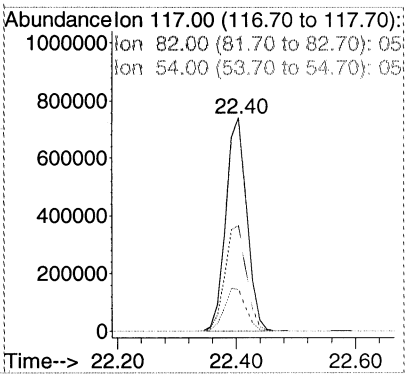


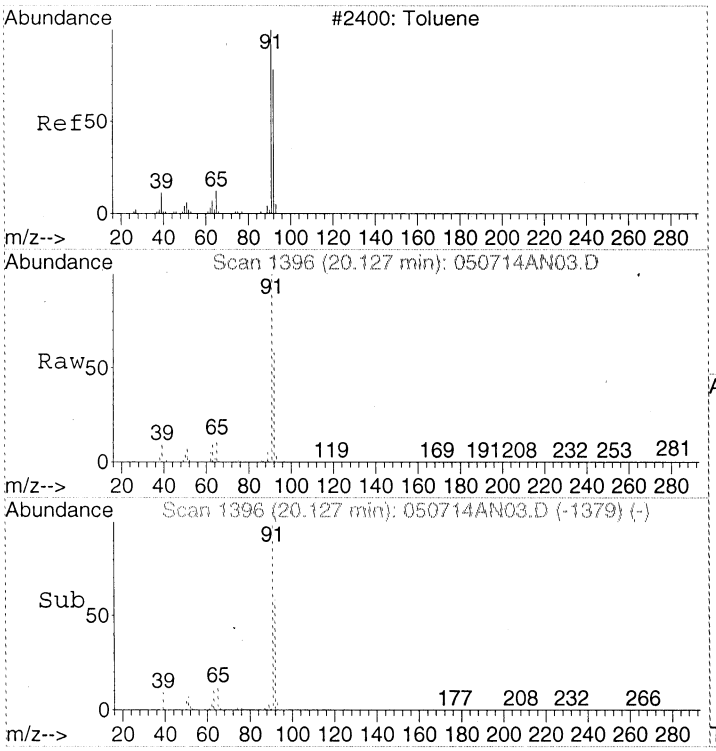


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.40 min Scan# 1588
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:117 Resp: 1811311

Ion	Ratio	Lower	Upper
117	100		
82	50.5	30.5	70.5
54	20.6	0.6	40.6

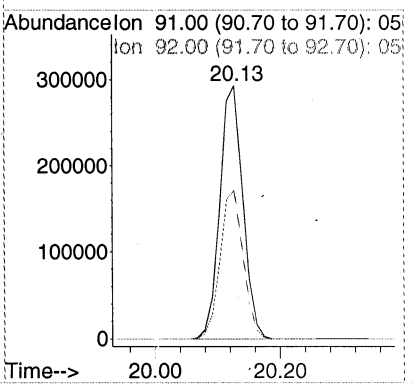




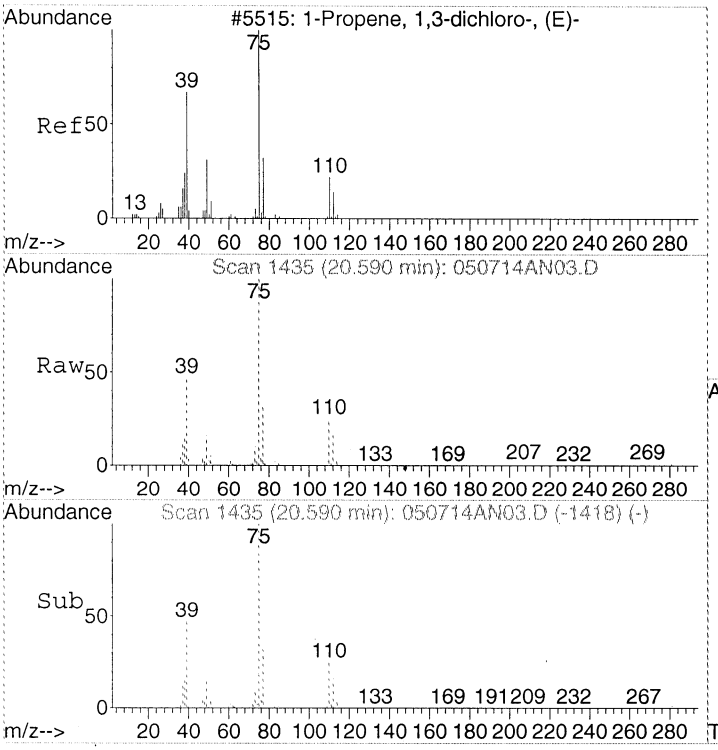
#44
Toluene
Concen: 9.51 ppbv
RT: 20.13 min Scan# 1396
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 91 Resp: 748450

Ion	Ratio	Lower	Upper
91	100		
92	58.5	38.5	78.5



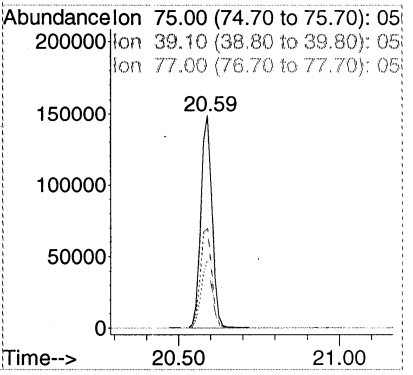
00066

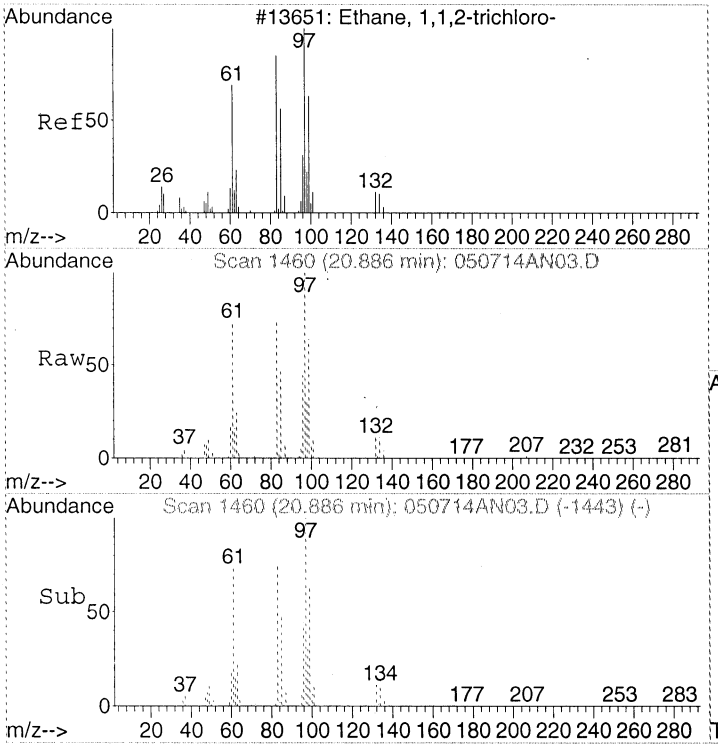


#45
trans-1,3-Dichloropropene
Concen: 9.77 ppbv
RT: 20.59 min Scan# 1435
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 75 Resp: 359612

Ion	Ratio	Lower	Upper
75	100		
39	48.6	28.6	68.6
77	31.0	11.0	51.0

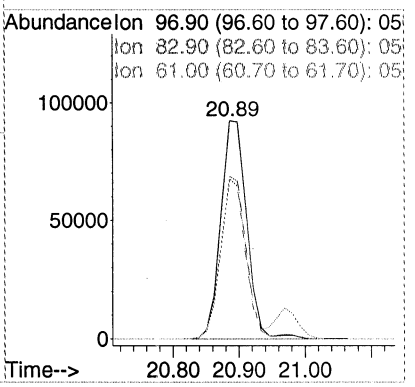


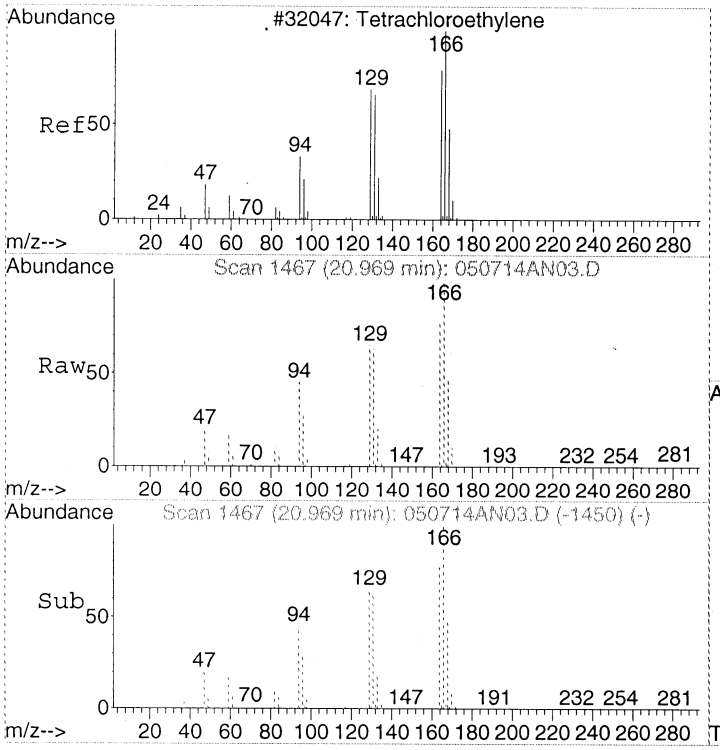


#46
1,1,2-Trichloroethane
Concen: 9.15 ppbv
RT: 20.89 min Scan# 1460
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 97 Resp: 250701

Ion	Ratio	Lower	Upper
97	100		
83	73.7	53.7	93.7
61	70.0	50.0	90.0

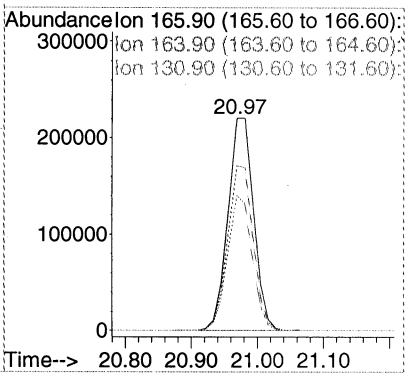


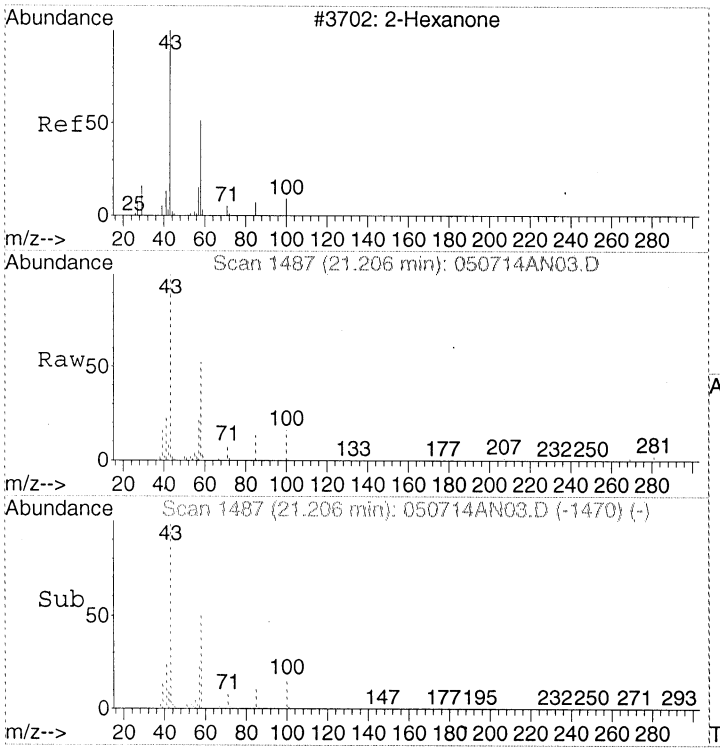


#47
Tetrachloroethene
Concen: 9.85 ppbv
RT: 20.97 min Scan# 1467
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:166 Resp: 593306

Ion	Ratio	Lower	Upper
166	100		
164	77.0	57.0	97.0
131	61.3	41.3	81.3

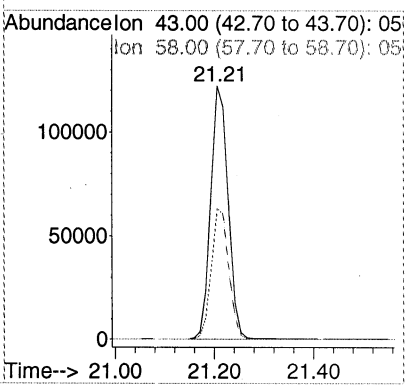




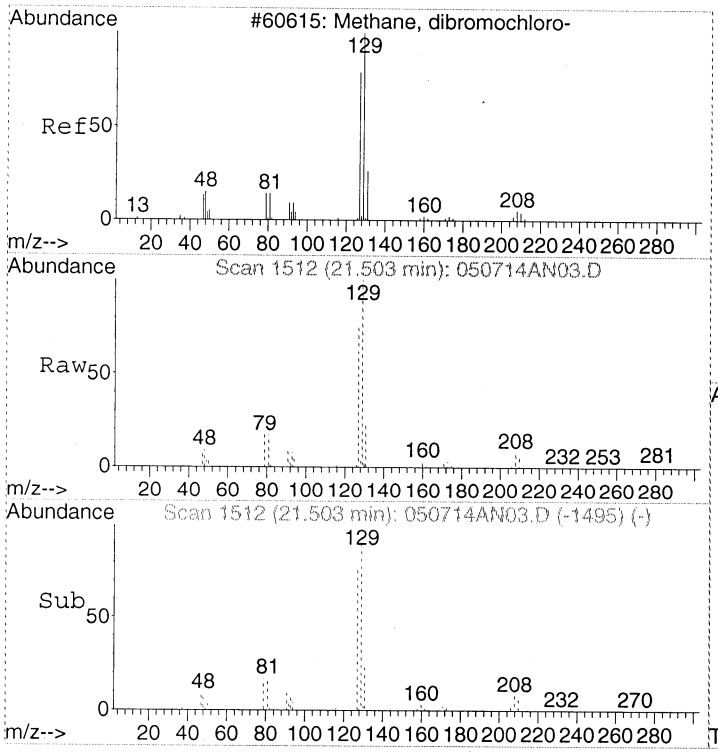
#48
2-Hexanone
Concen: 10.97 ppbv
RT: 21.21 min Scan# 1487
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 43 Resp: 299088

Ion	Ratio	Lower	Upper
43	100		
58	51.5	31.5	71.5



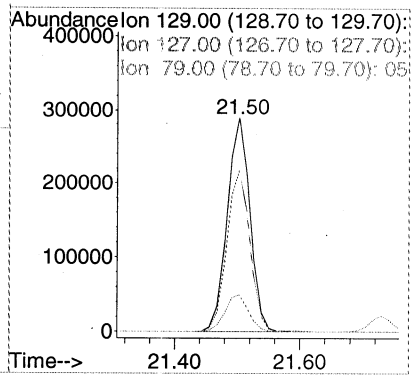
00066

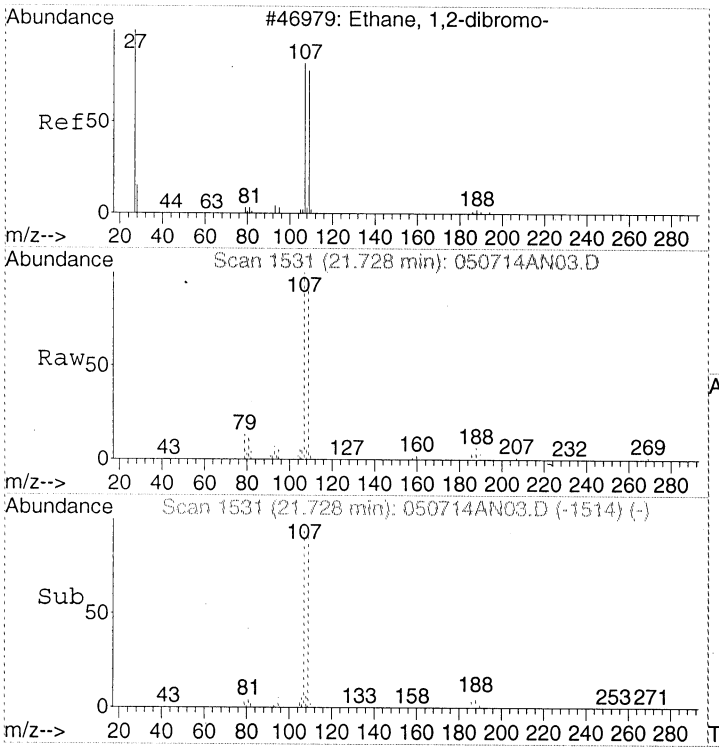


#49
Chlorodibromomethane
Concen: 10.84 ppbv
RT: 21.50 min Scan# 1512
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:129 Resp: 726806

Ion	Ratio	Lower	Upper
129	100		
127	76.5	56.5	96.5
79	17.7	0.0	37.7

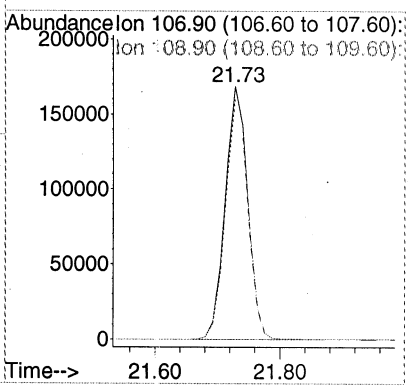


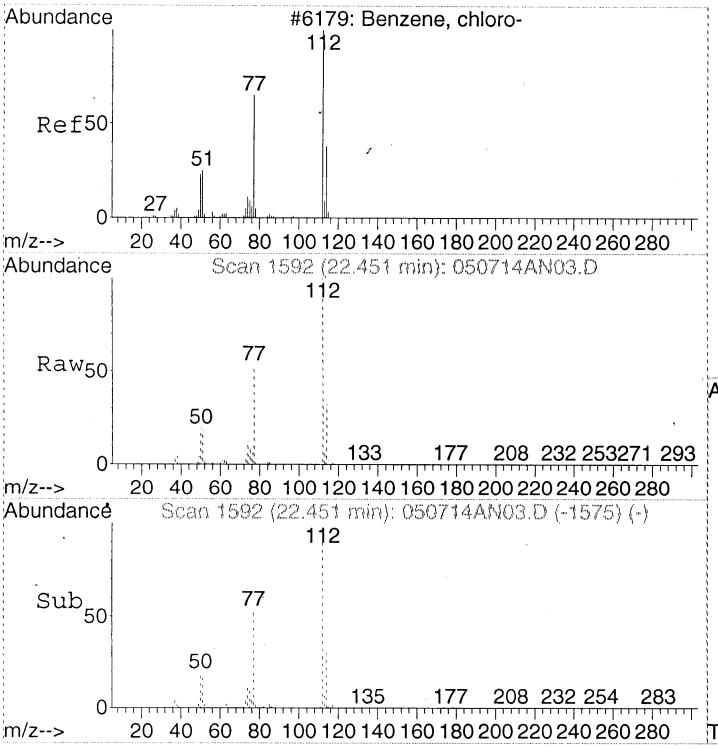


#50
1,2-Dibromoethane (EDB)
Concen: 9.06 ppbv
RT: 21.73 min Scan# 1531
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:107 Resp: 419507

Ion	Ratio	Lower	Upper
107	100		
109	95.4	75.4	115.4

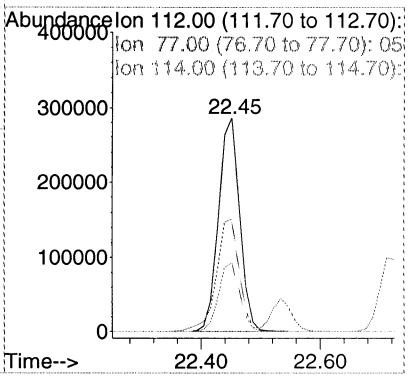


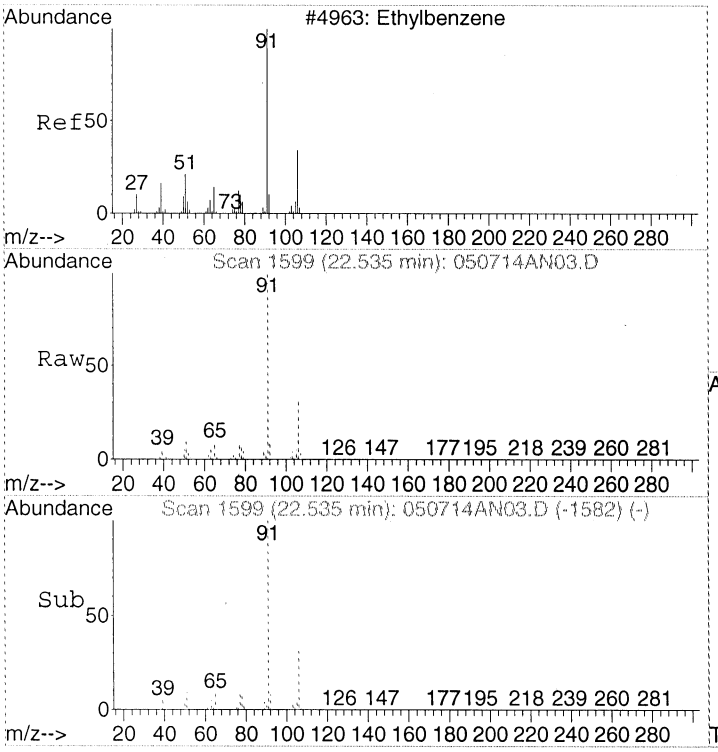


#51
Chlorobenzene
Concen: 9.70 ppbv
RT: 22.45 min Scan# 1592
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:112 Resp: 705560

Ion	Ratio	Lower	Upper
112	100		
77	57.0	37.0	77.0
114	32.5	12.5	52.5

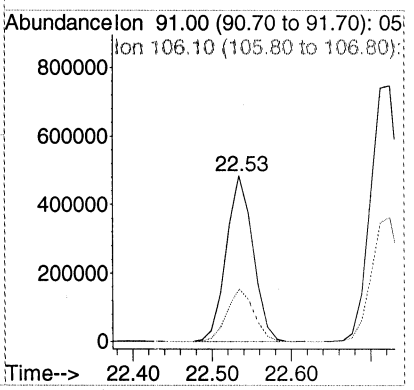


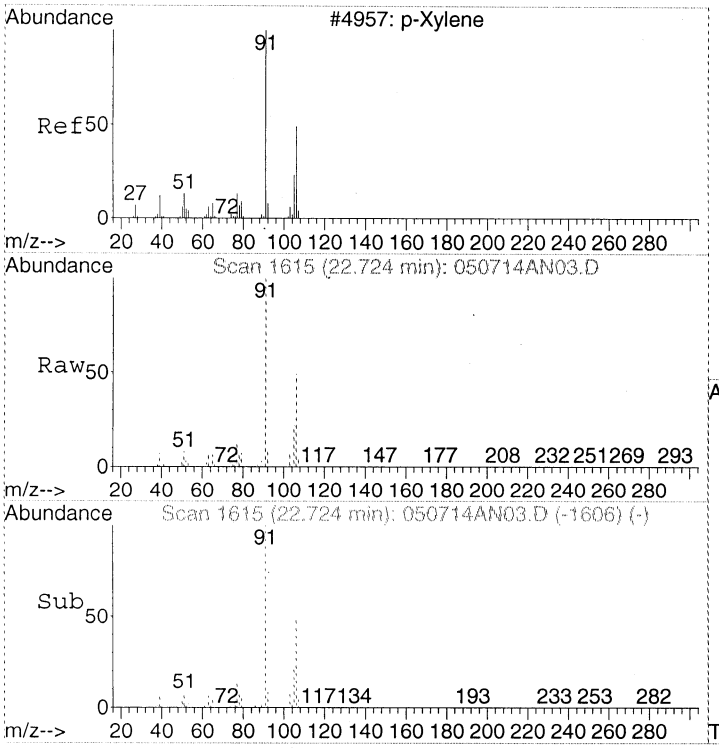


#52
Ethylbenzene
Concen: 9.97 ppbv
RT: 22.53 min Scan# 1599
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 91 Resp: 1134967

Ion	Ratio	Lower	Upper
91	100		
106	31.8	11.8	51.8

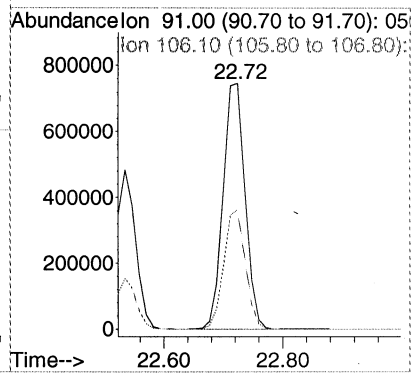


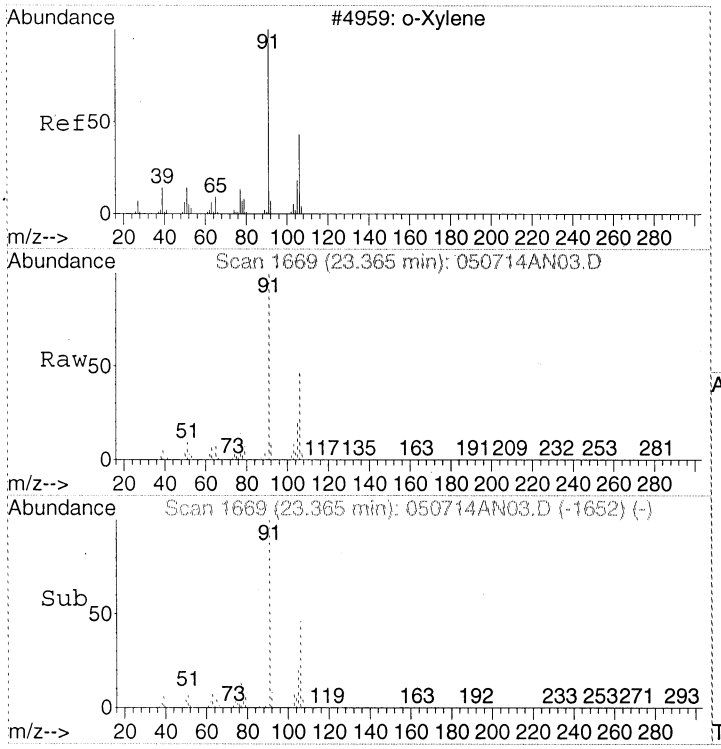


#53
m&p-Xylene
Concen: 20.43 ppbv
RT: 22.72 min Scan# 1615
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 91 Resp: 1911868

Ion	Ratio	Lower	Upper
91	100		
106	47.7	27.7	67.7

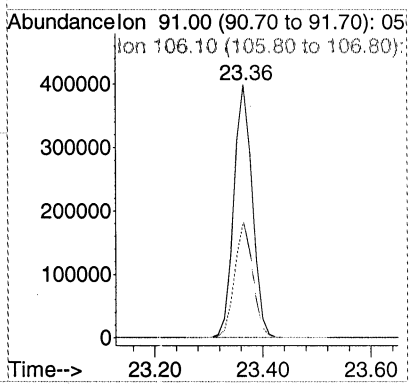


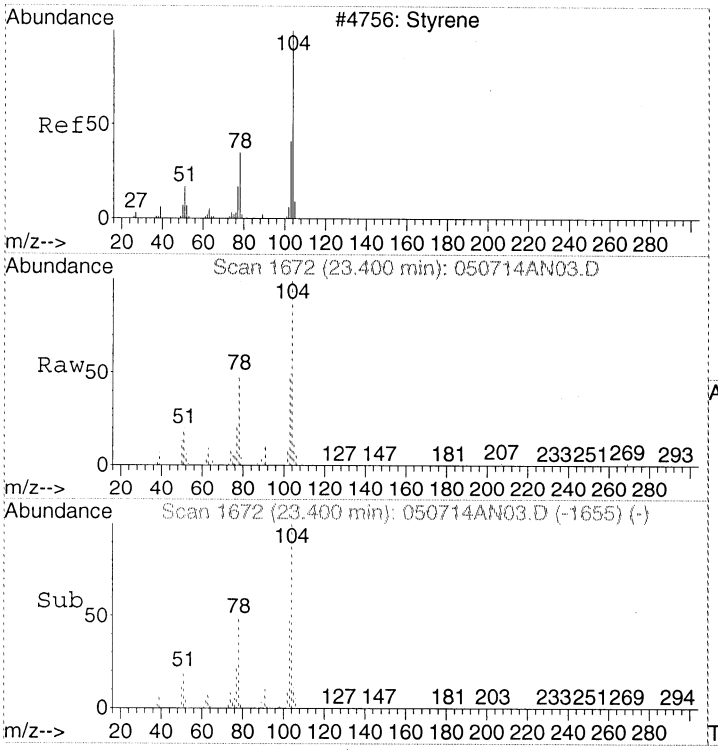


#54
o-Xylene
Concen: 10.11 ppbv
RT: 23.36 min Scan# 1669
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 91 Resp: 945543

Ion	Ratio	Lower	Upper
91	100		
106	45.0	25.0	65.0

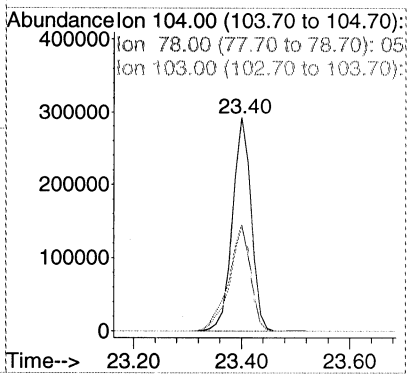


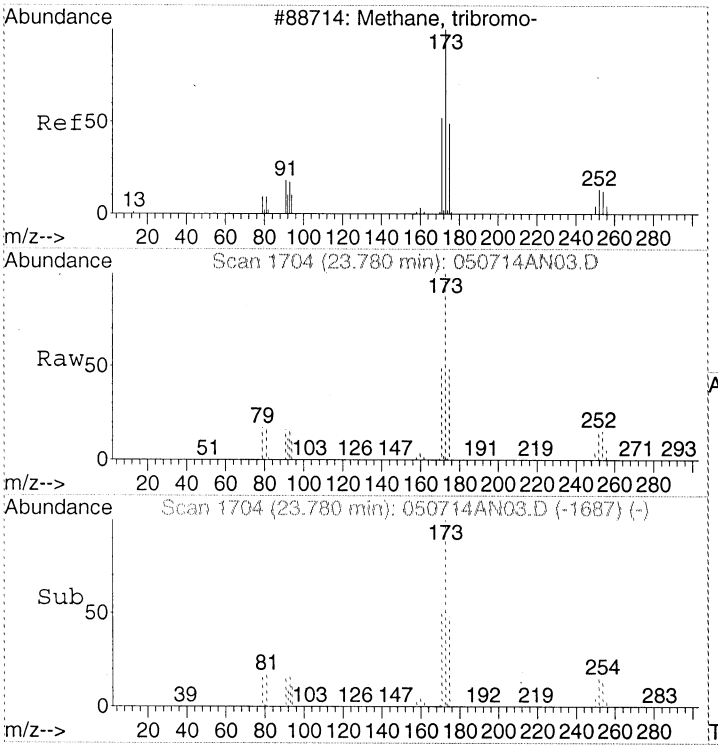


#55
Styrene
Concen: 9.62 ppbv
RT: 23.40 min Scan# 1672
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:104 Resp: 700269

Ion	Ratio	Lower	Upper
104	100		
78	57.6	37.6	77.6
103	55.2	35.2	75.2

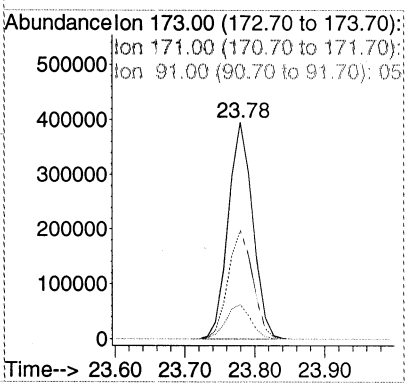


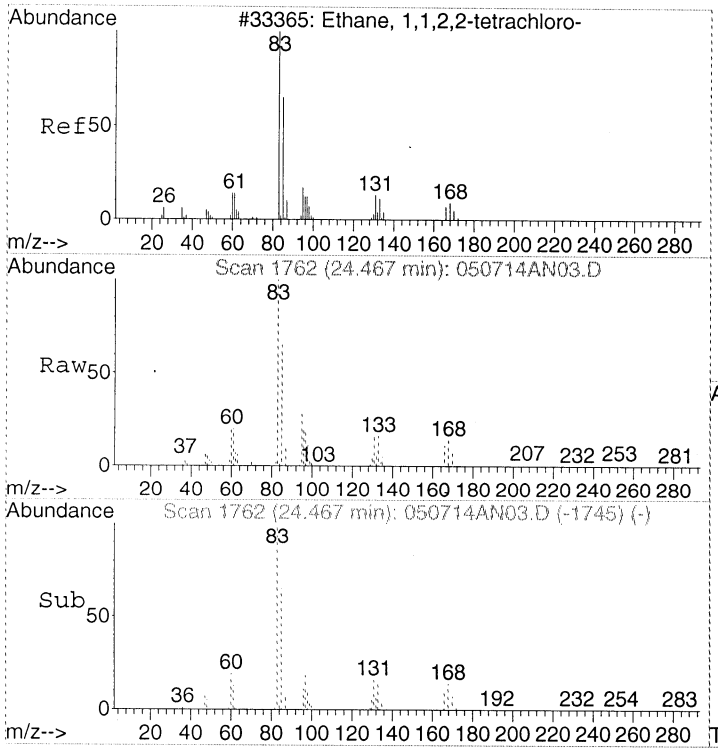


#56
Bromoform
Concen: 11.33 ppbv
RT: 23.78 min Scan# 1704
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:173 Resp: 956684

Ion	Ratio	Lower	Upper
173	100		
171	50.3	30.3	70.3
91	16.0	0.0	36.0

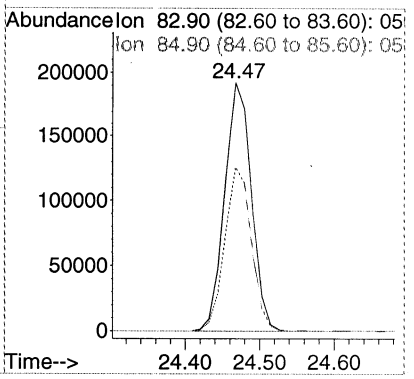


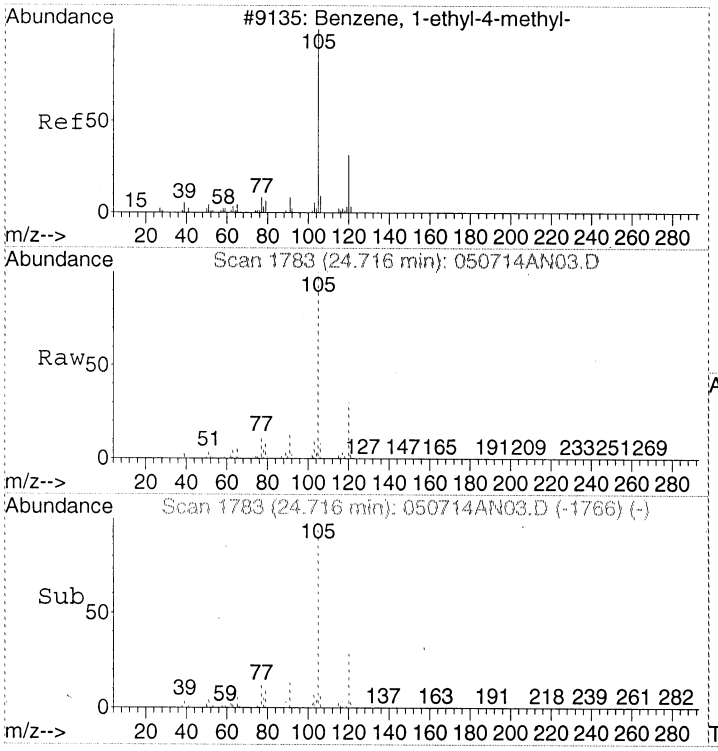


#57
1,1,2,2-Tetrachloroethane
Concen: 8.74 ppbv
RT: 24.47 min Scan# 1762
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 83 Resp: 473805

Ion	Ratio	Lower	Upper
83	100		
85	65.1	45.1	85.1

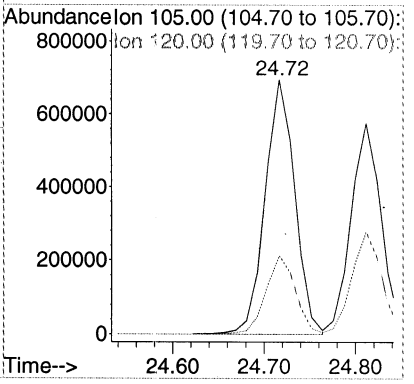


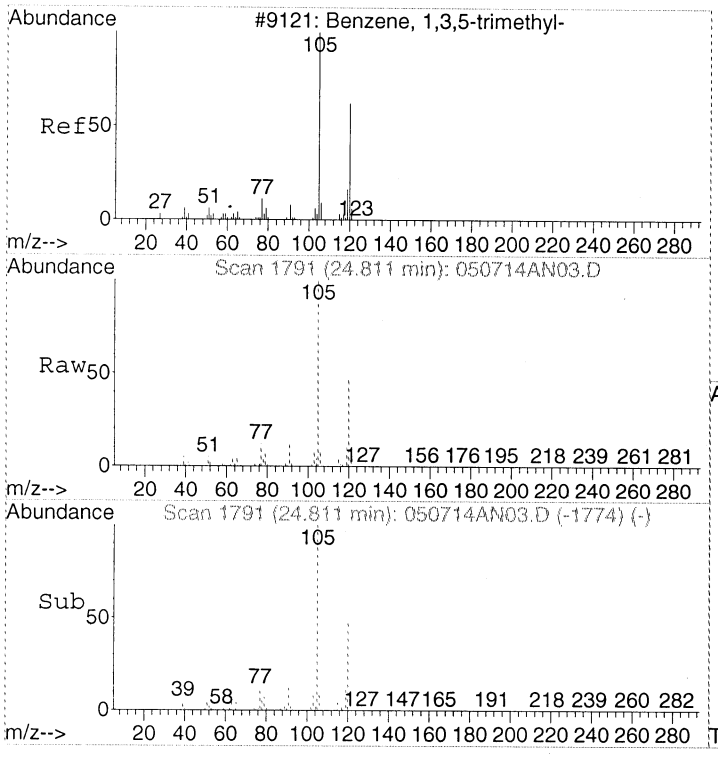


#58
4-Ethyltoluene
Concen: 10.97 ppbv
RT: 24.72 min Scan# 1783
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:105 Resp: 1552361

Ion	Ratio	Lower	Upper
105	100		
120	30.6	10.6	50.6

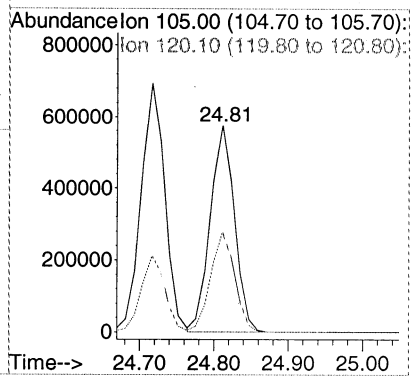


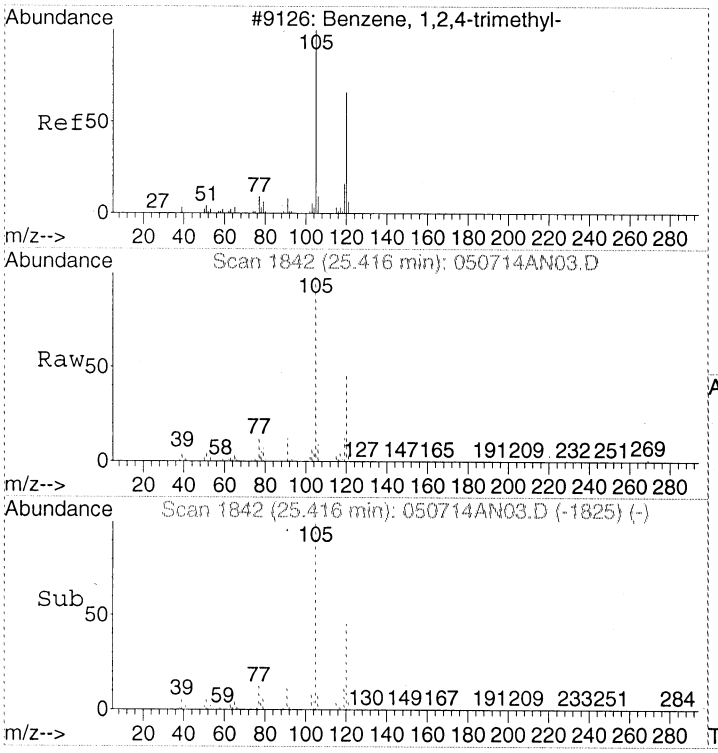


#59
1,3,5-Trimethylbenzene
Concen: 10.39 ppbv
RT: 24.81 min Scan# 1791
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:105 Resp: 1295002

Ion	Ratio	Lower	Upper
105	100		
120	48.1	28.1	68.1

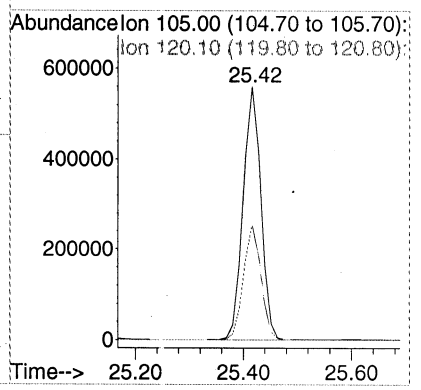


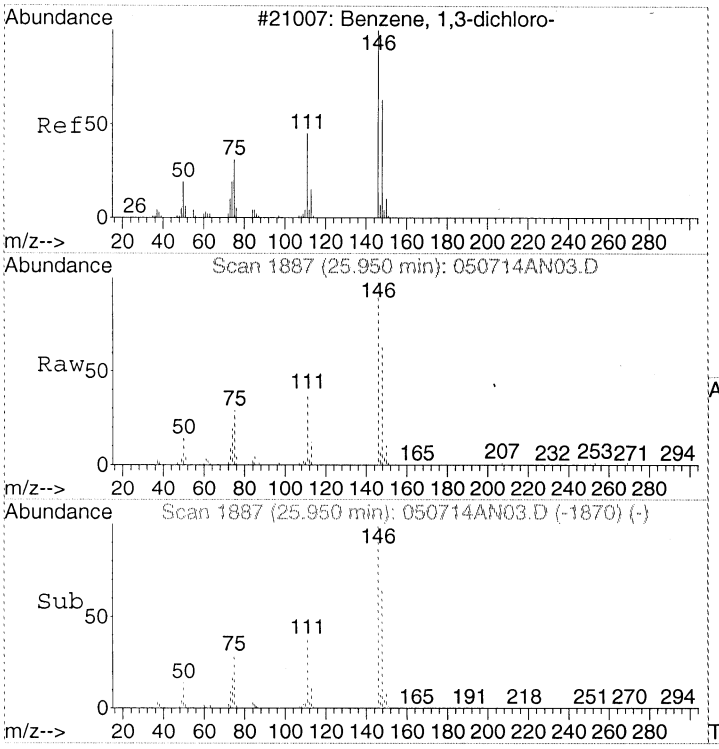


#60
1,2,4-Trimethylbenzene
Concen: 10.06 ppbv
RT: 25.42 min Scan# 1842
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:105 Resp: 1277473

Ion	Ratio	Lower	Upper
105	100		
120	44.6	24.6	64.6

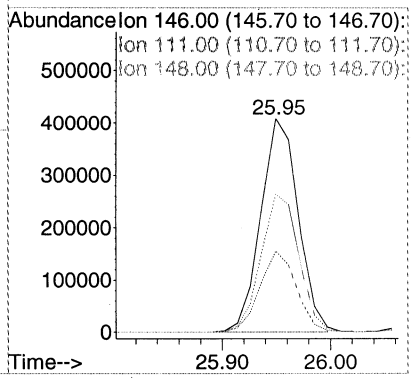


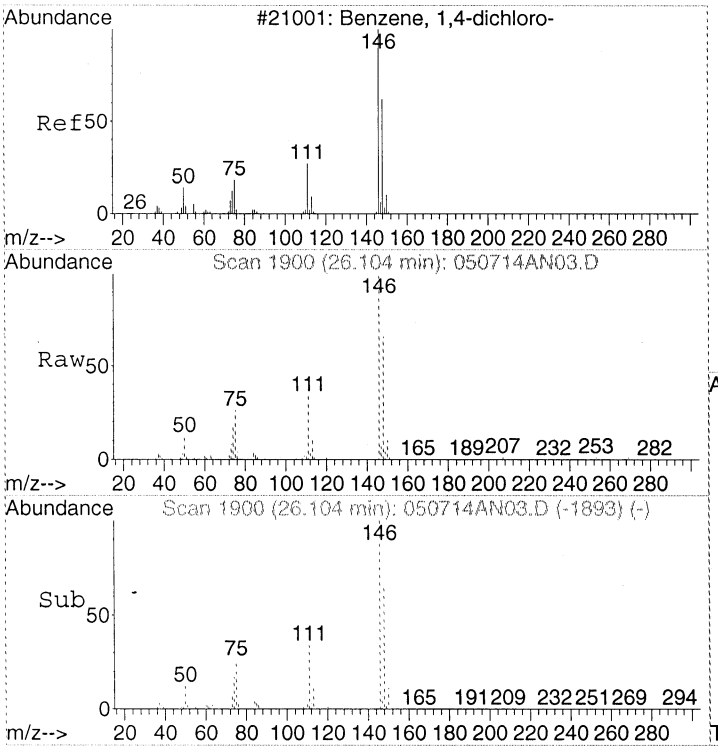


#61
1,3-Dichlorobenzene
Concen: 9.58 ppbv
RT: 25.95 min Scan# 1887
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:146 Resp: 978042

Ion	Ratio	Lower	Upper
146	100		
111	37.0	17.0	57.0
148	65.0	45.0	85.0

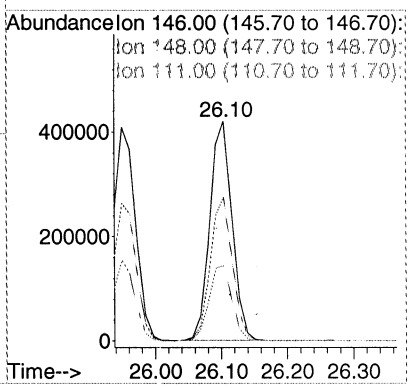


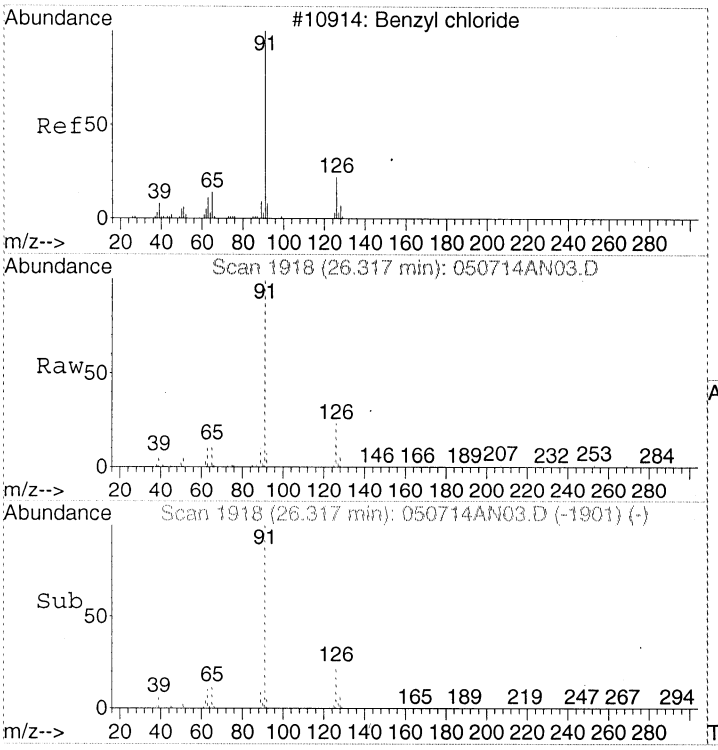


#62
1,4-Dichlorobenzene
Concen: 9.56 ppbv
RT: 26.10 min Scan# 1900
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:146 Resp: 975328

Ion	Ratio	Lower	Upper
146	100		
148	64.9	44.9	84.9
111	35.4	15.4	55.4

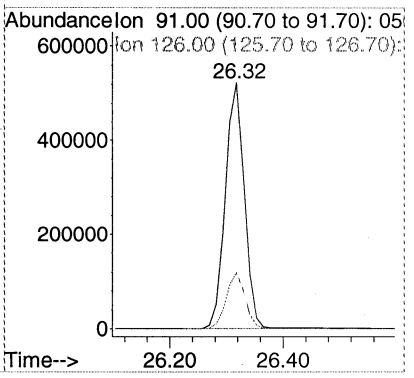


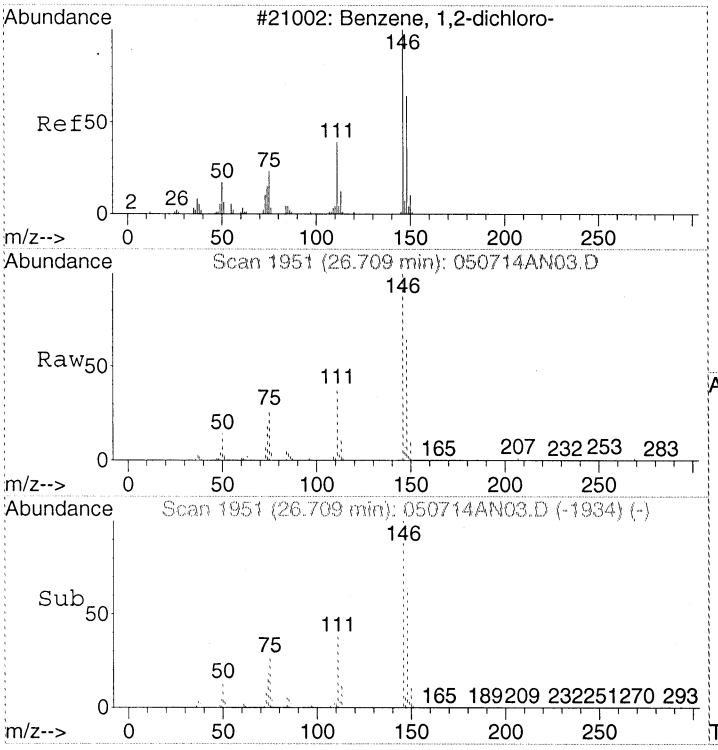


#63
Benzyl chloride
Concen: 10.87 ppbv
RT: 26.32 min Scan# 1918
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion: 91 Resp: 1215471

Ion	Ratio	Lower	Upper
91	100		
126	22.7	2.7	42.7

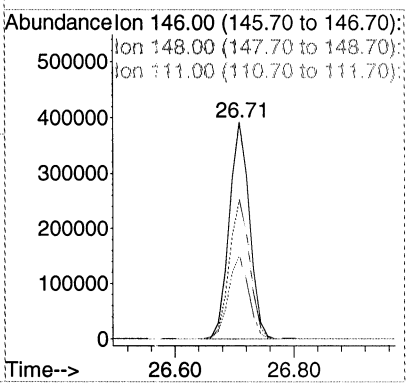


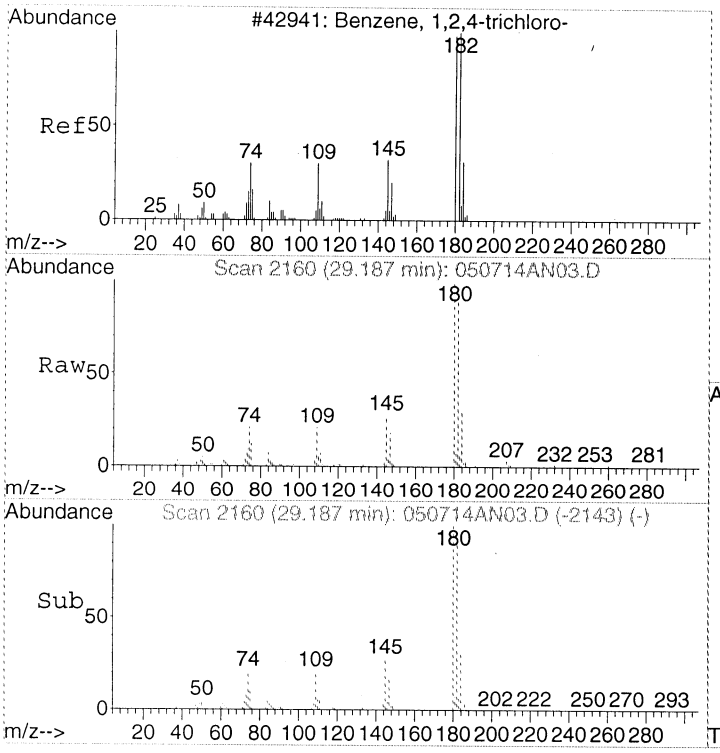


#64
1,2-Dichlorobenzene
Concen: 9.29 ppbv
RT: 26.71 min Scan# 1951
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:146 Resp: 924652

Ion	Ratio	Lower	Upper
146	100		
148	64.6	44.6	84.6
111	38.1	18.1	58.1

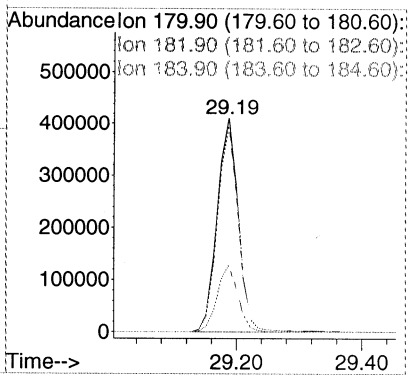


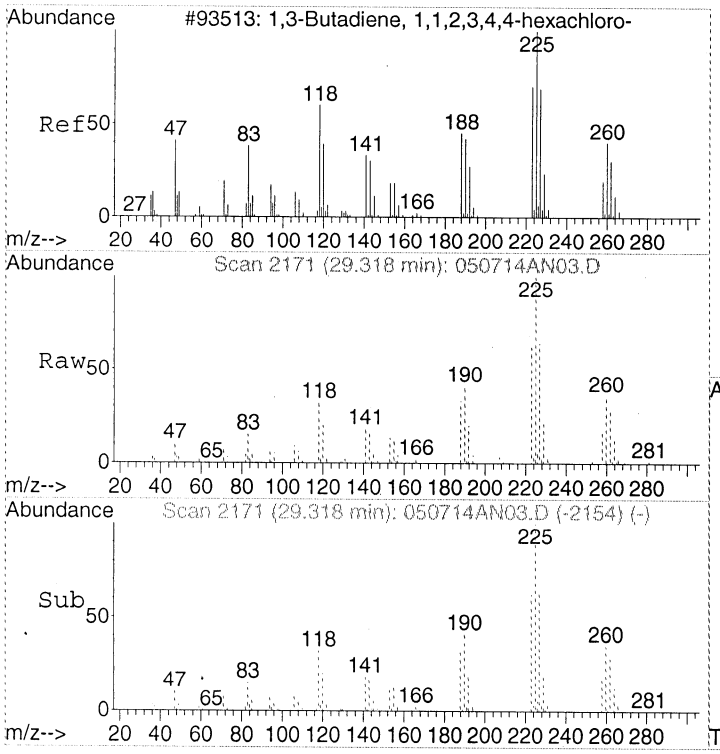


#65
1,2,4-Trichlorobenzene
Concen: 7.67 ppbv
RT: 29.19 min Scan# 2160
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:180 Resp: 964006

Ion	Ratio	Lower	Upper
180	100		
182	96.1	76.1	116.1
184	30.6	10.6	50.6

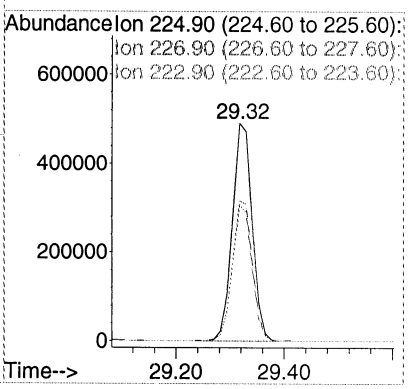




#66
Hexachlorobutadiene
Concen: 8.70 ppbv
RT: 29.32 min Scan# 2171
Delta R.T. 0.00 min
Lab File: 050714AN03.D
Acq: 7 May 2014 5:10 pm

Tgt Ion:225 Resp: 1240596

Ion	Ratio	Lower	Upper
225	100		
227	65.0	45.0	85.0
223	62.0	42.0	82.0



LSC Area Percent Report

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: lscint.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 : I:\DATA\ROOM201\AG5973N\2014\METHOD\050714TO15HNAA.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	4.474	70	76	80	rBV	92552	252142	2.94%	0.207%
2	4.569	80	84	93	rVB	347023	930040	10.85%	0.764%
3	4.925	108	114	125	rBV	369085	1179758	13.77%	0.969%
4	5.126	125	131	138	rVB	44481	137038	1.60%	0.113%
5	5.458	152	159	163	rBV	64768	204127	2.38%	0.168%
6	5.553	163	167	175	rVB	115495	347908	4.06%	0.286%
7	6.502	238	247	256	rBV	129285	468963	5.47%	0.385%
8	6.834	269	275	282	rBV	36275	137760	1.61%	0.113%
9	7.427	316	325	330	rBV	132328	541183	6.32%	0.445%
10	7.569	330	337	348	rVB	363220	1689018	19.71%	1.387%
11	9.419	477	493	514	rVB2	368712	3178273	37.09%	2.611%
12	10.012	535	543	552	rBV2	58089	311429	3.63%	0.256%
13	10.214	552	560	573	rVB	121498	579159	6.76%	0.476%
14	10.593	583	592	604	rBV	52785	273385	3.19%	0.225%
15	11.032	618	629	638	rBV2	116183	530885	6.20%	0.436%
16	11.554	664	673	684	rBV	122935	526544	6.15%	0.433%
17	12.241	717	731	747	rBV2	317674	1964590	22.93%	1.614%
18	12.846	773	782	791	rBV	207111	852537	9.95%	0.700%
19	13.581	837	844	850	rBV	158172	579448	6.76%	0.476%
20	13.712	850	855	866	rVB	122405	404898	4.73%	0.333%
21	15.004	954	964	968	rBV	240803	788092	9.20%	0.647%
22	15.123	968	974	983	rVB2	170626	856577	10.00%	0.704%
23	15.538	1001	1009	1016	rBV	877377	2720903	31.76%	2.235%
24	15.692	1016	1022	1033	rVV	373218	1197675	13.98%	0.984%
25	15.965	1033	1045	1055	rVV2	556266	2886832	33.69%	2.371%
26	16.226	1058	1067	1075	rBV	684899	2352889	27.46%	1.933%
27	16.665	1094	1104	1106	rBV	467552	1706812	19.92%	1.402%
28	16.902	1118	1124	1130	rBV	250506	717764	8.38%	0.590%
29	17.044	1130	1136	1149	rVB	432052	1277331	14.91%	1.049%
30	17.518	1169	1176	1186	rBV	1632997	4508251	52.62%	3.703%
31	17.922	1204	1210	1221	rBV	644545	1796941	20.97%	1.476%
32	18.420	1246	1252	1259	rBV	353549	1040819	12.15%	0.855%
33	18.609	1262	1268	1277	rBV	87144	265112	3.09%	0.218%
34	18.882	1285	1291	1298	rBV	646086	1721414	20.09%	1.414%
35	19.641	1350	1355	1361	rBV	451108	1140471	13.31%	0.937%
36	19.866	1368	1374	1381	rBV	390792	1006071	11.74%	0.826%
37	20.127	1389	1396	1407	rBV	711092	1855850	21.66%	1.524%
38	20.590	1430	1435	1442	rVB	477398	1153687	13.47%	0.948%

LSC Area Percent Report

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: lscint.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 : I:\DATA\ROOM201\AG5973N\2014\METHOD\050714TO15HNAA.M
Title : TO15

39	20.886	1455	1460	1464	rBV	557991	1537174	17.94%	1.263%
40	20.969	1464	1467	1474	rVB	1226237	3159722	36.88%	2.596%
41	21.206	1482	1487	1498	rBV	364806	921273	10.75%	0.757%
42	21.503	1506	1512	1517	rBV	942905	2406680	28.09%	1.977%
43	21.728	1525	1531	1538	rBV	477102	1193468	13.93%	0.980%
44	22.404	1582	1588	1591	rBV	2198438	6441323	75.18%	5.291%
45	22.535	1595	1599	1609	rVV	1129790	2688563	31.38%	2.208%
46	22.724	1609	1615	1624	rVV	2083351	5382462	62.82%	4.421%
47	23.365	1663	1669	1671	rBV	1153937	3280470	38.29%	2.695%
48	23.780	1698	1704	1711	rBV	1359322	3350339	39.10%	2.752%
49	24.064	1722	1728	1735	rVB	30564	95499	1.11%	0.078%
50	24.254	1738	1744	1752	rVV	3062171	7630512	89.06%	6.268%
51	24.467	1757	1762	1768	rBV	849824	2127890	24.84%	1.748%
52	24.716	1776	1783	1787	rBV	1717724	3874179	45.22%	3.182%
53	24.811	1787	1791	1797	rVB	1591885	3628676	42.35%	2.981%
54	25.416	1837	1842	1853	rBV	1549608	3607785	42.11%	2.964%
55	25.950	1882	1887	1893	rBV	1515774	3603169	42.05%	2.960%
56	26.104	1894	1900	1907	rVV	1483471	3580588	41.79%	2.941%
57	26.317	1913	1918	1925	rBV	1176205	2762796	32.25%	2.269%
58	26.709	1946	1951	1956	rBV	1440135	3434132	40.08%	2.821%
59	29.187	2155	2160	2166	rVV	1831684	4380155	51.12%	3.598%
60	29.318	2166	2171	2177	rVB	3438785	8567962	100.00%	7.038%

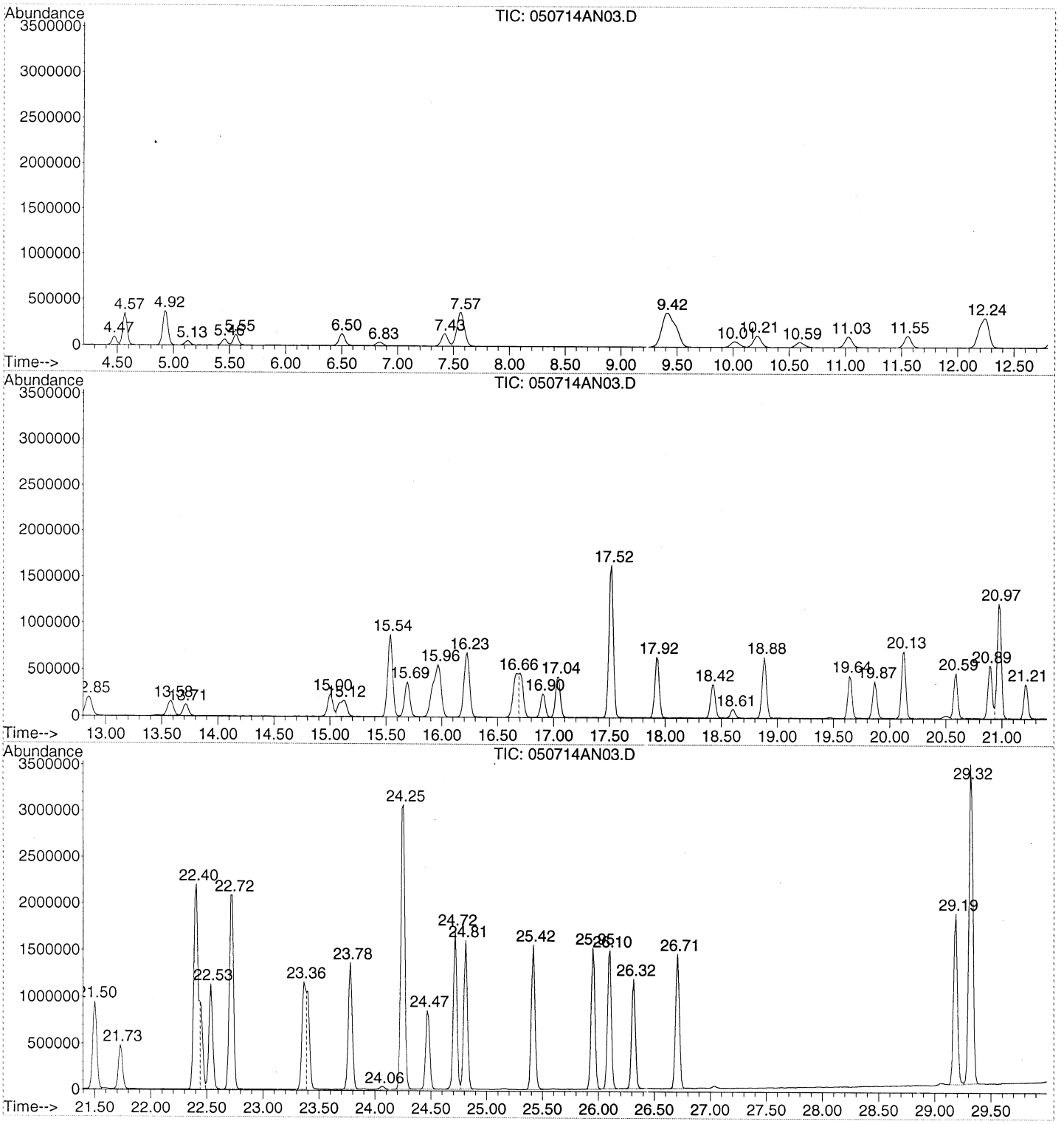
Sum of corrected areas: 121737393

LSC Report - Integrated Chromatogram

Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\
Data File : 050714AN03.D
Acq On : 7 May 2014 5:10 pm
Operator : EM
Sample : S14E034-CAL4
Misc : 10ppbv
ALS Vial : 32 Sample Multiplier: 1

Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M
Quant Title : TO15

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



Tentatively Identified Compound (LSC) summary

```
Data Path : I:\DATA\ROOM201\AG5973N\2014\DATA\050714TO15NA\\
Data File : 050714AN03.D
Acq On    :  7 May 2014   5:10 pmm
Operator  : EMM
Sample    : S14E034-CAL44
Misc      : 10ppbv
ALS Vial  : 32   Sample Multiplier: 11

Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.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 : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN04.D
Acq On : 7 May 2014 5:58 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL1
Misc : 1 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:12 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	294803	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1775548	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1538749	22.00 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.474	41	6893	1.071 ppbv	94
3) Dichlorodifluoromethane	4.569	85	55896	0.993 ppbv	97
4) 1,2-Dichlorotetrafluoroeth	4.924	85	39359	0.965 ppbv	100
5) Chloromethane	5.126	50	7436	0.903 ppbv	97
6) Vinyl chloride	5.446	62	10823	0.929 ppbv	99
7) 1,3-Butadiene	5.553	54	8407	1.101 ppbv	99
8) Bromomethane	6.502	94	15714	1.032 ppbv	97
9) Chloroethane	6.834	64	6587	1.028 ppbv	91
10) Bromoethene	7.415	106	19198	1.174 ppbv	99
11) Trichlorofluoromethane	7.557	101	75455	1.119 ppbv	98
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	46980	1.059 ppbv	99
13) 1,1-Dichloroethene	9.490	61	26689	1.051 ppbv	97
14) Acetone	10.024	43	19341	1.114 ppbv	100
15) Carbon disulfide	10.213	76	44581	1.216 ppbv #	71
16) 2-Propanol	10.593	45	13369	0.943 ppbv #	44
17) Allyl chloride	11.032	41	12632	1.139 ppbv	98
18) Dichloromethane	11.553	49	20938	1.360 ppbv	98
19) tert-Butyl methyl ether (M	12.217	73	46081	1.069 ppbv	99
20) trans-1,2-Dichloroethene	12.253	61	23175	1.188 ppbv	95
21) Hexane	12.846	57	17607	1.069 ppbv	99
22) 1,1-Dichloroethane	13.569	63	27588	1.030 ppbv	98
23) Vinyl acetate	13.712	43	24501	1.032 ppbv	98
24) cis-1,2-Dichloroethene	14.992	61	20214	0.967 ppbv	95
25) 2-Butanone (MEK)	15.087	72	6240	1.015 ppbv #	100
26) Ethyl acetate	15.135	61	3452	1.016 ppbv #	93
27) Tetrahydrofuran	15.538	42	9452	0.977 ppbv	97
28) Chloroform	15.692	83	48347	1.139 ppbv	96
29) Cyclohexane	15.917	56	19295	1.112 ppbv	99
30) 1,1,1-Trichloroethane	15.965	97	62957	1.123 ppbv	100
31) Carbon tetrachloride	16.226	117	77625	1.193 ppbv	97
33) Benzene	16.712	78	49661	0.996 ppbv	98
34) 2,2,4-Trimethylpentane	16.664	57	61226	1.098 ppbv	97
35) 1,2-Dichloroethane	16.902	62	34660	1.084 ppbv	99
36) Heptane	17.032	43	20278	1.137 ppbv	99
37) Trichloroethene	17.921	130	32720	1.038 ppbv	96
38) 1,2-Dichloropropane	18.419	63	14325	1.003 ppbv	98
39) 1,4-Dioxane	18.609	88	9264	0.988 ppbv	99
40) Bromodichloromethane	18.882	83	57756	1.210 ppbv	99
41) cis-1,3-Dichloropropene	19.641	75	30031	1.031 ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	25032	1.037 ppbv	98
44) Toluene	20.127	91	69273	1.036 ppbv	100
45) trans-1,3-Dichloropropene	20.590	75	31193	0.997 ppbv	98
46) 1,1,2-Trichloroethane	20.886	97	24678	1.060 ppbv	98
47) Tetrachloroethene	20.969	166	56135	1.097 ppbv	99
48) 2-Hexanone	21.206	43	24884	1.075 ppbv	100
49) Chlorodibromomethane	21.503	129	67700	1.189 ppbv	99

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN04.D
Acq On : 7 May 2014 5:58 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL1
Misc : 1 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:12 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	37906	0.963 ppbv	99
51) Chlorobenzene	22.439	112	62804	1.016 ppbv #	76
52) Ethylbenzene	22.534	91	93165	0.964 ppbv	100
53) m&p-Xylene	22.712	91	156077	1.963 ppbv	99
54) o-Xylene	23.364	91	76959	0.969 ppbv	98
55) Styrene	23.400	104	53792	0.870 ppbv	99
56) Bromoform	23.779	173	77847	1.086 ppbv	98
57) 1,1,2,2-Tetrachloroethane	24.467	83	39322	0.854 ppbv	99
58) 4-Ethyltoluene	24.716	105	130086	1.082 ppbv	99
59) 1,3,5-Trimethylbenzene	24.811	105	95088	0.898 ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	95750	0.888 ppbv	100
61) 1,3-Dichlorobenzene	25.950	146	78709	0.907 ppbv	99
62) 1,4-Dichlorobenzene	26.104	146	76699	0.885 ppbv	99
63) Benzyl chloride	26.317	91	97186	1.023 ppbv	99
64) 1,2-Dichlorobenzene	26.709	146	77732	0.919 ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	100167	0.938 ppbv	97
66) Hexachlorobutadiene	29.317	225	136318	1.125 ppbv	100

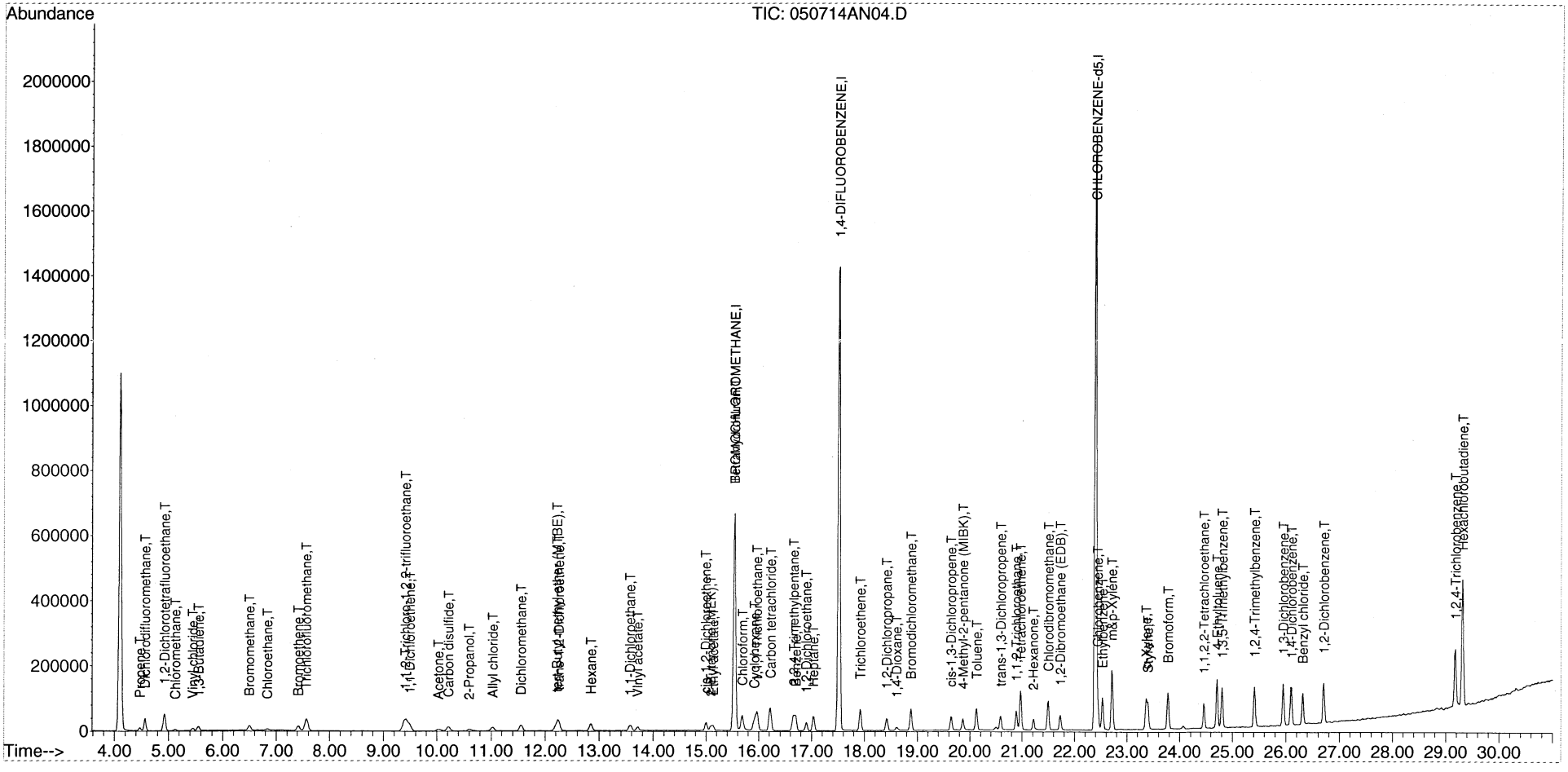
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN04.D
Acq On : 7 May 2014 5:58 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL1
Misc : 1 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:12 2014
Quant Title : TO15
QLast Update : Thu May 08 09:53:49 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN05.D
Acq On : 7 May 2014 6:46 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL2
Misc : 2 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:19 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	297674	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1768624	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1532112	22.00	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.474	41	14044	2.198	ppbv	97
3) Dichlorodifluoromethane	4.569	85	112822	2.023	ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.925	85	78819	1.977	ppbv	98
5) Chloromethane	5.126	50	15452	1.962	ppbv	99
6) Vinyl chloride	5.458	62	22515	2.008	ppbv	98
7) 1,3-Butadiene	5.553	54	16363	2.100	ppbv	99
8) Bromomethane	6.502	94	30402	2.031	ppbv	99
9) Chloroethane	6.834	64	12377	1.980	ppbv	97
10) Bromoethene	7.415	106	36747	2.213	ppbv	99
11) Trichlorofluoromethane	7.557	101	153504	2.273	ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.419	151	90089	2.015	ppbv	99
13) 1,1-Dichloroethene	9.490	61	49924	1.935	ppbv	99
14) Acetone	10.024	43	38888	2.292	ppbv	100
15) Carbon disulfide	10.213	76	82516	2.204	ppbv	99
16) 2-Propanol	10.605	45	22619	1.637	ppbv	93
17) Allyl chloride	11.032	41	24312	2.141	ppbv	99
18) Dichloromethane	11.553	49	33583	2.176	ppbv	96
19) tert-Butyl methyl ether (M	12.218	73	93559	2.120	ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	44562	2.215	ppbv	98
21) Hexane	12.846	57	32826	1.958	ppbv	95
22) 1,1-Dichloroethane	13.569	63	50327	1.874	ppbv	100
23) Vinyl acetate	13.712	43	48698	1.998	ppbv	99
24) cis-1,2-Dichloroethene	15.004	61	38957	1.884	ppbv	97
25) 2-Butanone (MEK)	15.087	72	12353	2.017	ppbv #	100
26) Ethyl acetate	15.123	61	7553	2.215	ppbv #	77
27) Tetrahydrofuran	15.538	42	18768	1.948	ppbv	96
28) Chloroform	15.692	83	90091	2.091	ppbv	98
29) Cyclohexane	15.917	56	37850	2.134	ppbv	99
30) 1,1,1-Trichloroethane	15.965	97	121754	2.138	ppbv	99
31) Carbon tetrachloride	16.226	117	149491	2.240	ppbv	100
33) Benzene	16.712	78	96050	1.969	ppbv	99
34) 2,2,4-Trimethylpentane	16.665	57	116873	2.078	ppbv	97
35) 1,2-Dichloroethane	16.902	62	66917	2.088	ppbv	98
36) Heptane	17.032	43	38584	2.132	ppbv	99
37) Trichloroethene	17.922	130	63529	2.030	ppbv	99
38) 1,2-Dichloropropane	18.420	63	25699	1.834	ppbv	96
39) 1,4-Dioxane	18.609	88	15953	1.770	ppbv	99
40) Bromodichloromethane	18.882	83	109585	2.250	ppbv	99
41) cis-1,3-Dichloropropene	19.641	75	56717	1.940	ppbv	100
42) 4-Methyl-2-pentanone (MIBK	19.866	43	49511	2.080	ppbv	98
44) Toluene	20.127	91	134874	2.017	ppbv	100
45) trans-1,3-Dichloropropene	20.590	75	62448	2.011	ppbv	100
46) 1,1,2-Trichloroethane	20.886	97	46976	2.026	ppbv	100
47) Tetrachloroethene	20.969	166	109202	2.099	ppbv	99
48) 2-Hexanone	21.206	43	48089	2.086	ppbv	99
49) Chlorodibromomethane	21.503	129	131640	2.254	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN05.D
Acq On : 7 May 2014 6:46 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL2
Misc : 2 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:19 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	74853	1.929 ppbv	98
51) Chlorobenzene	22.440	112	125420	2.028 ppbv	89
52) Ethylbenzene	22.534	91	195349	2.011 ppbv	100
53) m&p-Xylene	22.712	91	331369	4.123 ppbv	98
54) o-Xylene	23.365	91	160543	1.987 ppbv	100
55) Styrene	23.400	104	115164	1.851 ppbv	99
56) Bromoform	23.780	173	164815	2.239 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.467	83	81470	1.809 ppbv	99
58) 4-Ethyltoluene	24.716	105	269726	2.190 ppbv	99
59) 1,3,5-Trimethylbenzene	24.811	105	212697	1.991 ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	209529	1.924 ppbv	99
61) 1,3-Dichlorobenzene	25.950	146	166820	1.906 ppbv	99
62) 1,4-Dichlorobenzene	26.104	146	164566	1.885 ppbv	100
63) Benzyl chloride	26.317	91	202542	2.104 ppbv	99
64) 1,2-Dichlorobenzene	26.709	146	158063	1.865 ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	171785	1.597 ppbv	99
66) Hexachlorobutadiene	29.318	225	238652	1.934 ppbv	98

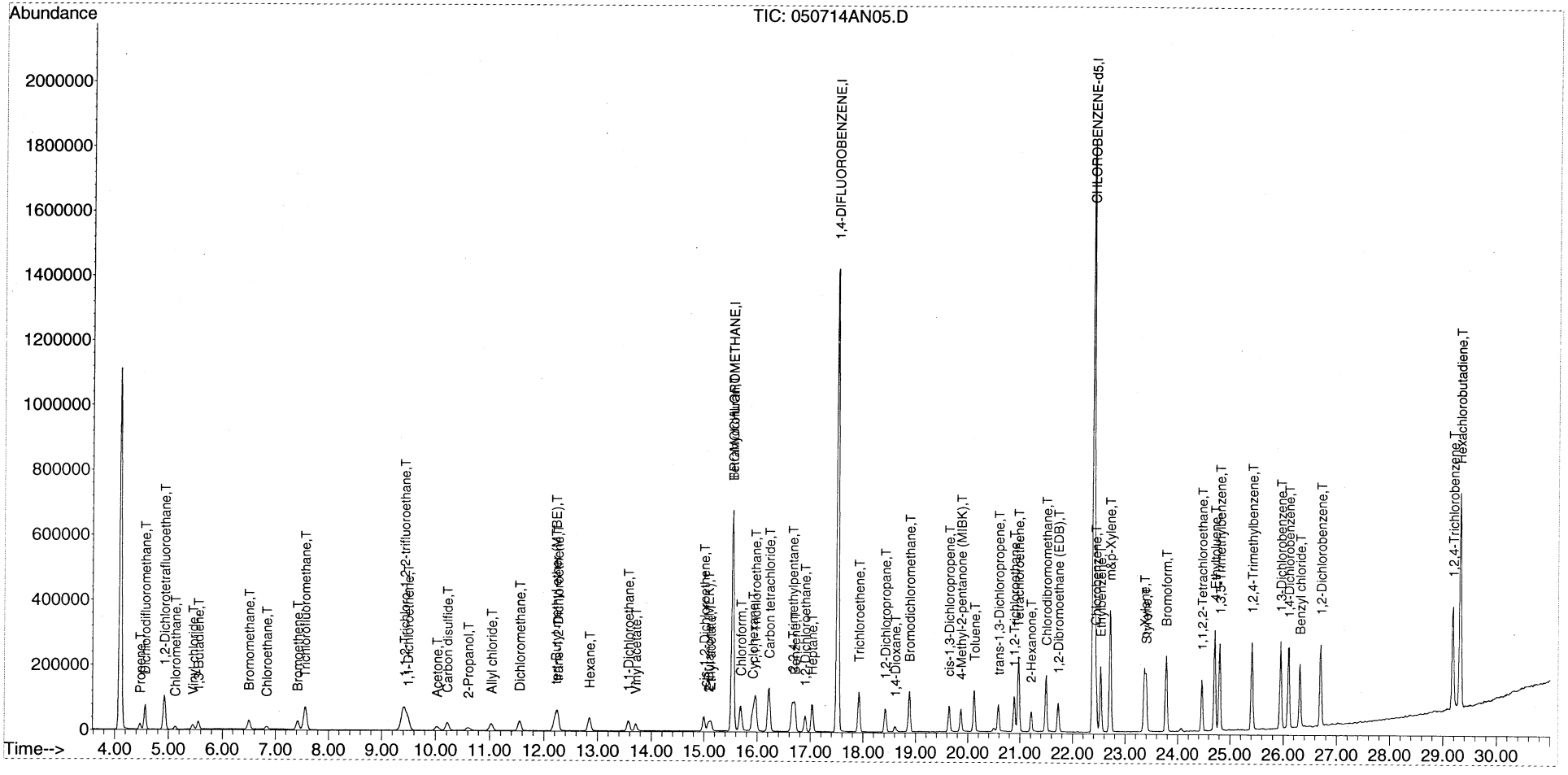
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN05.D
Acq On : 7 May 2014 6:46 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL2
Misc : 2 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:19 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN06.D
Acq On : 7 May 2014 7:35 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL3
Misc : 5 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:44 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:33 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	304384	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1790068	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1568110	22.00	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.474	41	36133	5.531	ppbv	98
3) Dichlorodifluoromethane	4.569	85	272557	4.881	ppbv	100
4) 1,2-Dichlorotetrafluoroeth	4.925	85	181694	4.626	ppbv	99
5) Chloromethane	5.126	50	38185	4.923	ppbv	99
6) Vinyl chloride	5.458	62	55326	4.974	ppbv	99
7) 1,3-Butadiene	5.553	54	40157	5.062	ppbv	97
8) Bromomethane	6.502	94	75688	5.055	ppbv	98
9) Chloroethane	6.846	64	31130	5.026	ppbv	99
10) Bromoethene	7.415	106	91399	5.368	ppbv	99
11) Trichlorofluoromethane	7.569	101	390126	5.651	ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.419	151	232363	5.087	ppbv	99
13) 1,1-Dichloroethene	9.490	61	128174	4.890	ppbv	99
14) Acetone	10.024	43	97635	5.450	ppbv	100
15) Carbon disulfide	10.213	76	208351	5.446	ppbv	100
16) 2-Propanol	10.605	45	67783	4.972	ppbv	97
17) Allyl chloride	11.032	41	63965	5.531	ppbv	99
18) Dichloromethane	11.553	49	74297	4.727	ppbv	99
19) tert-Butyl methyl ether (M	12.206	73	263114	5.726	ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	111129	5.333	ppbv	96
21) Hexane	12.846	57	87322	5.142	ppbv	99
22) 1,1-Dichloroethane	13.569	63	126873	4.711	ppbv	99
23) Vinyl acetate	13.712	43	134803	5.400	ppbv	99
24) cis-1,2-Dichloroethene	15.004	61	99685	4.822	ppbv	99
25) 2-Butanone (MEK)	15.087	72	34101	5.371	ppbv #	100
26) Ethyl acetate	15.135	61	19242	5.408	ppbv #	93
27) Tetrahydrofuran	15.526	42	53610	5.378	ppbv	98
28) Chloroform	15.692	83	225023	5.136	ppbv	100
29) Cyclohexane	15.917	56	96937	5.327	ppbv	100
30) 1,1,1-Trichloroethane	15.965	97	306895	5.251	ppbv	100
31) Carbon tetrachloride	16.226	117	382035	5.533	ppbv	99
33) Benzene	16.712	78	241103	4.965	ppbv	99
34) 2,2,4-Trimethylpentane	16.664	57	308887	5.416	ppbv	99
35) 1,2-Dichloroethane	16.902	62	168094	5.157	ppbv	100
36) Heptane	17.032	43	102192	5.529	ppbv	99
37) Trichloroethene	17.921	130	160273	5.075	ppbv	99
38) 1,2-Dichloropropane	18.419	63	67987	4.928	ppbv	98
39) 1,4-Dioxane	18.609	88	44493	5.037	ppbv	97
40) Bromodichloromethane	18.882	83	278674	5.566	ppbv	100
41) cis-1,3-Dichloropropene	19.641	75	152896	5.187	ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	143730	5.789	ppbv	99
44) Toluene	20.127	91	355210	5.191	ppbv	100
45) trans-1,3-Dichloropropene	20.590	75	168124	5.324	ppbv	99
46) 1,1,2-Trichloroethane	20.886	97	118941	5.038	ppbv	99
47) Tetrachloroethene	20.969	166	285642	5.305	ppbv	100
48) 2-Hexanone	21.206	43	141276	5.826	ppbv	100
49) Chlorodibromomethane	21.503	129	347525	5.685	ppbv	100

00088

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN06.D
Acq On : 7 May 2014 7:35 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL3
Misc : 5 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:44 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:33 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	199634	5.090	ppbv	99
51) Chlorobenzene	22.451	112	341124	5.416	ppbv	98
52) Ethylbenzene	22.534	91	537194	5.376	ppbv	100
53) m&p-Xylene	22.712	91	916135	11.035	ppbv	100
54) o-Xylene	23.364	91	452976	5.448	ppbv	99
55) Styrene	23.400	104	332811	5.251	ppbv	99
56) Bromoform	23.780	173	449657	5.784	ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.467	83	227788	5.010	ppbv	99
58) 4-Ethyltoluene	24.716	105	738971	5.718	ppbv	99
59) 1,3,5-Trimethylbenzene	24.811	105	614679	5.559	ppbv	99
60) 1,2,4-Trimethylbenzene	25.416	105	603382	5.343	ppbv	99
61) 1,3-Dichlorobenzene	25.950	146	470081	5.193	ppbv	100
62) 1,4-Dichlorobenzene	26.104	146	466212	5.173	ppbv	99
63) Benzyl chloride	26.317	91	582768	5.768	ppbv	99
64) 1,2-Dichlorobenzene	26.709	146	442038	5.073	ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	472063	4.321	ppbv	100
66) Hexachlorobutadiene	29.317	225	619143	4.865	ppbv	100

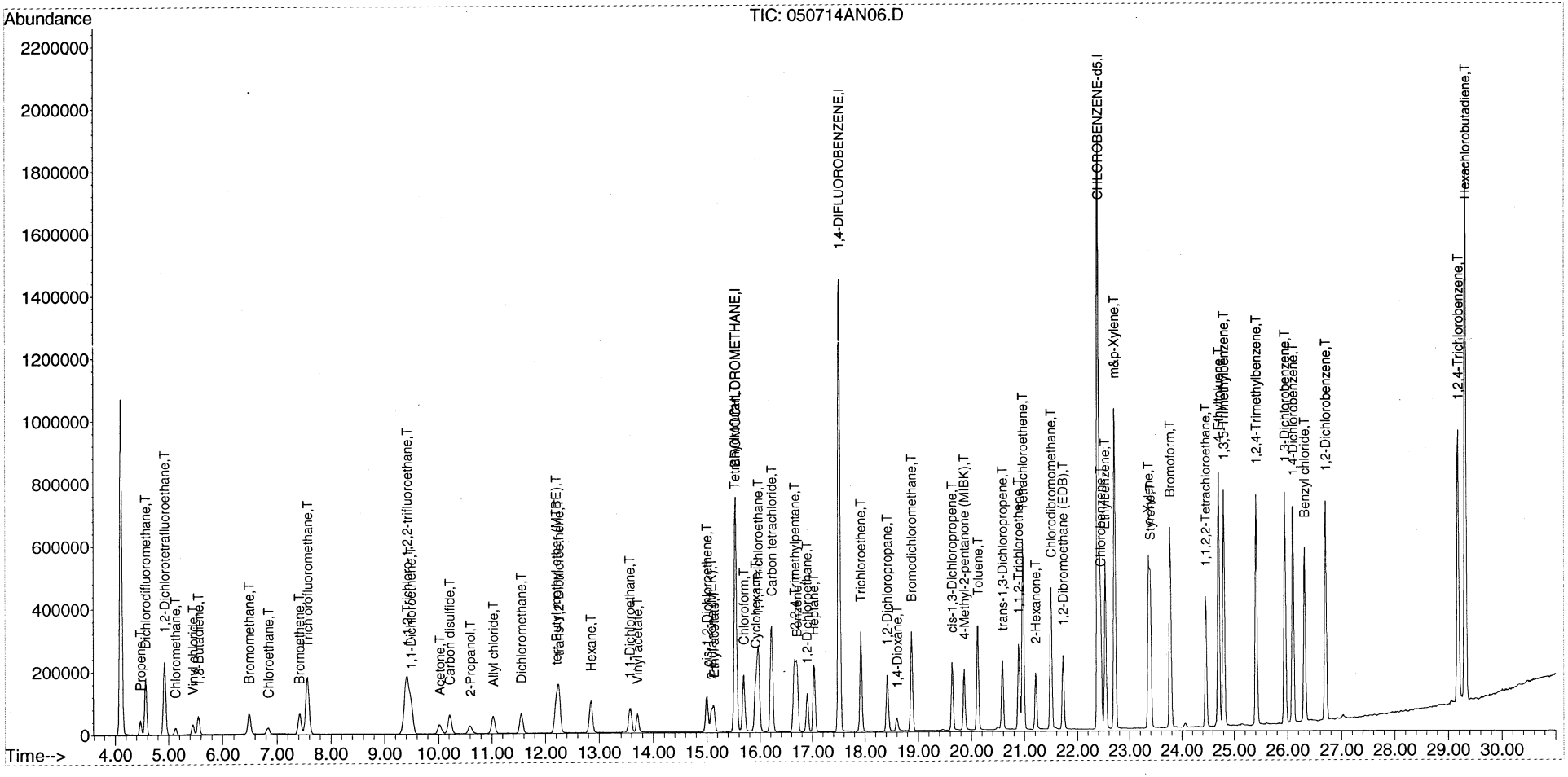
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN06.D
Acq On : 7 May 2014 7:35 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL3
Misc : 5 ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 08 09:54:44 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:33 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN07.D
Acq On : 7 May 2014 8:25 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL5
Misc : 15 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 08 09:54:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:50 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	316264	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1843255	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1618420	22.00	ppbv	0.00

Target Compounds						Qvalue
2) Propene	4.474	41	121654	17.673	ppbv	98
3) Dichlorodifluoromethane	4.569	85	660148	11.644	ppbv	100
4) 1,2-Dichlorotetrafluoroeth	4.924	85	390650	10.046	ppbv	100
5) Chloromethane	5.126	50	96419	12.340	ppbv	100
6) Vinyl chloride	5.458	62	142460	12.633	ppbv	99
7) 1,3-Butadiene	5.553	54	138097	16.701	ppbv	99
8) Bromomethane	6.502	94	193568	12.597	ppbv	99
9) Chloroethane	6.846	64	78693	12.447	ppbv	100
10) Bromoethene	7.415	106	323171	18.054	ppbv	100
11) Trichlorofluoromethane	7.569	101	1002982	13.876	ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.419	151	604240	12.604	ppbv	100
13) 1,1-Dichloroethene	9.490	61	339170	12.360	ppbv	99
14) Acetone	10.012	43	352201	18.650	ppbv	100
15) Carbon disulfide	10.213	76	733121	18.240	ppbv	99
16) 2-Propanol	10.593	45	274773	19.435	ppbv	97
17) Allyl chloride	11.032	41	232619	19.208	ppbv	99
18) Dichloromethane	11.553	49	182459	11.132	ppbv	97
19) tert-Butyl methyl ether (M	12.206	73	999377	20.506	ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	405906	18.446	ppbv	98
21) Hexane	12.846	57	323972	18.359	ppbv	99
22) 1,1-Dichloroethane	13.581	63	334452	12.058	ppbv	100
23) Vinyl acetate	13.712	43	518634	19.886	ppbv	100
24) cis-1,2-Dichloroethene	15.004	61	269426	12.726	ppbv	100
25) 2-Butanone (MEK)	15.087	72	127047	19.146	ppbv #	100
26) Ethyl acetate	15.135	61	67436	18.101	ppbv #	97
27) Tetrahydrofuran	15.526	42	201562	19.260	ppbv	99
28) Chloroform	15.692	83	594969	13.059	ppbv	99
29) Cyclohexane	15.917	56	353772	18.604	ppbv	100
30) 1,1,1-Trichloroethane	15.977	97	811834	13.251	ppbv	100
31) Carbon tetrachloride	16.226	117	1010721	13.805	ppbv	99
33) Benzene	16.712	78	648291	13.086	ppbv	99
34) 2,2,4-Trimethylpentane	16.664	57	1141737	19.338	ppbv	100
35) 1,2-Dichloroethane	16.902	62	447812	13.186	ppbv	100
36) Heptane	17.044	43	373012	19.376	ppbv	99
37) Trichloroethene	17.921	130	434258	13.346	ppbv	100
38) 1,2-Dichloropropane	18.419	63	181156	12.987	ppbv	98
39) 1,4-Dioxane	18.597	88	196060	21.575	ppbv	98
40) Bromodichloromethane	18.882	83	985899	18.751	ppbv	100
41) cis-1,3-Dichloropropene	19.641	75	413448	13.617	ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	559102	21.280	ppbv	100
44) Toluene	20.127	91	979110	13.867	ppbv	99
45) trans-1,3-Dichloropropene	20.590	75	457078	14.139	ppbv	100
46) 1,1,2-Trichloroethane	20.886	97	322505	13.368	ppbv	99
47) Tetrachloroethene	20.981	166	768942	13.657	ppbv	100
48) 2-Hexanone	21.206	43	562829	21.713	ppbv	98
49) Chlorodibromomethane	21.503	129	1268525	19.634	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN07.D
Acq On : 7 May 2014 8:25 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL5
Misc : 15 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 08 09:54:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:50 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	538347	13.459 ppbv	99
51) Chlorobenzene	22.451	112	904740	13.923 ppbv	99
52) Ethylbenzene	22.534	91	1483255	14.336 ppbv	100
53) m&p-Xylene	22.724	91	2504196	28.932 ppbv	99
54) o-Xylene	23.364	91	1245872	14.474 ppbv	100
55) Styrene	23.400	104	907737	13.931 ppbv	99
56) Bromoform	23.779	173	1671201	20.242 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.467	83	615684	13.369 ppbv	99
58) 4-Ethyltoluene	24.716	105	2741075	20.123 ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	1718949	14.966 ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	1692665	14.479 ppbv	100
61) 1,3-Dichlorobenzene	25.950	146	1248352	13.322 ppbv	100
62) 1,4-Dichlorobenzene	26.104	146	1230748	13.233 ppbv	99
63) Benzyl chloride	26.317	91	2038580	19.152 ppbv	100
64) 1,2-Dichlorobenzene	26.709	146	1194334	13.307 ppbv	100
65) 1,2,4-Trichlorobenzene	29.187	180	1055381	9.468 ppbv	99
66) Hexachlorobutadiene	29.317	225	1382975	10.408 ppbv	100

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

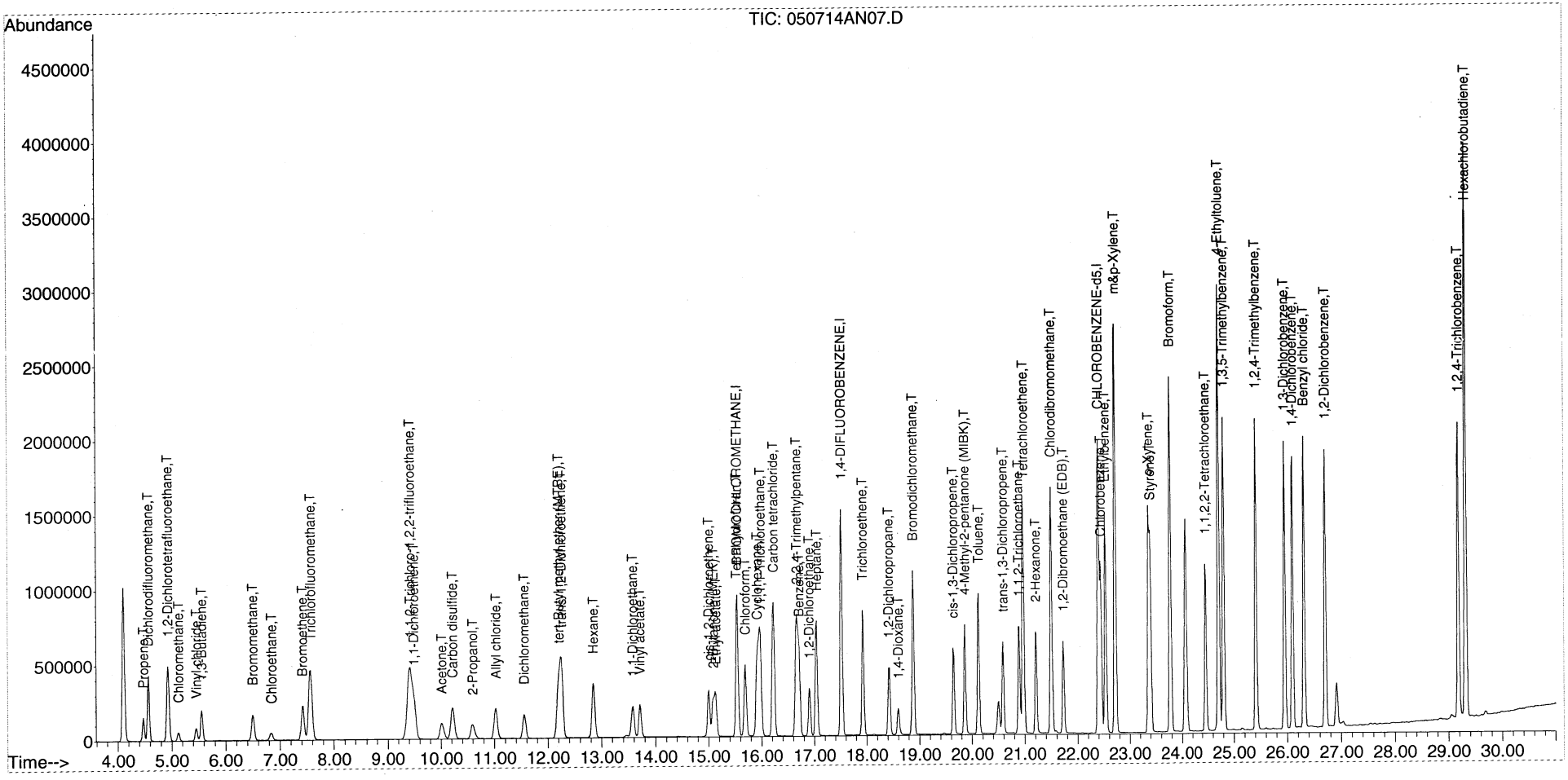
00092

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN07.D
Acq On : 7 May 2014 8:25 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL5
Misc : 15 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 08 09:54:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:54:50 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN08.D
Acq On : 7 May 2014 9:17 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL6
Misc : 20 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 08 09:55:16 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:07 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	312155	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1837526	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1603457	22.00 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.474	41	163726	23.346 ppbv	98
3) Dichlorodifluoromethane	4.569	85	816411	15.374 ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.925	85	437610	12.500 ppbv	99
5) Chloromethane	5.126	50	127428	17.375 ppbv	100
6) Vinyl chloride	5.458	62	188059	17.696 ppbv	98
7) 1,3-Butadiene	5.553	54	183571	21.930 ppbv	97
8) Bromomethane	6.502	94	253881	17.316 ppbv	99
9) Chloroethane	6.834	64	102657	17.069 ppbv	99
10) Bromoethene	7.415	106	422693	23.075 ppbv	99
11) Trichlorofluoromethane	7.569	101	1295094	18.404 ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	794130	17.005 ppbv	99
13) 1,1-Dichloroethene	9.490	61	447063	16.793 ppbv	99
14) Acetone	10.012	43	462547	23.933 ppbv	100
15) Carbon disulfide	10.213	76	960455	23.287 ppbv	98
16) 2-Propanol	10.593	45	371075	26.411 ppbv	96
17) Allyl chloride	11.032	41	308499	24.887 ppbv	100
18) Dichloromethane	11.553	49	236344	14.812 ppbv	97
19) tert-Butyl methyl ether (M	12.206	73	1322727	26.347 ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	531322	23.284 ppbv	97
21) Hexane	12.846	57	428421	23.898 ppbv	98
22) 1,1-Dichloroethane	13.581	63	440273	16.567 ppbv	99
23) Vinyl acetate	13.712	43	685918	25.755 ppbv	100
24) cis-1,2-Dichloroethene	15.004	61	351765	17.460 ppbv	99
25) 2-Butanone (MEK)	15.087	72	168544	25.065 ppbv #	100
26) Ethyl acetate	15.135	61	90141	23.955 ppbv	99
27) Tetrahydrofuran	15.526	42	266450	25.017 ppbv	100
28) Chloroform	15.692	83	780951	17.647 ppbv	99
29) Cyclohexane	15.917	56	469678	24.246 ppbv	100
30) 1,1,1-Trichloroethane	15.965	97	1073276	17.929 ppbv	100
31) Carbon tetrachloride	16.226	117	1328074	18.415 ppbv	99
33) Benzene	16.712	78	870154	18.100 ppbv	99
34) 2,2,4-Trimethylpentane	16.664	57	1518659	24.838 ppbv	99
35) 1,2-Dichloroethane	16.902	62	583485	17.309 ppbv	99
36) Heptane	17.044	43	495039	24.719 ppbv	99
37) Trichloroethene	17.921	130	574099	18.039 ppbv	99
38) 1,2-Dichloropropane	18.431	63	241448	18.046 ppbv	98
39) 1,4-Dioxane	18.597	88	266256	28.169 ppbv	99
40) Bromodichloromethane	18.882	83	1303047	23.720 ppbv	99
41) cis-1,3-Dichloropropene	19.641	75	552180	18.729 ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	743384	26.921 ppbv	99
44) Toluene	20.127	91	1312496	19.156 ppbv	99
45) trans-1,3-Dichloropropene	20.590	75	602475	19.505 ppbv	100
46) 1,1,2-Trichloroethane	20.898	97	427422	18.419 ppbv	99
47) Tetrachloroethene	20.981	166	1035138	18.745 ppbv	100
48) 2-Hexanone	21.206	43	757738	27.725 ppbv	96
49) Chlorodibromomethane	21.503	129	1692589	25.111 ppbv	100

00094

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN08.D
Acq On : 7 May 2014 9:17 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL6
Misc : 20 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 08 09:55:16 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:07 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	722389	18.908 ppbv	100
51) Chlorobenzene	22.451	112	1213566	19.317 ppbv	98
52) Ethylbenzene	22.534	91	1992478	19.794 ppbv	99
53) m&p-Xylene	22.724	91	3378472	39.930 ppbv	99
54) o-Xylene	23.365	91	1678802	20.122 ppbv	99
55) Styrene	23.400	104	1243055	19.896 ppbv	98
56) Bromoform	23.780	173	2262182	26.146 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.467	83	824088	18.954 ppbv	99
58) 4-Ethyltoluene	24.716	105	3680516	25.985 ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	2327004	20.845 ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	2314863	20.477 ppbv	99
61) 1,3-Dichlorobenzene	25.950	146	1724860	19.195 ppbv	100
62) 1,4-Dichlorobenzene	26.104	146	1700382	19.115 ppbv	99
63) Benzyl chloride	26.317	91	2822197	25.904 ppbv	99
64) 1,2-Dichlorobenzene	26.709	146	1671823	19.454 ppbv	100
65) 1,2,4-Trichlorobenzene	29.187	180	1616947	15.804 ppbv	100
66) Hexachlorobutadiene	29.317	225	2193651	17.448 ppbv	100

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

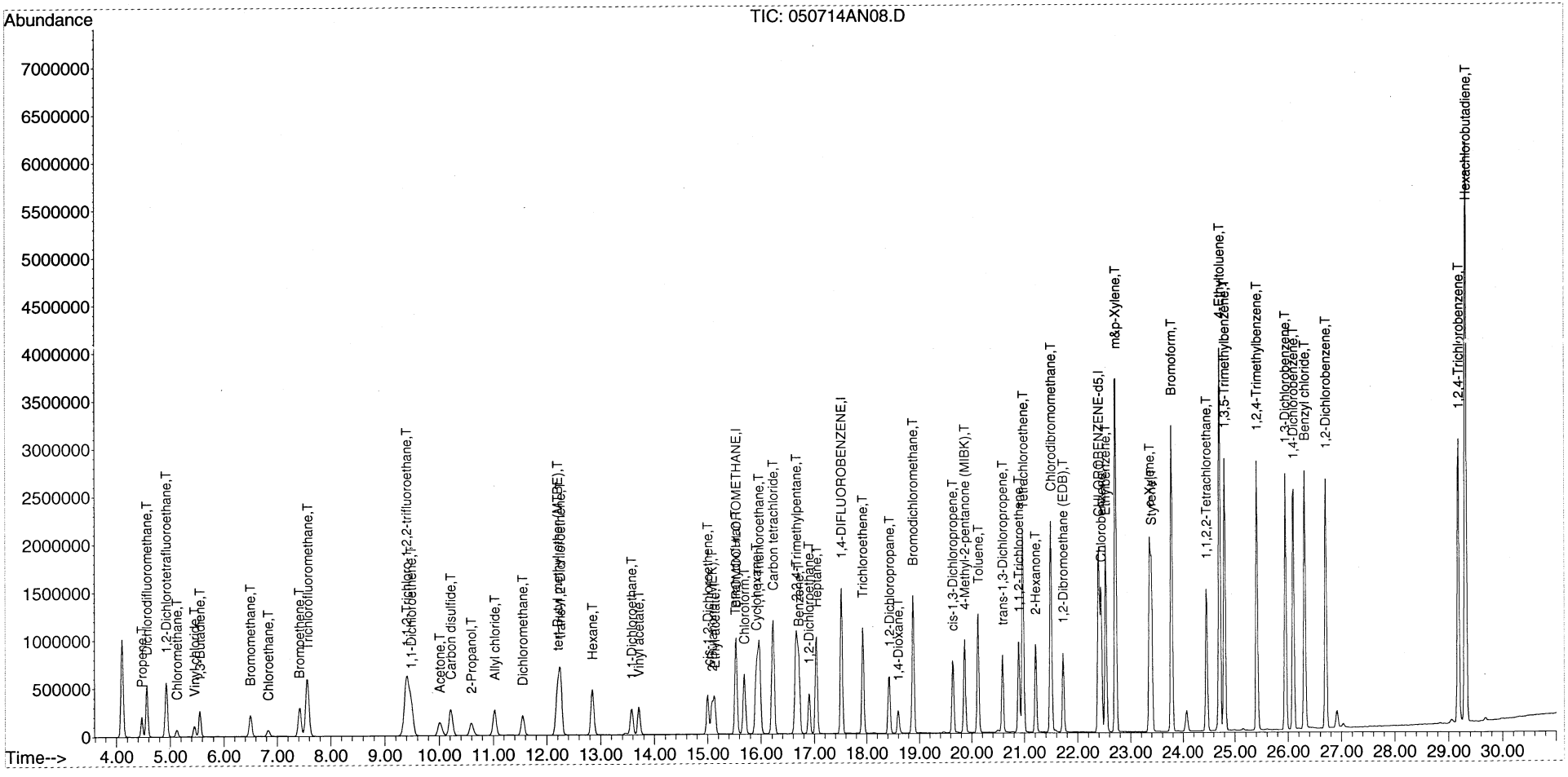
00035

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN08.D
Acq On : 7 May 2014 9:17 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-CAL6
Misc : 20 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 08 09:55:16 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:07 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



SCV REPORT

Nu
5/8/14
EM

Instrument Name: AG5973N
Sample Name: S14E034-SCV1
Misc Info: 10 ppbv
Date Acquired: 5/7/2014 22:06
QLast Update: Thu May 08 09:55:23 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
2)	Propene	4.47	11.00	9.36	85%	70.0	130.0	pass	Subset
3)	Dichlorodifluoromethane	4.57	11.00	10.19	93%	70.0	130.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.92	11.00	11.13	101%	70.0	130.0	pass	Primary
5)	Chloromethane	5.13	11.00	12.50	114%	70.0	130.0	pass	Primary
6)	Vinyl chloride	5.46	12.00	11.21	93%	70.0	130.0	pass	Primary
7)	1,3-Butadiene	5.55	22.00	16.59	75%	70.0	130.0	pass	Subset
8)	Bromomethane	6.50	11.00	9.26	84%	70.0	130.0	pass	Primary
9)	Chloroethane	6.85	11.00	9.45	86%	70.0	130.0	pass	Primary
10)	Bromoethene	7.43	11.00	6.95	63%	70.0	130.0	FAIL	Subset
11)	Trichlorofluoromethane	7.57	11.00	9.89	90%	70.0	130.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.41	11.00	8.68	79%	70.0	130.0	pass	Primary
13)	1,1-Dichloroethene	9.49	11.00	8.59	78%	70.0	130.0	pass	Primary
14)	Acetone	10.01	11.00	7.99	73%	70.0	130.0	pass	Subset
15)	Carbon disulfide	10.21	11.00	7.48	68%	70.0	130.0	FAIL	Subset
16)	2-Propanol	10.59	10.00	8.84	88%	70.0	130.0	pass	Subset
17)	Allyl chloride	11.03	22.00	17.46	79%	70.0	130.0	pass	Subset
18)	Dichloromethane	11.55	11.00	8.36	76%	70.0	130.0	pass	Primary
19)	tert-Butyl methyl ether (MTBE)	12.21	11.00	8.51	77%	70.0	130.0	pass	Subset
20)	trans-1,2-Dichloroethene	12.25	11.00	7.47	68%	70.0	130.0	FAIL	Subset
21)	Hexane	12.85	11.00	7.71	70%	70.0	130.0	pass	Subset
22)	1,1-Dichloroethane	13.57	12.00	9.04	75%	70.0	130.0	pass	Primary
23)	Vinyl acetate	13.71	11.00	8.61	78%	70.0	130.0	pass	Subset
24)	cis-1,2-Dichloroethene	15.00	11.00	10.25	93%	70.0	130.0	pass	Primary
25)	2-Butanone (MEK)	15.09	11.00	9.09	83%	70.0	130.0	pass	Subset
26)	Ethyl acetate	15.13	11.00	8.96	81%	70.0	130.0	pass	Subset
27)	Tetrahydrofuran	15.53	11.00	9.20	84%	70.0	130.0	pass	Subset
28)	Chloroform	15.69	11.00	10.19	93%	70.0	130.0	pass	Primary
29)	Cyclohexane	15.92	11.00	8.85	80%	70.0	130.0	pass	Subset
30)	1,1,1-Trichloroethane	15.96	11.00	10.82	98%	70.0	130.0	pass	Primary
31)	Carbon tetrachloride	16.23	11.00	10.89	99%	70.0	130.0	pass	Primary
33)	Benzene	16.71	11.00	10.25	93%	70.0	130.0	pass	Primary
34)	2,2,4-Trimethylpentane	16.66	11.00	8.92	81%	70.0	130.0	pass	Subset
35)	1,2-Dichloroethane	16.90	11.00	10.01	91%	70.0	130.0	pass	Primary
36)	Heptane	17.04	11.00	8.85	80%	70.0	130.0	pass	Subset
37)	Trichloroethene	17.92	11.00	10.37	94%	70.0	130.0	pass	Primary
38)	1,2-Dichloropropane	18.42	11.00	10.53	96%	70.0	130.0	pass	Primary
39)	1,4-Dioxane	18.60	9.50	9.21	97%	70.0	130.0	pass	Subset
40)	Bromodichloromethane	18.88	11.00	8.56	78%	70.0	130.0	pass	Subset
41)	cis-1,3-Dichloropropene	19.64	11.00	10.92	99%	70.0	130.0	pass	Primary
42)	4-Methyl-2-pentanone (MIBK)	19.87	11.00	9.34	85%	70.0	130.0	pass	Subset
44)	Toluene	20.13	11.00	11.29	103%	70.0	130.0	pass	Primary
45)	trans-1,3-Dichloropropene	20.59	11.00	11.98	109%	70.0	130.0	pass	Primary
46)	1,1,2-Trichloroethane	20.89	11.00	11.20	102%	70.0	130.0	pass	Primary
47)	Tetrachloroethene	20.98	11.00	11.14	101%	70.0	130.0	pass	Primary
48)	2-Hexanone	21.21	11.00	9.54	87%	70.0	130.0	pass	Subset
49)	Chlorodibromomethane	21.50	11.00	9.39	85%	70.0	130.0	pass	Subset
50)	1,2-Dibromoethane (EDB)	21.73	10.00	11.78	118%	70.0	130.0	pass	Primary
51)	Chlorobenzene	22.45	11.00	11.76	107%	70.0	130.0	pass	Primary
52)	Ethylbenzene	22.53	11.00	11.70	106%	70.0	130.0	pass	Primary
53)	m&p-Xylene	22.71	22.00	23.76	108%	70.0	130.0	pass	Primary

54)	o-Xylene	23.36	10.00	11.92	119%	70.0	130.0	pass	Primary
55)	Styrene	23.40	11.00	11.83	108%	70.0	130.0	pass	Primary
56)	Bromoform	23.78	11.00	9.62	87%	70.0	130.0	pass	Subset
57)	1,1,2,2-Tetrachloroethane	24.47	10.00	11.90	119%	70.0	130.0	pass	Primary
58)	4-Ethyltoluene	24.72	21.00	20.62	98%	70.0	130.0	pass	Subset
59)	1,3,5-Trimethylbenzene	24.81	11.00	12.42	113%	70.0	130.0	pass	Primary
60)	1,2,4-Trimethylbenzene	25.42	11.00	12.02	109%	70.0	130.0	pass	Primary
61)	1,3-Dichlorobenzene	25.95	10.00	11.15	111%	70.0	130.0	pass	Primary
62)	1,4-Dichlorobenzene	26.10	11.00	10.97	100%	70.0	130.0	pass	Primary
63)	Benzyl chloride	26.32	11.00	9.01	82%	70.0	130.0	pass	Subset
64)	1,2-Dichlorobenzene	26.71	11.00	10.76	98%	70.0	130.0	pass	Primary
65)	1,2,4-Trichlorobenzene	29.19	9.90	8.22	83%	70.0	130.0	pass	Primary
66)	Hexachlorobutadiene	29.32	10.00	9.52	95%	70.0	130.0	pass	Primary

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN09.D
Acq On : 7 May 2014 10:06 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-SCV1
Misc : 10 ppbv
ALS Vial : 34
Multiplier: 1

NOT USED

Quant Time: May 08 09:58:26 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	284888	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1734383	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1442514	22.00 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.474	41	62023	9.360 ppbv	96
3) Dichlorodifluoromethane	4.569	85	463477	10.187 ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.925	85	314858	11.132 ppbv	99
5) Chloromethane	5.126	50	79122	12.499 ppbv	99
6) Vinyl chloride	5.458	62	103534	11.209 ppbv	100
7) 1,3-Butadiene	5.553	54	129966	16.592 ppbv	99
8) Bromomethane	6.502	94	119842	9.260 ppbv	99
9) Chloroethane	6.846	64	50111	9.449 ppbv	98
10) Bromoethene	7.427	106	120256	6.954 ppbv	100
11) Trichlorofluoromethane	7.569	101	625292	9.891 ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	365024	8.682 ppbv	99
13) 1,1-Dichloroethene	9.490	61	204754	8.593 ppbv	98
14) Acetone	10.012	43	145811	7.987 ppbv	98
15) Carbon disulfide	10.214	76	291891	7.476 ppbv	97
16) 2-Propanol	10.593	45	114716	8.843 ppbv	99
17) Allyl chloride	11.032	41	204657	17.462 ppbv	97
18) Dichloromethane	11.554	49	120113	8.362 ppbv	97
19) tert-Butyl methyl ether (M	12.206	73	406216	8.509 ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	162710	7.468 ppbv	100
21) Hexane	12.846	57	129687	7.711 ppbv	98
22) 1,1-Dichloroethane	13.569	63	212440	9.038 ppbv	100
23) Vinyl acetate	13.712	43	216231	8.611 ppbv	99
24) cis-1,2-Dichloroethene	15.004	61	180857	10.248 ppbv	98
25) 2-Butanone (MEK)	15.087	72	57045	9.086 ppbv #	100
26) Ethyl acetate	15.135	61	31626	8.961 ppbv #	94
27) Tetrahydrofuran	15.526	42	92181	9.197 ppbv	98
28) Chloroform	15.692	83	404718	10.187 ppbv	99
29) Cyclohexane	15.917	56	161421	8.848 ppbv	97
30) 1,1,1-Trichloroethane	15.965	97	585239	10.819 ppbv	99
31) Carbon tetrachloride	16.226	117	715766	10.886 ppbv	100
33) Benzene	16.712	78	453142	10.248 ppbv	99
34) 2,2,4-Trimethylpentane	16.665	57	534147	8.920 ppbv	100
35) 1,2-Dichloroethane	16.902	62	316281	10.012 ppbv	100
36) Heptane	17.044	43	174496	8.854 ppbv	99
37) Trichloroethene	17.922	130	304902	10.365 ppbv	99
38) 1,2-Dichloropropane	18.420	63	127879	10.530 ppbv	99
39) 1,4-Dioxane	18.597	88	86246	9.213 ppbv	99
40) Bromodichloromethane	18.882	83	464196	8.556 ppbv	99
41) cis-1,3-Dichloropropene	19.641	75	295655	10.919 ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	256534	9.341 ppbv	100
44) Toluene	20.127	91	683411	11.288 ppbv	100
45) trans-1,3-Dichloropropene	20.590	75	321777	11.980 ppbv	100
46) 1,1,2-Trichloroethane	20.886	97	227299	11.196 ppbv	99
47) Tetrachloroethene	20.981	166	549631	11.140 ppbv	99
48) 2-Hexanone	21.206	43	249635	9.541 ppbv	98
49) Chlorodibromomethane	21.503	129	599652	9.385 ppbv	100

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN09.D
Acq On : 7 May 2014 10:06 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-SCV1
Misc : 10 ppbv
ALS Vial : 34
Multiplier: 1

Quant Time: May 08 09:58:26 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	391503	11.782 ppbv	100
51) Chlorobenzene	22.451	112	650626	11.763 ppbv	99
52) Ethylbenzene	22.534	91	1044567	11.705 ppbv	99
53) m&p-Xylene	22.712	91	1793404	23.760 ppbv	100
54) o-Xylene	23.365	91	879223	11.921 ppbv	100
55) Styrene	23.400	104	647261	11.835 ppbv	99
56) Bromoform	23.780	173	794776	9.622 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.467	83	444098	11.896 ppbv	99
58) 4-Ethyltoluene	24.716	105	2764758	20.617 ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	1230248	12.419 ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	1201092	12.016 ppbv	99
61) 1,3-Dichlorobenzene	25.950	146	878991	11.148 ppbv	99
62) 1,4-Dichlorobenzene	26.104	146	854180	10.974 ppbv	99
63) Benzyl chloride	26.317	91	921595	9.008 ppbv	99
64) 1,2-Dichlorobenzene	26.709	146	812376	10.764 ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	713466	8.223 ppbv	99
66) Hexachlorobutadiene	29.318	225	1058682	9.525 ppbv	100

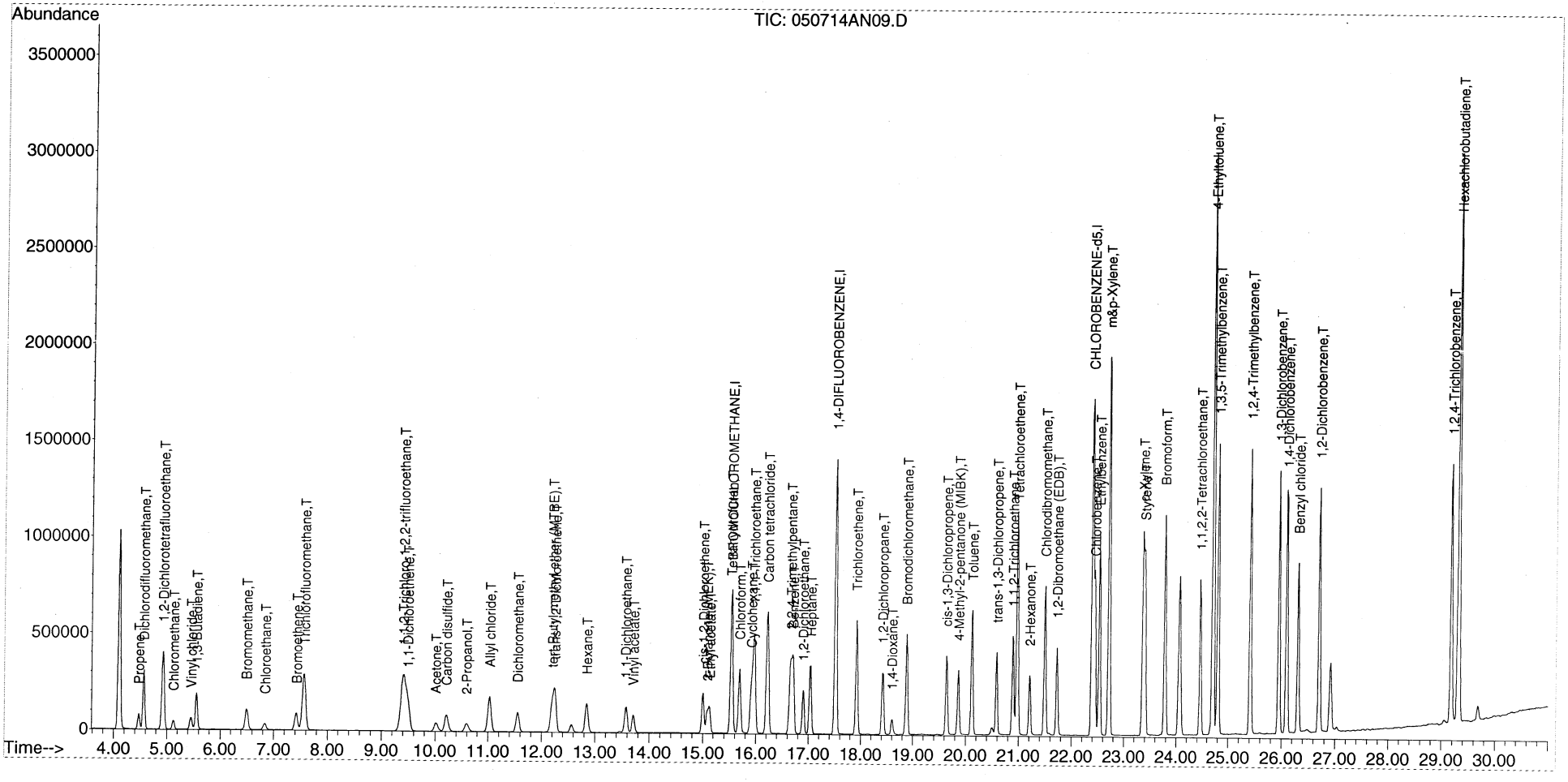
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN09.D
Acq On : 7 May 2014 10:06 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-SCV1
Misc : 10 ppbv
ALS Vial : 34
Multiplier: 1

Quant Time: May 08 09:58:26 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



SCV REPORT

Instrument Name: AG5973N
Sample Name: S14E034-SCV1
Misc Info: 10 ppbv
Date Acquired: 5/7/2014 22:56
QLast Update: Thu May 08 09:55:23 2014
Operator: EM

Pass
em 5/8/14

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
2)	Propene	4.47	11.00	8.78	80%	70.0	130.0	pass	Subset
3)	Dichlorodifluoromethane	4.57	11.00	9.23	84%	70.0	130.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.92	11.00	10.27	93%	70.0	130.0	pass	Primary
5)	Chloromethane	5.13	11.00	11.95	109%	70.0	130.0	pass	Primary
6)	Vinyl chloride	5.46	12.00	11.67	97%	70.0	130.0	pass	Primary
7)	1,3-Butadiene	5.55	22.00	17.57	80%	70.0	130.0	pass	Subset
8)	Bromomethane	6.50	11.00	11.23	102%	70.0	130.0	pass	Primary
9)	Chloroethane	6.85	11.00	11.29	103%	70.0	130.0	pass	Primary
10)	Bromoethene	7.41	11.00	8.58	78%	70.0	130.0	pass	Subset
11)	Trichlorofluoromethane	7.57	11.00	11.20	102%	70.0	130.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.41	11.00	10.41	95%	70.0	130.0	pass	Primary
13)	1,1-Dichloroethene	9.49	11.00	9.81	89%	70.0	130.0	pass	Primary
14)	Acetone	10.01	11.00	9.02	82%	70.0	130.0	pass	Subset
15)	Carbon disulfide	10.21	11.00	8.88	81%	70.0	130.0	pass	Subset
16)	2-Propanol	10.59	10.00	9.97	100%	70.0	130.0	pass	Subset
17)	Allyl chloride	11.03	22.00	19.86	90%	70.0	130.0	pass	Subset
18)	Dichloromethane	11.55	11.00	9.22	84%	70.0	130.0	pass	Primary
19)	tert-Butyl methyl ether (MTBE)	12.21	11.00	9.75	89%	70.0	130.0	pass	Subset
20)	trans-1,2-Dichloroethene	12.25	11.00	8.62	78%	70.0	130.0	pass	Subset
21)	Hexane	12.85	11.00	9.05	82%	70.0	130.0	pass	Subset
22)	1,1-Dichloroethane	13.57	12.00	9.99	83%	70.0	130.0	pass	Primary
23)	Vinyl acetate	13.71	11.00	9.28	84%	70.0	130.0	pass	Subset
24)	cis-1,2-Dichloroethene	15.00	11.00	10.56	96%	70.0	130.0	pass	Primary
25)	2-Butanone (MEK)	15.09	11.00	9.47	86%	70.0	130.0	pass	Subset
26)	Ethyl acetate	15.13	11.00	9.27	84%	70.0	130.0	pass	Subset
27)	Tetrahydrofuran	15.53	11.00	9.35	85%	70.0	130.0	pass	Subset
28)	Chloroform	15.69	11.00	10.32	94%	70.0	130.0	pass	Primary
29)	Cyclohexane	15.92	11.00	8.96	81%	70.0	130.0	pass	Subset
30)	1,1,1-Trichloroethane	15.96	11.00	10.78	98%	70.0	130.0	pass	Primary
31)	Carbon tetrachloride	16.23	11.00	10.63	97%	70.0	130.0	pass	Primary
33)	Benzene	16.71	11.00	10.37	94%	70.0	130.0	pass	Primary
34)	2,2,4-Trimethylpentane	16.66	11.00	9.03	82%	70.0	130.0	pass	Subset
35)	1,2-Dichloroethane	16.90	11.00	10.03	91%	70.0	130.0	pass	Primary
36)	Heptane	17.03	11.00	8.92	81%	70.0	130.0	pass	Subset
37)	Trichloroethene	17.92	11.00	10.52	96%	70.0	130.0	pass	Primary
38)	1,2-Dichloropropane	18.42	11.00	10.59	96%	70.0	130.0	pass	Primary
39)	1,4-Dioxane	18.60	9.50	9.52	100%	70.0	130.0	pass	Subset
40)	Bromodichloromethane	18.88	11.00	8.67	79%	70.0	130.0	pass	Subset
41)	cis-1,3-Dichloropropene	19.64	11.00	11.06	101%	70.0	130.0	pass	Primary
42)	4-Methyl-2-pentanone (MIBK)	19.87	11.00	9.61	87%	70.0	130.0	pass	Subset
44)	Toluene	20.13	11.00	11.68	106%	70.0	130.0	pass	Primary
45)	trans-1,3-Dichloropropene	20.59	11.00	12.21	111%	70.0	130.0	pass	Primary
46)	1,1,2-Trichloroethane	20.89	11.00	11.58	105%	70.0	130.0	pass	Primary
47)	Tetrachloroethene	20.97	11.00	11.40	104%	70.0	130.0	pass	Primary
48)	2-Hexanone	21.21	11.00	10.05	91%	70.0	130.0	pass	Subset
49)	Chlorodibromomethane	21.50	11.00	9.52	87%	70.0	130.0	pass	Subset
50)	1,2-Dibromoethane (EDB)	21.73	10.00	12.11	121%	70.0	130.0	pass	Primary
51)	Chlorobenzene	22.45	11.00	11.93	108%	70.0	130.0	pass	Primary
52)	Ethylbenzene	22.53	11.00	11.95	109%	70.0	130.0	pass	Primary
53)	m&p-Xylene	22.71	22.00	23.80	108%	70.0	130.0	pass	Primary

$= \frac{8.78}{11} =$ 80% ✓
em 5/8/14

54)	o-Xylene	23.36	10.00	12.24	122%	70.0	130.0	pass	Primary
55)	Styrene	23.40	11.00	12.05	110%	70.0	130.0	pass	Primary
56)	Bromoform	23.78	11.00	9.85	90%	70.0	130.0	pass	Subset
57)	1,1,2,2-Tetrachloroethane	24.47	10.00	12.08	121%	70.0	130.0	pass	Primary
58)	4-Ethyltoluene	24.72	21.00	21.04	100%	70.0	130.0	pass	Subset
59)	1,3,5-Trimethylbenzene	24.81	11.00	12.52	114%	70.0	130.0	pass	Primary
60)	1,2,4-Trimethylbenzene	25.42	11.00	12.19	111%	70.0	130.0	pass	Primary
61)	1,3-Dichlorobenzene	25.95	10.00	11.34	113%	70.0	130.0	pass	Primary
62)	1,4-Dichlorobenzene	26.10	11.00	11.35	103%	70.0	130.0	pass	Primary
63)	Benzyl chloride	26.32	11.00	9.43	86%	70.0	130.0	pass	Subset
64)	1,2-Dichlorobenzene	26.71	11.00	11.59	105%	70.0	130.0	pass	Primary
65)	1,2,4-Trichlorobenzene	29.19	9.90	8.98	91%	70.0	130.0	pass	Primary
66)	Hexachlorobutadiene	29.32	10.00	10.54	105%	70.0	130.0	pass	Primary

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN10.D
Acq On : 7 May 2014 10:56 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-SCV1
Misc : 10 ppbv
ALS Vial : 34
Multiplier: 1

Quant Time: May 08 10:07:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	299732	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1795053	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1471584	22.00 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.474	41	61189	8.777 ppbv	98
3) Dichlorodifluoromethane	4.569	85	441892	9.231 ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.925	85	305629	10.270 ppbv	99
5) Chloromethane	5.126	50	79576	11.949 ppbv	100
6) Vinyl chloride	5.458	62	113455	11.675 ppbv	99
7) 1,3-Butadiene	5.553	54	144772	17.567 ppbv	97
8) Bromomethane	6.502	94	152945	11.232 ppbv	99
9) Chloroethane	6.846	64	62967	11.285 ppbv	99
10) Bromoethene	7.415	106	156051	8.577 ppbv	99
11) Trichlorofluoromethane	7.569	101	745099	11.202 ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	460666	10.415 ppbv	98
13) 1,1-Dichloroethene	9.490	61	245821	9.806 ppbv	99
14) Acetone	10.012	43	173226	9.019 ppbv	100
15) Carbon disulfide	10.214	76	364579	8.876 ppbv	98
16) 2-Propanol	10.593	45	136046	9.967 ppbv	99
17) Allyl chloride	11.032	41	244924	19.862 ppbv	99
18) Dichloromethane	11.554	49	139317	9.219 ppbv	98
19) tert-Butyl methyl ether (M	12.206	73	489925	9.755 ppbv	99
20) trans-1,2-Dichloroethene	12.253	61	197625	8.621 ppbv	96
21) Hexane	12.846	57	160139	9.050 ppbv	98
22) 1,1-Dichloroethane	13.570	63	247148	9.994 ppbv	100
23) Vinyl acetate	13.712	43	245293	9.285 ppbv	100
24) cis-1,2-Dichloroethene	15.004	61	196166	10.565 ppbv	99
25) 2-Butanone (MEK)	15.087	72	62537	9.467 ppbv #	100
26) Ethyl acetate	15.135	61	34408	9.266 ppbv #	96
27) Tetrahydrofuran	15.526	42	98632	9.353 ppbv	100
28) Chloroform	15.692	83	431163	10.316 ppbv	99
29) Cyclohexane	15.918	56	172002	8.961 ppbv	98
30) 1,1,1-Trichloroethane	15.965	97	613788	10.784 ppbv	100
31) Carbon tetrachloride	16.226	117	735049	10.626 ppbv	99
33) Benzene	16.712	78	474692	10.373 ppbv	99
34) 2,2,4-Trimethylpentane	16.665	57	559946	9.035 ppbv	100
35) 1,2-Dichloroethane	16.902	62	328035	10.033 ppbv	99
36) Heptane	17.032	43	182044	8.925 ppbv	99
37) Trichloroethene	17.922	130	320401	10.524 ppbv	99
38) 1,2-Dichloropropane	18.420	63	133122	10.591 ppbv	98
39) 1,4-Dioxane	18.598	88	92213	9.517 ppbv	99
40) Bromodichloromethane	18.882	83	486738	8.669 ppbv	100
41) cis-1,3-Dichloropropene	19.641	75	310072	11.065 ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	273090	9.608 ppbv	100
44) Toluene	20.127	91	721141	11.676 ppbv	99
45) trans-1,3-Dichloropropene	20.590	75	334690	12.215 ppbv	100
46) 1,1,2-Trichloroethane	20.886	97	239839	11.581 ppbv	99
47) Tetrachloroethene	20.969	166	573745	11.399 ppbv	100
48) 2-Hexanone	21.206	43	268252	10.050 ppbv	98
49) Chlorodibromomethane	21.503	129	620646	9.522 ppbv	99

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN10.D
Acq On : 7 May 2014 10:56 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-SCV1
Misc : 10 ppbv
ALS Vial : 34
Multiplier: 1

Quant Time: May 08 10:07:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	410420	12.108 ppbv	100
51) Chlorobenzene	22.452	112	673322	11.933 ppbv	99
52) Ethylbenzene	22.535	91	1087568	11.946 ppbv	100
53) m&p-Xylene	22.712	91	1832719	23.801 ppbv	99
54) o-Xylene	23.365	91	920712	12.237 ppbv	99
55) Styrene	23.400	104	672113	12.047 ppbv	99
56) Bromoform	23.780	173	830173	9.852 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.467	83	460014	12.079 ppbv	100
58) 4-Ethyltoluene	24.717	105	2878238	21.040 ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	1265021	12.518 ppbv	100
60) 1,2,4-Trimethylbenzene	25.416	105	1243248	12.192 ppbv	99
61) 1,3-Dichlorobenzene	25.950	146	912033	11.338 ppbv	100
62) 1,4-Dichlorobenzene	26.104	146	901230	11.350 ppbv	99
63) Benzyl chloride	26.317	91	984370	9.431 ppbv	100
64) 1,2-Dichlorobenzene	26.709	146	892116	11.587 ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	794492	8.976 ppbv	100
66) Hexachlorobutadiene	29.318	225	1194939	10.538 ppbv	99

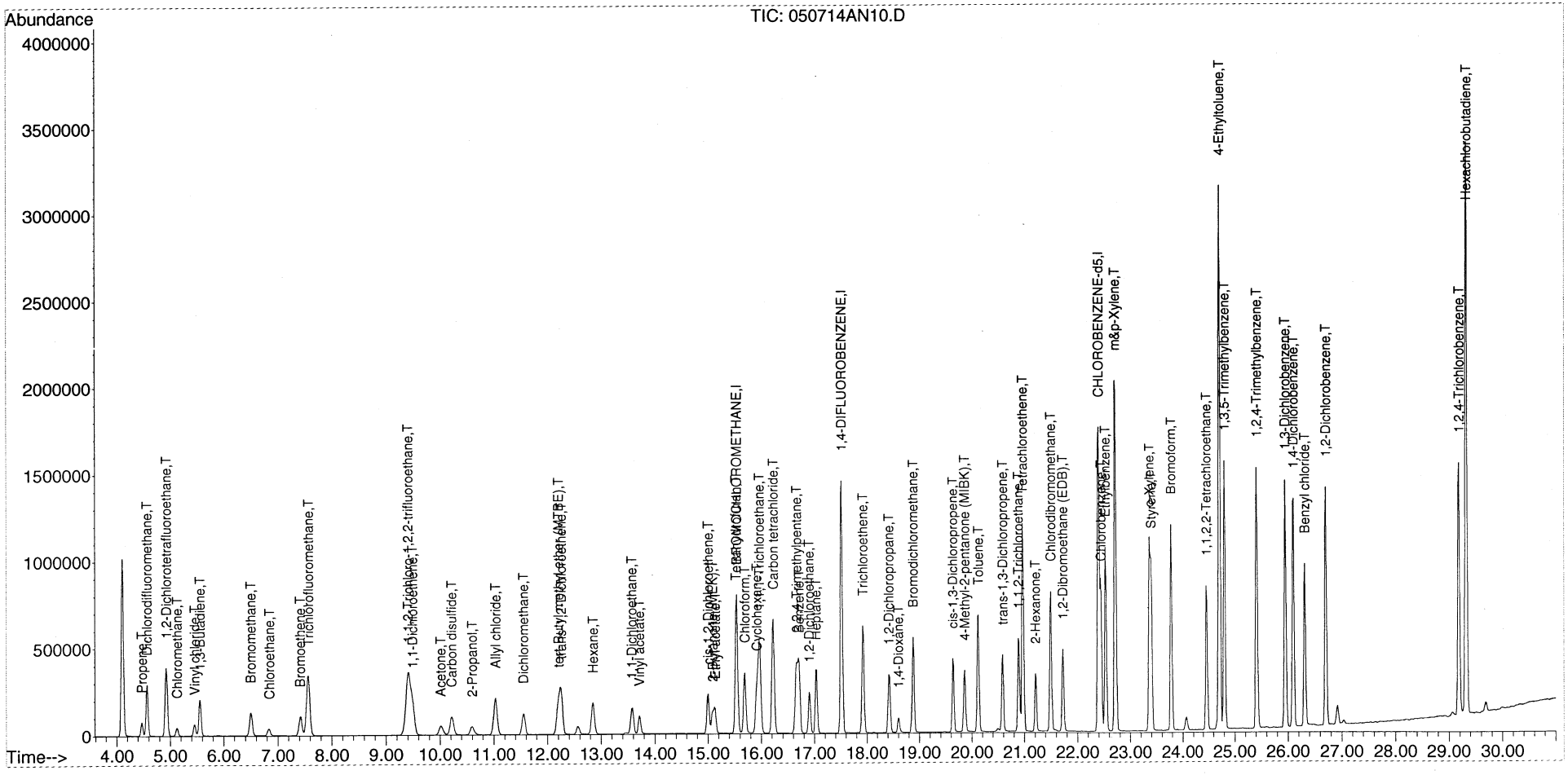
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\050714TO15NA\
Data File : 050714AN10.D
Acq On : 7 May 2014 10:56 pm
Instrument: AG5973N
Operator : EM
Sample : S14E034-SCV1
Misc : 10 ppbv
ALS Vial : 34
Multiplier: 1

Quant Time: May 08 10:07:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:050714TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



SDG: 14149A
Instrument: AG5973N
Analysis Date: 5/30/2014

SAMPLE DATA

ANALYSIS SEQUENCE

S14E108

Instrument: AG5973N

Calibration ID: 1404010

Printed: 6/3/2014 1:25:56PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
S14E108-TUN1	QC		1		1346075			
S14E108-CCV1	QC		2		1421057			
B14E113-BS1	QC		3					
S14E108-CRL1	QC		4		1420080			
B14E113-BLK1	QC		5			1350049		
1405053-01	VOCs, Soil Gas	A	6			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-02	VOCs, Soil Gas	A	7			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-03	VOCs, Soil Gas	A	8			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-04	VOCs, Soil Gas	A	9			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
B14E113-DUP1	QC		10			1350049		
1405053-05	VOCs, Soil Gas	A	11			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-06	VOCs, Soil Gas	A	12			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-07	VOCs, Soil Gas	A	13			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-08	VOCs, Soil Gas	A	14			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-08RE1	VOCs, Soil Gas	A	15			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-09	VOCs, Soil Gas	A	16			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-09RE1	VOCs, Soil Gas	A	17			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-10	VOCs, Soil Gas	A	18			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-10RE1	VOCs, Soil Gas	A	19			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-11	VOCs, Soil Gas	A	20			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-11RE1	VOCs, Soil Gas	A	21			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-12	VOCs, Soil Gas	A	22			1350049	California Site Cleanup Section 3	14 day prelim - 28 day final
1405053-12RE1	VOCs, Soil Gas	A	23			1350049	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\053014TO15NAA.SEQ
Date: 06-24-2014
Time: 16:24:56
Int. Std Volume: 40 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
BFB 1346075	3	2	100	40	C:\Smart\TO15NA.CTD	12:00
10ppbv 1416082	3	2	100	40	C:\Smart\TO15NA.CTD	12:00
1.0ppbv 1416082	3	3	20	0	C:\Smart\TO15NA.CTD	12:00
CAN 635	3	5	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-01	3	6	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-02	3	7	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-03	3	8	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-04	3	9	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-04DUP	3	9	200	0	C:\Smart\TO15NA.CTD	12:00
IBL	3	10	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-05	3	11	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-05RE1	3	11	20	0	C:\Smart\TO15NA.CTD	12:00
1405053-06	3	12	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-06RE1	3	12	20	0	C:\Smart\TO15NA.CTD	12:00
1405053-08	4	1	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-08RE1	4	1	20	0	C:\Smart\TO15NA.CTD	12:00
1405053-09	4	2	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-08RE1	4	2	20	0	C:\Smart\TO15NA.CTD	12:00
IBL	4	3	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-07	4	4	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-07RE1	4	4	20	0	C:\Smart\TO15NA.CTD	12:00
1405053-10	4	5	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-10RE1	4	5	20	0	C:\Smart\TO15NA.CTD	12:00
1405053-11	4	6	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-11RE1	4	6	20	0	C:\Smart\TO15NA.CTD	12:00
1405053-12	4	7	200	0	C:\Smart\TO15NA.CTD	12:00
1405053-12RE1	4	7	20	0	C:\Smart\TO15NA.CTD	12:00
IBL	4	8	200	0	C:\Smart\TO15NA.CTD	12:00

Injection Log

Directory: D:\MSDCHEM\1\2014\DATA\053014TO15NA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	053014an01.d	1.	S14E108-TUN1	BFB 1346075/40mL ...	30 May 2014 14:54
2	32	053014an02.d	1.	S14E108-CCV1@B14E113-BS1	10ppbv	30 May 2014 15:45
3	33	053014an03.d	1.	S14E108-CRL1	1 ppbv	30 May 2014 16:35
4	35	053014an04.d	1.	B14E113-BLK1	BLANK CAN 635	30 May 2014 17:28
5	36	053014an05.d	2.05	1405053-01	200mL	30 May 2014 18:21
6	37	053014an06.d	2.08	1405053-02	200mL	30 May 2014 19:13
7	38	053014an07.d	2.07	1405053-03	200mL	30 May 2014 20:06
8	39	053014an08.d	2.08	1405053-04	200mL	30 May 2014 20:58
9	39	053014an09.d	2.08	B14E113-DUP1	200mL	30 May 2014 21:54
10	10	053014an10.d	1.	IBL	200mL	30 May 2014 22:47
11	11	053014an11.d	2.07	1405053-05	200mL	30 May 2014 23:39
12	11	053014an12.d	2.07	1405053-05RE1 Nu	20mL	31 May 2014 00:28
13	12	053014an13.d	2.2	1405053-06	200mL	31 May 2014 01:20
14	12	053014an14.d	2.2	1405053-06RE1 Nu	20mL	31 May 2014 02:08
15	41	053014an15.d	2.06	1405053-08	200mL	31 May 2014 03:00
16	41	053014an16.d	2.06	1405053-08RE1	20mL	31 May 2014 03:48
17	42	053014an17.d	2.22	1405053-09	200mL	31 May 2014 04:40
18	42	053014an18.d	2.22	1405053-09RE1	20mL	31 May 2014 05:28
19	43	053014an19.d	1.	IBL	200mL	31 May 2014 06:20
20	44	053014an20.d	2.07	1405053-07	200mL	31 May 2014 07:11
21	44	053014an21.d	2.07	1405053-07RE1 Nu	20mL	31 May 2014 08:00
22	45	053014an22.d	2.09	1405053-10	200mL	31 May 2014 08:51
23	45	053014an23.d	2.09	1405053-10RE1	20mL	31 May 2014 09:40
24	46	053014an24.d	2.23	1405053-11	200mL	31 May 2014 10:31
25	46	053014an25.d	2.23	1405053-11RE1	20mL	31 May 2014 11:19
26	47	053014an26.d	2.21	1405053-12	200mL	31 May 2014 12:11
27	47	053014an27.d	2.21	1405053-12RE1	20mL	31 May 2014 13:00
28	48	053014an28.d	1.	IBL	200mL	31 May 2014 13:51

03 Jun 2014 09:55

GC/MS QA-QC Check Report

Tune File : D:\MSDCHEM\1\2014\DATA\053014TO15NA\053014AN01.D
Tune Time : 30 May 2014 2:54 pm

Daily Calibration File : D:\MSDCHEM\1\2014\DATA\053014TO15NA\053014AN02.D

File	Sample		Surrogate Recovery %	Internal Standard Responses	
			324160	1996460	1818040
053014AN02.D					
	S14E108-CCV1		324160	1996456	1818038
053014AN03.D					
	S14E108-CRL1		324258	1966441	1645633
053014AN04.D					
	B14E113-BLK1		330057	2011326	1645954
053014AN05.D					
	1405053-01		337718	2052576	1701327
053014AN06.D					
	1405053-02		340856	2056036	1689958
053014AN07.D					
	1405053-03		338086	2068803	1652032
053014AN08.D					
	1405053-04		342453	2089679	1670129
053014AN09.D					
	B14E113-DUP1		336894	2041380	1591619
053014AN10.D					
	IBL		339594	2095791	1673028
053014AN11.D					
	1405053-05		336564	2062330	1642106
053014AN12.D					
	1405053-05RE1	NU	314143	1934587	1464712
053014AN13.D					
	1405053-06		333458	2043562	1655986
053014AN14.D					
	1405053-06RE1	NU	315192	1929401	1498877
053014AN15.D					
	1405053-08		337527	2044878	1663558
053014AN16.D					
	1405053-08RE1		319965	1971692	1542814
053014AN17.D					
	1405053-09		338961	2080793	1679083
053014AN18.D					
	1405053-09RE1		316986	1950578	1519401
053014AN19.D					
	IBL		322996	1977103	1552736
053014AN20.D					
	1405053-07		332642	2020188	1628691

053014AN21.D				
	1405053-07RE1 NU	309290	1897229	1462547
053014AN22.D				
	1405053-10	337318	2032399	1648357
053014AN23.D				
	1405053-10RE1	310786	1914594	1481830
053014AN24.D				
	1405053-11	339373	2041383	1663177
053014AN25.D				
	1405053-11RE1	310157	1902293	1476932
053014AN26.D				
	1405053-12	331178	2003547	1628367
053014AN27.D				
	1405053-12RE1	310011	1900642	1449013
053014AN28.D				
	IBL	317775	1938317	1531582

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

Created: Tue Jun 03 11:24:05 2014 AG5973N

Response Factor Report AG5973N

Method Path : D:\MSDCHEM\1\2014\METHOD\
Method File : 050714TO15HNAA.M
Title : TO15
Last Update : Thu May 08 09:55:23 2014
Response Via : Initial Calibration

Calibration Files
1 =050714AN04.D 2 =050714AN05.D 5 =050714AN06.D
10 =050714AN03.D 15 =050714AN07.D 20 =050714AN08.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.499	0.504	0.507	0.453	0.548	0.560	0.512	7.50
3)	T	Dichlorodifluorom	4.049	4.047	3.824	3.397	2.972	2.793	3.513	15.56
4)	T	1,2-Dichlorotetra	2.797	2.773	2.501	1.841	1.725	1.469	2.184	26.40
5)	T	Chloromethane	0.528	0.544	0.526	0.482	0.426	0.428	0.489	10.70
6)	T	Vinyl chloride	0.769	0.792	0.761	0.697	0.629	0.631	0.713	10.06
7)	T	1,3-Butadiene	0.627	0.605	0.580	0.530	0.640	0.647	0.605	7.29
8)	T	Bromomethane	1.138	1.090	1.062	0.966	0.871	0.869	0.999	11.50
9)	T	Chloroethane	0.477	0.444	0.437	0.394	0.354	0.351	0.410	12.55
10)	T	Bromoethene	1.377	1.305	1.270	1.187	1.441	1.432	1.335	7.44
11)	T	Trichlorofluorome	5.261	5.300	5.269	4.851	4.346	4.265	4.882	9.77
12)	T	1,1,2-Trichloro-1	3.613	3.431	3.462	3.200	2.888	2.885	3.247	9.51
13)	T	1,1-Dichloroethen	2.074	1.921	1.930	1.836	1.638	1.641	1.840	9.41
14)	T	Acetone	1.374	1.368	1.344	1.265	1.555	1.552	1.410	8.39
15)	T	Carbon disulfide	3.168	2.903	2.868	2.690	3.237	3.223	3.015	7.50
16)	T	2-Propanol	0.941	0.788	0.924	0.922	1.202	1.234	1.002	17.60
17)	T	Allyl chloride	0.881	0.839	0.864	0.822	1.008	1.016	0.905	9.41
18)	T	Dichloromethane	1.594	1.266	1.096	0.986	0.863	0.850	1.109	25.58
19)	T	tert-Butyl methyl	3.213	3.230	3.554	3.435	4.330	4.356	3.686	14.23
20)	T	trans-1,2-Dichlor	1.695	1.614	1.575	1.531	1.845	1.836	1.683	7.94
21)	T	Hexane	1.275	1.177	1.225	1.191	1.458	1.466	1.299	10.08
22)	T	1,1-Dichloroethan	2.122	1.917	1.890	1.763	1.599	1.599	1.815	11.19
23)	T	Vinyl acetate	1.725	1.698	1.838	1.824	2.269	2.280	1.939	13.70
24)	T	cis-1,2-Dichloroe	1.493	1.425	1.426	1.369	1.237	1.227	1.363	7.98
25)	T	2-Butanone (MEK)	0.443	0.435	0.469	0.435	0.561	0.566	0.485	12.81
26)	T	Ethyl acetate	0.248	0.268	0.267	0.246	0.301	0.305	0.273	9.35
27)	T	Tetrahydrofuran	0.685	0.673	0.752	0.715	0.907	0.912	0.774	14.01
28)	T	Chloroform	3.536	3.263	3.188	3.017	2.704	2.698	3.068	10.75
29)	T	Cyclohexane	1.371	1.332	1.334	1.278	1.562	1.576	1.409	9.07
30)	T	1,1,1-Trichloroet	4.651	4.454	4.391	4.098	3.727	3.745	4.177	9.23
31)	T	Carbon tetrachlor	5.623	5.362	5.360	5.027	4.550	4.544	5.077	8.91
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.609	0.591	0.587	0.552	0.511	0.516	0.561	7.38
34)	T	2,2,4-Trimethylpe	0.722	0.692	0.723	0.689	0.865	0.866	0.760	10.95
35)	T	1,2-Dichloroethan	0.438	0.425	0.422	0.400	0.364	0.356	0.401	8.46
36)	T	Heptane	0.239	0.228	0.239	0.228	0.283	0.282	0.250	10.23
37)	T	Trichloroethene	0.401	0.391	0.390	0.374	0.342	0.340	0.373	7.04
38)	T	1,2-Dichloropropa	0.172	0.155	0.162	0.154	0.140	0.140	0.154	8.15
39)	T	1,4-Dioxane	0.109	0.094	0.104	0.104	0.149	0.152	0.119	20.91
40)	T	Bromodichlorometh	0.688	0.655	0.658	0.623	0.754	0.750	0.688	7.79
41)	T	cis-1,3-Dichlorop	0.361	0.342	0.365	0.352	0.319	0.321	0.343	5.73
42)	T	4-Methyl-2-pentan	0.295	0.293	0.336	0.318	0.424	0.424	0.348	17.36
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	0.971	0.949	0.977	0.891	0.870	0.883	0.923	5.16
45)	T	trans-1,3-Dichlor	0.417	0.419	0.441	0.408	0.387	0.386	0.410	5.08
46)	T	1,1,2-Trichloroet	0.342	0.327	0.324	0.296	0.284	0.285	0.310	8.03
47)	T	Tetrachloroethene	0.802	0.784	0.801	0.720	0.697	0.710	0.752	6.45
48)	T	2-Hexanone	0.342	0.332	0.381	0.349	0.490	0.500	0.399	19.10
49)	T	Chlorodibromometh	0.930	0.909	0.937	0.849	1.105	1.116	0.974	11.31
50)	T	1,2-Dibromoethane	0.526	0.522	0.544	0.495	0.474	0.481	0.507	5.49
51)	T	Chlorobenzene	0.863	0.866	0.920	0.824	0.788	0.801	0.844	5.82
52)	T	Ethylbenzene	1.306	1.375	1.477	1.351	1.317	1.340	1.361	4.56
53)	T	m&p-Xylene	1.094	1.166	1.260	1.138	1.112	1.136	1.151	5.11
54)	T	o-Xylene	1.068	1.119	1.234	1.115	1.096	1.118	1.125	5.04
55)	T	Styrene	0.761	0.818	0.924	0.842	0.814	0.844	0.834	6.40
56)	T	Bromoform	1.080	1.149	1.225	1.128	1.470	1.507	1.260	14.57

Method Path : D:\MSDCHEM\1\2014\METHOD\
Method File : 050714TO15HNAA.M
Title : TO15
Last Update : Thu May 08 09:55:23 2014
Response Via : Initial Calibration

Calibration Files
1 =050714AN04.D 2 =050714AN05.D 5 =050714AN06.D
10 =050714AN03.D 15 =050714AN07.D 20 =050714AN08.D

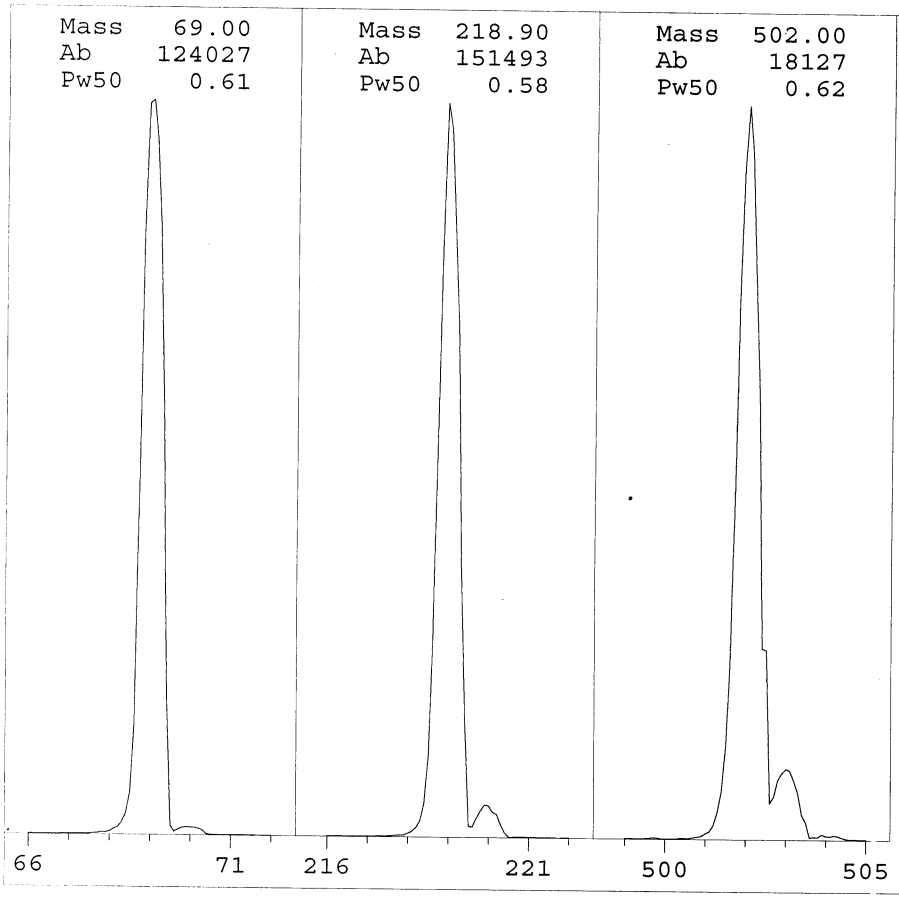
		Compound	1	2	5	10	15	20	Avg	%RSD
57)	T	1,1,2,2-Tetrachlo	0.551	0.573	0.626	0.564	0.547	0.554	0.569	5.20
58)	T	4-Ethyltoluene	1.788	1.862	1.993	1.813	2.388	2.428	2.045	14.18
59)	T	1,3,5-Trimethylbe	1.320	1.482	1.674	1.527	1.512	1.550	1.511	7.59
60)	T	1,2,4-Trimethylbe	1.355	1.489	1.676	1.536	1.518	1.572	1.524	6.90
61)	T	1,3-Dichlorobenze	1.136	1.210	1.332	1.200	1.142	1.195	1.203	5.86
62)	T	1,4-Dichlorobenze	1.107	1.193	1.321	1.196	1.126	1.178	1.187	6.32
63)	T	Benzyl chloride	1.336	1.398	1.572	1.419	1.776	1.862	1.560	13.87
64)	T	1,2-Dichlorobenze	1.122	1.146	1.253	1.134	1.093	1.158	1.151	4.74
65)	T	1,2,4-Trichlorobe	1.573	1.355	1.455	1.286	1.051	1.219	1.323	13.83
66)	T	Hexachlorobutadie	2.051	1.803	1.828	1.586	1.319	1.584	1.695	14.97

(#) = Out of Range

5973

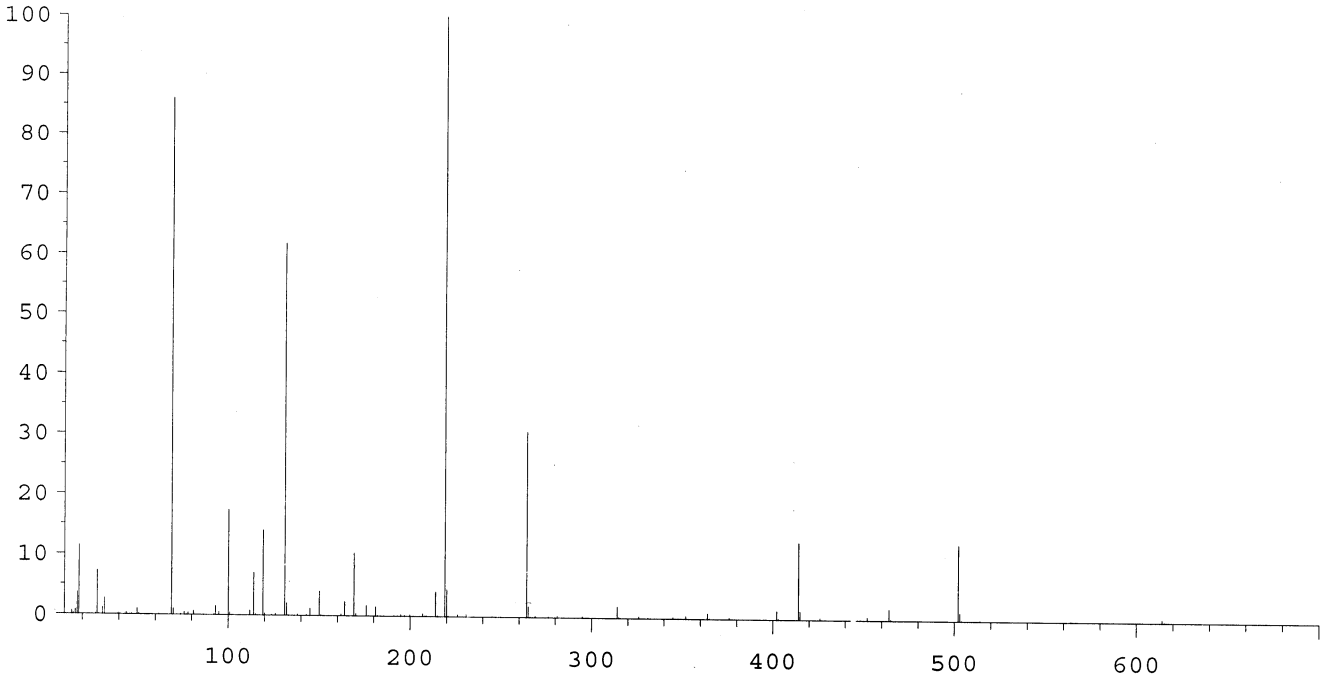
Fri May 30 14:05:25 2014
C:\MSDCHEM\1\5973N\BFB053014TO15NAA.U

Instrument: AG5973N



Ion Pol	POS	MassGain	146
		MassOffs	-10
Emission	34.6	AmuGain	2536
ElEnrgy	69.9	AmuOffs	133
Filament	2	Wid219	-0.018
		DC Pol	NEG
Repeller	31.97		
IonFcus	90.2	HEDEnab	ON
EntLens	18.5	EMVolts	976
EntOffs	17.82		
		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
99 peaks Base: 219.00 Abundance: 135872



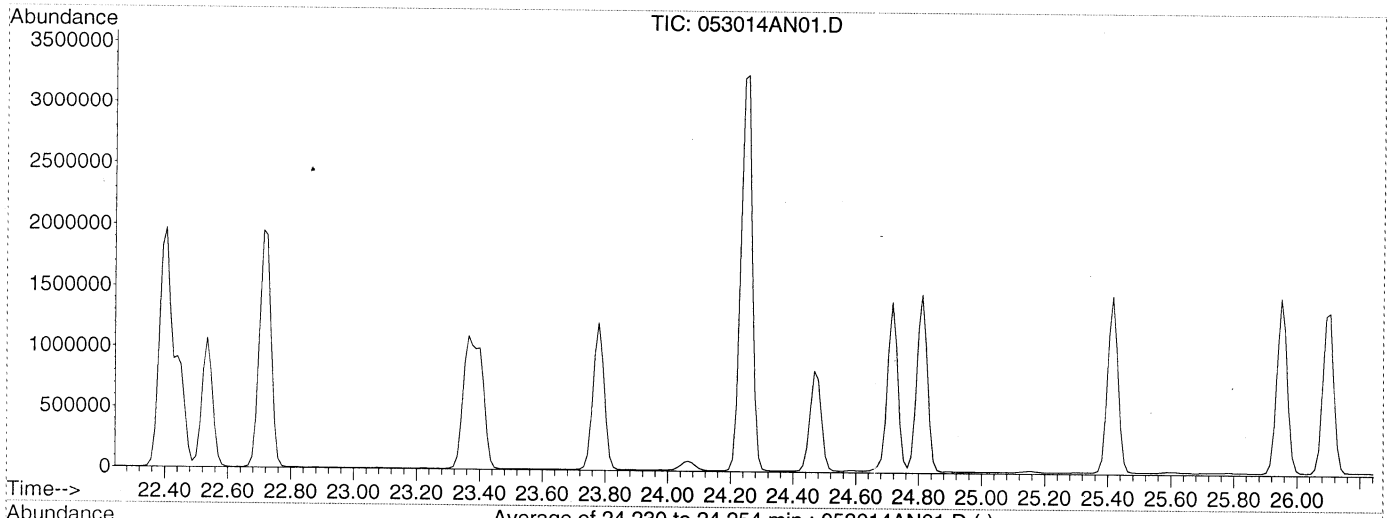
Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	116864	100.00	70.00	1364	1.17
219.00	135872	116.27	220.00	6013	4.43
502.00	16904	14.46	503.00	1681	9.94

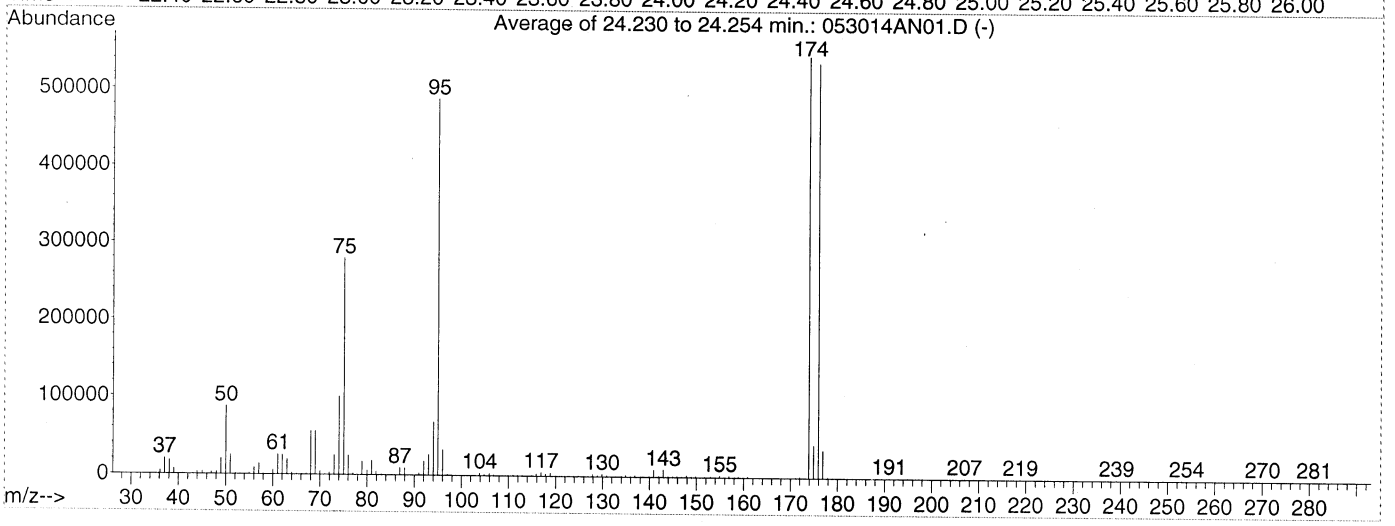
BFB

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN01.D
Acq On : 30 May 2014 2:54 pm
Operator : EM
Sample : S14E108-TUN1
Misc : BFB 1346075/40mL ISTD/10ppbv VOC STD
ALS Vial : 32 Sample Multiplier: 1

Integration File: lscint.p

Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M
Title : TO15
Last Update : Thu May 08 09:55:23 2014





AutoFind: Scans 1742, 1743, 1744; Background Corrected with Scan 1737

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.8	86616	PASS
75	95	30	66	57.3	279274	PASS
95	95	100	100	100.0	487189	PASS
96	95	5	9	6.7	32416	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	111.9	545344	PASS
175	174	4	9	7.5	41010	PASS
176	174	93	101	98.4	536384	PASS
177	176	5	9	6.5	34984	PASS

Average of 24.230 to 24.254 min.: 053014AN01.D
S14E108-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	4016	48.05	2815	58.00	642	69.00	55016
37.05	19799	49.00	19479	60.00	5104	70.00	4026
38.05	17128	50.00	86616	61.00	25034	71.00	161
39.00	6223	50.95	24752	62.00	24741	71.95	2673
40.00	205	52.05	1186	63.00	19423	73.00	24706
40.95	142	52.95	101	64.05	1865	74.00	99728
43.10	268	53.20	70	65.05	561	75.00	279274
44.00	2514	54.10	56	66.00	37	76.00	24104
45.05	3309	55.00	1475	66.20	64	77.00	1745
46.10	351	56.00	8037	67.10	951	77.85	108
47.00	2099	57.00	13431	68.00	55053	78.90	16652

Average of 24.230 to 24.254 min.: 053014AN01.D
S14E108-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.95	5126	95.00	487189	111.90	581	123.85	346
80.90	17989	96.00	32416	112.90	573	124.80	41
81.90	3766	97.00	1025	114.95	770	124.95	228
82.95	449	97.90	37	115.90	2336	125.90	304
85.90	263	102.95	391	116.90	4178	126.95	174
86.90	8840	103.90	2829	117.85	2488	127.90	2336
87.90	8610	104.85	925	118.90	3627	128.90	1122
90.95	2282	105.90	2585	120.00	126	129.85	2510
92.00	17529	106.85	627	121.90	122	130.90	1003
93.00	25973	109.95	444	122.70	45	132.00	137
94.00	67565	110.95	615	123.05	126	132.80	61

Average of 24.230 to 24.254 min.: 053014AN01.D
S14E108-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.00	6	141.95	1004	153.85	426	173.90	545344
133.90	55	142.90	9085	154.95	1865	174.90	41010
134.05	165	143.95	510	155.80	83	175.90	536384
134.90	1425	144.95	840	156.10	260	176.85	34984
135.95	294	145.85	973	156.90	1408	177.95	1058
136.90	1291	146.80	389	157.80	118	178.90	41
138.00	33	147.90	1877	158.10	90	191.00	71
138.40	35	148.90	609	158.85	985	192.90	53
138.85	240	149.85	924	160.85	1027	195.00	34
139.95	568	151.75	324	171.10	37	197.20	36
140.90	8671	152.95	578	171.95	935	207.00	50

Average of 24.230 to 24.254 min.: 053014AN01.D
S14E108-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.95	10	283.00	53				
208.95	45						
211.00	43						
218.80	36						
239.20	34						
249.05	88						
253.00	104						
254.05	135						
270.10	102						
281.00	65						
282.05	44						

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN02.D
Acq On : 30 May 2014 3:45 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CCV1@B14E113-BS1
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 30 16:37:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

/ but
em 5/30/14

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	98	0.00
2	T	Propene	0.512	0.436	14.8	94	0.00
3	T	Dichlorodifluoromethane	3.513	4.344	-23.7	125	0.00
4	T	1,2-Dichlorotetrafluoroetha	2.184	2.956	-35.3#	157#	0.00
5	T	Chloromethane	0.489	0.537	-9.8	109	0.00
6	T	Vinyl chloride	0.713	0.742	-4.1	104	0.00
7	T	1,3-Butadiene	0.605	0.500	17.4	92	0.00
8	T	Bromomethane	0.999	1.025	-2.6	104	0.00
9	T	Chloroethane	0.410	0.405	1.2	101	-0.01
10	T	Bromoethene	1.335	1.203	9.9	99	-0.01
11	T	Trichlorofluoromethane	4.882	5.617	-15.1	113	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	3.247	3.426	-5.5	105	0.01
13	T	1,1-Dichloroethene	1.840	1.995	-8.4	106	0.00
14	T	Acetone	1.410	1.267	10.1	98	0.00
15	T	Carbon disulfide	3.015	2.453	18.6	89	0.00
16	T	2-Propanol	1.002	1.053	-5.1	112	0.00
17	T	Allyl chloride	0.905	0.815	9.9	97	0.00
18	T	Dichloromethane	1.109	1.029	7.2	102	0.00
19	T	tert-Butyl methyl ether (MT	3.686	3.471	5.8	99	0.00
20	T	trans-1,2-Dichloroethene	1.683	1.399	16.9	89	0.00
21	T	Hexane	1.299	1.138	12.4	94	0.00
22	T	1,1-Dichloroethane	1.815	1.893	-4.3	105	0.00
23	T	Vinyl acetate	1.939	1.897	2.2	102	0.00
24	T	cis-1,2-Dichloroethene	1.363	1.596	-17.1	114	0.00
25	T	2-Butanone (MEK)	0.485	0.406	16.3	91	0.00
26	T	Ethyl acetate	0.273	0.225	17.6	89	-0.01
27	T	Tetrahydrofuran	0.774	0.619	20.0	85	0.00
28	T	Chloroform	3.068	3.235	-5.4	105	0.00
29	T	Cyclohexane	1.409	1.164	17.4	89	0.00
30	T	1,1,1-Trichloroethane	4.177	4.431	-6.1	106	0.00
31	T	Carbon tetrachloride	5.077	5.366	-5.7	105	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	102	0.00
33	T	Benzene	0.561	0.549	2.1	101	0.00
34	T	2,2,4-Trimethylpentane	0.760	0.617	18.8	91	0.00
35	T	1,2-Dichloroethane	0.401	0.414	-3.2	105	0.00
36	T	Heptane	0.250	0.203	18.8	90	0.00
37	T	Trichloroethene	0.373	0.395	-5.9	107	0.00
38	T	1,2-Dichloropropane	0.154	0.156	-1.3	103	0.00
39	T	1,4-Dioxane	0.119	0.118	0.8	115	-0.01
40	T	Bromodichloromethane	0.688	0.598	13.1	97	0.00
41	T	cis-1,3-Dichloropropene	0.343	0.358	-4.4	103	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.348	0.277	20.4	88	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	100	0.00
44	T	Toluene	0.923	0.915	0.9	103	0.00
45	T	trans-1,3-Dichloropropene	0.410	0.452	-10.2	111	0.00

Evaluate Continuing Calibration Report

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN02.D
Acq On : 30 May 2014 3:45 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CCV1@B14E113-BS1
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 30 16:37:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.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	0.310	0.311	-0.3	106	0.00
47 T	Tetrachloroethene	0.752	0.774	-2.9	108	0.00
48 T	2-Hexanone	0.399	0.300	24.8	86	0.00
49 T	Chlorodibromomethane	0.974	0.833	14.5	99	0.00
50 T	1,2-Dibromoethane (EDB)	0.507	0.542	-6.9	110	0.00
51 T	Chlorobenzene	0.844	0.845	-0.1	103	0.00
52 T	Ethylbenzene	1.361	1.348	1.0	100	0.00
53 T	m&p-Xylene	1.151	1.123	2.4	99	-0.01
54 T	o-Xylene	1.125	1.144	-1.7	103	0.00
55 T	Styrene	0.834	0.849	-1.8	101	0.00
56 T	Bromoform	1.260	1.054	16.3	94	0.00
57 T	1,1,2,2-Tetrachloroethane	0.569	0.581	-2.1	103	0.00
58 T	4-Ethyltoluene	2.045	1.621	20.7	90	0.00
59 T	1,3,5-Trimethylbenzene	1.511	1.542	-2.1	101	0.00
60 T	1,2,4-Trimethylbenzene	1.524	1.572	-3.1	103	0.00
61 T	1,3-Dichlorobenzene	1.203	1.231	-2.3	103	0.00
62 T	1,4-Dichlorobenzene	1.187	1.209	-1.9	101	0.00
63 T	Benzyl chloride	1.560	1.167	25.2	83	0.00
64 T	1,2-Dichlorobenzene	1.151	1.200	-4.3	106	0.00
65 T	1,2,4-Trichlorobenzene	1.323	1.399	-5.7	109	0.00
66 T	Hexachlorobutadiene	1.695	1.819	-7.3	115	0.00

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

$$\%\ Dev_{HCB} = \frac{1.695 - 1.819}{1.695} \times 100 = 7.3\%$$

Clm 5/30/14

00119

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN02.D
Acq On : 30 May 2014 3:45 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CCV1@B14E113-BS1
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 30 16:37:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	324160	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	1996456	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.404	117	1818038	22.00 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.474	41	66195	8.779 ppbv	99
3) Dichlorodifluoromethane	4.569	85	659470	12.739 ppbv	99
4) 1,2-Dichlorotetrafluoroeth	4.925	85	457480	14.214 ppbv	99
5) Chloromethane	5.126	50	83164	11.546 ppbv	100
6) Vinyl chloride	5.458	62	114878	10.930 ppbv	100
7) 1,3-Butadiene	5.553	54	73725	8.272 ppbv	98
8) Bromomethane	6.502	94	155558	10.563 ppbv	100
9) Chloroethane	6.834	64	61530	10.197 ppbv	99
10) Bromoethene	7.415	106	184429	9.373 ppbv	99
11) Trichlorofluoromethane	7.569	101	885805	12.314 ppbv	100
12) 1,1,2-Trichloro-1,2,2-trif	9.419	151	489836	10.240 ppbv	98
13) 1,1-Dichloroethene	9.490	61	282311	10.413 ppbv	100
14) Acetone	10.012	43	195997	9.436 ppbv	98
15) Carbon disulfide	10.213	76	379568	8.544 ppbv	100
16) 2-Propanol	10.593	45	164536	11.146 ppbv	98
17) Allyl chloride	11.032	41	128486	9.634 ppbv	99
18) Dichloromethane	11.553	49	148638	9.095 ppbv	97
19) tert-Butyl methyl ether (M	12.206	73	547333	10.076 ppbv	99
20) trans-1,2-Dichloroethene	12.253	61	210240	8.480 ppbv	99
21) Hexane	12.846	57	172825	9.031 ppbv	98
22) 1,1-Dichloroethane	13.581	63	270620	10.119 ppbv	99
23) Vinyl acetate	13.712	43	296210	10.367 ppbv	100
24) cis-1,2-Dichloroethene	15.004	61	237558	11.830 ppbv	99
25) 2-Butanone (MEK)	15.087	72	62765	8.786 ppbv #	100
26) Ethyl acetate	15.123	61	34446	8.577 ppbv	99
27) Tetrahydrofuran	15.526	42	94024	8.245 ppbv	99
28) Chloroform	15.692	83	486245	10.757 ppbv	100
29) Cyclohexane	15.917	56	180197	8.681 ppbv	98
30) 1,1,1-Trichloroethane	15.965	97	659636	10.717 ppbv	99
31) Carbon tetrachloride	16.226	117	814505	10.887 ppbv	100
33) Benzene	16.712	78	503394	9.890 ppbv	100
34) 2,2,4-Trimethylpentane	16.664	57	587793	8.527 ppbv	99
35) 1,2-Dichloroethane	16.902	62	368271	10.128 ppbv	99
36) Heptane	17.032	43	193639	8.536 ppbv	99
37) Trichloroethene	17.921	130	362341	10.701 ppbv	99
38) 1,2-Dichloropropane	18.420	63	146260	10.463 ppbv	99
39) 1,4-Dioxane	18.597	88	112535	10.443 ppbv	98
40) Bromodichloromethane	18.882	83	564714	9.043 ppbv	100
41) cis-1,3-Dichloropropene	19.641	75	334648	10.737 ppbv	100
42) 4-Methyl-2-pentanone (MIBK	19.866	43	263952	8.350 ppbv	99
44) Toluene	20.127	91	771807	10.115 ppbv	100
45) trans-1,3-Dichloropropene	20.590	75	399635	11.806 ppbv	98
46) 1,1,2-Trichloroethane	20.886	97	264645	10.343 ppbv	99
47) Tetrachloroethene	20.969	166	639530	10.285 ppbv	100
48) 2-Hexanone	21.206	43	257476	7.808 ppbv	100
49) Chlorodibromomethane	21.503	129	716313	8.896 ppbv	99

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN02.D
Acq On : 30 May 2014 3:45 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CCV1@B14E113-BS1
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 30 16:37:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	461830	11.028 ppbv	99
51) Chlorobenzene	22.451	112	726309	10.419 ppbv	100
52) Ethylbenzene	22.534	91	1136603	10.105 ppbv	99
53) m&p-Xylene	22.712	91	1892863	19.897 ppbv	100
54) o-Xylene	23.365	91	973720	10.475 ppbv	100
55) Styrene	23.400	104	708514	10.279 ppbv	100
56) Bromoform	23.780	173	897623	8.623 ppbv	100
57) 1,1,2,2-Tetrachloroethane	24.467	83	489568	10.406 ppbv	99
58) 4-Ethyltoluene	24.716	105	1393221	8.244 ppbv	100
59) 1,3,5-Trimethylbenzene	24.811	105	1312809	10.515 ppbv	99
60) 1,2,4-Trimethylbenzene	25.416	105	1312259	10.417 ppbv	100
61) 1,3-Dichlorobenzene	25.950	146	1007130	10.135 ppbv	99
62) 1,4-Dichlorobenzene	26.104	146	989016	10.082 ppbv	100
63) Benzyl chloride	26.317	91	1002989	7.778 ppbv	100
64) 1,2-Dichlorobenzene	26.709	146	981950	10.323 ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	1051959	9.620 ppbv	100
66) Hexachlorobutadiene	29.317	225	1428355	10.196 ppbv	100

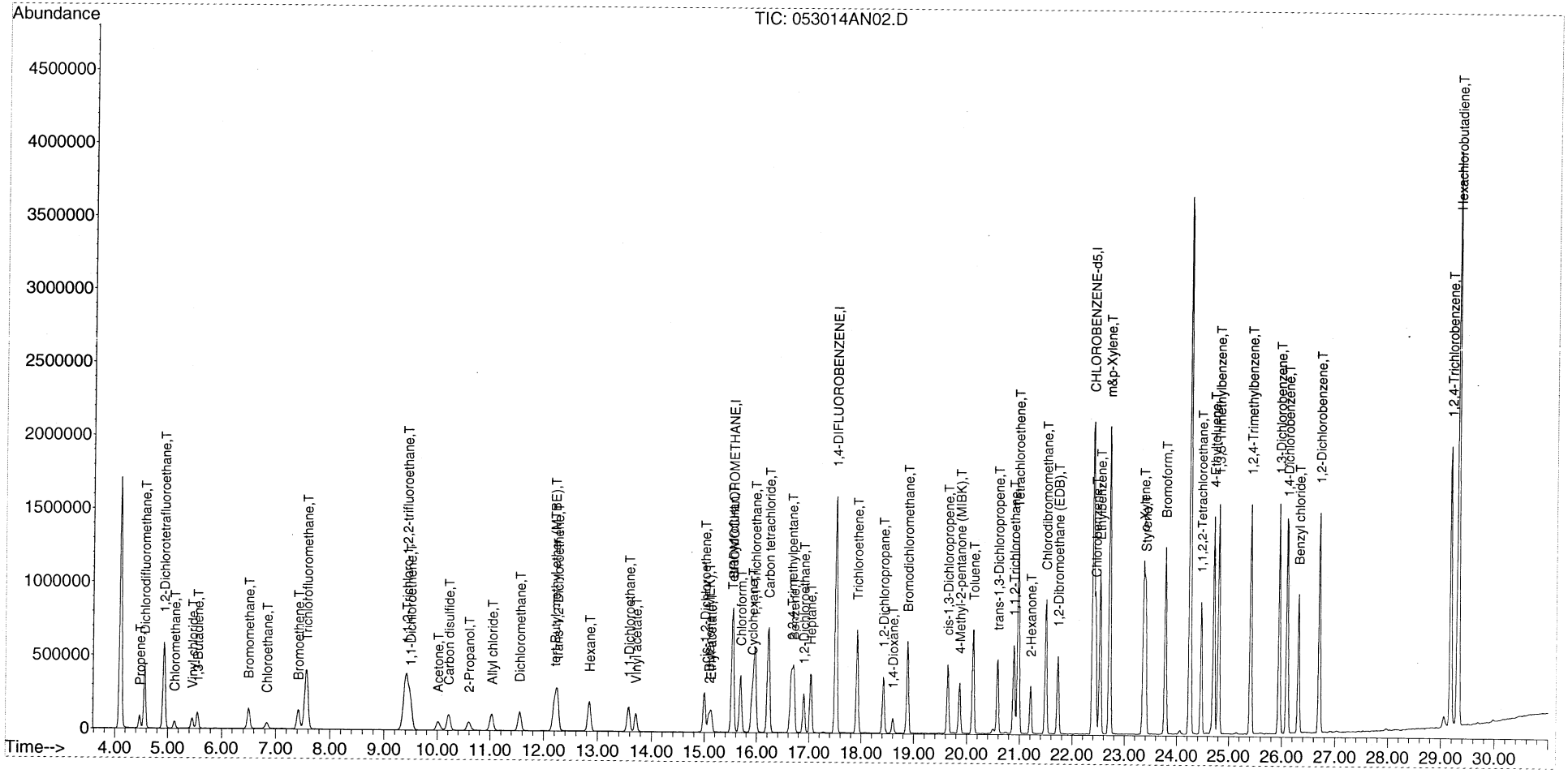
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN02.D
Acq On : 30 May 2014 3:45 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CCV1@B14E113-BS1
Misc : 10ppbv
ALS Vial : 32
Multiplier: 1

Quant Time: May 30 16:37:58 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



3 out

LCS REPORT

em 5/30/14

Instrument Name: AG5973N
Sample Name: S14E108-CCV1@B14E113-BS1
Misc Info: 10ppbv
Date Acquired: 5/30/2014 15:45
QLast Update: Thu May 08 09:55:23 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.54	#N/A	22.00	#N/A	70.0	130.0	#N/A
2)	Propene	4.47	10.30	8.78	85%	72.0	121.0	pass
3)	Dichlorodifluoromethane	4.57	10.30	12.74	124%	68.0	129.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.92	10.50	14.21	135%	67.0	127.0	FAIL
5)	Chloromethane	5.13	10.50	11.55	110%	70.0	123.0	pass
6)	Vinyl chloride	5.46	10.50	10.93	104%	69.0	125.0	pass
7)	1,3-Butadiene	5.55	10.00	8.27	83%	75.0	121.0	pass
8)	Bromomethane	6.50	10.30	10.56	103%	66.0	125.0	pass
9)	Chloroethane	6.83	10.30	10.20	99%	67.0	125.0	pass
10)	Bromoethene	7.41	10.40	9.37	90%	68.0	124.0	pass
11)	Trichlorofluoromethane	7.57	10.70	12.31	115%	68.0	133.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.42	9.70	10.24	106%	64.0	125.0	pass
13)	1,1-Dichloroethene	9.49	9.60	10.41	108%	73.0	128.0	pass
14)	Acetone	10.01	10.50	9.44	90%	67.0	141.0	pass
15)	Carbon disulfide	10.21	10.50	8.54	81%	45.0	158.0	pass
16)	2-Propanol	10.59	10.60	11.15	105%	72.0	132.0	pass
17)	Allyl chloride	11.03	10.70	9.63	90%	75.0	132.0	pass
18)	Dichloromethane	11.55	9.80	9.09	93%	73.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.21	10.70	10.08	94%	74.0	131.0	pass
20)	trans-1,2-Dichloroethene	12.25	10.20	8.48	83%	80.0	123.0	pass
21)	Hexane	12.85	10.30	9.03	88%	75.0	124.0	pass
22)	1,1-Dichloroethane	13.58	9.70	10.12	104%	72.0	125.0	pass
23)	Vinyl acetate	13.71	10.60	10.37	98%	31.0	171.0	pass
24)	cis-1,2-Dichloroethene	15.00	10.10	11.83	117%	77.0	129.0	pass
25)	2-Butanone (MEK)	15.09	10.50	8.79	84%	69.0	137.0	pass
26)	Ethyl acetate	15.12	10.40	8.58	82%	75.0	127.0	pass
27)	Tetrahydrofuran	15.53	10.30	8.24	80%	78.0	120.0	pass
28)	Chloroform	15.69	10.20	10.76	105%	77.0	126.0	pass
29)	Cyclohexane	15.92	10.50	8.68	83%	76.0	124.0	pass
30)	1,1,1-Trichloroethane	15.96	10.10	10.72	106%	74.0	133.0	pass
31)	Carbon tetrachloride	16.23	10.30	10.89	106%	71.0	141.0	pass
32)	1,4-DIFLUOROBENZENE	17.52	#N/A	22.00	#N/A	70.0	130.0	#N/A
33)	Benzene	16.71	10.10	9.89	98%	81.0	125.0	pass
34)	2,2,4-Trimethylpentane	16.66	10.50	8.53	81%	82.0	125.0	FAIL
35)	1,2-Dichloroethane	16.90	9.80	10.13	103%	61.0	153.0	pass
36)	Heptane	17.03	10.50	8.54	81%	80.0	129.0	pass
37)	Trichloroethene	17.92	10.10	10.70	106%	73.0	128.0	pass
38)	1,2-Dichloropropane	18.42	10.30	10.46	102%	77.0	129.0	pass
39)	1,4-Dioxane	18.60	10.50	10.44	99%	58.0	140.0	pass
40)	Bromodichloromethane	18.88	10.40	9.04	87%	76.0	137.0	pass
41)	cis-1,3-Dichloropropene	19.64	10.30	10.74	104%	80.0	136.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.87	10.50	8.35	80%	65.0	140.0	pass
43)	CHLOROBENZENE-d5	22.40	#N/A	22.00	#N/A	70.0	130.0	#N/A
44)	Toluene	20.13	10.20	10.11	99%	78.0	133.0	pass
45)	trans-1,3-Dichloropropene	20.59	10.70	11.81	110%	79.0	146.0	pass
46)	1,1,2-Trichloroethane	20.89	10.30	10.34	100%	74.0	134.0	pass
47)	Tetrachloroethene	20.97	10.00	10.28	103%	73.0	130.0	pass

48)	2-Hexanone	21.21	10.40	7.81	75%	50.0	162.0	pass
49)	Chlorodibromomethane	21.50	10.40	8.90	86%	81.0	135.0	pass
50)	1,2-Dibromoethane (EDB)	21.73	10.30	11.03	107%	78.0	133.0	pass
51)	Chlorobenzene	22.45	10.40	10.42	100%	81.0	126.0	pass
52)	Ethylbenzene	22.53	10.20	10.11	99%	82.0	130.0	pass
53)	m&p-Xylene	22.71	20.40	19.90	98%	82.0	131.0	pass
54)	o-Xylene	23.36	10.30	10.47	102%	82.0	132.0	pass
55)	Styrene	23.40	10.10	10.28	102%	65.0	141.0	pass
56)	Bromoform	23.78	10.30	8.62	84%	84.0	137.0	FAIL — ok
57)	1,1,2,2-Tetrachloroethane	24.47	10.20	10.41	~~102%~~	~~73.0~~	127.0	pass
58)	4-Ethyltoluene	24.72	10.40	8.24	79%	81.0	127.0	FAIL
59)	1,3,5-Trimethylbenzene	24.81	10.30	10.52	102%	77.0	132.0	pass
60)	1,2,4-Trimethylbenzene	25.42	10.10	10.42	103%	78.0	131.0	pass
61)	1,3-Dichlorobenzene	25.95	9.90	10.13	102%	79.0	124.0	pass
62)	1,4-Dichlorobenzene	26.10	9.90	10.08	102%	75.0	127.0	pass
63)	Benzyl chloride	26.32	10.40	7.78	75%	67.0	156.0	pass
64)	1,2-Dichlorobenzene	26.71	9.90	10.32	104%	77.0	124.0	pass
65)	1,2,4-Trichlorobenzene	29.19	9.10	9.62	106%	55.0	132.0	pass
66)	Hexachlorobutadiene	29.32	9.50	10.20	107%	52.0	131.0	pass

QLS REPORT

Instrument Name: AG5973N
Sample Name: S14E108-CRL1
Misc Info: 1 ppbv
Date Acquired: 5/30/2014 16:35
QLast Update: Thu May 08 09:55:23 2014
Operator: EM

1 out
on 5/30/14

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS	TYPE
1)	BROMOCHLOROMETHANE	15.53	22.00	22.00	100%	60.0	140.0	pass	Internal
2)	Propene	4.47	1.03	0.94	91%	60.0	140.0	pass	Subset
3)	Dichlorodifluoromethane	4.57	1.03	1.19	115%	60.0	140.0	pass	Primary
4)	1,2-Dichlorotetrafluoroethane	4.92	1.05	1.54	146%	60.0	140.0	FAIL	Primary
5)	Chloromethane	5.13	1.05	1.17	111%	60.0	140.0	pass	Primary
6)	Vinyl chloride	5.45	1.05	1.06	101%	60.0	140.0	pass	Primary
7)	1,3-Butadiene	5.55	1.00	0.80	80%	60.0	140.0	pass	Subset
8)	Bromomethane	6.50	1.03	1.04	101%	60.0	140.0	pass	Primary
9)	Chloroethane	6.82	1.03	1.00	97%	60.0	140.0	pass	Primary
10)	Bromoethene	7.41	1.04	0.87	84%	60.0	140.0	pass	Subset
11)	Trichlorofluoromethane	7.56	1.07	1.14	107%	60.0	140.0	pass	Primary
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.41	0.97	0.99	102%	60.0	140.0	pass	Primary
13)	1,1-Dichloroethene	9.49	0.96	0.91	95%	60.0	140.0	pass	Primary
14)	Acetone	10.04	1.05	0.94	90%	60.0	140.0	pass	Subset
15)	Carbon disulfide	10.21	1.05	0.81	77%	60.0	140.0	pass	Subset
16)	2-Propanol	10.59	1.06	1.12	106%	60.0	140.0	pass	Subset
17)	Allyl chloride	11.02	1.07	0.85	79%	60.0	140.0	pass	Subset
18)	Dichloromethane	11.55	0.98	1.25	128%	60.0	140.0	pass	Primary
19)	tert-Butyl methyl ether (MTBE)	12.22	1.07	0.90	84%	60.0	140.0	pass	Subset
20)	trans-1,2-Dichloroethene	12.25	1.02	0.75	74%	60.0	140.0	pass	Subset
21)	Hexane	12.85	1.03	0.80	77%	60.0	140.0	pass	Subset
22)	1,1-Dichloroethane	13.57	0.97	0.92	95%	60.0	140.0	pass	Primary
23)	Vinyl acetate	13.71	1.06	0.80	76%	60.0	140.0	pass	Subset
24)	cis-1,2-Dichloroethene	14.99	1.01	1.02	101%	60.0	140.0	pass	Primary
25)	2-Butanone (MEK)	15.08	1.05	0.80	76%	60.0	140.0	pass	Subset
26)	Ethyl acetate	15.13	1.04	0.76	73%	60.0	140.0	pass	Subset
27)	Tetrahydrofuran	15.54	1.03	0.82	80%	60.0	140.0	pass	Subset
28)	Chloroform	15.68	1.02	0.96	94%	60.0	140.0	pass	Primary
29)	Cyclohexane	15.92	1.05	0.77	73%	60.0	140.0	pass	Subset
30)	1,1,1-Trichloroethane	15.96	1.01	0.97	96%	60.0	140.0	pass	Primary
31)	Carbon tetrachloride	16.21	1.03	0.97	94%	60.0	140.0	pass	Primary
32)	1,4-DIFLUOROBENZENE	17.51	22.00	22.00	100%	60.0	140.0	pass	Internal
33)	Benzene	16.71	1.01	0.89	88%	60.0	140.0	pass	Primary
34)	2,2,4-Trimethylpentane	16.66	1.05	0.76	72%	60.0	140.0	pass	Subset
35)	1,2-Dichloroethane	16.90	0.98	0.89	91%	60.0	140.0	pass	Primary
36)	Heptane	17.03	1.05	0.75	72%	60.0	140.0	pass	Subset
37)	Trichloroethene	17.92	1.01	0.95	94%	60.0	140.0	pass	Primary
38)	1,2-Dichloropropane	18.42	1.03	0.97	94%	60.0	140.0	pass	Primary
40)	Bromodichloromethane	18.88	1.04	0.79	76%	60.0	140.0	pass	Subset
41)	cis-1,3-Dichloropropene	19.64	1.03	0.89	87%	60.0	140.0	pass	Subset
42)	4-Methyl-2-pentanone (MIBK)	19.87	1.05	0.84	80%	60.0	140.0	pass	Primary
43)	CHLOROBENZENE-d5	22.39	22.00	22.00	100%	60.0	140.0	pass	Subset
44)	Toluene	20.12	1.02	0.92	90%	60.0	140.0	pass	Internal
45)	trans-1,3-Dichloropropene	20.58	1.07	1.00	93%	60.0	140.0	pass	Primary
46)	1,1,2-Trichloroethane	20.89	1.03	1.02	99%	60.0	140.0	pass	Primary
47)	Tetrachloroethene	20.97	1.00	1.00	100%	60.0	140.0	pass	Primary
48)	2-Hexanone	21.21	1.04	0.86	83%	60.0	140.0	pass	Primary
50)	1,2-Dibromoethane (EDB)	21.73	1.03	1.03	100%	60.0	140.0	pass	Subset
51)	Chlorobenzene	22.44	1.04	0.99	96%	60.0	140.0	pass	Subset
52)	Ethylbenzene	22.53	1.02	0.96	94%	60.0	140.0	pass	Primary

53)	m&p-Xylene	22.71	2.04	1.86	91%	60.0	140.0	pass	Primary
54)	o-Xylene	23.36	1.03	0.97	94%	60.0	140.0	pass	Primary
55)	Styrene	23.40	1.01	0.92	91%	60.0	140.0	pass	Primary
56)	Bromoform	23.78	1.03	0.83	81%	60.0	140.0	pass	Primary
57)	1,1,2,2-Tetrachloroethane	24.47	1.02	1.05	103%	60.0	140.0	pass	Primary
58)	4-Ethyltoluene	24.72	1.04	0.84	80%	60.0	140.0	pass	Subset
59)	1,3,5-Trimethylbenzene	24.81	1.03	0.96	93%	60.0	140.0	pass	Primary
61)	1,3-Dichlorobenzene	25.95	0.99	0.94	95%	60.0	140.0	pass	Subset
62)	1,4-Dichlorobenzene	26.09	0.99	0.93	94%	60.0	140.0	pass	Primary
63)	Benzyl chloride	26.32	1.04	0.69	66%	60.0	140.0	pass	Primary
64)	1,2-Dichlorobenzene	26.71	0.99	0.97	98%	60.0	140.0	pass	Primary
65)	1,2,4-Trichlorobenzene	29.19	0.91	0.90	99%	60.0	140.0	pass	Primary
66)	Hexachlorobutadiene	29.32	0.95	0.88	92%	60.0	140.0	pass	Subset

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN03.D
Acq On : 30 May 2014 4:35 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CRL1
Misc : 1 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 30 17:07:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	324258	22.00 ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.506	114	1966441	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1645633	22.00 ppbv	-0.01

Target Compounds					Qvalue
2) Propene	4.474	41	7055	0.935 ppbv	96
3) Dichlorodifluoromethane	4.569	85	61466	1.187 ppbv	98
4) 1,2-Dichlorotetrafluoroeth	4.925	85	49489	1.537 ppbv	100
5) Chloromethane	5.126	50	8433	1.170 ppbv	99
6) Vinyl chloride	5.446	62	11155	1.061 ppbv	100
7) 1,3-Butadiene	5.553	54	7159	0.803 ppbv	94
8) Bromomethane	6.502	94	15270	1.037 ppbv	99
9) Chloroethane	6.822	64	6056	1.003 ppbv #	41
10) Bromoethene	7.415	106	17122	0.870 ppbv	100
11) Trichlorofluoromethane	7.557	101	82098	1.141 ppbv	99
12) 1,1,2-Trichloro-1,2,2-trif	9.407	151	47200	0.986 ppbv	98
13) 1,1-Dichloroethene	9.490	61	24612	0.908 ppbv	95
14) Acetone	10.036	43	19612	0.944 ppbv	98
15) Carbon disulfide	10.214	76	35836	0.806 ppbv	94
16) 2-Propanol	10.593	45	16593	1.124 ppbv	97
17) Allyl chloride	11.020	41	11280	0.846 ppbv	97
18) Dichloromethane	11.554	49	20459	1.251 ppbv	94
19) tert-Butyl methyl ether (M	12.218	73	48751	0.897 ppbv	100
20) trans-1,2-Dichloroethene	12.253	61	18720	0.755 ppbv	98
21) Hexane	12.846	57	15240	0.796 ppbv	98
22) 1,1-Dichloroethane	13.569	63	24639	0.921 ppbv	97
23) Vinyl acetate	13.712	43	22925	0.802 ppbv	99
24) cis-1,2-Dichloroethene	14.993	61	20530	1.022 ppbv	96
25) 2-Butanone (MEK)	15.076	72	5738	0.803 ppbv #	100
26) Ethyl acetate	15.135	61	3033	0.755 ppbv #	92
27) Tetrahydrofuran	15.538	42	9384	0.823 ppbv	100
28) Chloroform	15.680	83	43191	0.955 ppbv	95
29) Cyclohexane	15.917	56	15905	0.766 ppbv	95
30) 1,1,1-Trichloroethane	15.965	97	59919	0.973 ppbv	99
31) Carbon tetrachloride	16.214	117	72294	0.966 ppbv	99
33) Benzene	16.712	78	44634	0.890 ppbv	98
34) 2,2,4-Trimethylpentane	16.665	57	51568	0.760 ppbv	97
35) 1,2-Dichloroethane	16.902	62	32053	0.895 ppbv	100
36) Heptane	17.032	43	16785	0.751 ppbv	99
37) Trichloroethene	17.922	130	31782	0.953 ppbv	99
38) 1,2-Dichloropropane	18.420	63	13405	0.974 ppbv	99
39) 1,4-Dioxane	18.609	88	11526	1.086 ppbv	97
40) Bromodichloromethane	18.882	83	48505	0.789 ppbv	99
41) cis-1,3-Dichloropropene	19.641	75	27378	0.892 ppbv	99
42) 4-Methyl-2-pentanone (MIBK	19.866	43	26130	0.839 ppbv	100
44) Toluene	20.115	91	63733	0.923 ppbv	100
45) trans-1,3-Dichloropropene	20.578	75	30526	0.996 ppbv	99
46) 1,1,2-Trichloroethane	20.886	97	23603	1.019 ppbv	97
47) Tetrachloroethene	20.969	166	56201	0.999 ppbv	98
48) 2-Hexanone	21.206	43	25819	0.865 ppbv	97
49) Chlorodibromomethane	21.503	129	61802	0.848 ppbv	99

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN03.D
Acq On : 30 May 2014 4:35 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CRL1
Misc : 1 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 30 17:07:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
50) 1,2-Dibromoethane (EDB)	21.728	107	39015	1.029 ppbv	100
51) Chlorobenzene	22.440	112	62690	0.994 ppbv #	76
52) Ethylbenzene	22.535	91	97748	0.960 ppbv	99
53) m&p-Xylene	22.712	91	159883	1.857 ppbv	99
54) o-Xylene	23.365	91	81901	0.973 ppbv	99
55) Styrene	23.400	104	57327	0.919 ppbv	98
56) Bromoform	23.780	173	78188	0.830 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.467	83	44645	1.048 ppbv	99
58) 4-Ethyltoluene	24.716	105	128045	0.837 ppbv	99
59) 1,3,5-Trimethylbenzene	24.811	105	108495	0.960 ppbv	99
60) 1,2,4-Trimethylbenzene	25.416	105	105529	0.925 ppbv	99
61) 1,3-Dichlorobenzene	25.950	146	84449	0.939 ppbv	98
62) 1,4-Dichlorobenzene	26.092	146	82871	0.933 ppbv	98
63) Benzyl chloride	26.317	91	80421	0.689 ppbv	96
64) 1,2-Dichlorobenzene	26.709	146	83716	0.972 ppbv	99
65) 1,2,4-Trichlorobenzene	29.187	180	88828	0.897 ppbv	98
66) Hexachlorobutadiene	29.318	225	111098	0.876 ppbv	99

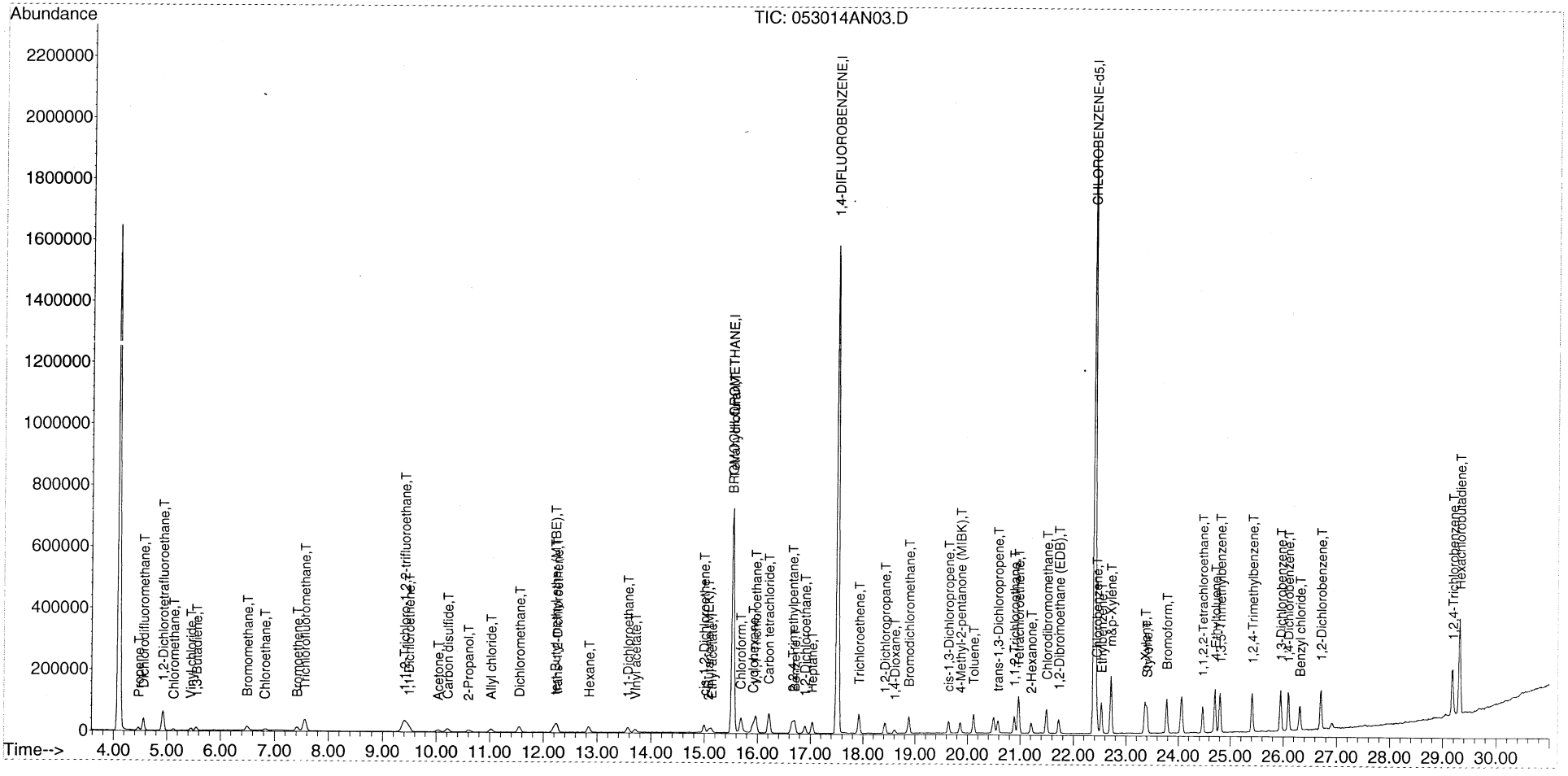
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN03.D
Acq On : 30 May 2014 4:35 pm
Instrument: AG5973N
Operator : EM
Sample : S14E108-CRL1
Misc : 1 ppbv
ALS Vial : 33
Multiplier: 1

Quant Time: May 30 17:07:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN04.D
Acq On : 30 May 2014 5:28 pm
Instrument: AG5973N
Operator : EM
Sample : B14E113-BLK1
Misc : BLANK CAN 635
ALS Vial : 35
Multiplier: 1

Quant Time: May 30 18:21:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	330057	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	2011326	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1645954	22.00	ppbv	-0.01

Target Compounds Qvalue

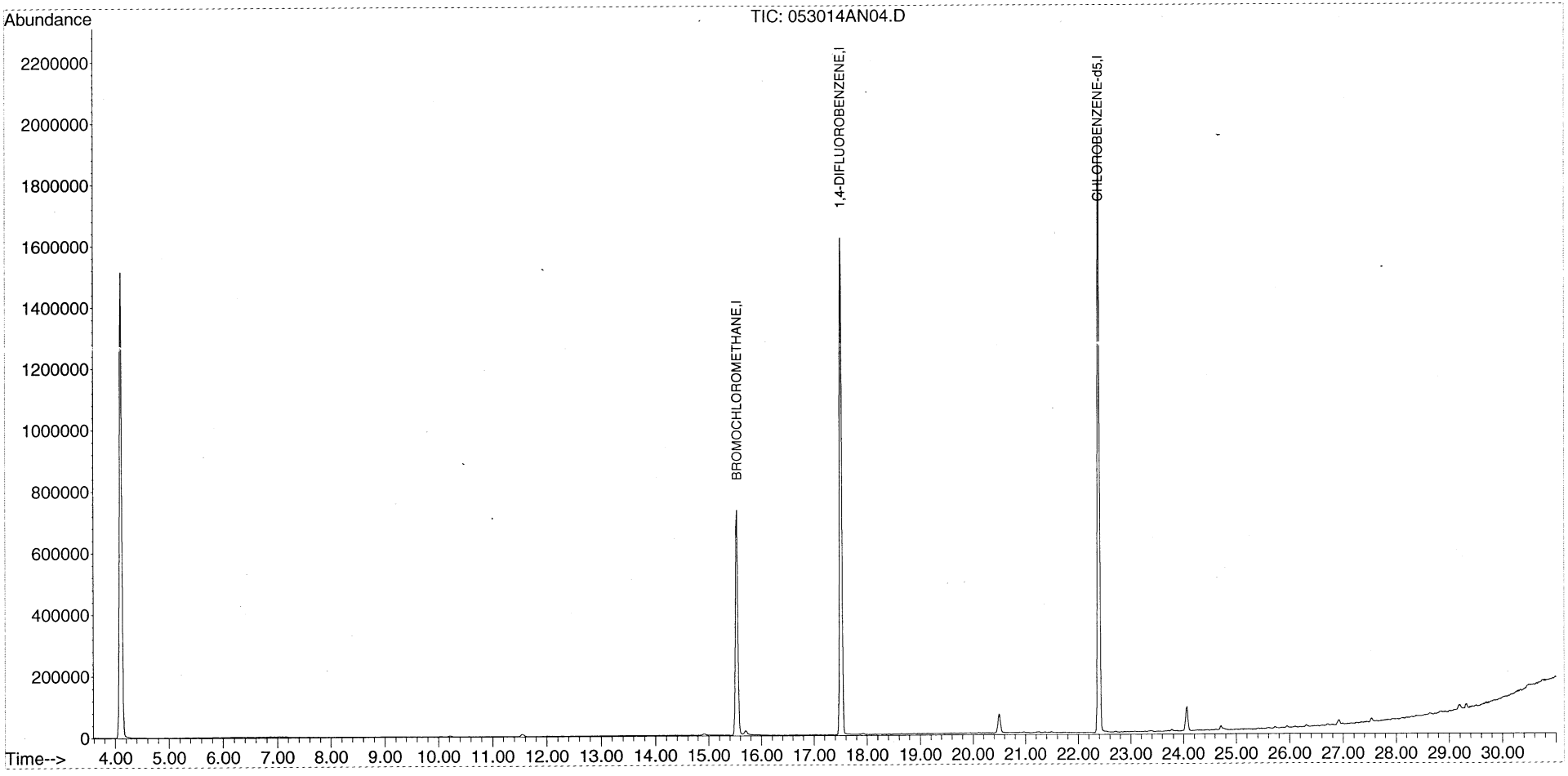
(#) = qualifier out of range (m) = manual integration (+) = signals summed

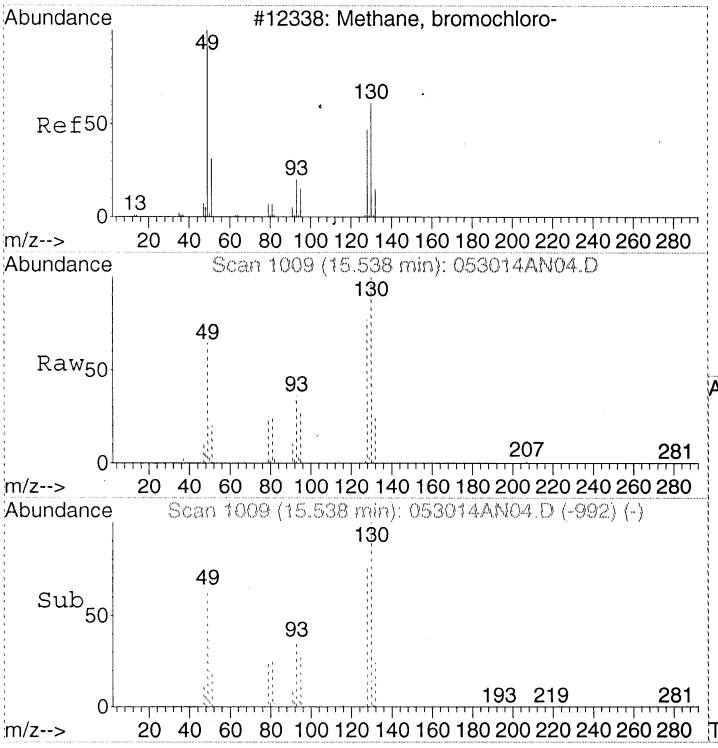
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN04.D
Acq On : 30 May 2014 5:28 pm
Instrument: AG5973N
Operator : EM
Sample : B14E113-BLK1
Misc : BLANK CAN 635
ALS Vial : 35
Multiplier: 1

Quant Time: May 30 18:21:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

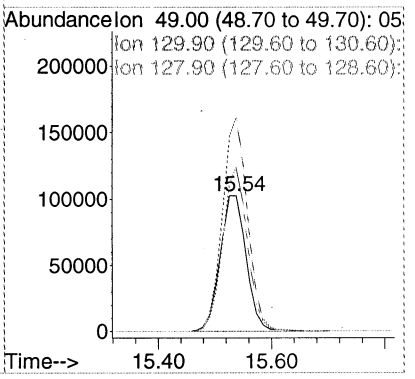


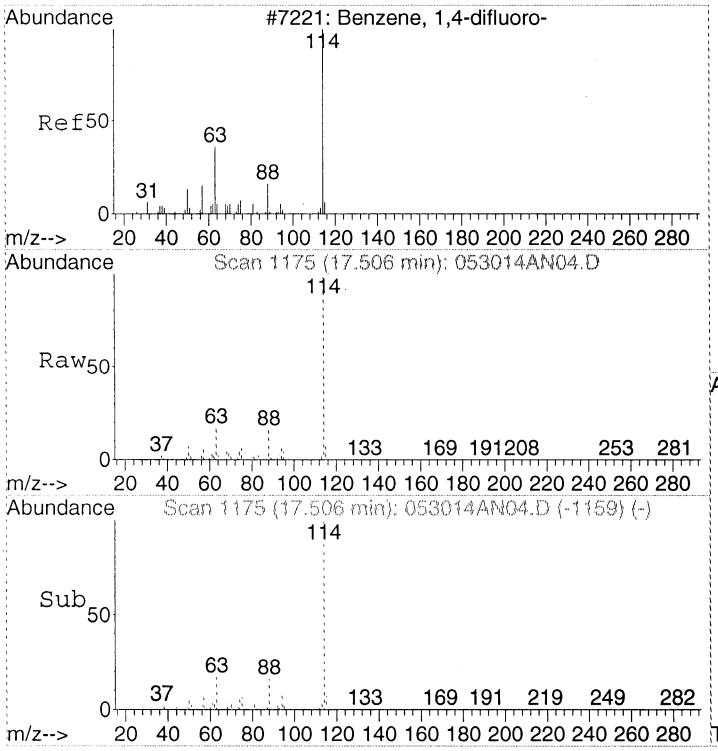


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN04.D
Acq: 30 May 2014 5:28 pm

Tgt Ion: 49 Resp: 330057

Ion	Ratio	Lower	Upper
49	100		
130	150.8	125.1	165.1
128	114.8	91.6	131.6

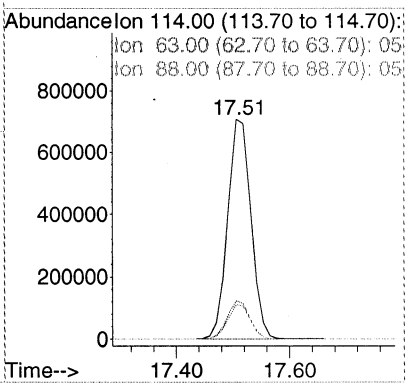


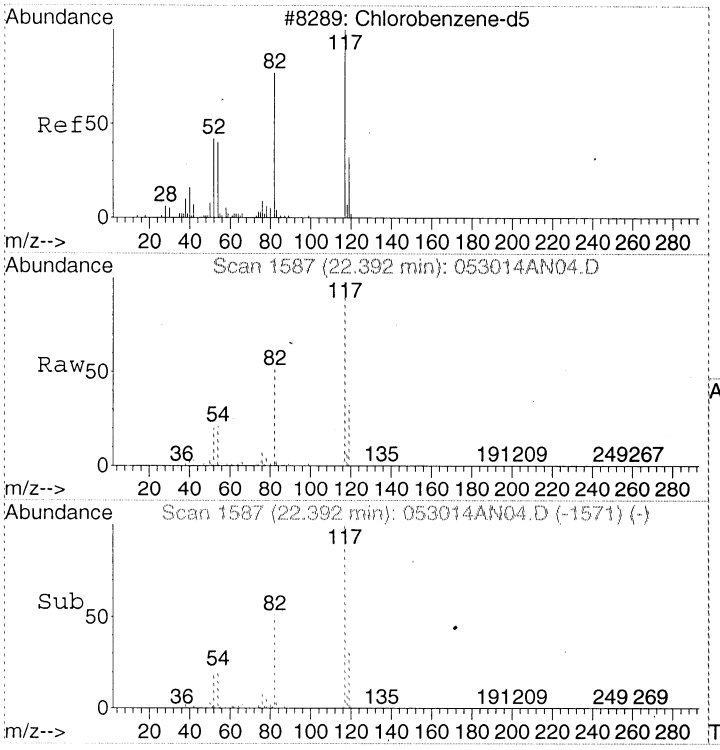


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN04.D
Acq: 30 May 2014 5:28 pm

Tgt Ion:114 Resp: 2011326

Ion	Ratio	Lower	Upper
114	100		
63	16.9	0.0	37.2
88	15.3	0.0	35.6

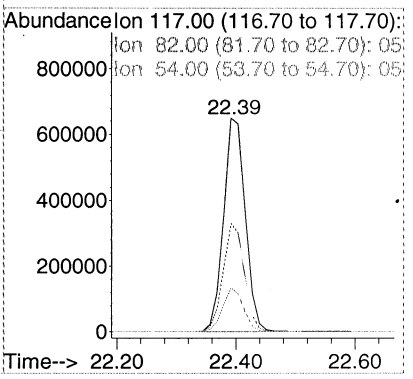




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN04.D
Acq: 30 May 2014 5:28 pm

Tgt Ion:117 Resp: 1645954

Ion	Ratio	Lower	Upper
117	100		
82	49.6	30.5	70.5
54	19.8	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN05.D
Acq On : 30 May 2014 6:21 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-01
Misc : 200mL
ALS Vial : 36
Multiplier: 2.05

Quant Time: Jun 03 09:57:08 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	337718	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	2052576	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1701327	22.00 ppbv	-0.01

Target Compounds					Qvalue
14) Acetone	10.024	43	55259	2.553 ppbv	99
18) Dichloromethane	11.553	49	10355	0.608 ppbv	94
37) Trichloroethene	17.921	130	17553	0.504 ppbv	96

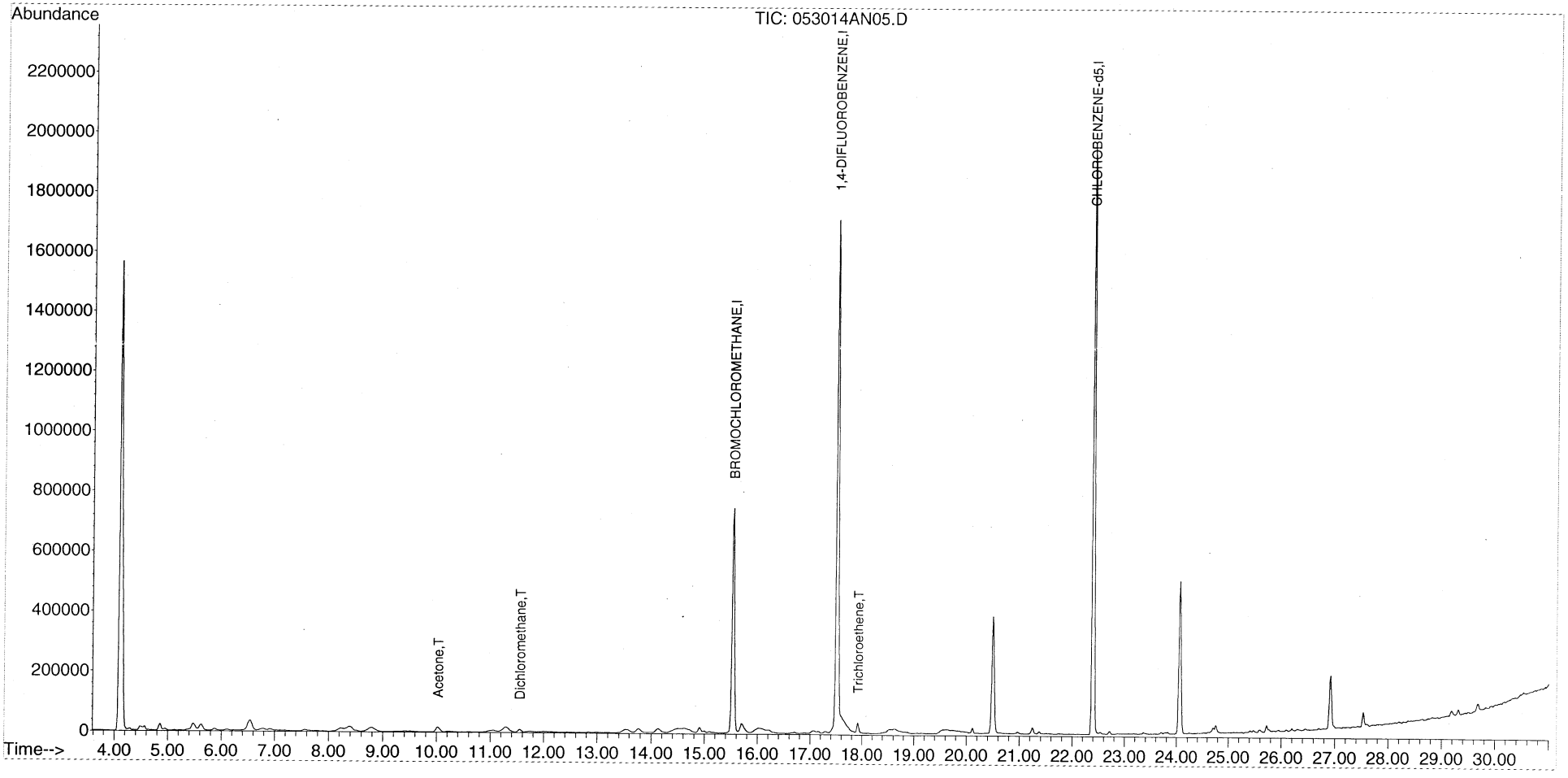
(#) = qualifier out of range (m) = manual integration (+) = signals summed

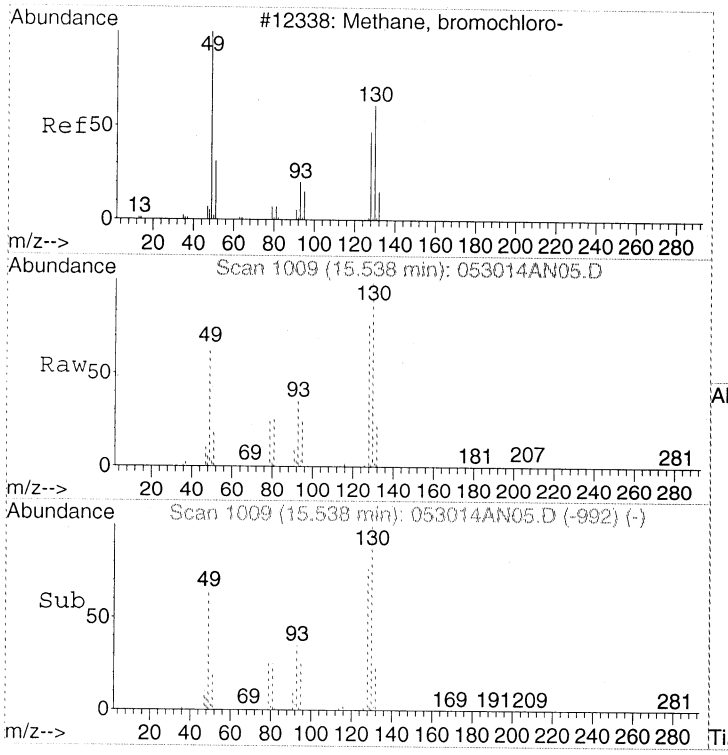
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN05.D
Acq On : 30 May 2014 6:21 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-01
Misc : 200mL
ALS Vial : 36
Multiplier: 2.05

Quant Time: Jun 03 09:57:08 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

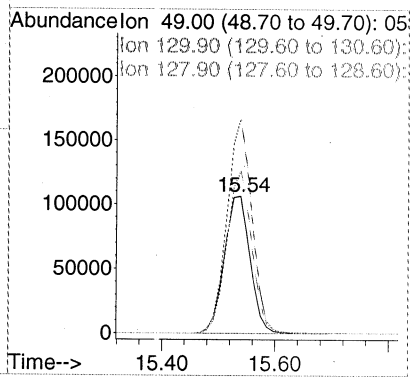


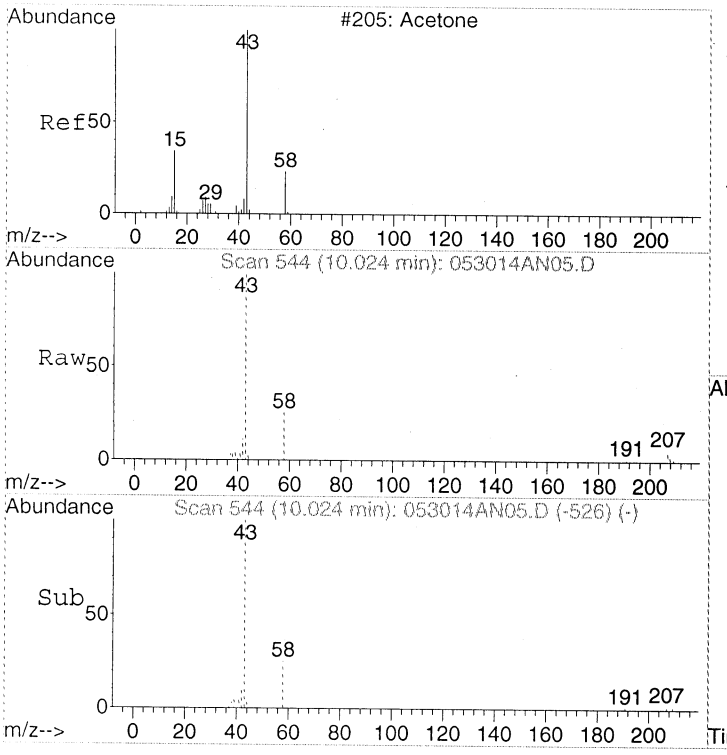


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN05.D
Acq: 30 May 2014 6:21 pm

Tgt Ion: 49 Resp: 337718

Ion	Ratio	Lower	Upper
49	100		
130	150.7	125.1	165.1
128	114.8	91.6	131.6

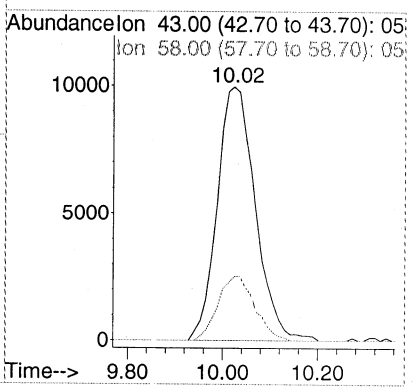


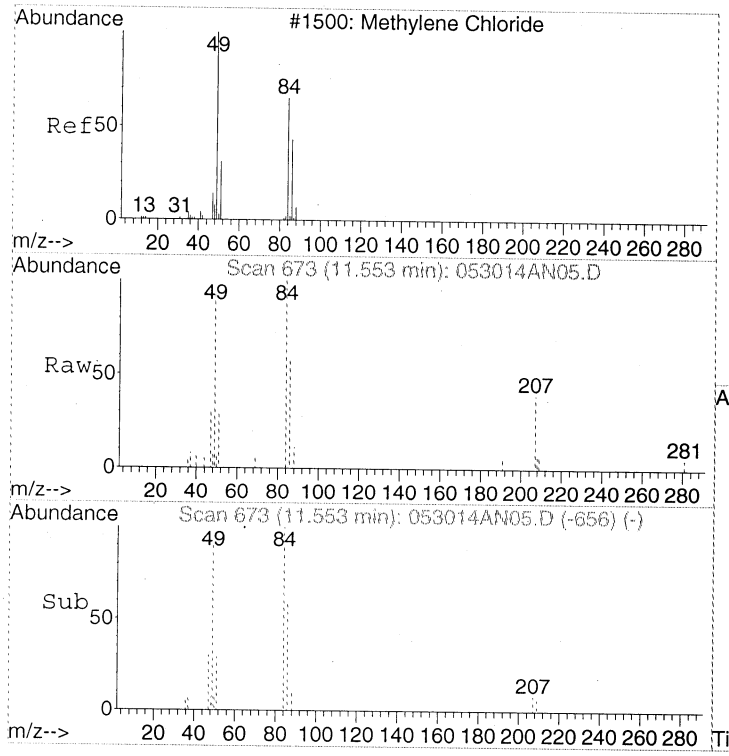


#14
Acetone
Concen: 2.55 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN05.D
Acq: 30 May 2014 6:21 pm

Tgt Ion: 43 Resp: 55259

Ion	Ratio	Lower	Upper
43	100		
58	24.5	4.2	44.2

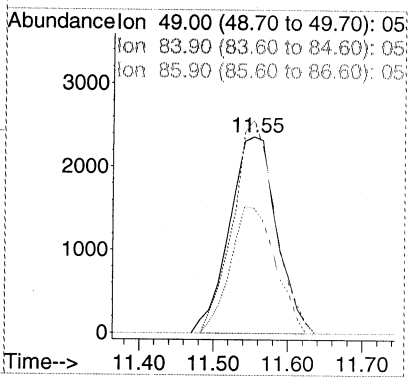


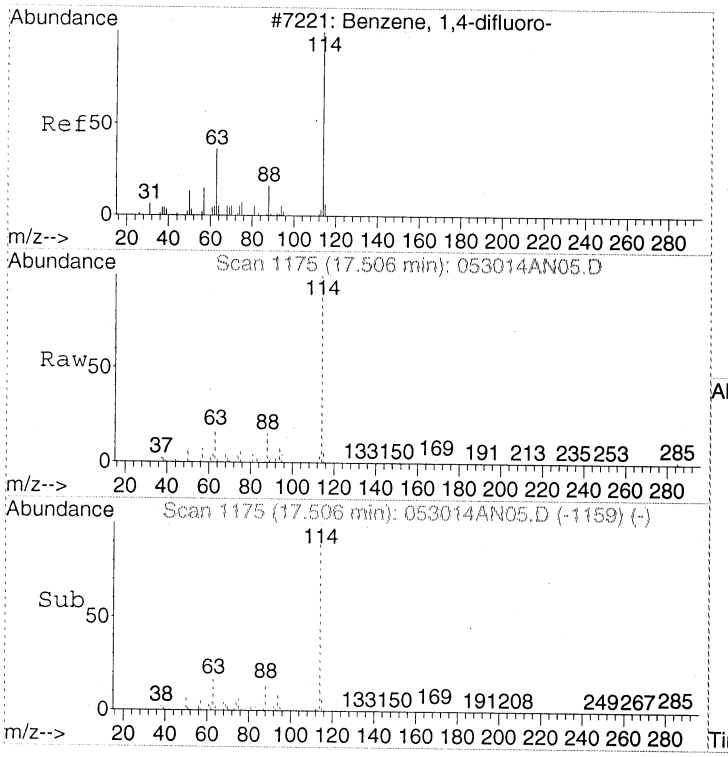


#18
Dichloromethane
Concen: 0.61 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN05.D
Acq: 30 May 2014 6:21 pm

Tgt Ion: 49 Resp: 10355

Ion	Ratio	Lower	Upper
49	100		
84	97.5	69.9	109.9
86	61.3	38.3	78.3

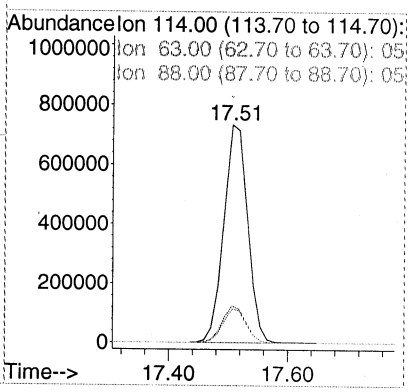


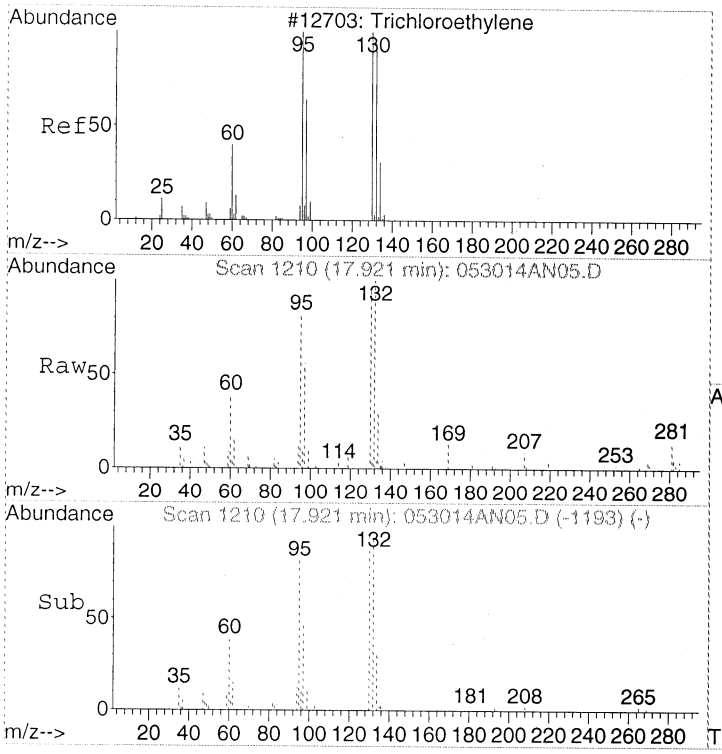


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN05.D
Acq: 30 May 2014 6:21 pm

Tgt Ion:114 Resp: 2052576

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.3	0.0	35.6

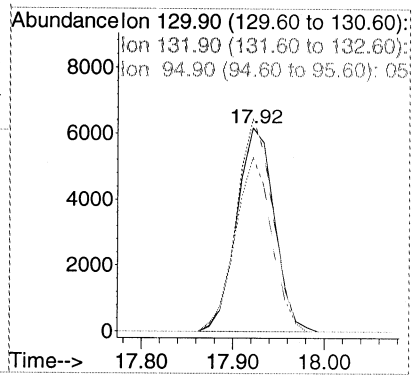


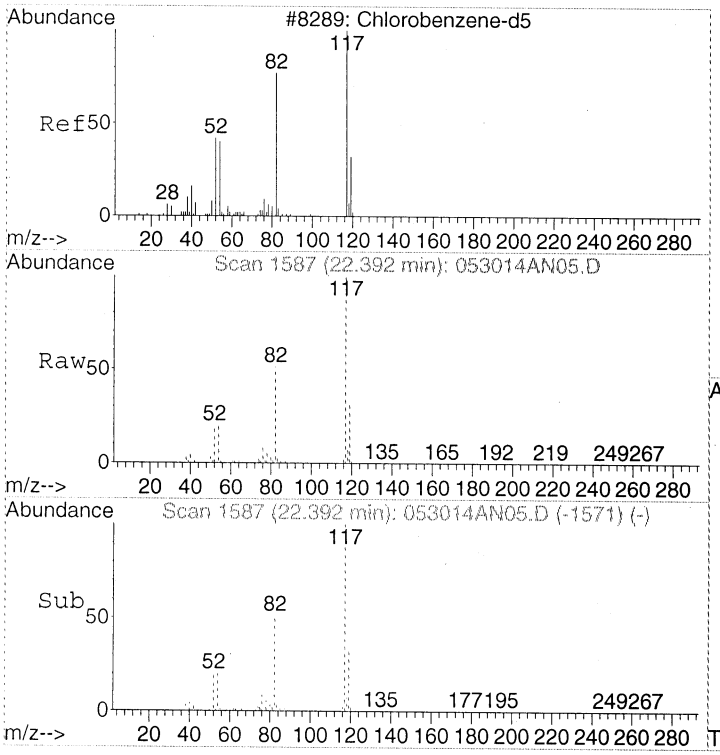


#37
Trichloroethene
Concen: 0.50 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN05.D
Acq: 30 May 2014 6:21 pm

Tgt Ion:130 Resp: 17553

Ion	Ratio	Lower	Upper
130	100		
132	100.0	76.1	116.1
95	83.2	66.3	106.3

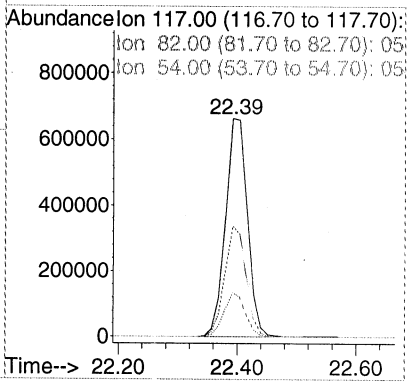




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN05.D
Acq: 30 May 2014 6:21 pm

Tgt Ion:117 Resp: 1701327

Ion	Ratio	Lower	Upper
117	100		
82	49.4	30.5	70.5
54	19.5	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN06.D
Acq On : 30 May 2014 7:13 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-02
Misc : 200mL
ALS Vial : 37
Multiplier: 2.08

Quant Time: Jun 03 09:57:14 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	340856	22.00 ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.507	114	2056036	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1689958	22.00 ppbv	-0.01

Target Compounds					Qvalue
14) Acetone	10.036	43	34533	1.581 ppbv	99
18) Dichloromethane	11.554	49	8623	0.502 ppbv	89
24) cis-1,2-Dichloroethene	15.004	61	22977	1.088 ppbv	96
28) Chloroform	15.692	83	44989	0.947 ppbv	96
37) Trichloroethene	17.922	130	186977	5.362 ppbv	99
44) Toluene	20.115	91	42708	0.602 ppbv	99
~~45) trans-1,3-Dichloropropene~~	~~20.495~~	~~75~~	~~37046~~	~~1.177 ppbv #~~	~~42~~

em 6/3/14

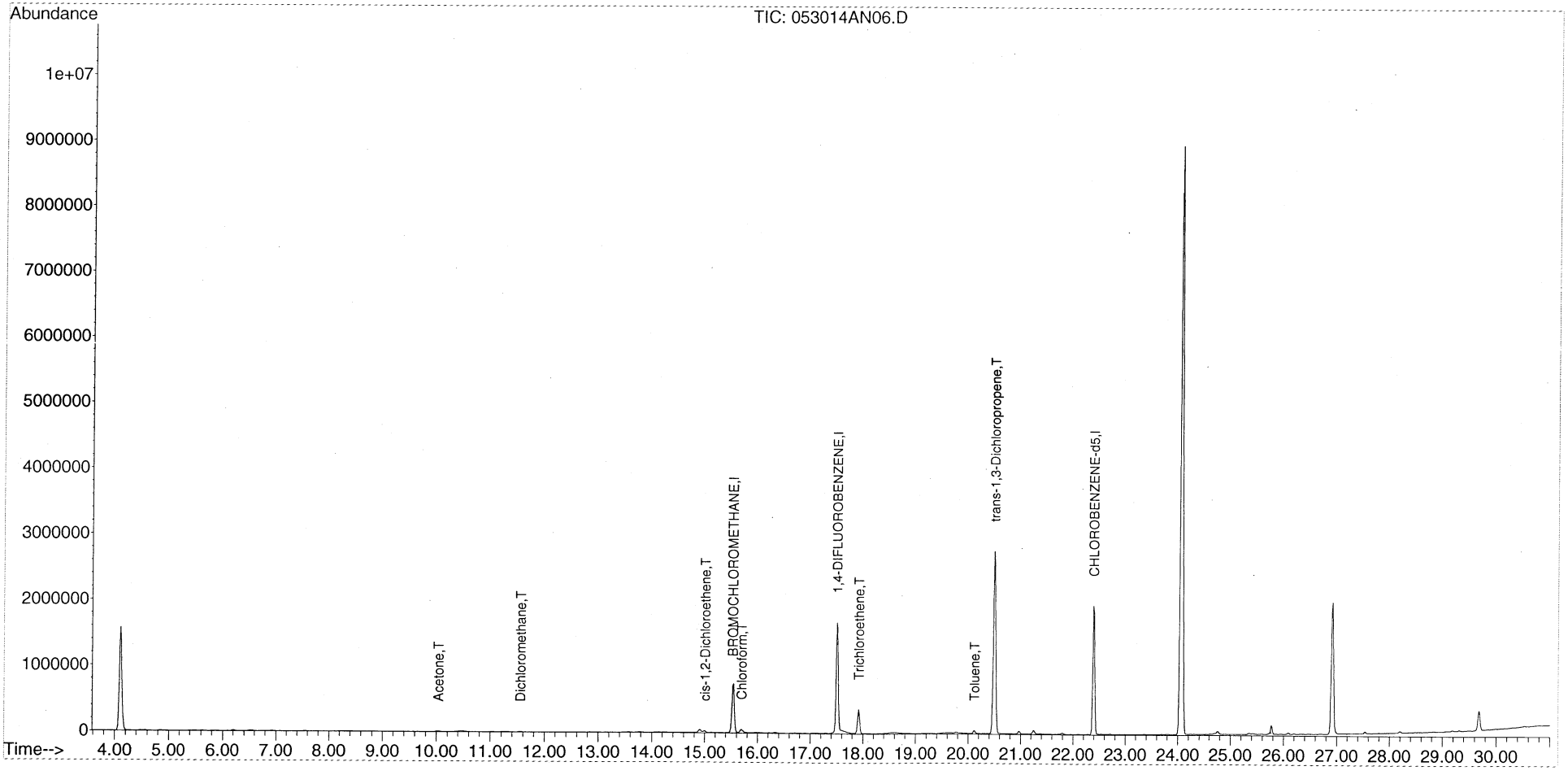
(#) = qualifier out of range (m) = manual integration (+) = signals summed

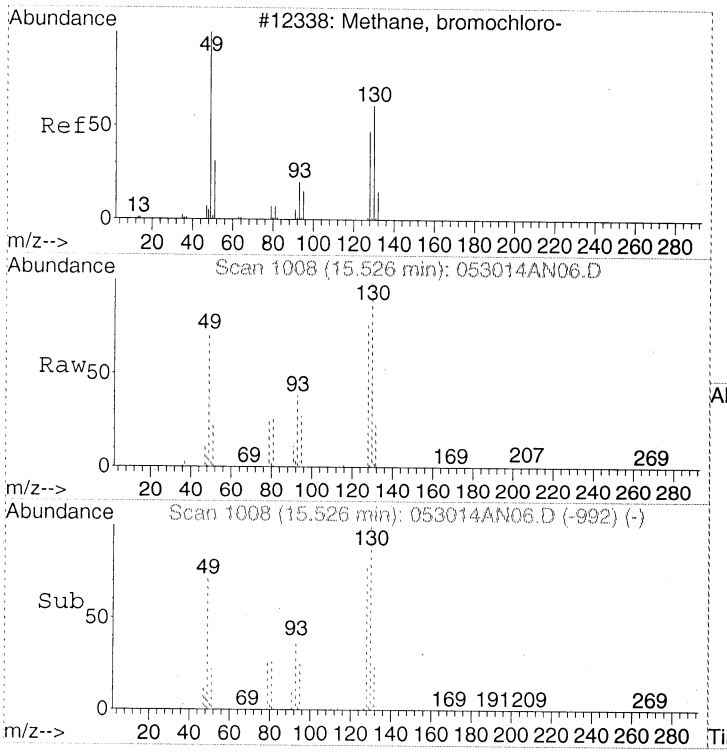
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN06.D
Acq On : 30 May 2014 7:13 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-02
Misc : 200mL
ALS Vial : 37
Multiplier: 2.08

Quant Time: Jun 03 09:57:14 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

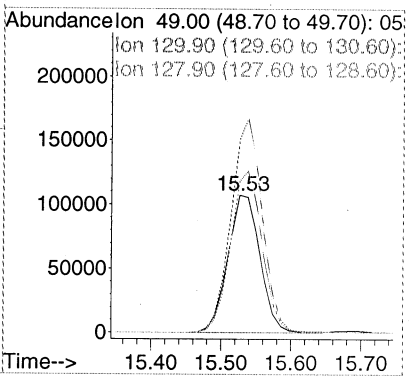


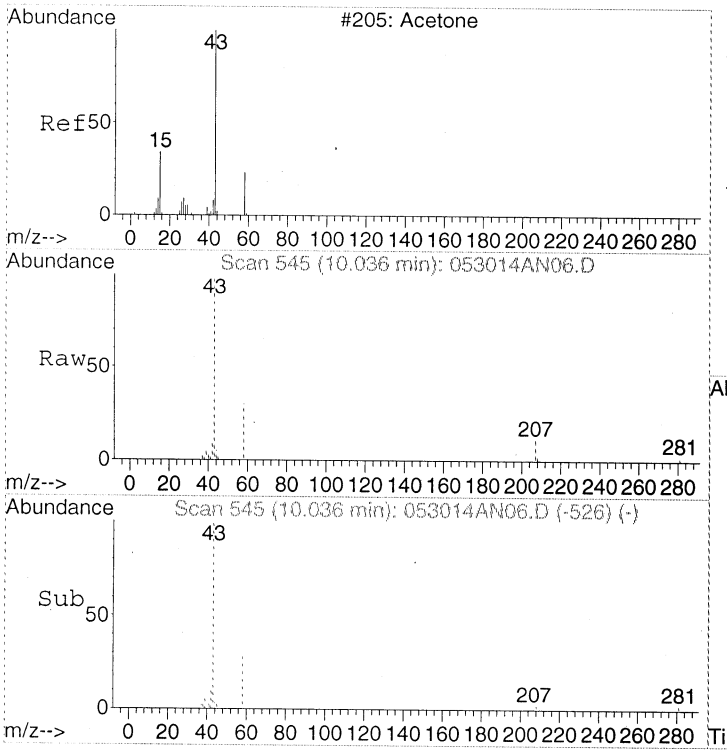


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. -0.01 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 49 Resp: 340856

Ion	Ratio	Lower	Upper
49	100		
130	151.3	125.1	165.1
128	116.2	91.6	131.6

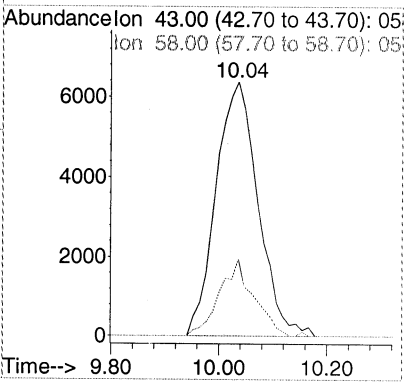


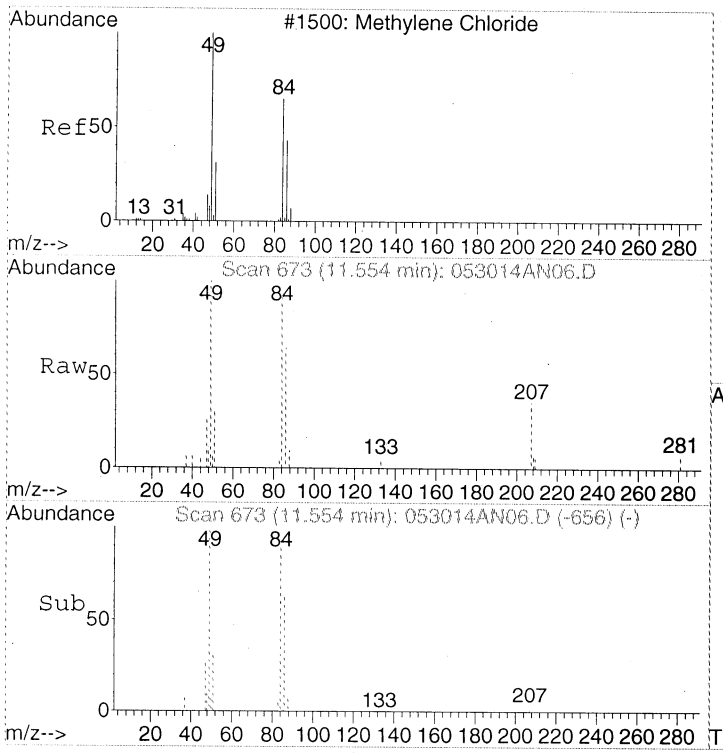


#14
Acetone
Concen: 1.58 ppbv
RT: 10.04 min Scan# 545
Delta R.T. 0.02 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 43 Resp: 34533

Ion	Ratio	Lower	Upper
43	100		
58	24.7	4.2	44.2

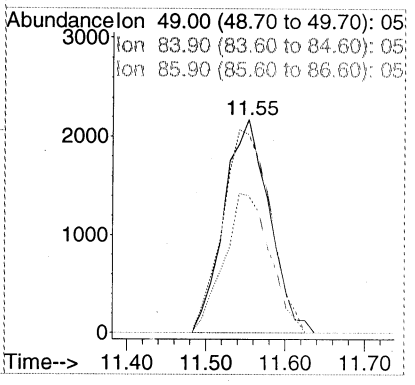


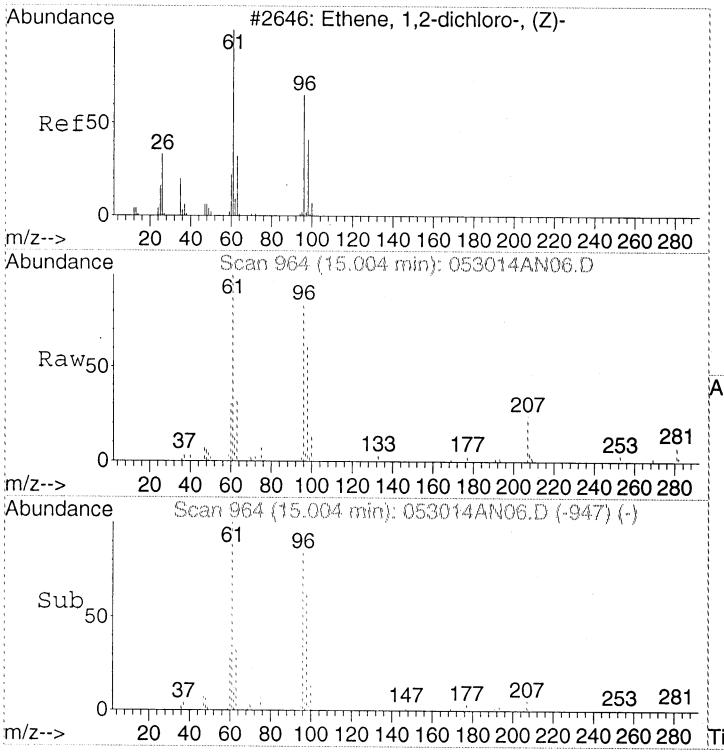


#18
Dichloromethane
Concen: 0.50 ppbv
RT: 11.55 min Scan# 673
Delta R.T. 0.00 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 49 Resp: 8623

Ion	Ratio	Lower	Upper
49	100		
84	101.2	69.9	109.9
86	66.2	38.3	78.3

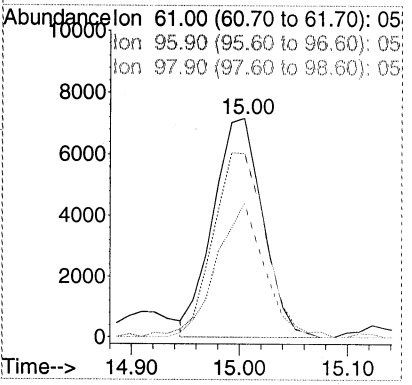


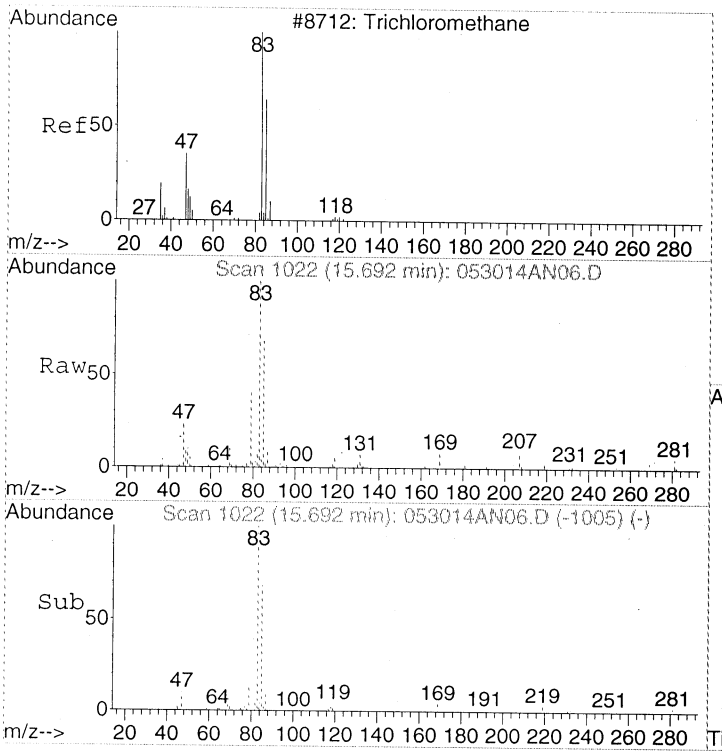


#24
cis-1,2-Dichloroethene
Concen: 1.09 ppbv
RT: 15.00 min Scan# 964
Delta R.T. 0.00 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 61 Resp: 22977

Ion	Ratio	Lower	Upper
61	100		
96	89.5	65.5	105.5
98	58.1	34.8	74.8

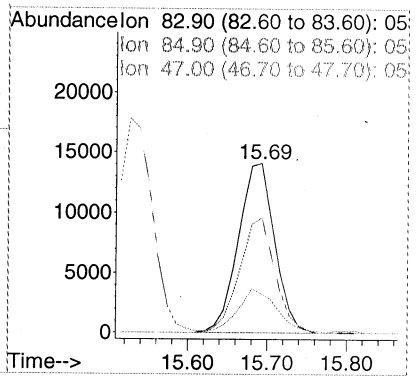


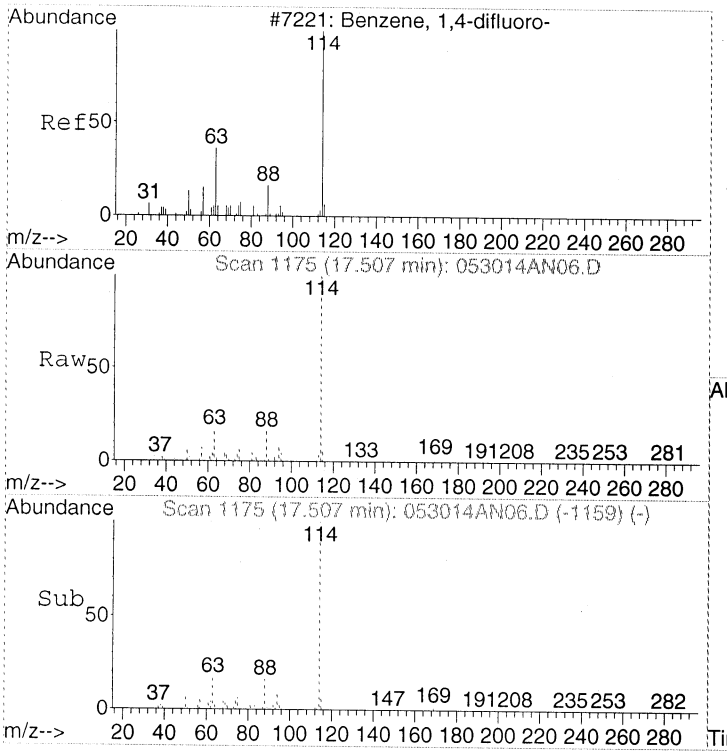


#28
Chloroform
Concen: 0.95 ppbv
RT: 15.69 min Scan# 1022
Delta R.T. 0.00 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 83 Resp: 44989

Ion	Ratio	Lower	Upper
83	100		
85	66.8	45.0	85.0
47	28.2	3.2	43.2

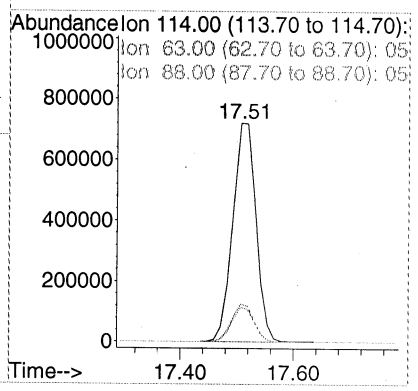


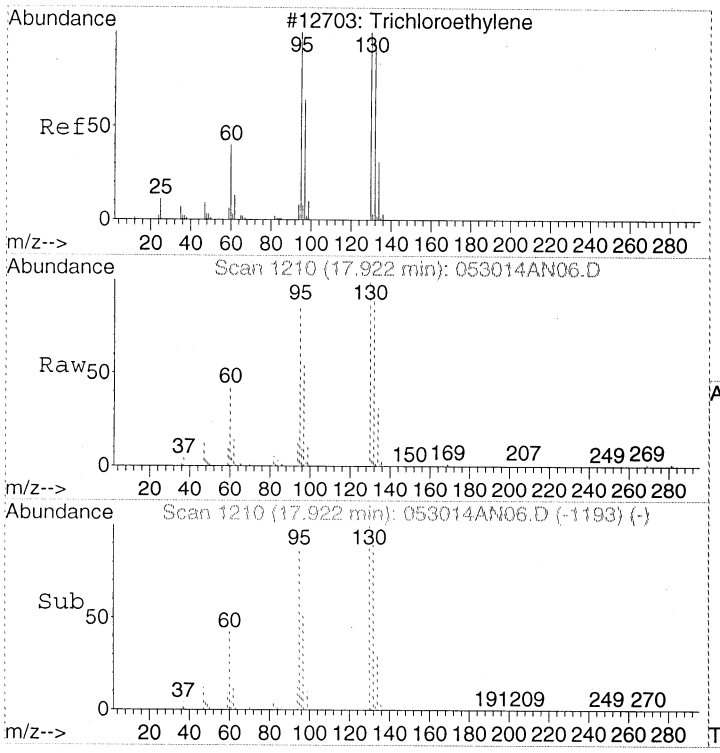


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion:114 Resp: 2056036

Ion	Ratio	Lower	Upper
114	100		
63	16.9	0.0	37.2
88	15.4	0.0	35.6

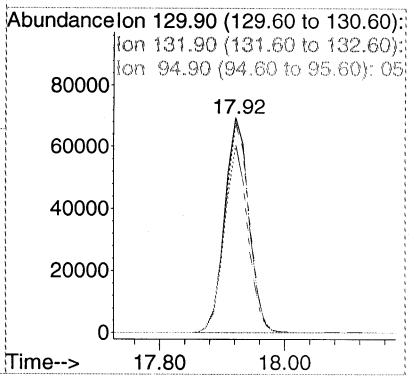


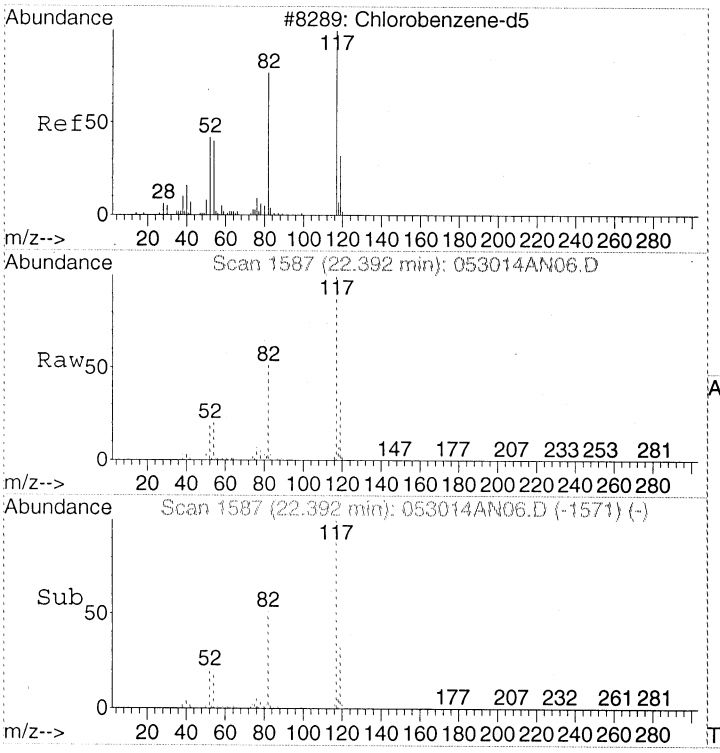


#37
Trichloroethene
Concen: 5.36 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. 0.00 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion:130 Resp: 186977

Ion	Ratio	Lower	Upper
130	100		
132	97.1	76.1	116.1
95	85.1	66.3	106.3

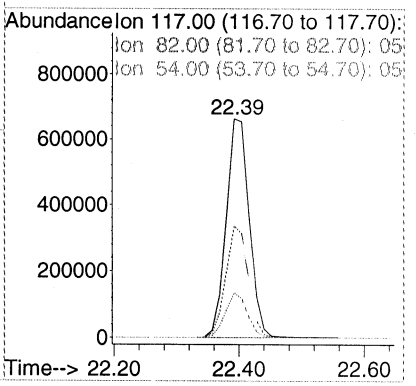


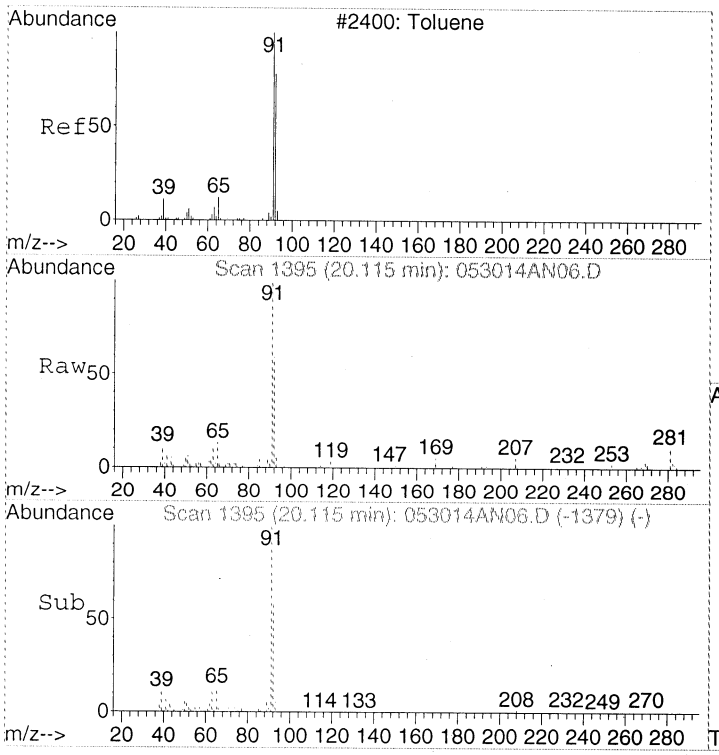


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion:117 Resp: 1689958

Ion	Ratio	Lower	Upper
117	100		
82	49.5	30.5	70.5
54	19.3	0.6	40.6

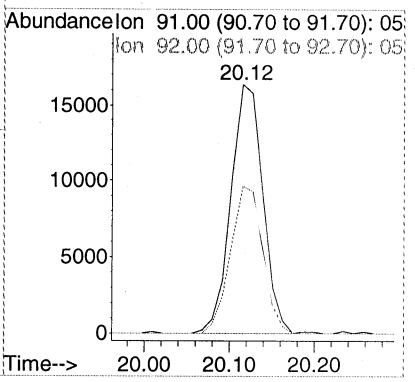


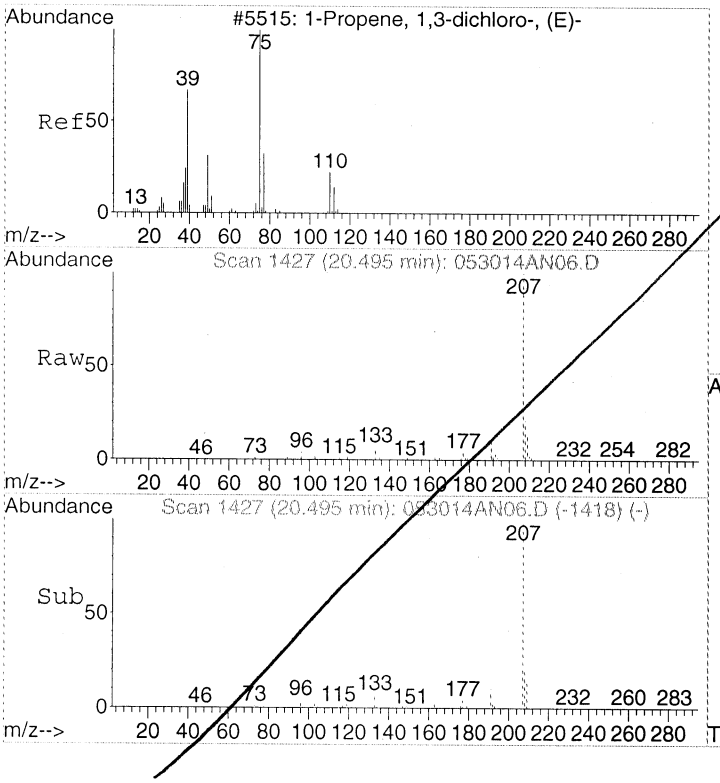


#44
Toluene
Concen: 0.60 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 91 Resp: 42708

Ion	Ratio	Lower	Upper
91	100		
92	59.4	38.5	78.5

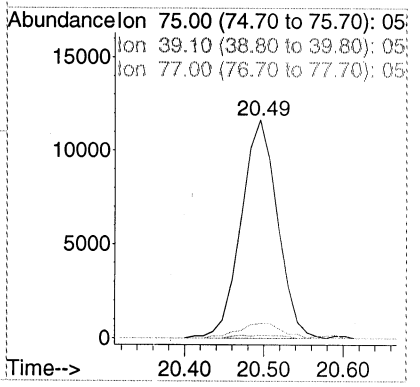




#45
trans-1,3-Dichloropropene
Concen: 1.18 ppbv
RT: 20.49 min Scan# 1427
Delta R.T. -0.09 min
Lab File: 053014AN06.D
Acq: 30 May 2014 7:13 pm

Tgt Ion: 75 Resp: 37046

Ion	Ratio	Lower	Upper
75	100		
39	1.8	28.6	68.6#
77	7.9	11.0	51.0#



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN07.D
Acq On : 30 May 2014 8:06 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-03
Misc : 200mL
ALS Vial : 38
Multiplier: 2.07

Quant Time: Jun 03 09:57:22 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	338086	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	2068803	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1652032	22.00	ppbv	-0.01

Target Compounds						Qvalue
14) Acetone	10.024	43	47892	2.211	ppbv	99
18) Dichloromethane	11.554	49	8700	0.510	ppbv	95
37) Trichloroethene	17.922	130	110613	3.152	ppbv	99

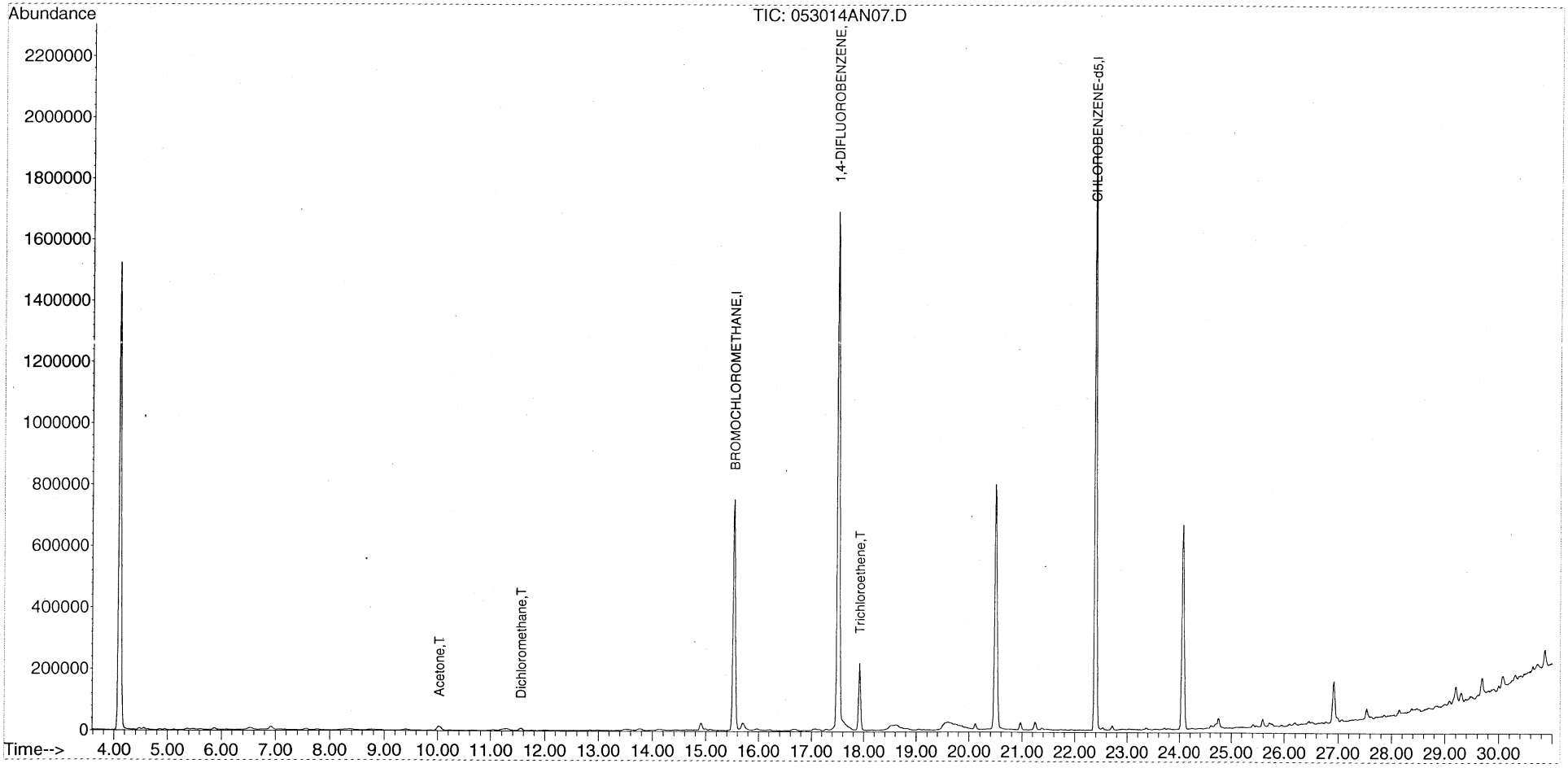
(#) = qualifier out of range (m) = manual integration (+) = signals summed

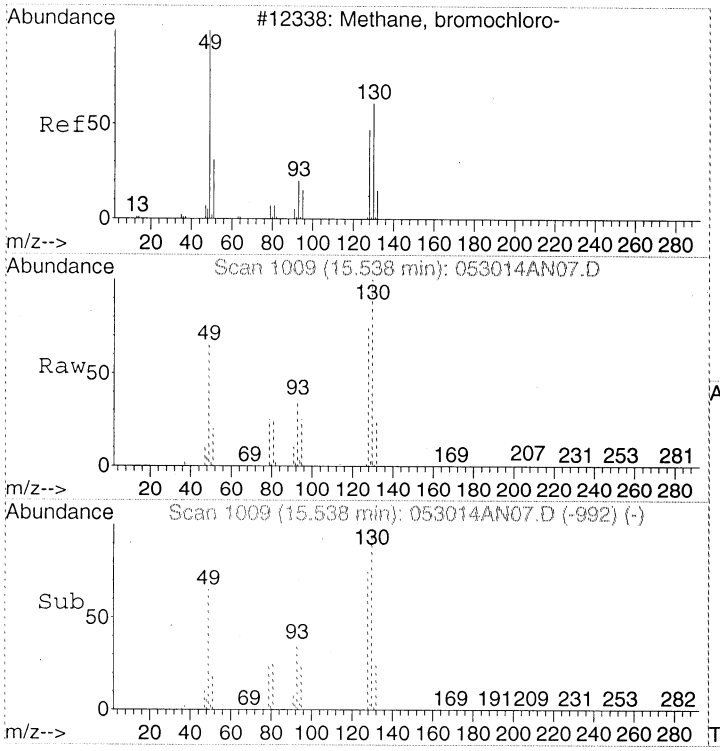
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN07.D
Acq On : 30 May 2014 8:06 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-03
Misc : 200mL
ALS Vial : 38
Multiplier: 2.07

Quant Time: Jun 03 09:57:22 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

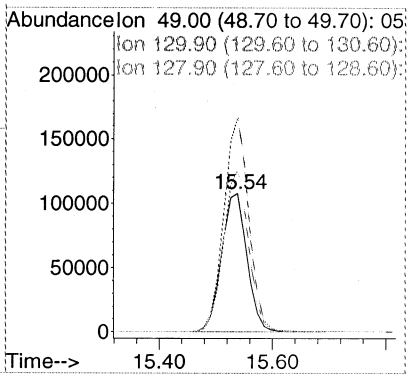


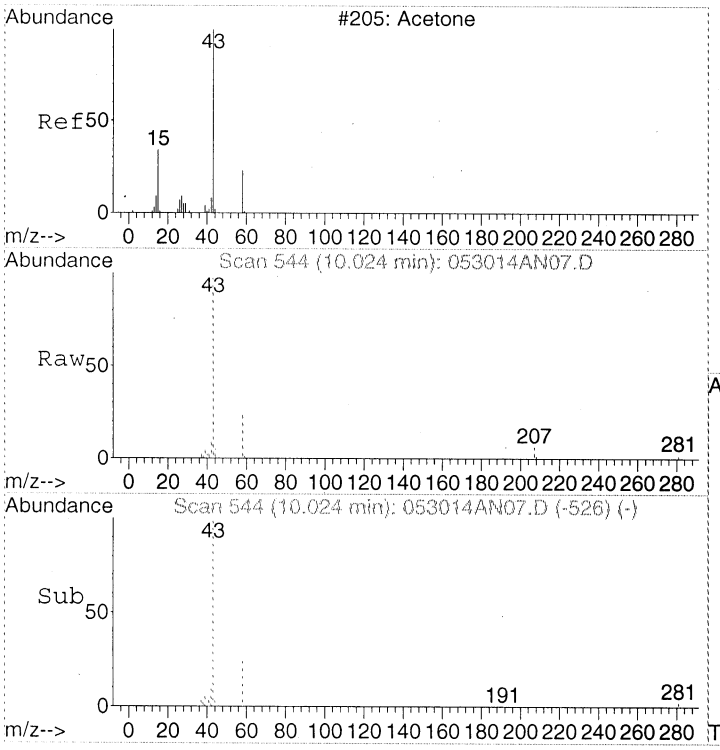


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN07.D
Acq: 30 May 2014 8:06 pm

Tgt Ion: 49 Resp: 338086

Ion	Ratio	Lower	Upper
49	100		
130	150.6	125.1	165.1
128	114.8	91.6	131.6

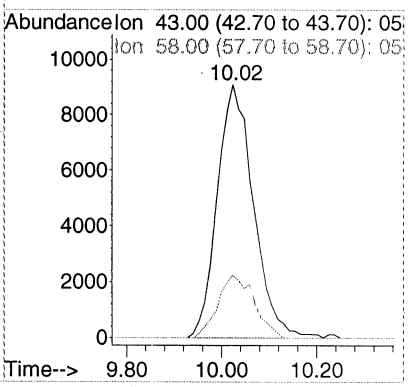


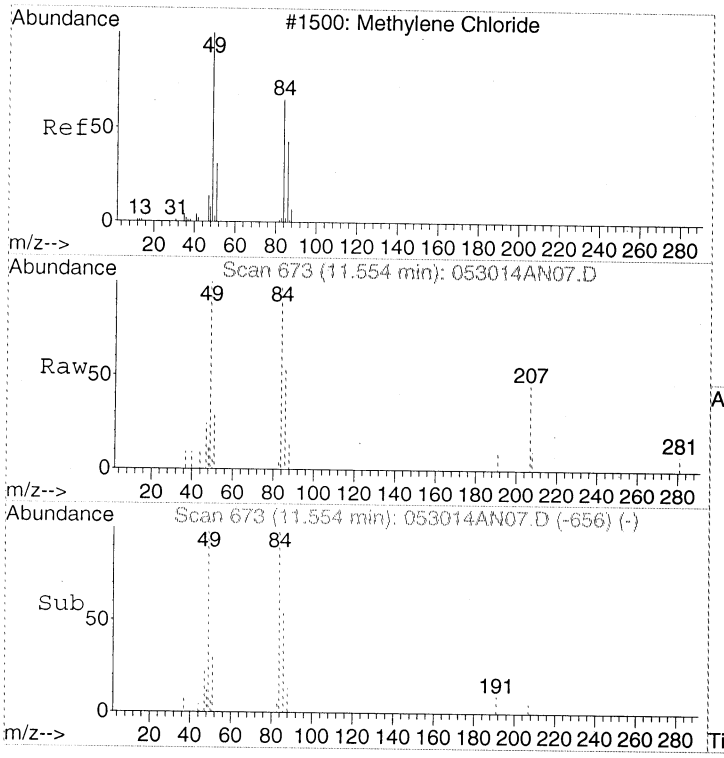


#14
Acetone
Concen: 2.21 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN07.D
Acq: 30 May 2014 8:06 pm

Tgt Ion: 43 Resp: 47892

Ion	Ratio	Lower	Upper
43	100		
58	24.7	4.2	44.2

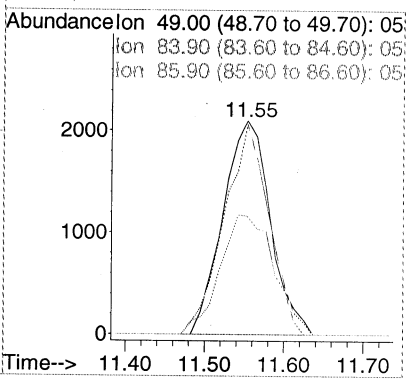


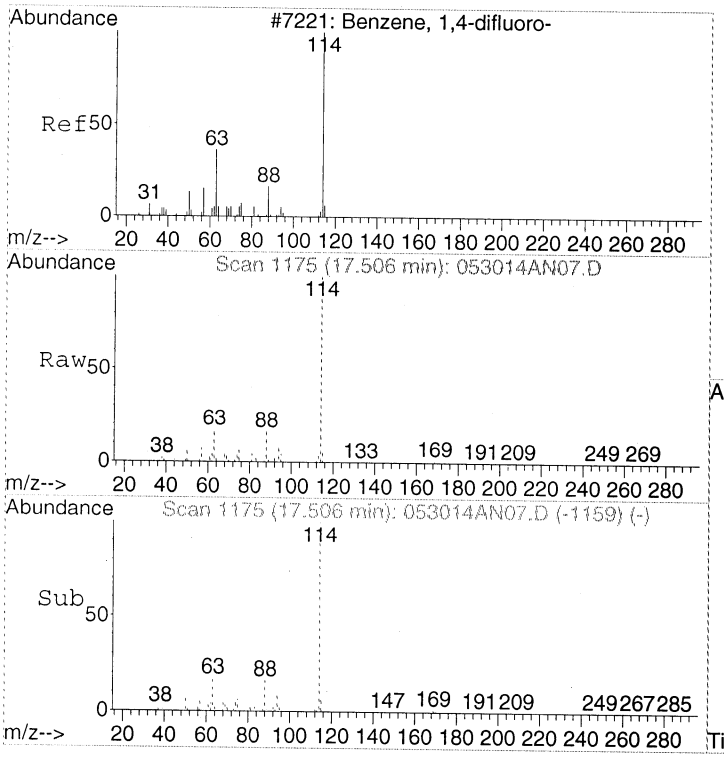


#18
Dichloromethane
Concen: 0.51 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN07.D
Acq: 30 May 2014 8:06 pm

Tgt Ion: 49 Resp: 8700

Ion	Ratio	Lower	Upper
49	100		
84	94.5	69.9	109.9
86	62.3	38.3	78.3

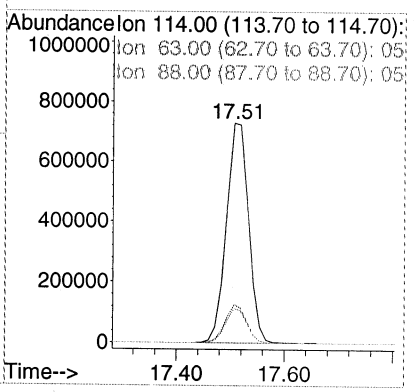


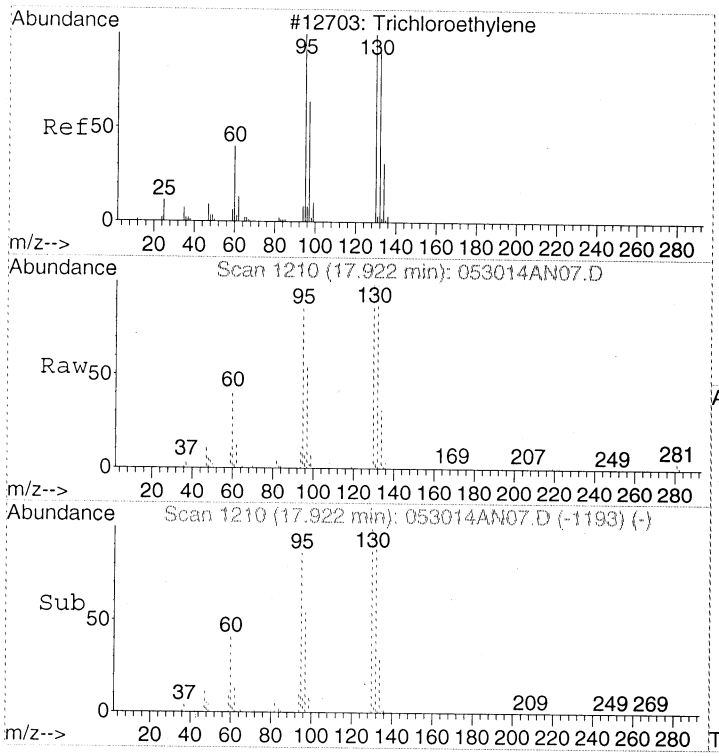


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN07.D
Acq: 30 May 2014 8:06 pm

Tgt Ion:114 Resp: 2068803

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.2	0.0	35.6

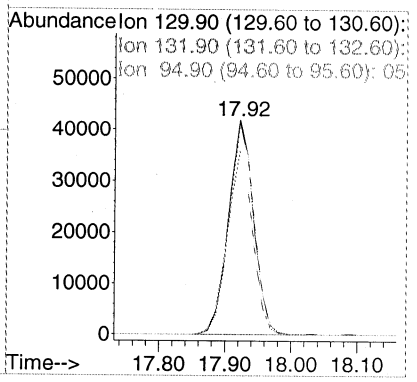


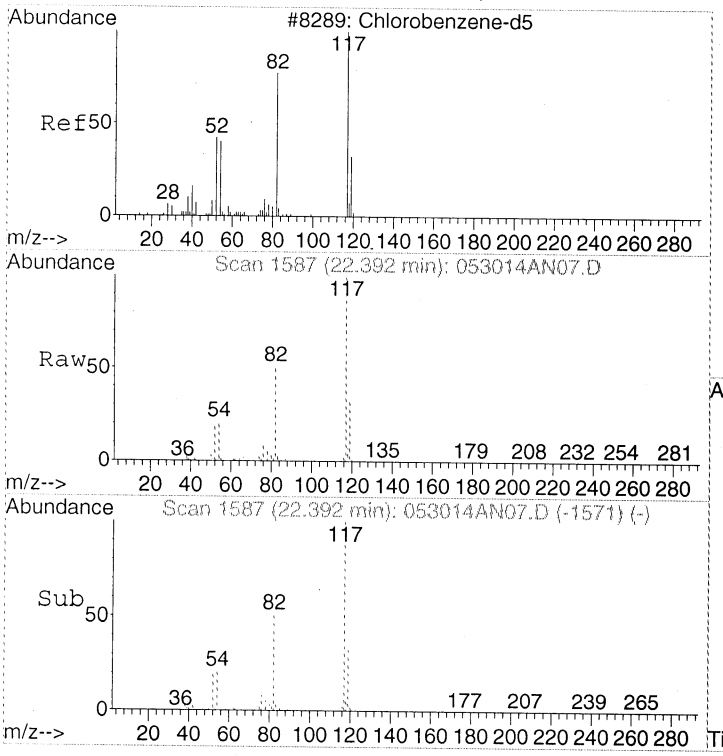


#37
Trichloroethene
Concen: 3.15 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN07.D
Acq: 30 May 2014 8:06 pm

Tgt Ion:130 Resp: 110613

Ion	Ratio	Lower	Upper
130	100		
132	98.2	76.1	116.1
95	86.7	66.3	106.3

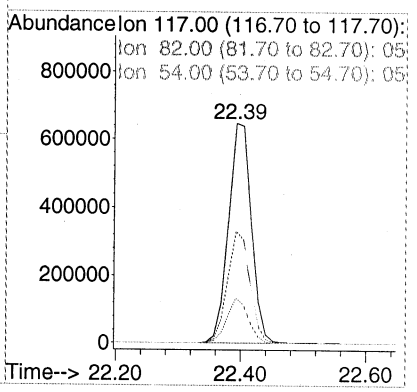




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN07.D
Acq: 30 May 2014 8:06 pm

Tgt Ion:117 Resp: 1652032

Ion	Ratio	Lower	Upper
117	100		
82	49.8	30.5	70.5
54	19.4	0.6	40.6



00150

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN08.D
Acq On : 30 May 2014 8:58 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-04
Misc : 200mL
ALS Vial : 39
Multiplier: 2.08

Quant Time: Jun 03 13:07:36 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	342453	22.00	ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.507	114	2089679	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1670129	22.00	ppbv	-0.01

Target Compounds						Qvalue
14) Acetone	10.036	43	23731	1.081	ppbv	99

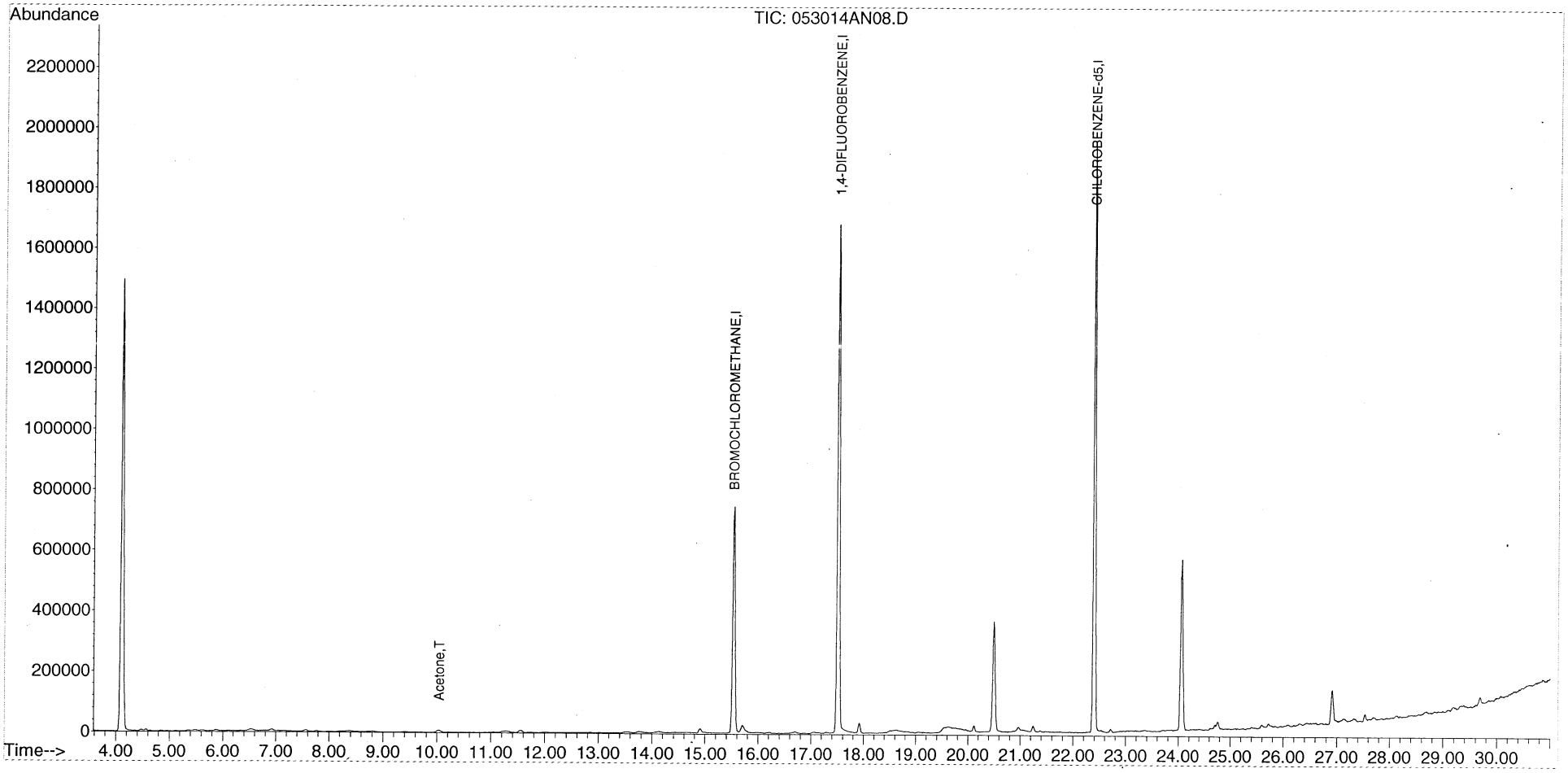
(#) = qualifier out of range (m) = manual integration (+) = signals summed

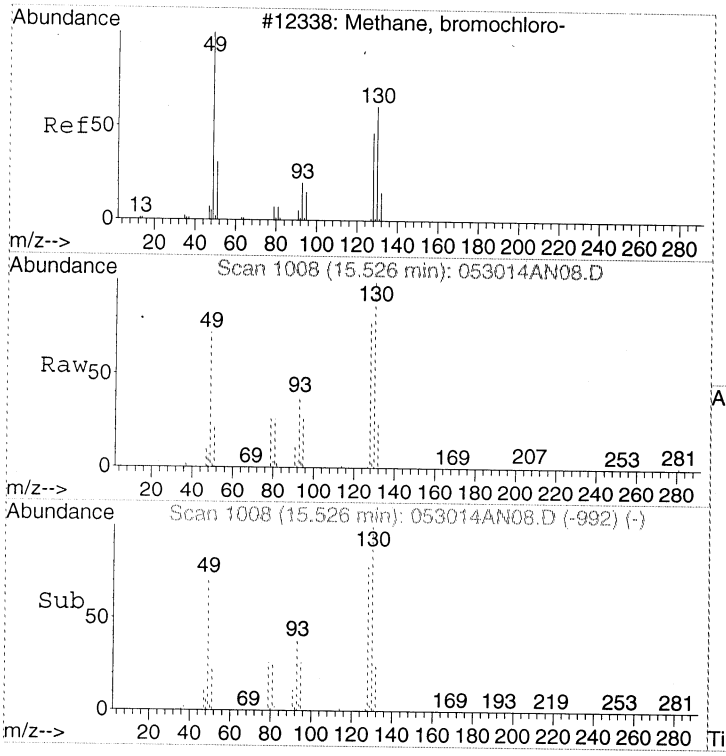
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN08.D
Acq On : 30 May 2014 8:58 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-04
Misc : 200mL
ALS Vial : 39
Multiplier: 2.08

Quant Time: Jun 03 13:07:36 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

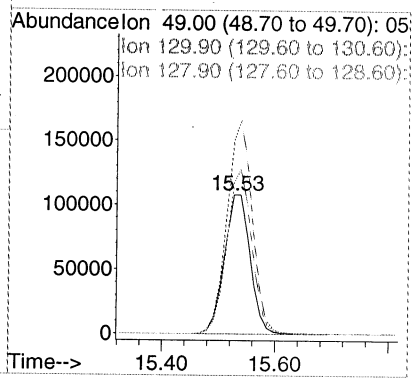


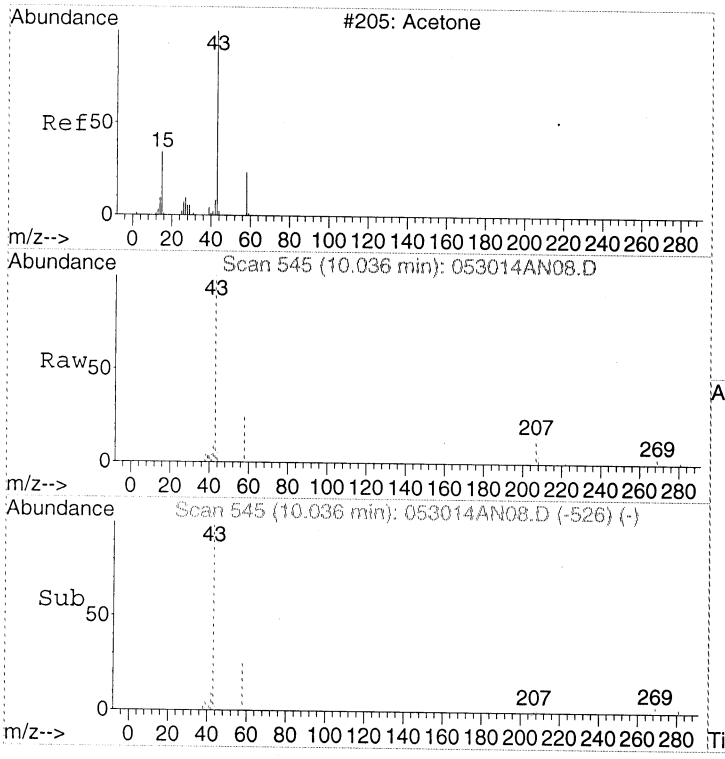


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. -0.01 min
Lab File: 053014AN08.D
Acq: 30 May 2014 8:58 pm

Tgt Ion: 49 Resp: 342453

Ion	Ratio	Lower	Upper
49	100		
130	150.1	125.1	165.1
128	114.9	91.6	131.6

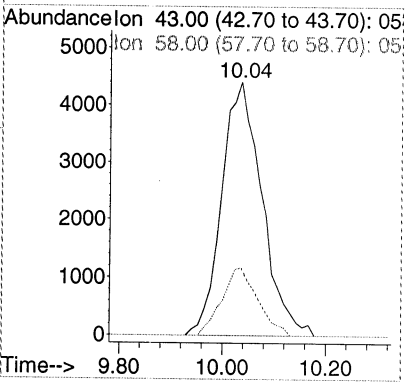


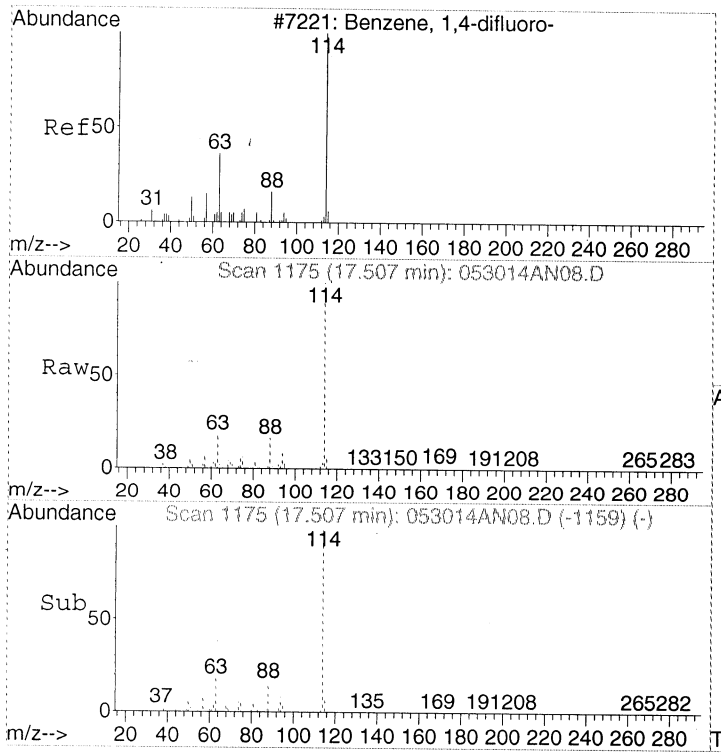


#14
Acetone
Concen: 1.08 ppbv
RT: 10.04 min Scan# 545
Delta R.T. 0.02 min
Lab File: 053014AN08.D
Acq: 30 May 2014 8:58 pm

Tgt Ion: 43 Resp: 23731

Ion	Ratio	Lower	Upper
43	100		
58	23.6	4.2	44.2

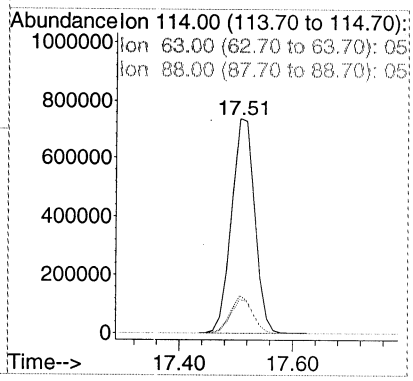


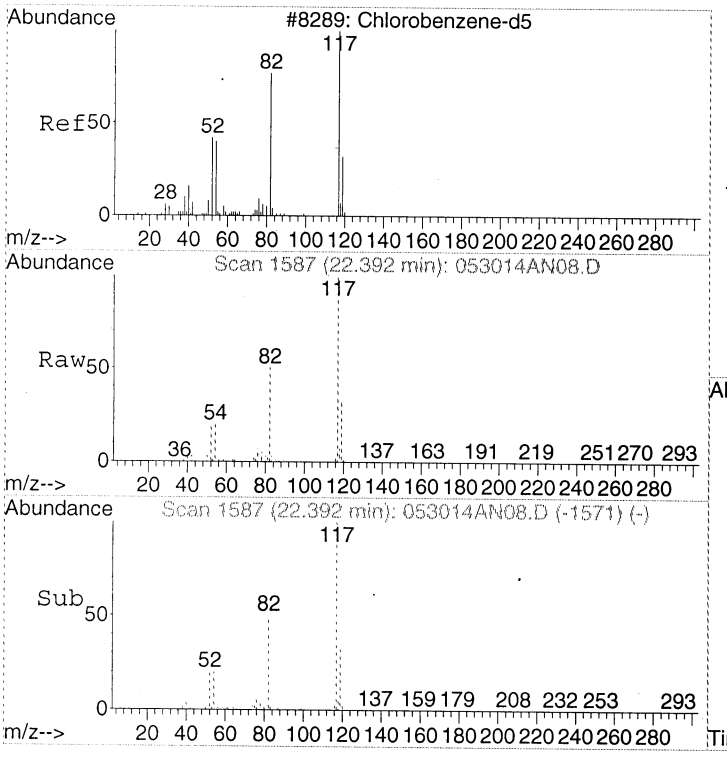


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN08.D
Acq: 30 May 2014 8:58 pm

Tgt Ion:114 Resp: 2089679

Ion	Ratio	Lower	Upper
114	100		
63	16.6	0.0	37.2
88	15.2	0.0	35.6

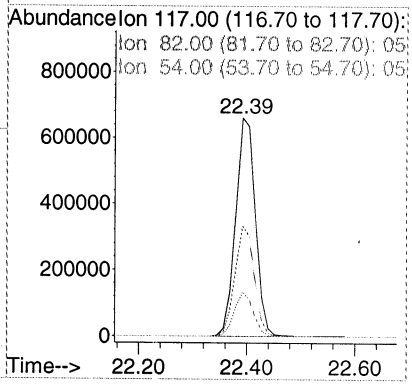




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN08.D
Acq: 30 May 2014 8:58 pm

Tgt Ion:117 Resp: 1670129

Ion	Ratio	Lower	Upper
117	100		
82	49.5	30.5	70.5
54	19.4	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN09.D
Acq On : 30 May 2014 9:54 pm
Instrument: AG5973N
Operator : EM
Sample : B14E113-DUP1
Misc : 200mL
ALS Vial : 39
Multiplier: 2.08

Quant Time: Jun 03 09:57:34 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	336894	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.507	114	2041380	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1591619	22.00	ppbv	-0.01

Target Compounds						Qvalue
14) Acetone	10.036	43	15715	0.728	ppbv #	51

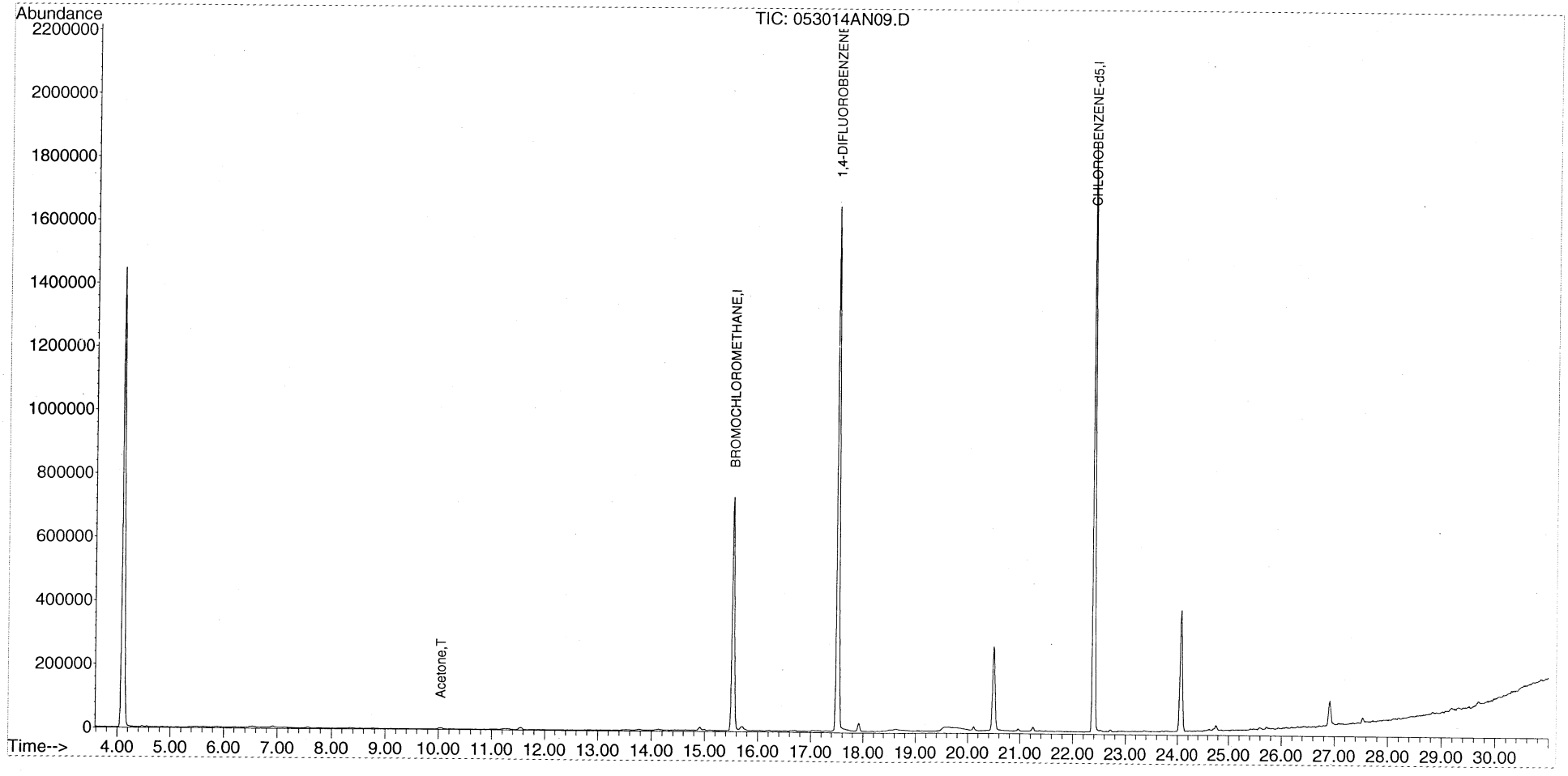
(#) = qualifier out of range (m) = manual integration (+) = signals summed

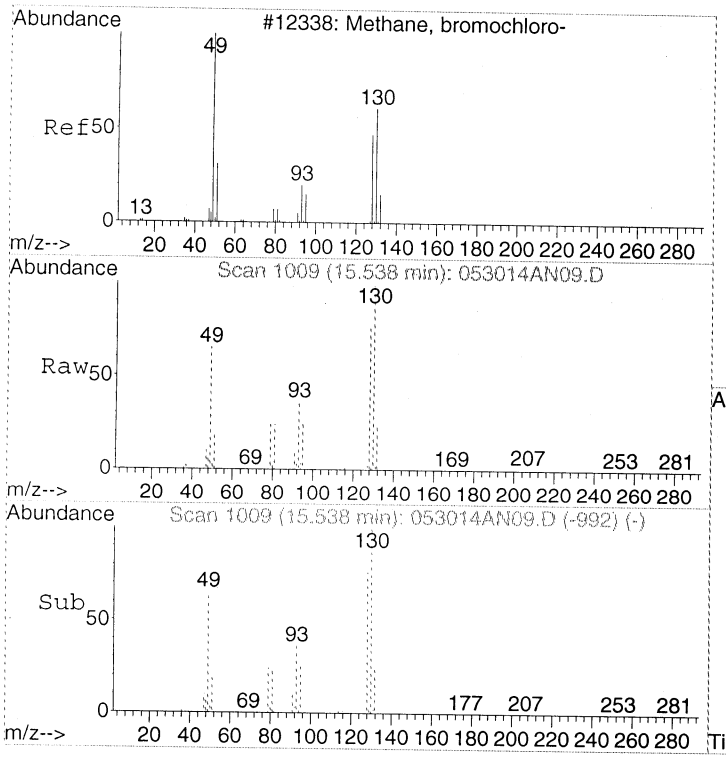
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN09.D
Acq On : 30 May 2014 9:54 pm
Instrument: AG5973N
Operator : EM
Sample : B14E113-DUP1
Misc : 200mL
ALS Vial : 39
Multiplier: 2.08

Quant Time: Jun 03 09:57:34 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

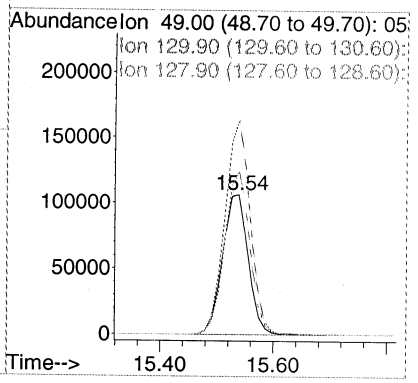


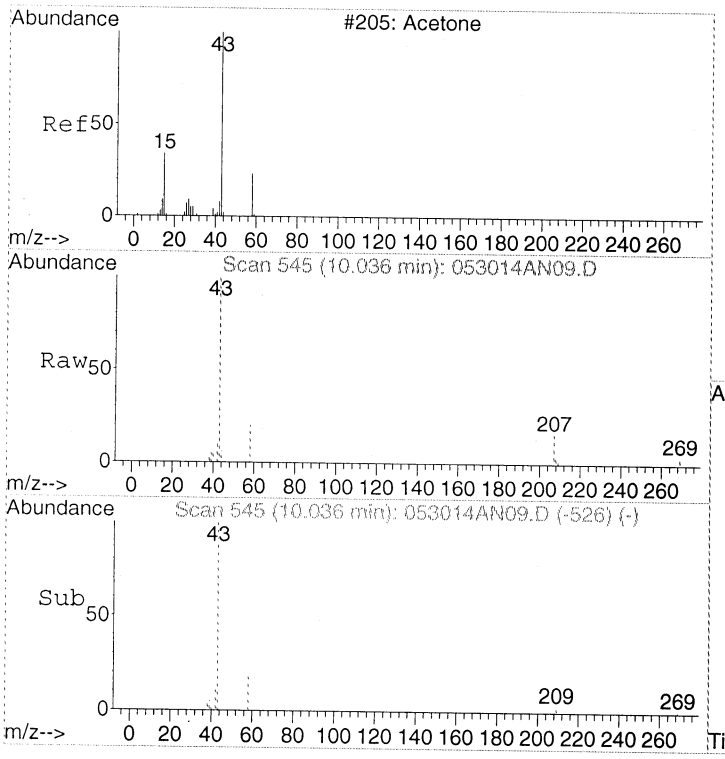


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. 0.00 min
Lab File: 053014AN09.D
Acq: 30 May 2014 9:54 pm

Tgt Ion: 49 Resp: 336894

Ion	Ratio	Lower	Upper
49	100		
130	150.0	125.1	165.1
128	113.8	91.6	131.6

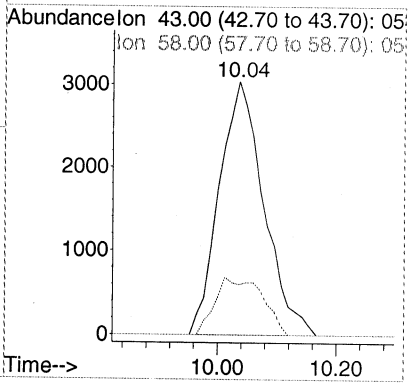


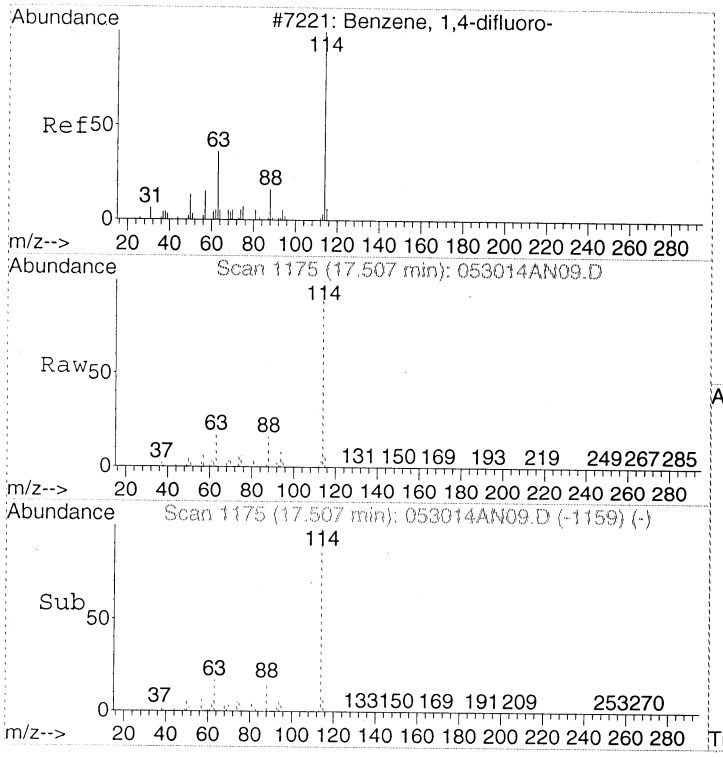


#14
Acetone
Concen: 0.73 ppbv
RT: 10.04 min Scan# 545
Delta R.T. 0.02 min
Lab File: 053014AN09.D
Acq: 30 May 2014 9:54 pm

Tgt Ion: 43 Resp: 15715

Ion	Ratio	Lower	Upper
43	100		
58	0.0	4.2	44.2#

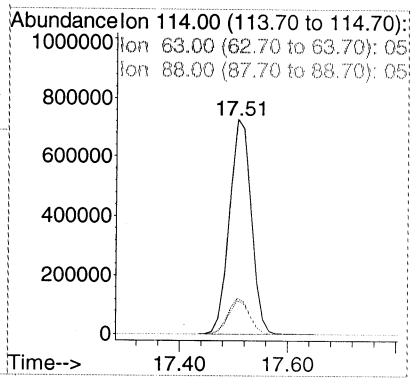


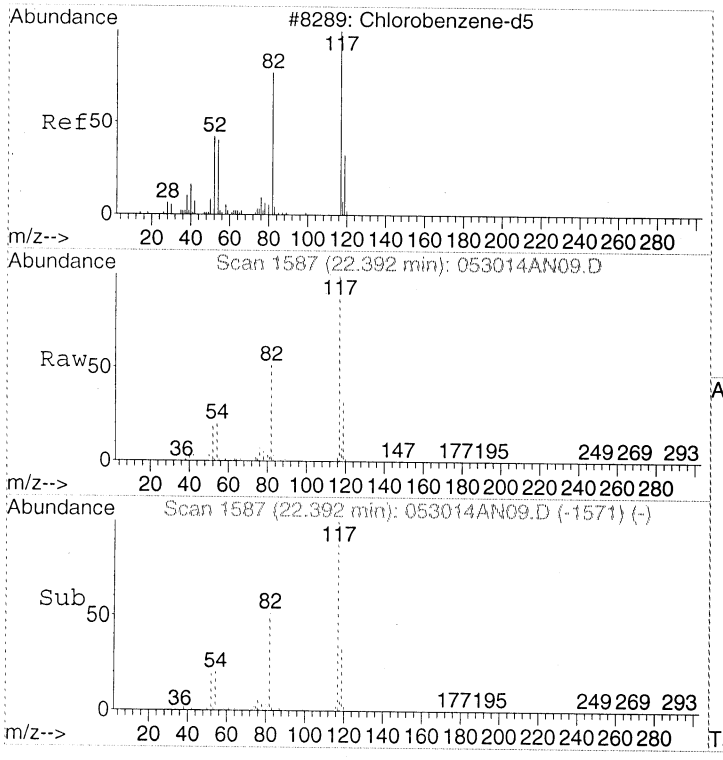


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN09.D
Acq: 30 May 2014 9:54 pm

Tgt Ion:114 Resp: 2041380

Ion	Ratio	Lower	Upper
114	100		
63	16.6	0.0	37.2
88	15.3	0.0	35.6

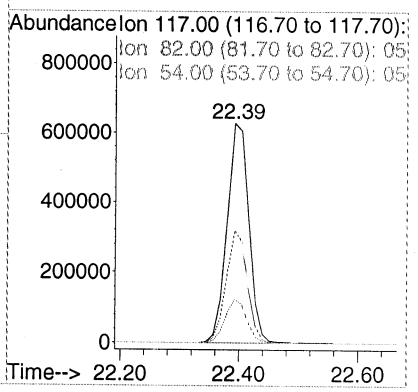




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN09.D
Acq: 30 May 2014 9:54 pm

Tgt Ion:117 Resp: 1591619

Ion	Ratio	Lower	Upper
117	100		
82	49.3	30.5	70.5
54	19.3	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN10.D
Acq On : 30 May 2014 10:47 pm
Instrument: AG5973N
Operator : EM
Sample : IBL
Misc : 200mL
ALS Vial : 10
Multiplier: 1

Quant Time: Jun 03 09:57:38 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	339594	22.00	ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.506	114	2095791	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1673028	22.00	ppbv	-0.01

Target Compounds	Qvalue

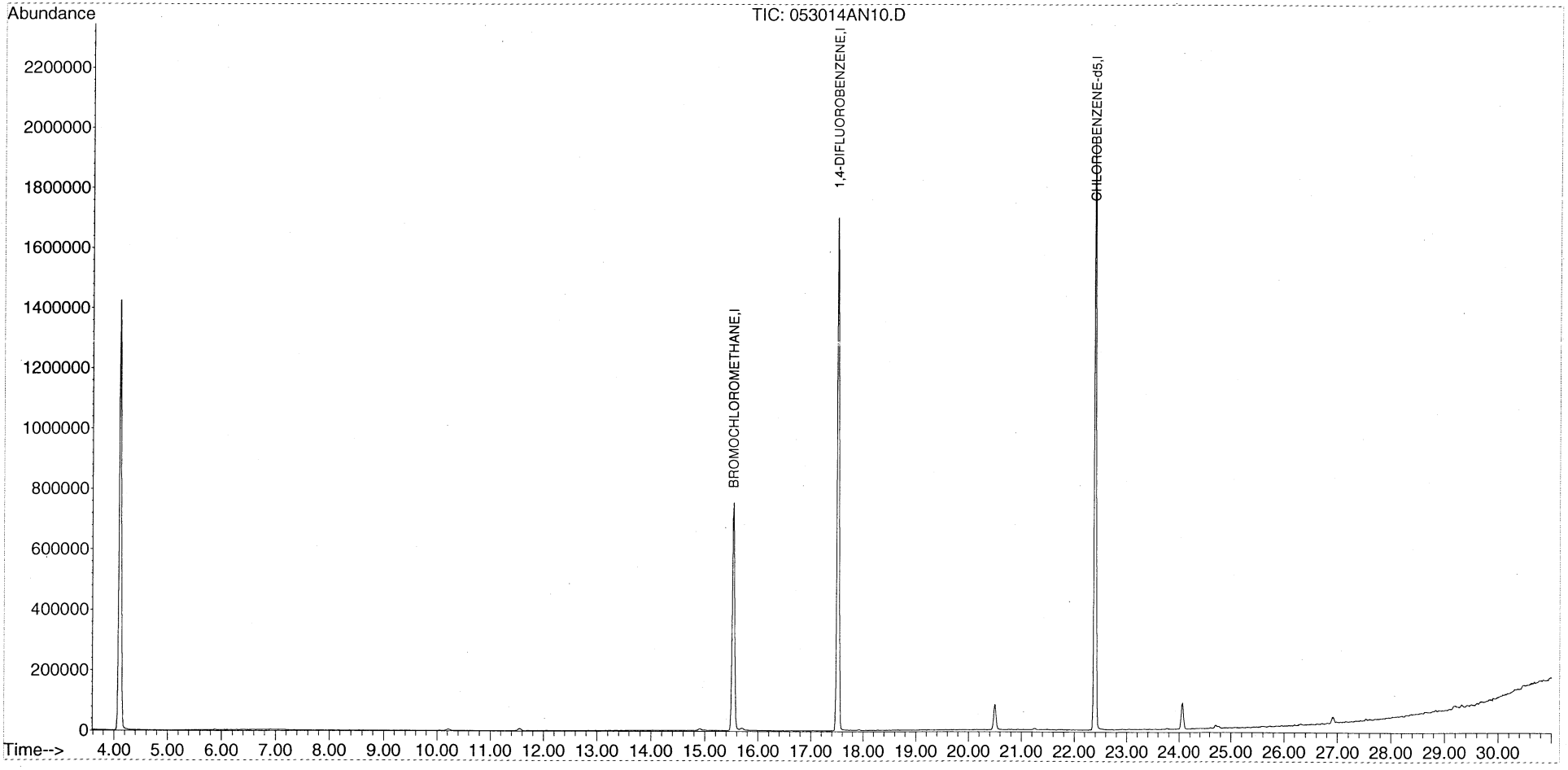
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN10.D
Acq On : 30 May 2014 10:47 pm
Instrument: AG5973N
Operator : EM
Sample : IBL
Misc : 200mL
ALS Vial : 10
Multiplier: 1

Quant Time: Jun 03 09:57:38 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN11.D
Acq On : 30 May 2014 11:39 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-05
Misc : 200mL
ALS Vial : 11
Multiplier: 2.07

Quant Time: Jun 03 09:57:44 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	336564	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	2062330	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1642106	22.00 ppbv	-0.01
Target Compounds					Qvalue
14) Acetone	10.024	43	23764	1.102 ppbv	98
37) Trichloroethene	17.921	130	39096	1.118 ppbv	99

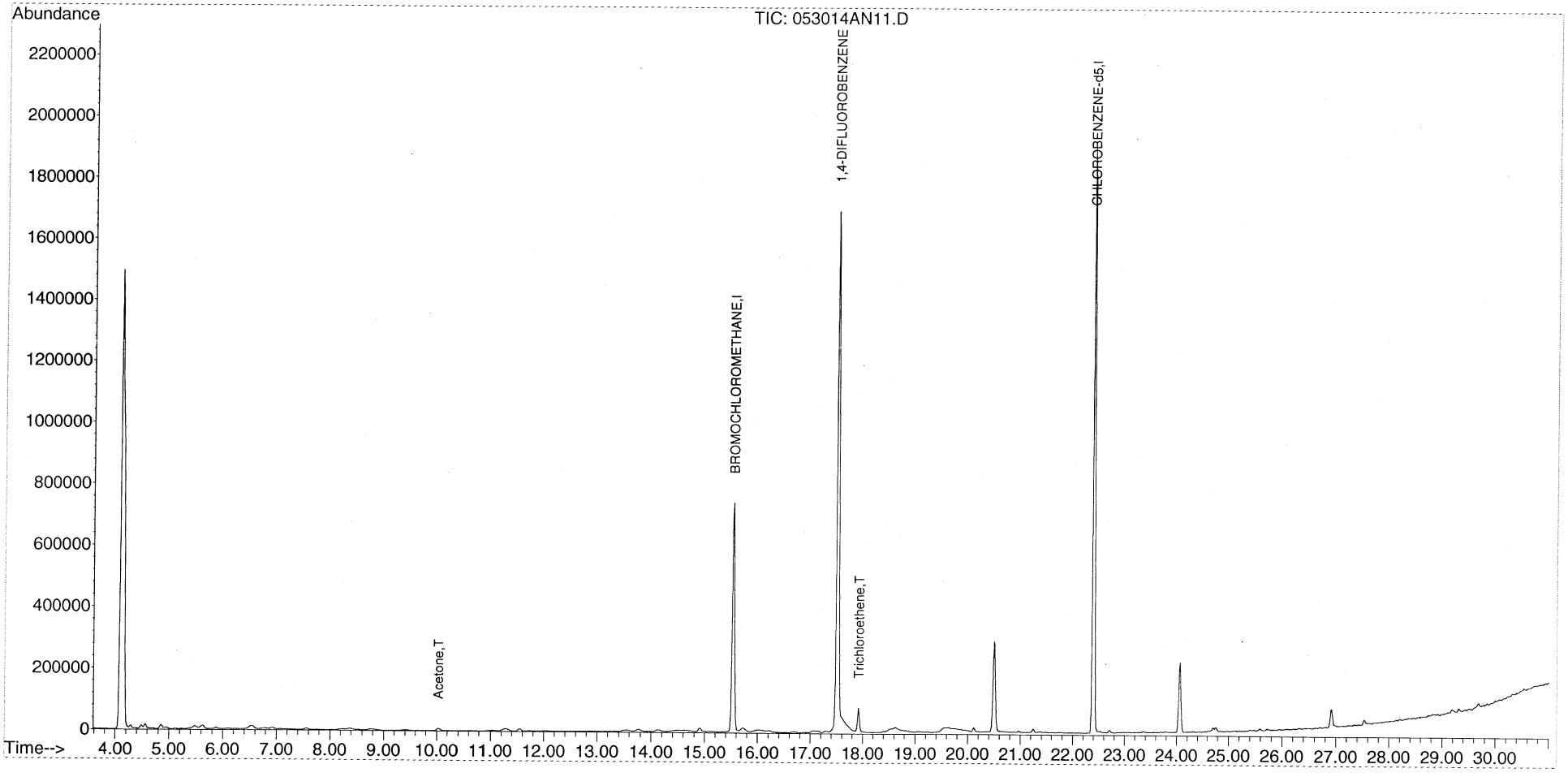
(#) = qualifier out of range (m) = manual integration (+) = signals summed

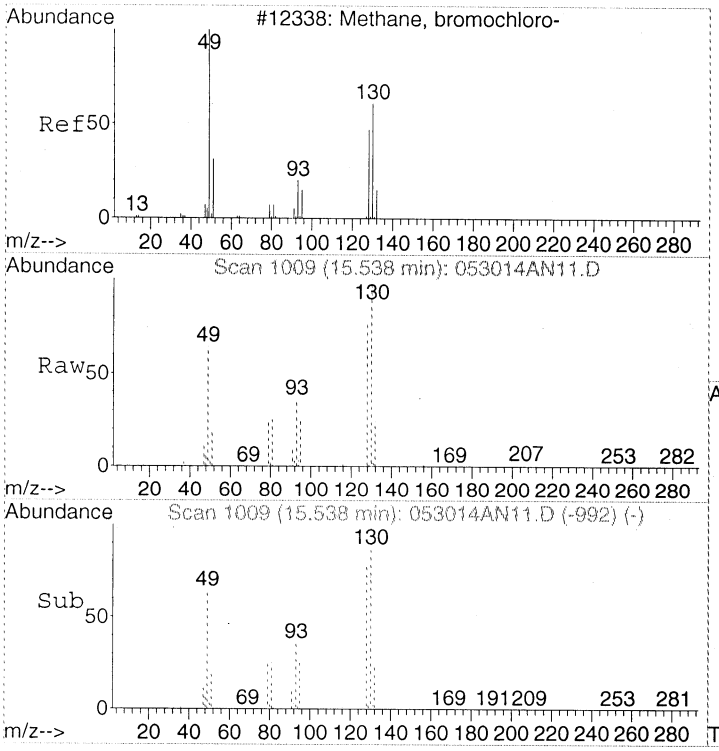
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN11.D
Acq On : 30 May 2014 11:39 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-05
Misc : 200mL
ALS Vial : 11
Multiplier: 2.07

Quant Time: Jun 03 09:57:44 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

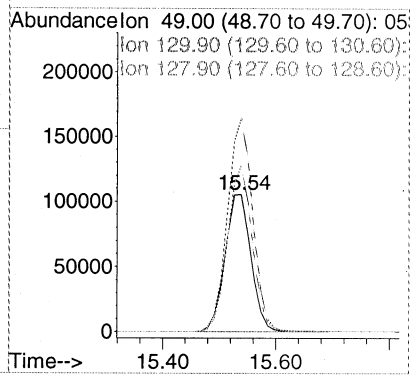


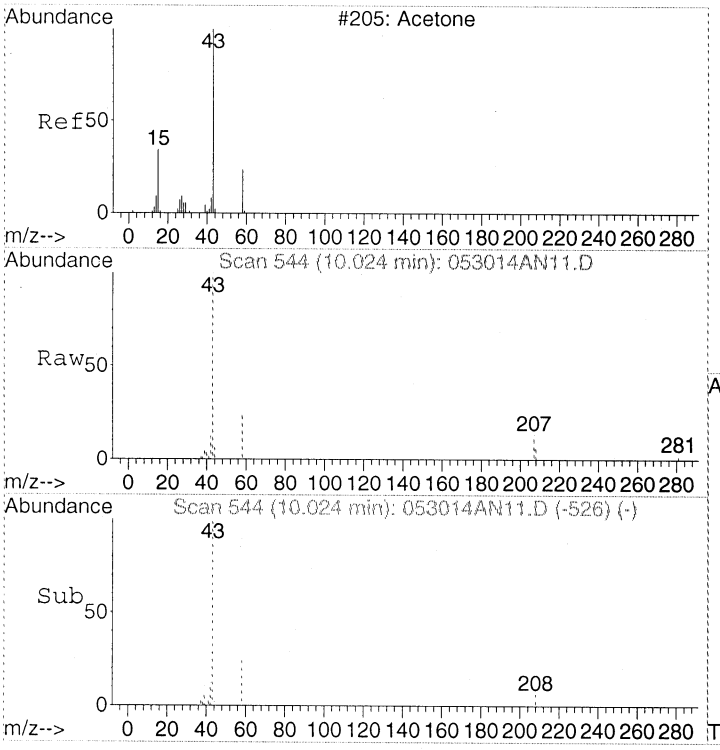


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN11.D
Acq: 30 May 2014 11:39 pm

Tgt Ion: 49 Resp: 336564

Ion	Ratio	Lower	Upper
49	100		
130	150.9	125.1	165.1
128	115.6	91.6	131.6

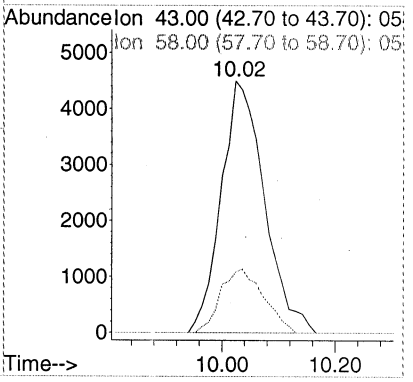


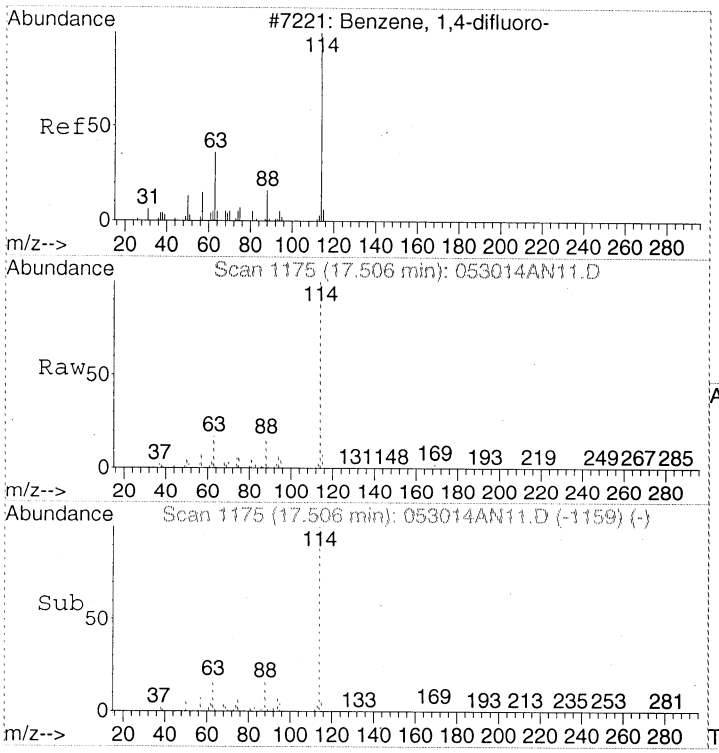


#14
Acetone
Concen: 1.10 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN11.D
Acq: 30 May 2014 11:39 pm

Tgt Ion: 43 Resp: 23764

Ion	Ratio	Lower	Upper
43	100		
58	25.1	4.2	44.2

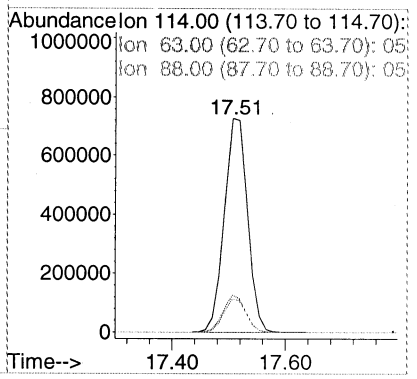


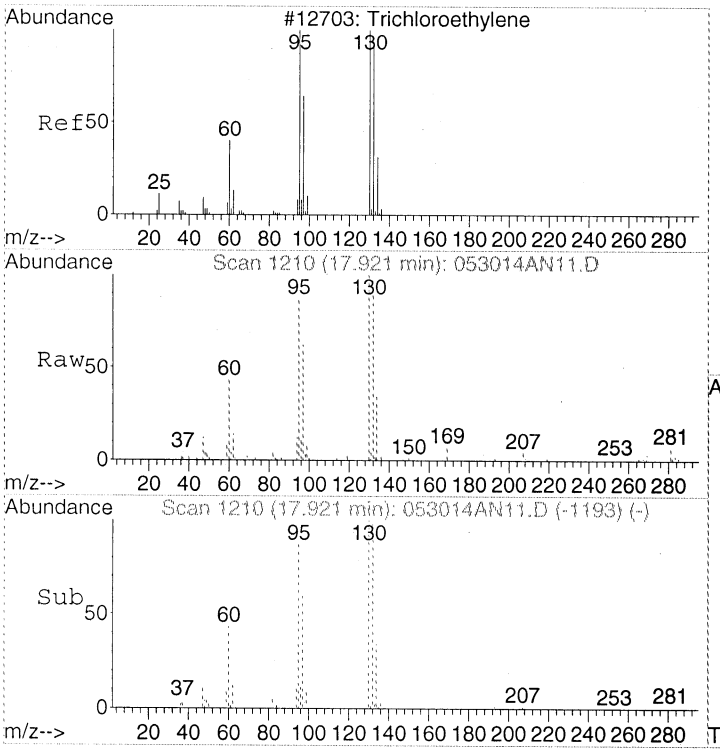


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN11.D
Acq: 30 May 2014 11:39 pm

Tgt Ion:114 Resp: 2062330

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.3	0.0	35.6

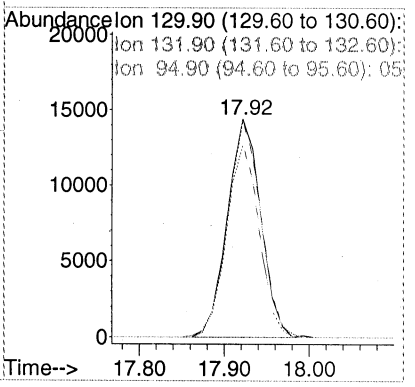


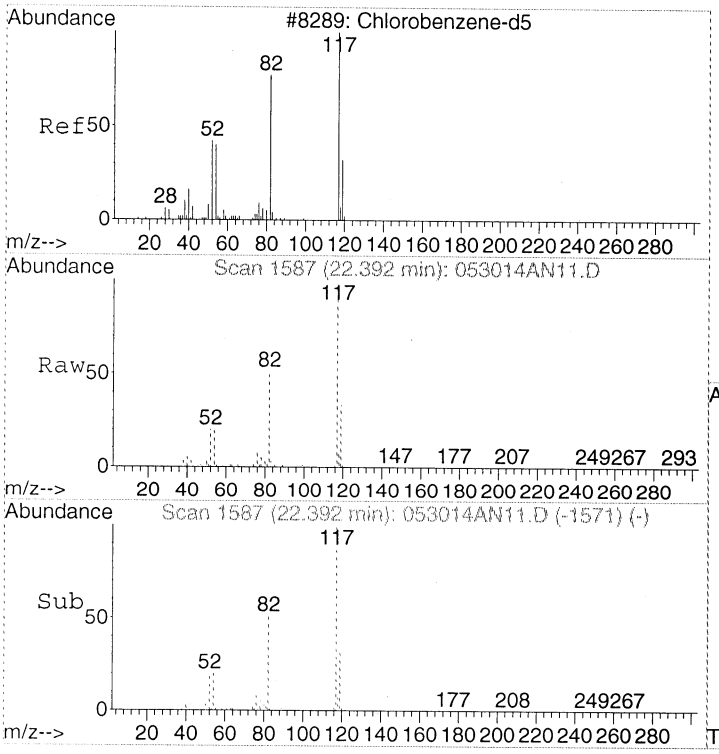


#37
Trichloroethene
Concen: 1.12 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN11.D
Acq: 30 May 2014 11:39 pm

Tgt Ion:130 Resp: 39096

Ion	Ratio	Lower	Upper
130	100		
132	98.6	76.1	116.1
95	86.5	66.3	106.3

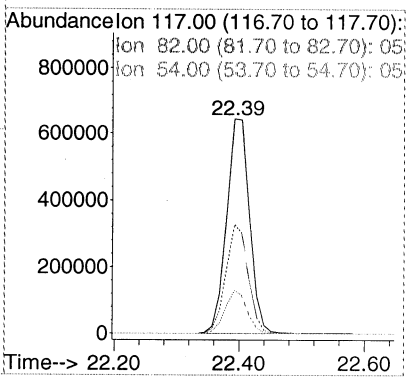




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN11.D
Acq: 30 May 2014 11:39 pm

Tgt Ion:117 Resp: 1642106

Ion	Ratio	Lower	Upper
117	100		
82	49.4	30.5	70.5
54	19.4	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN12.D
Acq On : 31 May 2014 12:28 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-05RE1
Misc : 20mL
ALS Vial : 11
Multiplier: 2.07

Quant Time: Jun 03 09:57:50 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	314143	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	1934587	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1464712	22.00	ppbv	-0.01

Target Compounds	Qvalue

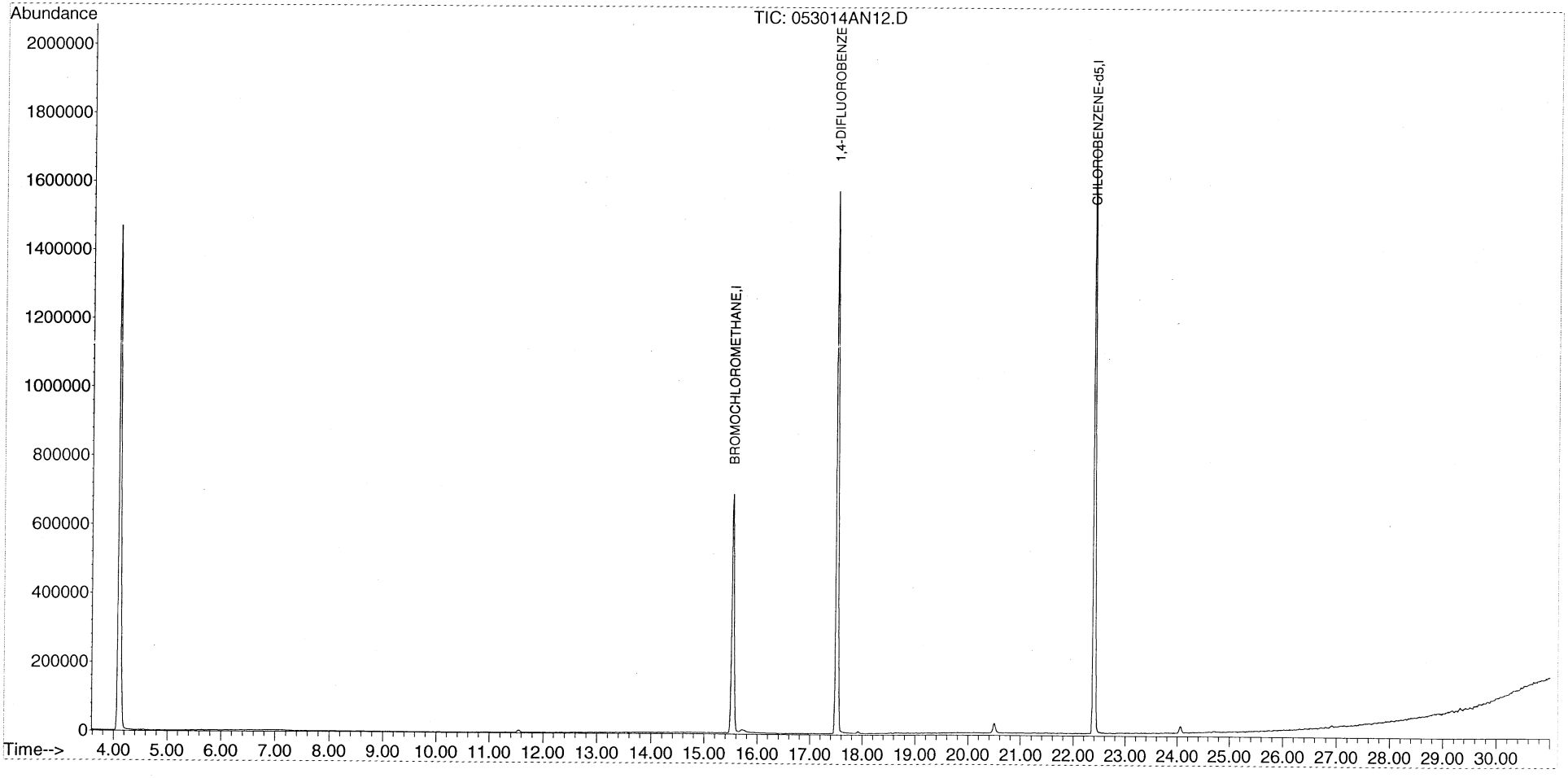
(#) = qualifier out of range (m) = manual integration (+) = signals summed

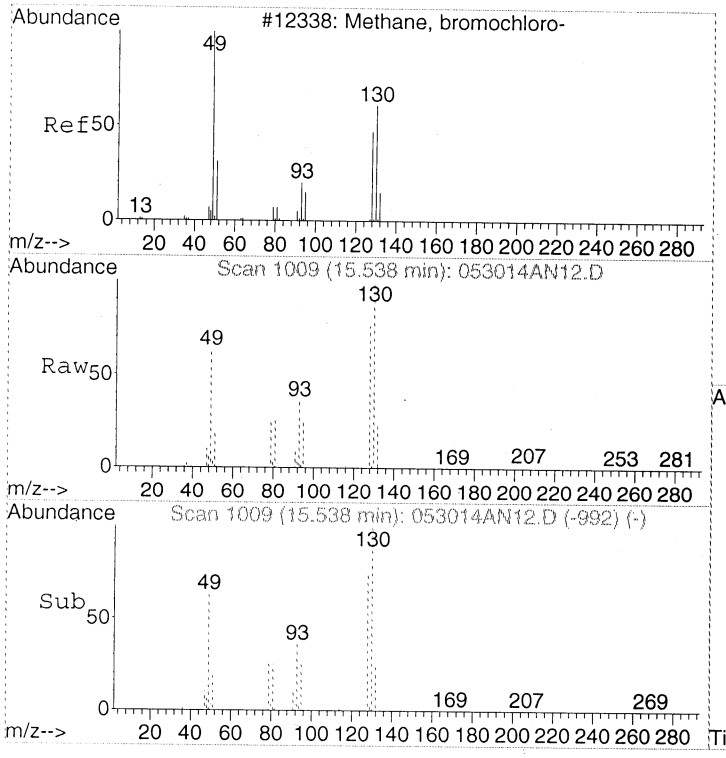
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN12.D
Acq On : 31 May 2014 12:28 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-05RE1
Misc : 20mL
ALS Vial : 11
Multiplier: 2.07

Quant Time: Jun 03 09:57:50 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

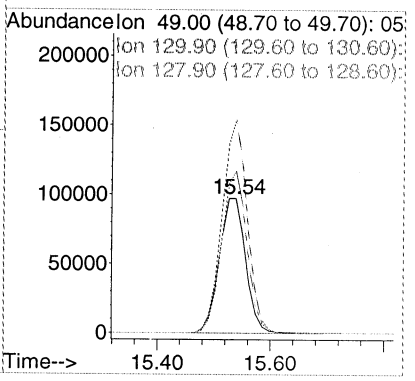


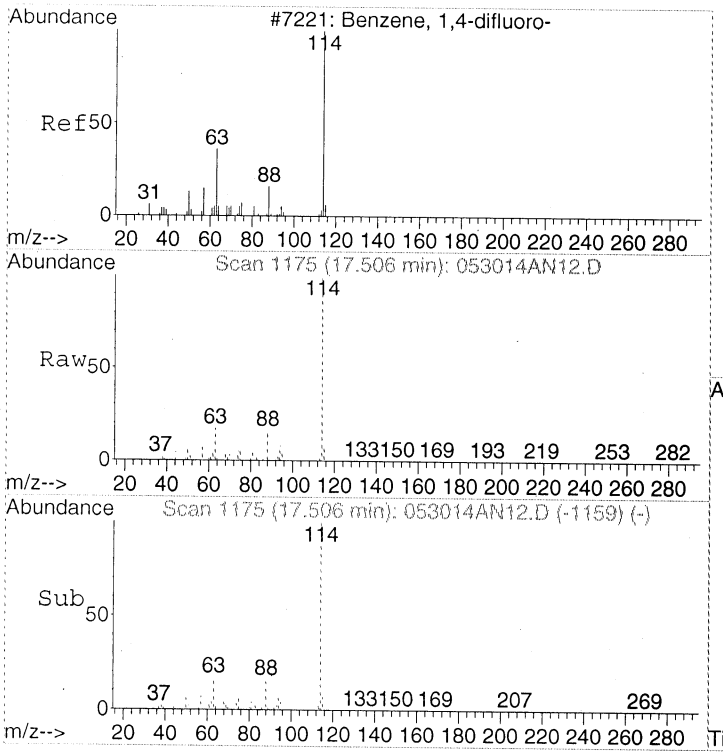


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN12.D
Acq: 31 May 2014 12:28 am

Tgt Ion: 49 Resp: 314143

Ion	Ratio	Lower	Upper
49	100		
130	151.0	125.1	165.1
128	115.9	91.6	131.6

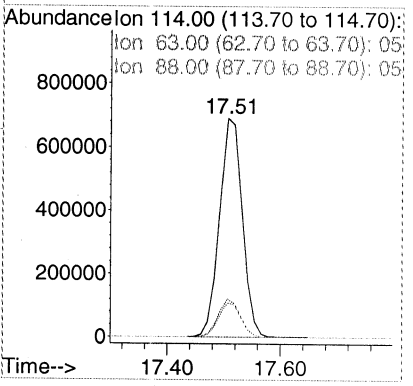


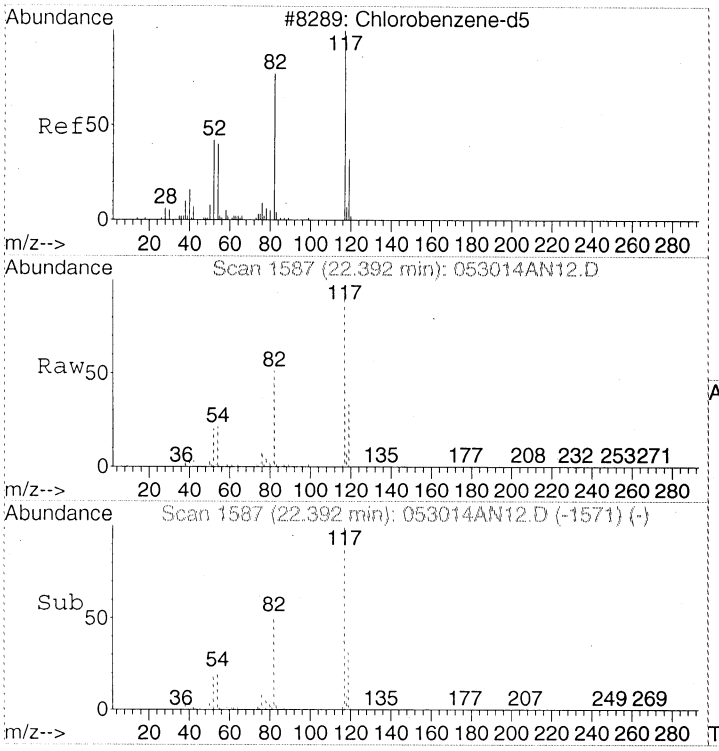


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN12.D
Acq: 31 May 2014 12:28 am

Tgt Ion:114 Resp: 1934587

Ion	Ratio	Lower	Upper
114	100		
63	16.8	0.0	37.2
88	15.4	0.0	35.6

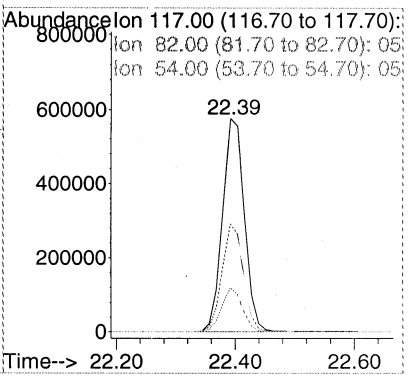




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN12.D
Acq: 31 May 2014 12:28 am

Tgt Ion:117 Resp: 1464712

Ion	Ratio	Lower	Upper
117	100		
82	49.3	30.5	70.5
54	19.6	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN13.D
Acq On : 31 May 2014 1:20 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-06
Misc : 200mL
ALS Vial : 12
Multiplier: 2.2

Quant Time: Jun 03 09:57:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	333458	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	2043562	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.404	117	1655986	22.00 ppbv	0.00

Target Compounds					Qvalue
2) Propene	4.474	41	4321	0.557 ppbv #	75
14) Acetone	10.024	43	29645	1.387 ppbv	94
18) Dichloromethane	11.553	49	10841	0.645 ppbv	94
24) cis-1,2-Dichloroethene	14.992	61	31934	1.546 ppbv	97
28) Chloroform	15.680	83	261071	5.614 ppbv	99
37) Trichloroethene	17.921	130	210224	6.065 ppbv	98
44) Toluene	20.115	91	265208	3.816 ppbv	100
47) Tetrachloroethene	20.969	166	213224	3.765 ppbv	99

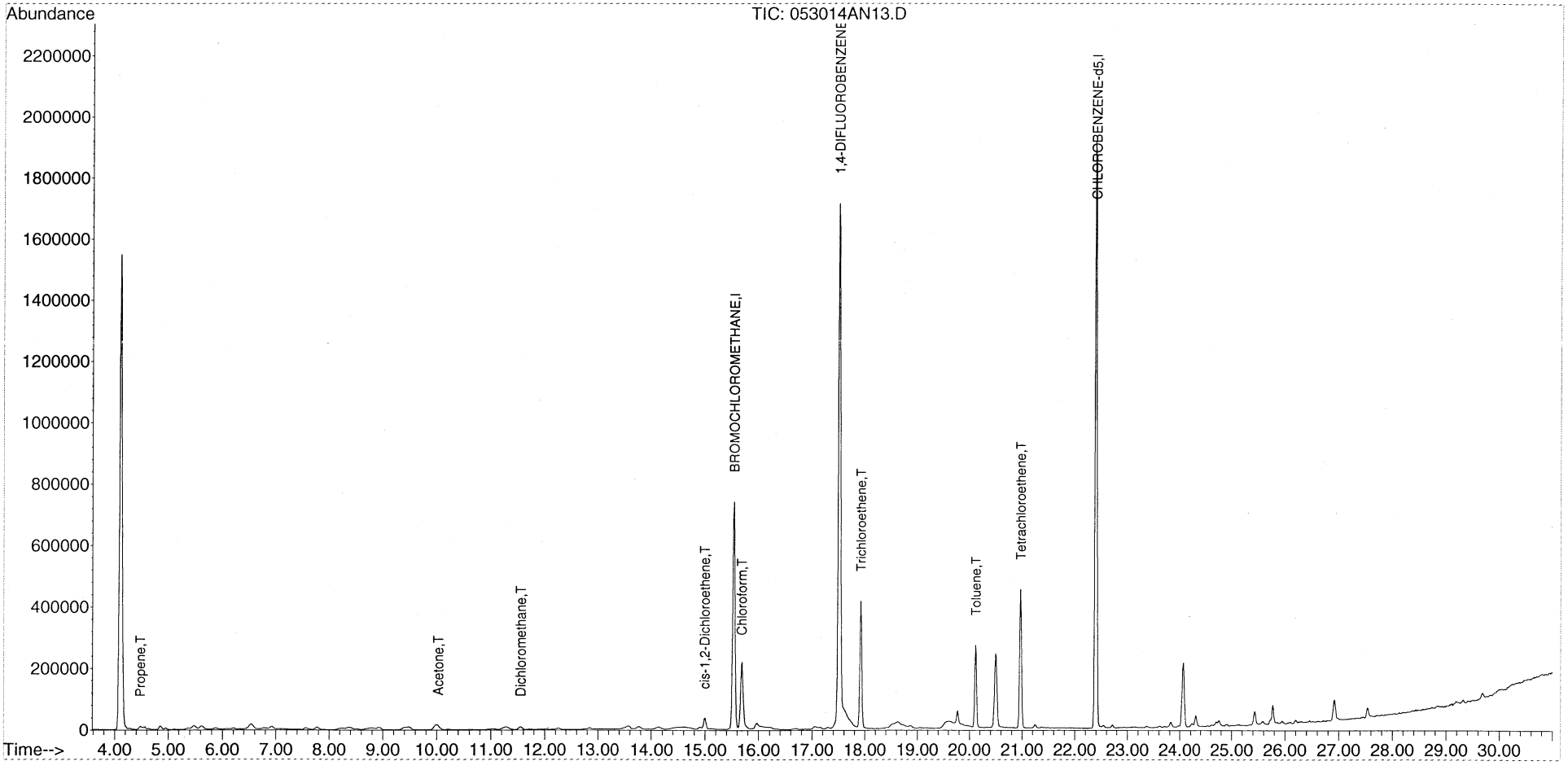
(#) = qualifier out of range (m) = manual integration (+) = signals summed

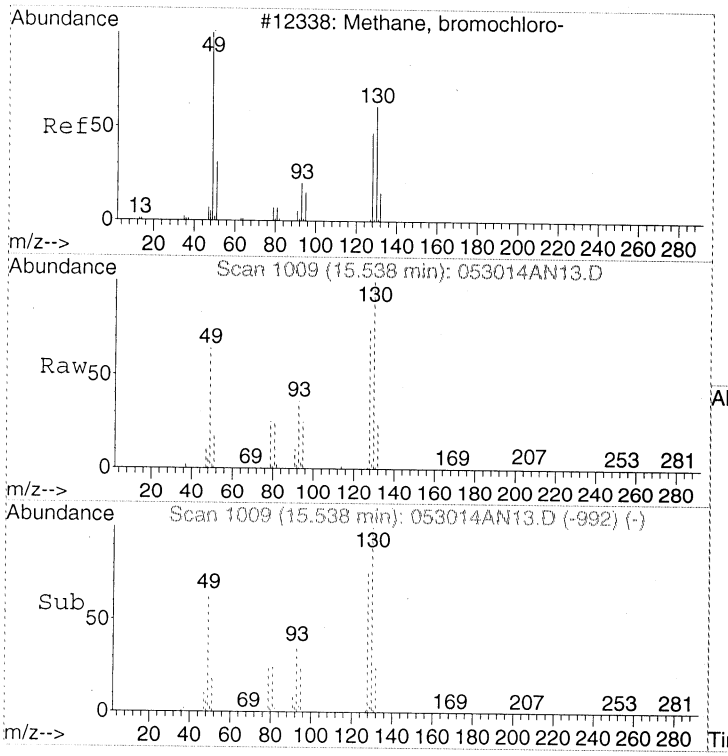
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN13.D
Acq On : 31 May 2014 1:20 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-06
Misc : 200mL
ALS Vial : 12
Multiplier: 2.2

Quant Time: Jun 03 09:57:54 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

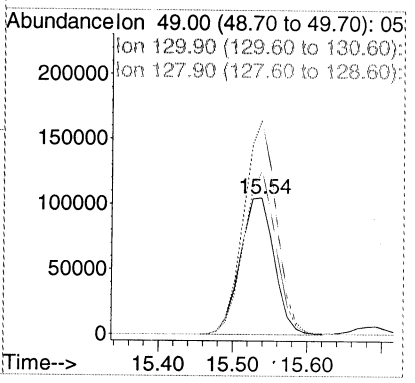


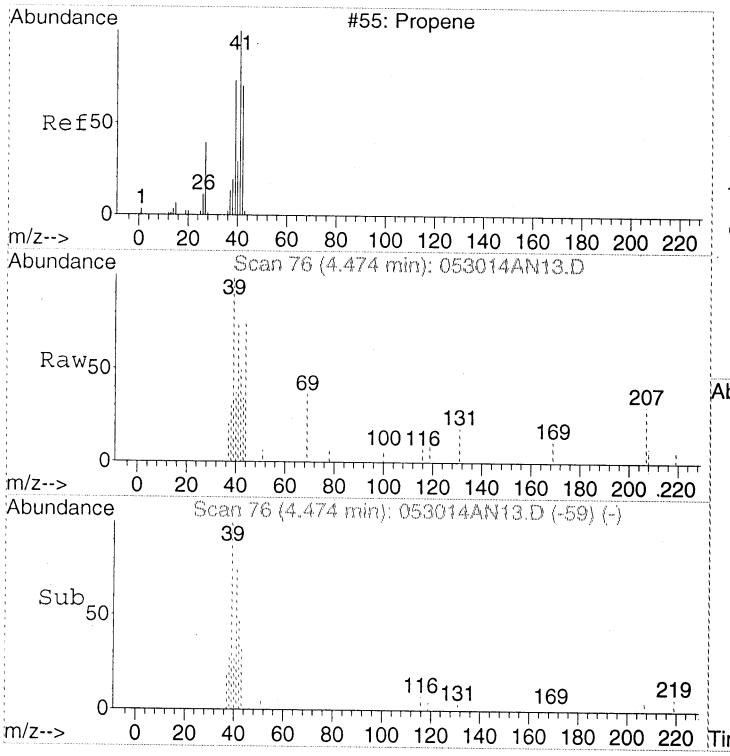


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 49 Resp: 333458

Ion	Ratio	Lower	Upper
49	100		
130	151.0	125.1	165.1
128	114.7	91.6	131.6

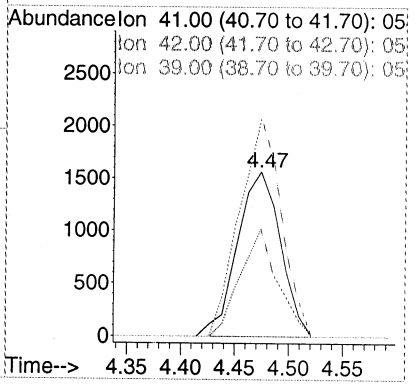


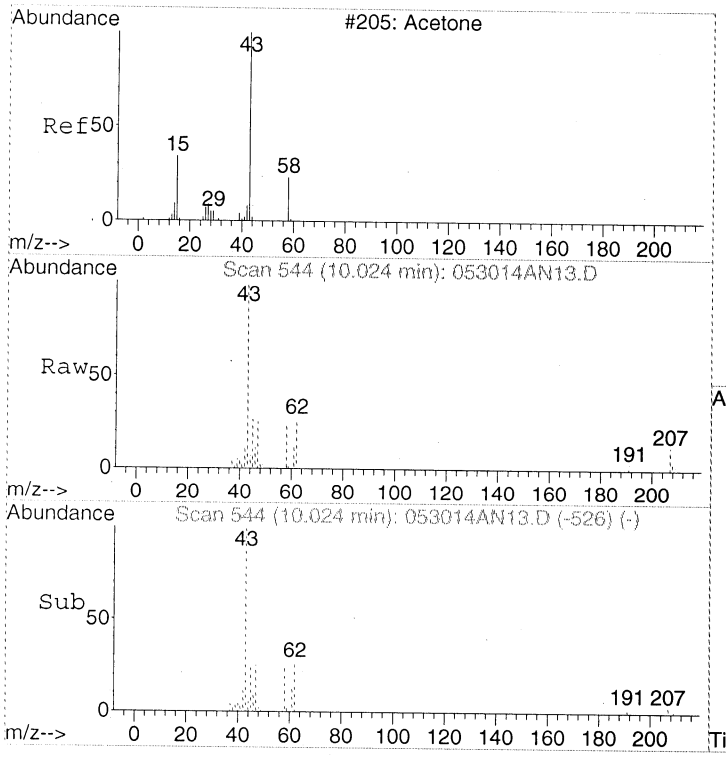


#2
Propene
Concen: 0.56 ppbv
RT: 4.47 min Scan# 76
Delta R.T. -0.00 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 41 Resp: 4321

Ion	Ratio	Lower	Upper
41	100		
42	56.4	44.9	84.9
39	128.3	74.8	114.8#

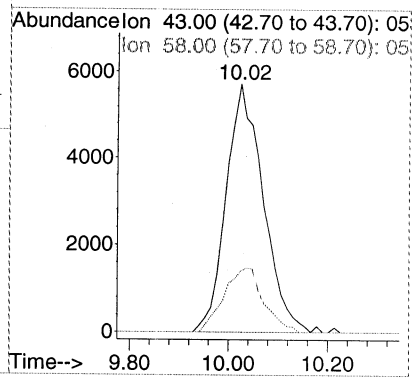


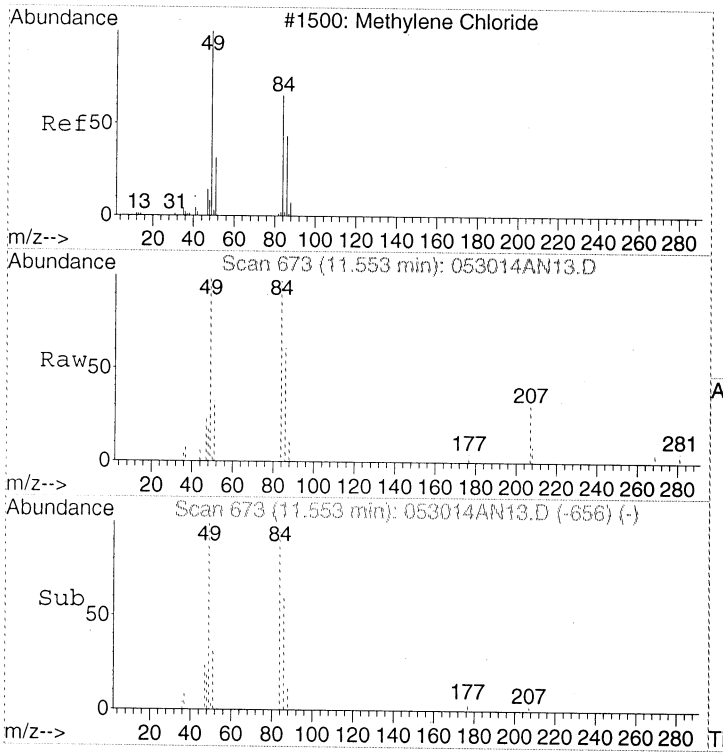


#14
Acetone
Concen: 1.39 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 43 Resp: 29645

Ion	Ratio	Lower	Upper
43	100		
58	27.3	4.2	44.2

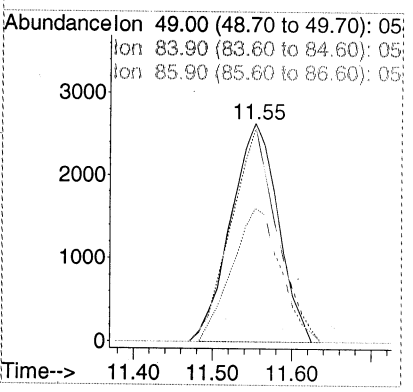


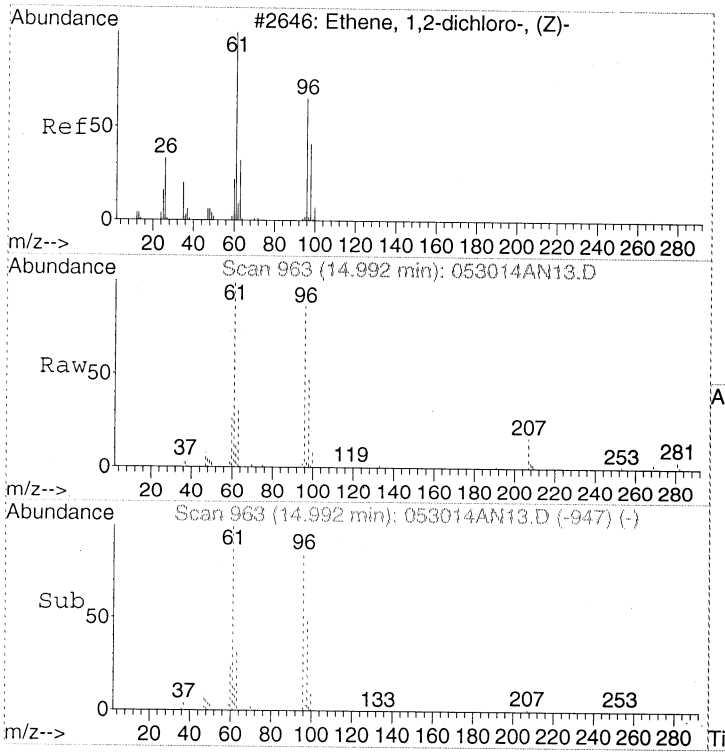


#18
Dichloromethane
Concen: 0.64 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 49 Resp: 10841

Ion	Ratio	Lower	Upper
49	100		
84	95.0	69.9	109.9
86	62.5	38.3	78.3

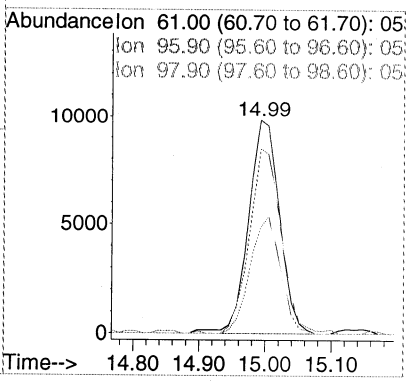


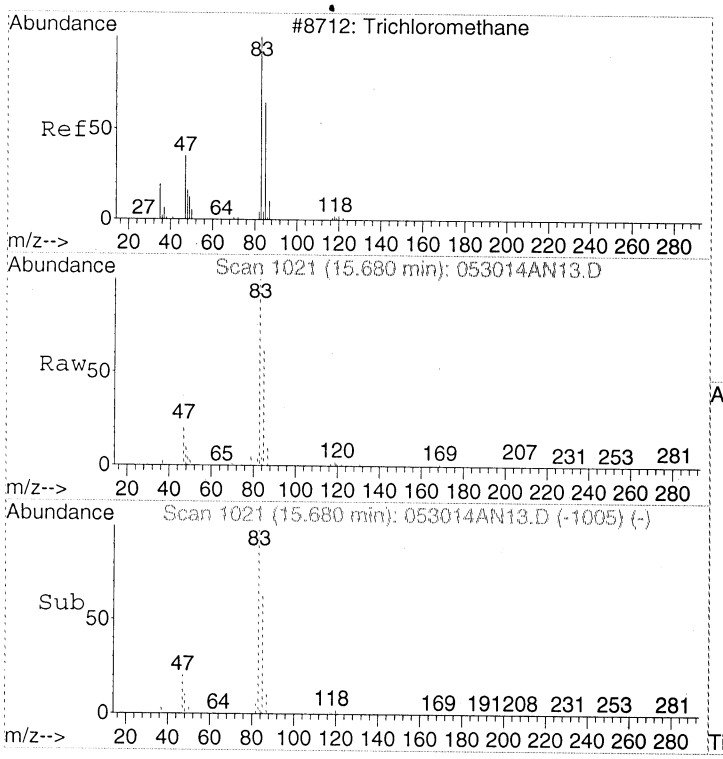


#24
cis-1,2-Dichloroethene
Concen: 1.55 ppbv
RT: 14.99 min Scan# 963
Delta R.T. -0.01 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 61 Resp: 31934

Ion	Ratio	Lower	Upper
61	100		
96	88.2	65.5	105.5
98	53.4	34.8	74.8

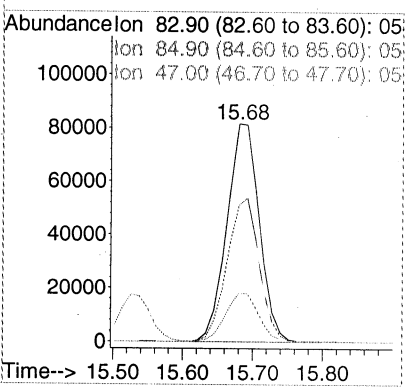


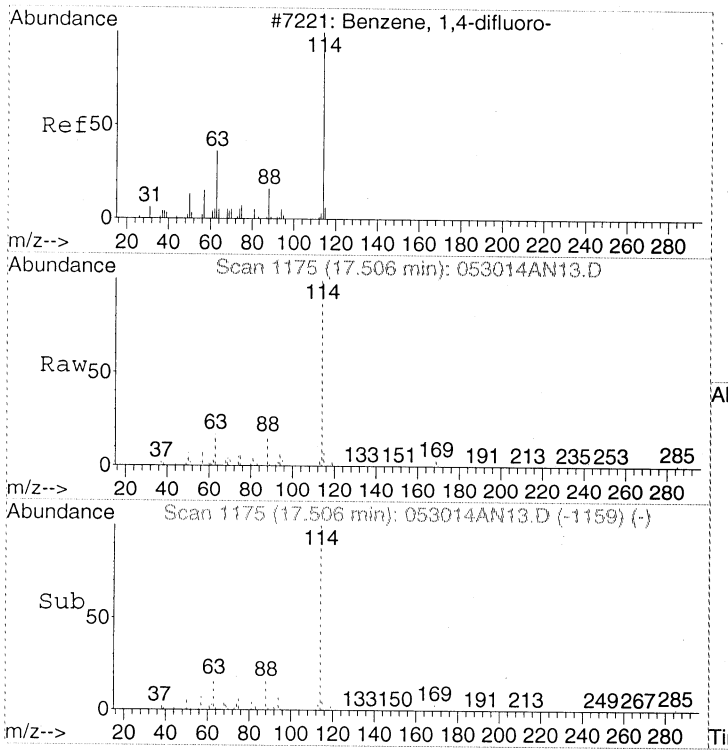


#28
Chloroform
Concen: 5.61 ppbv
RT: 15.68 min Scan# 1021
Delta R.T. -0.01 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 83 Resp: 261071

Ion	Ratio	Lower	Upper
83	100		
85	65.4	45.0	85.0
47	22.8	3.2	43.2

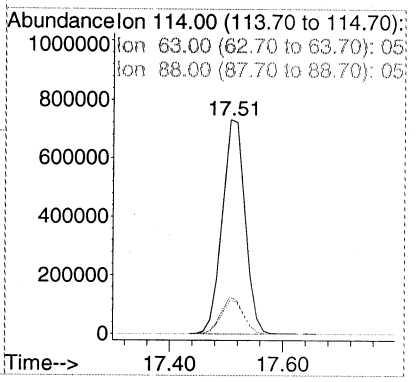


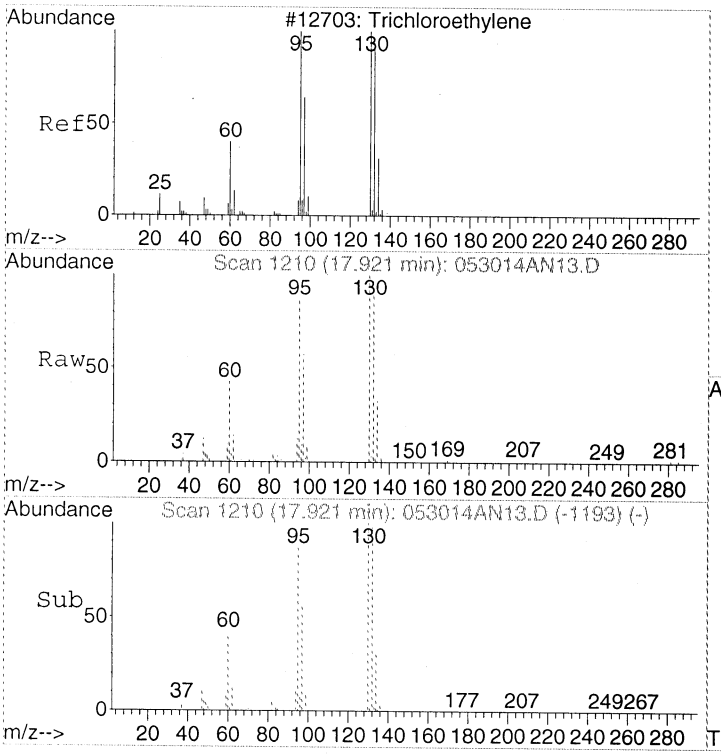


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion:114 Resp: 2043562

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.5	0.0	35.6

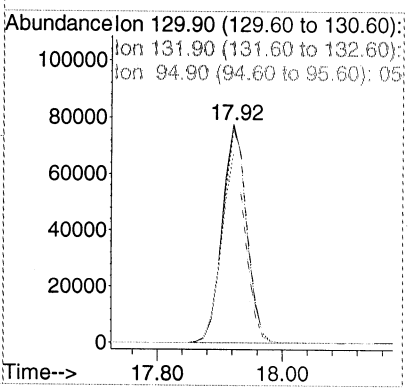


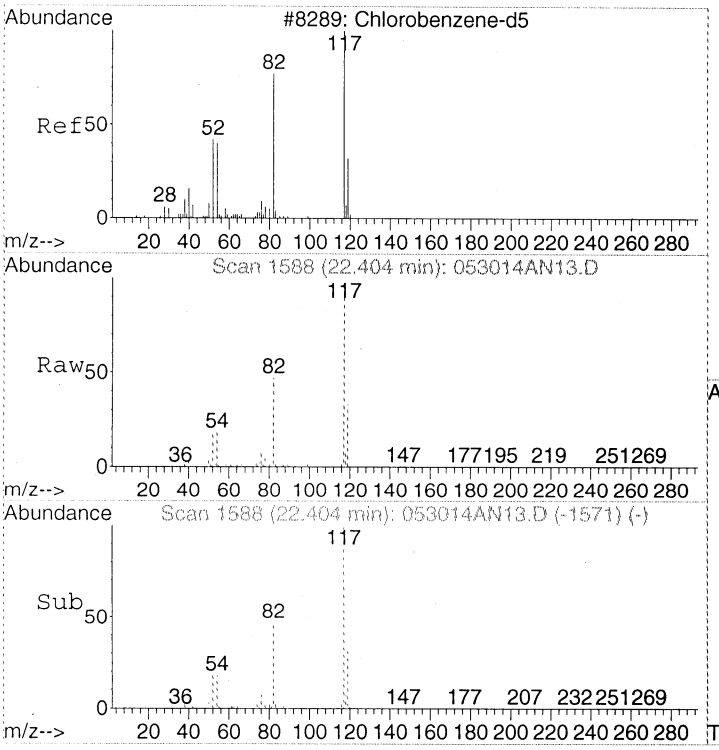


#37
Trichloroethene
Concen: 6.07 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion:130 Resp: 210224

Ion	Ratio	Lower	Upper
130	100		
132	98.2	76.1	116.1
95	85.3	66.3	106.3

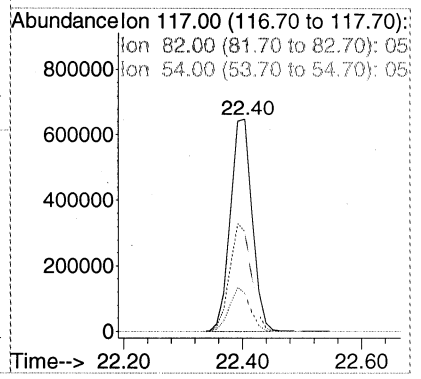


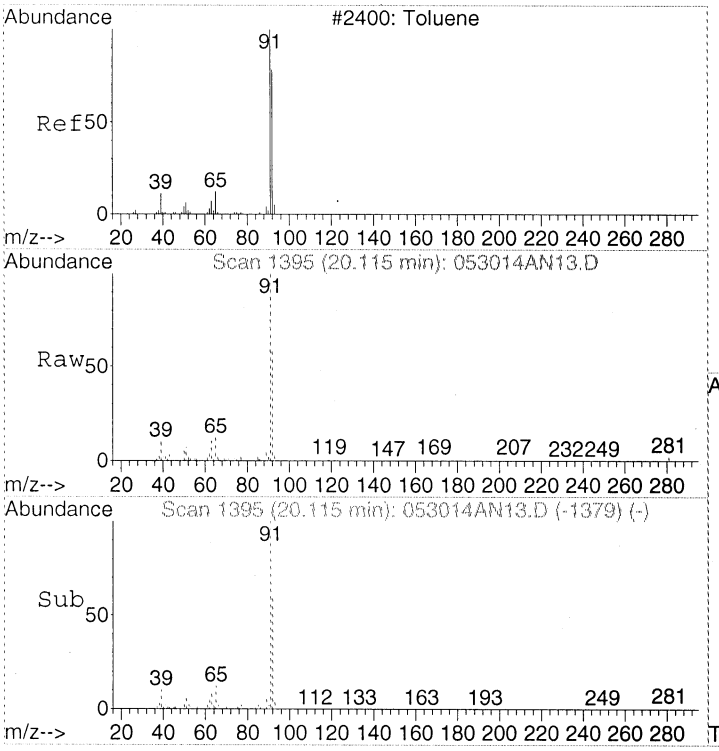


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.40 min Scan# 1588
Delta R.T. -0.00 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion:117 Resp: 1655986

Ion	Ratio	Lower	Upper
117	100		
82	49.3	30.5	70.5
54	19.5	0.6	40.6

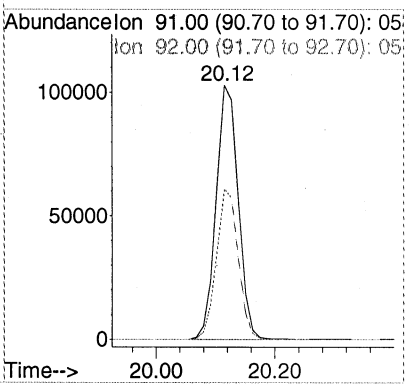




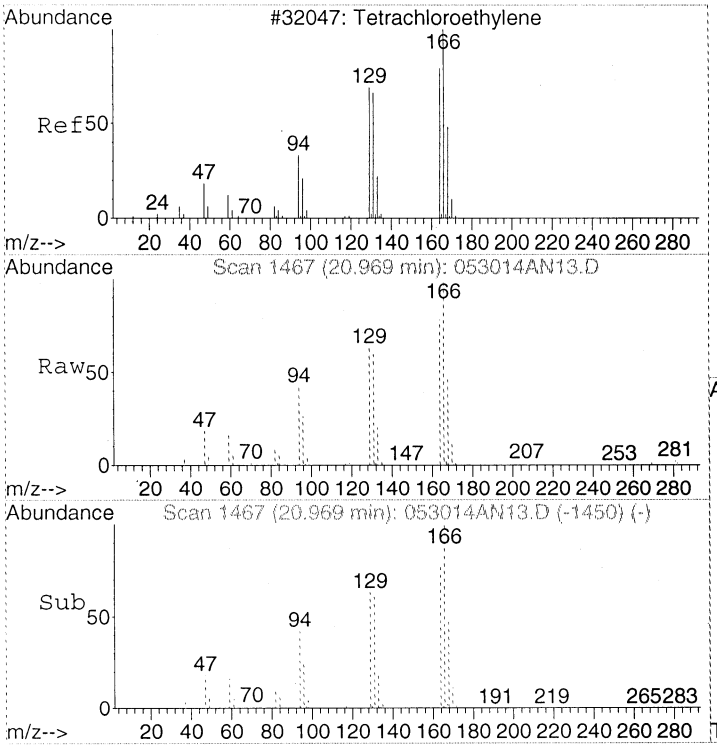
#44
Toluene
Concen: 3.82 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion: 91 Resp: 265208

Ion	Ratio	Lower	Upper
91	100		
92	58.4	38.5	78.5



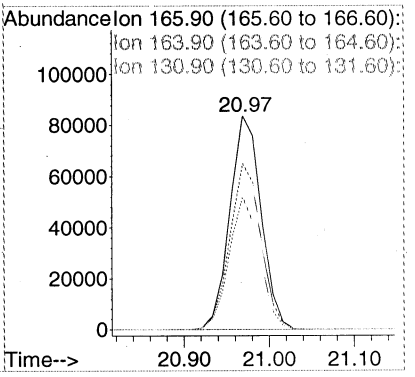
00176



#47
Tetrachloroethene
Concen: 3.76 ppbv
RT: 20.97 min Scan# 1467
Delta R.T. -0.00 min
Lab File: 053014AN13.D
Acq: 31 May 2014 1:20 am

Tgt Ion:166 Resp: 213224

Ion	Ratio	Lower	Upper
166	100		
164	77.2	57.0	97.0
131	60.1	41.3	81.3



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN14.D
Acq On : 31 May 2014 2:08 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-06RE1
Misc : 20mL
ALS Vial : 12
Multiplier: 2.2

NA
lm 6/3/14

Quant Time: Jun 03 09:58:04 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	315192	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.507	114	1929401	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1498877	22.00	ppbv	-0.01

Target Compounds	Qvalue

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

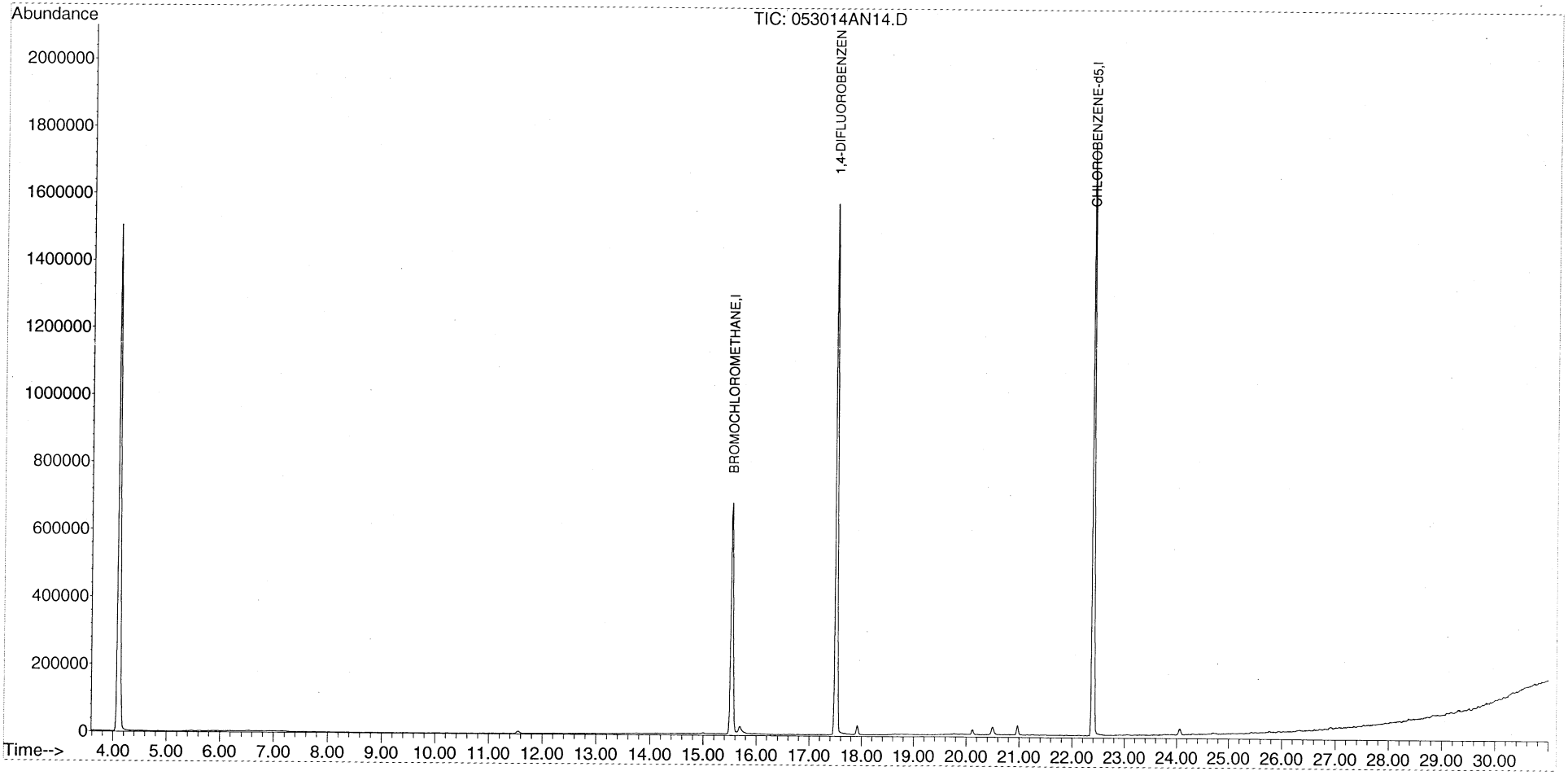
00178

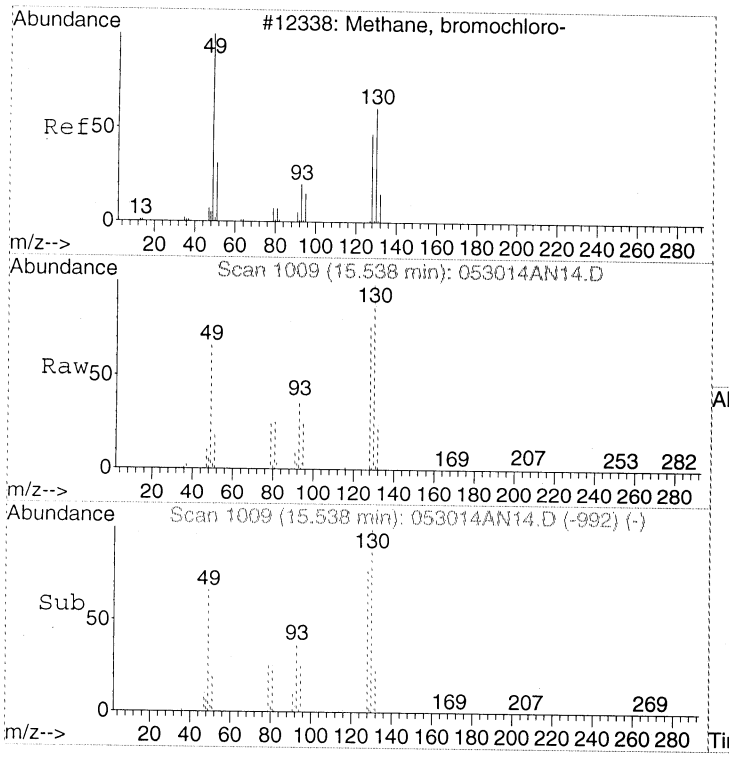
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN14.D
Acq On : 31 May 2014 2:08 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-06RE1
Misc : 20mL
ALS Vial : 12
Multiplier: 2.2

Quant Time: Jun 03 09:58:04 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

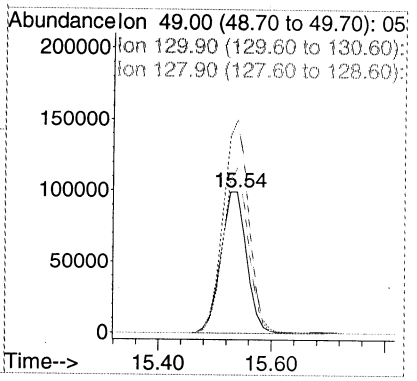


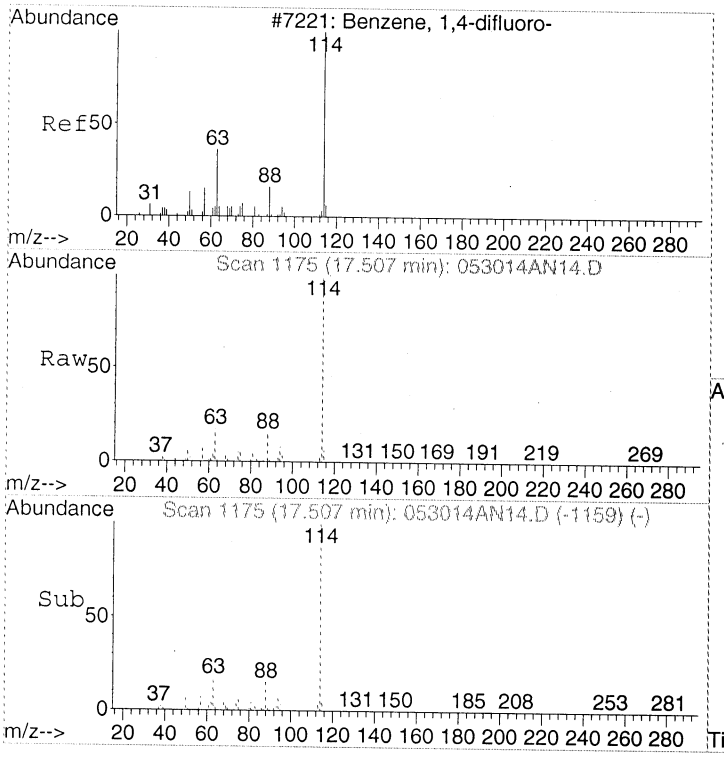


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. 0.00 min
Lab File: 053014AN14.D
Acq: 31 May 2014 2:08 am

Tgt Ion: 49 Resp: 315192

Ion	Ratio	Lower	Upper
49	100		
130	149.5	125.1	165.1
128	114.9	91.6	131.6

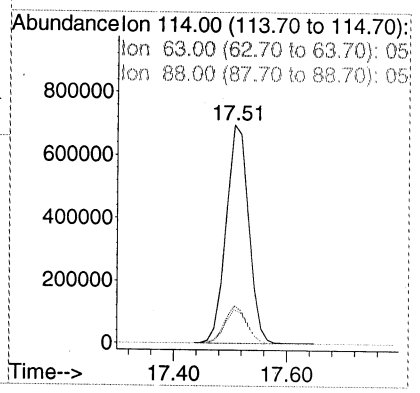




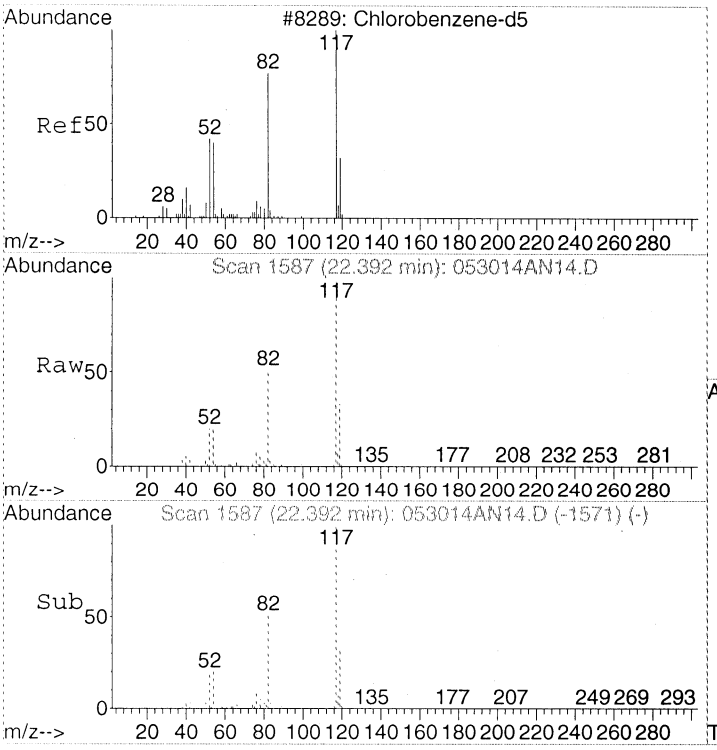
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN14.D
Acq: 31 May 2014 2:08 am

Tgt Ion:114 Resp: 1929401

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.2	0.0	35.6



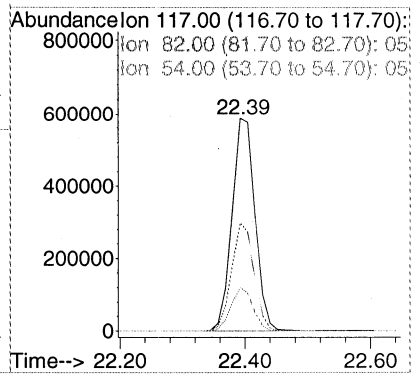
00180



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN14.D
Acq: 31 May 2014 2:08 am

Tgt Ion:117 Resp: 1498877

Ion	Ratio	Lower	Upper
117	100		
82	49.4	30.5	70.5
54	19.5	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN15.D
Acq On : 31 May 2014 3:00 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-08
Misc : 200mL
ALS Vial : 41
Multiplier: 2.06

Quant Time: Jun 03 09:58:08 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	337527	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.507	114	2044878	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1663558	22.00	ppbv	-0.01

Target Compounds						Qvalue
2) Propene	4.474	41	16657	2.122	ppbv #	68
5) Chloromethane	5.126	50	5444	0.726	ppbv	98
14) Acetone	10.012	43	157322	7.274	ppbv	93
16) 2-Propanol	10.593	45	130298	8.477	ppbv	97
18) Dichloromethane	11.554	49	35026	2.058	ppbv	93
26) Ethyl acetate	15.123	61	4741	1.134	ppbv #	21
28) Chloroform	15.680	83	1506093	31.999	ppbv E	99
37) Trichloroethene	17.922	130	49213	1.419	ppbv	99
~~42) 4-Methyl-2-pentanone (MIBK~~	~~20.115~~	~~43~~	~~35628~~	~~1.100~~	~~ppbv #~~	~~43~~
44) Toluene	20.115	91	1025666	14.690	ppbv	100

am 6/3/14

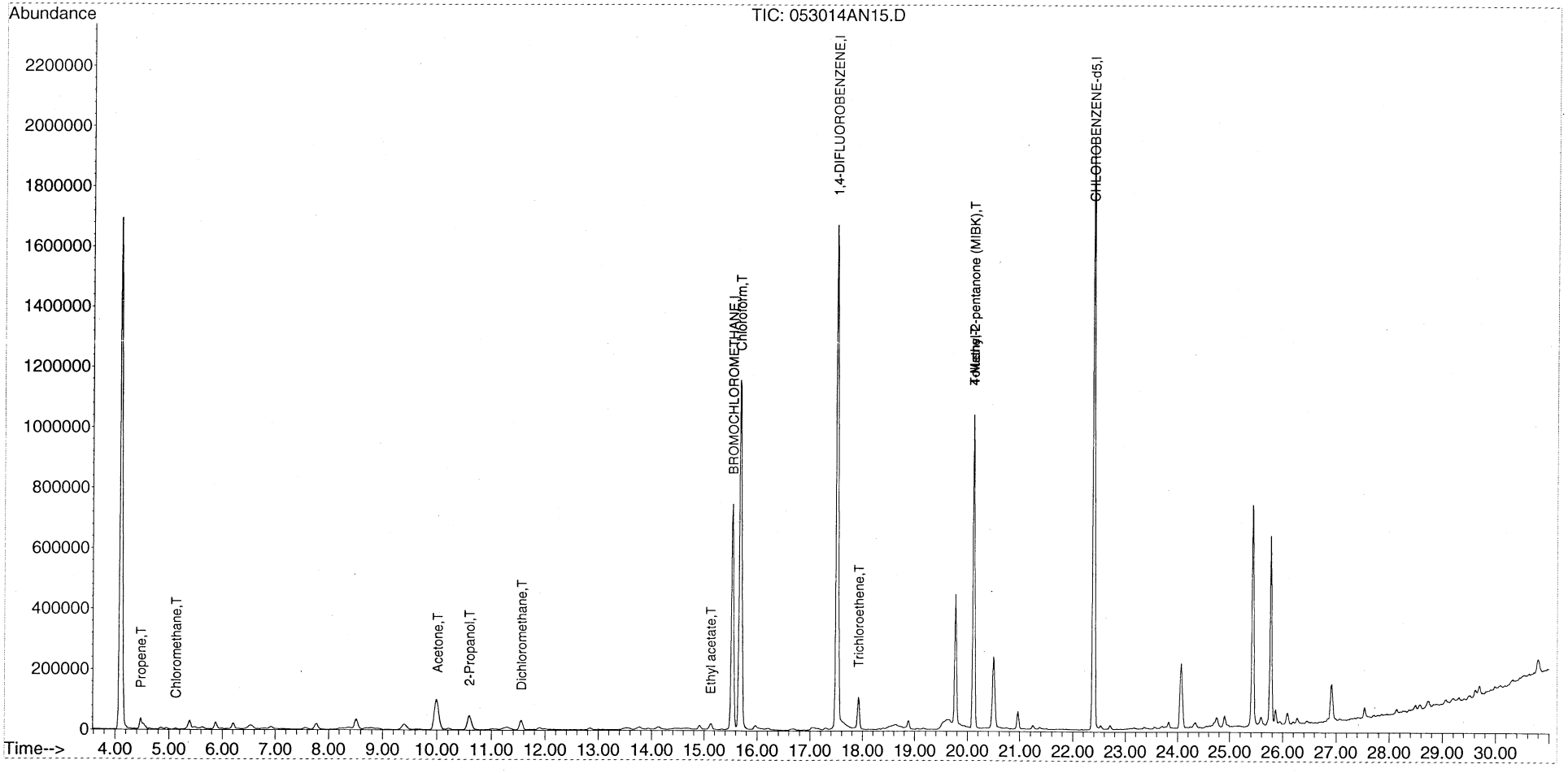
(#) = qualifier out of range (m) = manual integration (+) = signals summed

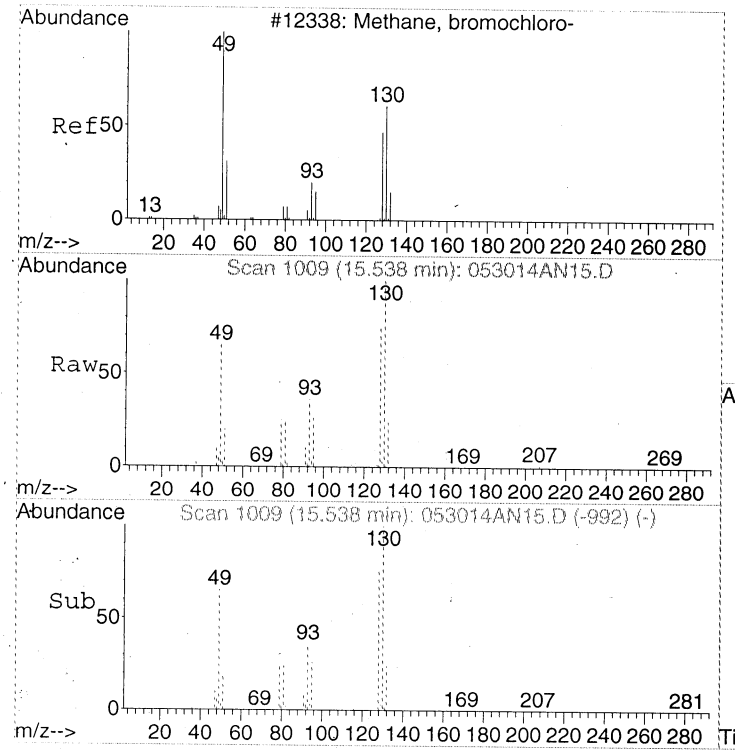
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN15.D
Acq On : 31 May 2014 3:00 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-08
Misc : 200mL
ALS Vial : 41
Multiplier: 2.06

Quant Time: Jun 03 09:58:08 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

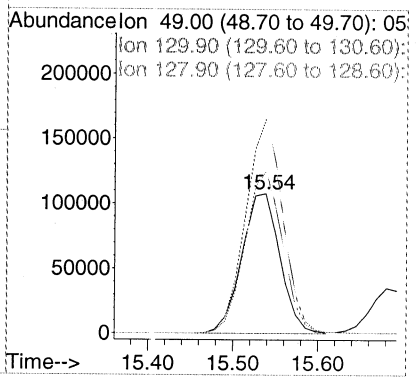


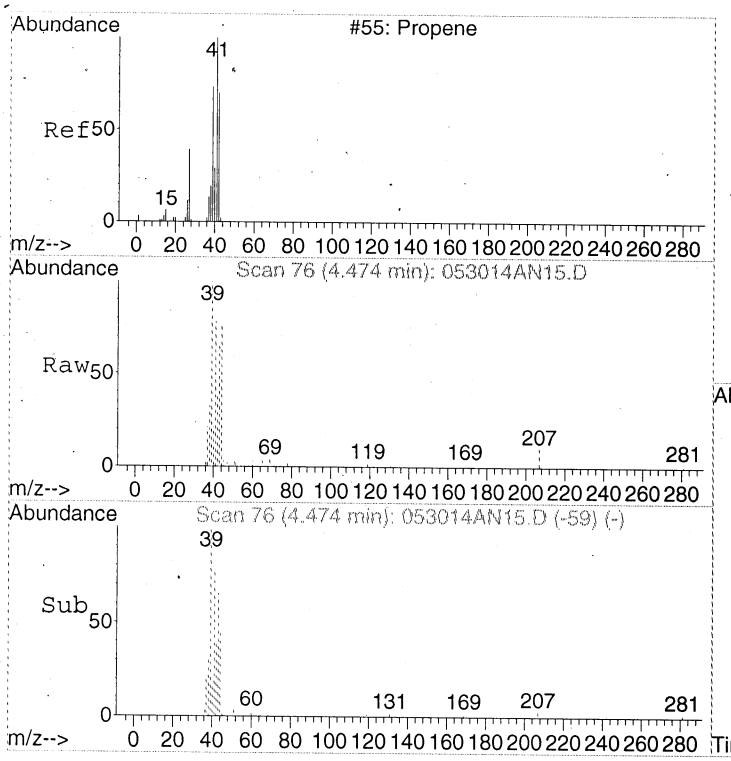


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 49 Resp: 337527

Ion	Ratio	Lower	Upper
49	100		
130	149.2	125.1	165.1
128	114.1	91.6	131.6

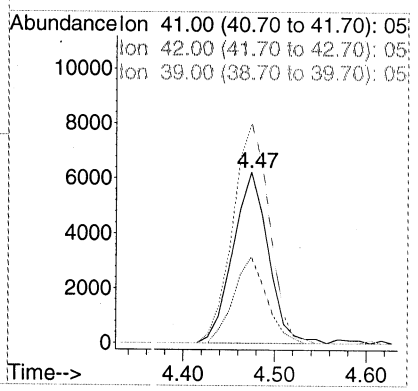


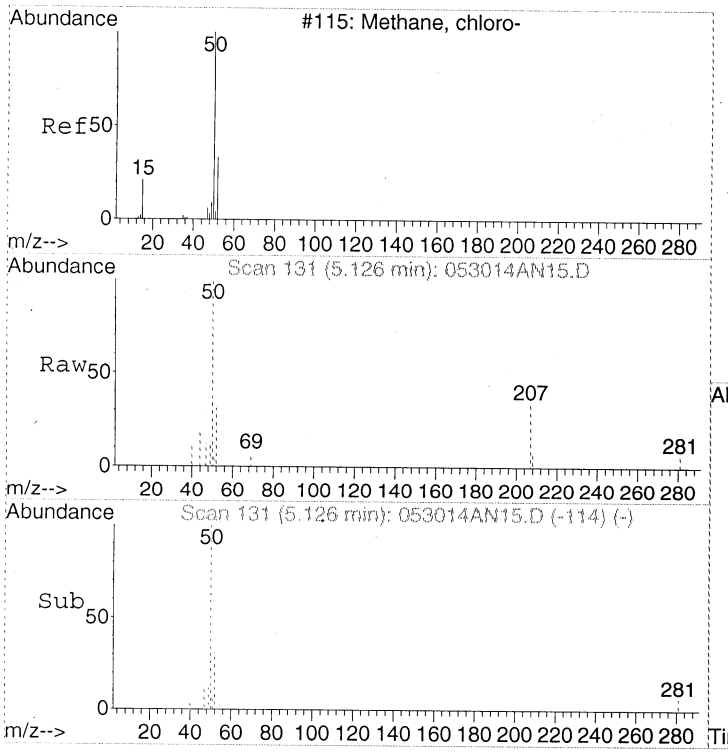


#2
Propene
Concen: 2.12 ppbv
RT: 4.47 min Scan# 76
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 41 Resp: 16657

Ion	Ratio	Lower	Upper
41	100		
42	47.3	44.9	84.9
39	133.0	74.8	114.8#

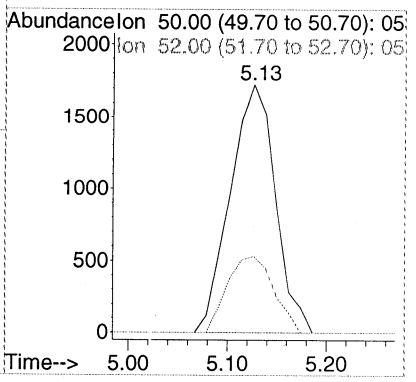


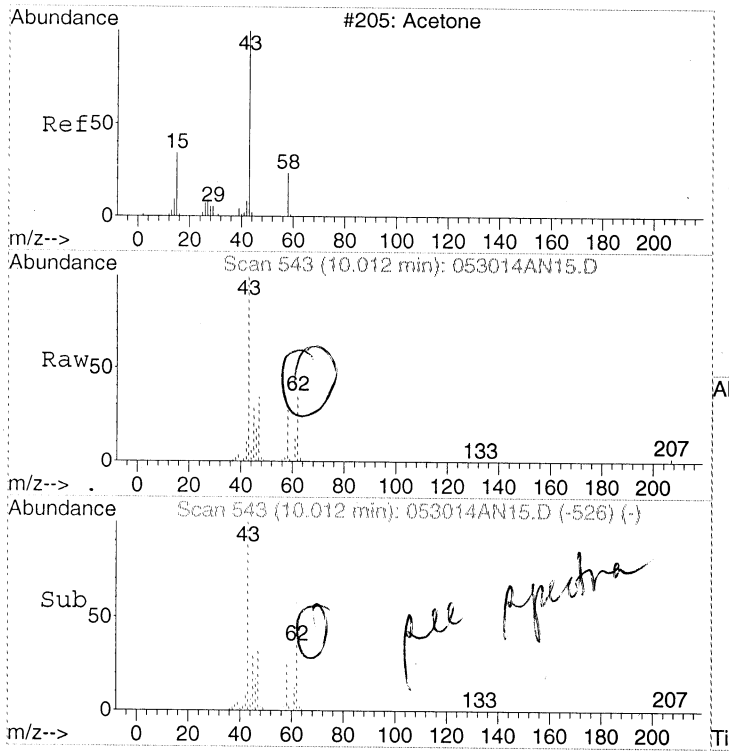


#5
Chloromethane
Concen: 0.73 ppbv
RT: 5.13 min Scan# 131
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 50 Resp: 5444

Ion	Ratio	Lower	Upper
50	100		
52	31.7	12.7	52.7



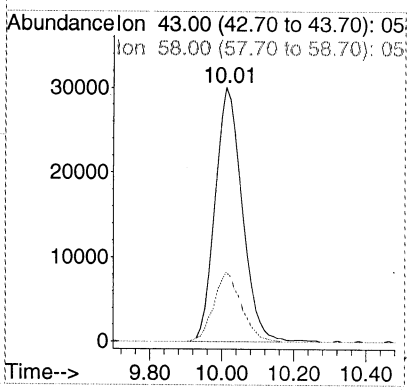


see spectra

#14
Acetone
Concen: 7.27 ppbv
RT: 10.01 min Scan# 543
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 43 Resp: 157322

Ion	Ratio	Lower	Upper
43	100		
58	27.7	4.2	44.2

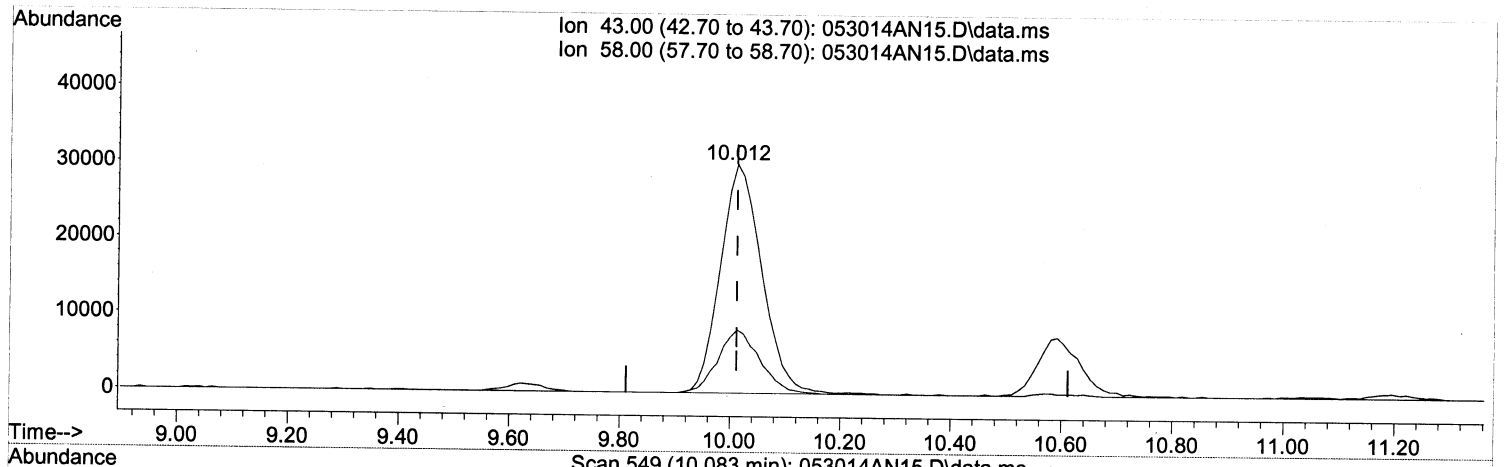


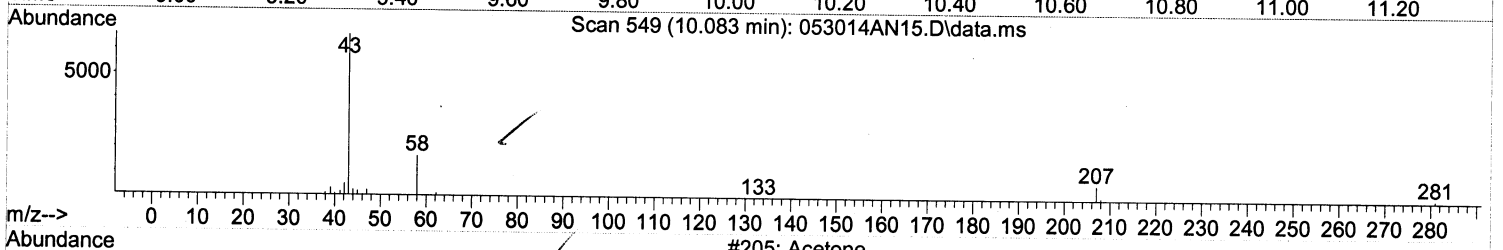
Quantitation Report (Qedit)

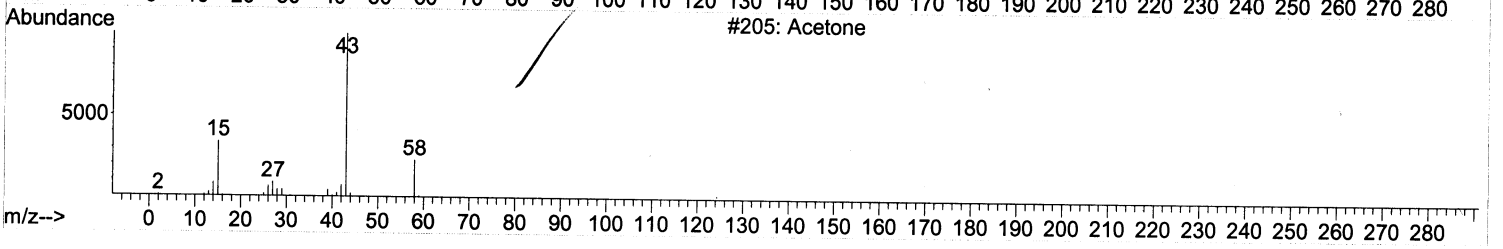
Data Path : I:\Data\ROOM201\AG5973N\2014\Data\053014TO15NA\
Data File : 053014AN15.D
Acq On : 31 May 2014 3:00
Instrument: AG5973N
Operator : EM
Sample : 1405053-08
Misc : 200mL
ALS Vial : 41
Multiplier: 2.06

Quant Time: Jun 03 13:10:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M







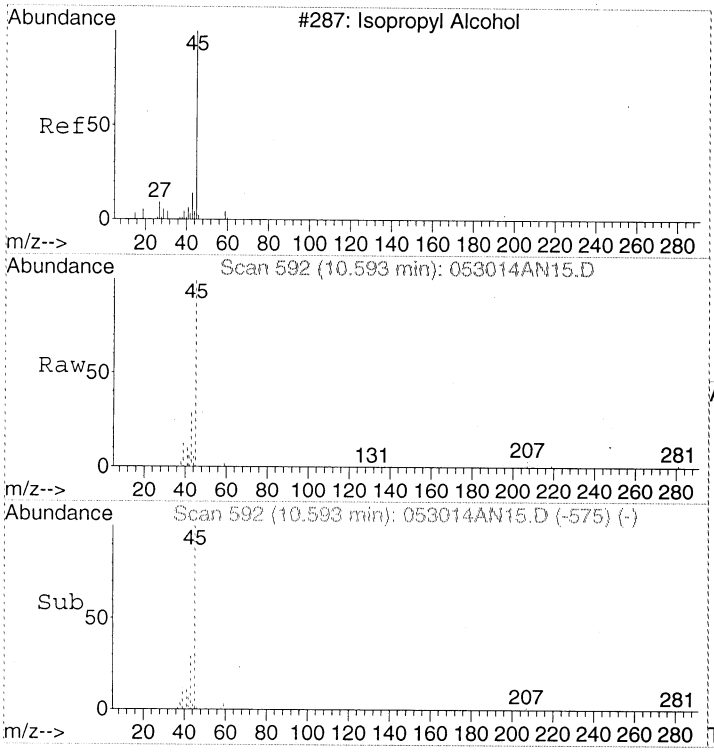
TIC: 053014AN15.D\data.ms

(14) Acetone (T)

10.012min (+0.000) 7.27 ppbv

response 157322

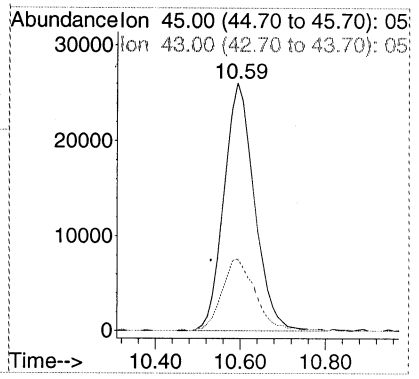
Ion	Exp%	Act%
43.00	100	100
58.00	24.20	27.71
0.00	0.00	0.00
0.00	0.00	0.00

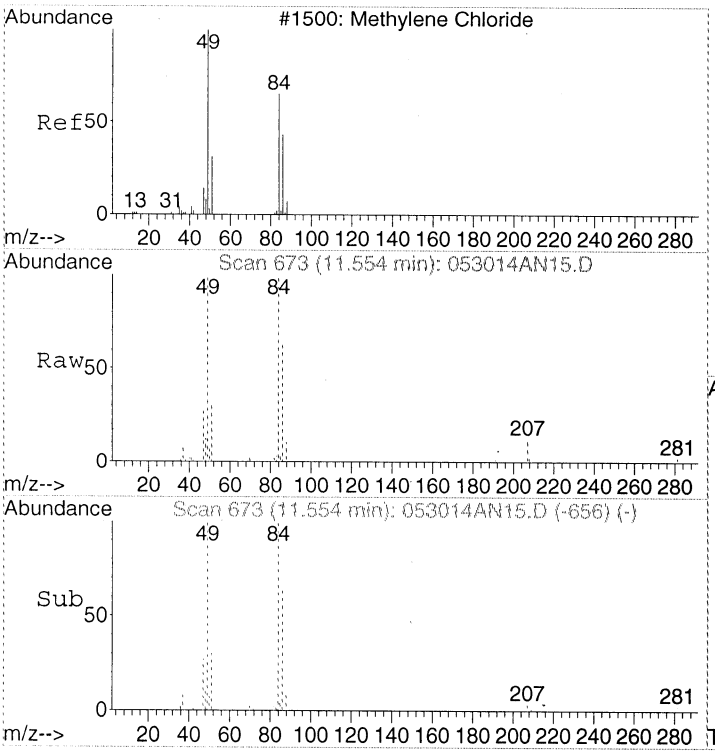


#16
2-Propanol
Concen: 8.48 ppbv
RT: 10.59 min Scan# 592
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 45 Resp: 130298

Ion	Ratio	Lower	Upper
45	100		
43	31.7	10.3	50.3

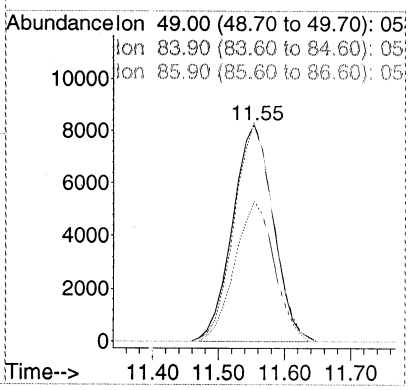


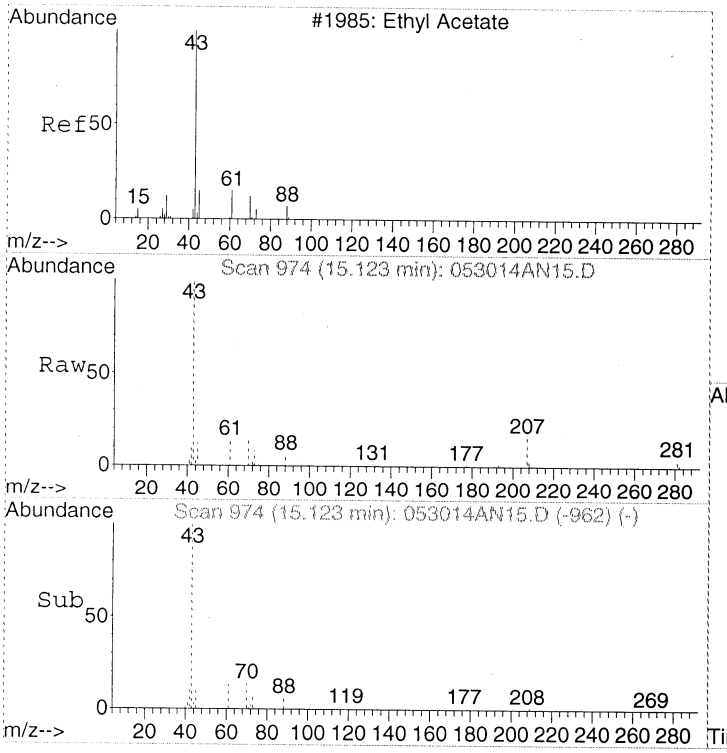


#18
Dichloromethane
Concen: 2.06 ppbv
RT: 11.55 min Scan# 673
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 49 Resp: 35026

Ion	Ratio	Lower	Upper
49	100		
84	97.4	69.9	109.9
86	63.1	38.3	78.3

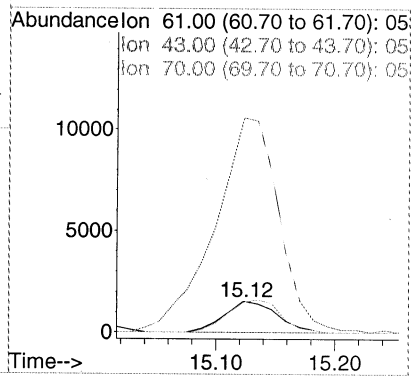


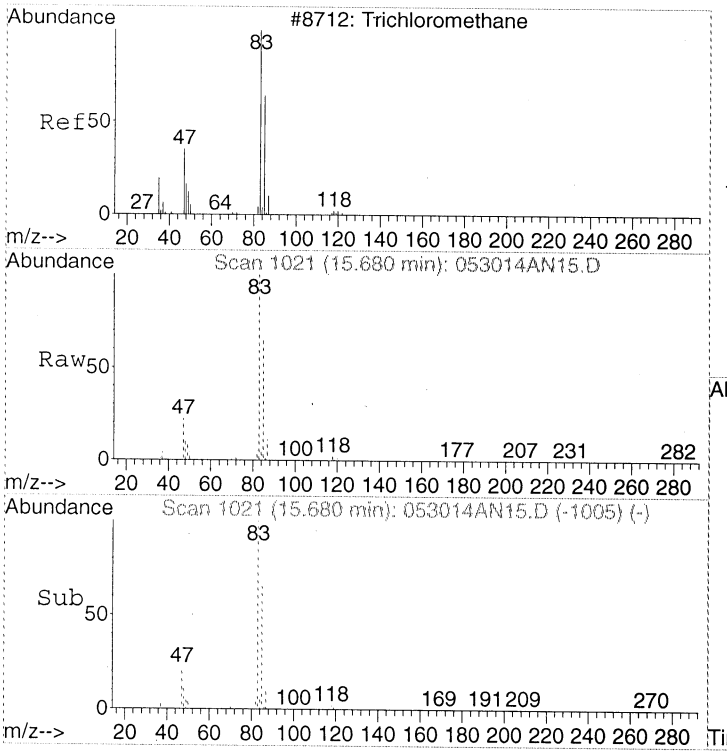


#26
Ethyl acetate
Concen: 1.13 ppbv
RT: 15.12 min Scan# 974
Delta R.T. -0.01 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 61 Resp: 4741

Ion	Ratio	Lower	Upper
61	100		
43	840.0	1289.4	1309.4#
70	104.7	91.8	111.8

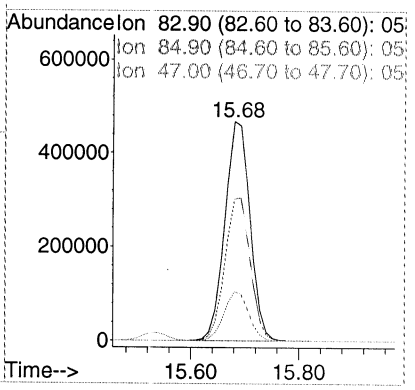


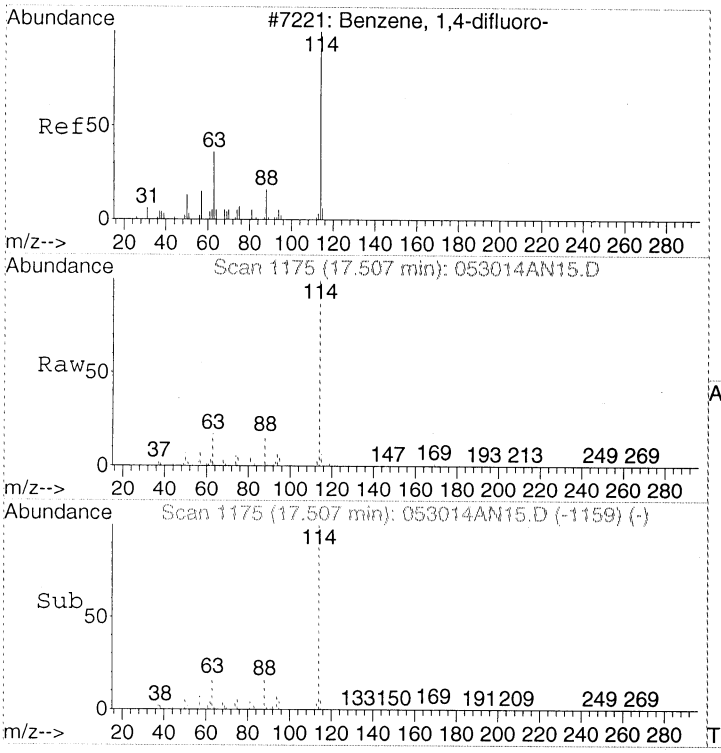


#28
Chloroform
Concen: 32.00 ppbv
RT: 15.68 min Scan# 1021
Delta R.T. -0.01 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 83 Resp: 1506093

Ion	Ratio	Lower	Upper
83	100		
85	65.6	45.0	85.0
47	22.1	3.2	43.2

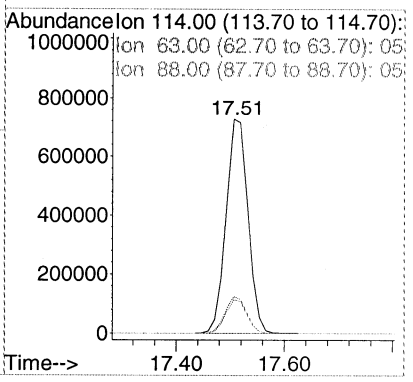


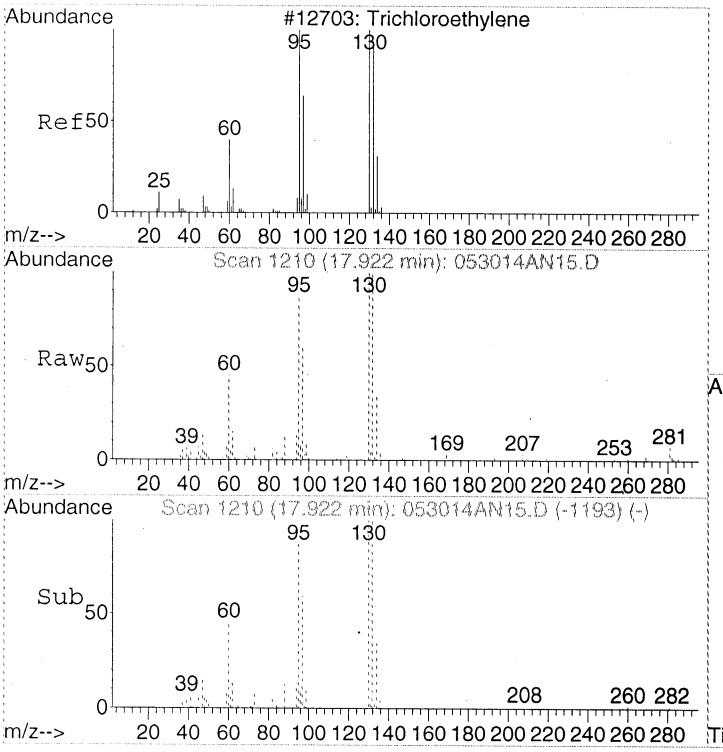


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion:114 Resp: 2044878

Ion	Ratio	Lower	Upper
114	100		
63	16.8	0.0	37.2
88	15.3	0.0	35.6

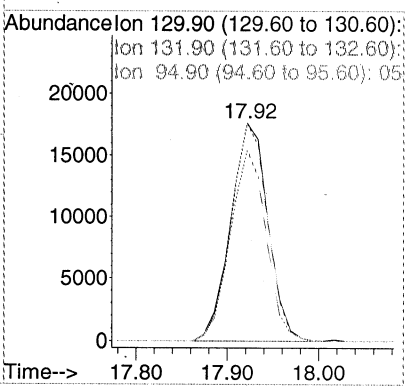


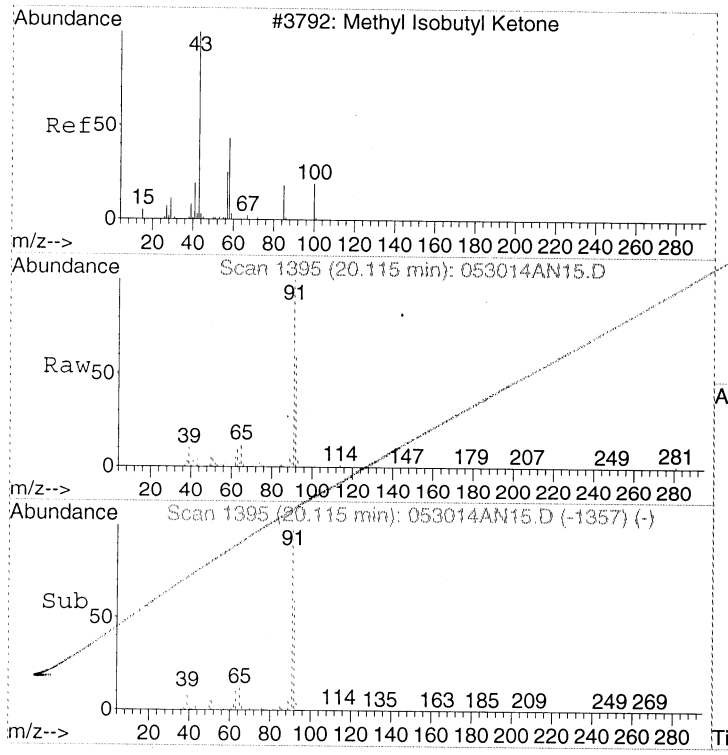


#37
Trichloroethene
Concen: 1.42 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. 0.00 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion:130 Resp: 49213

Ion	Ratio	Lower	Upper
130	100		
132	97.7	76.1	116.1
95	85.3	66.3	106.3

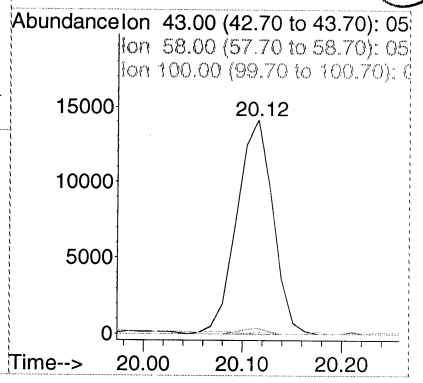


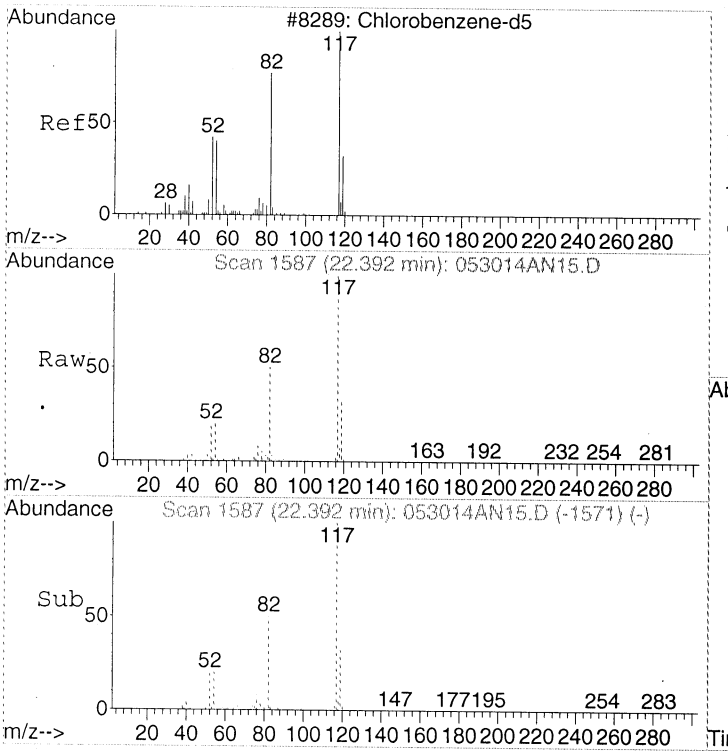


#42
4-Methyl-2-pentanone (MIBK)
Concen: 1.10 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. 0.25 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 43 Resp: 35628

Ion	Ratio	Lower	Upper
43	100		
58	2.0	20.2	60.2#
100	0.5	4.3	44.3#

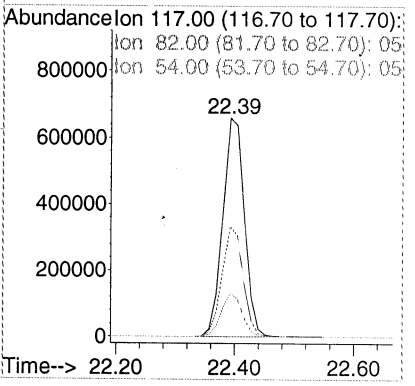


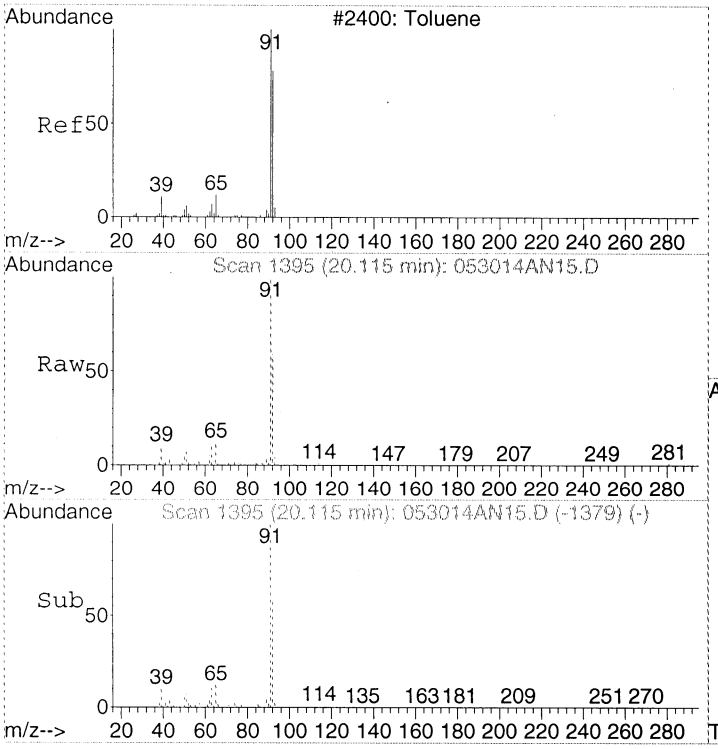


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion:117 Resp: 1663558

Ion	Ratio	Lower	Upper
117	100		
82	49.3	30.5	70.5
54	19.3	0.6	40.6

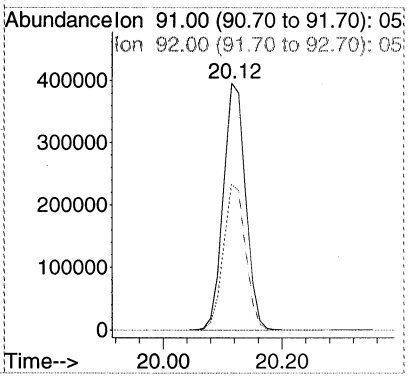




#44
Toluene
Concen: 14.69 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN15.D
Acq: 31 May 2014 3:00 am

Tgt Ion: 91 Resp: 1025666

Ion	Ratio	Lower	Upper
91	100		
92	58.8	38.5	78.5



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN16.D
Acq On : 31 May 2014 3:48 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-08RE1
Misc : 20mL
ALS Vial : 41
Multiplier: 2.06

Quant Time: Jun 03 09:58:18 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	319965	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.507	114	1971692	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1542814	22.00	ppbv	-0.01

Target Compounds						Qvalue
14) Acetone	10.048	43	10687	0.521	ppbv	95
16) 2-Propanol	10.605	45	7418	0.509	ppbv	77
18) Dichloromethane	11.554	49	9216	0.571	ppbv	94
28) Chloroform	15.680	83	97586	2.187	ppbv	98
44) Toluene	20.115	91	58377	0.902	ppbv	100

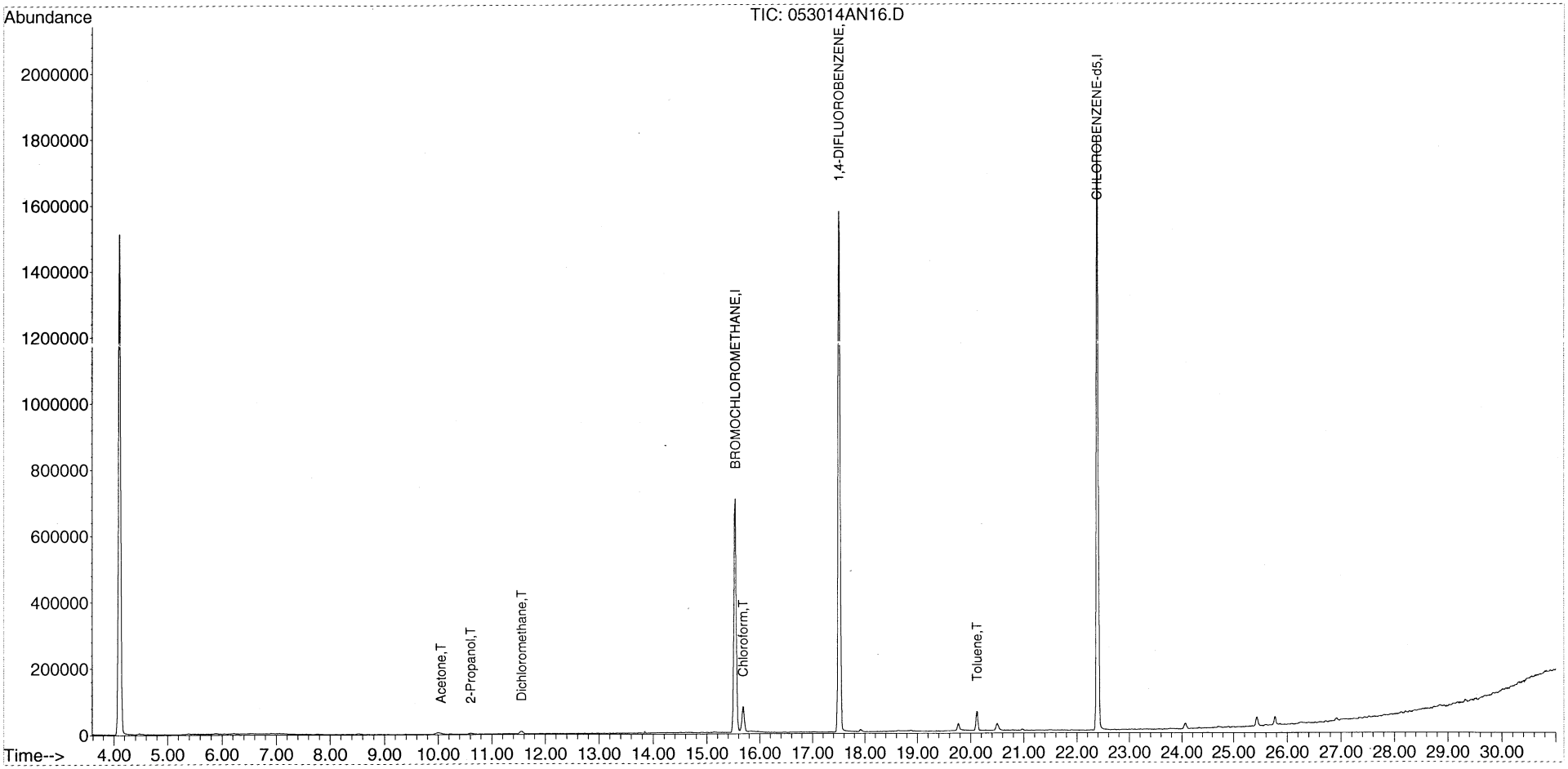
(#) = qualifier out of range (m) = manual integration (+) = signals summed

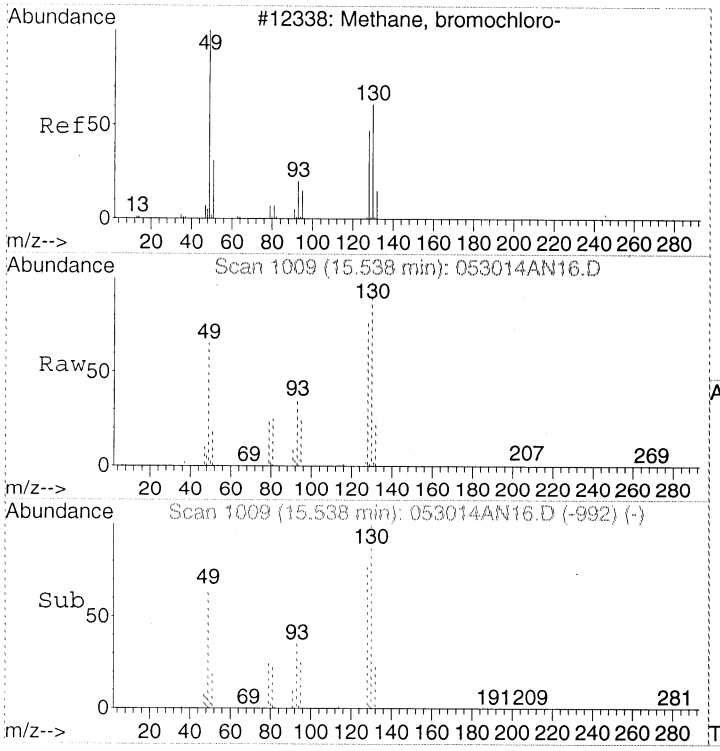
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN16.D
Acq On : 31 May 2014 3:48 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-08RE1
Misc : 20mL
ALS Vial : 41
Multiplier: 2.06

Quant Time: Jun 03 09:58:18 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

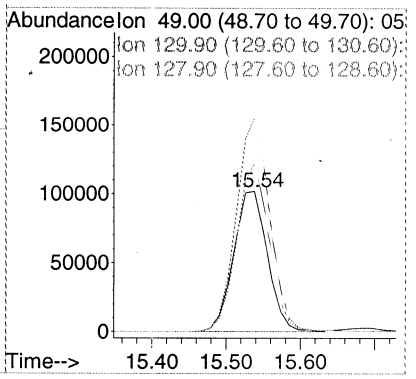


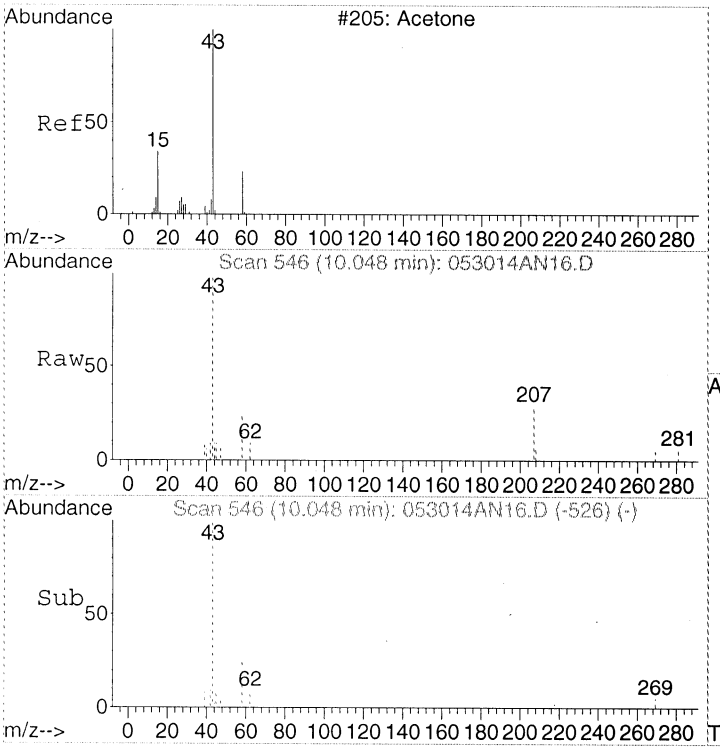


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. 0.00 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion: 49 Resp: 319965

Ion	Ratio	Lower	Upper
49	100		
130	150.5	125.1	165.1
128	115.5	91.6	131.6

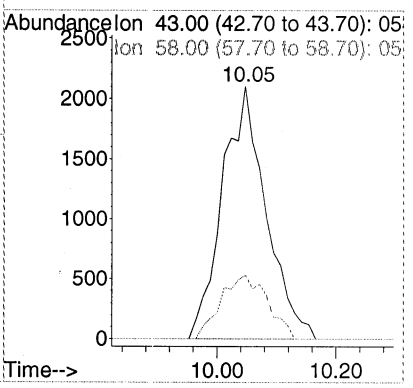


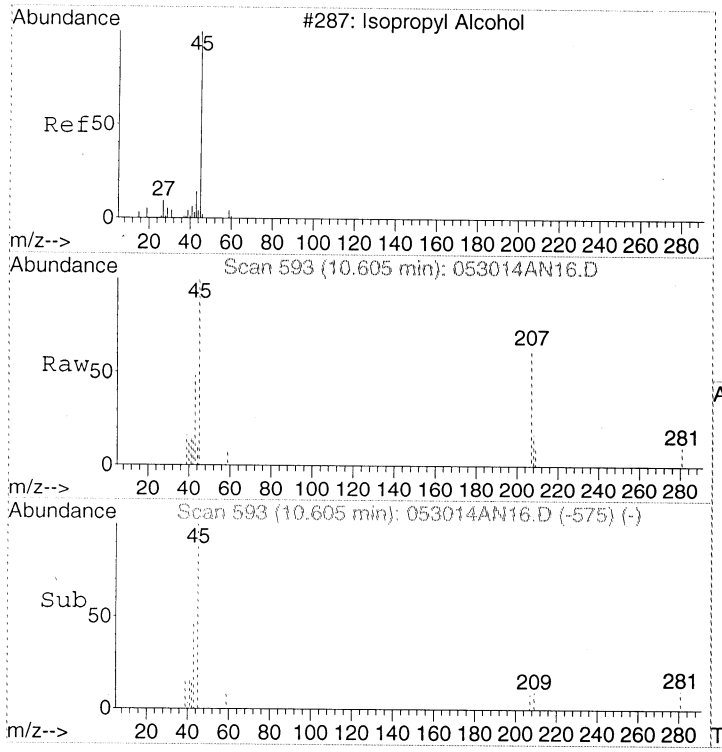


#14
Acetone
Concen: 0.52 ppbv
RT: 10.05 min Scan# 546
Delta R.T. 0.04 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion: 43 Resp: 10687

Ion	Ratio	Lower	Upper
43	100		
58	26.9	4.2	44.2

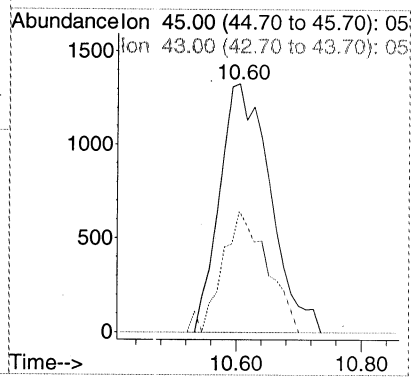


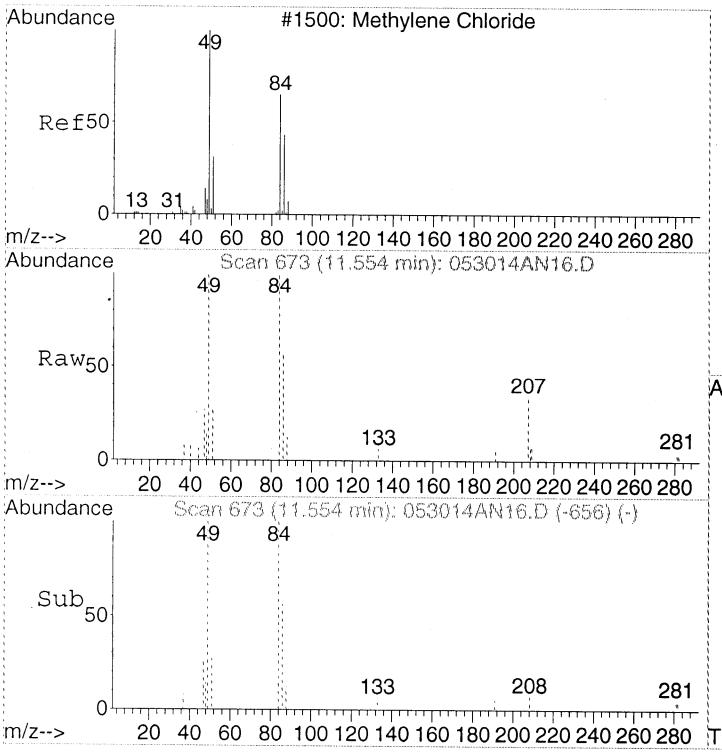


#16
2-Propanol
Concen: 0.51 ppbv
RT: 10.60 min Scan# 593
Delta R.T. 0.01 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion: 45 Resp: 7418

Ion	Ratio	Lower	Upper
45	100		
43	43.0	10.3	50.3

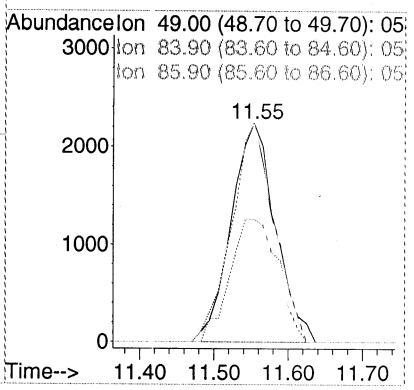


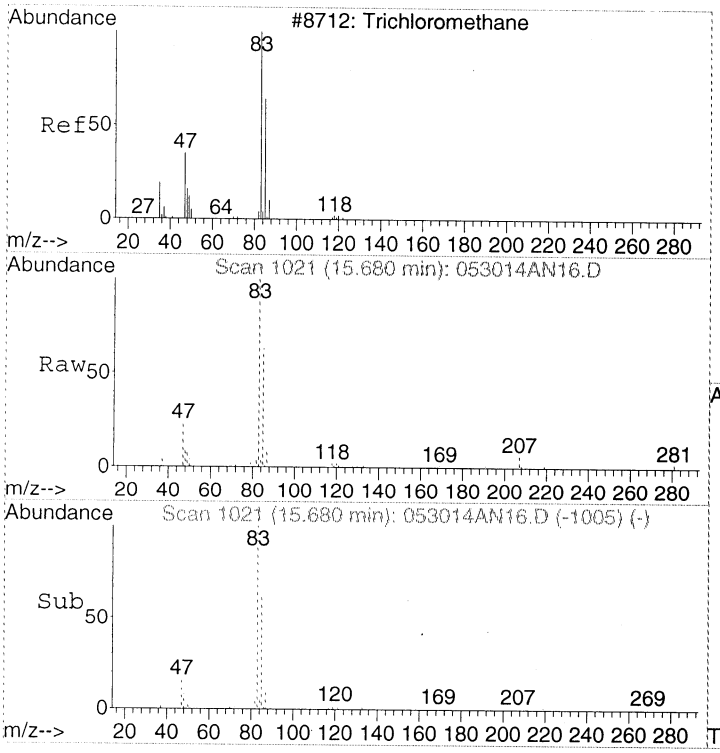


#18
Dichloromethane
Concen: 0.57 ppbv
RT: 11.55 min Scan# 673
Delta R.T. 0.00 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion: 49 Resp: 9216

Ion	Ratio	Lower	Upper
49	100		
84	96.7	69.9	109.9
86	61.1	38.3	78.3

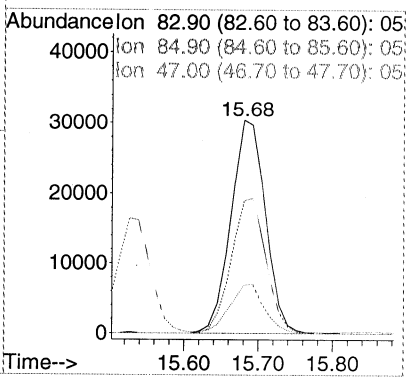


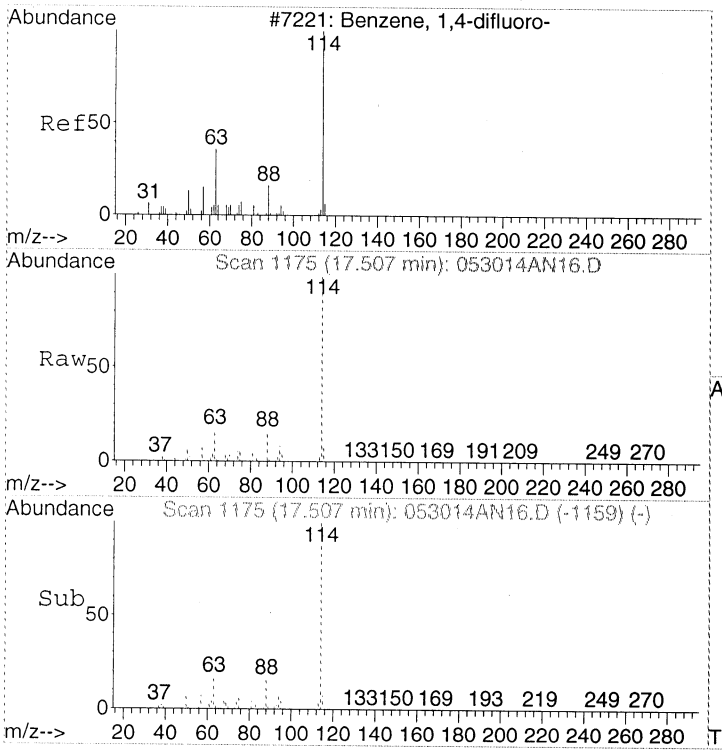


#28
Chloroform
Concen: 2.19 ppbv
RT: 15.68 min Scan# 1021
Delta R.T. -0.01 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion: 83 Resp: 97586

Ion	Ratio	Lower	Upper
83	100		
85	63.7	45.0	85.0
47	22.2	3.2	43.2

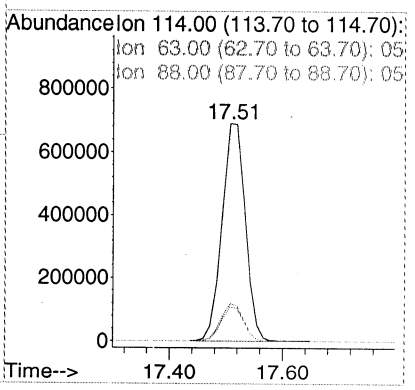


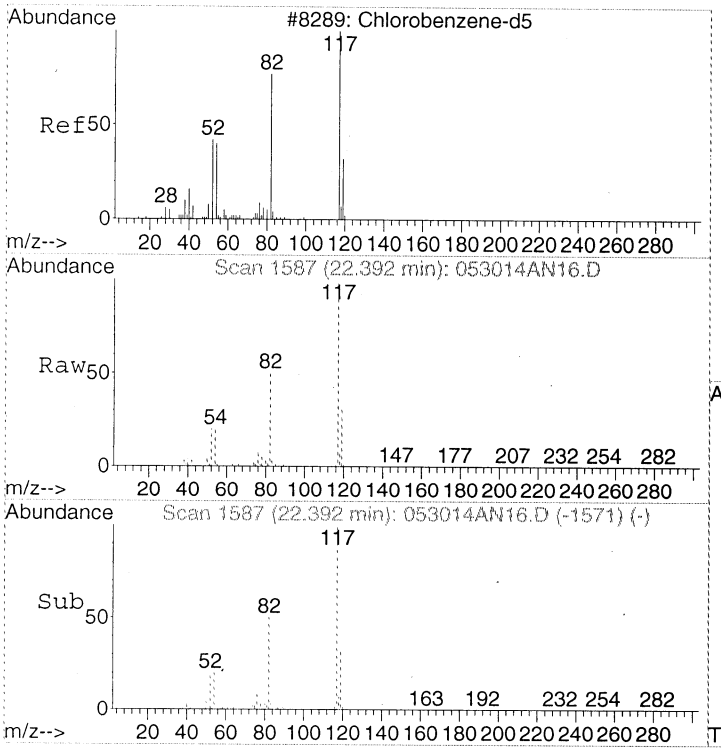


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion:114 Resp: 1971692

Ion	Ratio	Lower	Upper
114	100		
63	16.8	0.0	37.2
88	15.3	0.0	35.6

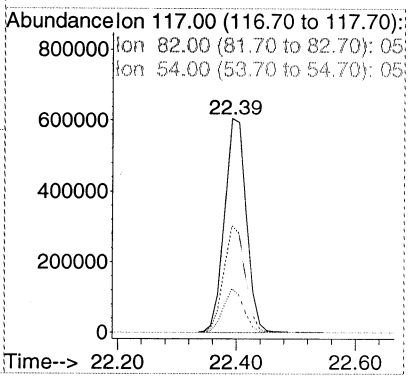


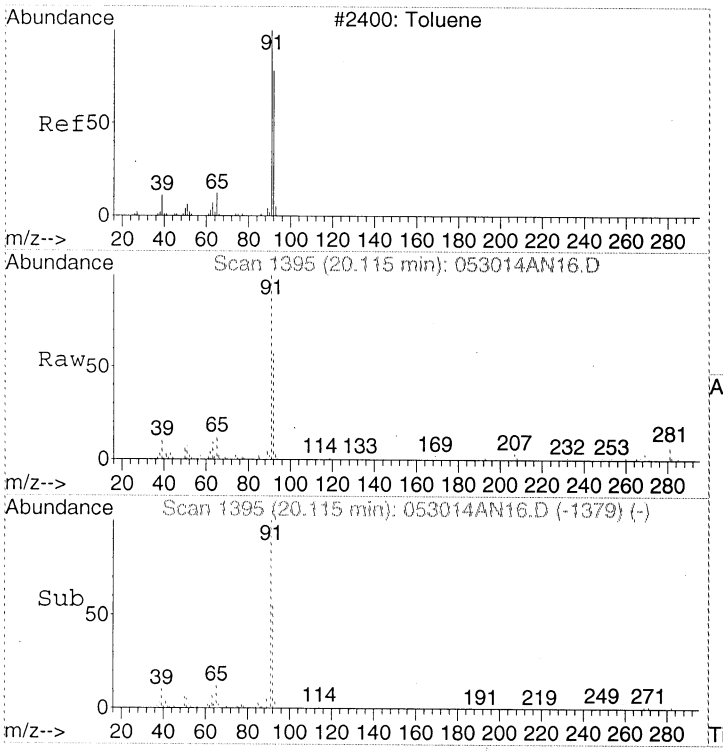


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion:117 Resp: 1542814

Ion	Ratio	Lower	Upper
117	100		
82	49.1	30.5	70.5
54	19.4	0.6	40.6

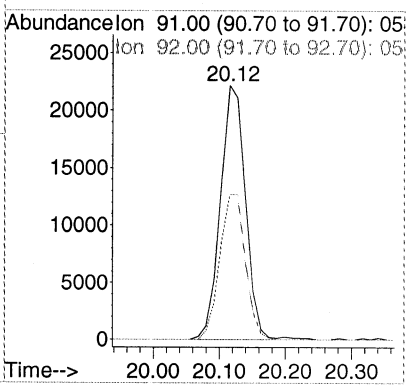




#44
Toluene
Concen: 0.90 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN16.D
Acq: 31 May 2014 3:48 am

Tgt Ion: 91 Resp: 58377

Ion	Ratio	Lower	Upper
91	100		
92	58.5	38.5	78.5



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN17.D
Acq On : 31 May 2014 4:40 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-09
Misc : 200mL
ALS Vial : 42
Multiplier: 2.22

Quant Time: Jun 03 09:58:26 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	338961	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	2080793	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.392	117	1679083	22.00 ppbv	-0.01

Target Compounds					Qvalue
2) Propene	4.474	41	12396	1.572 ppbv #	71
6) Vinyl chloride	5.446	62	6795	0.618 ppbv	95
13) 1,1-Dichloroethene	9.490	61	24476	0.863 ppbv #	47
14) Acetone	10.024	43	45440	2.092 ppbv	92
18) Dichloromethane	11.554	49	17287	1.012 ppbv	93
22) 1,1-Dichloroethane	13.570	63	14747	0.527 ppbv	100
24) cis-1,2-Dichloroethene	14.993	61	156669	7.461 ppbv	98
28) Chloroform	15.692	83	966277	20.443 ppbv	99
37) Trichloroethene	17.922	130	1056112	29.926 ppbv E	98
44) Toluene	20.115	91	135694	1.925 ppbv	100
47) Tetrachloroethene	20.969	166	139410	2.428 ppbv	99

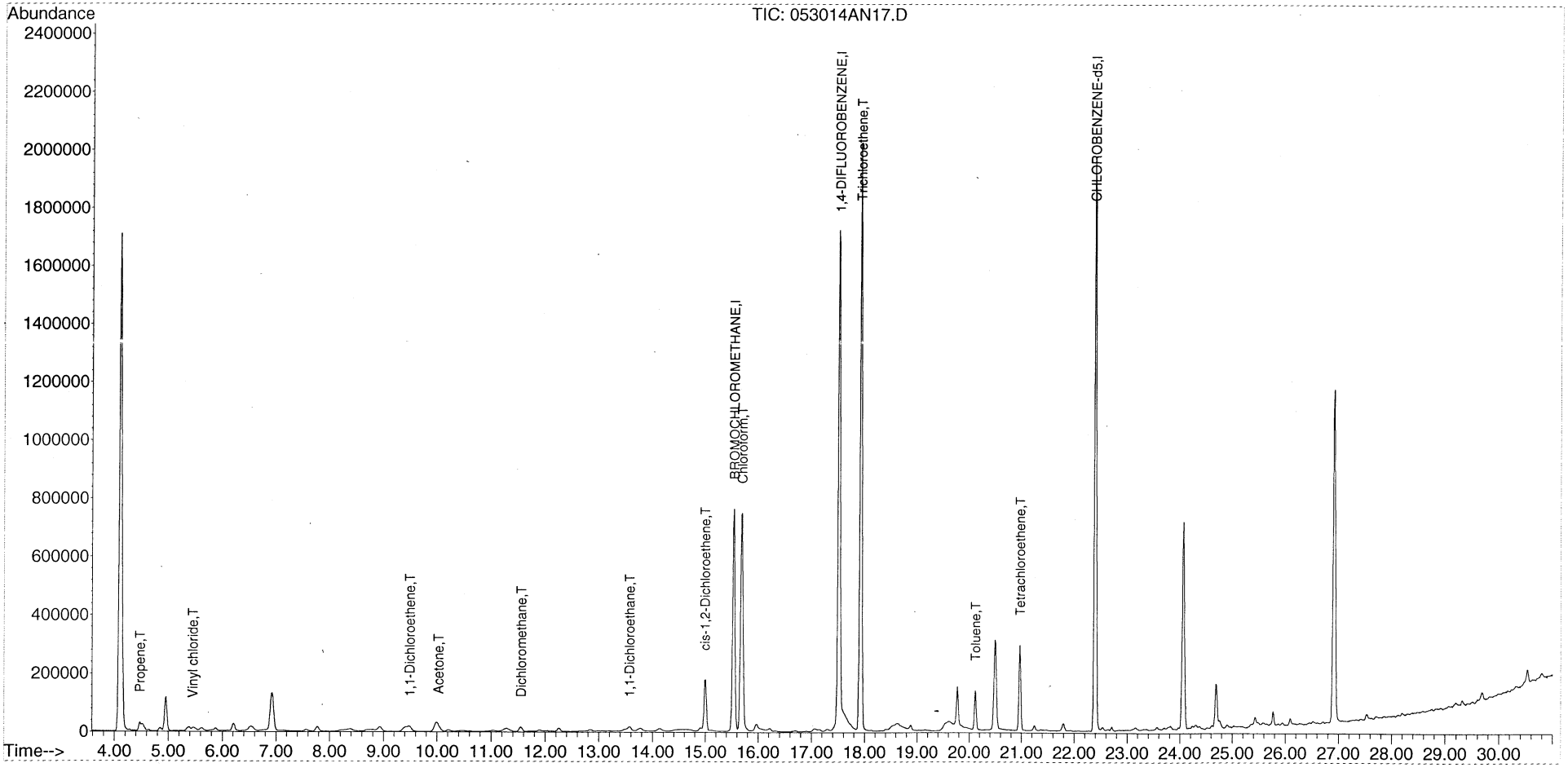
(#) = qualifier out of range (m) = manual integration (+) = signals summed

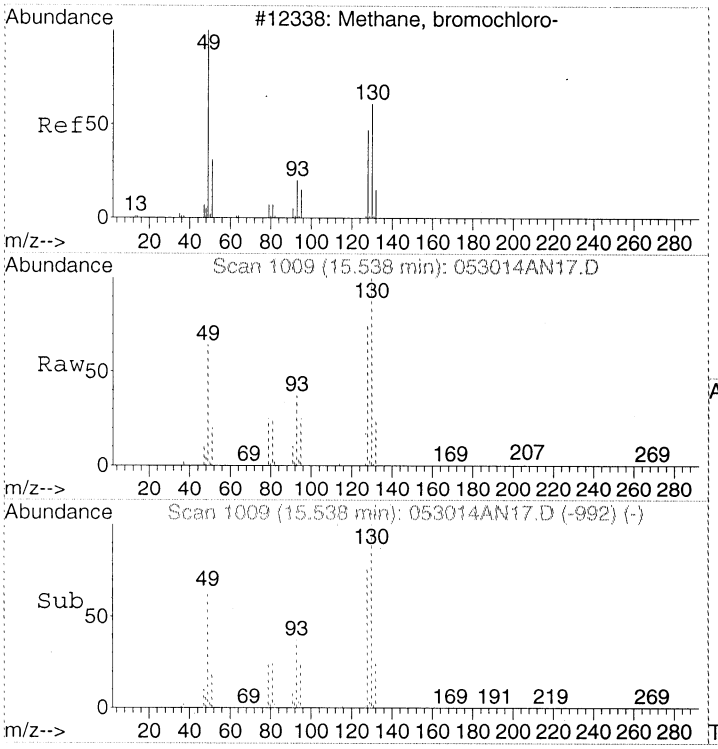
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN17.D
Acq On : 31 May 2014 4:40 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-09
Misc : 200mL
ALS Vial : 42
Multiplier: 2.22

Quant Time: Jun 03 09:58:26 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

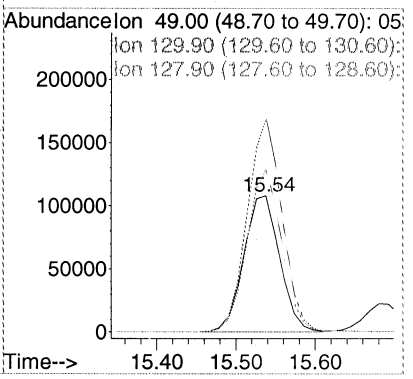


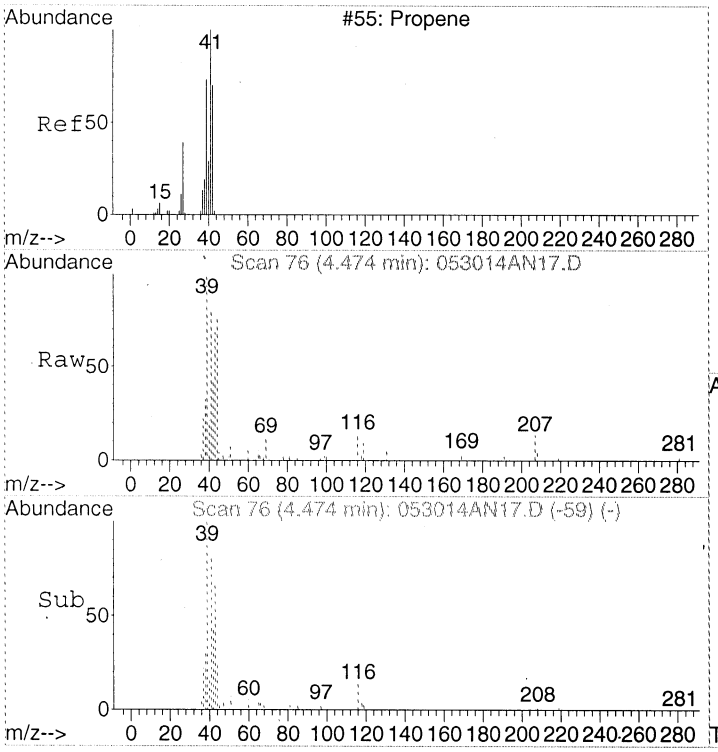


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 49 Resp: 338961

Ion	Ratio	Lower	Upper
49	100		
130	151.8	125.1	165.1
128	116.2	91.6	131.6

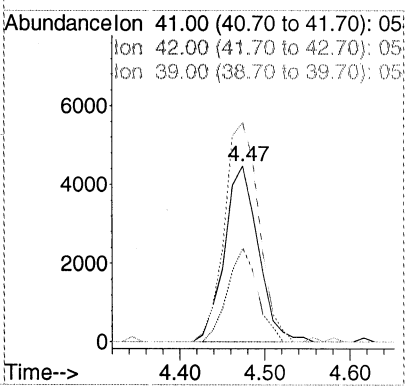


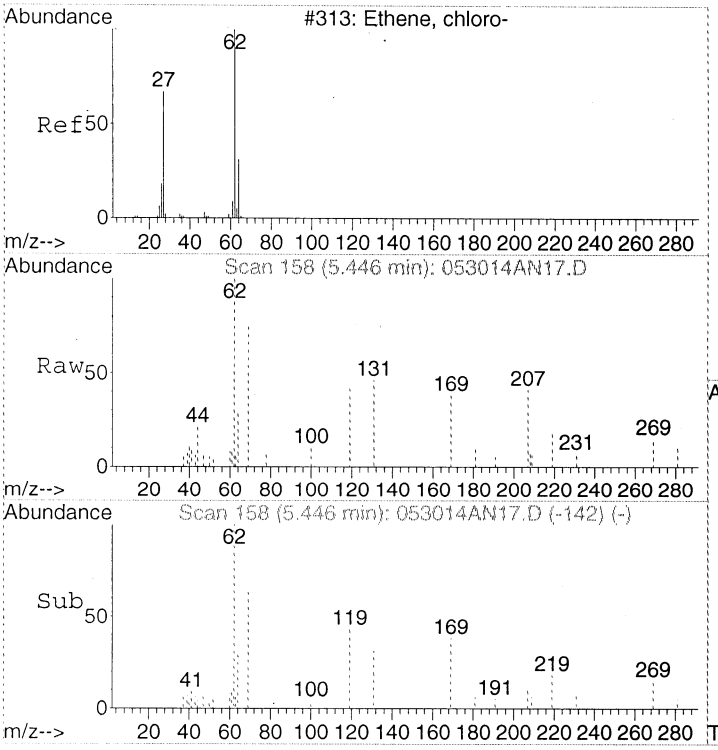


#2
Propene
Concen: 1.57 ppbv
RT: 4.47 min Scan# 76
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 41 Resp: 12396

Ion	Ratio	Lower	Upper
41	100		
42	47.3	44.9	84.9
39	126.9	74.8	114.8#

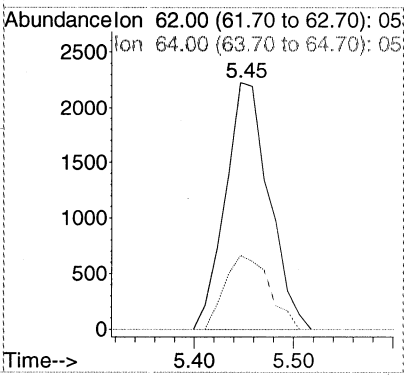


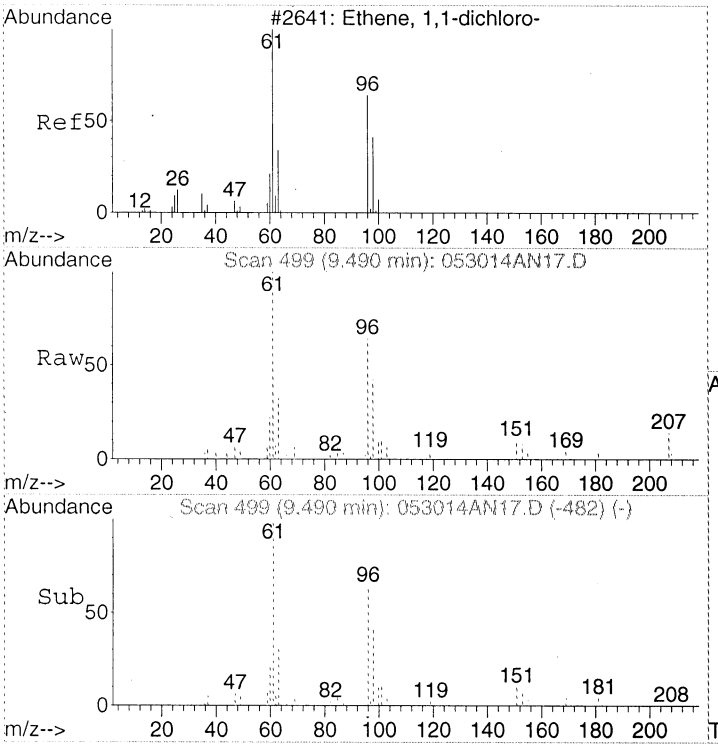


#6
Vinyl chloride
Concen: 0.62 ppbv
RT: 5.45 min Scan# 158
Delta R.T. -0.01 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 62 Resp: 6795

Ion	Ratio	Lower	Upper
62	100		
64	30.3	12.9	52.9

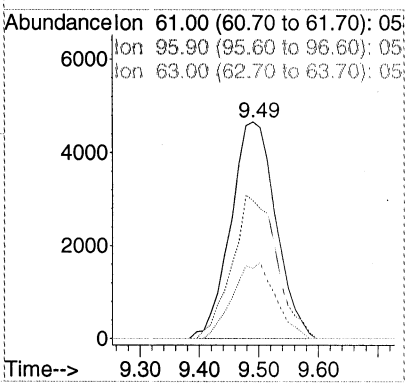


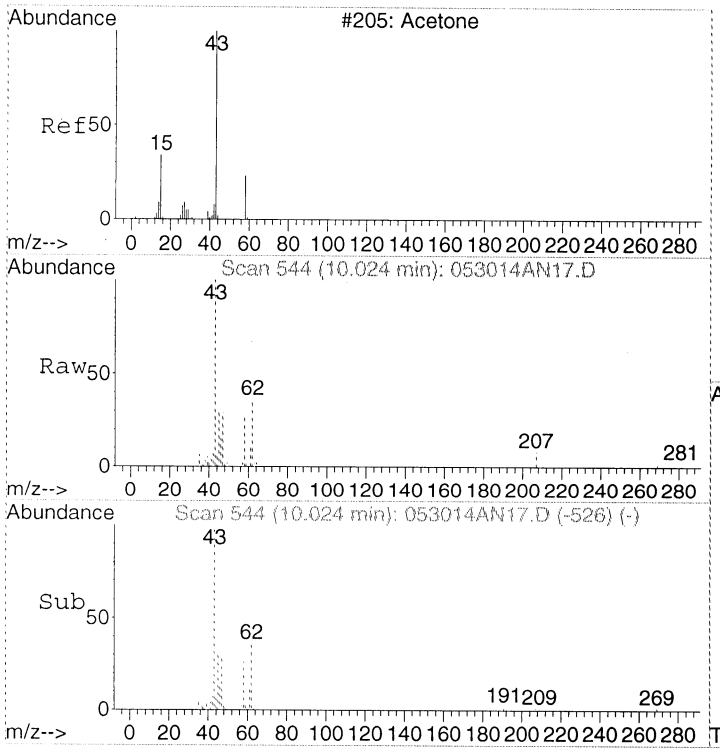


#13
1,1-Dichloroethene
Concen: 0.86 ppbv
RT: 9.49 min Scan# 499
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 61 Resp: 24476

Ion	Ratio	Lower	Upper
61	100		
96	0.0	41.0	81.0#
63	33.2	11.8	51.8

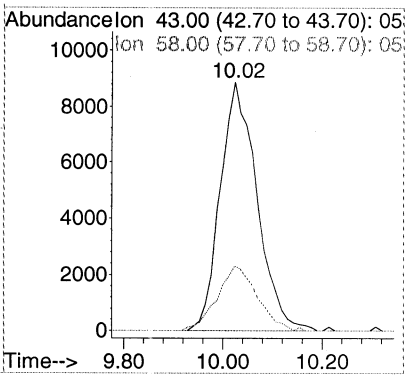


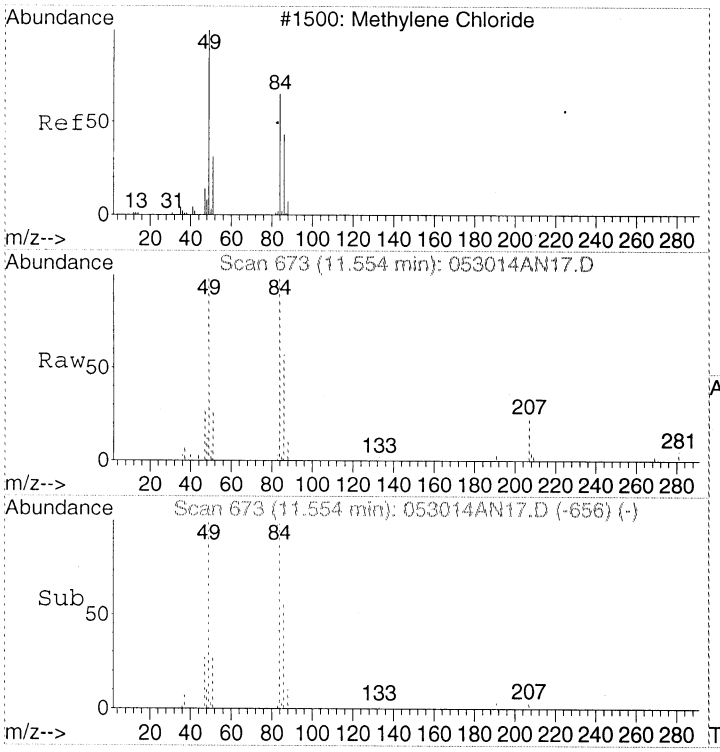


#14
Acetone
Concen: 2.09 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 43 Resp: 45440

Ion	Ratio	Lower	Upper
43	100		
58	28.2	4.2	44.2

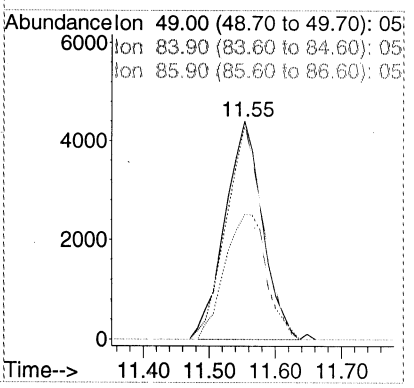


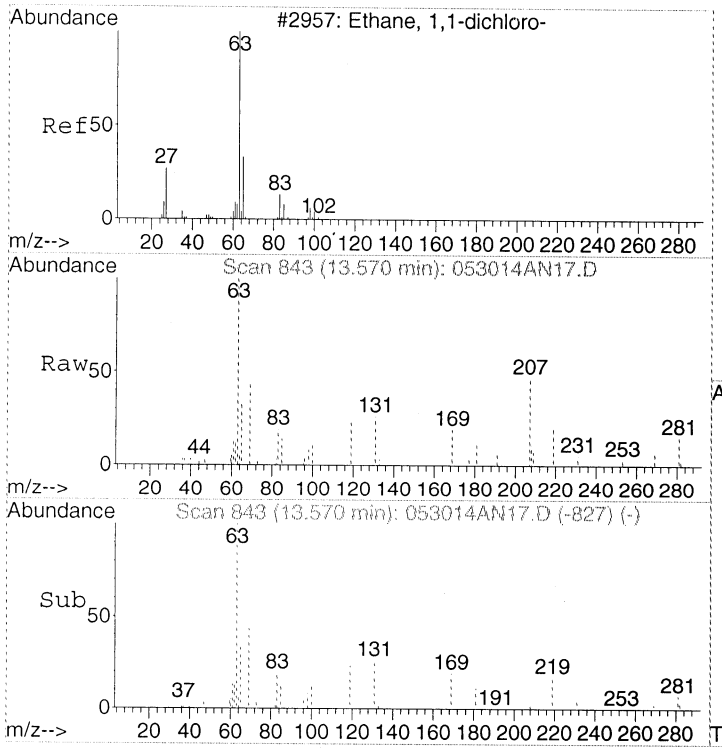


#18
Dichloromethane
Concen: 1.01 ppbv
RT: 11.55 min Scan# 673
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 49 Resp: 17287

Ion	Ratio	Lower	Upper
49	100		
84	96.4	69.9	109.9
86	63.1	38.3	78.3

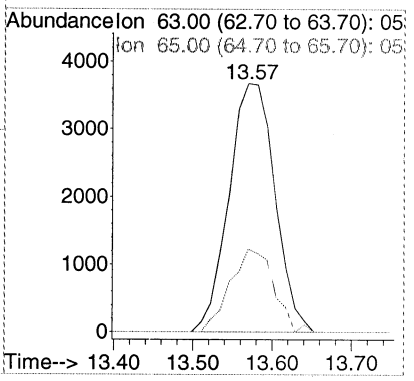


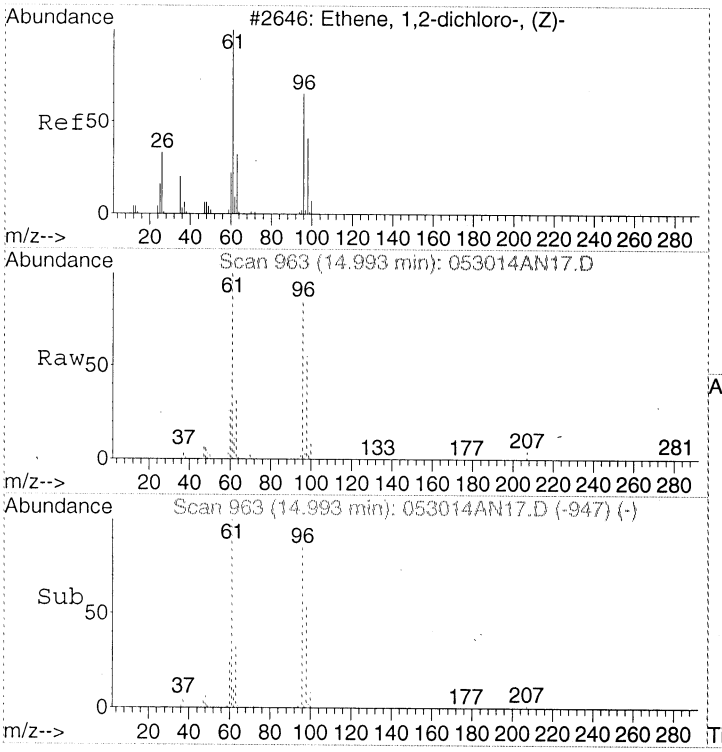


#22
1,1-Dichloroethane
Concen: 0.53 ppbv
RT: 13.57 min Scan# 843
Delta R.T. -0.01 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 63 Resp: 14747

Ion	Ratio	Lower	Upper
63	100		
65	31.6	11.6	51.6

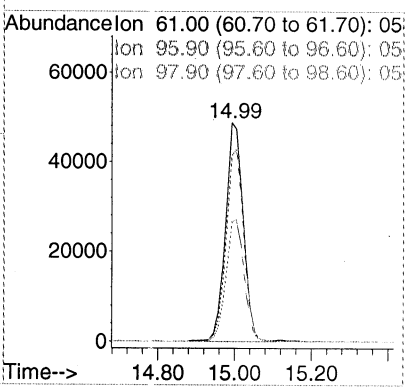


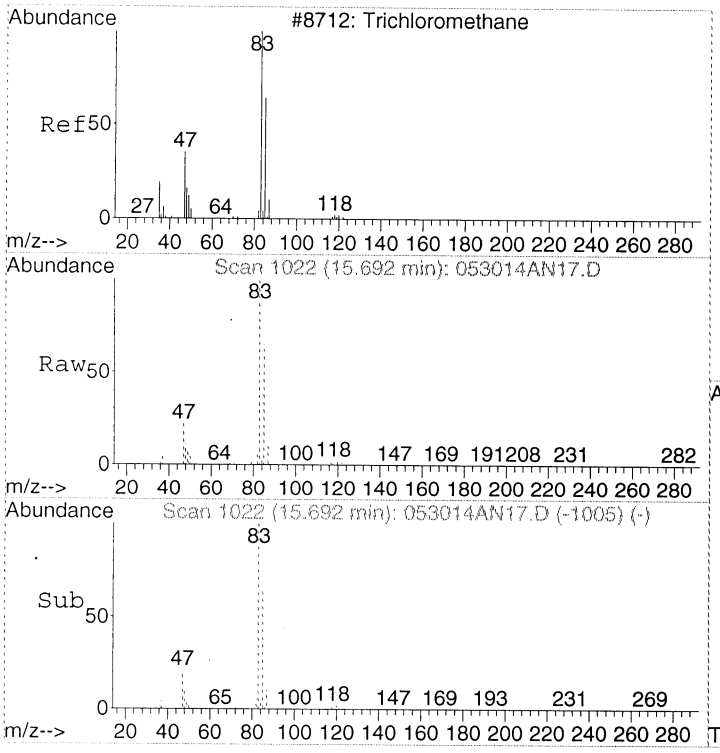


#24
cis-1,2-Dichloroethene
Concen: 7.46 ppbv
RT: 14.99 min Scan# 963
Delta R.T. -0.01 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 61 Resp: 156669

Ion	Ratio	Lower	Upper
61	100		
96	87.7	65.5	105.5
98	56.2	34.8	74.8

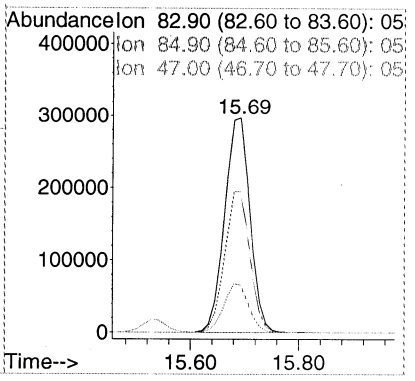


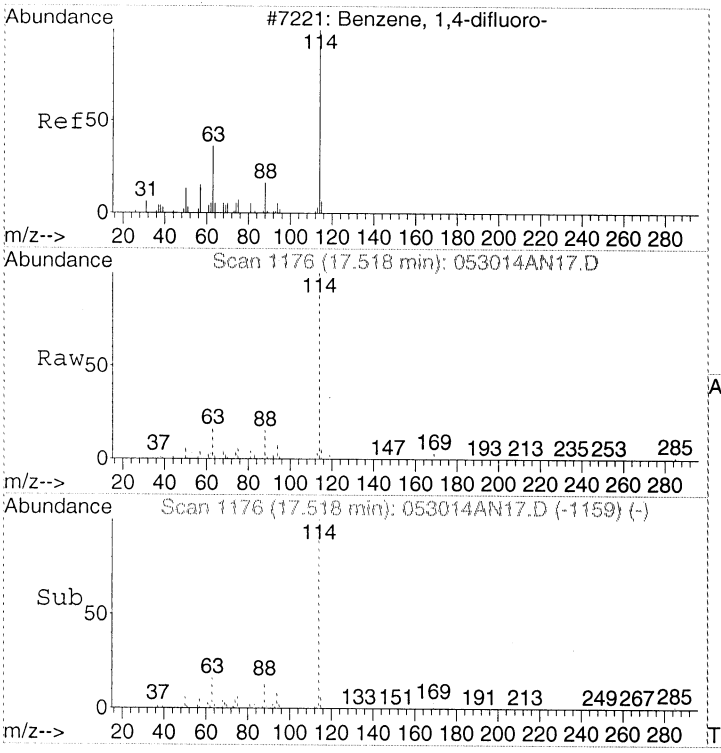


#28
Chloroform
Concen: 20.44 ppbv
RT: 15.69 min Scan# 1022
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 83 Resp: 966277

Ion	Ratio	Lower	Upper
83	100		
85	65.4	45.0	85.0
47	22.5	3.2	43.2

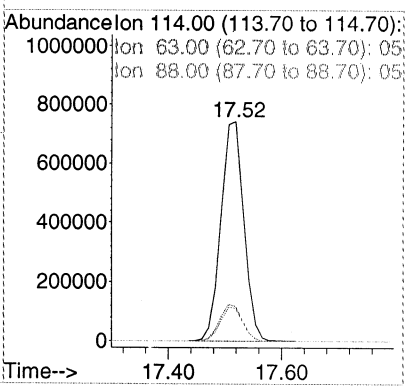




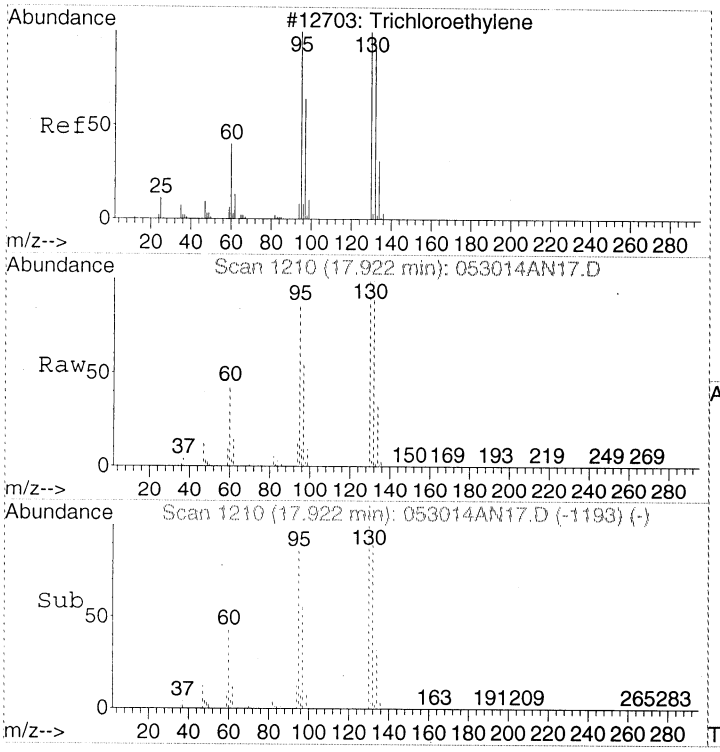
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.52 min Scan# 1176
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion:114 Resp: 2080793

Ion	Ratio	Lower	Upper
114	100		
63	16.6	0.0	37.2
88	15.2	0.0	35.6



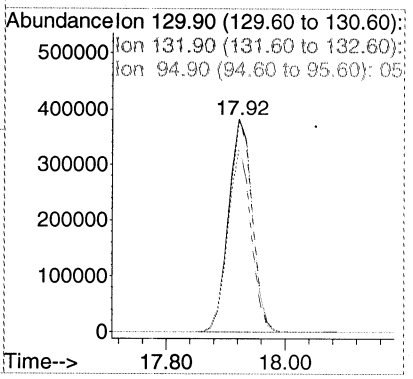
00204

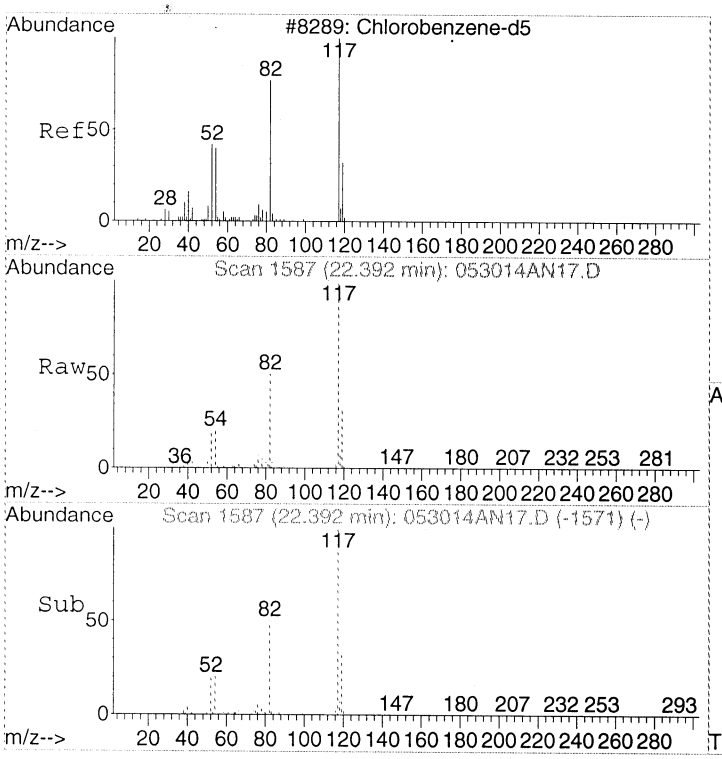


#37
Trichloroethene
Concen: 29.93 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion:130 Resp: 1056112

Ion	Ratio	Lower	Upper
130	100		
132	98.0	76.1	116.1
95	84.7	66.3	106.3

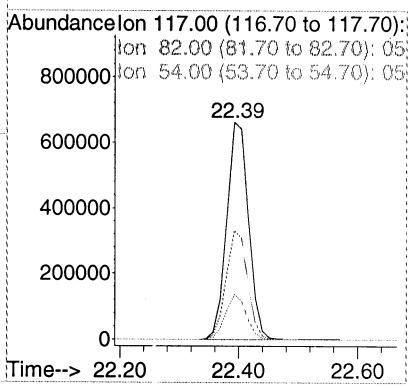




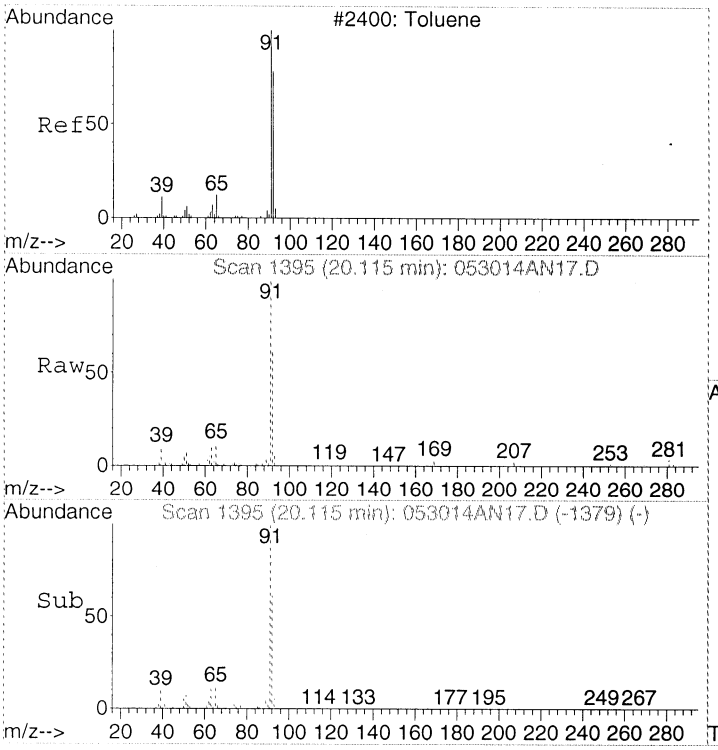
#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion:117 Resp: 1679083

Ion	Ratio	Lower	Upper
117	100		
82	49.4	30.5	70.5
54	19.7	0.6	40.6



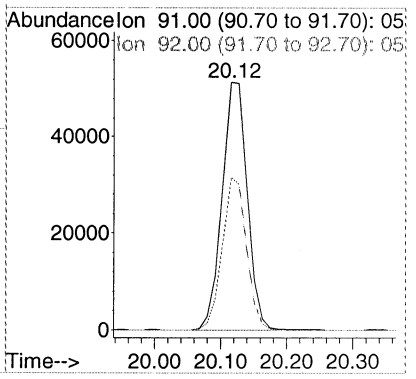
00205

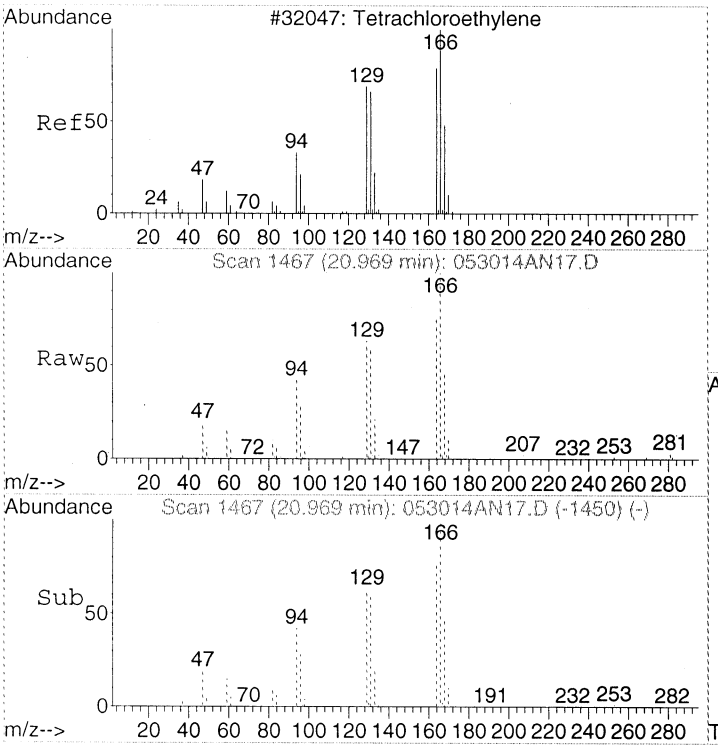


#44
Toluene
Concen: 1.93 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion: 91 Resp: 135694

Ion	Ratio	Lower	Upper
91	100		
92	58.7	38.5	78.5

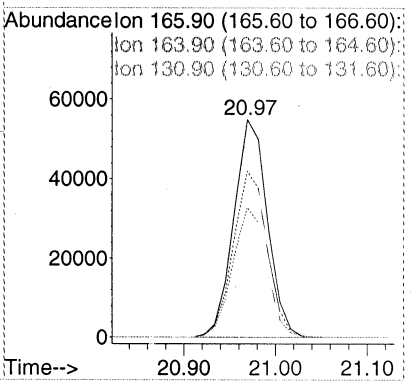




#47
Tetrachloroethene
Concen: 2.43 ppbv
RT: 20.97 min Scan# 1467
Delta R.T. 0.00 min
Lab File: 053014AN17.D
Acq: 31 May 2014 4:40 am

Tgt Ion:166 Resp: 139410

Ion	Ratio	Lower	Upper
166	100		
164	76.9	57.0	97.0
131	60.3	41.3	81.3



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN18.D
Acq On : 31 May 2014 5:28 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-09RE1
Misc : 20mL
ALS Vial : 42
Multiplier: 2.22

Quant Time: Jun 03 09:58:36 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	316986	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	1950578	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.404	117	1519401	22.00 ppbv	0.00

Target Compounds					Qvalue
18) Dichloromethane	11.553	49	7965	0.498 ppbv	99
28) Chloroform	15.692	83	60993	1.380 ppbv	97
37) Trichloroethene	17.921	130	63789	1.928 ppbv	99

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

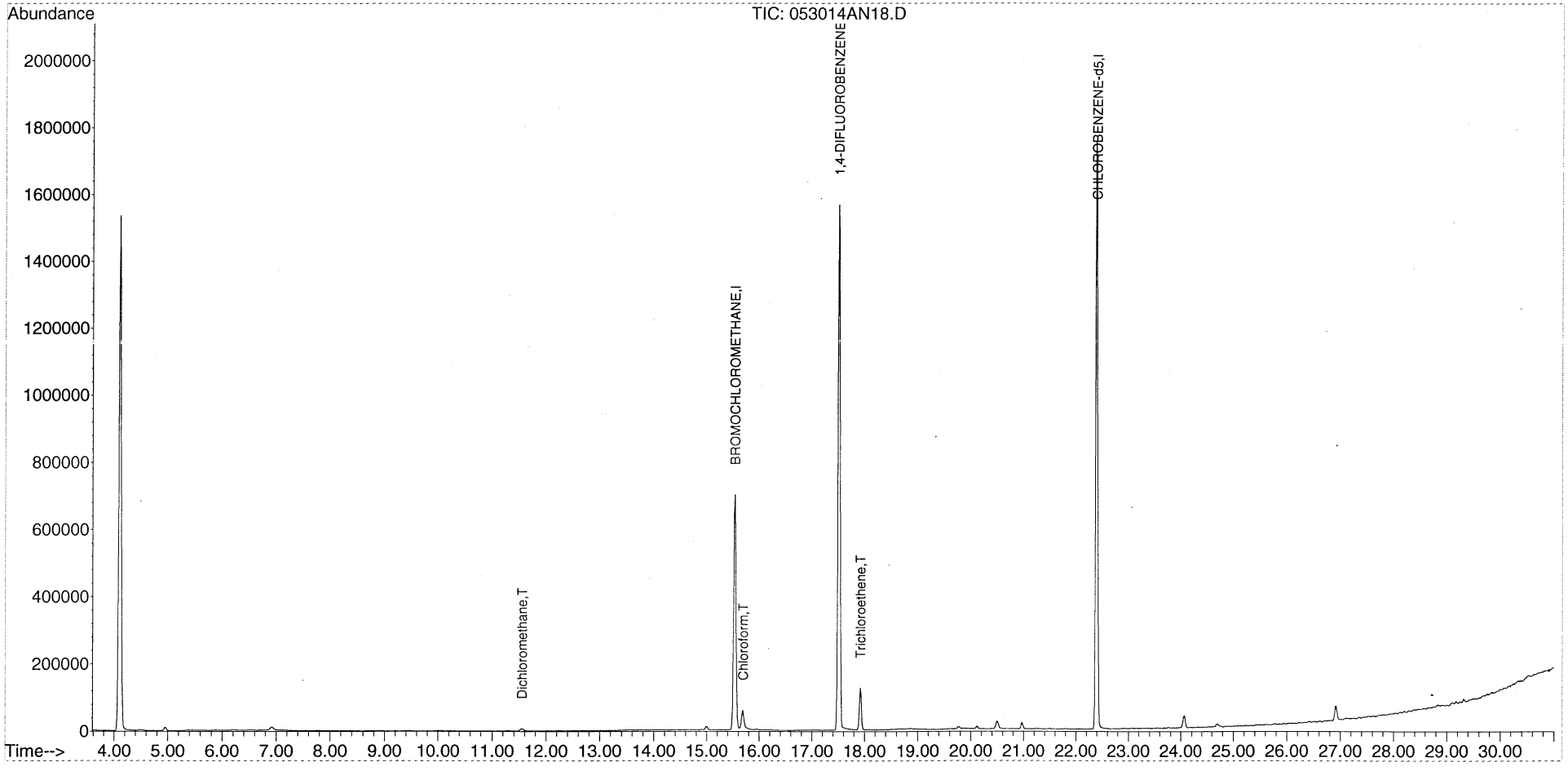
00207

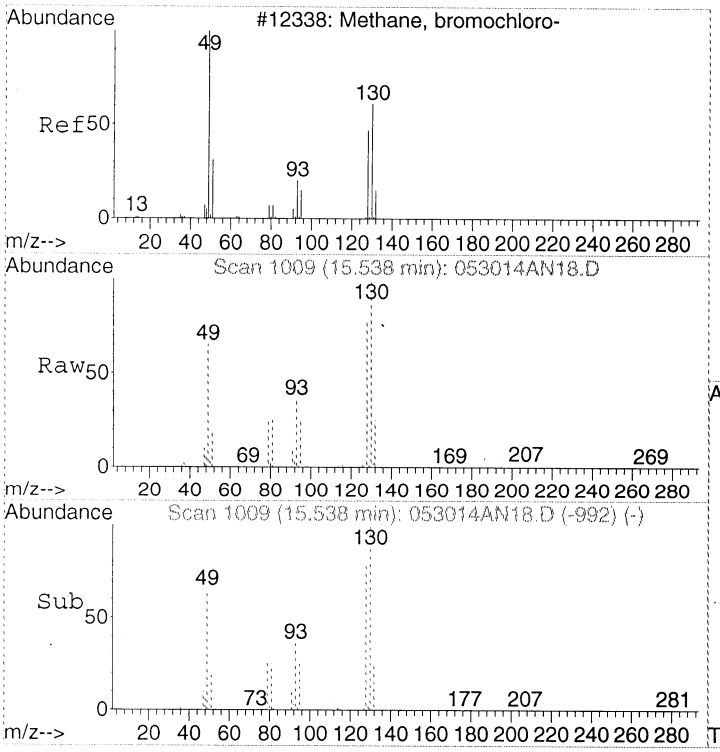
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN18.D
Acq On : 31 May 2014 5:28 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-09RE1
Misc : 20mL
ALS Vial : 42
Multiplier: 2.22

Quant Time: Jun 03 09:58:36 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

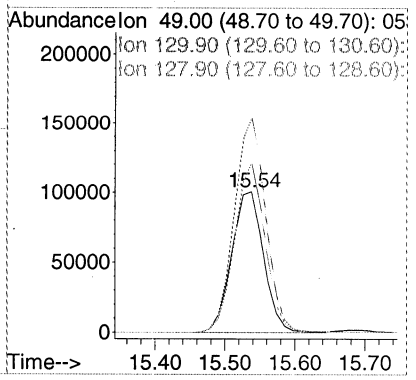


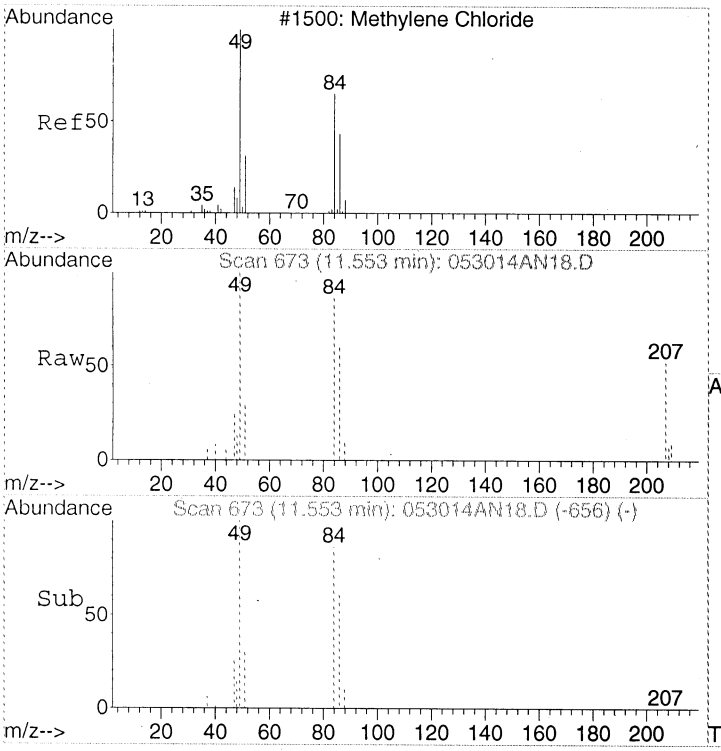


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN18.D
Acq: 31 May 2014 5:28 am

Tgt Ion: 49 Resp: 316986

Ion	Ratio	Lower	Upper
49	100		
130	150.1	125.1	165.1
128	115.6	91.6	131.6

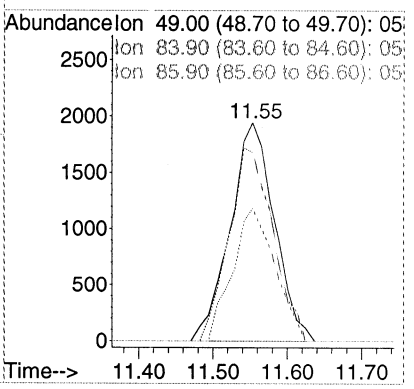




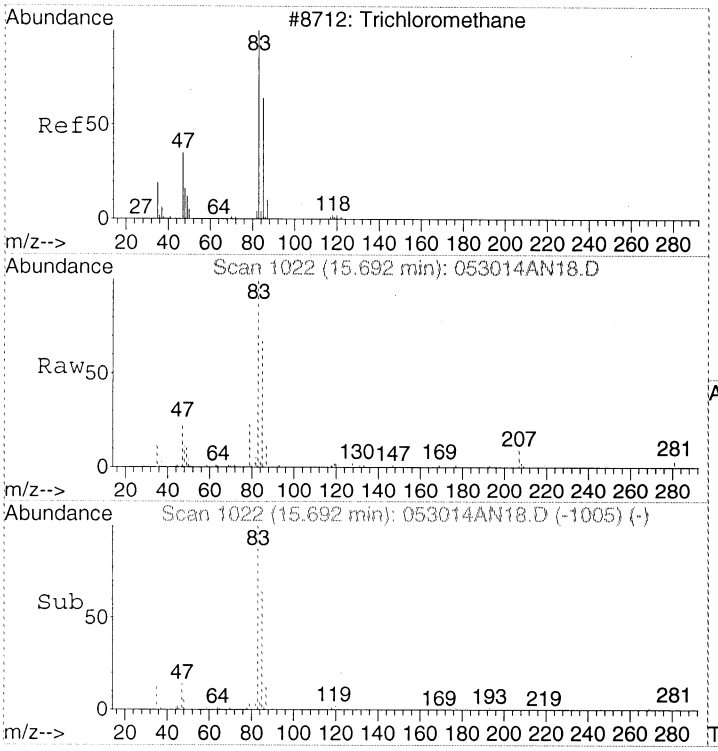
#18
Dichloromethane
Concen: 0.50 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN18.D
Acq: 31 May 2014 5:28 am

Tgt Ion: 49 Resp: 7965

Ion	Ratio	Lower	Upper
49	100		
84	88.1	69.9	109.9
86	58.8	38.3	78.3



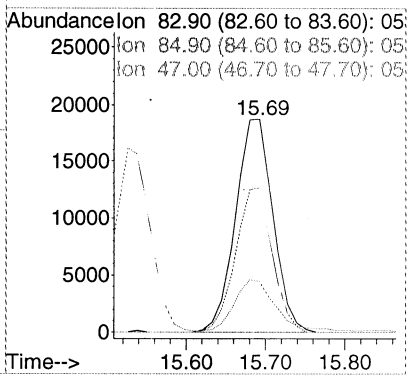
00209

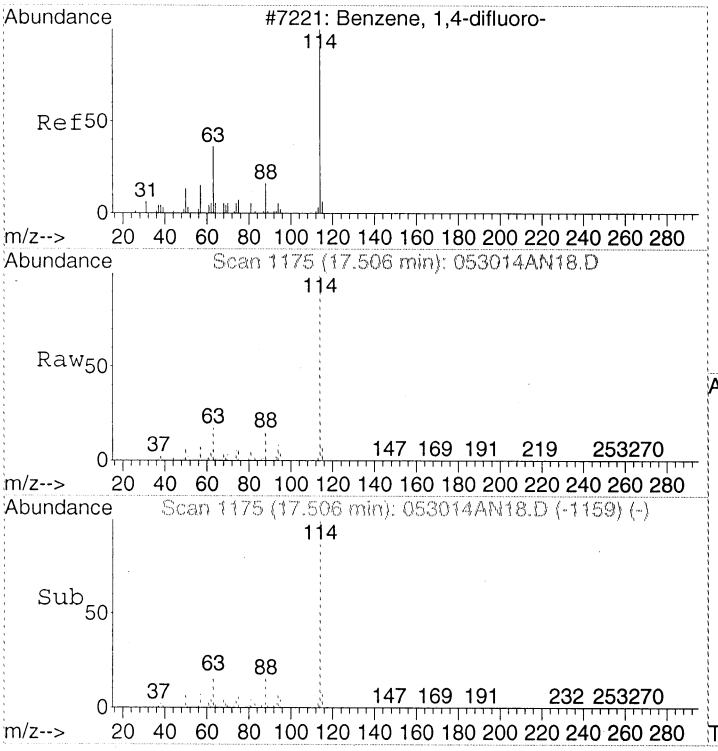


#28
Chloroform
Concen: 1.38 ppbv
RT: 15.69 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 053014AN18.D
Acq: 31 May 2014 5:28 am

Tgt Ion: 83 Resp: 60993

Ion	Ratio	Lower	Upper
83	100		
85	66.4	45.0	85.0
47	25.4	3.2	43.2

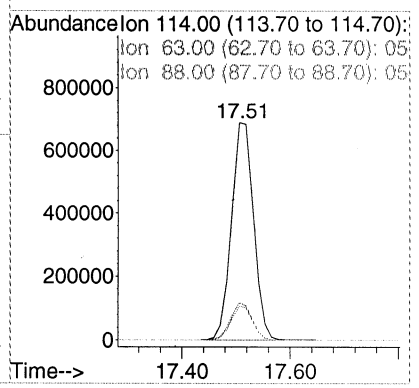


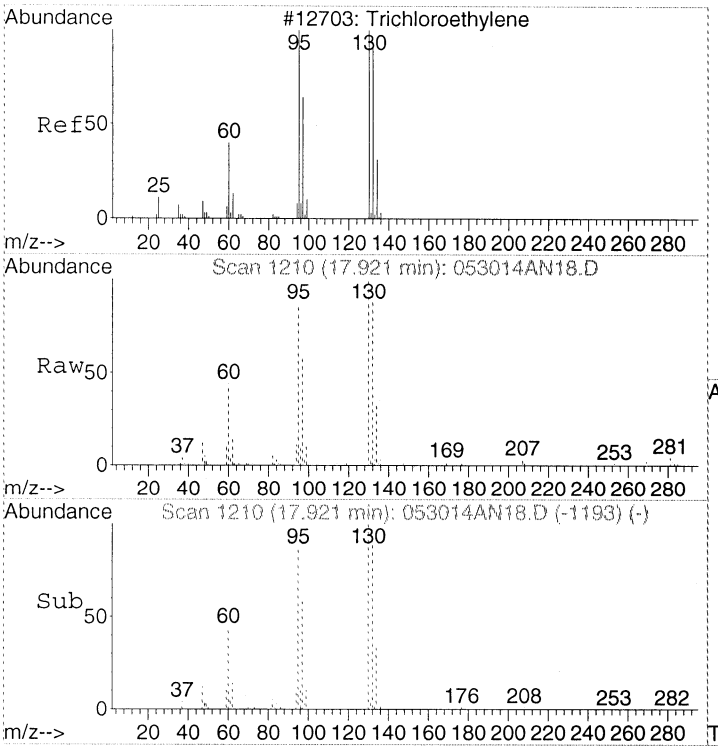


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN18.D
Acq: 31 May 2014 5:28 am

Tgt Ion:114 Resp: 1950578

Ion	Ratio	Lower	Upper
114	100		
63	16.6	0.0	37.2
88	15.2	0.0	35.6

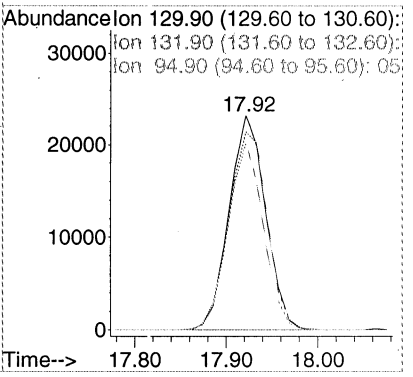


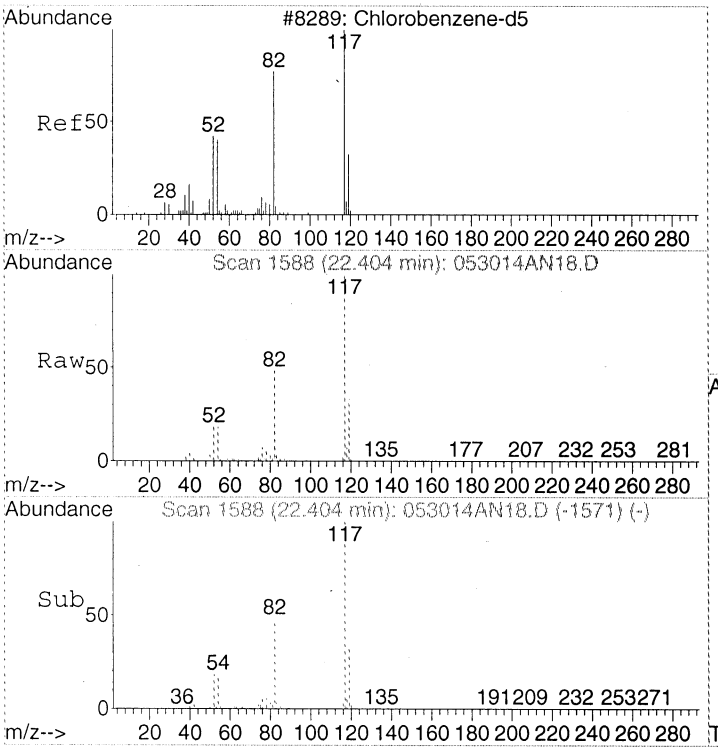


#37
Trichloroethene
Concen: 1.93 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN18.D
Acq: 31 May 2014 5:28 am

Tgt Ion:130 Resp: 63789

Ion	Ratio	Lower	Upper
130	100		
132	96.8	76.1	116.1
95	85.0	66.3	106.3

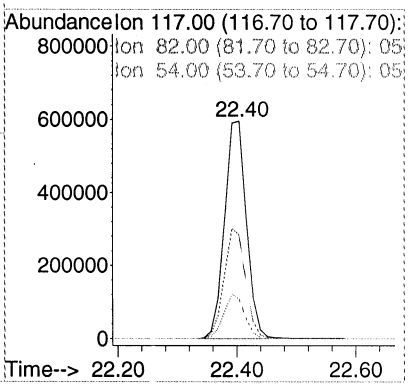




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.40 min Scan# 1588
Delta R.T. -0.00 min
Lab File: 053014AN18.D
Acq: 31 May 2014 5:28 am

Tgt Ion:117 Resp: 1519401

Ion	Ratio	Lower	Upper
117	100		
82	49.4	30.5	70.5
54	19.4	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN19.D
Acq On : 31 May 2014 6:20 am
Instrument: AG5973N
Operator : EM
Sample : IBL
Misc : 200mL
ALS Vial : 43
Multiplier: 1

Quant Time: Jun 03 09:58:42 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	322996	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	1977103	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1552736	22.00 ppbv	-0.01

Target Compounds	Qvalue

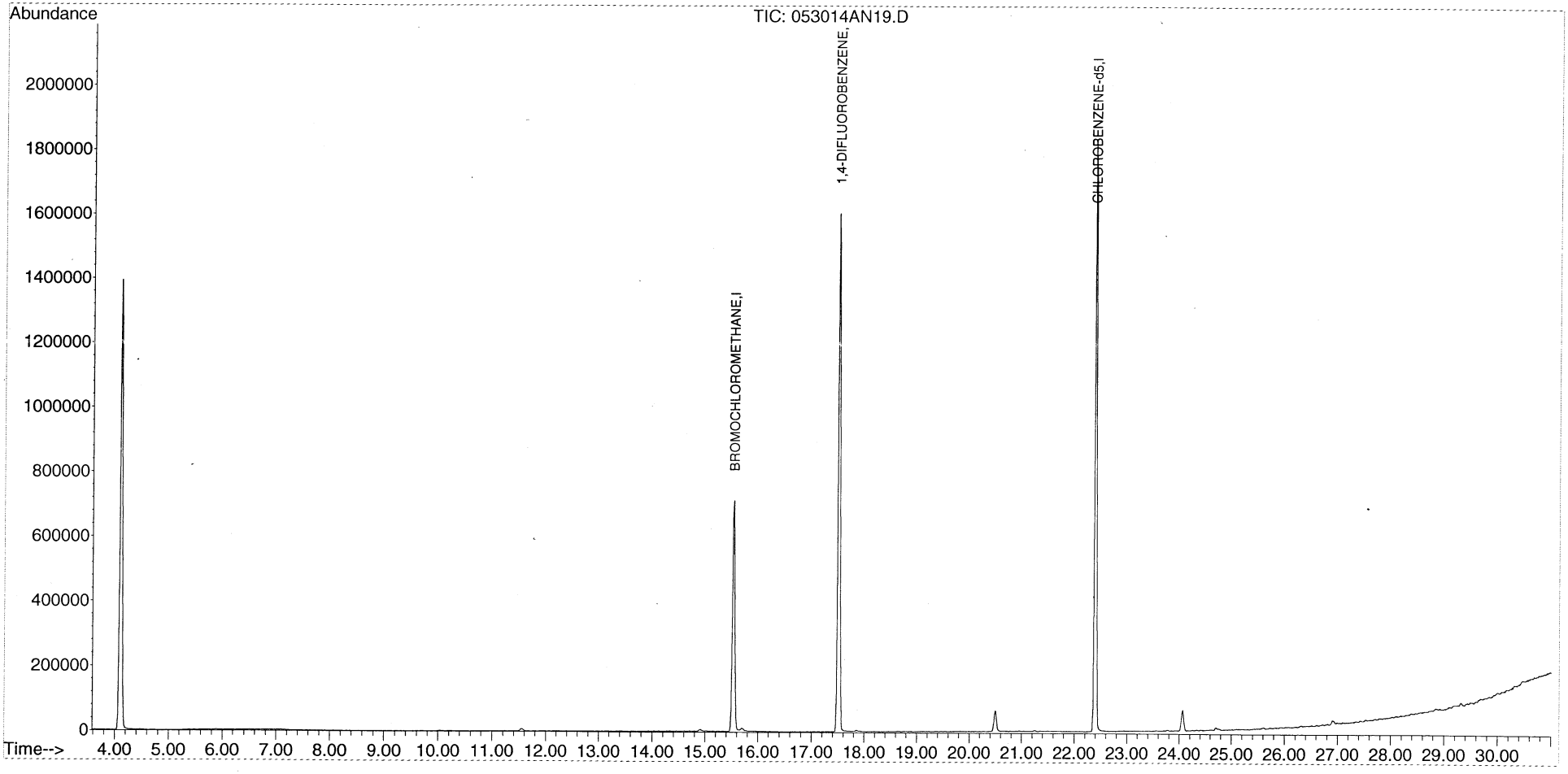
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN19.D
Acq On : 31 May 2014 6:20 am
Instrument: AG5973N
Operator : EM
Sample : IBL
Misc : 200mL
ALS Vial : 43
Multiplier: 1

Quant Time: Jun 03 09:58:42 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN20.D
Acq On : 31 May 2014 7:11 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-07
Misc : 200mL
ALS Vial : 44
Multiplier: 2.07

Quant Time: Jun 03 09:58:46 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	332642	22.00	ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.507	114	2020188	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1628691	22.00	ppbv	-0.01

Target Compounds						Qvalue
14) Acetone	10.024	43	30554	1.433	ppbv	98

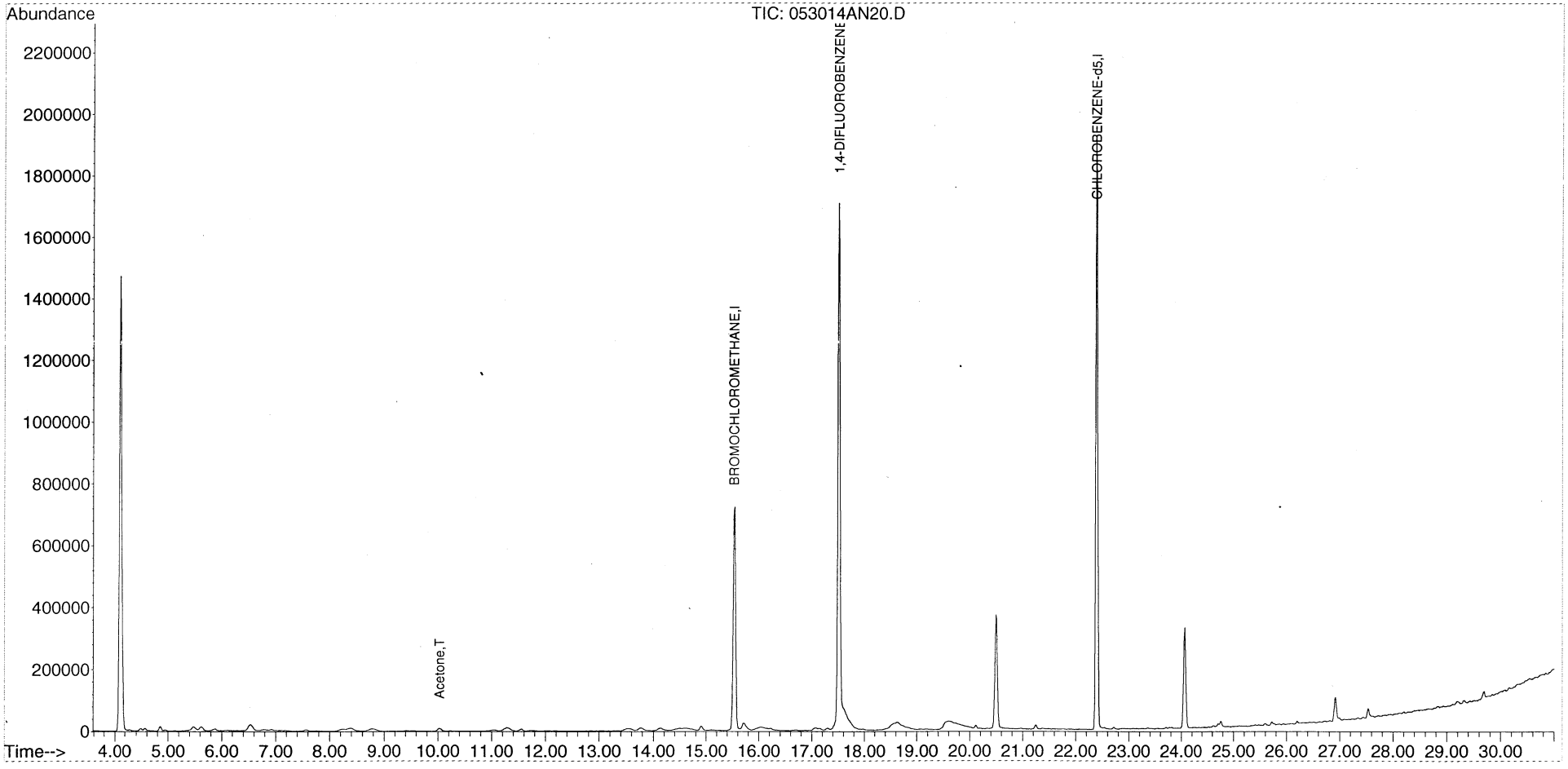
(#) = qualifier out of range (m) = manual integration (+) = signals summed

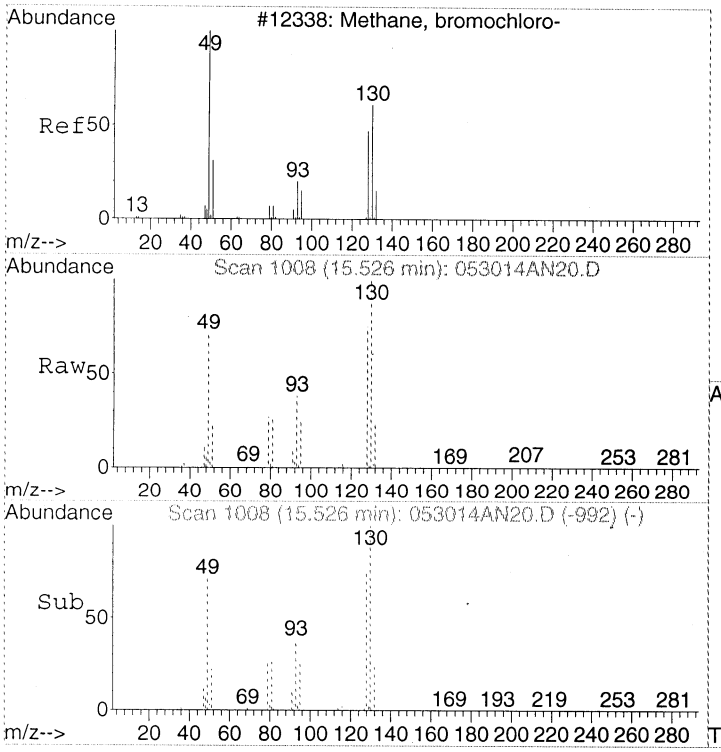
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN20.D
Acq On : 31 May 2014 7:11 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-07
Misc : 200mL
ALS Vial : 44
Multiplier: 2.07

Quant Time: Jun 03 09:58:46 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

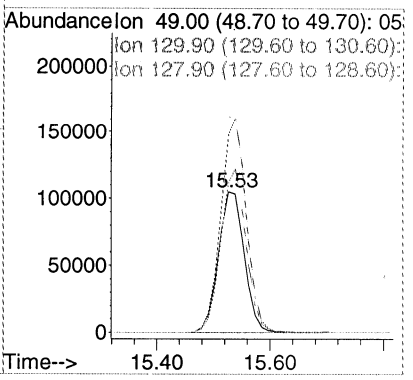


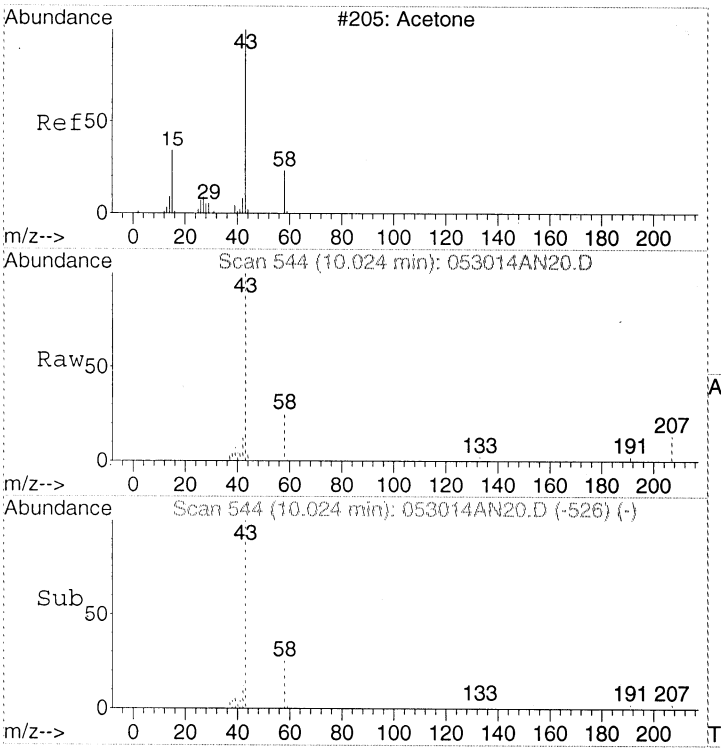


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. -0.01 min
Lab File: 053014AN20.D
Acq: 31 May 2014 7:11 am

Tgt Ion: 49 Resp: 332642

Ion	Ratio	Lower	Upper
49	100		
130	149.6	125.1	165.1
128	113.7	91.6	131.6

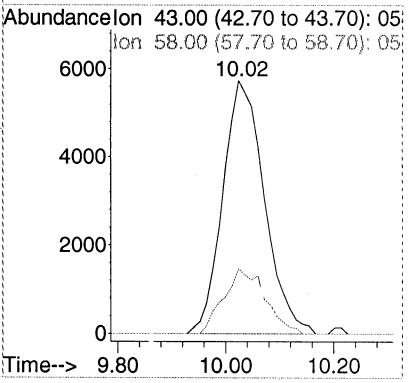


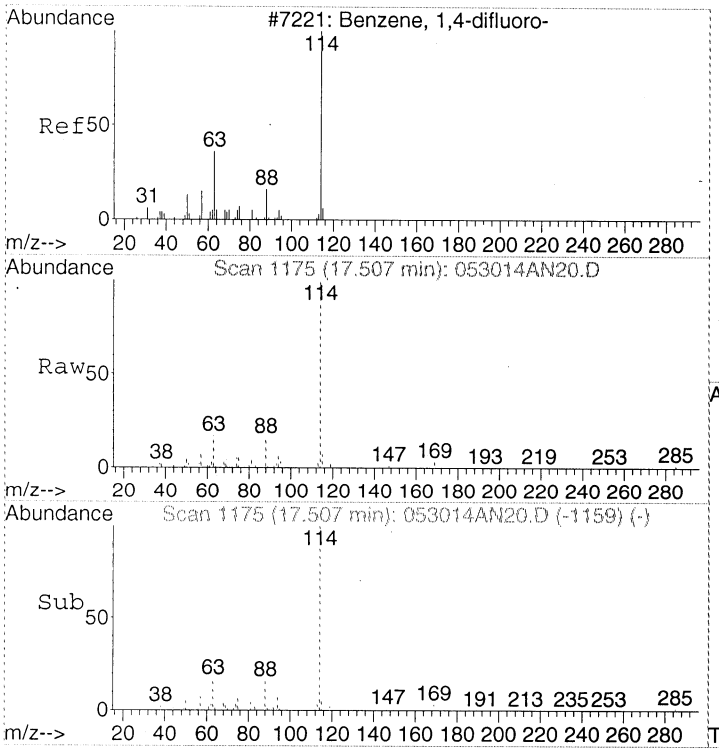


#14
Acetone
Concen: 1.43 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN20.D
Acq: 31 May 2014 7:11 am

Tgt Ion: 43 Resp: 30554

Ion	Ratio	Lower	Upper
43	100		
58	25.3	4.2	44.2

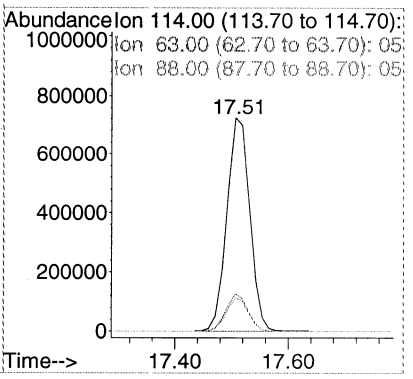


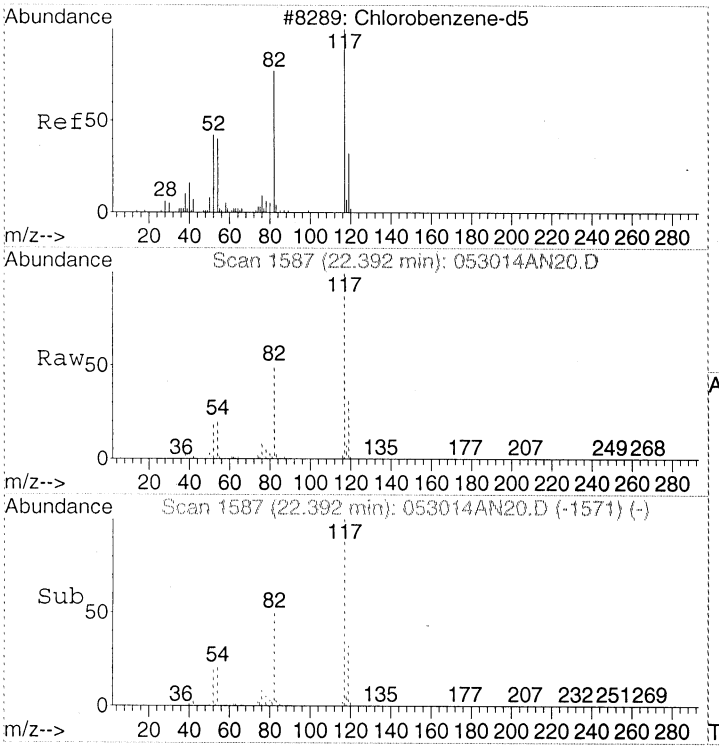


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN20.D
Acq: 31 May 2014 7:11 am

Tgt Ion:114 Resp: 2020188

Ion	Ratio	Lower	Upper
114	100		
63	16.8	0.0	37.2
88	15.3	0.0	35.6

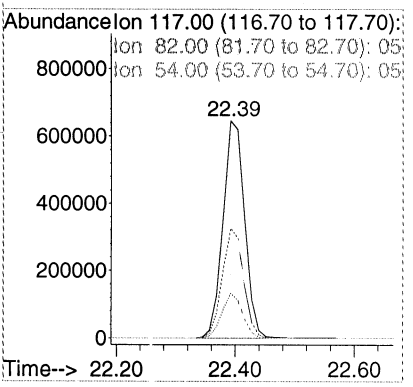




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN20.D
Acq: 31 May 2014 7:11 am

Tgt Ion:117 Resp: 1628691

Ion	Ratio	Lower	Upper
117	100		
82	49.6	30.5	70.5
54	19.7	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN21.D
Acq On : 31 May 2014 8:00 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-07RE1
Misc : 20mL
ALS Vial : 44
Multiplier: 2.07

NU

em 6/3/14

Quant Time: Jun 03 09:58:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	309290	22.00	ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.506	114	1897229	22.00	ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1462547	22.00	ppbv	-0.01

Target Compounds Qvalue

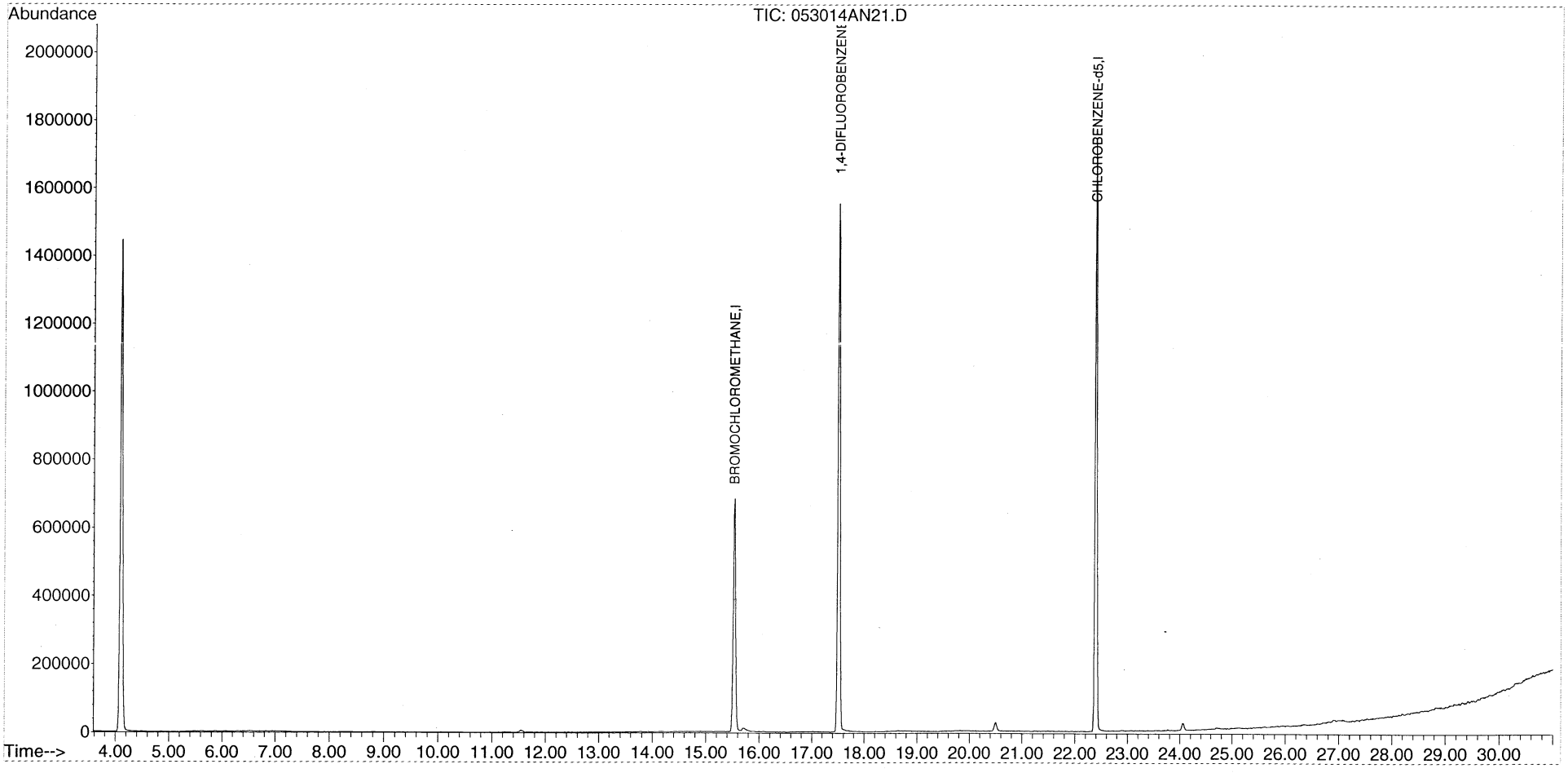
(#) = qualifier out of range (m) = manual integration (+) = signals summed

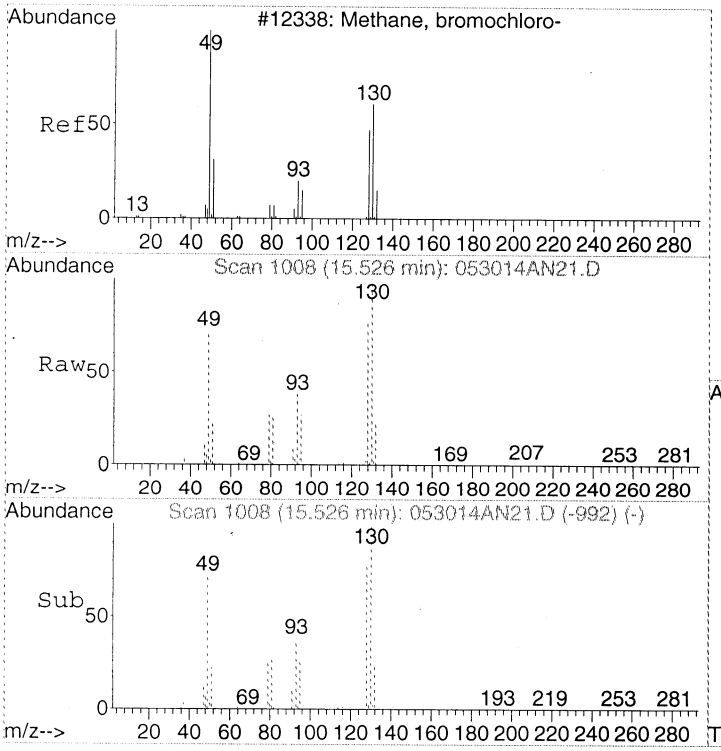
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN21.D
Acq On : 31 May 2014 8:00 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-07RE1
Misc : 20mL
ALS Vial : 44
Multiplier: 2.07

Quant Time: Jun 03 09:58:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

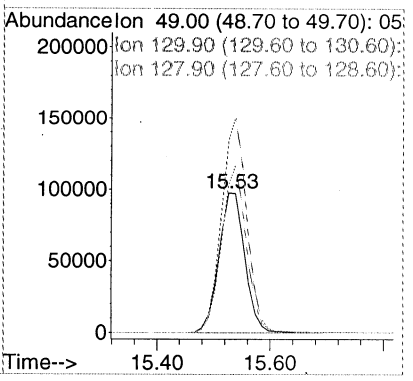


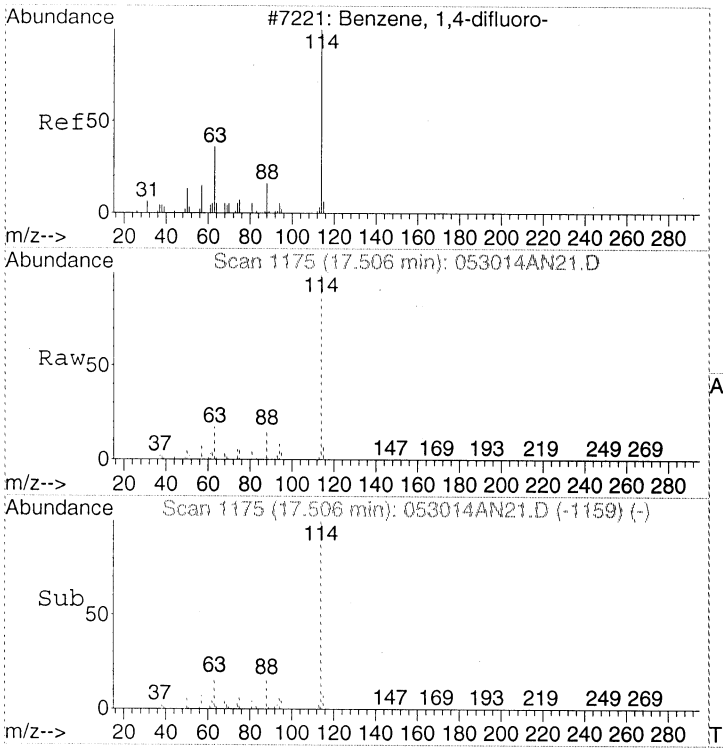


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. -0.01 min
Lab File: 053014AN21.D
Acq: 31 May 2014 8:00 am

Tgt Ion: 49 Resp: 309290

Ion	Ratio	Lower	Upper
49	100		
130	149.5	125.1	165.1
128	114.3	91.6	131.6

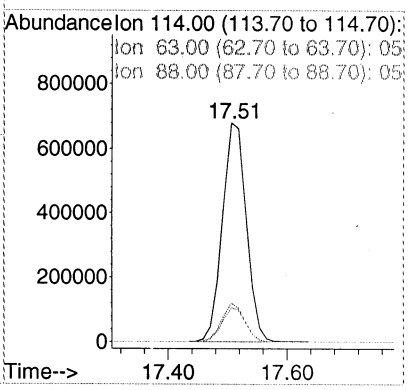




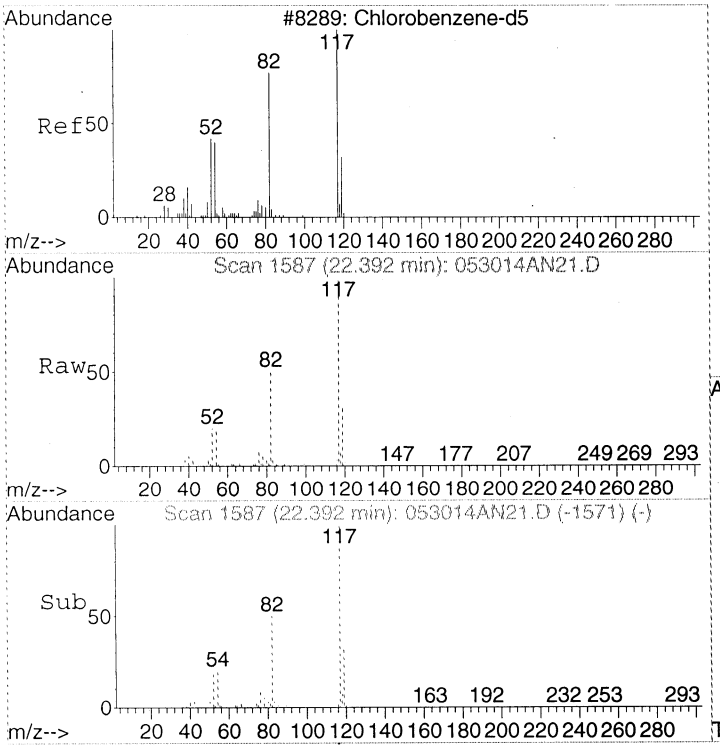
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN21.D
Acq: 31 May 2014 8:00 am

Tgt Ion:114 Resp: 1897229

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.3	0.0	35.6



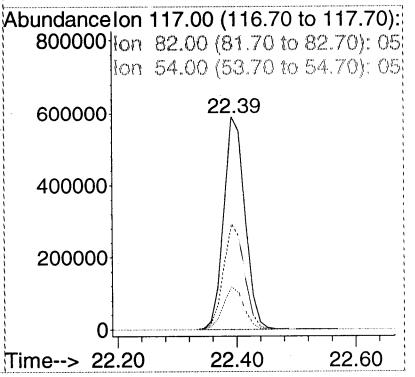
00220



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN21.D
Acq: 31 May 2014 8:00 am

Tgt Ion:117 Resp: 1462547

Ion	Ratio	Lower	Upper
117	100		
82	49.1	30.5	70.5
54	19.5	0.6	40.6



00221

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN22.D
Acq On : 31 May 2014 8:51 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-10
Misc : 200mL
ALS Vial : 45
Multiplier: 2.09

Quant Time: Jun 03 09:58:56 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	337318	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	2032399	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.392	117	1648357	22.00 ppbv	-0.01

Target Compounds					Qvalue
2) Propene	4.474	41	14325	1.826 ppbv #	67
6) Vinyl chloride	5.458	62	7714	0.705 ppbv	99
13) 1,1-Dichloroethene	9.490	61	29491	1.045 ppbv	95
14) Acetone	10.036	43	62774	2.904 ppbv	95
15) Carbon disulfide	10.213	76	25065	0.542 ppbv	99
18) Dichloromethane	11.553	49	19113	1.124 ppbv	96
20) trans-1,2-Dichloroethene	12.253	61	13438	0.521 ppbv	82
22) 1,1-Dichloroethane	13.569	63	18614	0.669 ppbv	97
24) cis-1,2-Dichloroethene	15.004	61	198178	9.484 ppbv	99
28) Chloroform	15.692	83	1222257	25.984 ppbv E	100
37) Trichloroethene	17.922	130	1337902	38.813 ppbv E	99
44) Toluene	20.115	91	168181	2.431 ppbv	100
47) Tetrachloroethene	20.969	166	176735	3.135 ppbv	99

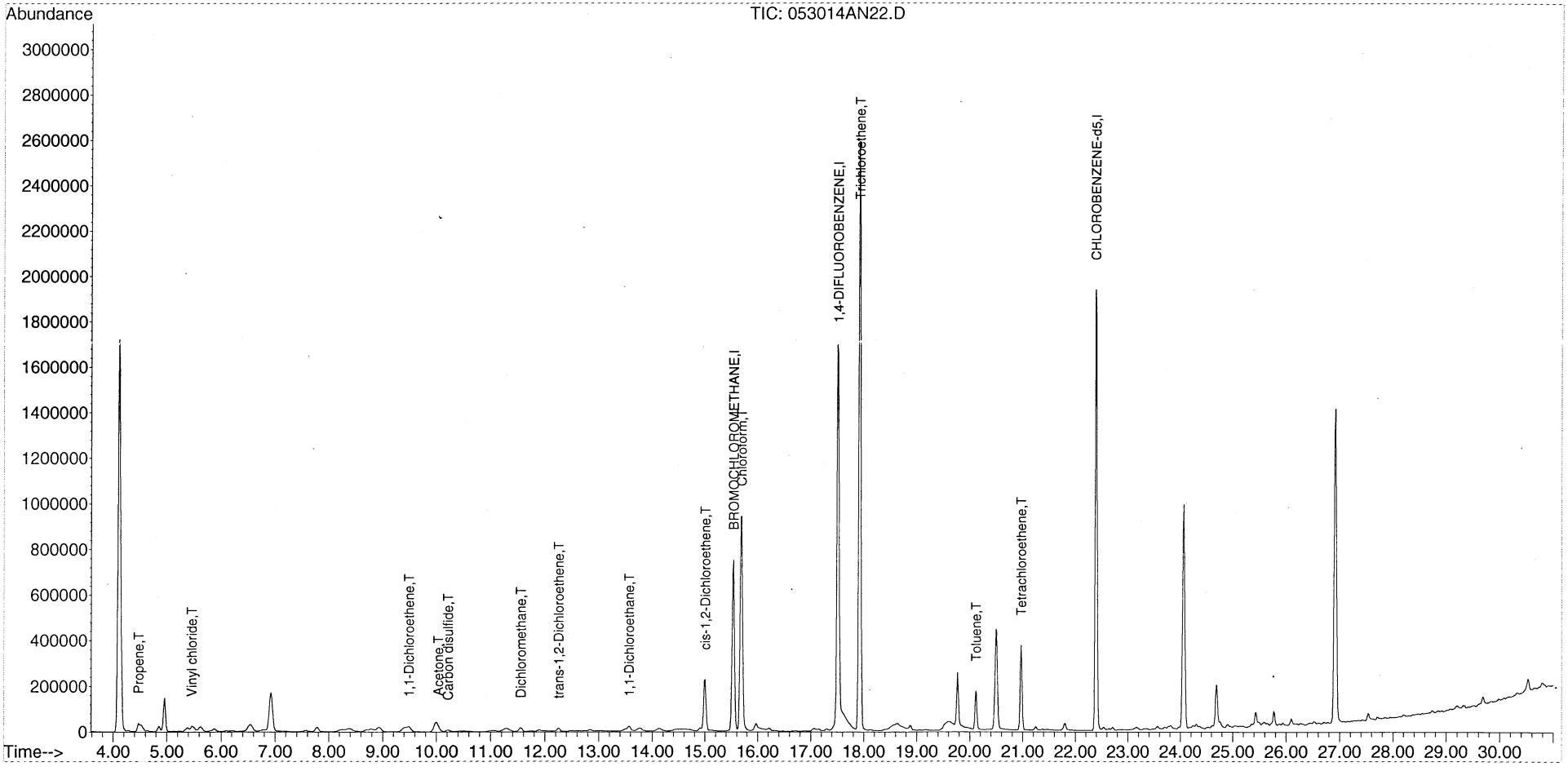
(#) = qualifier out of range (m) = manual integration (+) = signals summed

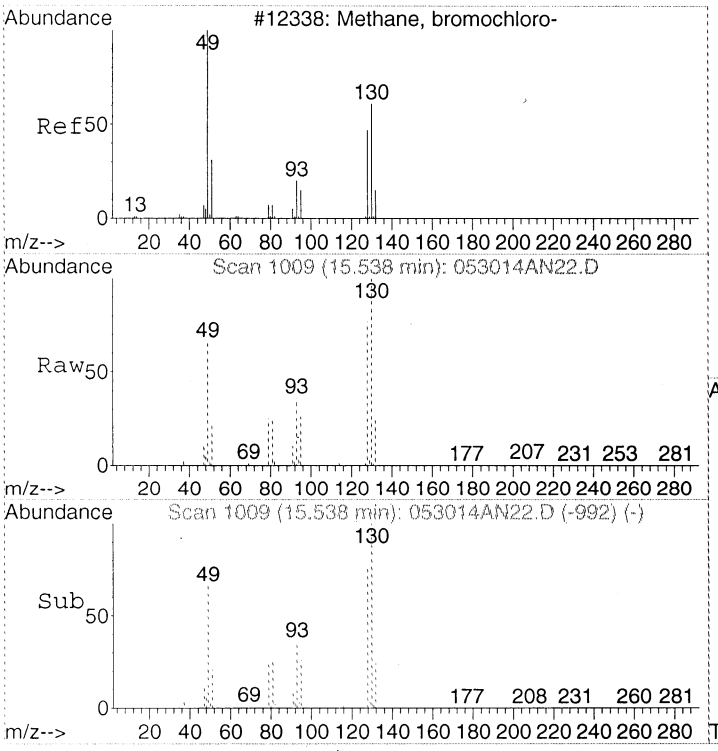
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN22.D
Acq On : 31 May 2014 8:51 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-10
Misc : 200mL
ALS Vial : 45
Multiplier: 2.09

Quant Time: Jun 03 09:58:56 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

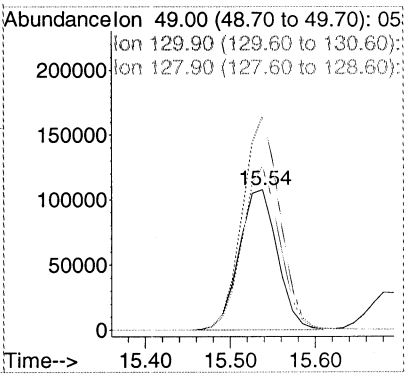


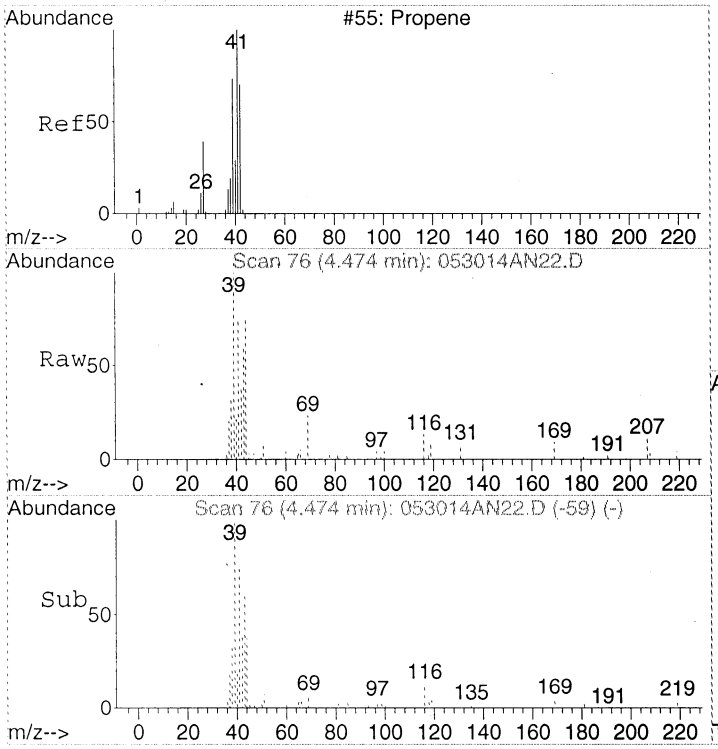


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 49 Resp: 337318

Ion	Ratio	Lower	Upper
49	100		
130	149.2	125.1	165.1
128	114.3	91.6	131.6

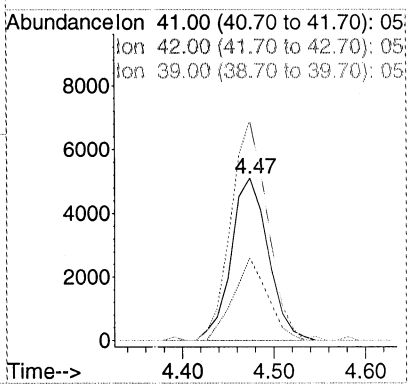


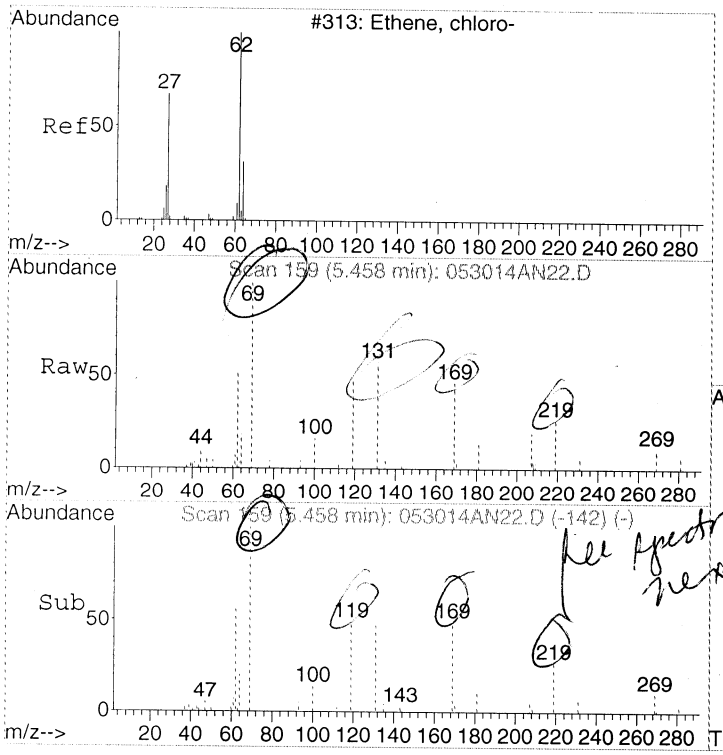


#2
Propene
Concen: 1.83 ppbv
RT: 4.47 min Scan# 76
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 41 Resp: 14325

Ion	Ratio	Lower	Upper
41	100		
42	46.7	44.9	84.9
39	133.4	74.8	114.8#

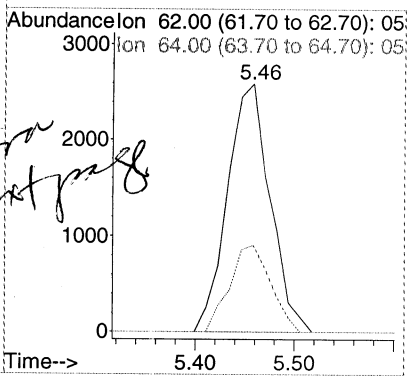




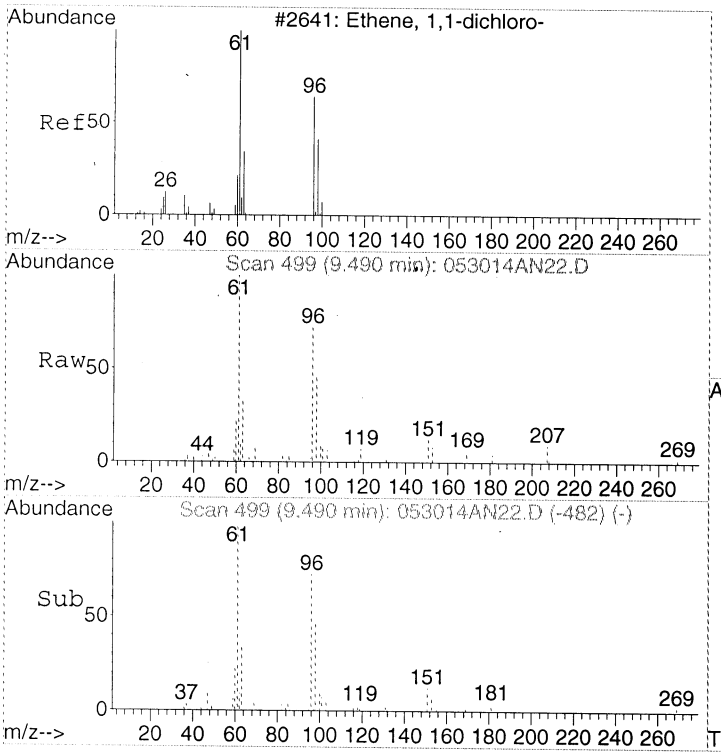
#6
Vinyl chloride
Concen: 0.71 ppbv
RT: 5.46 min Scan# 159
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 62 Resp: 7714

Ion	Ratio	Lower	Upper
62	100		
64	33.7	12.9	52.9



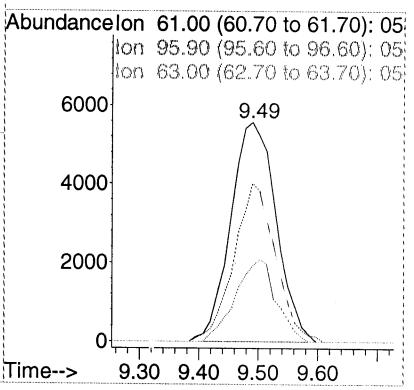
See spectra next page



#13
1,1-Dichloroethene
Concen: 1.05 ppbv
RT: 9.49 min Scan# 499
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 61 Resp: 29491

Ion	Ratio	Lower	Upper
61	100		
96	65.8	41.0	81.0
63	33.4	11.8	51.8



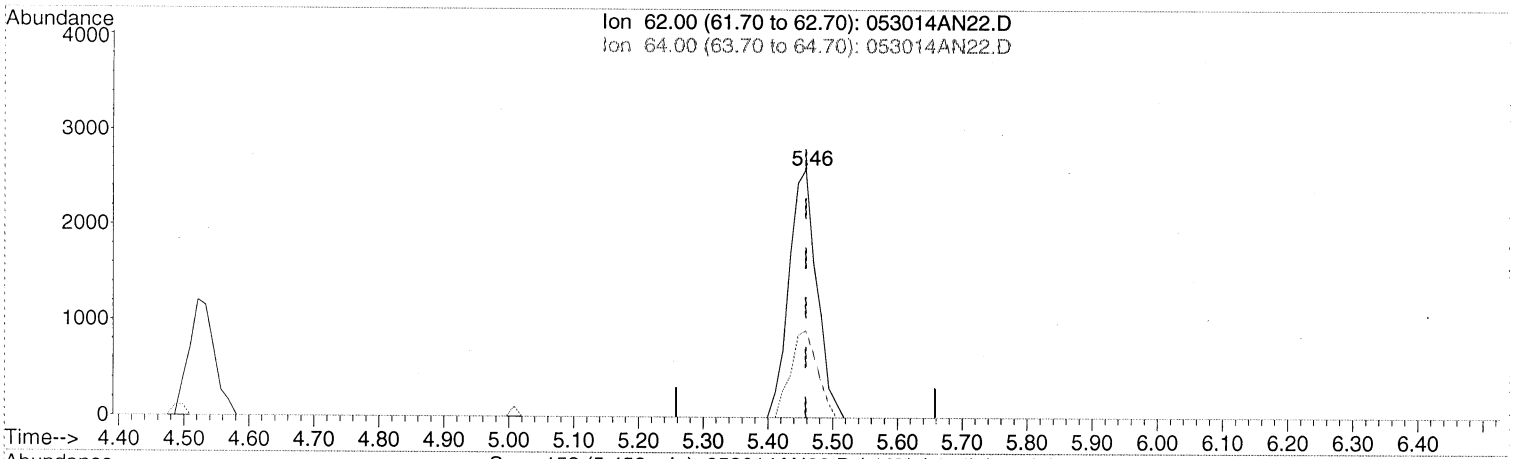
00225

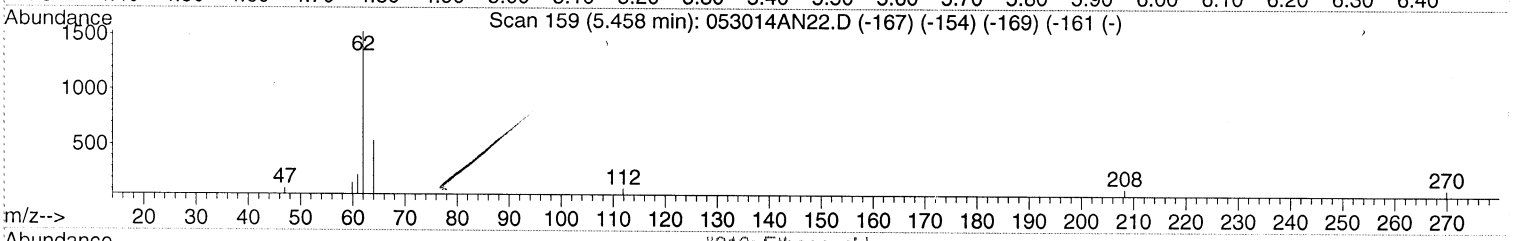
Quantitation Report (Qedit)

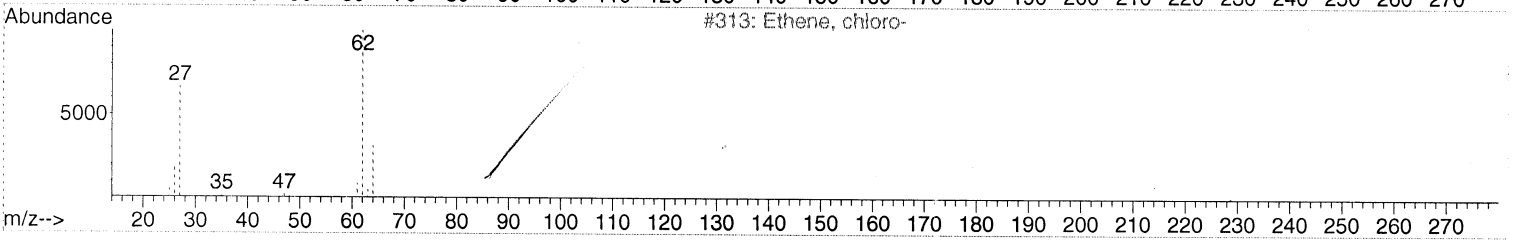
Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN22.D
Acq On : 31 May 2014 8:51 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-10
Misc : 200mL
ALS Vial : 45
Multiplier: 2.09

Quant Time: Jun 03 09:58:56 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M







TIC: 053014AN22.D

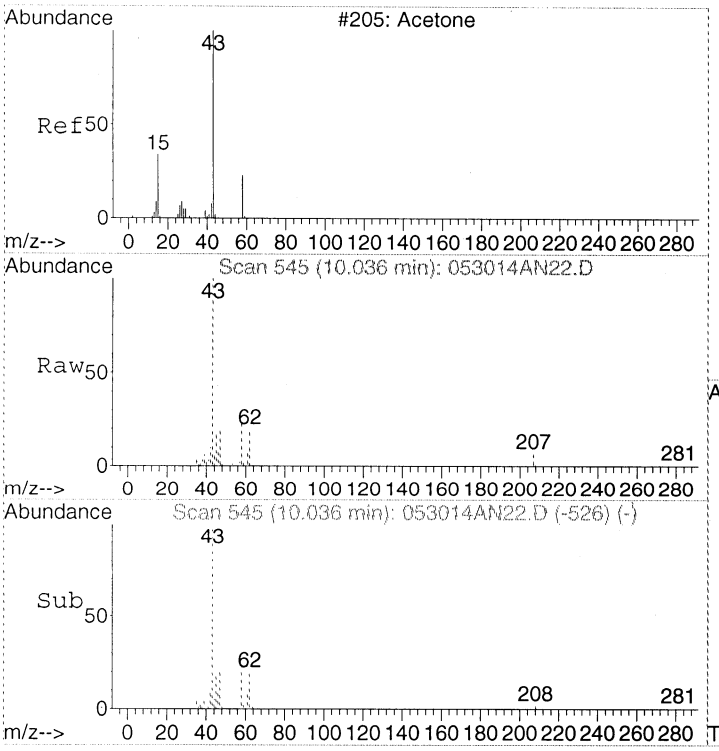
(6) Vinyl chloride (T)

5.458min (-0.000) 0.71ppbv

response 7714

Ion	Exp%	Act%
62.00	100	100
64.00	32.90	33.67
0.00	0.00	0.00
0.00	0.00	0.00

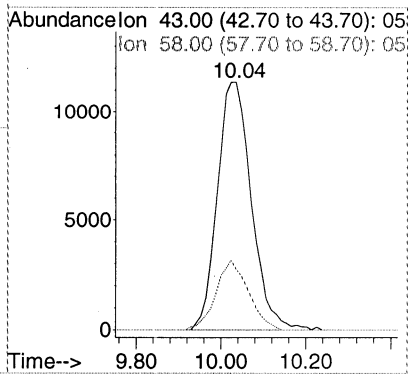
00226

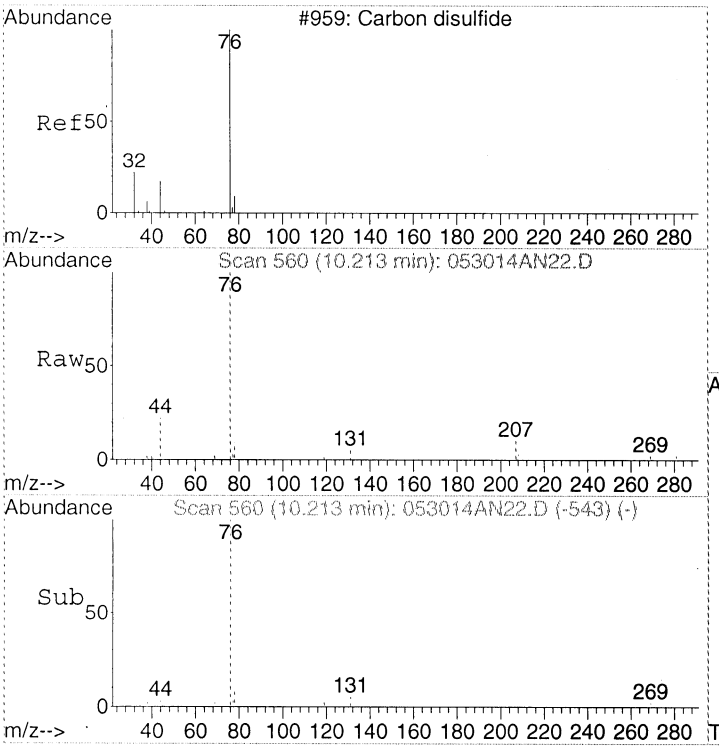


#14
Acetone
Concen: 2.90 ppbv
RT: 10.04 min Scan# 545
Delta R.T. 0.02 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 43 Resp: 62774

Ion	Ratio	Lower	Upper
43	100		
58	26.5	4.2	44.2

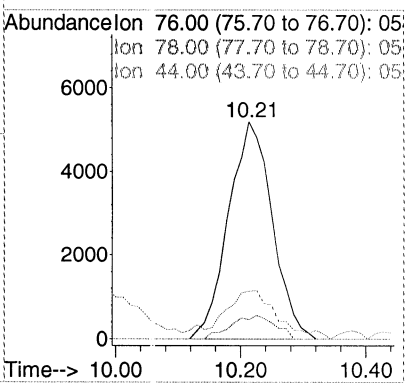




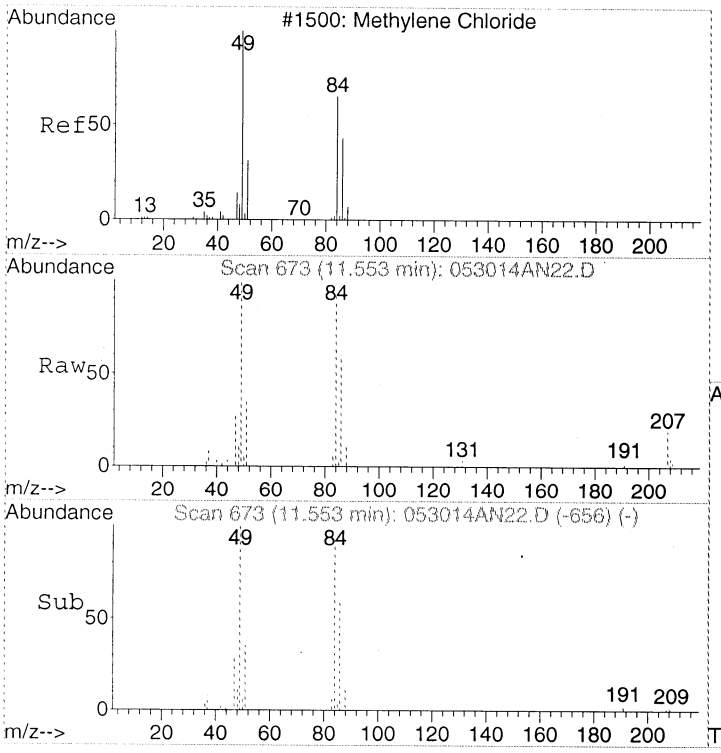
#15
Carbon disulfide
Concen: 0.54 ppbv
RT: 10.21 min Scan# 560
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 76 Resp: 25065

Ion	Ratio	Lower	Upper
76	100		
78	10.6	0.0	29.4
44	19.3	0.0	39.2



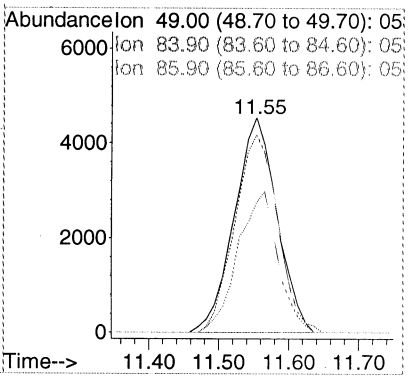
00227

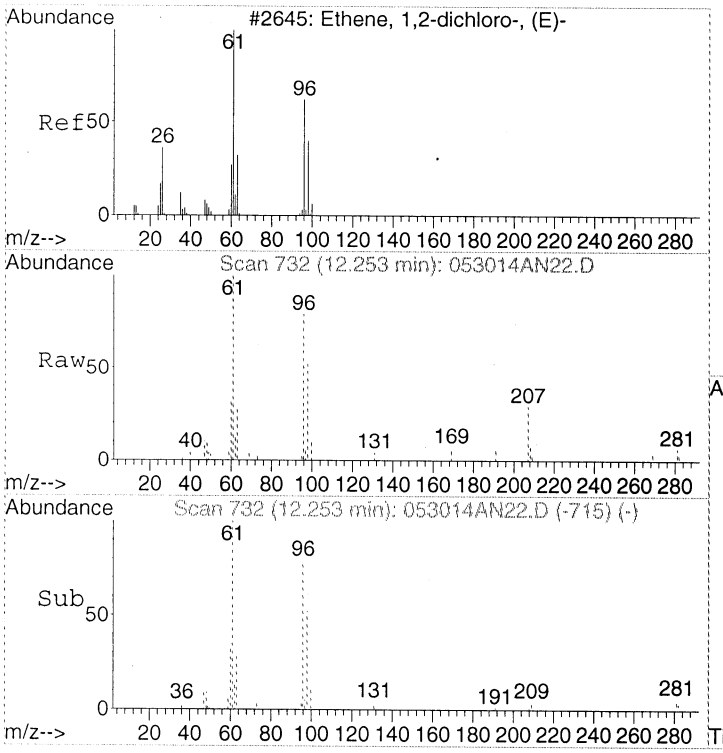


#18
Dichloromethane
Concen: 1.12 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 49 Resp: 19113

Ion	Ratio	Lower	Upper
49	100		
84	92.7	69.9	109.9
86	61.6	38.3	78.3

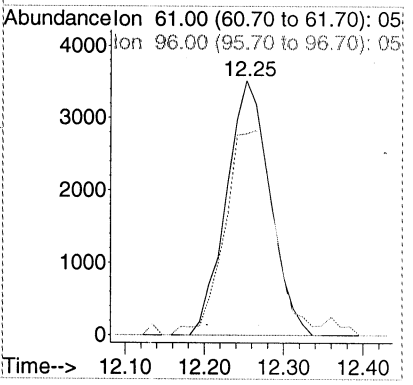


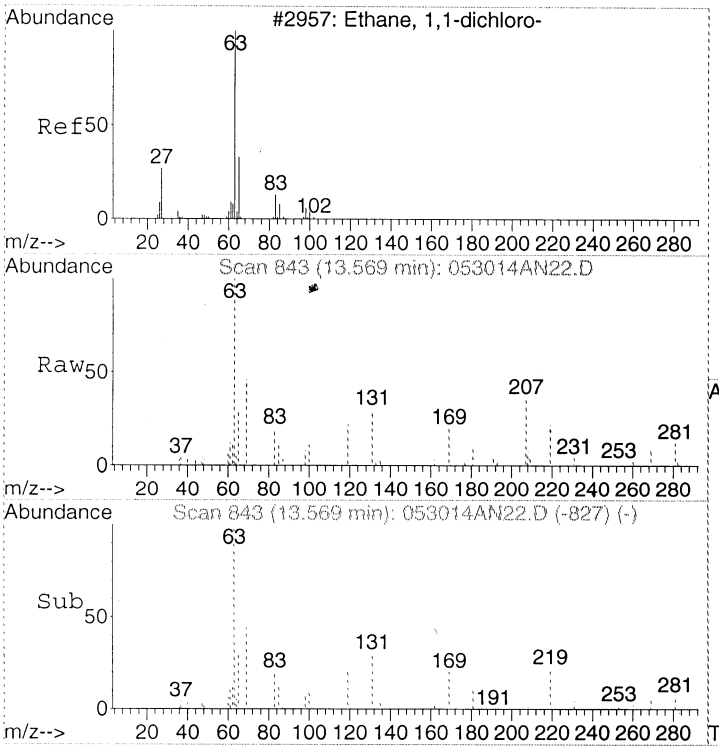


#20
trans-1,2-Dichloroethene
Concen: 0.52 ppbv
RT: 12.25 min Scan# 732
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 61 Resp: 13438

Ion	Ratio	Lower	Upper
61	100		
96	93.0	57.2	97.2

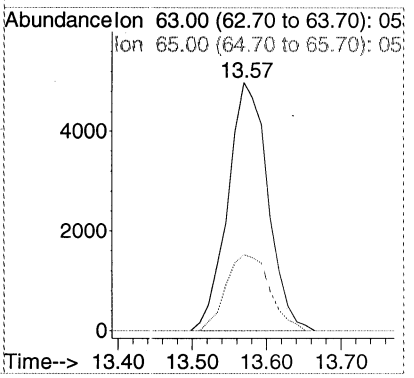


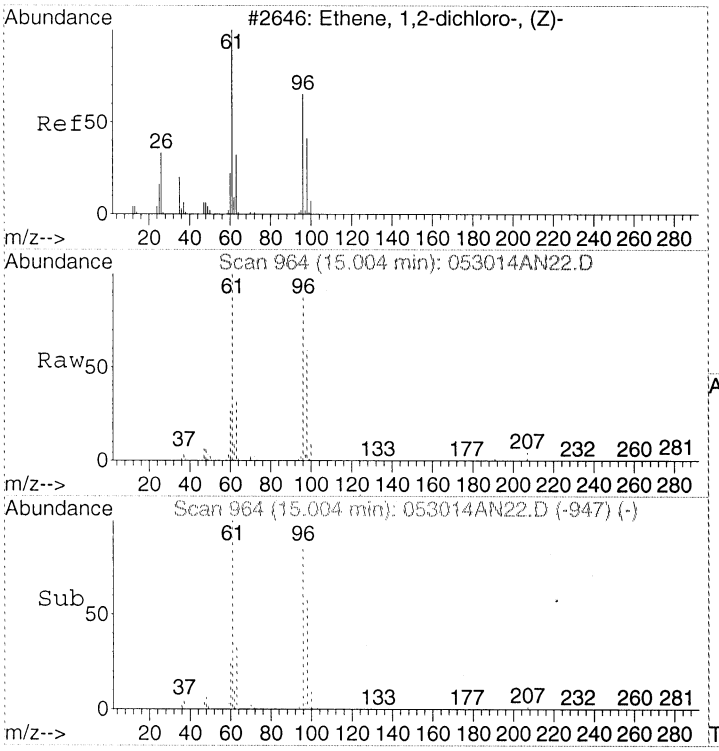


#22
1,1-Dichloroethane
Concen: 0.67 ppbv
RT: 13.57 min Scan# 843
Delta R.T. -0.01 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 63 Resp: 18614

Ion	Ratio	Lower	Upper
63	100		
65	33.2	11.6	51.6

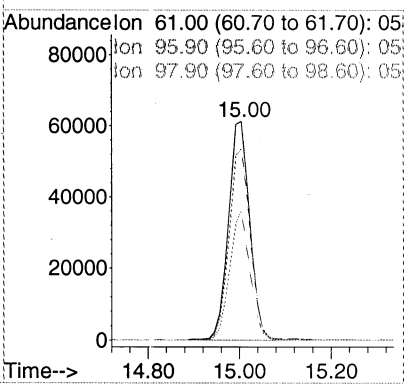


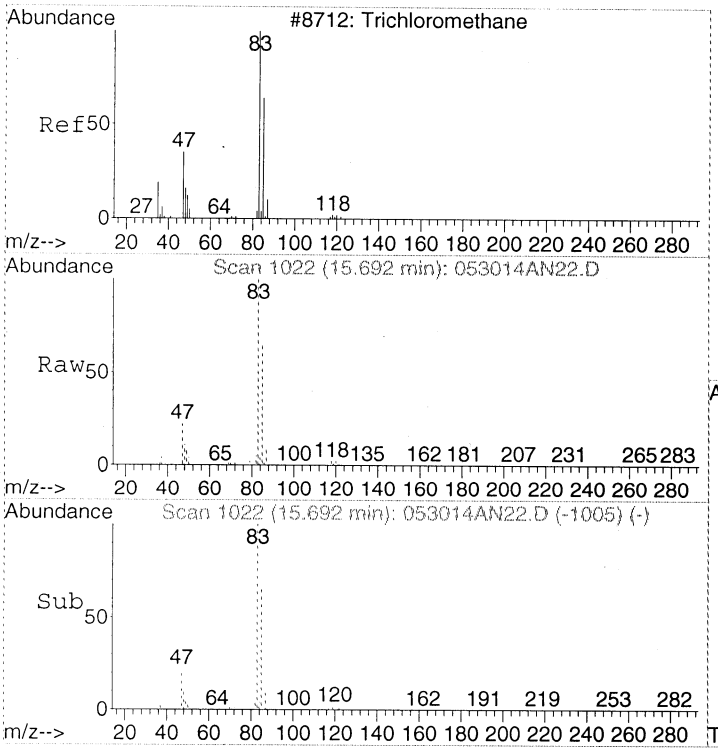


#24
cis-1,2-Dichloroethene
Concen: 9.48 ppbv
RT: 15.00 min Scan# 964
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 61 Resp: 198178

Ion	Ratio	Lower	Upper
61	100		
96	87.2	65.5	105.5
98	55.3	34.8	74.8

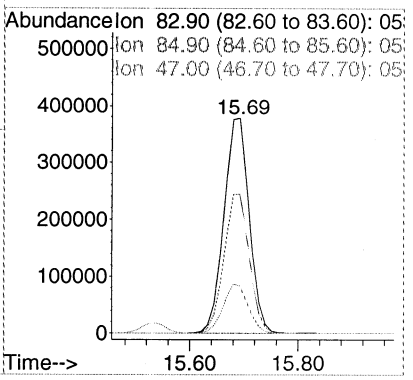


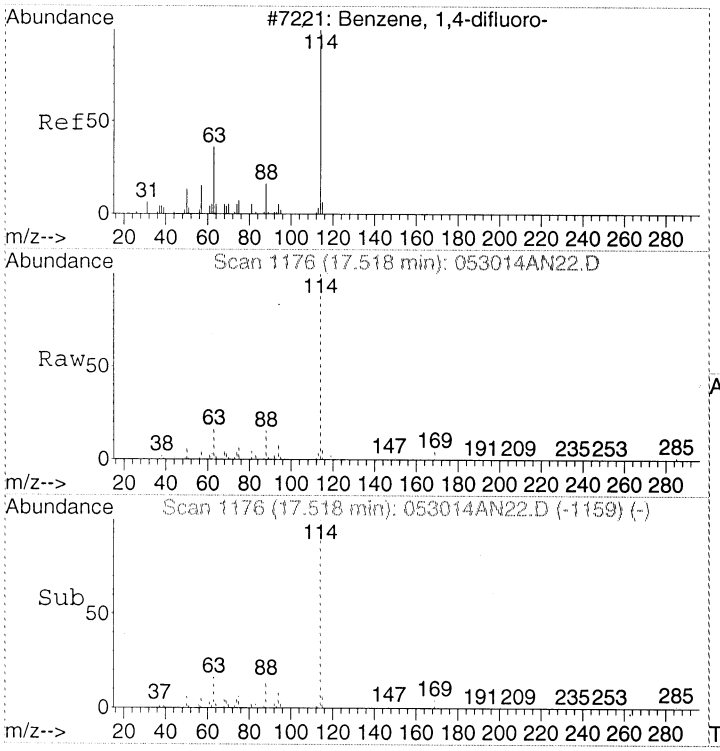


#28
Chloroform
Concen: 25.98 ppbv
RT: 15.69 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 83 Resp: 1222257

Ion	Ratio	Lower	Upper
83	100		
85	64.9	45.0	85.0
47	22.6	3.2	43.2

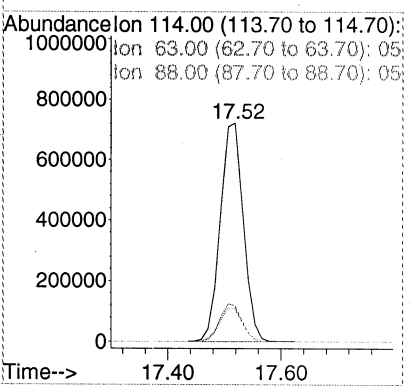


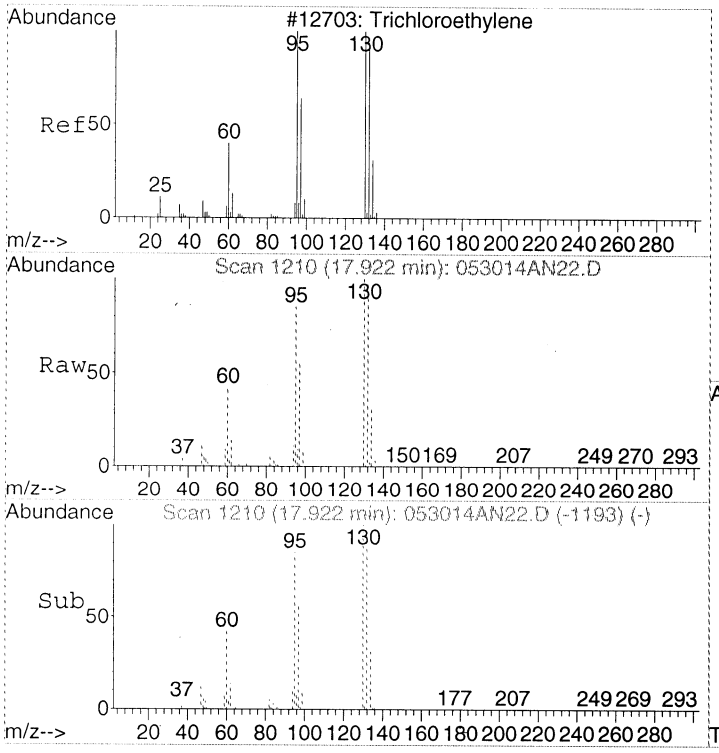


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.52 min Scan# 1176
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion:114 Resp: 2032399

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.2	0.0	35.6

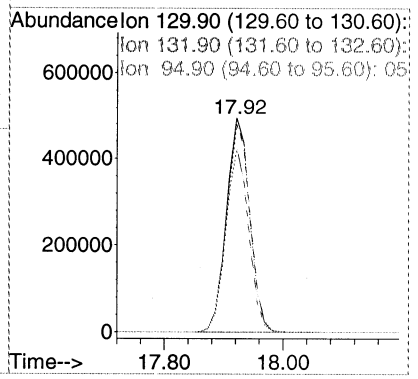


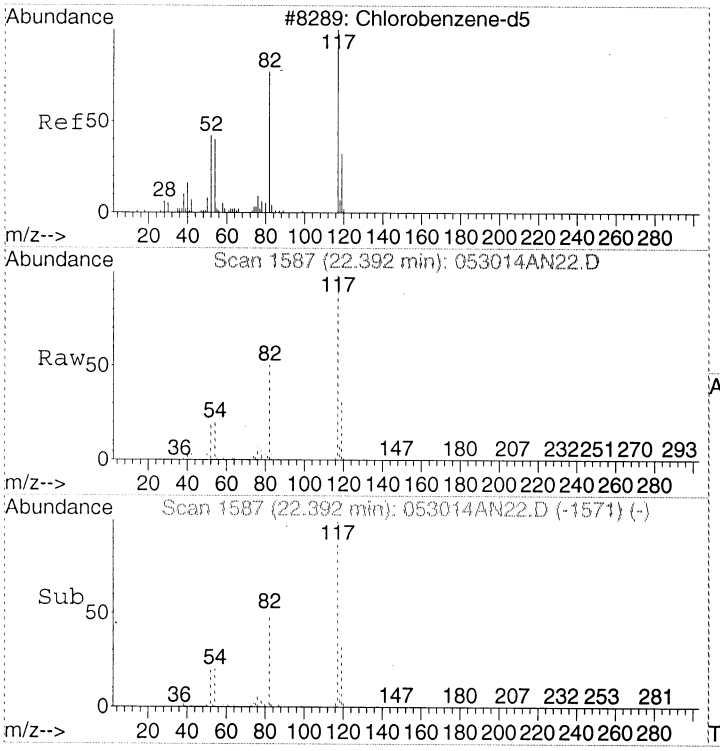


#37
Trichloroethene
Concen: 38.81 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion:130 Resp: 1337902

Ion	Ratio	Lower	Upper
130	100		
132	97.4	76.1	116.1
95	85.0	66.3	106.3

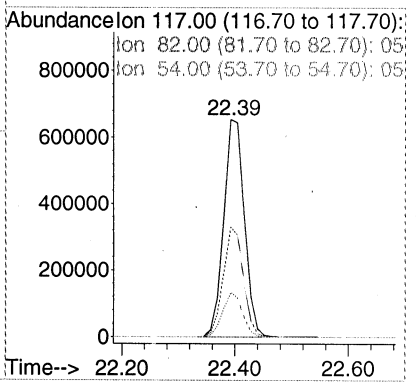


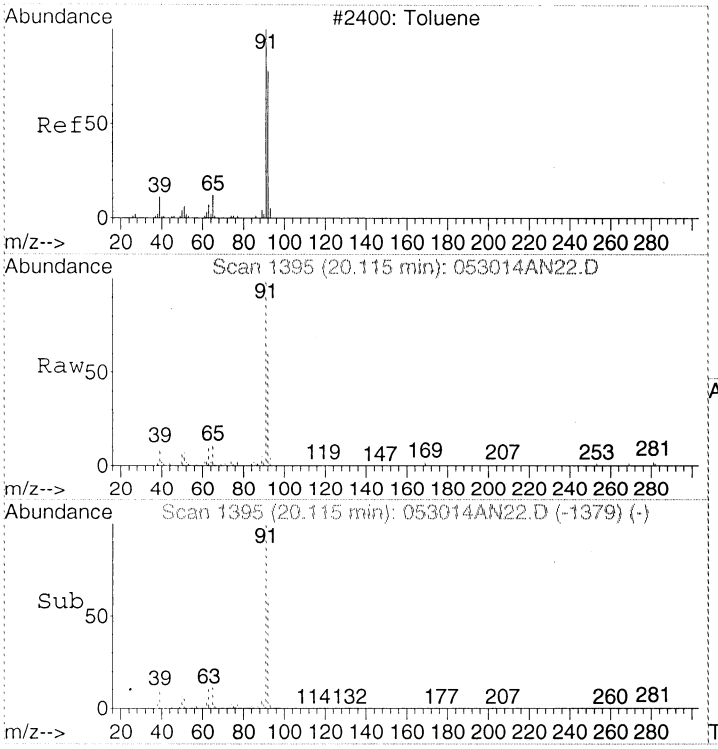


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion:117 Resp: 1648357

Ion	Ratio	Lower	Upper
117	100		
82	49.2	30.5	70.5
54	19.5	0.6	40.6

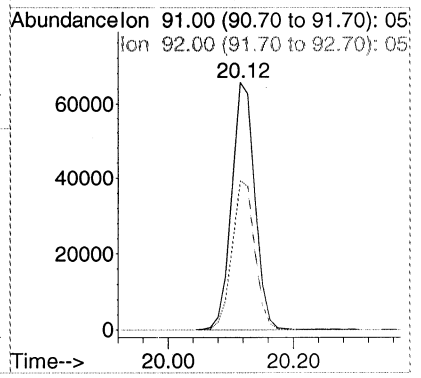


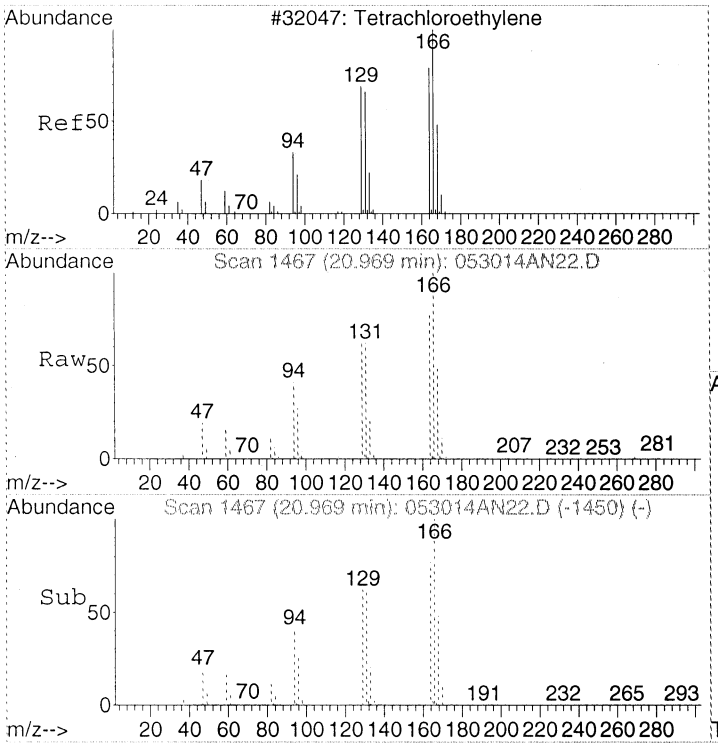


#44
Toluene
Concen: 2.43 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion: 91 Resp: 168181

Ion	Ratio	Lower	Upper
91	100		
92	58.8	38.5	78.5

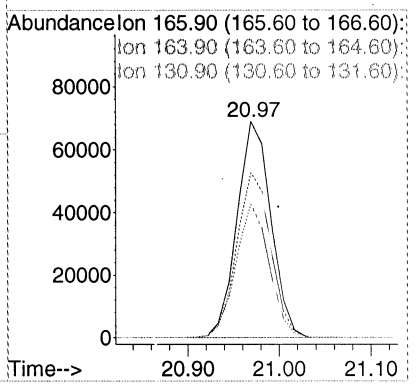




#47
Tetrachloroethene
Concen: 3.13 ppbv
RT: 20.97 min Scan# 1467
Delta R.T. -0.00 min
Lab File: 053014AN22.D
Acq: 31 May 2014 8:51 am

Tgt Ion:166 Resp: 176735

Ion	Ratio	Lower	Upper
166	100		
164	76.8	57.0	97.0
131	60.5	41.3	81.3



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN23.D
Acq On : 31 May 2014 9:40 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-10RE1
Misc : 20mL
ALS Vial : 45
Multiplier: 2.09

Quant Time: Jun 03 09:59:08 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	310786	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	1914594	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1481830	22.00 ppbv	-0.01

Target Compounds					Qvalue
18) Dichloromethane	11.553	49	7727	0.493 ppbv	99
24) cis-1,2-Dichloroethene	15.004	61	11818	0.614 ppbv	94
28) Chloroform	15.680	83	78215	1.805 ppbv	97
37) Trichloroethene	17.921	130	81967	2.524 ppbv	98

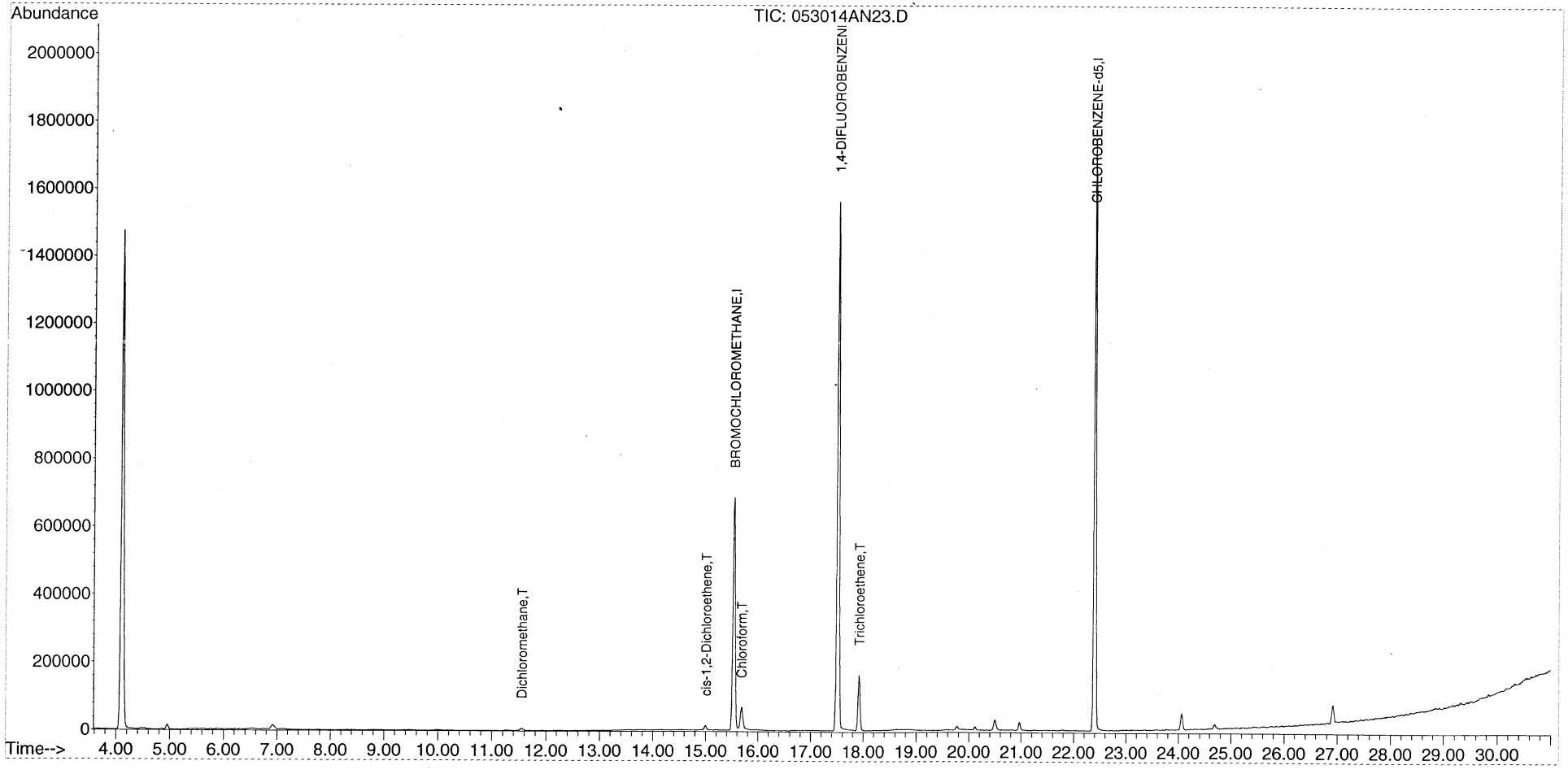
(#) = qualifier out of range (m) = manual integration (+) = signals summed

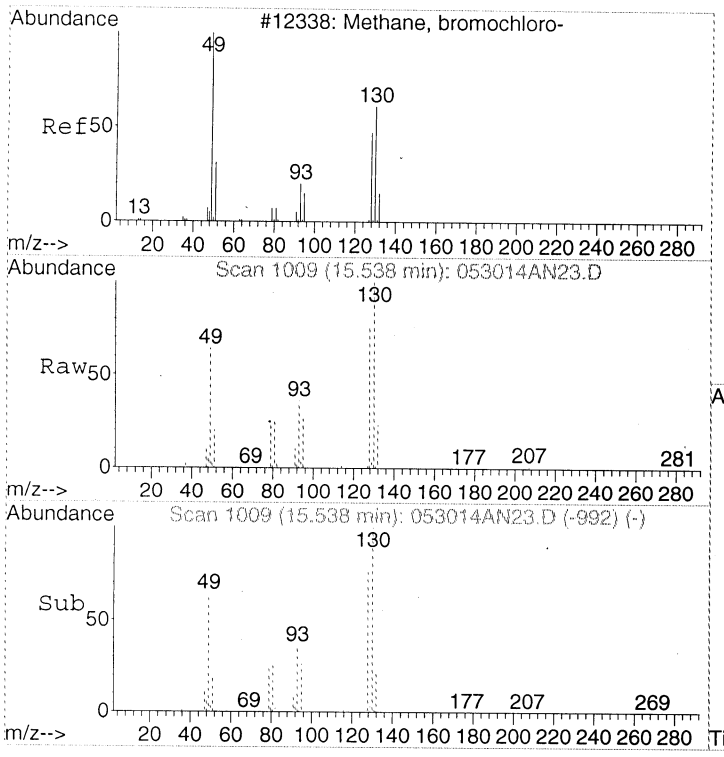
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN23.D
Acq On : 31 May 2014 9:40 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-10RE1
Misc : 20mL
ALS Vial : 45
Multiplier: 2.09

Quant Time: Jun 03 09:59:08 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

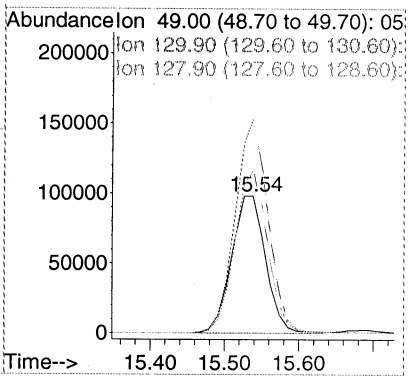


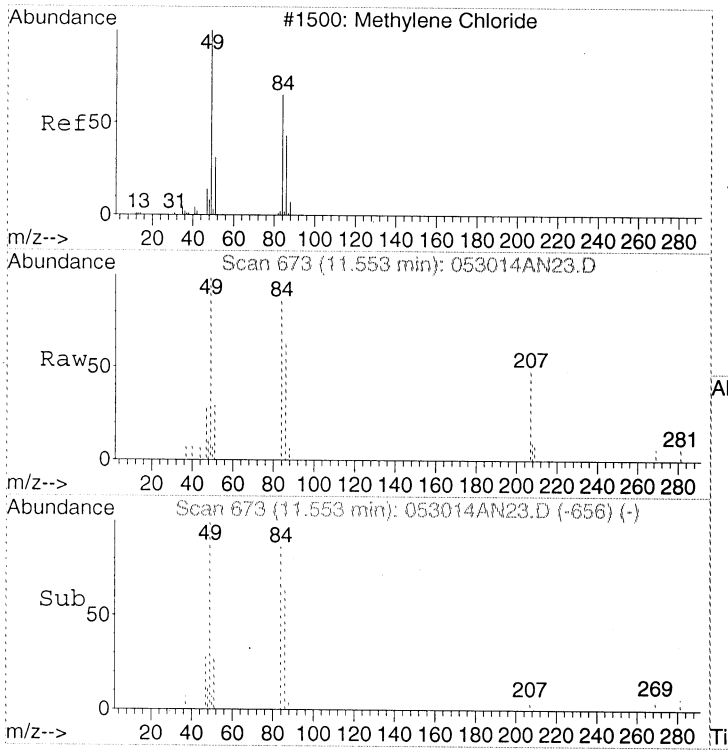


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion: 49 Resp: 310786

Ion	Ratio	Lower	Upper
49	100		
130	151.2	125.1	165.1
128	115.3	91.6	131.6

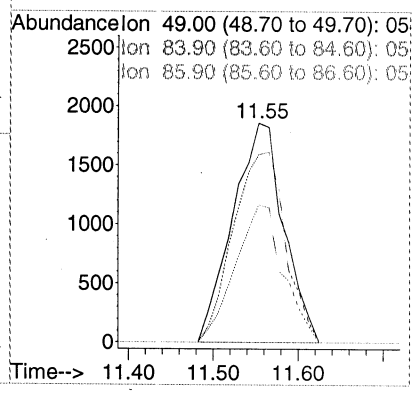




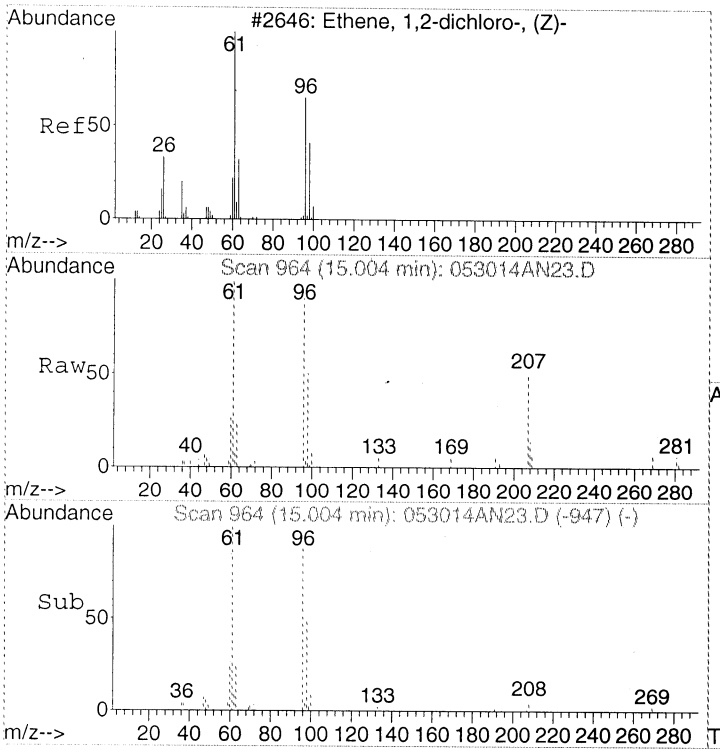
#18
Dichloromethane
Concen: 0.49 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion: 49 Resp: 7727

Ion	Ratio	Lower	Upper
49	100		
84	88.5	69.9	109.9
86	58.7	38.3	78.3



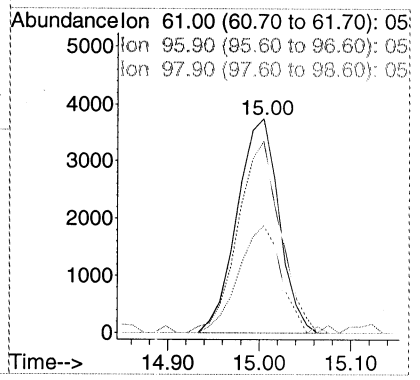
00235

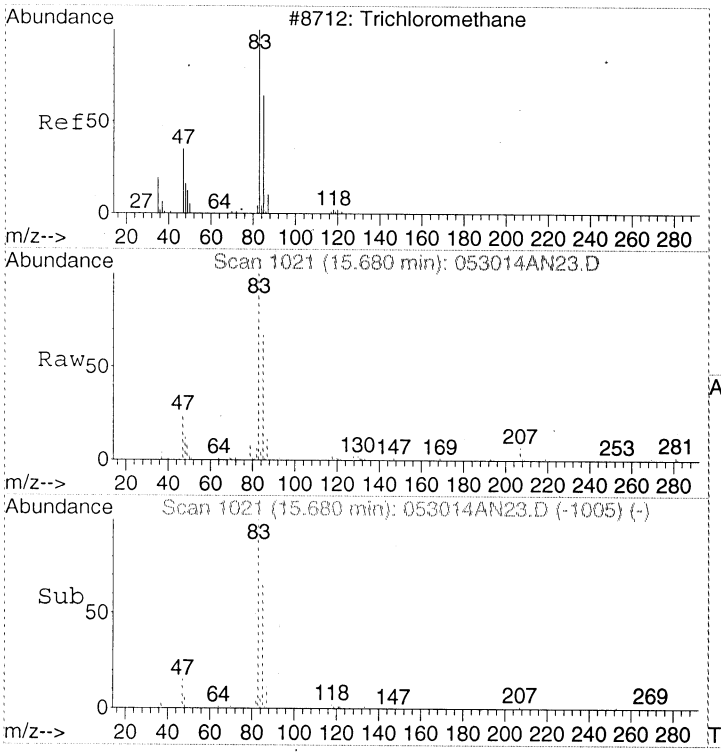


#24
cis-1,2-Dichloroethene
Concen: 0.61 ppbv
RT: 15.00 min Scan# 964
Delta R.T. -0.00 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion: 61 Resp: 11818

Ion	Ratio	Lower	Upper
61	100		
96	91.7	65.5	105.5
98	50.8	34.8	74.8

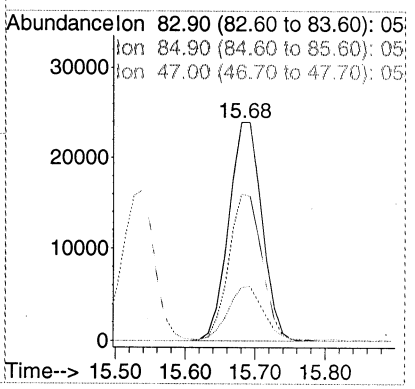


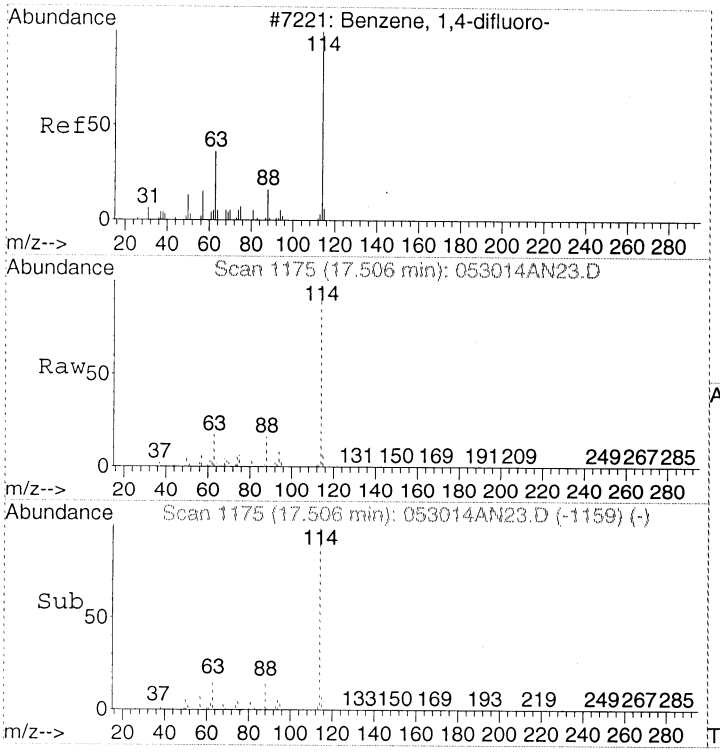


#28
Chloroform
Concen: 1.80 ppbv
RT: 15.68 min Scan# 1021
Delta R.T. -0.01 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion: 83 Resp: 78215

Ion	Ratio	Lower	Upper
83	100		
85	66.6	45.0	85.0
47	26.5	3.2	43.2

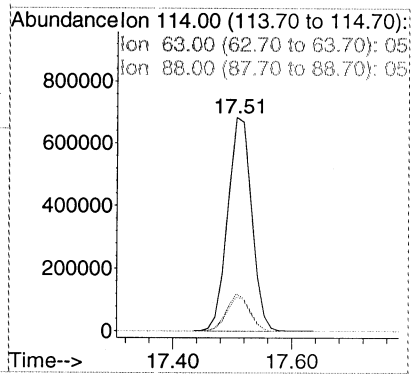


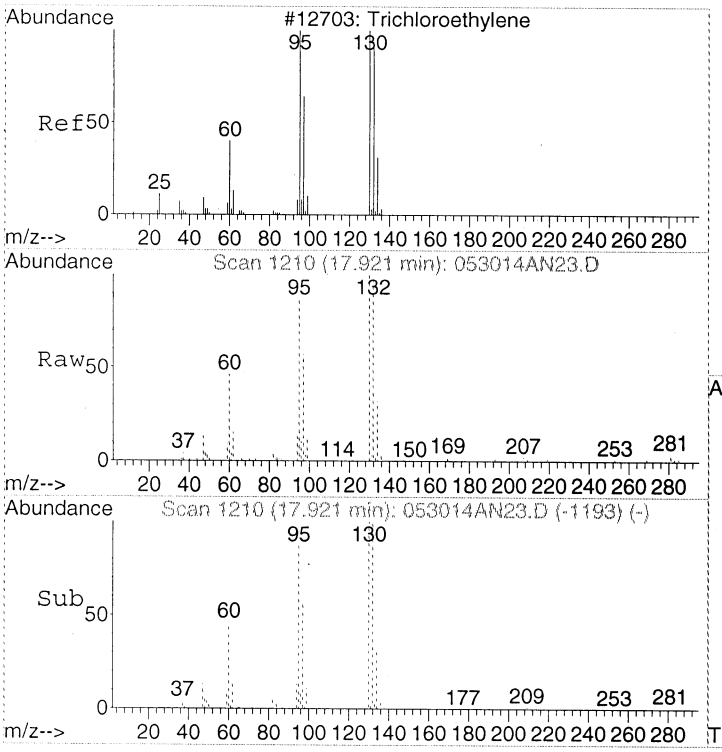


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion:114 Resp: 1914594

Ion	Ratio	Lower	Upper
114	100		
63	16.8	0.0	37.2
88	15.3	0.0	35.6

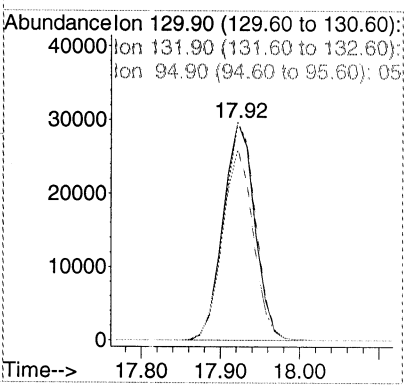




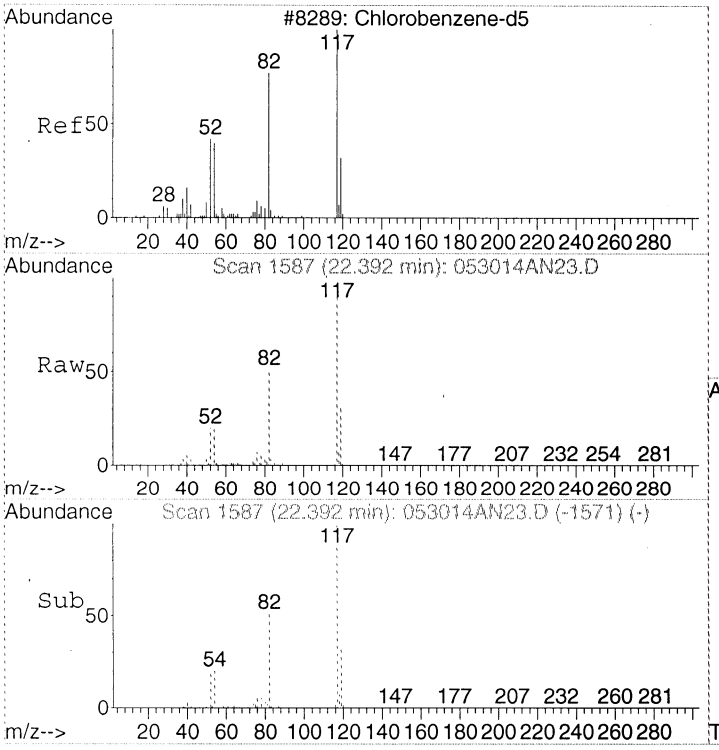
#37
Trichloroethene
Concen: 2.52 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion:130 Resp: 81967

Ion	Ratio	Lower	Upper
130	100		
132	99.8	76.1	116.1
95	86.1	66.3	106.3



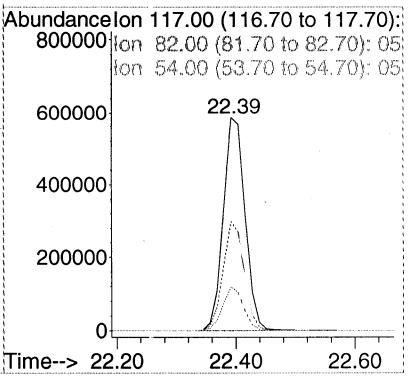
00237



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN23.D
Acq: 31 May 2014 9:40 am

Tgt Ion:117 Resp: 1481830

Ion	Ratio	Lower	Upper
117	100		
82	49.2	30.5	70.5
54	19.4	0.6	40.6



Quantitation Report (QT Reviewed)

Data Path : I:\Data\ROOM201\AG5973N\2014\Data\053014TO15NA\
Data File : 053014AN24.D
Acq On : 31 May 2014 10:31
Instrument: AG5973N
Operator : EM
Sample : 1405053-11
Misc : 200mL
ALS Vial : 46
Multiplier: 2.23

Quant Time: Jun 03 09:59:14 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.538	49	339373	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	2041383	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.392	117	1663177	22.00	ppbv	-0.01
Target Compounds						Qvalue
2) Propene	4.474	41	20346	2.58	ppbv #	69
6) Vinyl chloride	5.446	62	13410	1.22	ppbv	98
12) 1,1,2-Trichloro-1,2,2-...	9.407	151	27172	0.54	ppbv	97
13) 1,1-Dichloroethene	9.490	61	41839	1.47	ppbv	96
14) Acetone	10.036	43	57234	2.63	ppbv	93
15) Carbon disulfide	10.225	76	34294	0.74	ppbv	100
18) Dichloromethane	11.554	49	24964	1.46	ppbv #	65
20) trans-1,2-Dichloroethene	12.253	61	19321	0.74	ppbv	93
22) 1,1-Dichloroethane	13.570	63	23020	0.82	ppbv	98
24) cis-1,2-Dichloroethene	15.004	61	248673	11.83	ppbv	99
28) Chloroform	15.680	83	1607378	33.96	ppbv E	99
30) 1,1,1-Trichloroethane	15.965	97	36995	0.57	ppbv	96
37) Trichloroethene	17.922	130	1810279	52.29	ppbv E	98
44) Toluene	20.115	91	144663	2.07	ppbv	99
47) Tetrachloroethene	20.969	166	251508	4.42	ppbv	99

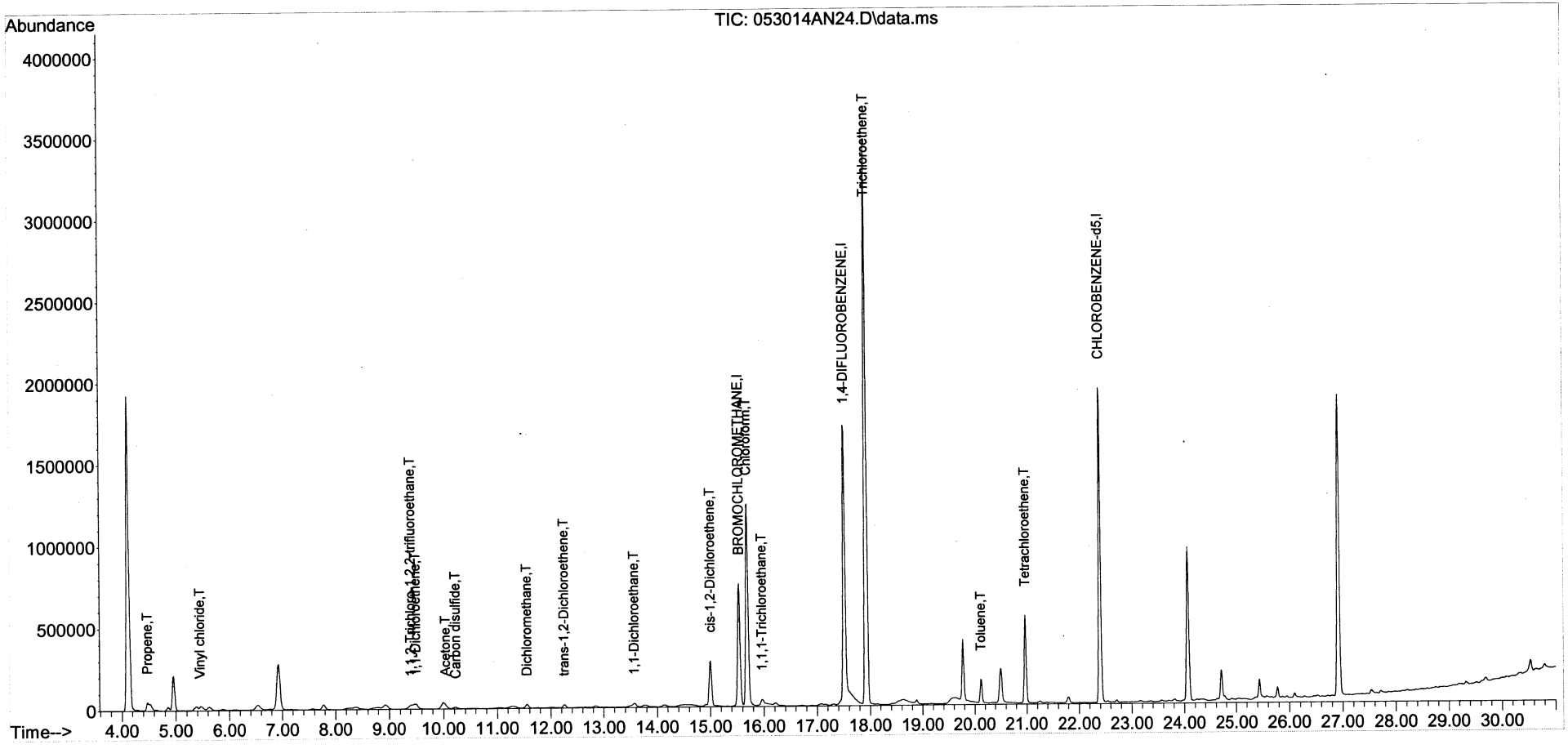
(#) = qualifier out of range (m) = manual integration (+) = signals summed

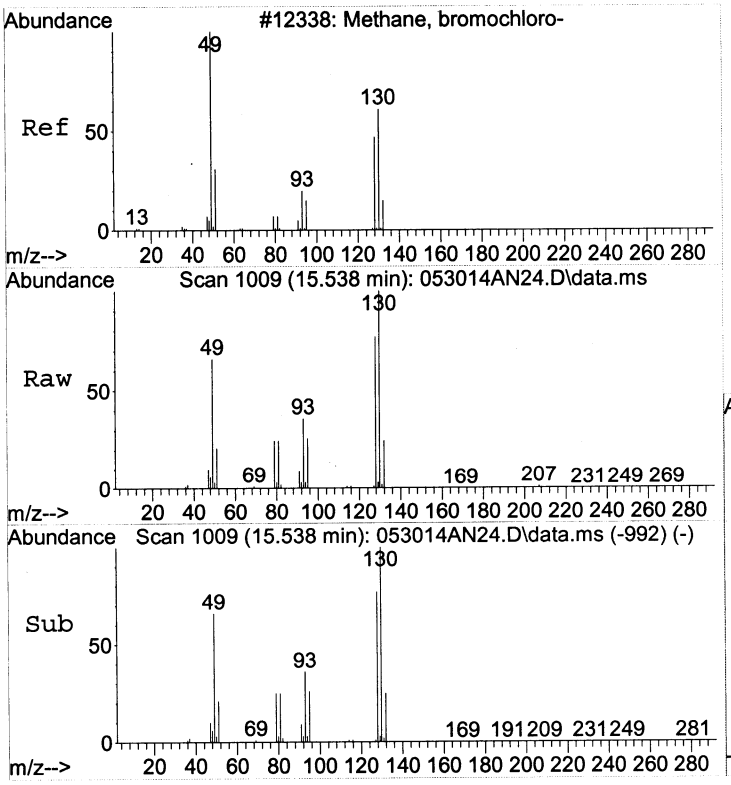
Quantitation Report (QT Reviewed)

Data Path : I:\Data\ROOM201\AG5973N\2014\Data\053014TO15NA\
Data File : 053014AN24.D
Acq On : 31 May 2014 10:31
Instrument: AG5973N
Operator : EM
Sample : 1405053-11
Misc : 200mL
ALS Vial : 46
Multiplier: 2.23

Quant Time: Jun 03 09:59:14 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

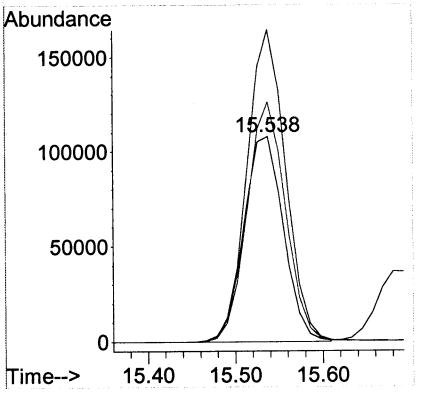


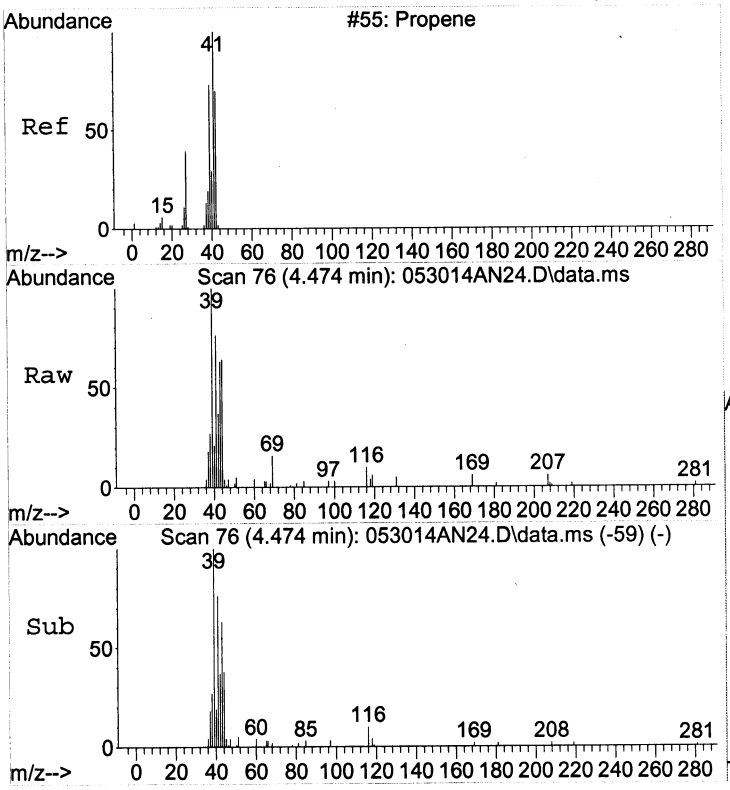


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.538 min Scan# 1009
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 49 Resp: 339373

Ion	Ratio	Lower	Upper
49	100		
130	148.6	125.1	165.1
128	113.4	91.6	131.6

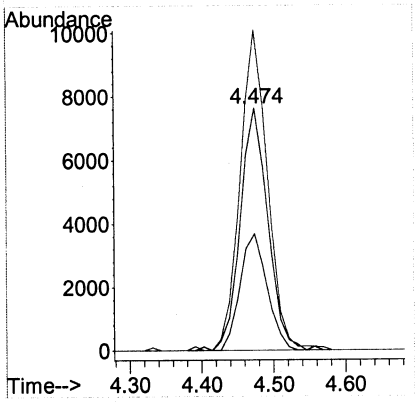


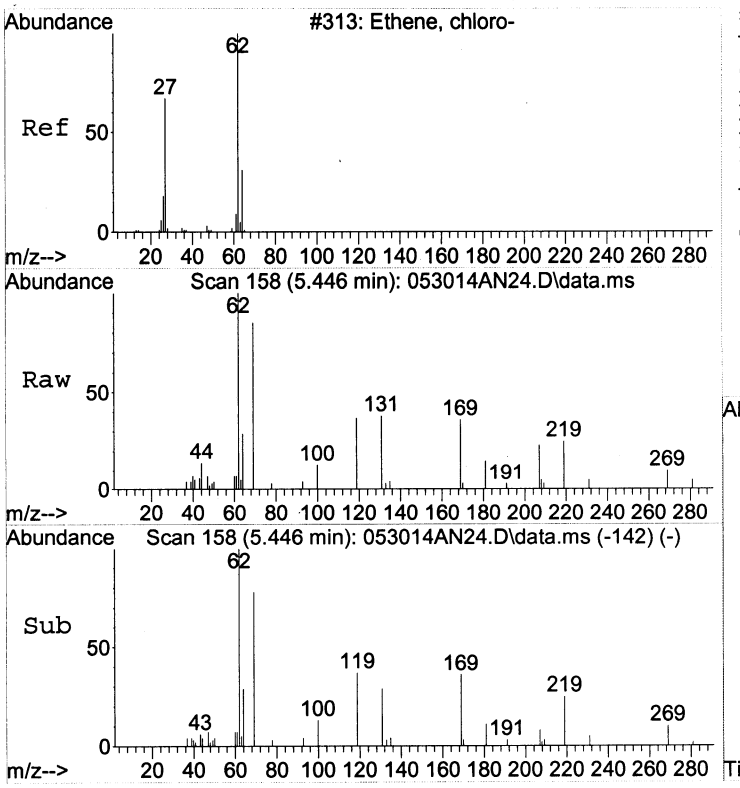


#2
Propene
Concen: 2.58 ppbv
RT: 4.474 min Scan# 76
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 41 Resp: 20346

Ion	Ratio	Lower	Upper
41	100		
42	47.4	44.9	84.9
39	130.1	74.8	114.8#

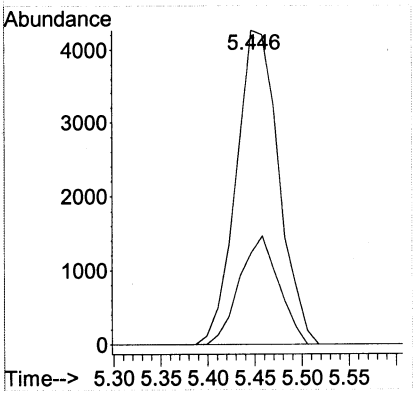


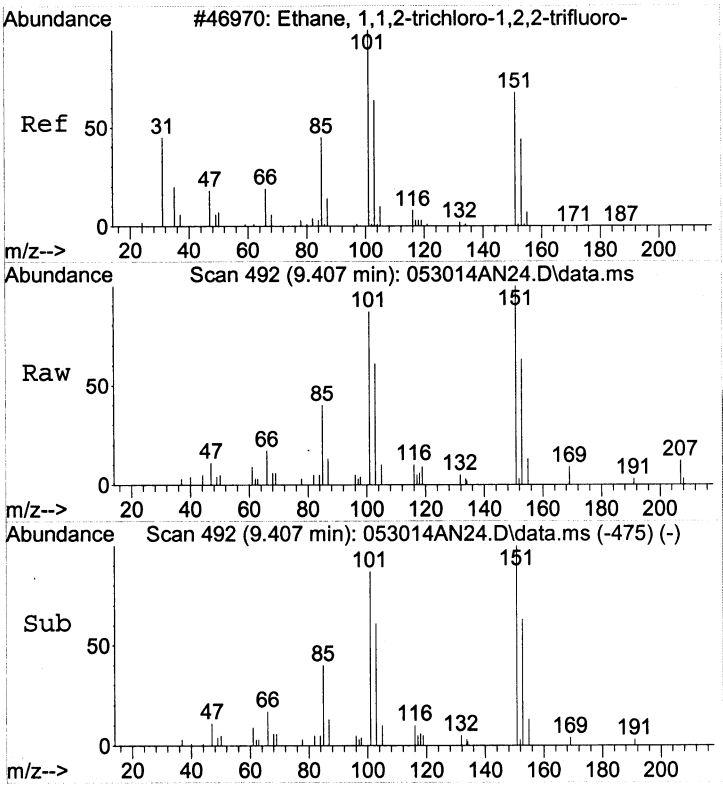


#6
Vinyl chloride
Concen: 1.22 ppbv
RT: 5.446 min Scan# 158
Delta R.T. -0.012 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 62 Resp: 13410

Ion	Ratio	Lower	Upper
62	100		
64	31.8	12.9	52.9

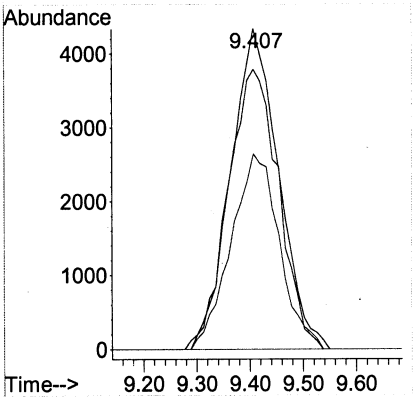


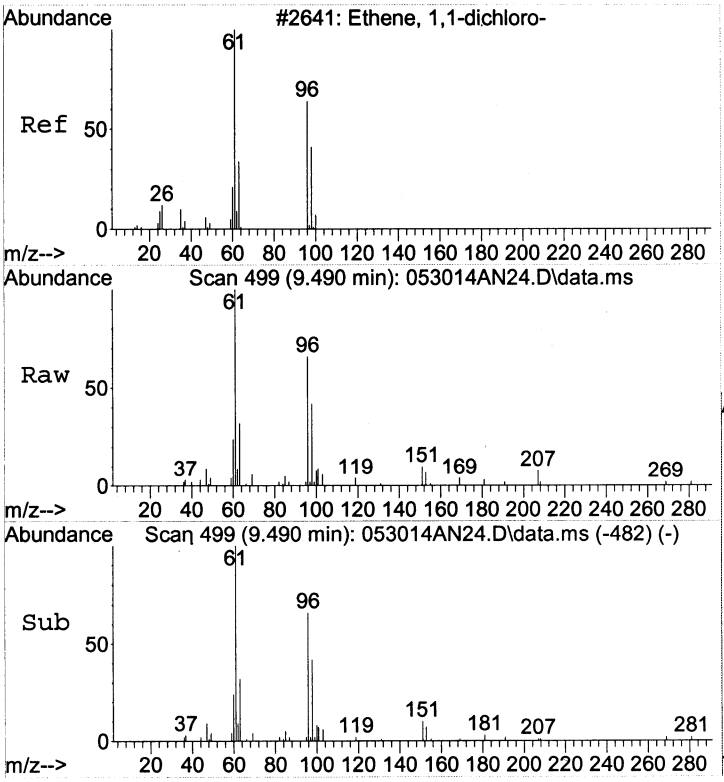


#12
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.54 ppbv
RT: 9.407 min Scan# 492
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion:151 Resp: 27172

Ion	Ratio	Lower	Upper
151	100		
101	91.5	69.5	109.5
103	61.2	37.8	77.8

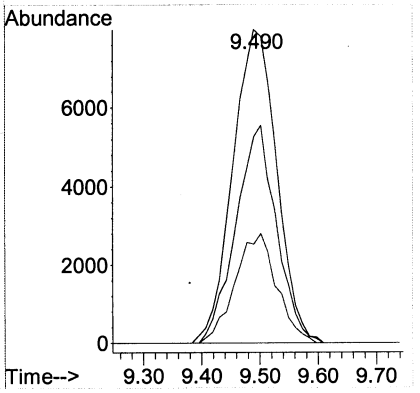


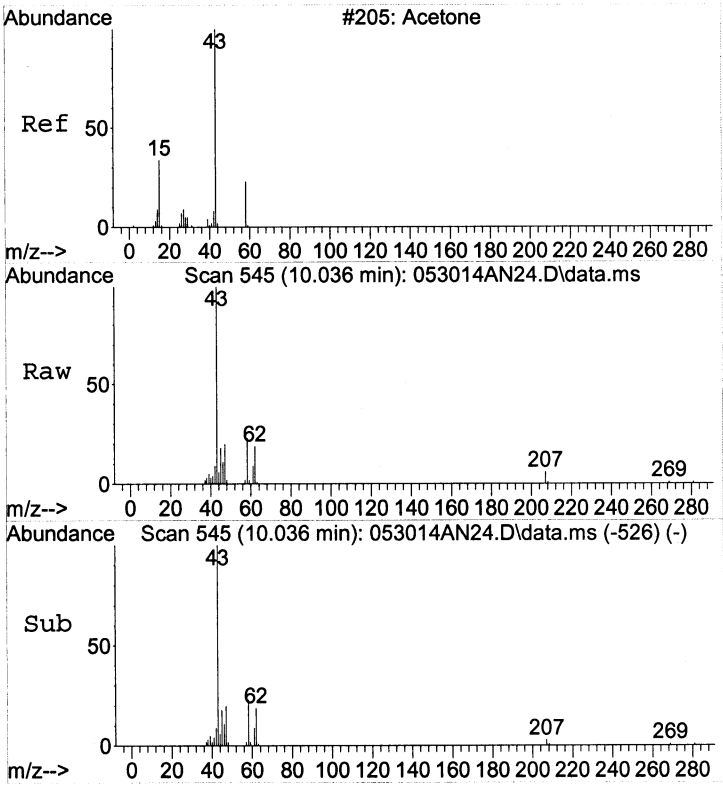


#13
1,1-Dichloroethene
Concen: 1.47 ppbv
RT: 9.490 min Scan# 499
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 61 Resp: 41839

Ion	Ratio	Lower	Upper
61	100		
96	64.5	41.0	81.0
63	33.4	11.8	51.8

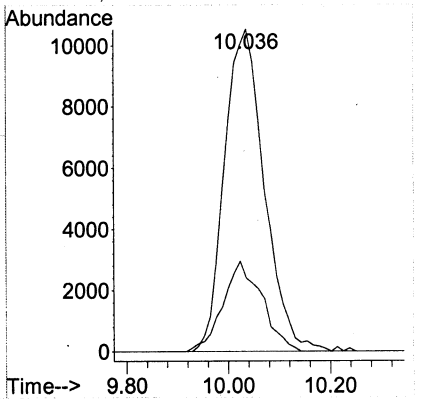


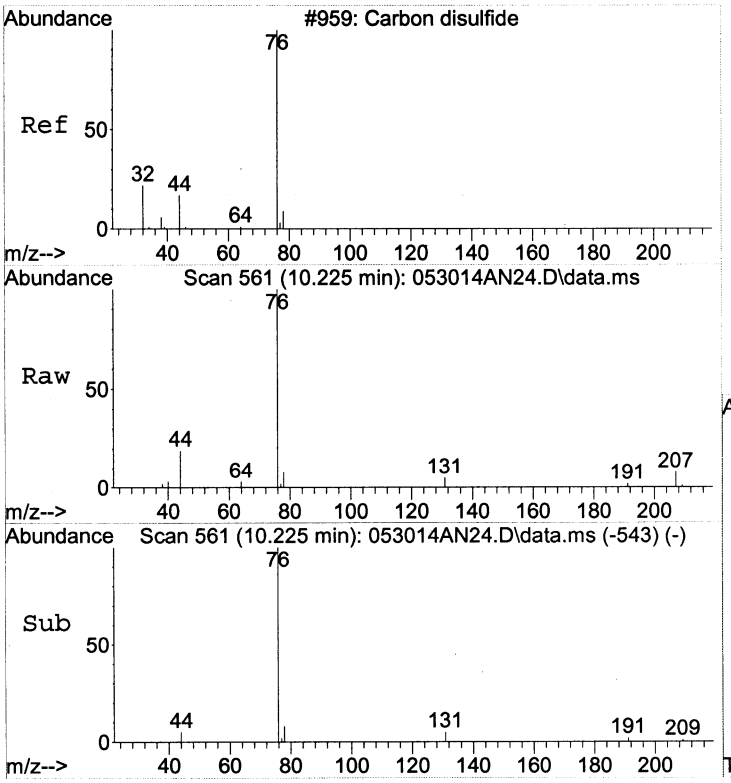


#14
Acetone
Concen: 2.63 ppbv
RT: 10.036 min Scan# 545
Delta R.T. 0.024 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 43 Resp: 57234

Ion	Ratio	Lower	Upper
43	100		
58	27.5	4.2	44.2

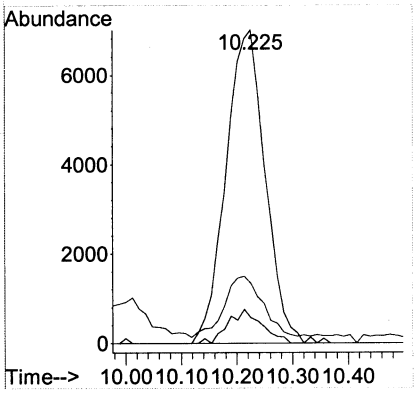


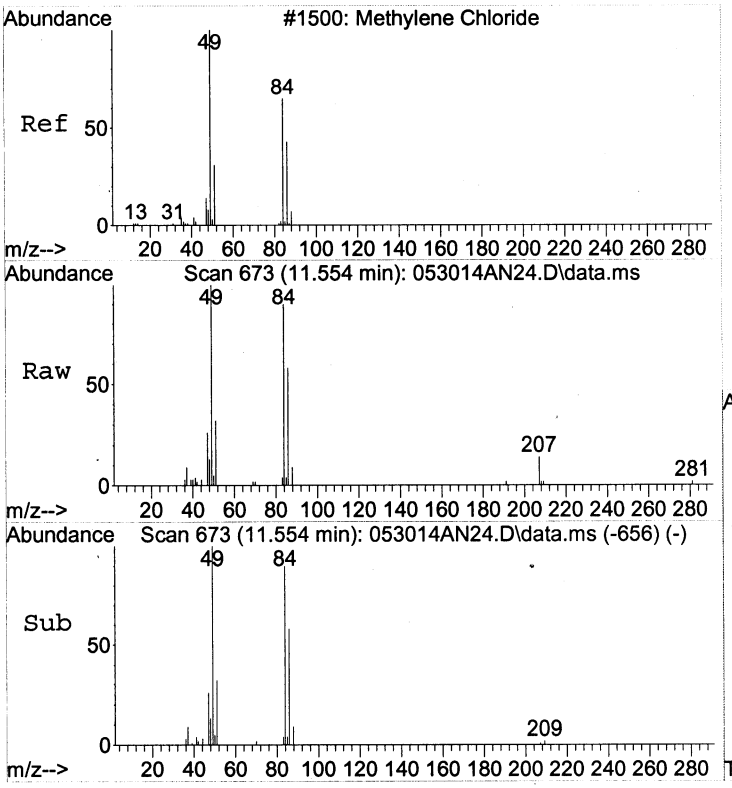


#15
Carbon disulfide
Concen: 0.74 ppbv
RT: 10.225 min Scan# 561
Delta R.T. 0.012 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 76 Resp: 34294

Ion	Ratio	Lower	Upper
76	100		
78	9.3	0.0	29.4
44	19.1	0.0	39.2

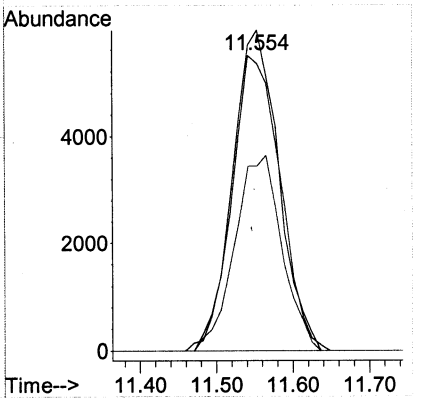


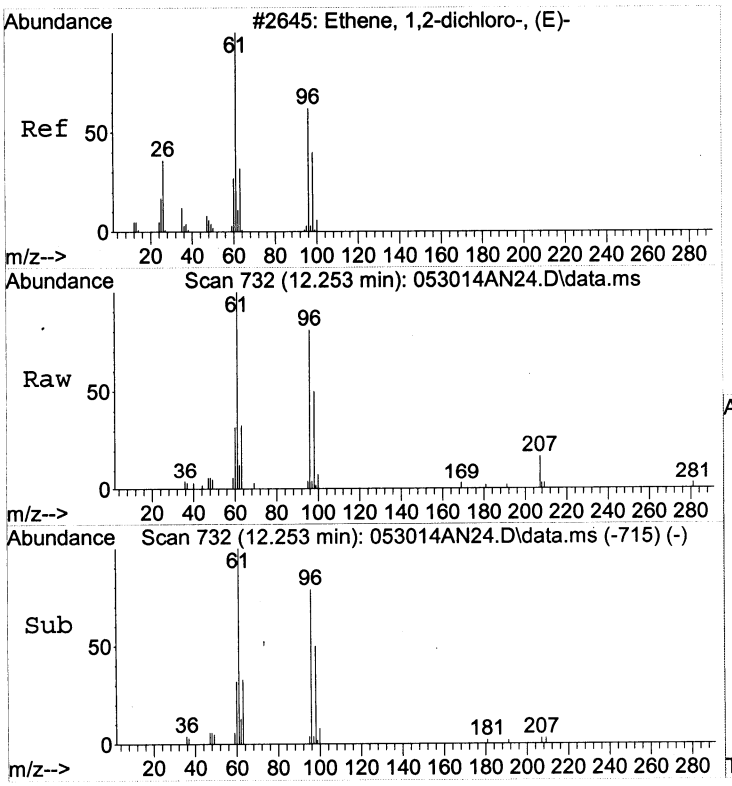


#18
Dichloromethane
Concen: 1.46 ppbv
RT: 11.554 min Scan# 673
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 49 Resp: 24964

Ion	Ratio	Lower	Upper
49	100		
84	96.3	69.9	109.9
86	0.0	38.3	78.3#

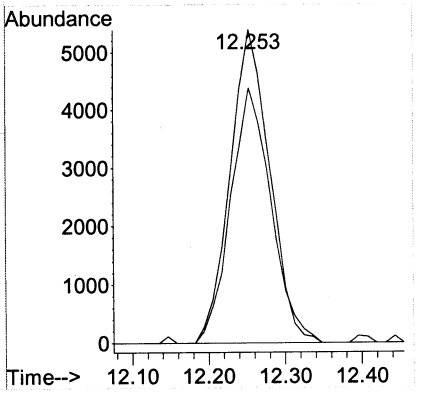


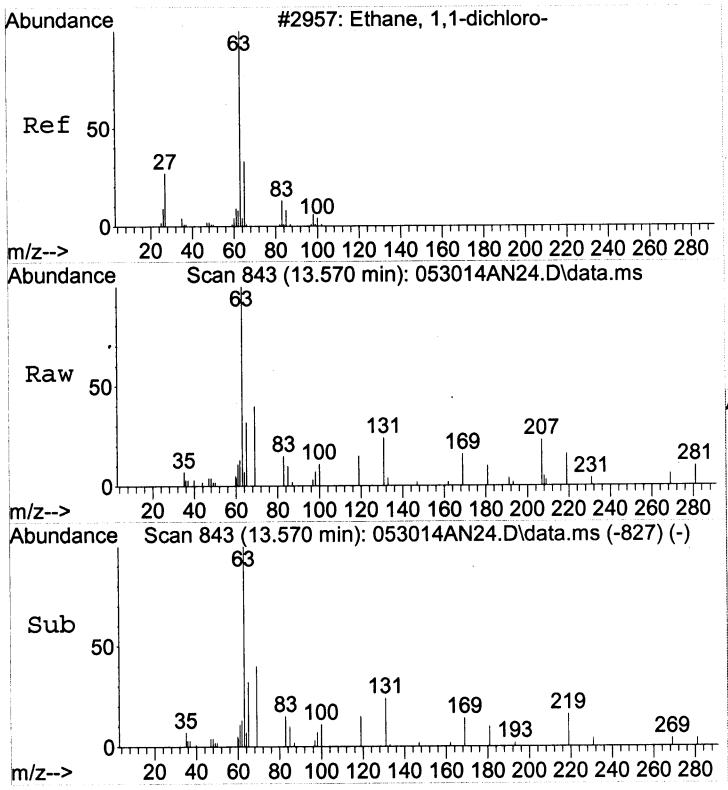


#20
trans-1,2-Dichloroethene
Concen: 0.74 ppbv
RT: 12.253 min Scan# 732
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 61 Resp: 19321

Ion	Ratio	Lower	Upper
61	100		
96	83.2	57.2	97.2

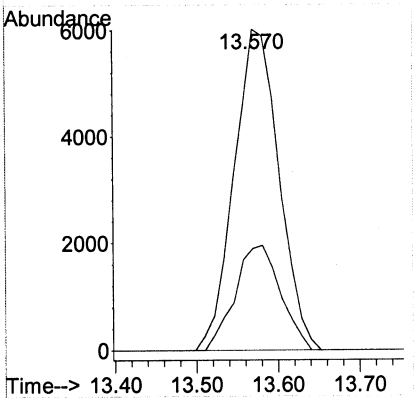


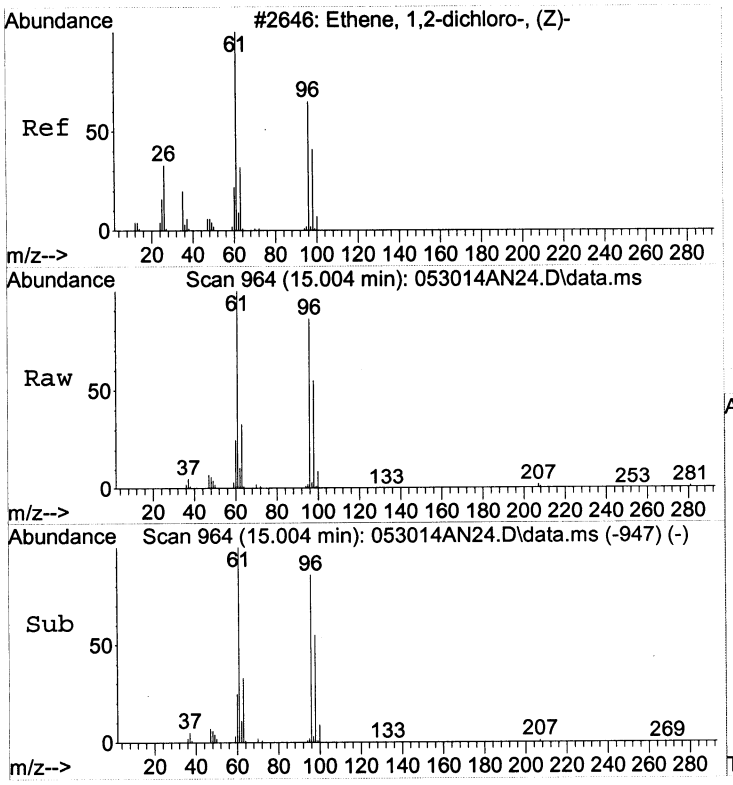


#22
1,1-Dichloroethane
Concen: 0.82 ppbv
RT: 13.570 min Scan# 843
Delta R.T. -0.012 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 63 Resp: 23020

Ion	Ratio	Lower	Upper
63	100		
65	32.9	11.6	51.6

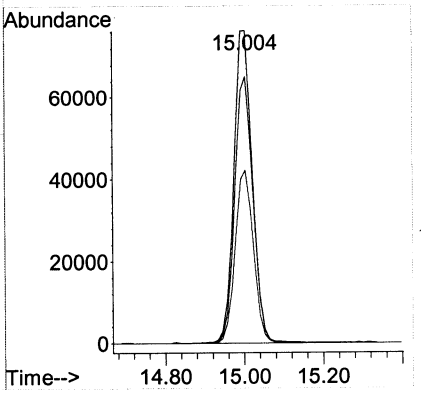


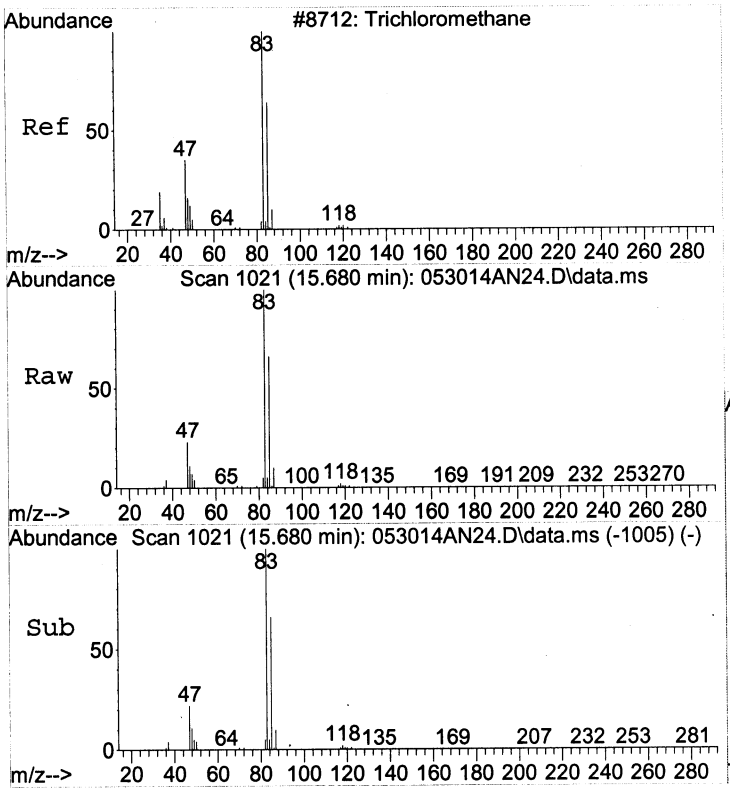


#24
cis-1,2-Dichloroethene
Concen: 11.83 ppbv
RT: 15.004 min Scan# 964
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 61 Resp: 248673

Ion	Ratio	Lower	Upper
61	100		
96	84.8	65.5	105.5
98	54.5	34.8	74.8

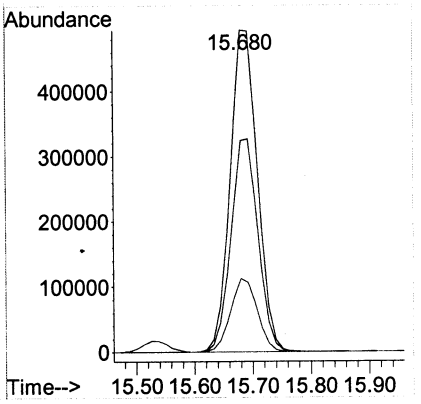




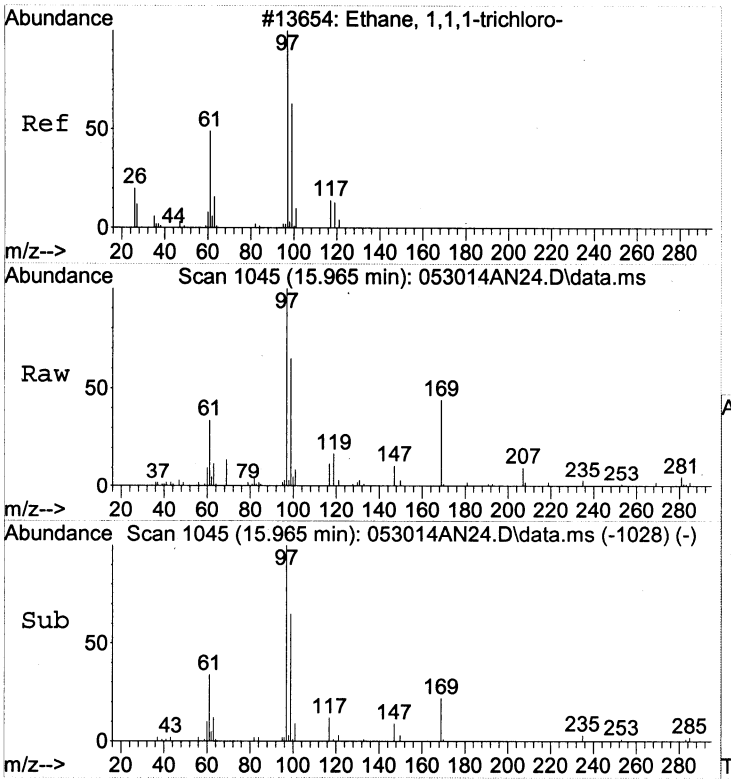
#28
Chloroform
Concen: 33.96 ppbv
RT: 15.680 min Scan# 1021
Delta R.T. -0.012 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 83 Resp: 1607378

Ion	Ratio	Lower	Upper
83	100		
85	65.6	45.0	85.0
47	22.3	3.2	43.2



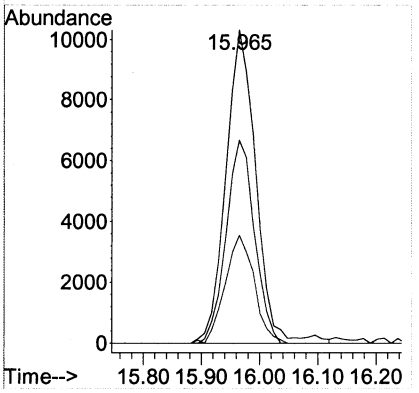
00246

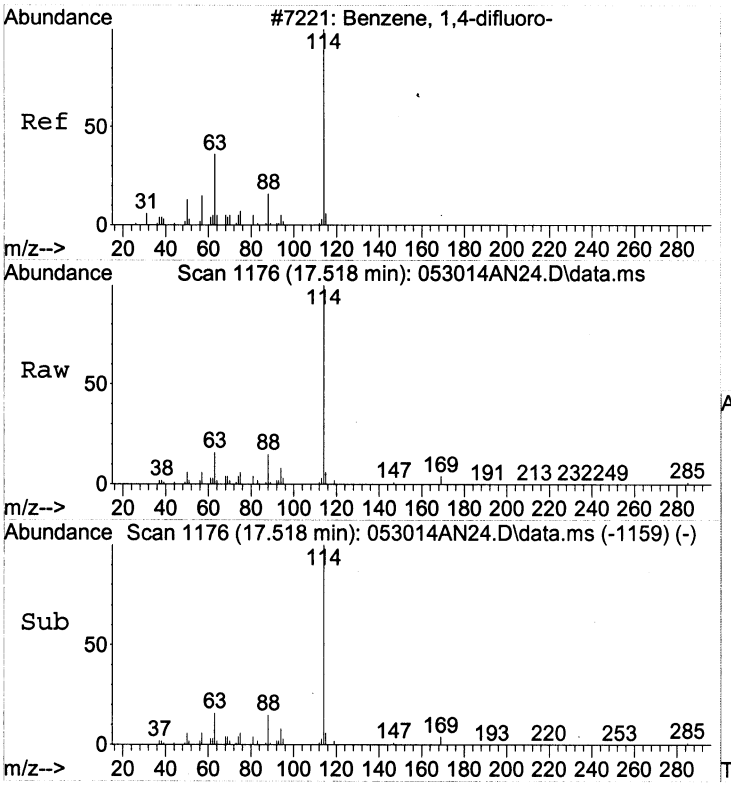


#30
1,1,1-Trichloroethane
Concen: 0.57 ppbv
RT: 15.965 min Scan# 1045
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 97 Resp: 36995

Ion	Ratio	Lower	Upper
97	100		
99	61.2	44.6	84.6
61	33.2	15.9	55.9

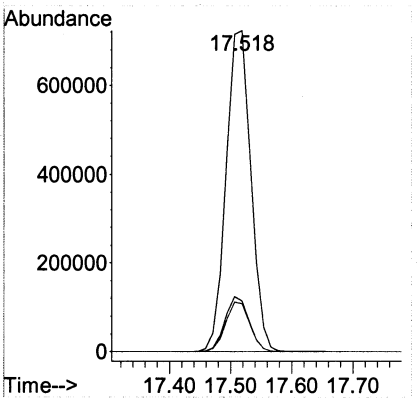




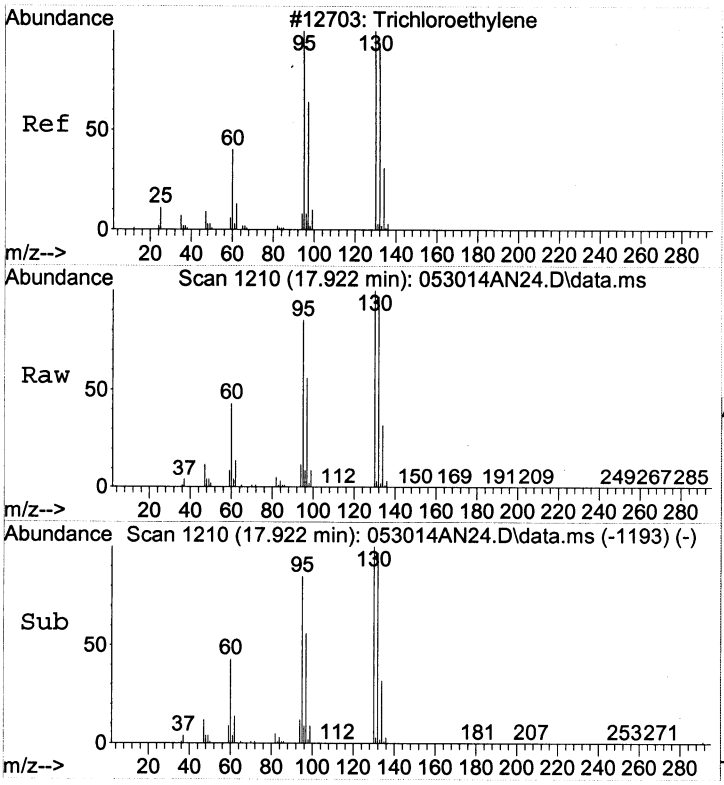
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.518 min Scan# 1176
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion:114 Resp: 2041383

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.2	0.0	35.6



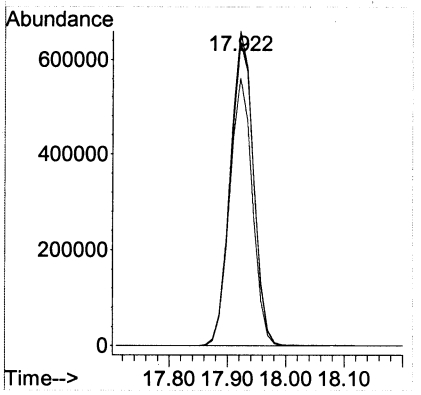
00247

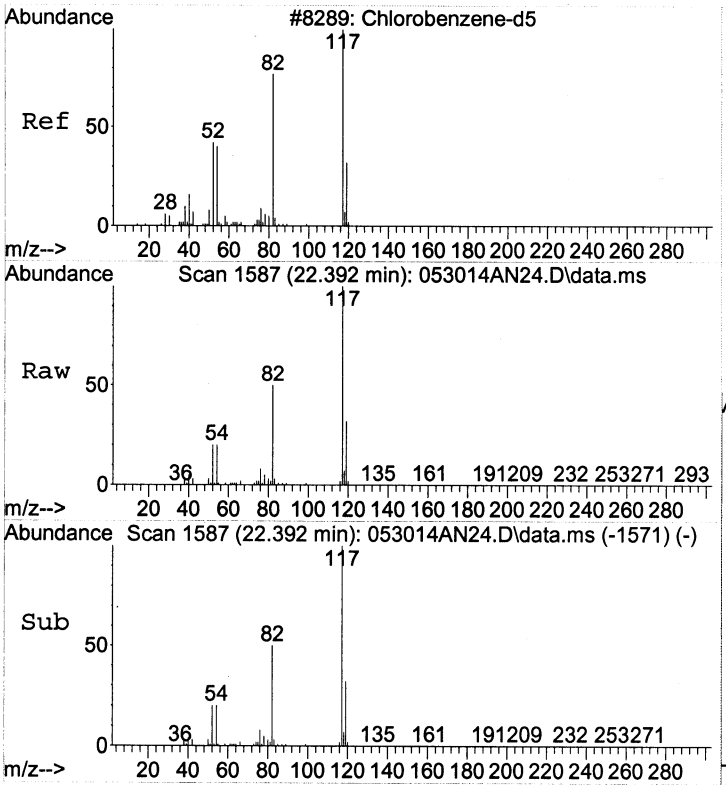


#37
Trichloroethene
Concen: 52.29 ppbv
RT: 17.922 min Scan# 1210
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion:130 Resp: 1810279

Ion	Ratio	Lower	Upper
130	100		
132	97.4	76.1	116.1
95	84.5	66.3	106.3

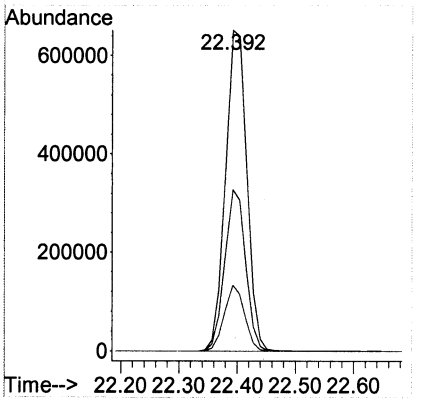


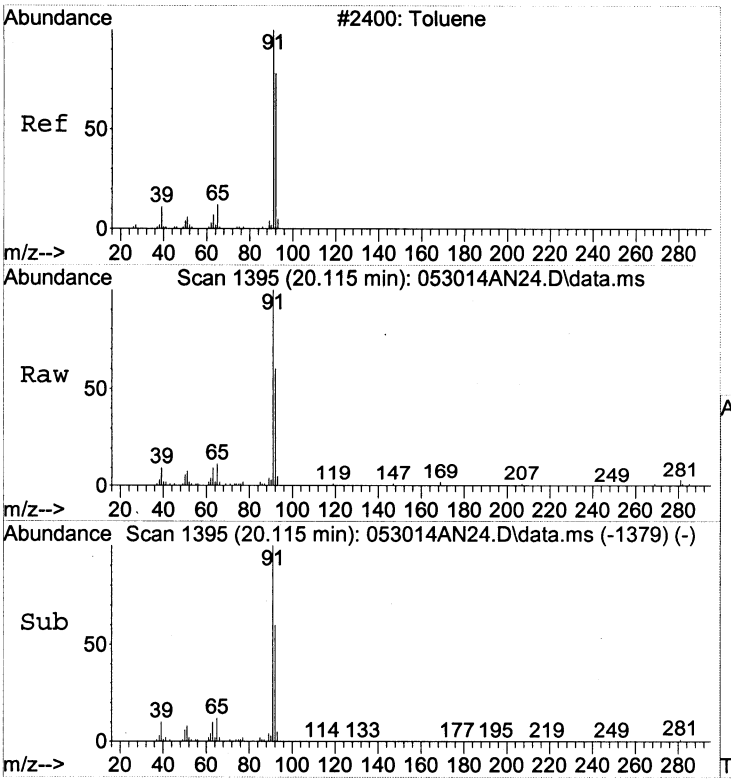


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.392 min Scan# 1587
Delta R.T. -0.012 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion:117 Resp: 1663177

Ion	Ratio	Lower	Upper
117	100		
82	49.1	30.5	70.5
54	19.4	0.6	40.6

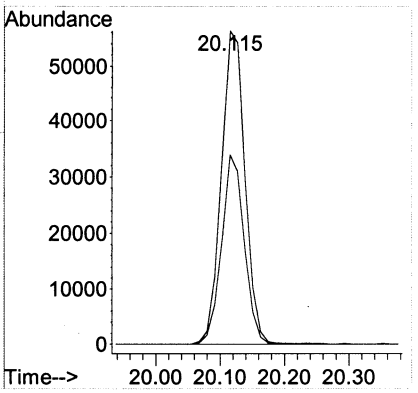


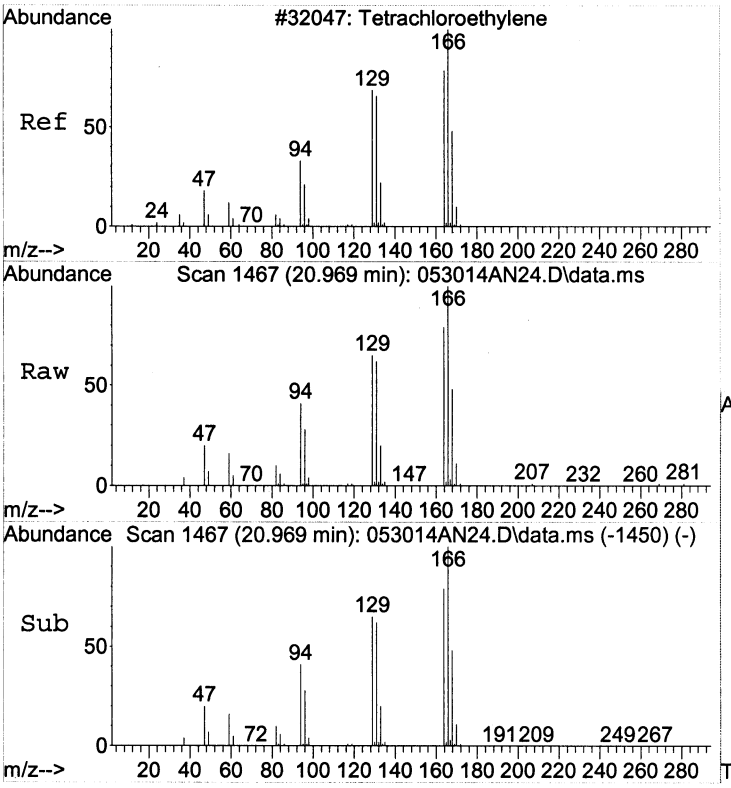


#44
Toluene
Concen: 2.07 ppbv
RT: 20.115 min Scan# 1395
Delta R.T. -0.012 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion: 91 Resp: 144663

Ion	Ratio	Lower	Upper
91	100		
92	57.9	38.5	78.5

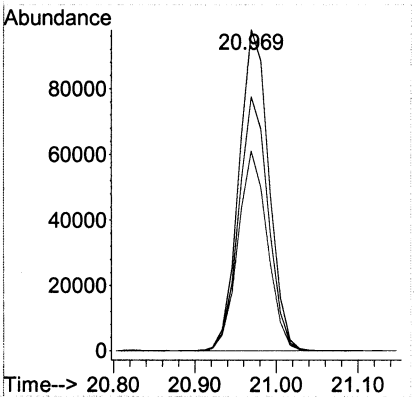




#47
Tetrachloroethene
Concen: 4.42 ppbv
RT: 20.969 min Scan# 1467
Delta R.T. 0.000 min
Lab File: 053014AN24.D
Acq: 31 May 2014 10:31

Tgt Ion:166 Resp: 251508

Ion	Ratio	Lower	Upper
166	100		
164	77.7	57.0	97.0
131	60.7	41.3	81.3



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN25.D
Acq On : 31 May 2014 11:19 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-11RE1
Misc : 20mL
ALS Vial : 46
Multiplier: 2.23

Quant Time: Jun 03 09:59:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	310157	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.506	114	1902293	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1476932	22.00 ppbv	-0.01

Target Compounds					Qvalue
18) Dichloromethane	11.565	49	7993	0.511 ppbv #	11
24) cis-1,2-Dichloroethene	15.004	61	14566	0.758 ppbv	95
28) Chloroform	15.692	83	103885	2.402 ppbv	99
37) Trichloroethene	17.921	130	110680	3.430 ppbv	98

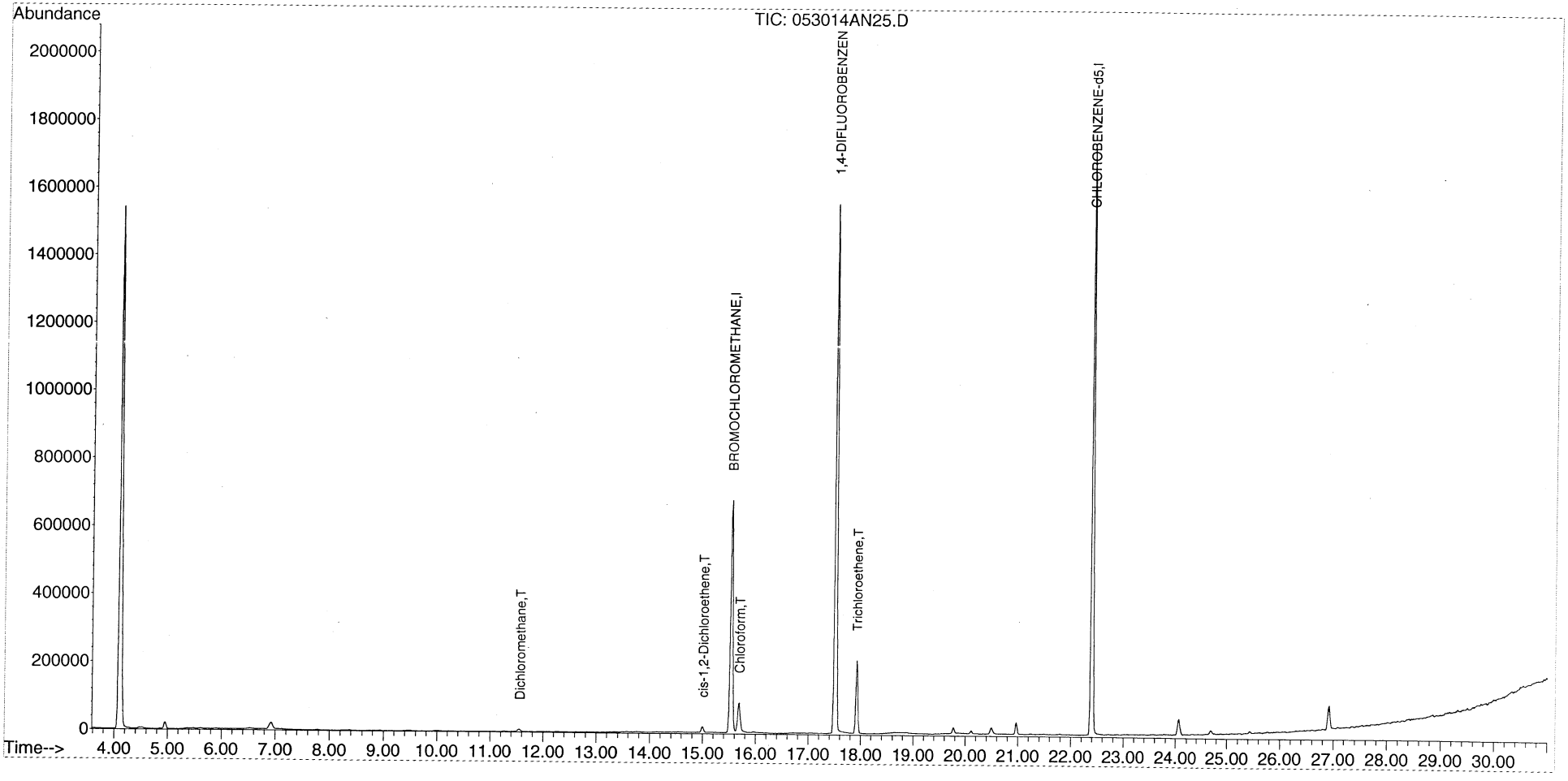
(#) = qualifier out of range (m) = manual integration (+) = signals summed

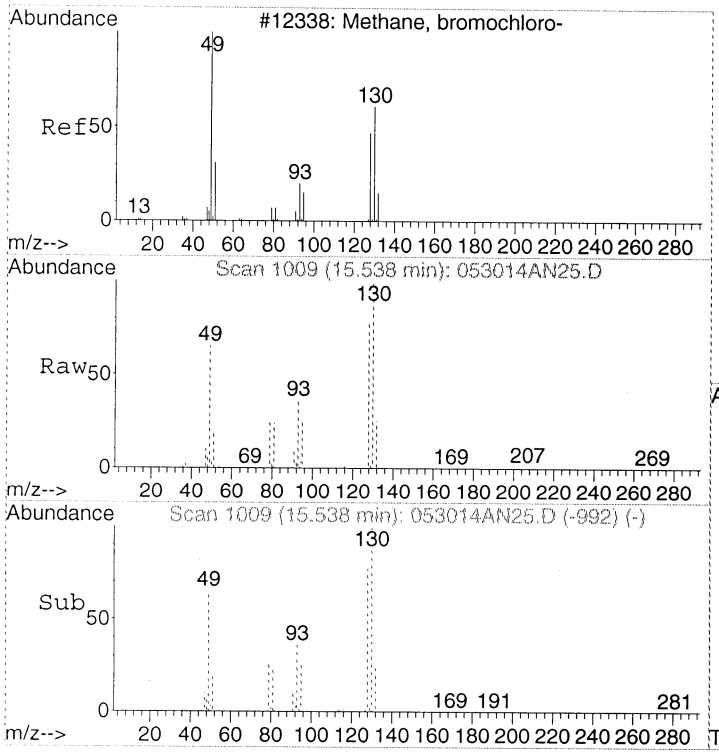
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN25.D
Acq On : 31 May 2014 11:19 am
Instrument: AG5973N
Operator : EM
Sample : 1405053-11RE1
Misc : 20mL
ALS Vial : 46
Multiplier: 2.23

Quant Time: Jun 03 09:59:28 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

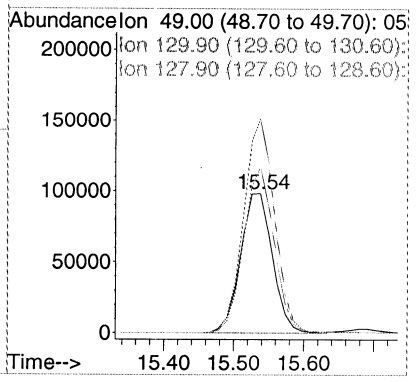


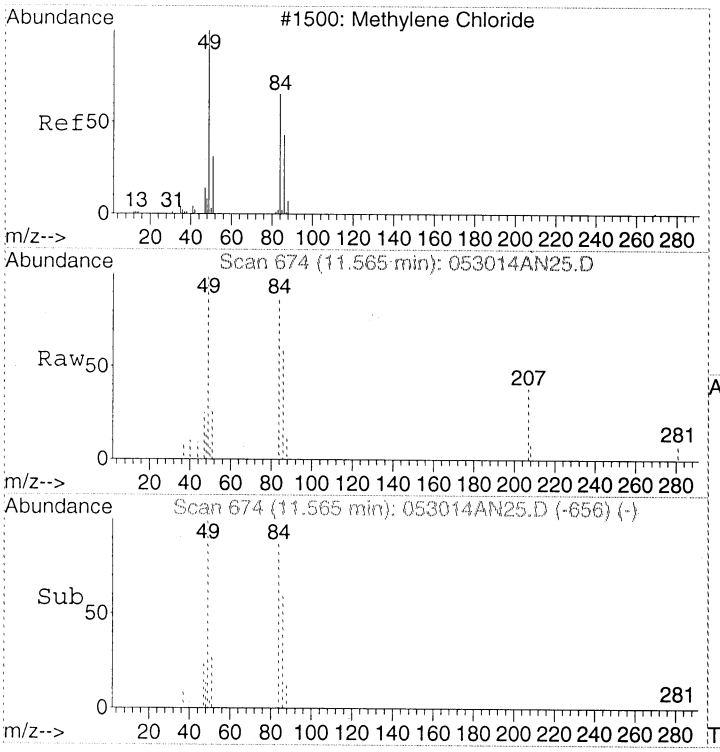


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion: 49 Resp: 310157

Ion	Ratio	Lower	Upper
49	100		
130	149.1	125.1	165.1
128	114.2	91.6	131.6

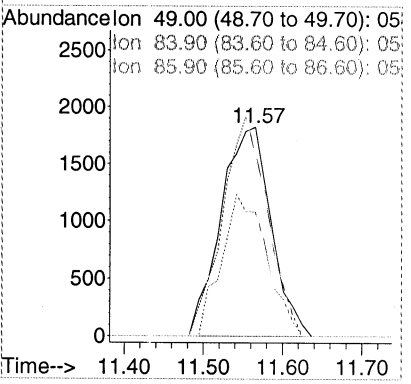


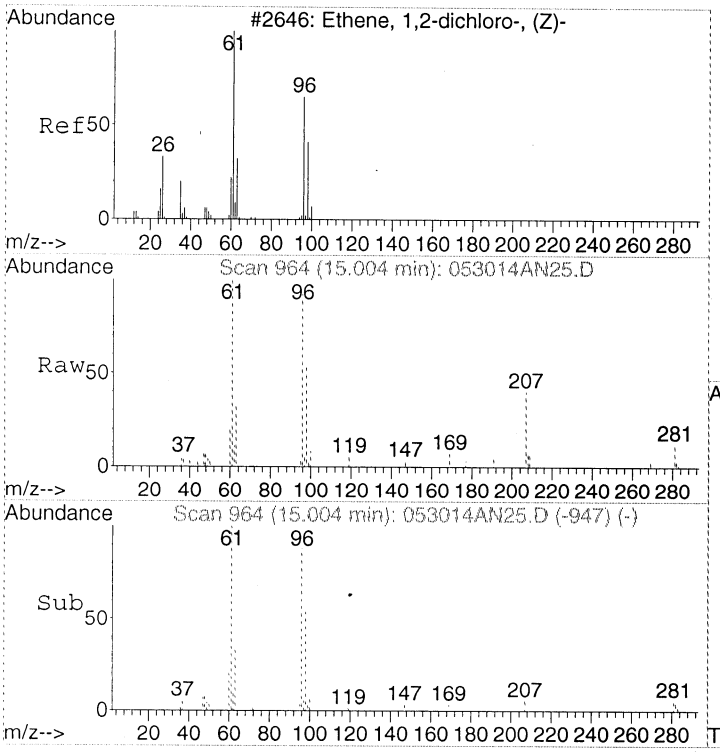


#18
Dichloromethane
Concen: 0.51 ppbv
RT: 11.57 min Scan# 674
Delta R.T. 0.01 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion: 49 Resp: 7993

Ion	Ratio	Lower	Upper
49	100		
84	0.0	69.9	109.9#
86	0.0	38.3	78.3#

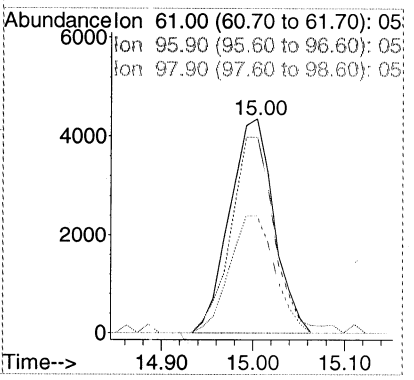


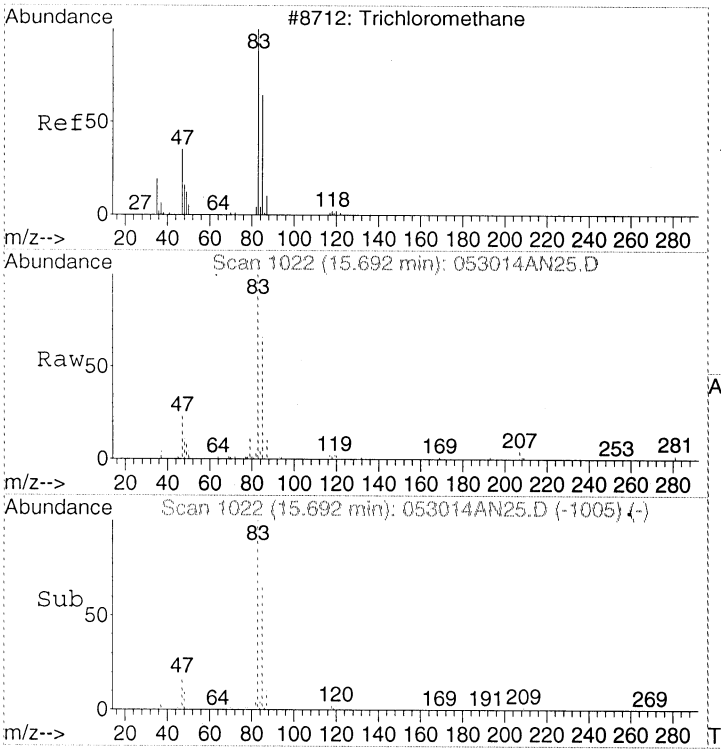


#24
cis-1,2-Dichloroethene
Concen: 0.76 ppbv
RT: 15.00 min Scan# 964
Delta R.T. -0.00 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion: 61 Resp: 14566

Ion	Ratio	Lower	Upper
61	100		
96	91.5	65.5	105.5
98	56.0	34.8	74.8

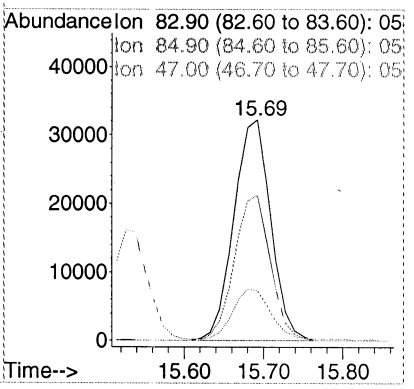




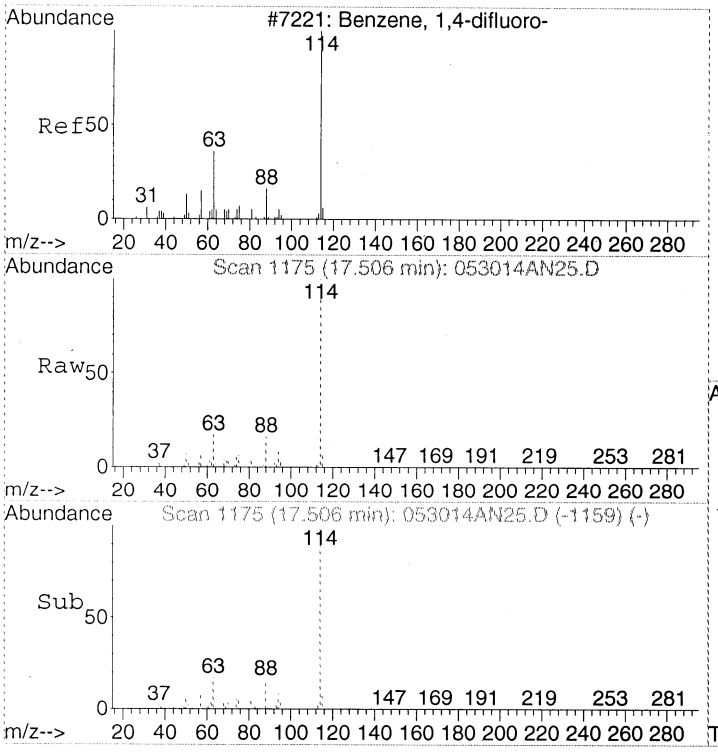
#28
Chloroform
Concen: 2.40 ppbv
RT: 15.69 min Scan# 1022
Delta R.T. -0.00 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion: 83 Resp: 103885

Ion	Ratio	Lower	Upper
83	100		
85	64.2	45.0	85.0
47	23.4	3.2	43.2



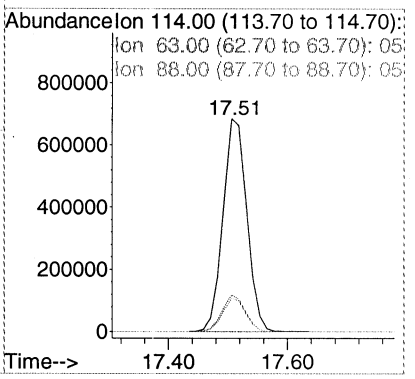
00253

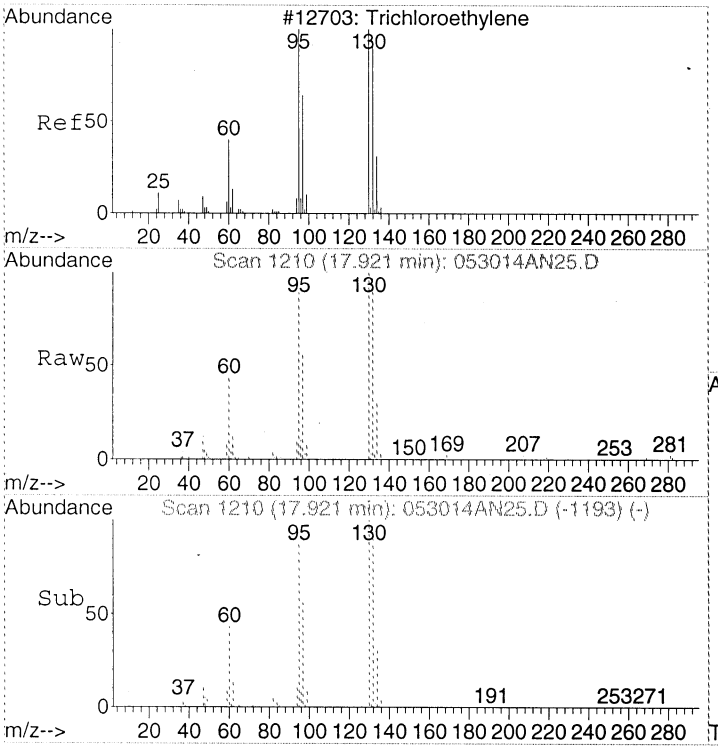


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion:114 Resp: 1902293

Ion	Ratio	Lower	Upper
114	100		
63	16.8	0.0	37.2
88	15.3	0.0	35.6

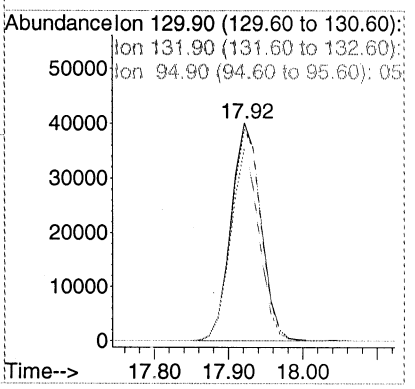




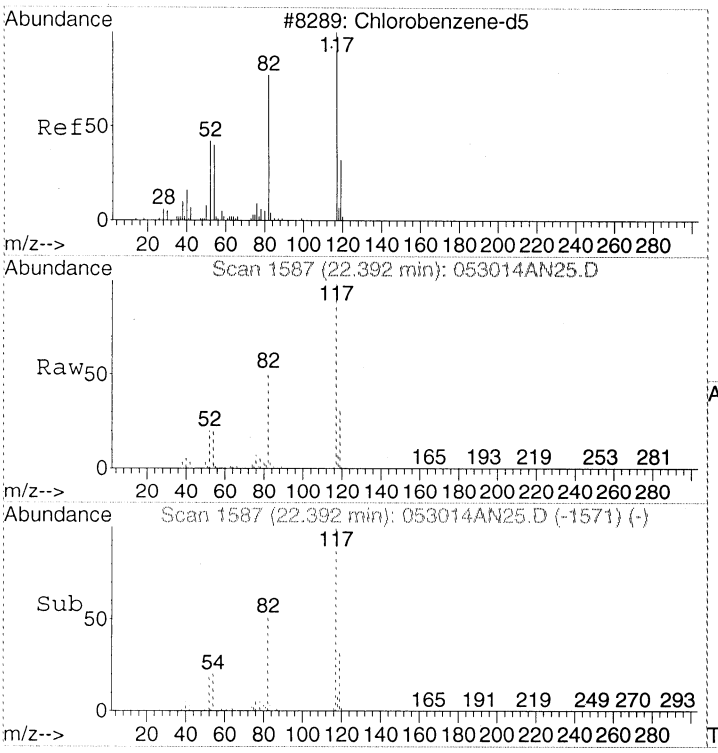
#37
Trichloroethene
Concen: 3.43 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion:130 Resp: 110680

Ion	Ratio	Lower	Upper
130	100		
132	97.3	76.1	116.1
95	84.6	66.3	106.3



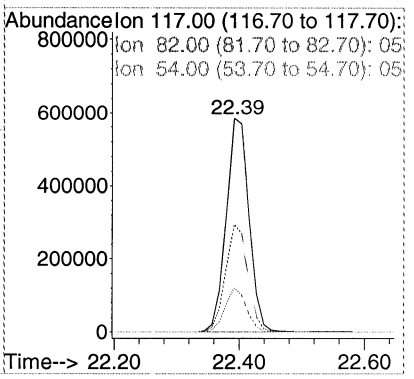
00254



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN25.D
Acq: 31 May 2014 11:19 am

Tgt Ion:117 Resp: 1476932

Ion	Ratio	Lower	Upper
117	100		
82	49.1	30.5	70.5
54	19.4	0.6	40.6



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN26.D
Acq On : 31 May 2014 12:11 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-12
Misc : 200mL
ALS Vial : 47
Multiplier: 2.21

Quant Time: Jun 03 09:59:34 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.538	49	331178	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.518	114	2003547	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.392	117	1628367	22.00	ppbv	-0.01

Target Compounds						Qvalue
2) Propene	4.474	41	16675	2.165	ppbv #	60
6) Vinyl chloride	5.458	62	9258	0.862	ppbv	100
13) 1,1-Dichloroethene	9.490	61	27769	1.003	ppbv	95
14) Acetone	10.024	43	56409	2.658	ppbv	92
15) Carbon disulfide	10.213	76	23277	0.513	ppbv #	91
18) Dichloromethane	11.553	49	19840	1.188	ppbv	97
20) trans-1,2-Dichloroethene	12.253	61	12665	0.500	ppbv	91
22) 1,1-Dichloroethane	13.569	63	16152	0.591	ppbv	95
24) cis-1,2-Dichloroethene	15.004	61	173790	8.471	ppbv	99
28) Chloroform	15.680	83	1117091	24.189	ppbv E	99
37) Trichloroethene	17.921	130	1230376	36.208	ppbv E	98
44) Toluene	20.115	91	146939	2.150	ppbv	99
47) Tetrachloroethene	20.969	166	187676	3.370	ppbv	99

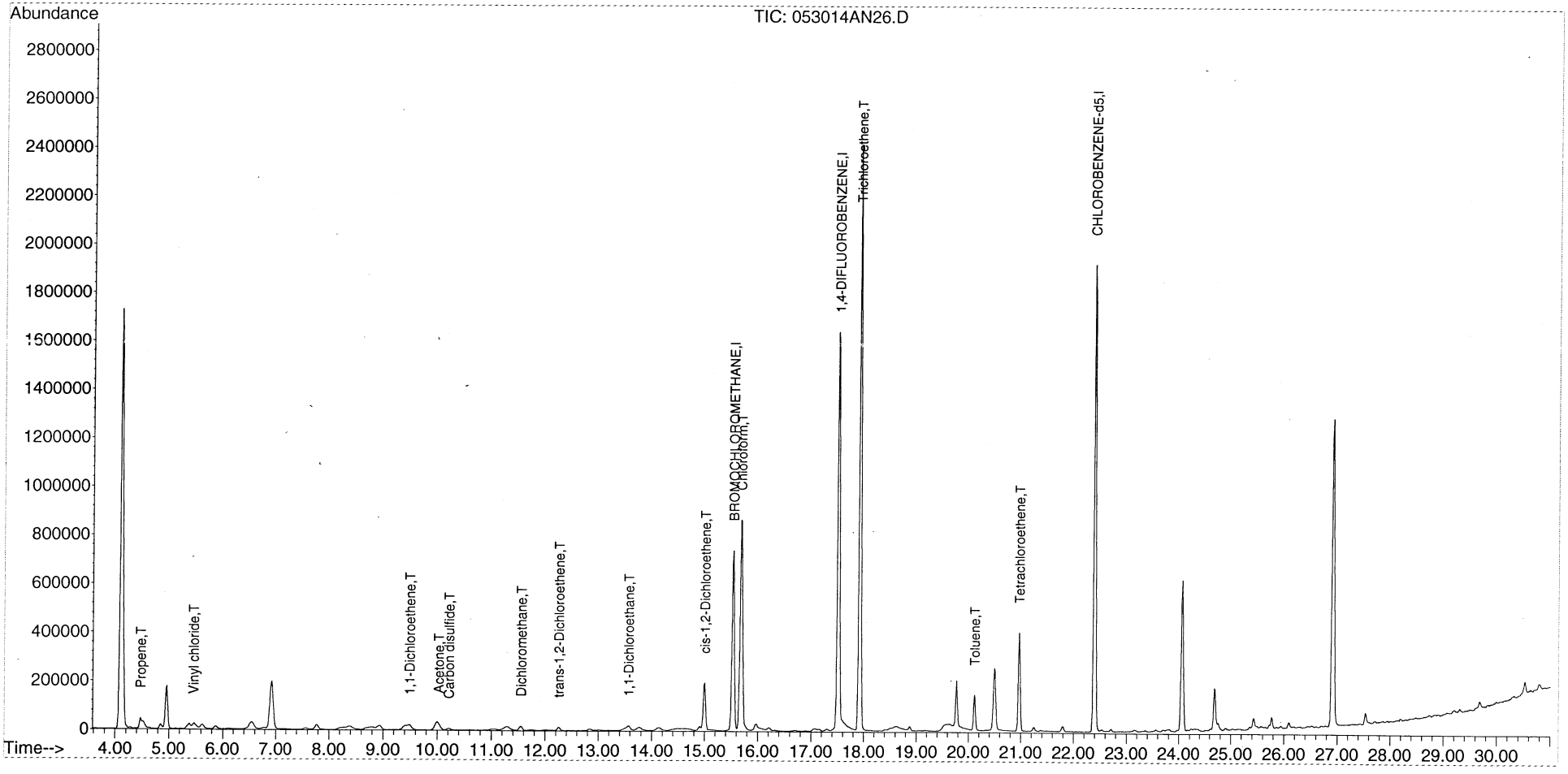
(#) = qualifier out of range (m) = manual integration (+) = signals summed

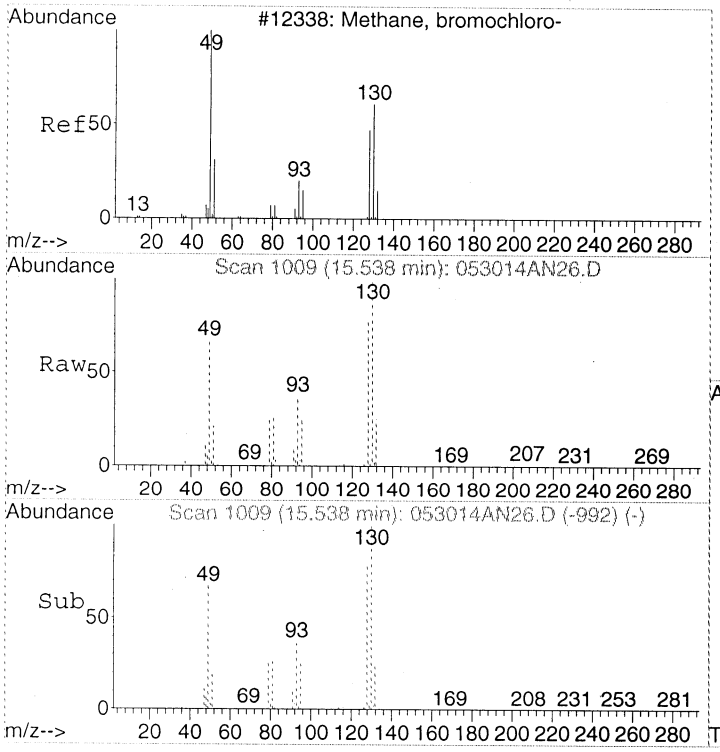
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN26.D
Acq On : 31 May 2014 12:11 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-12
Misc : 200mL
ALS Vial : 47
Multiplier: 2.21

Quant Time: Jun 03 09:59:34 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

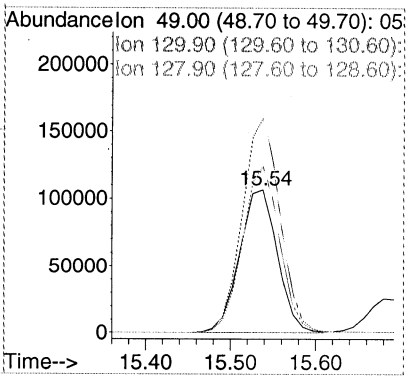


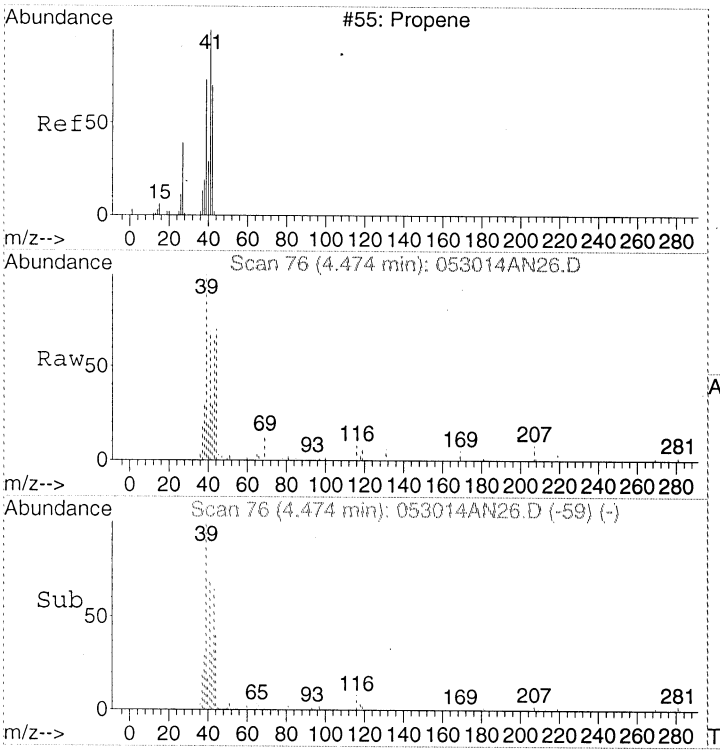


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.54 min Scan# 1009
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 49 Resp: 331178

Ion	Ratio	Lower	Upper
49	100		
130	149.6	125.1	165.1
128	114.4	91.6	131.6

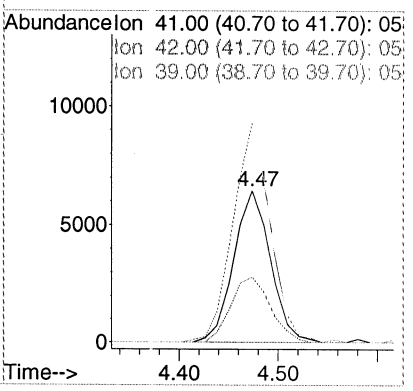


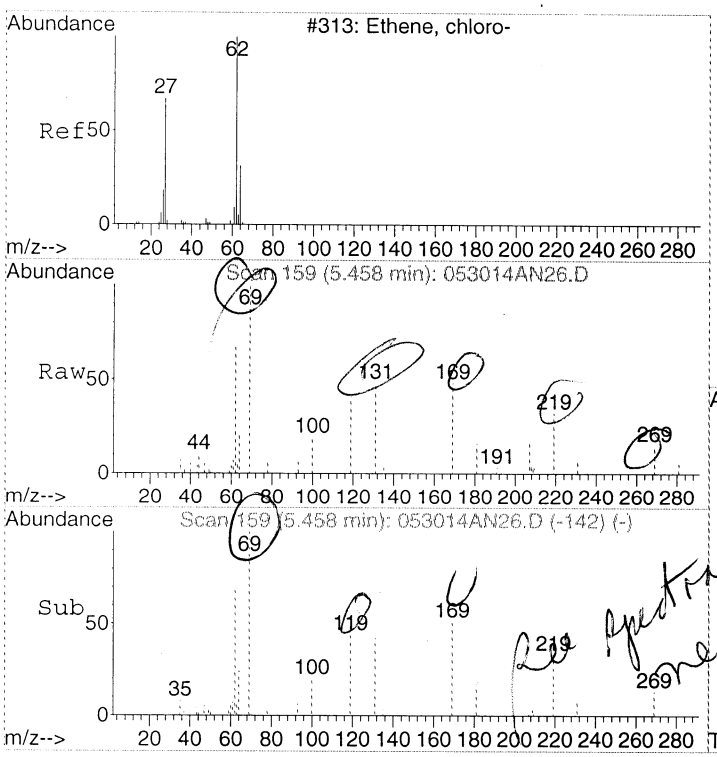


#2
Propene
Concen: 2.16 ppbv
RT: 4.47 min Scan# 76
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 41 Resp: 16675

Ion	Ratio	Lower	Upper
41	100		
42	46.8	44.9	84.9
39	144.9	74.8	114.8#

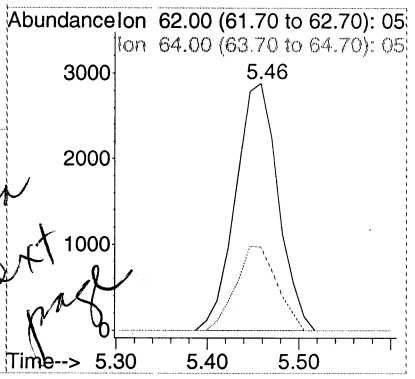




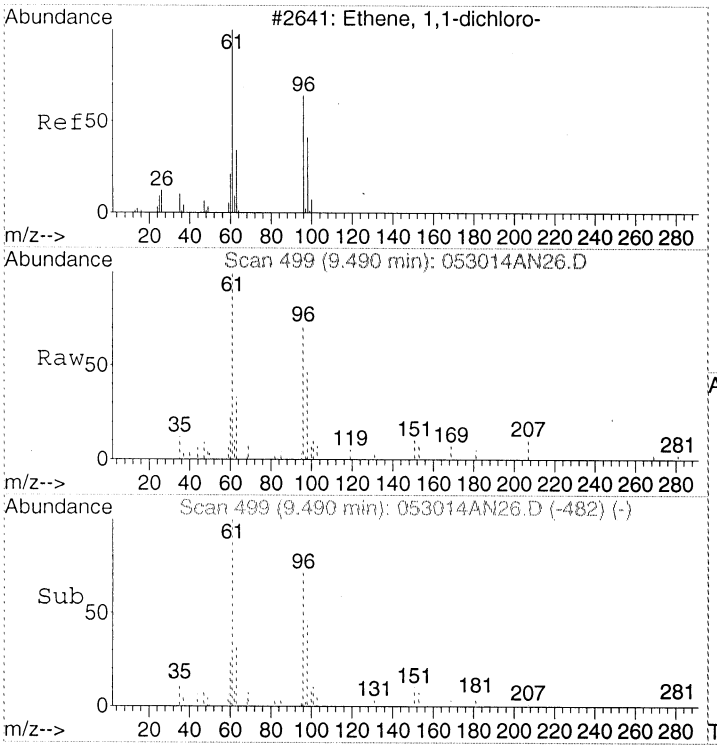
#6
Vinyl chloride
Concen: 0.86 ppbv
RT: 5.46 min Scan# 159
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 62 Resp: 9258

Ion	Ratio	Lower	Upper
62	100		
64	32.8	12.9	52.9



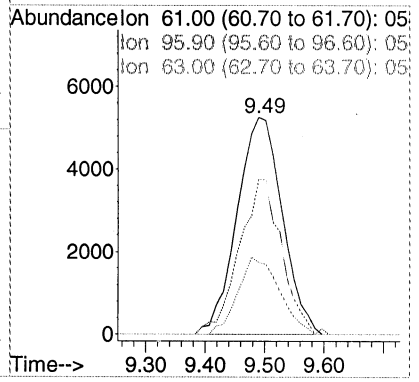
See spectra next page



#13
1,1-Dichloroethene
Concen: 1.00 ppbv
RT: 9.49 min Scan# 499
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 61 Resp: 27769

Ion	Ratio	Lower	Upper
61	100		
96	66.7	41.0	81.0
63	32.6	11.8	51.8

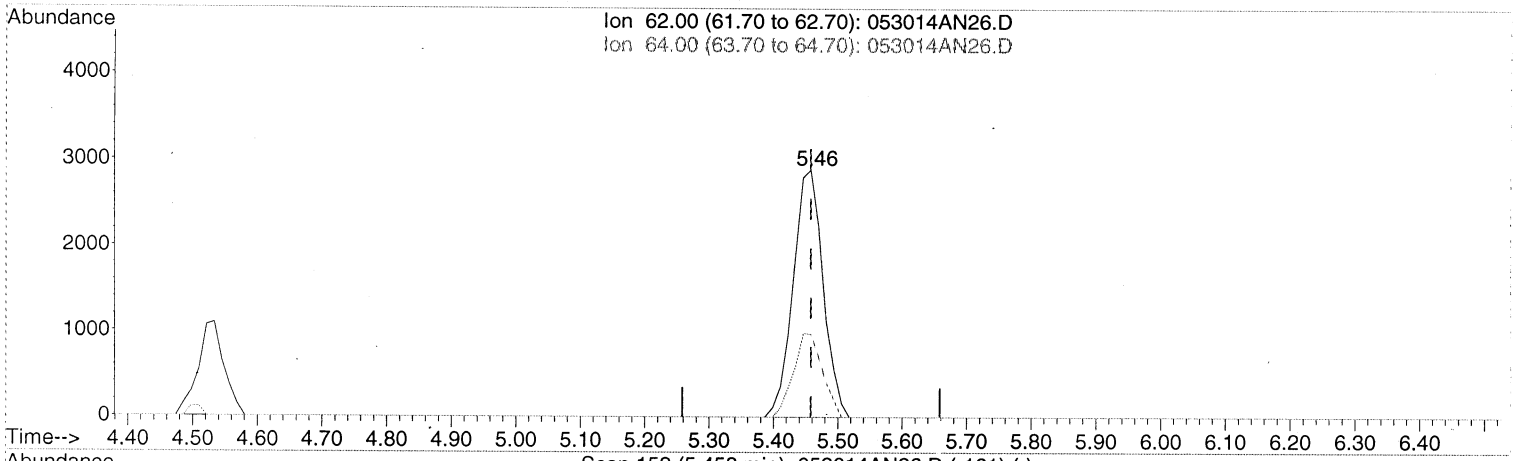


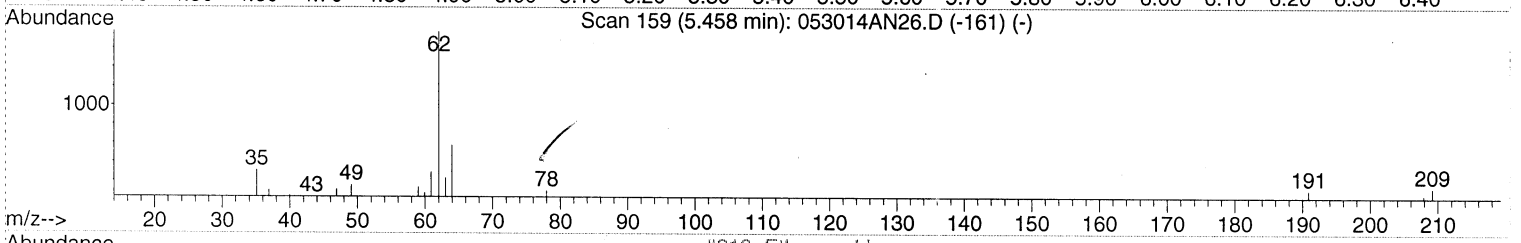
Quantitation Report (Qedit)

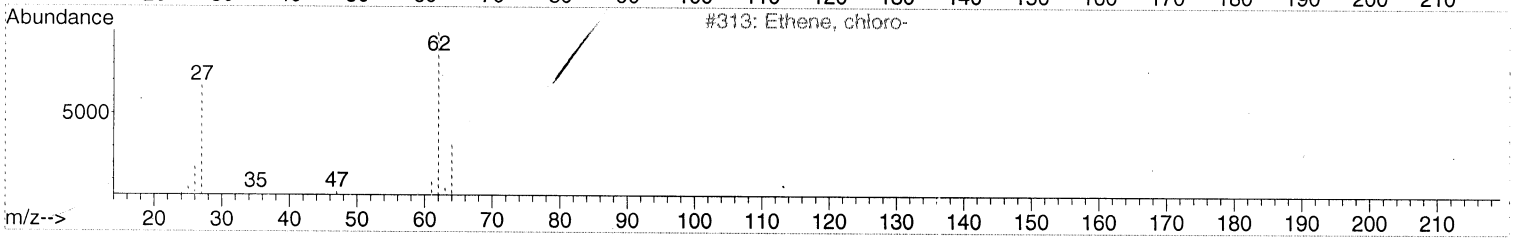
Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN26.D
Acq On : 31 May 2014 12:11 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-12
Misc : 200mL
ALS Vial : 47
Multiplier: 2.21

Quant Time: Jun 03 09:59:34 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M







TIC: 053014AN26.D

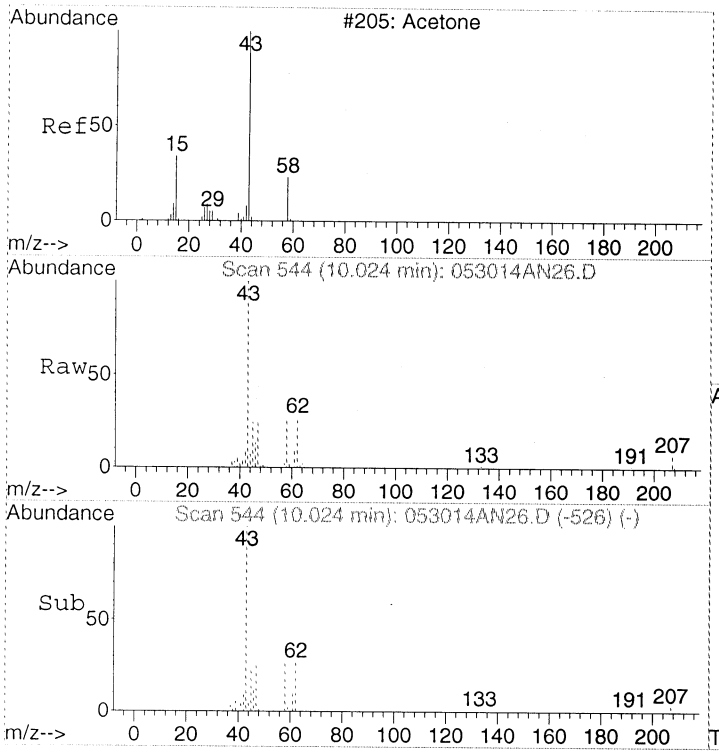
(6) Vinyl chloride (T)

5.458min (-0.000) 0.86ppbv

response 9258

Ion	Exp%	Act%
62.00	100	100
64.00	32.90	32.77
0.00	0.00	0.00
0.00	0.00	0.00

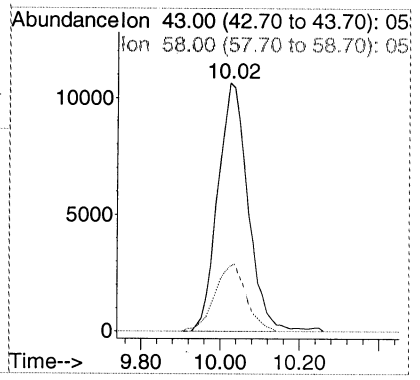
00260

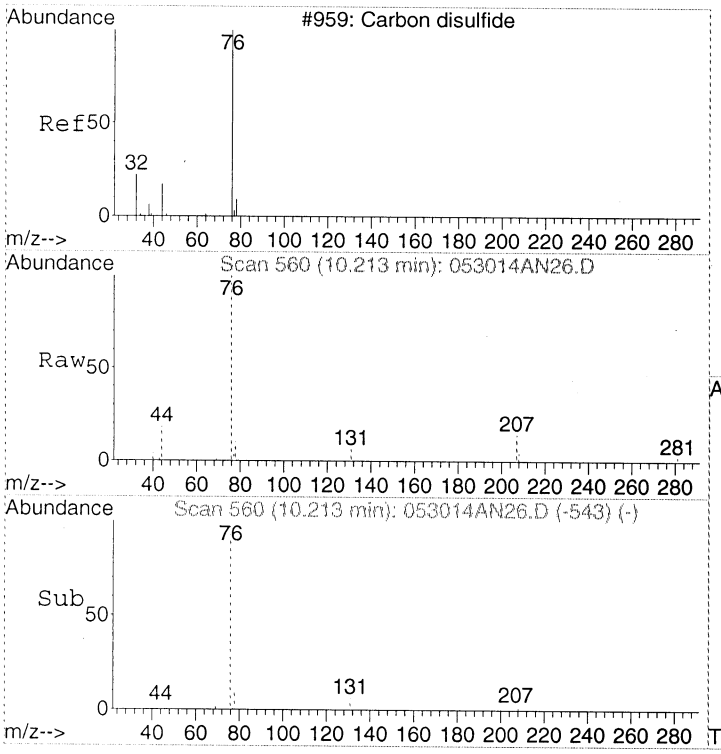


#14
Acetone
Concen: 2.66 ppbv
RT: 10.02 min Scan# 544
Delta R.T. 0.01 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 43 Resp: 56409

Ion	Ratio	Lower	Upper
43	100		
58	27.9	4.2	44.2

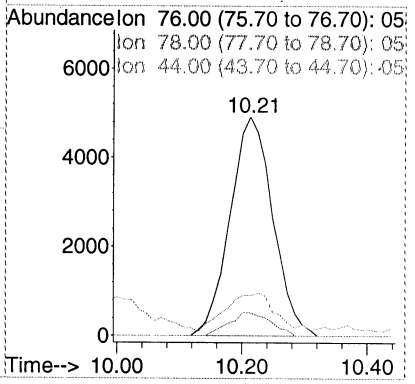




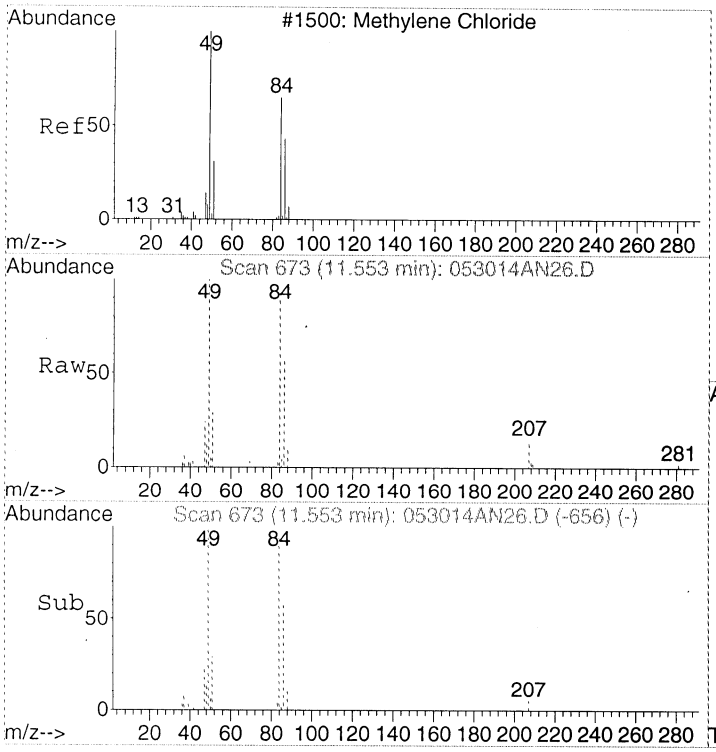
#15
Carbon disulfide
Concen: 0.51 ppbv
RT: 10.21 min Scan# 560
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 76 Resp: 23277

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	29.4
44	19.9	0.0	39.2



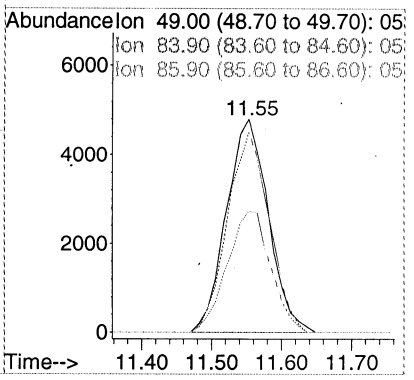
00251

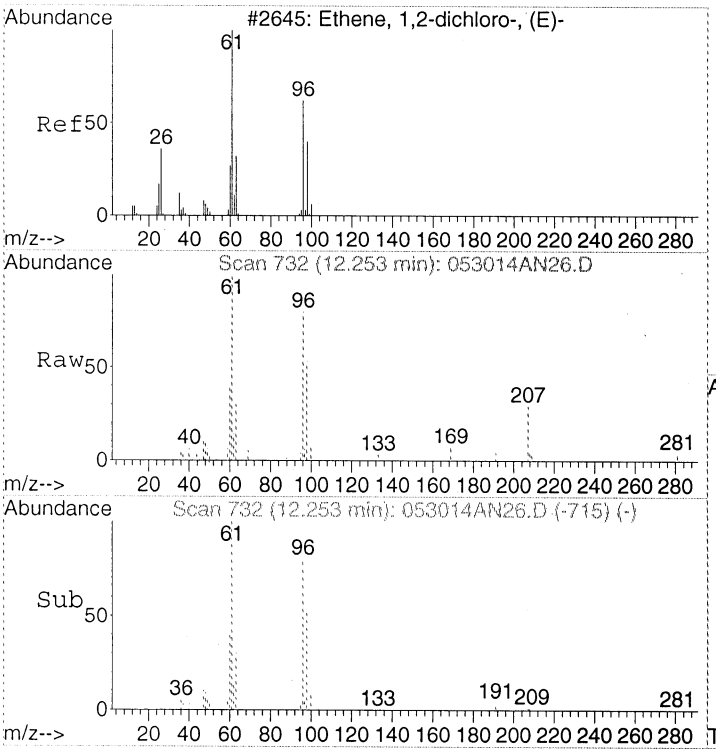


#18
Dichloromethane
Concen: 1.19 ppbv
RT: 11.55 min Scan# 673
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 49 Resp: 19840

Ion	Ratio	Lower	Upper
49	100		
84	93.9	69.9	109.9
86	59.0	38.3	78.3

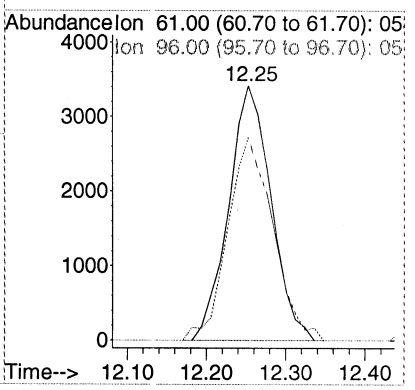




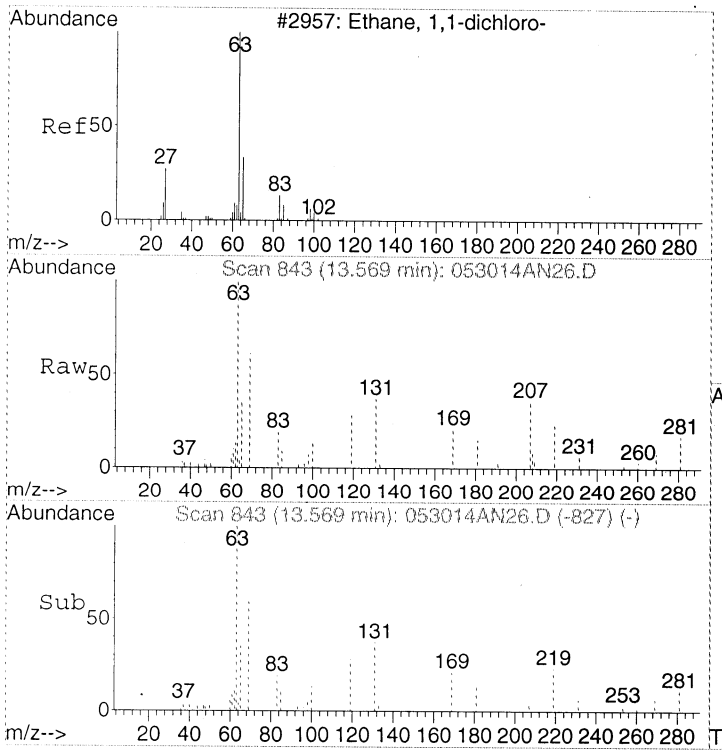
#20
trans-1,2-Dichloroethene
Concen: 0.50 ppbv
RT: 12.25 min Scan# 732
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 61 Resp: 12665

Ion	Ratio	Lower	Upper
61	100		
96	85.2	57.2	97.2



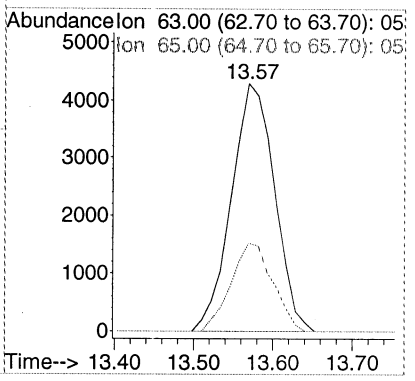
00262

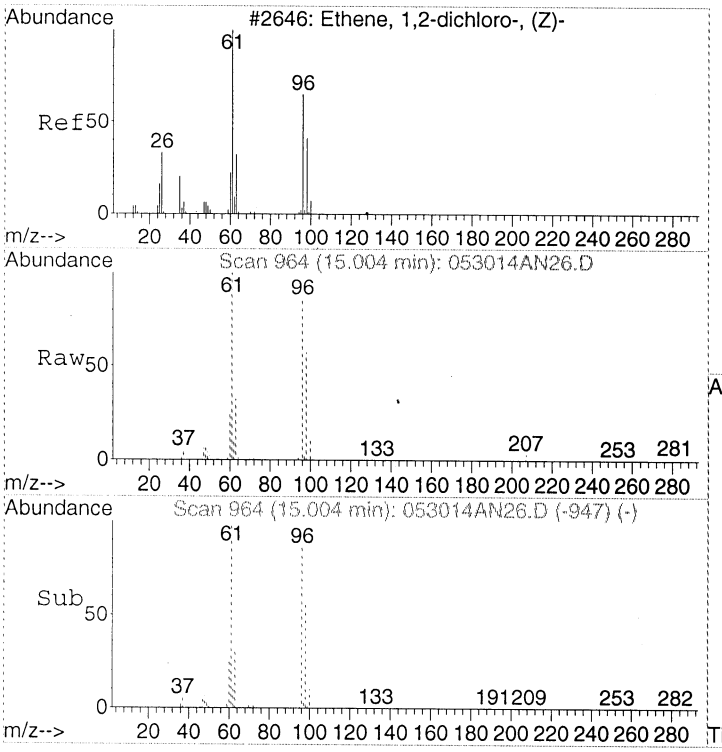


#22
1,1-Dichloroethane
Concen: 0.59 ppbv
RT: 13.57 min Scan# 843
Delta R.T. -0.01 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 63 Resp: 16152

Ion	Ratio	Lower	Upper
63	100		
65	34.2	11.6	51.6

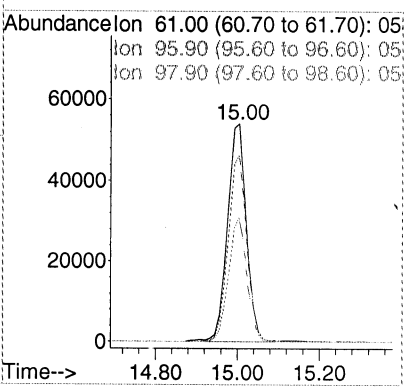


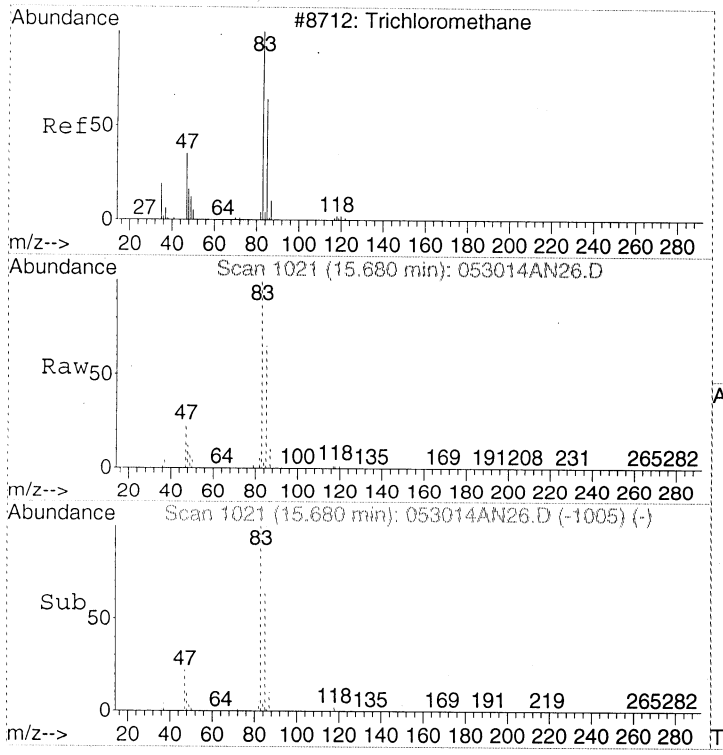


#24
cis-1,2-Dichloroethene
Concen: 8.47 ppbv
RT: 15.00 min Scan# 964
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 61 Resp: 173790

Ion	Ratio	Lower	Upper
61	100		
96	84.5	65.5	105.5
98	54.7	34.8	74.8

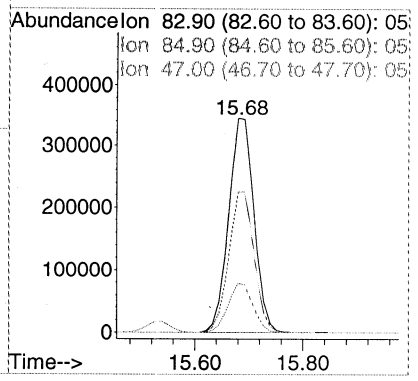


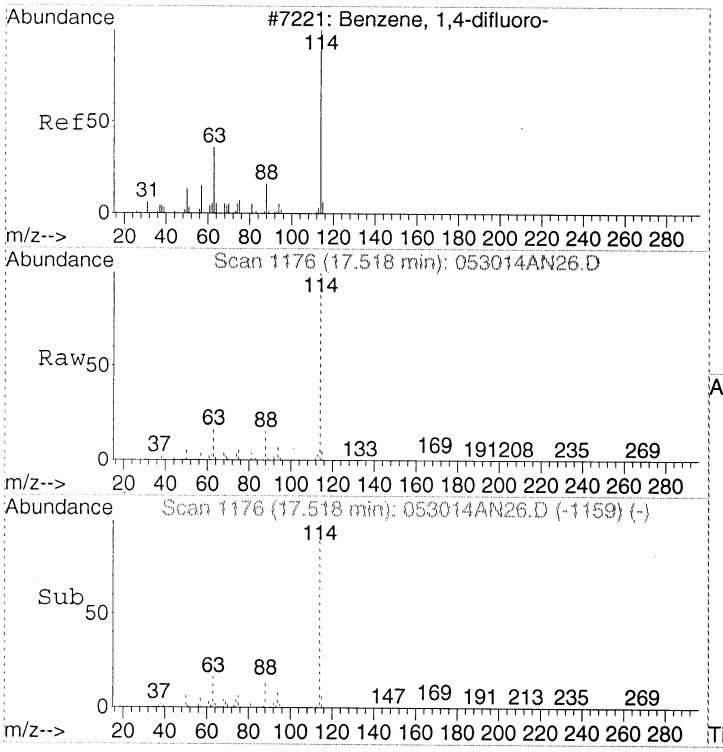


#28
Chloroform
Concen: 24.19 ppbv
RT: 15.68 min Scan# 1021
Delta R.T. -0.01 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 83 Resp: 1117091

Ion	Ratio	Lower	Upper
83	100		
85	65.5	45.0	85.0
47	22.4	3.2	43.2

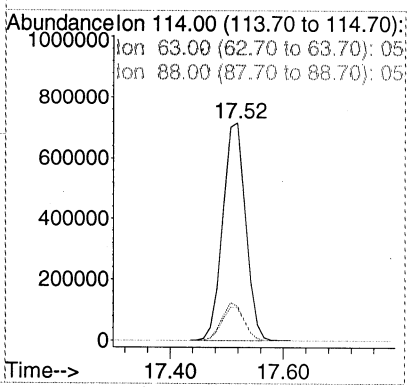




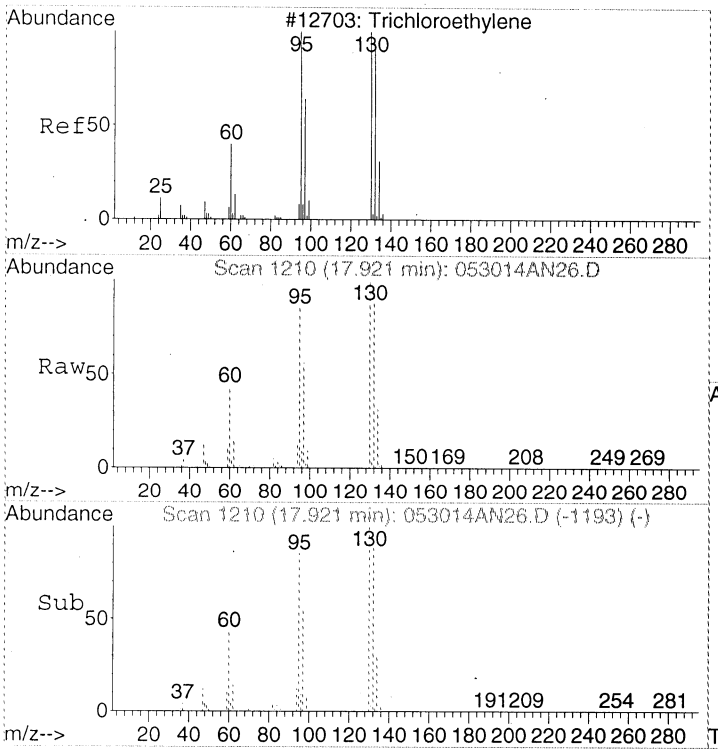
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.52 min Scan# 1176
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion:114 Resp: 2003547

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.3	0.0	35.6



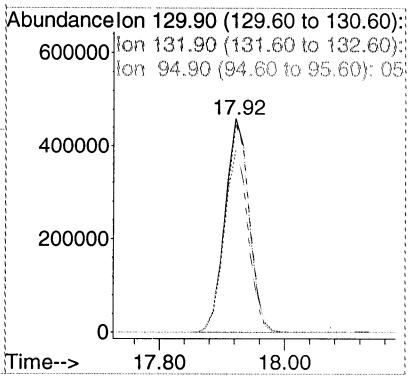
00264

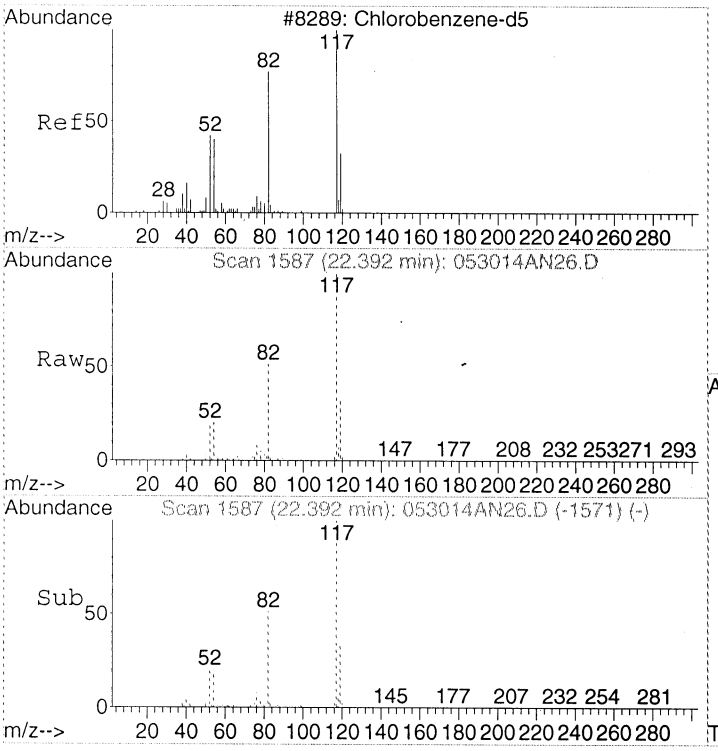


#37
Trichloroethene
Concen: 36.21 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion:130 Resp: 1230376

Ion	Ratio	Lower	Upper
130	100		
132	97.9	76.1	116.1
95	84.9	66.3	106.3

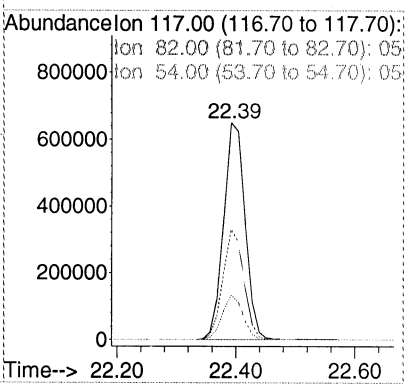


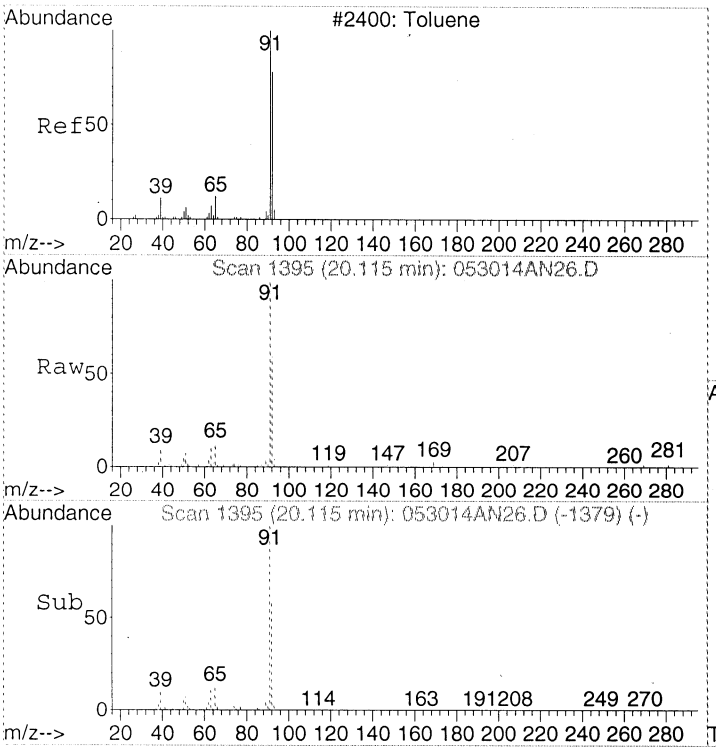


#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion:117 Resp: 1628367

Ion	Ratio	Lower	Upper
117	100		
82	49.5	30.5	70.5
54	19.6	0.6	40.6

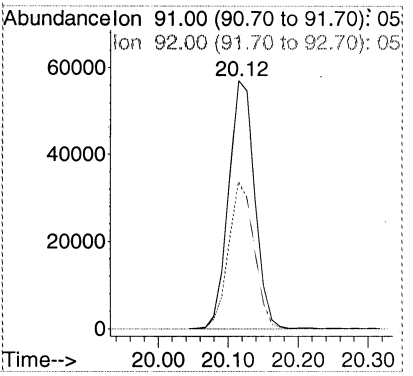


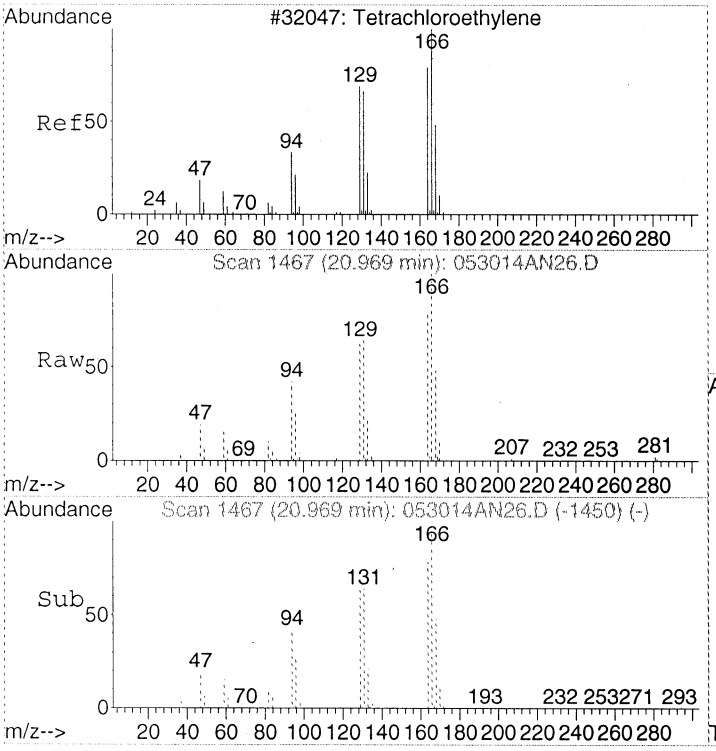


#44
Toluene
Concen: 2.15 ppbv
RT: 20.12 min Scan# 1395
Delta R.T. -0.01 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion: 91 Resp: 146939

Ion	Ratio	Lower	Upper
91	100		
92	57.8	38.5	78.5

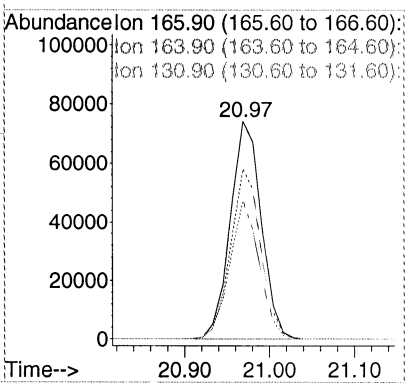




#47
Tetrachloroethene
Concen: 3.37 ppbv
RT: 20.97 min Scan# 1467
Delta R.T. -0.00 min
Lab File: 053014AN26.D
Acq: 31 May 2014 12:11 pm

Tgt Ion:166 Resp: 187676

Ion	Ratio	Lower	Upper
166	100		
164	76.6	57.0	97.0
131	60.7	41.3	81.3



Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN27.D
Acq On : 31 May 2014 1:00 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-12RE1
Misc : 20mL
ALS Vial : 47
Multiplier: 2.21

Quant Time: Jun 03 09:59:46 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	310011	22.00 ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.507	114	1900642	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1449013	22.00 ppbv	-0.01

Target Compounds					Qvalue
18) Dichloromethane	11.554	49	7741	0.495 ppbv	93
24) cis-1,2-Dichloroethene	14.993	61	9697	0.505 ppbv	90
28) Chloroform	15.680	83	69756	1.614 ppbv	97
37) Trichloroethene	17.922	130	72356	2.245 ppbv	99

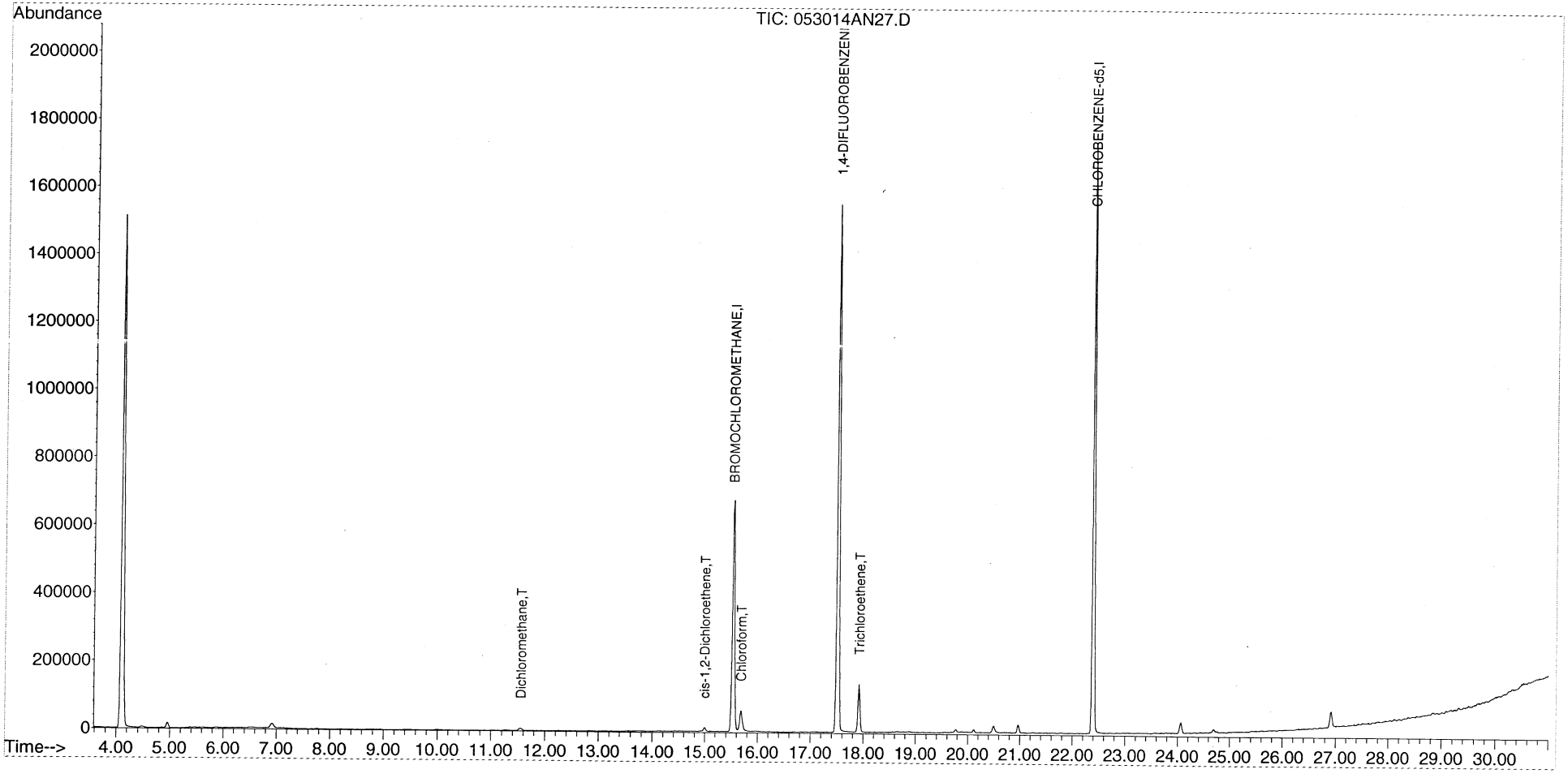
(#) = qualifier out of range (m) = manual integration (+) = signals summed

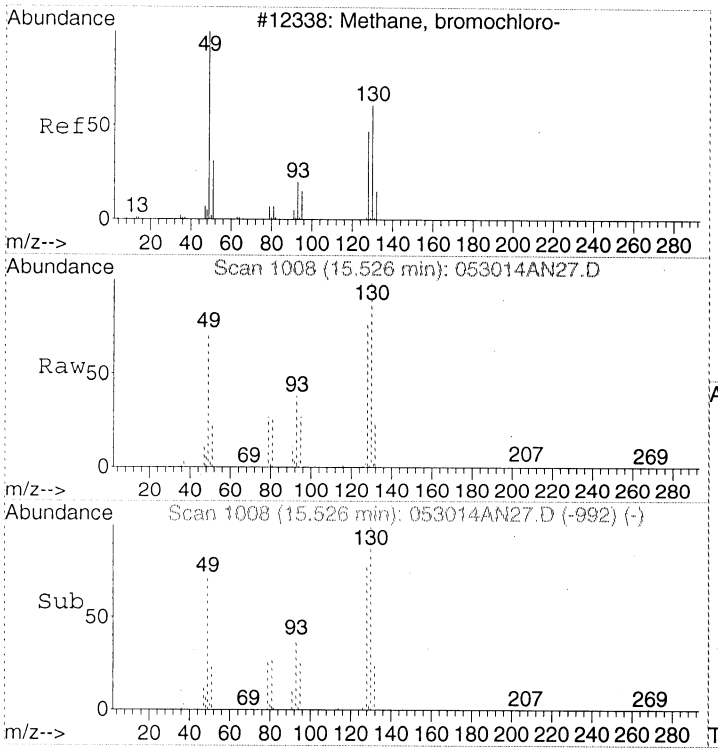
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN27.D
Acq On : 31 May 2014 1:00 pm
Instrument: AG5973N
Operator : EM
Sample : 1405053-12RE1
Misc : 20mL
ALS Vial : 47
Multiplier: 2.21

Quant Time: Jun 03 09:59:46 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

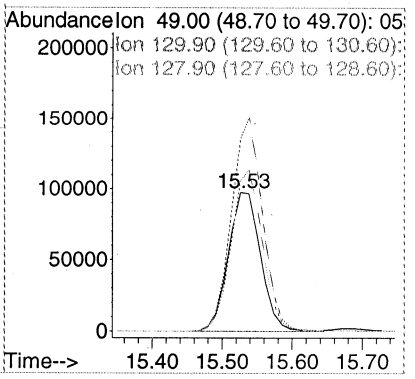


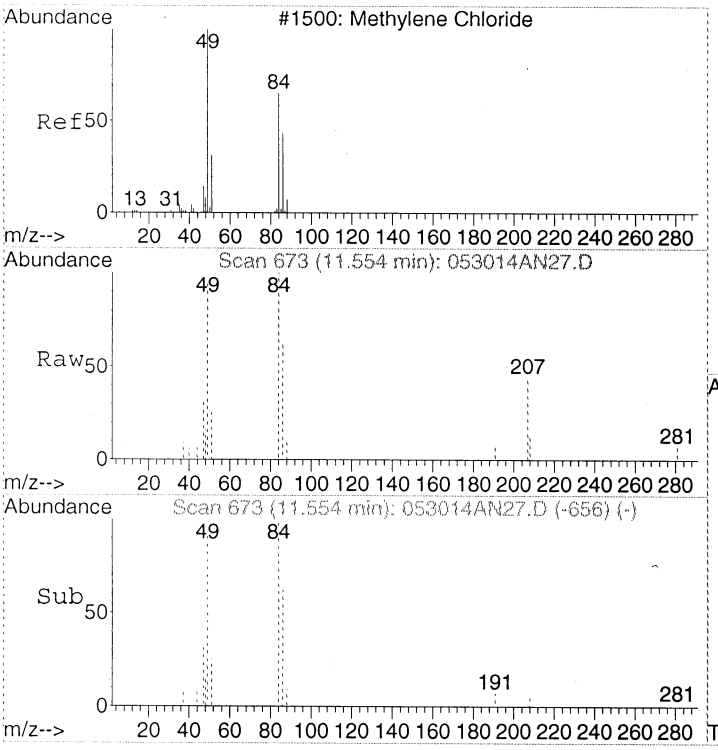


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. -0.01 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion: 49 Resp: 310011

Ion	Ratio	Lower	Upper
49	100		
130	148.8	125.1	165.1
128	113.6	91.6	131.6

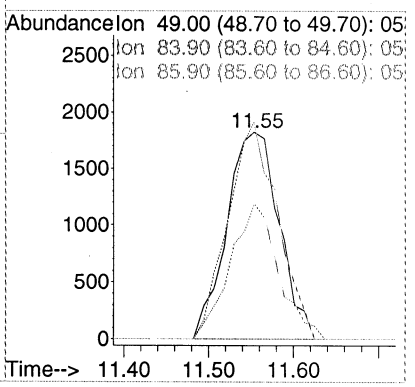


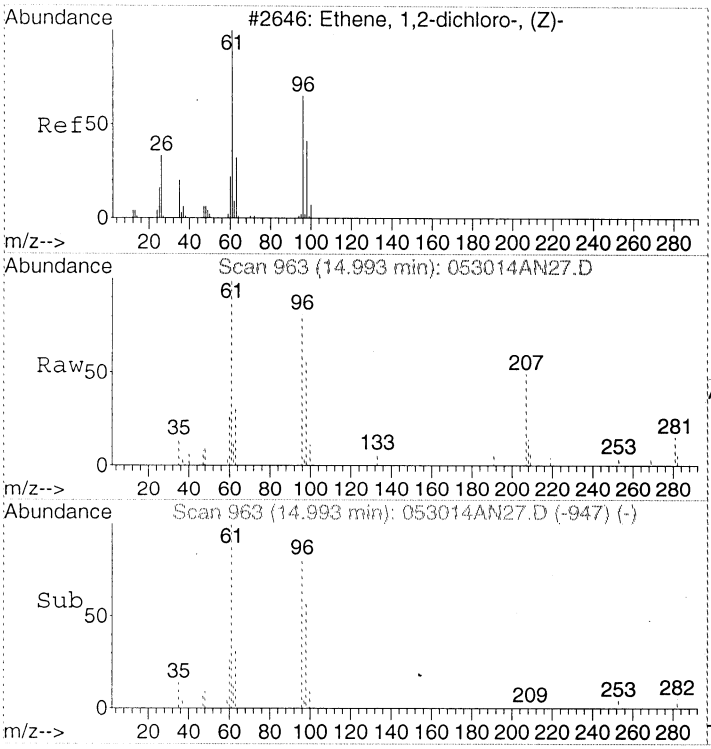


#18
Dichloromethane
Concen: 0.50 ppbv
RT: 11.55 min Scan# 673
Delta R.T. 0.00 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion: 49 Resp: 7741

Ion	Ratio	Lower	Upper
49	100		
84	99.8	69.9	109.9
86	60.2	38.3	78.3

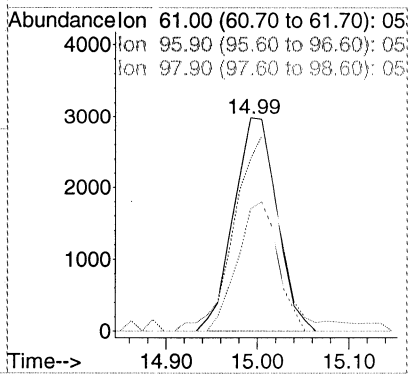


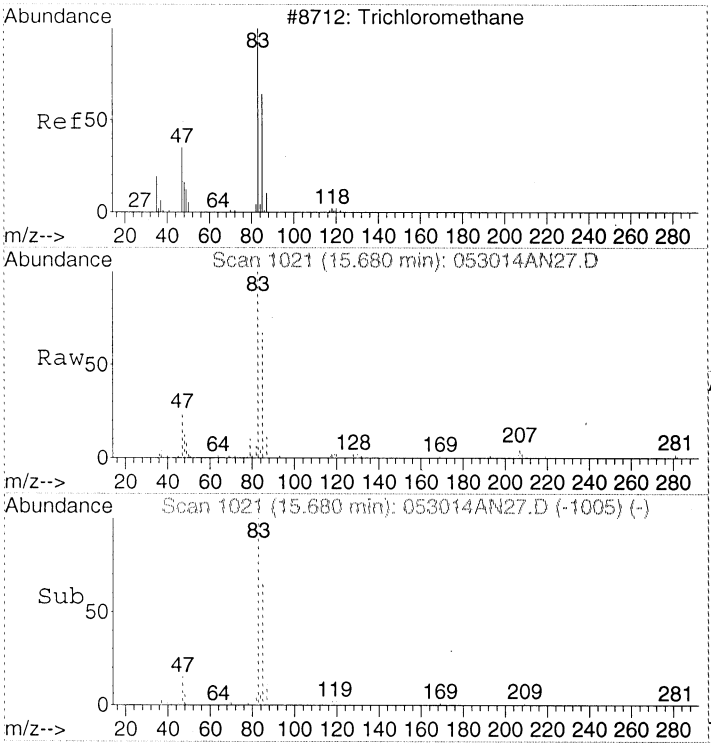


#24
cis-1,2-Dichloroethene
Concen: 0.50 ppbv
RT: 14.99 min Scan# 963
Delta R.T. -0.01 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion: 61 Resp: 9697

Ion	Ratio	Lower	Upper
61	100		
96	99.8	65.5	105.5
98	56.6	34.8	74.8

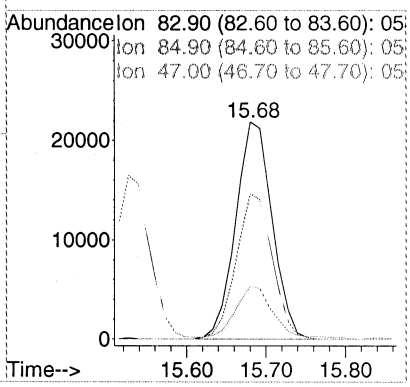


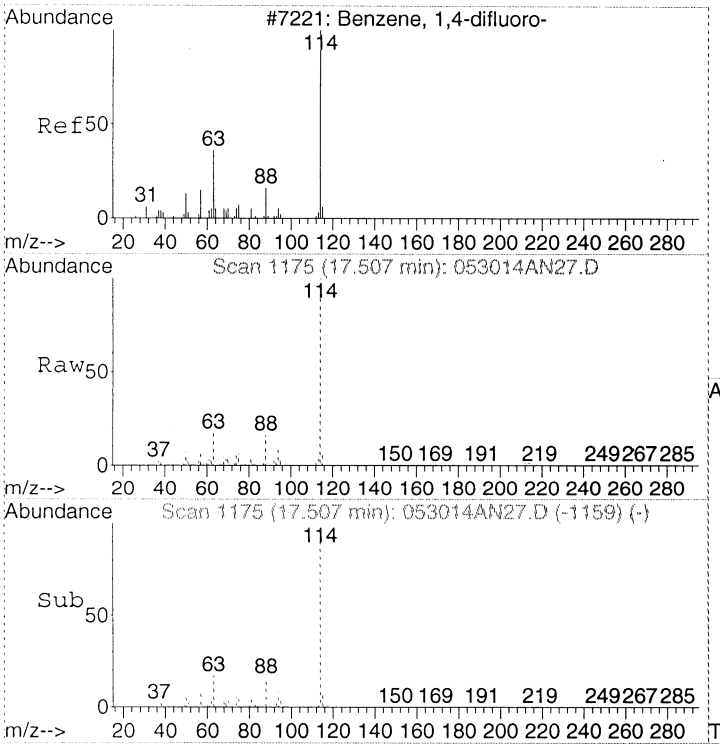


#28
Chloroform
Concen: 1.61 ppbv
RT: 15.68 min Scan# 1021
Delta R.T. -0.01 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion: 83 Resp: 69756

Ion	Ratio	Lower	Upper
83	100		
85	66.3	45.0	85.0
47	25.8	3.2	43.2

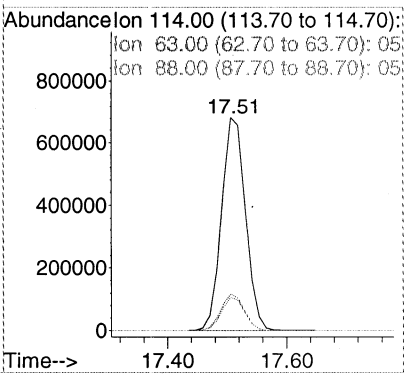


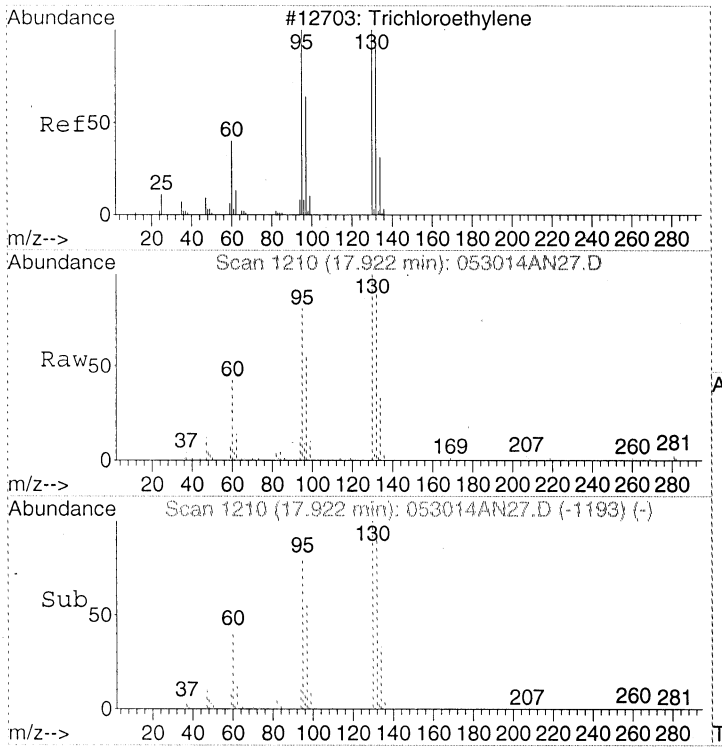


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion:114 Resp: 1900642

Ion	Ratio	Lower	Upper
114	100		
63	16.7	0.0	37.2
88	15.1	0.0	35.6

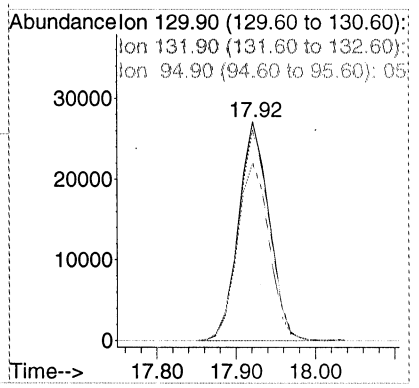




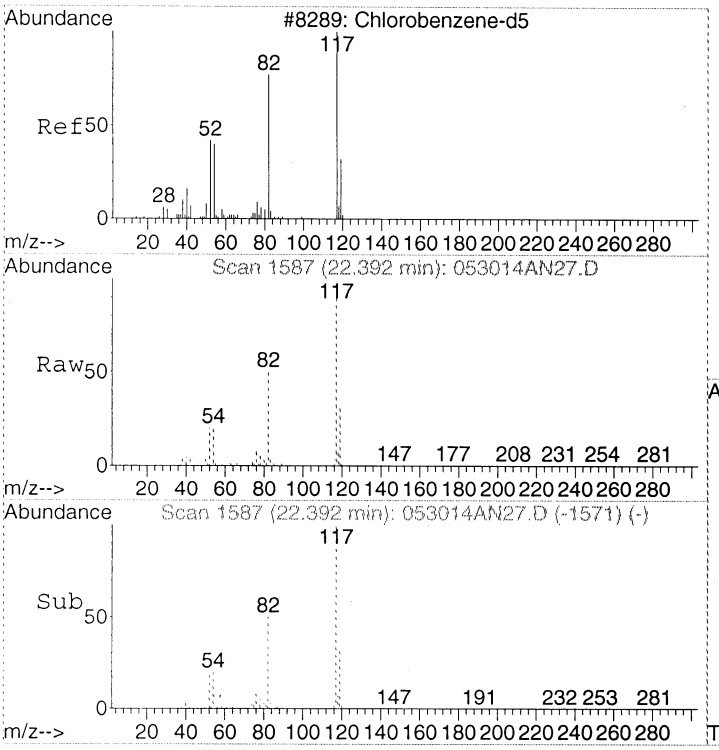
#37
Trichloroethene
Concen: 2.24 ppbv
RT: 17.92 min Scan# 1210
Delta R.T. 0.00 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion:130 Resp: 72356

Ion	Ratio	Lower	Upper
130	100		
132	96.8	76.1	116.1
95	85.3	66.3	106.3



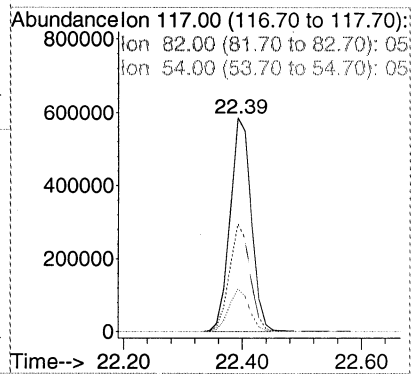
00271



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN27.D
Acq: 31 May 2014 1:00 pm

Tgt Ion:117 Resp: 1449013

Ion	Ratio	Lower	Upper
117	100		
82	49.2	30.5	70.5
54	19.4	0.6	40.6



00272

Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN28.D
Acq On : 31 May 2014 1:51 pm
Instrument: AG5973N
Operator : EM
Sample : IBL
Misc : 200mL
ALS Vial : 48
Multiplier: 1

Quant Time: Jun 03 09:59:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) BROMOCHLOROMETHANE	15.526	49	317775	22.00 ppbv	-0.01
32) 1,4-DIFLUOROBENZENE	17.506	114	1938317	22.00 ppbv	-0.01
43) CHLOROBENZENE-d5	22.392	117	1531582	22.00 ppbv	-0.01

Target Compounds					Qvalue
14) Acetone	10.036	43	19814	0.973 ppbv	99

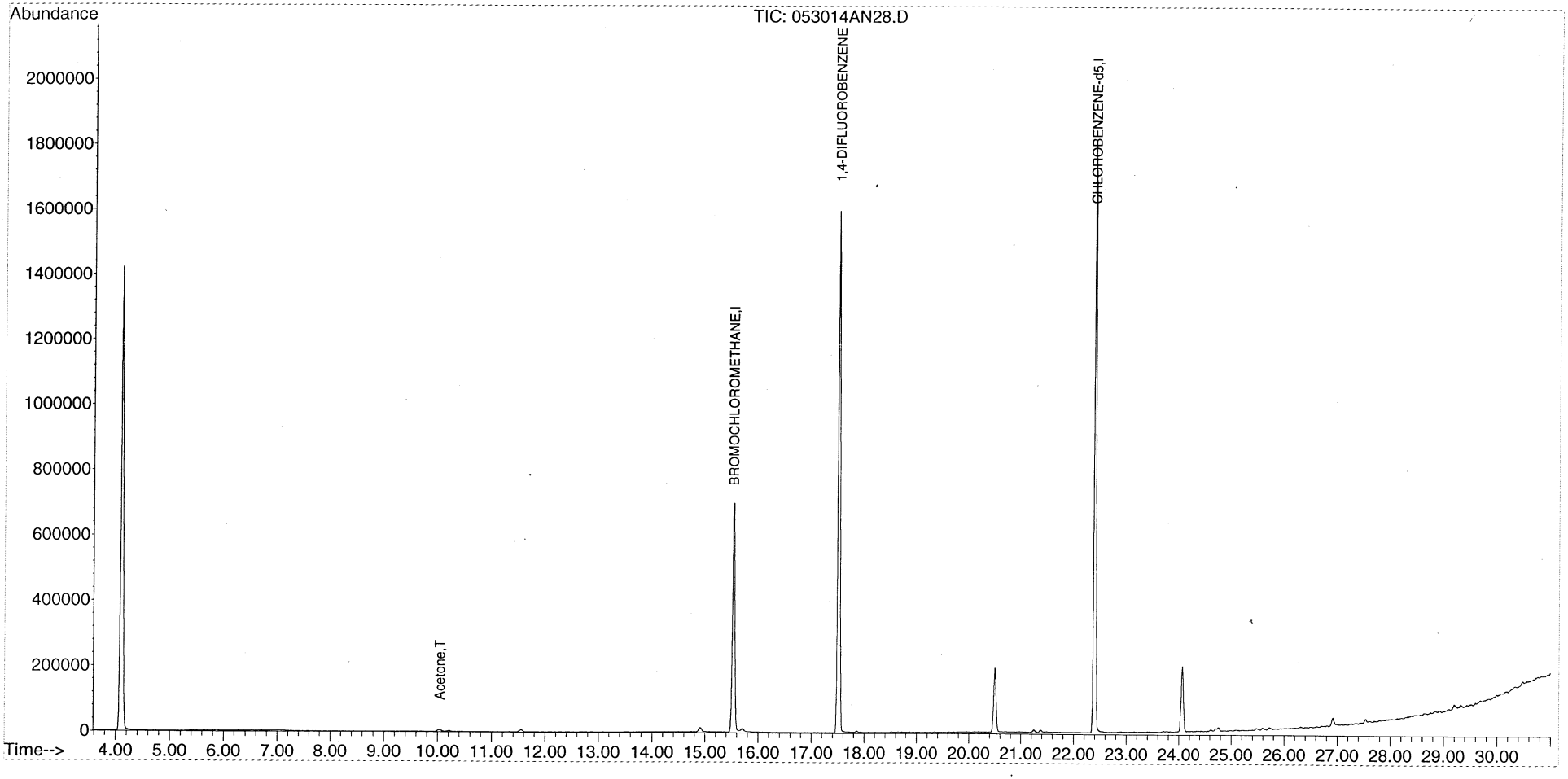
(#) = qualifier out of range (m) = manual integration (+) = signals summed

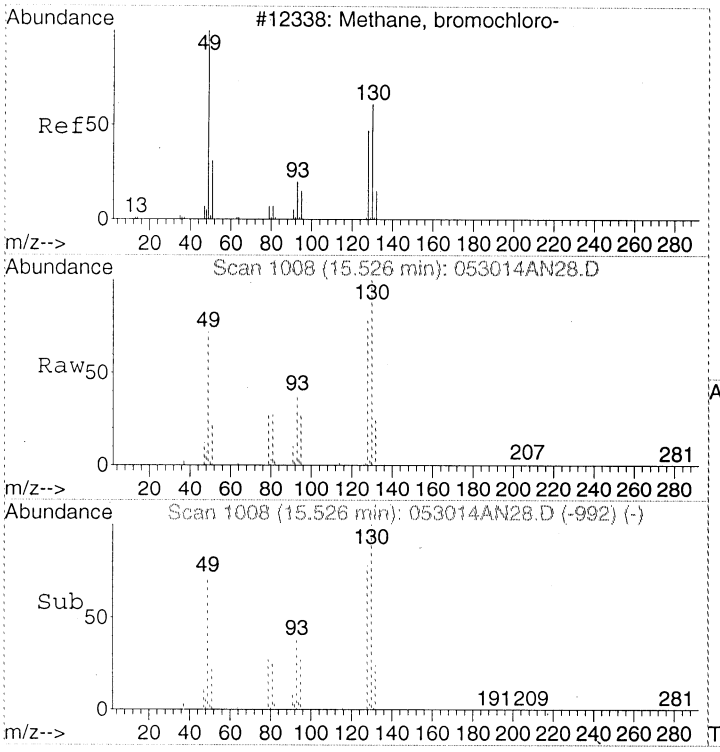
Quantitation Report (Not Reviewed)

Data Path : D:\MSDCHEM\1\2014\DATA\053014TO15NA\
Data File : 053014AN28.D
Acq On : 31 May 2014 1:51 pm
Instrument: AG5973N
Operator : EM
Sample : IBL
Misc : 200mL
ALS Vial : 48
Multiplier: 1

Quant Time: Jun 03 09:59:52 2014
Quant Title : TO15
QLast Update : Thu May 08 09:55:23 2014
Response via : Initial Calibration

DataAcq Meth:053014TO15HNAA.M
Quant Method : D:\MSDCHEM\1\2014\METHOD\050714TO15HNAA.M

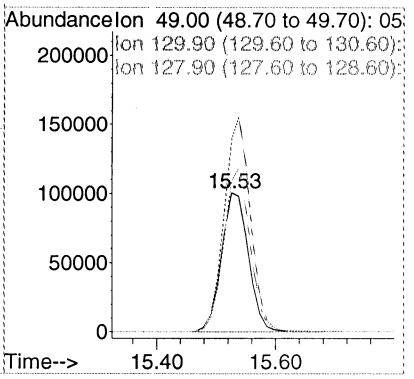


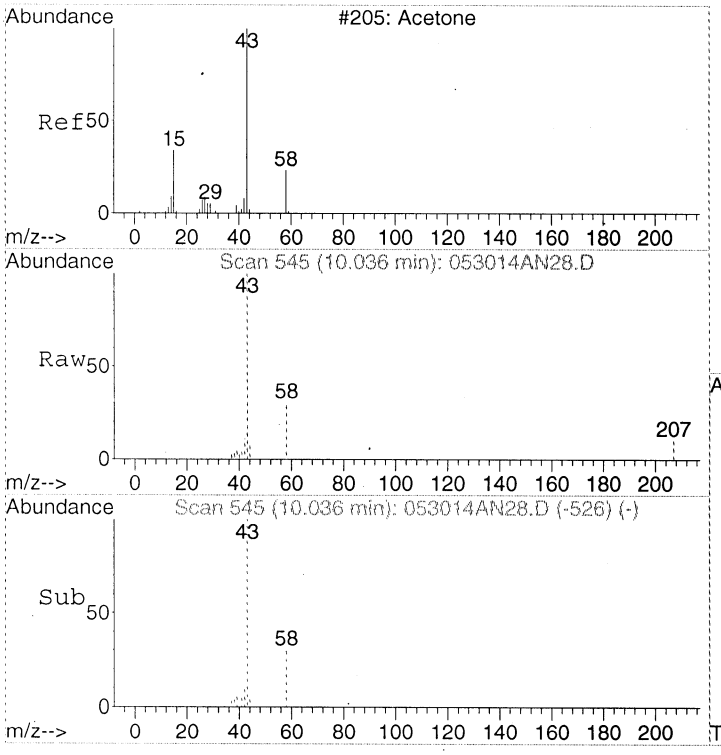


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.53 min Scan# 1008
Delta R.T. -0.01 min
Lab File: 053014AN28.D
Acq: 31 May 2014 1:51 pm

Tgt Ion: 49 Resp: 317775

Ion	Ratio	Lower	Upper
49	100		
130	149.7	125.1	165.1
128	114.4	91.6	131.6

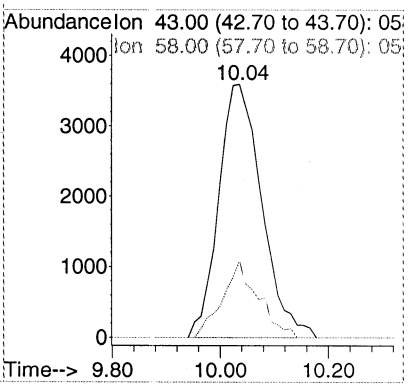


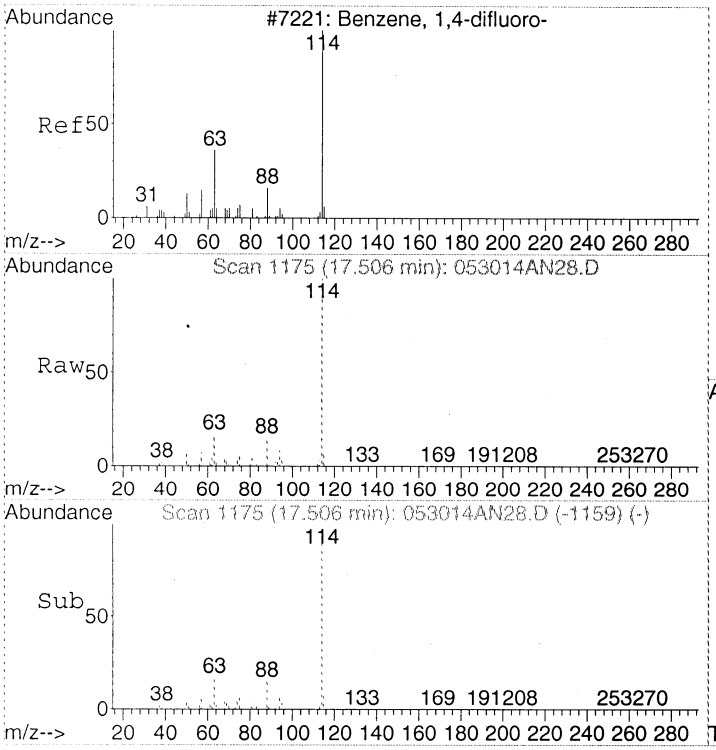


#14
Acetone
Concen: 0.97 ppbv
RT: 10.04 min Scan# 545
Delta R.T. 0.02 min
Lab File: 053014AN28.D
Acq: 31 May 2014 1:51 pm

Tgt Ion: 43 Resp: 19814

Ion	Ratio	Lower	Upper
43	100		
58	24.7	4.2	44.2

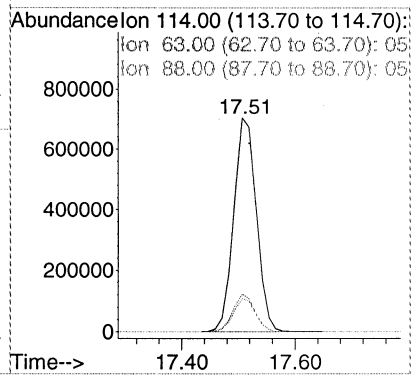


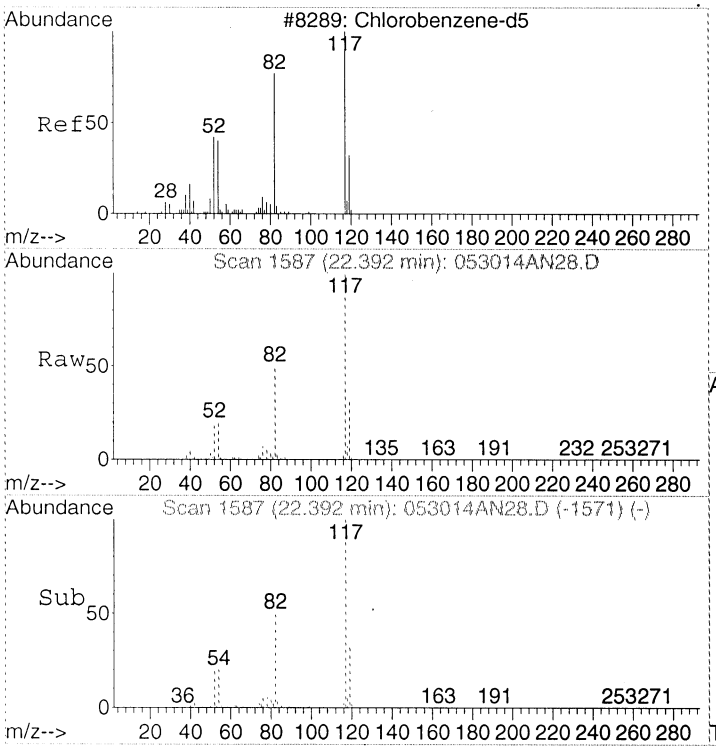


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.51 min Scan# 1175
Delta R.T. -0.01 min
Lab File: 053014AN28.D
Acq: 31 May 2014 1:51 pm

Tgt Ion:114 Resp: 1938317

Ion	Ratio	Lower	Upper
114	100		
63	16.9	0.0	37.2
88	15.3	0.0	35.6

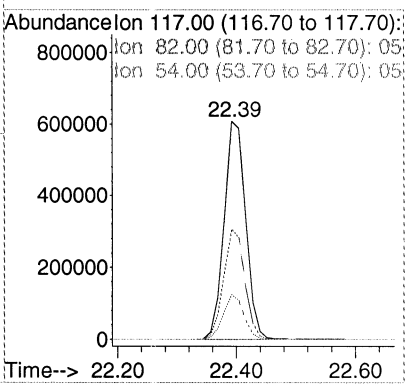




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.39 min Scan# 1587
Delta R.T. -0.01 min
Lab File: 053014AN28.D
Acq: 31 May 2014 1:51 pm

Tgt Ion:117 Resp: 1531582

Ion	Ratio	Lower	Upper
117	100		
82	49.5	30.5	70.5
54	19.6	0.6	40.6



00276

CANISTER

CERTIFICATION

DATA

EPA Region 9 Laboratory
Canister Certification Status

Canister	Type	Status	Cert. Date	Cert. File
852	400 mL	Certified Clean	2/5/2014	020514K09
876	400 mL	Certified Clean	2/5/2014	020514K10
883	400 mL	Certified Clean	2/5/2014	020514K11
892	400 mL	Certified Clean	2/5/2014	020514K12
895	400 mL	Certified Clean	2/5/2014	020514K13
1075	400 mL	Certified Clean	2/5/2014	020514K14
1090	400 mL	Certified Clean	2/5/2014	020514K15
1099	400 mL	Certified Clean	2/5/2014	020514K16
1101	400 mL	Certified Clean	2/5/2014	020514K17
1136	400 mL	Certified Clean	2/5/2014	020514K19
1137	400 mL	Certified Clean	2/5/2014	020514K20
1179	400 mL	Certified Clean	2/5/2014	020514K21

00278

Organics Daily Folder Preparation/Technical Review Guide

Analysis Method	TO15	**Analyst Initial**	EN	**Reviewer Initial**	[illegible]	**Batch/ Sequence**	NA NA
Instrument ID	[illegible]	**Date Analyzed**	[illegible]	**Date**	5/1/14	**Chemstation Last Update**	[illegible] 09:46
Cases	Replace lost original			**SDGs**	Canister 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
CRL	020514K04	169%	60-140%	✓			✓	Dichloromethane
BLK	020514K05	>1/2RL	≤ 1/2RL					627
↓	↓ K06	↓	↓					651
↓	↓ K07	↓	↓					Reclean canister 657
↓	↓ K18	↓	↓					1105
↓	↓ K22	↓	↓					1112
↓	↓ K08	↓	↓					664

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

Sequence Name: C:\Smart\2014\020514KAA.SEQ
Date: 05-06-2014
Time: 10:16:39
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 1402036	3	2	100	40	C:\Smart\TO15.CTD	12:00	
10 ppbv 1402036	3	2	100	0	C:\Smart\TO15.CTD	12:00	
1 ppbv 1402037	3	3	20	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 627	3	4	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 651	3	5	200	0	C:\Smart\TO15.CTD	12:00	NA - Reclean
BLANK CAN 657	3	6	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 664	3	7	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 852	3	8	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 876	3	9	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 883	3	10	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 892	3	11	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 895	3	12	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1075	4	1	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1090	4	2	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1099	4	3	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1101	4	4	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1105	4	5	200	0	C:\Smart\TO15.CTD	12:00	— Reclean
BLANK CAN 1136	4	6	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1137	4	7	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1179	4	8	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 1972	4	9	200	0	C:\Smart\TO15.CTD	12:00	— Reclean
BLANK CAN 1998	3	4	200	0	C:\Smart\TO15.CTD	12:00	
BLANK CAN 2002	3	5	200	0	C:\Smart\TO15.CTD	12:00	

Injection Log

Directory: C:\msdchem\1\DATA\2014\020514KA

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	32	020514K01.D	1.	020514-TUN1	BFB STD 1311118/IS 1350050/10ppbv STD	5 Feb 2014 12:10
2	32	020514K02.D	1.	020514-CCV1	10 ppbv 1402036	5 Feb 2014 12:58
3	32	020514K03.D	1.	020514-BS1	10 ppbv 1402036	5 Feb 2014 13:45
4	33	020514K04.D	1.	020514-CRL1	1.0 ppbv 1402037	5 Feb 2014 14:31
5	34	020514K05.D	1.	CAN 627	CAN 627	5 Feb 2014 15:20
6	35	020514K06.D	1.	CAN 651	CAN 651	5 Feb 2014 16:09
7	36	020514K07.D	1.	CAN 657 NU	CAN 657	5 Feb 2014 16:58
8	37	020514K08.D	1.	CAN 664	CAN 664	5 Feb 2014 17:47
9	38	020514K09.D	1.	CAN 852	CAN 852	5 Feb 2014 18:37
10	39	020514K10.D	1.	CAN 876	CAN 876	5 Feb 2014 19:26
11	10	020514K11.D	1.	CAN 883	CAN 883	5 Feb 2014 20:16
12	11	020514K12.D	1.	CAN 892	CAN 892	5 Feb 2014 21:05
13	12	020514K13.D	1.	CAN 895	CAN 895	5 Feb 2014 21:55
14	41	020514K14.D	1.	CAN 1075	CAN 1075	5 Feb 2014 22:44
15	42	020514K15.D	1.	CAN 1090	CAN 1090	5 Feb 2014 23:34
16	43	020514K16.D	1.	CAN 1099	CAN 1099	6 Feb 2014 00:24
17	44	020514K17.D	1.	CAN 1101	CAN 1101	6 Feb 2014 01:14
18	45	020514K18.D	1.	CAN 1105 — NU	CAN 1105	6 Feb 2014 02:03
19	46	020514K19.D	1.	CAN 1136	CAN 1136	6 Feb 2014 02:53
20	47	020514K20.D	1.	CAN 1137	CAN 1137	6 Feb 2014 03:42
21	48	020514K21.D	1.	CAN 1179	CAN 1179	6 Feb 2014 04:32
22	49	020514K22.D	1.	CAN 1972— NU	CAN 1972	6 Feb 2014 05:22
23	34	020514K23.D	1.	CAN 1998	CAN 1998	6 Feb 2014 09:58
24	35	020514K24.D	1.	CAN 2002	CAN 2002	6 Feb 2014 10:52

00281

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 020514KAA.M
Title : TO15
Last Update : Fri Jan 24 15:09:46 2014
Response Via : Initial Calibration

Calibration Files
1 =012414K03.D 2 =012414K04.D 5 =012414K05.D 10 =012414K02.D 15 =012414K06.D
20 =012414K07.D

		Compound	1	2	5	10	15	20	Avg	%RSD
1)	I	BROMOCHLOROMETHANE	----------ISTD----------							
2)	T	Propene	0.803	0.648	0.607	0.575	0.593	0.587	0.636	13.46
3)	T	Dichlorodifluo...	2.114	1.815	1.700	1.587	1.600	1.535	1.725	12.44
4)	T	1,2-Dichlorote...	2.105	1.795	1.697	1.636	1.709	1.678	1.770	9.72
5)	T	Chloromethane	0.878	0.752	0.713	0.676	0.701	0.692	0.735	10.14
6)	T	Vinyl chloride	0.915	0.775	0.757	0.732	0.751	0.752	0.780	8.63
7)	T	1,3-Butadiene	0.668	0.578	0.562	0.548	0.573	0.575	0.584	7.28
8)	T	Bromomethane	0.687	0.594	0.559	0.531	0.557	0.550	0.580	9.75
9)	T	Chloroethane	0.475	0.416	0.392	0.373	0.389	0.387	0.405	9.03
10)	T	Bromoethene	0.619	0.549	0.520	0.505	0.528	0.525	0.541	7.53
11)	T	Trichlorofluor...	1.758	1.515	1.449	1.373	1.438	1.420	1.492	9.25
12)	T	1,1,2-Trichlor...	1.201	1.068	1.006	0.986	1.001	1.006	1.045	7.83
13)	T	1,1-Dichloroet...	1.312	1.137	1.119	1.084	1.134	1.134	1.153	6.96
14)	T	Acetone	1.139	1.082	1.000	0.975	1.001	0.984	1.030	6.35
15)	T	Carbon disulfide	1.932	1.705	1.624	1.571	1.633	1.613	1.680	7.79
16)	T	2-Propanol	1.135	1.047	1.013	1.020	1.057	1.052	1.054	4.13
17)	T	Allyl chloride	0.910	0.838	0.831	0.817	0.859	0.849	0.851	3.83
18)	T	Dichloromethane	1.364	1.080	0.928	0.858	0.868	0.857	0.992	20.26
19)	T	tert-Butyl met...	1.754	1.701	1.681	1.640	1.741	1.735	1.708	2.53
20)	T	trans-1,2-Dich...	1.022	0.952	0.929	0.890	0.932	0.917	0.940	4.79
21)	T	Hexane	1.227	1.130	1.130	1.097	1.158	1.144	1.148	3.81
22)	T	1,1-Dichloroet...	1.585	1.418	1.356	1.293	1.356	1.345	1.392	7.36
23)	T	Vinyl acetate	1.523	1.446	1.495	1.507	1.605	1.602	1.530	4.11
24)	T	cis-1,2-Dichlo...	1.128	1.020	0.999	0.968	1.013	1.008	1.023	5.34
25)	T	2-Butanone (MEK)	1.134	1.316	1.344	1.430	1.356	1.350	1.322	7.51
26)	T	Ethyl acetate	1.912	1.815	1.734	1.575	1.807	1.788	1.772	6.34
27)	T	Tetrahydrofuran	0.950	0.898	0.888	0.866	0.907	0.892	0.900	3.11
28)	T	Chloroform	1.563	1.437	1.370	1.314	1.387	1.366	1.406	6.14
29)	T	Cyclohexane	1.233	1.173	1.152	1.112	1.176	1.167	1.169	3.37
30)	T	1,1,1-Trichlor...	1.535	1.408	1.372	1.300	1.382	1.370	1.394	5.55
31)	T	Carbon tetrach...	1.472	1.387	1.307	1.264	1.342	1.341	1.352	5.30
32)	I	1,4-DIFLUOROBENZENE	----------ISTD----------							
33)	T	Benzene	0.977	0.894	0.859	0.821	0.862	0.848	0.877	6.21
34)	T	2,2,4-Trimethy...	1.406	1.330	1.342	1.304	1.378	1.362	1.354	2.68
35)	T	1,2-Dichloroet...	0.394	0.359	0.350	0.333	0.348	0.341	0.354	5.97
36)	T	Heptane	0.538	0.498	0.507	0.495	0.519	0.515	0.512	3.09
37)	T	Trichloroethene	0.370	0.342	0.326	0.313	0.331	0.327	0.335	5.87
38)	T	1,2-Dichloropr...	0.376	0.344	0.330	0.314	0.328	0.322	0.336	6.49
39)	T	1,4-Dioxane	0.144	0.145	0.159	0.164	0.175	0.173	0.160	8.25
40)	T	Bromodichlorom...	0.597	0.547	0.534	0.512	0.539	0.530	0.543	5.31
41)	T	cis-1,3-Dichlo...	0.496	0.469	0.462	0.451	0.477	0.472	0.471	3.24
42)	T	4-Methyl-2-pen...	0.641	0.655	0.665	0.651	0.685	0.678	0.663	2.55
43)	I	CHLOROBENZENE-d5	----------ISTD----------							
44)	T	Toluene	1.148	1.094	1.059	1.017	1.103	1.087	1.085	4.06
45)	T	trans-1,3-Dich...	0.482	0.453	0.451	0.451	0.484	0.481	0.467	3.59
46)	T	1,1,2-Trichlor...	0.388	0.370	0.353	0.330	0.356	0.352	0.358	5.37
47)	T	Tetrachloroethene	0.549	0.514	0.485	0.459	0.506	0.503	0.503	5.95
48)	T	2-Hexanone	0.620	0.639	0.653	0.652	0.711	0.699	0.662	5.32
49)	T	Chlorodibromom...	0.583	0.550	0.532	0.506	0.554	0.551	0.546	4.66
50)	T	1,2-Dibromoeth...	0.523	0.508	0.492	0.467	0.504	0.497	0.499	3.81
51)	T	Chlorobenzene	0.898	0.839	0.797	0.764	0.823	0.812	0.822	5.48
52)	T	Ethylbenzene	1.491	1.425	1.390	1.350	1.460	1.453	1.428	3.59
53)	T	m&p-Xylene	1.078	1.060	1.057	1.041	1.151	1.155	1.090	4.57
54)	T	o-Xylene	1.071	1.066	1.045	1.024	1.124	1.126	1.076	3.86
55)	T	Styrene	0.837	0.841	0.848	0.844	0.939	0.936	0.874	5.64
56)	T	Bromoform	0.571	0.555	0.553	0.544	0.610	0.614	0.575	5.27

Response Factor Report HP5973K

Method Path : C:\msdchem\1\METHODS\2014\
Method File : 020514KAA.M
Title : TO15

57)	T	1,1,2,2-Tetrac...	0.890	0.869	0.829	0.797	0.862	0.850	0.849	3.85
58)	T	4-Ethyltoluene	1.338	1.361	1.354	1.336	1.478	1.480	1.391	4.94
59)	T	1,3,5-Trimethy...	1.195	1.187	1.185	1.195	1.314	1.322	1.233	5.35
60)	T	1,2,4-Trimethy...	1.168	1.207	1.187	1.198	1.330	1.334	1.237	6.02
61)	T	1,3-Dichlorobe...	0.848	0.839	0.806	0.810	0.911	0.909	0.854	5.44
62)	T	1,4-Dichlorobe...	0.801	0.809	0.796	0.807	0.899	0.899	0.835	5.93
63)	T	Benzyl chloride	0.876	0.887	0.907	0.908	1.003	1.002	0.930	6.13
64)	T	1,2-Dichlorobe...	0.837	0.820	0.796	0.786	0.875	0.874	0.831	4.59
65)	T	1,2,4-Trichlor...	0.770	0.777	0.752	0.795	0.914	0.914	0.820	9.02
66)	T	Hexachlorobuta...	0.680	0.741	0.705	0.663	0.745	0.724	0.710	4.67

(#) = Out of Range

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\2014\020514KA\020514K01.D
Tune Time : 5 Feb 2014 12:10

Daily Calibration File : C:\msdchem\1\DATA\2014\020514KA\020514K02.D

File	Sample	Surrogate Recovery %			Internal Standard Responses
			897982	2339600	1994110
020514K02.D	020514-CCV	897982	2339596	1994107	
020514K03.D	020514-BS1	853839	2141268	1814002	
020514K04.D	020514-CRL	873753	2165602	1850452	
020514K05.D	CAN 627	890828	2242389	1946565	
020514K06.D	CAN 651	869553	2204361	1911046	
020514K07.D	CAN 657	861315	2178105	1899122	
020514K08.D	CAN 664	860650	2184131	1904014	
020514K09.D	CAN 852	853840	2155644	1898070	
020514K10.D	CAN 876	851922	2115589	1850265	
020514K11.D	CAN 883	856825	2188442	1927032	
020514K12.D	CAN 892	866474	2200758	1946099	
020514K13.D	CAN 895	846111	2104482	1868099	
020514K14.D	CAN 1075	840306	2100281	1857905	
020514K15.D	CAN 1090	840052	2119306	1866808	
020514K16.D	CAN 1099	835641	2068179	1835421	
020514K17.D	CAN 1101	866809	2189052	1941182	
020514K18.D	CAN 1105	856001	2148940	1900067	
020514K19.D	CAN 1136	855579	2170970	1929352	
020514K20.D	CAN 1137	856165	2149721	1898973	

020514K21.D

CAN 1179	856006	2128093	1877445

020514K22.D

CAN 1972	854261	2150794	1896059

020514K23.D

CAN 1998	827958	2105311	1799437

020514K24.D

CAN 2002	827551	2077612	1805514

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

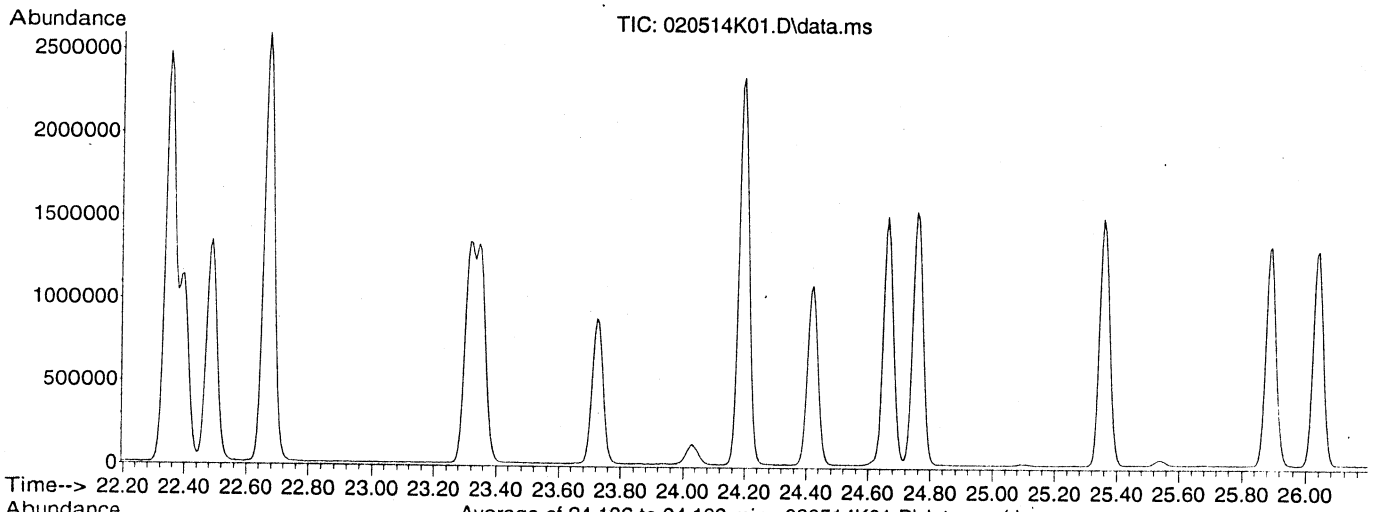
Created: Tue May 06 10:26:59 2014 HP5973K

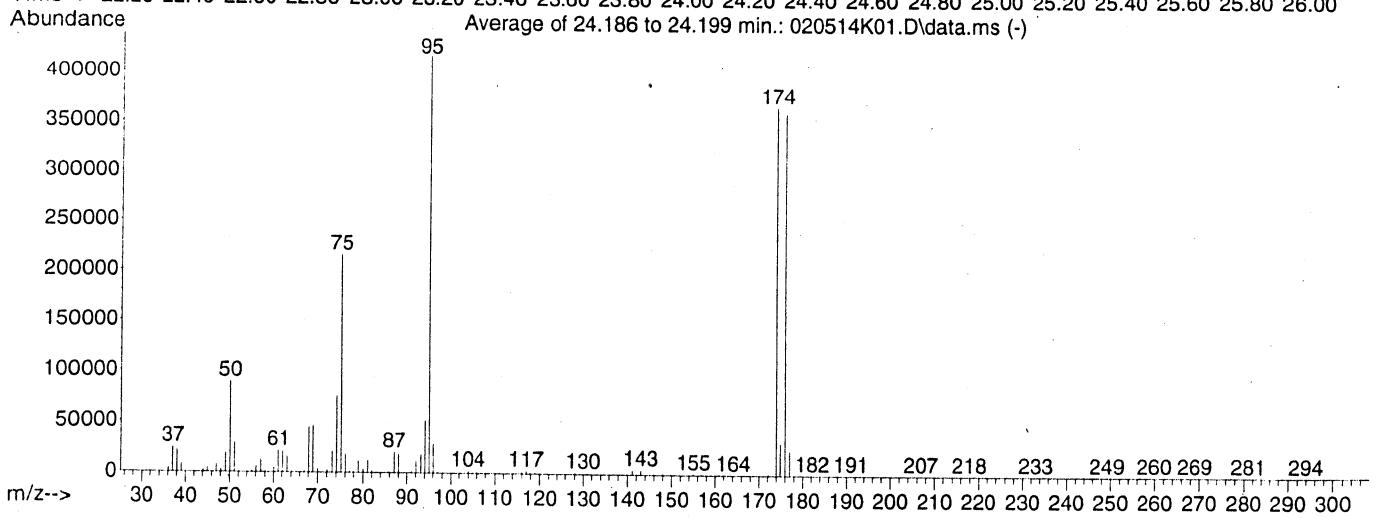
BFB

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K01.D
Acq On : 5 Feb 2014 12:10
Operator : EM
Sample : 020514-TUN1
Misc : BFB STD 1311118/IS 1350050/10ppbv STD
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\2014\020514KAA.M
Title : TO15
Last Update : Fri Jan 24 15:09:46 2014





AutoFind: Scans 3387, 3388, 3389; 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	21.3	88801	PASS
75	95	30	66	51.7	215293	PASS
95	95	100	100	100.0	416623	PASS
96	95	5	9	6.7	27849	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	87.9	366336	PASS
175	174	4	9	8.5	31049	PASS
176	174	93	101	98.4	360405	PASS
177	176	5	9	6.7	24147	PASS

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	32	47.05	7448	57.05	11980	67.05	1295
36.05	4425	48.05	2992	58.05	416	68.10	44321
37.10	24259	49.10	18907	58.90	175	69.05	45576
38.05	21238	50.10	88801	60.10	4257	70.05	3582
39.10	8106	51.10	28783	61.10	20931	71.05	197
40.10	300	52.10	1102	62.10	20235	72.05	2576
41.10	187	53.10	30	63.10	15613	73.10	20352
42.15	110	53.95	78	64.10	1369	74.05	74874
44.10	2578	54.20	130	65.10	914	75.05	215293
45.05	4124	55.10	1208	66.00	84	76.10	18803
46.15	264	56.10	6387	66.25	22	77.10	2460

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.00	1827	88.00	18608	102.10	11	114.10	24
79.00	11403	89.90	23	103.00	121	114.90	370
80.00	3635	91.00	1432	103.95	1950	115.90	1501
81.00	12078	92.05	11955	104.95	635	117.00	2627
82.00	2689	93.10	18175	105.95	1779	117.95	1531
83.10	358	94.05	51906	107.00	361	119.00	2221
84.10	28	95.05	416623	110.05	311	119.85	69
84.30	6	96.10	27849	111.00	394	121.25	52
85.00	45	97.10	834	111.90	267	121.95	133
86.10	406	98.10	101	112.10	210	122.95	118
87.00	20023	99.00	8	113.00	429	124.00	268

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.95	217	135.00	746	141.95	627	152.85	257
125.95	191	135.70	48	142.95	4533	154.00	286
126.85	94	135.95	59	144.00	231	155.00	1096
128.00	1298	136.20	29	144.95	473	156.05	230
129.00	693	136.95	733	145.95	694	156.95	731
129.95	1340	137.80	8	146.90	329	157.95	102
130.90	594	138.25	67	147.95	1026	158.90	445
131.95	0	138.80	48	148.95	249	160.05	69
132.20	49	139.00	76	149.90	412	160.90	375
133.00	144	139.95	264	150.75	8	161.10	235
134.00	198	141.00	4267	151.95	179	161.85	84

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
162.95	37	168.50	28	174.95	31049	185.90	11
163.50	15	168.70	30	176.00	360405	187.20	10
163.65	21	169.20	54	177.00	24147	187.85	41
164.10	75	169.50	52	178.00	712	188.40	12
164.70	7	169.80	49	179.10	61	188.80	8
165.50	13	170.10	220	179.95	40	189.40	10
165.65	34	170.80	142	181.05	9	189.70	9
166.30	7	171.00	132	181.50	15	191.00	61
166.60	29	171.90	681	182.20	17	191.90	39
167.15	22	172.15	1331	183.60	20	192.10	1
167.80	50	174.00	366336	184.50	15	192.95	61

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
194.30	13	206.05	75	214.70	7	221.40	11
195.90	9	206.90	285	216.10	17	221.80	28
196.60	14	207.10	98	216.30	10	222.80	7
197.20	7	208.05	150	216.80	10	222.95	30
197.45	17	209.10	31	217.90	73	224.85	28
198.20	11	209.95	30	218.90	28	227.50	13
199.10	14	210.95	22	219.40	15	228.95	19
202.00	35	211.90	9	219.70	8	230.70	11
203.10	25	212.70	13	219.95	28	231.20	14

204.40	15	213.10	7	220.20	21	233.05	48
205.20	22	214.30	9	220.90	21	233.40	18

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
235.00	25	245.90	10	253.70	38	261.30	16
235.50	8	246.20	14	254.00	3	261.90	30
235.90	17	246.80	11	254.60	13	263.35	17
238.70	9	248.10	25	254.90	41	265.05	14
239.10	22	249.20	30	256.00	9	265.90	28
242.20	12	249.80	30	256.50	19	266.20	8
242.80	10	250.40	8	256.80	9	266.95	69
243.00	12	251.50	10	257.65	31	267.30	18
244.00	28	252.00	14	258.40	34	268.20	11
244.50	9	252.30	8	258.90	9	269.05	159
245.30	16	253.00	73	259.90	231	269.95	36

Average of 24.186 to 24.199 min.: 020514K01.D\data.ms
020514-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.95	2	281.05	210	293.95	45		
271.30	12	282.05	25	294.20	25		
271.70	22	282.75	40	295.10	23		
272.90	24	284.70	12	296.30	7		
273.15	7	285.10	33	297.00	7		
274.90	13	286.50	10	297.20	8		
276.00	8	287.20	9	297.90	7		
276.30	11	288.00	19				
279.20	11	288.80	11				
279.50	13	292.10	11				
279.90	16	292.80	7				

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:14 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.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	0.636	0.600	5.7	103	0.00
3	T	Dichlorodifluoromethane	1.725	1.494	13.4	93	0.00
4	T	1,2-Dichlorotetrafluoroetha	1.770	1.608	9.2	97	0.00
5	T	Chloromethane	0.735	0.693	5.7	101	0.00
6	T	Vinyl chloride	0.780	0.721	7.6	97	0.00
7	T	1,3-Butadiene	0.584	0.552	5.5	100	0.00
8	T	Bromomethane	0.580	0.522	10.0	97	0.00
9	T	Chloroethane	0.405	0.362	10.6	96	0.00
10	T	Bromoethene	0.541	0.486	10.2	95	0.00
11	T	Trichlorofluoromethane	1.492	1.440	3.5	104	0.00
12	T	1,1,2-Trichloro-1,2,2-trifl	1.045	1.009	3.4	101	0.00
13	T	1,1-Dichloroethene	1.153	1.069	7.3	98	0.00
14	T	Acetone	1.030	0.999	3.0	101	0.00
15	T	Carbon disulfide	1.680	1.520	9.5	96	0.00
16	T	2-Propanol	1.054	1.018	3.4	99	0.00
17	T	Allyl chloride	0.851	0.809	4.9	98	0.00
18	T	Dichloromethane	0.992	0.882	11.1	102	0.00
19	T	tert-Butyl methyl ether (MT	1.708	1.636	4.2	99	0.00
20	T	trans-1,2-Dichloroethene	0.940	0.878	6.6	98	0.00
21	T	Hexane	1.148	1.076	6.3	97	0.00
22	T	1,1-Dichloroethane	1.392	1.271	8.7	97	0.00
23	T	Vinyl acetate	1.530	1.532	-0.1	101	0.00
24	T	cis-1,2-Dichloroethene	1.023	0.932	8.9	95	0.00
25	T	2-Butanone (MEK)	1.322	1.330	-0.6	92	0.00
26	T	Ethyl acetate	1.772	1.767	0.3	111	0.00
27	T	Tetrahydrofuran	0.900	0.870	3.3	99	0.00
28	T	Chloroform	1.406	1.278	9.1	96	0.00
29	T	Cyclohexane	1.169	1.085	7.2	97	0.00
30	T	1,1,1-Trichloroethane	1.394	1.304	6.5	99	0.00
31	T	Carbon tetrachloride	1.352	1.307	3.3	102	0.00
32	I	1,4-DIFLUOROBENZENE	1.000	1.000	0.0	98	0.00
33	T	Benzene	0.877	0.810	7.6	96	0.00
34	T	2,2,4-Trimethylpentane	1.354	1.301	3.9	98	0.00
35	T	1,2-Dichloroethane	0.354	0.331	6.5	97	0.00
36	T	Heptane	0.512	0.508	0.8	100	0.00
37	T	Trichloroethene	0.335	0.316	5.7	98	0.00
38	T	1,2-Dichloropropane	0.336	0.310	7.7	96	0.00
39	T	1,4-Dioxane	0.160	0.164	-2.5	98	0.00
40	T	Bromodichloromethane	0.543	0.504	7.2	96	0.00
41	T	cis-1,3-Dichloropropene	0.471	0.436	7.4	95	0.00
42	T	4-Methyl-2-pentanone (MIBK)	0.663	0.683	-3.0	103	0.00
43	I	CHLOROBENZENE-d5	1.000	1.000	0.0	89	0.00
44	T	Toluene	1.085	1.083	0.2	94	0.00
45	T	trans-1,3-Dichloropropene	0.467	0.488	-4.5	96	0.00

00289

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:14 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.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	0.358	0.356	0.6	95	0.00
47	T	Tetrachloroethene	0.503	0.516	-2.6	100	0.00
48	T	2-Hexanone	0.662	0.763	-15.3	104	0.00
49	T	Chlorodibromomethane	0.546	0.565	-3.5	99	0.00
50	T	1,2-Dibromoethane (EDB)	0.499	0.506	-1.4	96	0.00
51	T	Chlorobenzene	0.822	0.819	0.4	95	0.00
52	T	Ethylbenzene	1.428	1.434	-0.4	94	0.00
53	T	m&p-Xylene	1.090	1.097	-0.6	93	0.00
54	T	o-Xylene	1.076	1.083	-0.7	94	0.00
55	T	Styrene	0.874	0.907	-3.8	95	0.00
56	T	Bromoform	0.575	0.608	-5.7	99	0.00
57	T	1,1,2,2-Tetrachloroethane	0.849	0.850	-0.1	95	0.00
58	T	4-Ethyltoluene	1.391	1.431	-2.9	95	0.00
59	T	1,3,5-Trimethylbenzene	1.233	1.266	-2.7	94	0.00
60	T	1,2,4-Trimethylbenzene	1.237	1.266	-2.3	94	0.00
61	T	1,3-Dichlorobenzene	0.854	0.902	-5.6	99	0.00
62	T	1,4-Dichlorobenzene	0.835	0.878	-5.1	96	0.00
63	T	Benzyl chloride	0.930	0.959	-3.1	94	0.00
64	T	1,2-Dichlorobenzene	0.831	0.871	-4.8	98	0.00
65	T	1,2,4-Trichlorobenzene	0.820	0.836	-2.0	93	0.00
66	T	Hexachlorobutadiene	0.710	0.709	0.1	95	0.00

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

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: AWI Date: 5/15/14
Manual integration(s) reviewed by:
Reviewer: Date: 5/16/14

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:14 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	897982	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2339596	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1994107	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	262278	10.11	ppbv	99
3) Dichlorodifluoromethane	4.463	85	628408	8.92	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	689375	9.54	ppbv	99
5) Chloromethane	5.011	50	296906	9.89	ppbv	98
6) Vinyl chloride	5.333	62	308895	9.70	ppbv	99
7) 1,3-Butadiene	5.431	54	229891	9.64	ppbv	97
8) Bromomethane	6.361	94	219534	9.28	ppbv	98
9) Chloroethane	6.690	64	152097	9.19	ppbv	99
10) Bromoethene	7.262	106	204212	9.25	ppbv	97
11) Trichlorofluoromethane	7.402	101	629275	10.33	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	399678	9.37	ppbv	99
13) 1,1-Dichloroethene	9.300	61	419178	8.90	ppbv	100
14) Acetone	9.817	43	432463	10.29	ppbv	99
15) Carbon disulfide	10.012	76	633022	9.23	ppbv	99
16) 2-Propanol	10.444	45	394722	9.18	ppbv	97
17) Allyl chloride	10.845	41	333558	9.60	ppbv	98
18) Dichloromethane	11.380	49	353077	8.72	ppbv	97
19) tert-Butyl methyl ethe...	12.074	73	728252	10.44	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	340472	8.87	ppbv	99
21) Hexane	12.713	57	448218	9.57	ppbv	98
22) 1,1-Dichloroethane	13.449	63	503498	8.86	ppbv	99
23) Vinyl acetate	13.595	43	625369	10.02	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	384377	9.21	ppbv	99
25) 2-Butanone (MEK)	14.994	43	564590	10.47	ppbv	96
26) Ethyl acetate	15.043	43	750406m	10.38	ppbv	
27) Tetrahydrofuran	15.450	42	365737	9.95	ppbv	98
28) Chloroform	15.596	83	532320	9.27	ppbv	99
29) Cyclohexane	15.828	56	460510	9.65	ppbv	98
30) 1,1,1-Trichloroethane	15.876	97	537624	9.45	ppbv	99
31) Carbon tetrachloride	16.138	117	549503	9.96	ppbv	97
33) Benzene	16.631	78	870007	9.33	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1452938	10.09	ppbv	99
35) 1,2-Dichloroethane	16.825	62	344992	9.16	ppbv	98
36) Heptane	16.971	43	567753	10.43	ppbv	97
37) Trichloroethene	17.859	130	339149	9.52	ppbv	99
38) 1,2-Dichloropropane	18.364	63	339112	9.50	ppbv	99
39) 1,4-Dioxane	18.559	88	184928	10.86	ppbv	98
40) Bromodichloromethane	18.827	83	568615	9.85	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	477881	9.54	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	762697	10.83	ppbv	99
44) Toluene	20.074	91	1001430	10.19	ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	473472	11.19	ppbv	98
46) 1,1,2-Trichloroethane	20.846	97	332226	10.23	ppbv	98
47) Tetrachloroethene	20.926	166	468166	10.27	ppbv	99
48) 2-Hexanone	21.181	43	712659	11.87	ppbv	98

00291

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:14 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	532834	10.76 ppbv	98
50) 1,2-Dibromoethane (EDB)	21.680	107	472285	10.45 ppbv	99
51) Chlorobenzene	22.398	112	772206	10.36 ppbv	99
52) Ethylbenzene	22.489	91	1325664	10.24 ppbv	100
53) m&p-Xylene	22.672	91	2028935	20.53 ppbv	98
54) o-Xylene	23.316	91	1011233	10.37 ppbv	99
55) Styrene	23.353	104	830838	10.49 ppbv	99
56) Bromoform	23.730	173	567467	10.89 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	786425	10.21 ppbv	99
58) 4-Ethyltoluene	24.667	105	1361878	10.80 ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1182330	10.58 ppbv	99
60) 1,2,4-Trimethylbenzene	25.367	105	1159390	10.34 ppbv	99
61) 1,3-Dichlorobenzene	25.896	146	809230	10.46 ppbv	97
62) 1,4-Dichlorobenzene	26.042	146	788071	10.41 ppbv	99
63) Benzyl chloride	26.255	91	895700	10.62 ppbv	99
64) 1,2-Dichlorobenzene	26.650	146	782145	10.38 ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	690032	9.28 ppbv	99
66) Hexachlorobutadiene	29.248	225	610796	9.50 ppbv	99

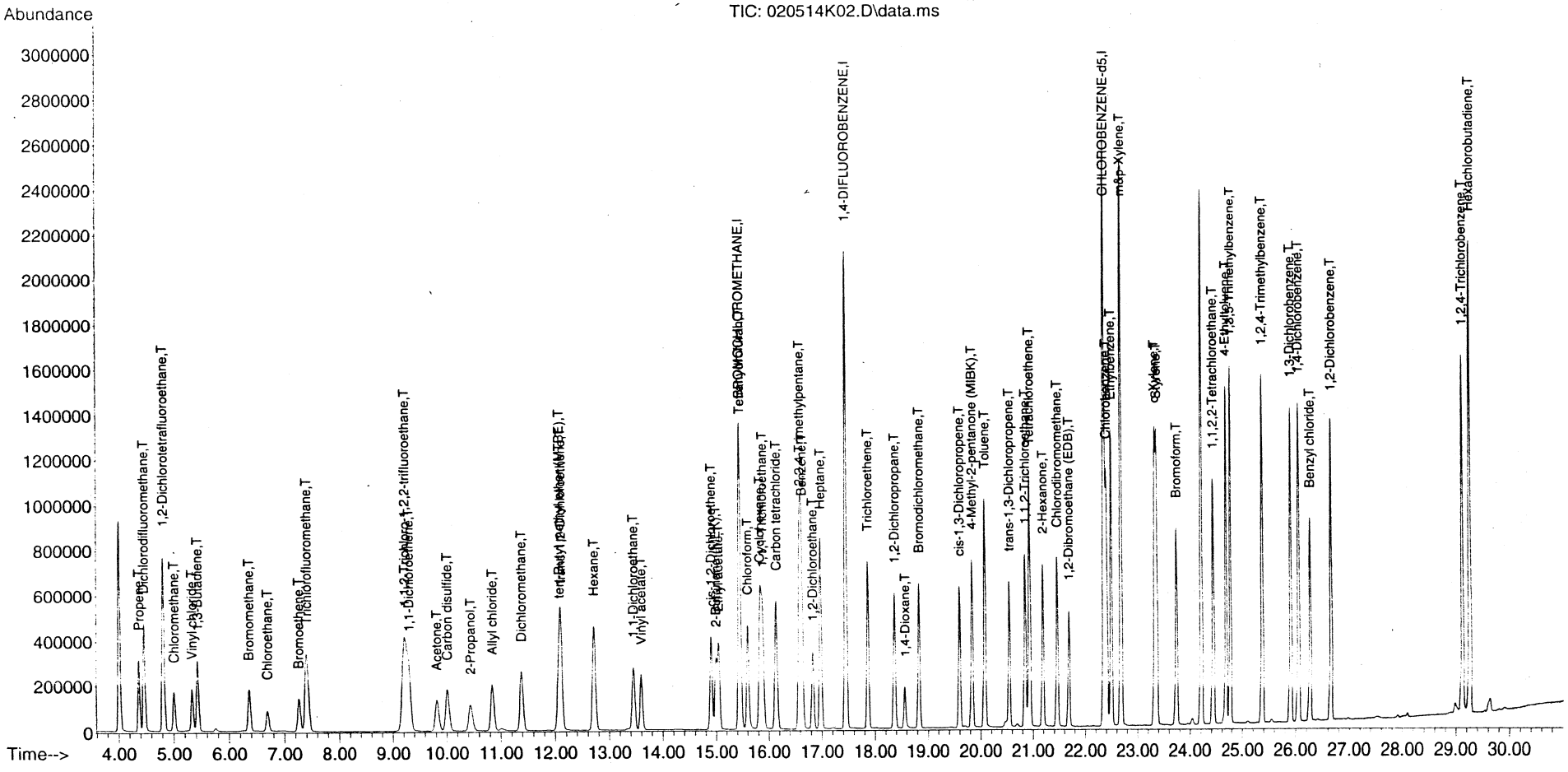
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:14 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

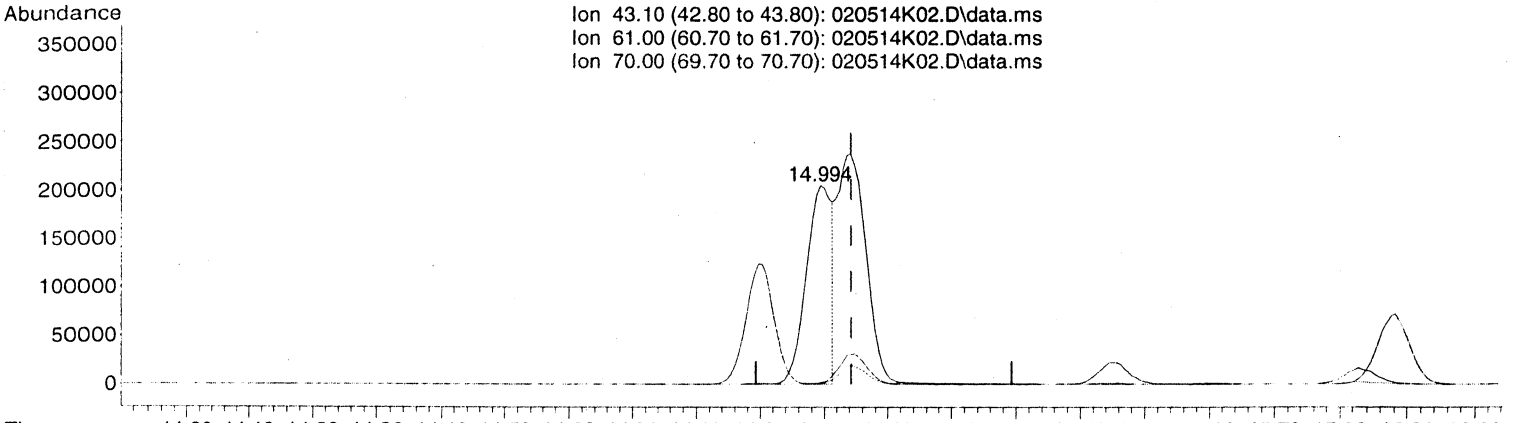


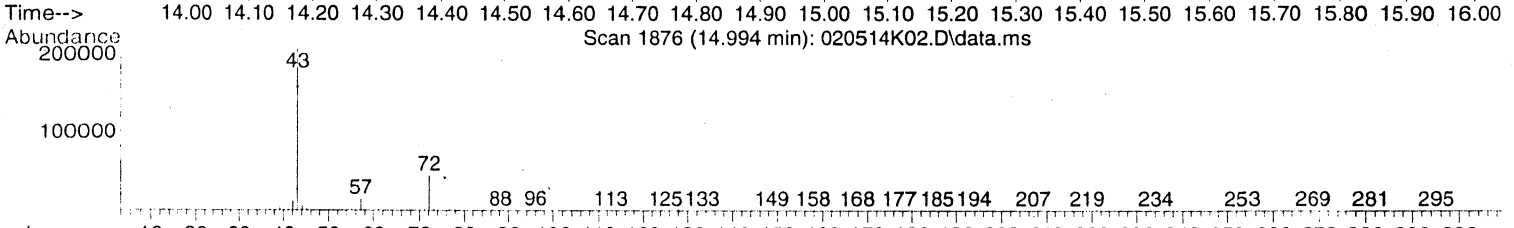
Quantitation Report (Qedit)

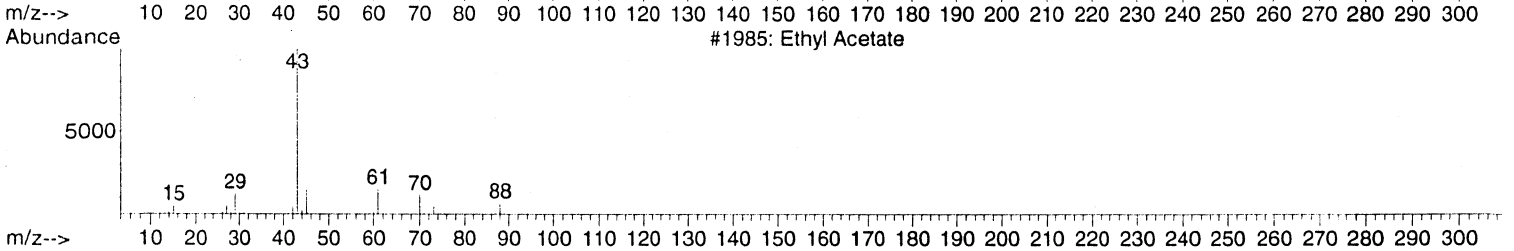
Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:04:58 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M







TIC: 020514K02.D\data.ms

(26) Ethyl acetate (T)

14.994min (-0.049) 7.81 ppbv

response 564778

Ion	Exp%	Act%
43.10	100	100
61.00	14.80	0.00#
70.00	9.30	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:

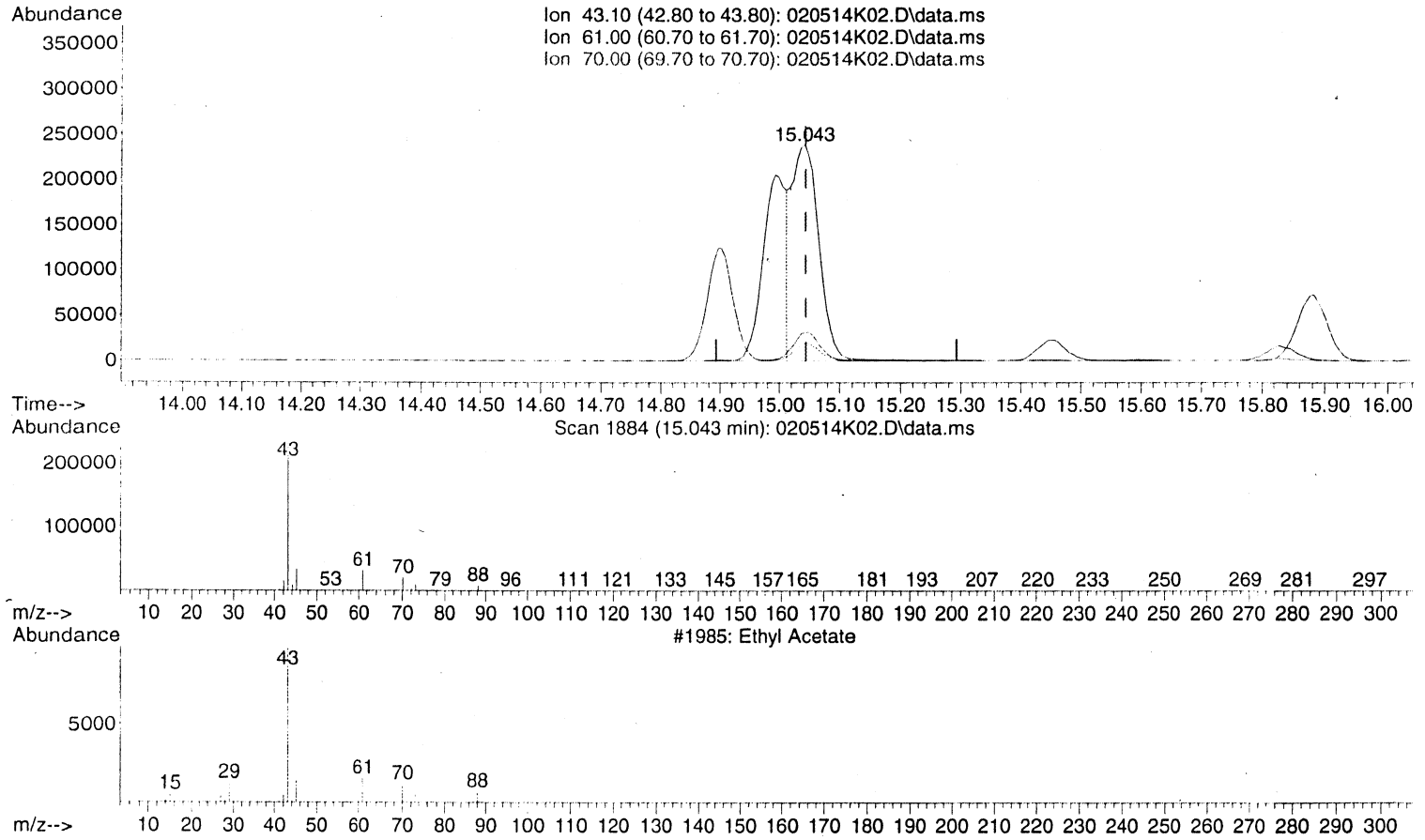
Reviewer: _____ Date _____

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:04:58 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M



TIC: 020514K02.D\data.ms

(26) Ethyl acetate (T)

15.043min (-0.000) 10.38 ppbv m

response 750406

Ion	Exp%	Act%
43.10	100	100
61.00	14.80	0.00#
70.00	9.30	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: 5/6/14
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 5/6/14

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:04:58 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

ACC MIT
Jm 5/11/14

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	897982	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2339596	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1994107	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	262278	10.11	ppbv	99
3) Dichlorodifluoromethane	4.463	85	628408	8.92	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	689375	9.54	ppbv	99
5) Chloromethane	5.011	50	296906	9.89	ppbv	98
6) Vinyl chloride	5.333	62	308895	9.70	ppbv	99
7) 1,3-Butadiene	5.431	54	229891	9.64	ppbv	97
8) Bromomethane	6.361	94	219534	9.28	ppbv	98
9) Chloroethane	6.690	64	152097	9.19	ppbv	99
10) Bromoethene	7.262	106	204212	9.25	ppbv	97
11) Trichlorofluoromethane	7.402	101	629275	10.33	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	399678	9.37	ppbv	99
13) 1,1-Dichloroethene	9.300	61	419178	8.90	ppbv	100
14) Acetone	9.817	43	432463	10.29	ppbv	99
15) Carbon disulfide	10.012	76	633022	9.23	ppbv	99
16) 2-Propanol	10.444	45	394722	9.18	ppbv	97
17) Allyl chloride	10.845	41	333558	9.60	ppbv	98
18) Dichloromethane	11.380	49	353077	8.72	ppbv	97
19) tert-Butyl methyl ethe...	12.074	73	728252	10.44	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	340472	8.87	ppbv	99
21) Hexane	12.713	57	448218	9.57	ppbv	98
22) 1,1-Dichloroethane	13.449	63	503498	8.86	ppbv	99
23) Vinyl acetate	13.595	43	625369	10.02	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	384377	9.21	ppbv	99
25) 2-Butanone (MEK)	14.994	43	564590	10.47	ppbv	96
26) Ethyl acetate	14.994	43	564778	7.81	ppbv #	68
27) Tetrahydrofuran	15.450	42	365737	9.95	ppbv	98
28) Chloroform	15.596	83	532320	9.27	ppbv	99
29) Cyclohexane	15.828	56	460510	9.65	ppbv	98
30) 1,1,1-Trichloroethane	15.876	97	537624	9.45	ppbv	99
31) Carbon tetrachloride	16.138	117	549503	9.96	ppbv	97
33) Benzene	16.631	78	870007	9.33	ppbv	99
34) 2,2,4-Trimethylpentane	16.588	57	1452938	10.09	ppbv	99
35) 1,2-Dichloroethane	16.825	62	344992	9.16	ppbv	98
36) Heptane	16.971	43	567753	10.43	ppbv	97
37) Trichloroethene	17.859	130	339149	9.52	ppbv	99
38) 1,2-Dichloropropane	18.364	63	339112	9.50	ppbv	99
39) 1,4-Dioxane	18.559	88	184928	10.86	ppbv	98
40) Bromodichloromethane	18.827	83	568615	9.85	ppbv	99
41) cis-1,3-Dichloropropene	19.593	75	477881	9.54	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	762697	10.83	ppbv	99
44) Toluene	20.074	91	1001430	10.19	ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	473472	11.19	ppbv	98
46) 1,1,2-Trichloroethane	20.846	97	332226	10.23	ppbv	98
47) Tetrachloroethene	20.926	166	468166	10.27	ppbv	99
48) 2-Hexanone	21.181	43	712659	11.87	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:04:58 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	532834	10.76 ppbv	98
50) 1,2-Dibromoethane (EDB)	21.680	107	472285	10.45 ppbv	99
51) Chlorobenzene	22.398	112	772206	10.36 ppbv	99
52) Ethylbenzene	22.489	91	1325664	10.24 ppbv	100
53) m&p-Xylene	22.672	91	2028935	20.53 ppbv	98
54) o-Xylene	23.316	91	1011233	10.37 ppbv	99
55) Styrene	23.353	104	830838	10.49 ppbv	99
56) Bromoform	23.730	173	567467	10.89 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	786425	10.21 ppbv	99
58) 4-Ethyltoluene	24.667	105	1361878	10.80 ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1182330	10.58 ppbv	99
60) 1,2,4-Trimethylbenzene	25.367	105	1159390	10.34 ppbv	99
61) 1,3-Dichlorobenzene	25.896	146	809230	10.46 ppbv	97
62) 1,4-Dichlorobenzene	26.042	146	788071	10.41 ppbv	99
63) Benzyl chloride	26.255	91	895700	10.62 ppbv	99
64) 1,2-Dichlorobenzene	26.650	146	782145	10.38 ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	690032	9.28 ppbv	99
66) Hexachlorobutadiene	29.248	225	610796	9.50 ppbv	99

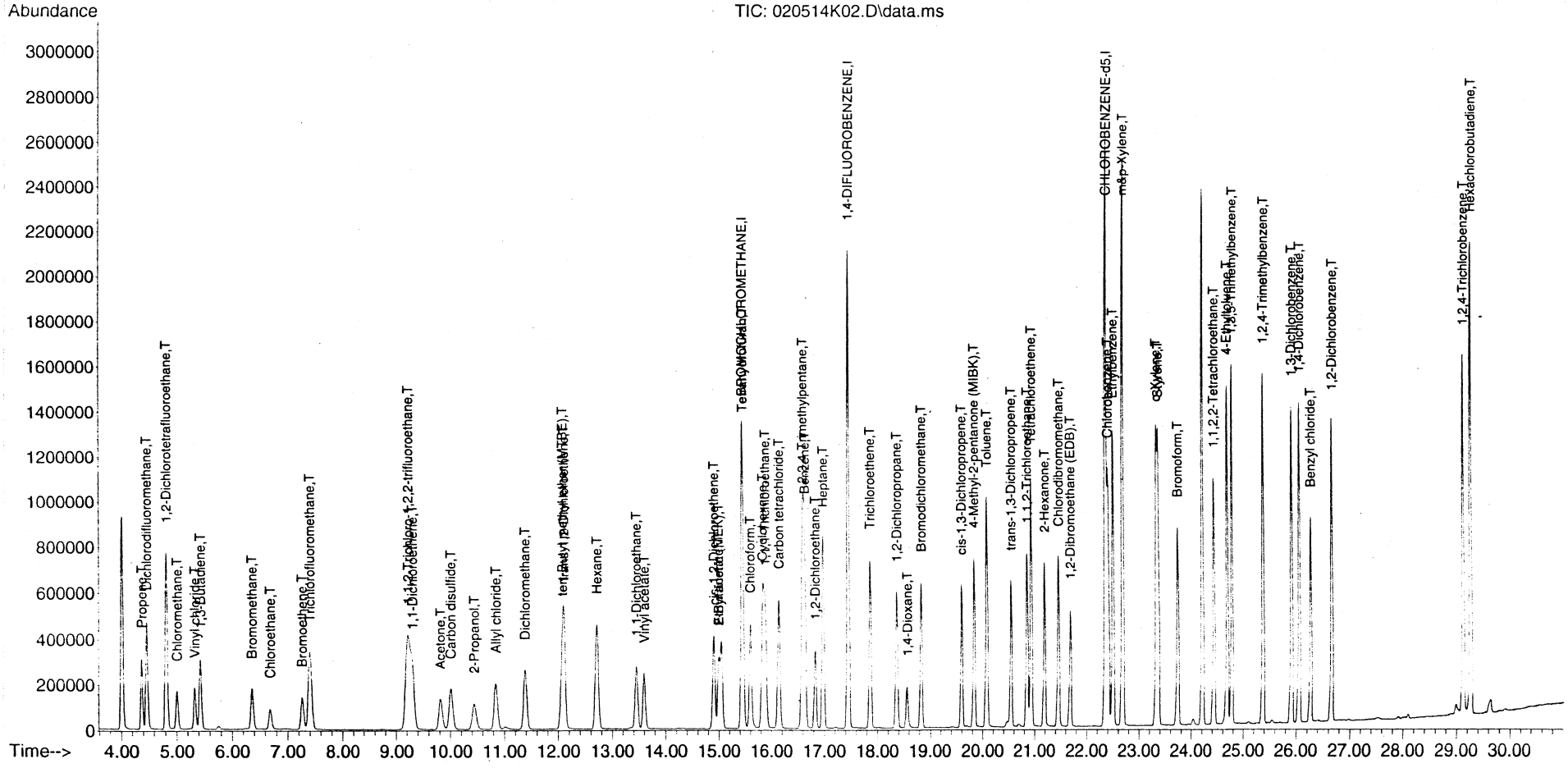
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K02.D
Acq On : 5 Feb 2014 12:58
Instrument: HP5973K
Operator : EM
Sample : 020514-CCV1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:04:58 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M



LCS REPORT

Instrument Name: HP5973K
Sample Name: 020514-BS1
Misc Info: 10 ppbv 1402036
Date Acquired: 2/5/2014 13:45
QLast Update: Fri Jan 24 15:09:46 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	10.25	100%	56.0	155.0	pass
3)	Dichlorodifluoromethane	4.46	10.30	8.75	85%	67.0	141.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.82	10.50	9.38	89%	68.0	147.0	pass
5)	Chloromethane	5.01	10.50	10.05	96%	64.0	141.0	pass
6)	Vinyl chloride	5.33	10.50	9.77	93%	65.0	141.0	pass
7)	1,3-Butadiene	5.44	10.00	9.75	97%	61.0	154.0	pass
8)	Bromomethane	6.36	10.30	9.13	89%	71.0	132.0	pass
9)	Chloroethane	6.70	10.30	9.42	91%	70.0	134.0	pass
10)	Bromoethene	7.27	10.40	9.34	90%	71.0	146.0	pass
11)	Trichlorofluoromethane	7.41	10.70	10.34	97%	72.0	141.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.22	9.70	8.79	91%	68.0	134.0	pass
13)	1,1-Dichloroethene	9.30	9.60	9.02	94%	81.0	127.0	pass
14)	Acetone	9.82	10.50	10.59	101%	77.0	150.0	pass
15)	Carbon disulfide	10.02	10.50	9.27	88%	75.0	138.0	pass
16)	2-Propanol	10.44	10.60	9.48	89%	71.0	142.0	pass
17)	Allyl chloride	10.85	10.70	10.14	95%	84.0	143.0	pass
18)	Dichloromethane	11.38	9.80	8.93	91%	74.0	116.0	pass
19)	tert-Butyl methyl ether (MTBE)	12.08	10.70	10.68	100%	79.0	131.0	pass
20)	trans-1,2-Dichloroethene	12.10	10.20	9.02	88%	82.0	136.0	pass
21)	Hexane	12.71	10.30	9.95	97%	78.0	139.0	pass
22)	1,1-Dichloroethane	13.45	9.70	9.14	94%	82.0	123.0	pass
23)	Vinyl acetate	13.60	10.60	10.49	99%	70.0	139.0	pass
24)	cis-1,2-Dichloroethene	14.90	10.10	9.44	93%	83.0	126.0	pass
25)	2-Butanone (MEK)	15.00	10.50	10.69	102%	76.0	138.0	pass
26)	Ethyl acetate	15.04	10.40	10.04	97%	83.0	136.0	pass
27)	Tetrahydrofuran	15.45	10.30	10.35	100%	74.0	132.0	pass
28)	Chloroform	15.60	10.20	9.37	92%	81.0	127.0	pass
29)	Cyclohexane	15.83	10.50	10.05	96%	77.0	139.0	pass
30)	1,1,1-Trichloroethane	15.88	10.10	9.53	94%	80.0	131.0	pass
31)	Carbon tetrachloride	16.14	10.30	10.00	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	16.63	10.10	9.93	98%	77.0	131.0	pass
34)	2,2,4-Trimethylpentane	16.59	10.50	10.97	104%	68.0	152.0	pass
35)	1,2-Dichloroethane	16.83	9.80	9.85	101%	70.0	149.0	pass
36)	Heptane	16.97	10.50	11.34	108%	62.0	159.0	pass
37)	Trichloroethene	17.86	10.10	9.92	98%	81.0	125.0	pass
38)	1,2-Dichloropropane	18.36	10.30	10.15	99%	74.0	135.0	pass
39)	1,4-Dioxane	18.56	10.50	11.60	111%	67.0	134.0	pass
40)	Bromodichloromethane	18.83	10.40	10.36	100%	69.0	150.0	pass
41)	cis-1,3-Dichloropropene	19.59	10.30	10.14	98%	77.0	129.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.83	10.50	11.81	112%	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	10.75	105%	79.0	126.0	pass
45)	trans-1,3-Dichloropropene	20.54	10.70	11.95	112%	81.0	137.0	pass
46)	1,1,2-Trichloroethane	20.85	10.30	10.77	105%	76.0	124.0	pass
47)	Tetrachloroethene	20.93	10.00	10.68	107%	80.0	122.0	pass

48)	2-Hexanone	21.18	10.40	12.99	125%	55.0	149.0	pass
49)	Chlorodibromomethane	21.45	10.40	11.37	109%	76.0	145.0	pass
50)	1,2-Dibromoethane (EDB)	21.68	10.30	10.98	107%	78.0	124.0	pass
51)	Chlorobenzene	22.40	10.40	10.77	104%	76.0	120.0	pass
52)	Ethylbenzene	22.49	10.20	10.82	106%	75.0	125.0	pass
53)	m&p-Xylene	22.68	20.40	21.78	107%	75.0	128.0	pass
54)	o-Xylene	23.32	10.30	11.03	107%	74.0	128.0	pass
55)	Styrene	23.35	10.10	11.05	109%	69.0	122.0	pass
56)	Bromoform	23.73	10.30	11.36	110%	72.0	142.0	pass
57)	1,1,2,2-Tetrachloroethane	24.42	10.20	10.74	105%	70.0	130.0	pass
58)	4-Ethyltoluene	24.67	10.40	11.22	108%	69.0	138.0	pass
59)	1,3,5-Trimethylbenzene	24.76	10.30	11.07	107%	70.0	134.0	pass
60)	1,2,4-Trimethylbenzene	25.37	10.10	10.84	107%	65.0	129.0	pass
61)	1,3-Dichlorobenzene	25.90	9.90	10.91	110%	62.0	130.0	pass
62)	1,4-Dichlorobenzene	26.04	9.90	10.89	110%	61.0	131.0	pass
63)	Benzyl chloride	26.25	10.40	11.27	108%	61.0	153.0	pass
64)	1,2-Dichlorobenzene	26.65	9.90	10.77	109%	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	10.12	107%	37.0	124.0	pass

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: 5/16/14
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 05/16/14

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:06:10 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	853839	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2141268	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1814002	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	252854	10.25	ppbv	99
3) Dichlorodifluoromethane	4.464	85	585843	8.75	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	644706	9.38	ppbv	99
5) Chloromethane	5.011	50	286912	10.05	ppbv	99
6) Vinyl chloride	5.333	62	296004	9.77	ppbv	99
7) 1,3-Butadiene	5.437	54	220961	9.75	ppbv	96
8) Bromomethane	6.362	94	205392	9.13	ppbv	99
9) Chloroethane	6.696	64	148114	9.42	ppbv	99
10) Bromoethene	7.268	106	196156	9.34	ppbv	97
11) Trichlorofluoromethane	7.408	101	598592	10.34	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	356254	8.79	ppbv	100
13) 1,1-Dichloroethene	9.300	61	403793	9.02	ppbv	99
14) Acetone	9.817	43	423382	10.59	ppbv	98
15) Carbon disulfide	10.018	76	604188	9.27	ppbv	98
16) 2-Propanol	10.444	45	387604	9.48	ppbv	97
17) Allyl chloride	10.845	41	335000	10.14	ppbv	95
18) Dichloromethane	11.381	49	344059	8.93	ppbv	96
19) tert-Butyl methyl ethe...	12.080	73	707981	10.68	ppbv	100
20) trans-1,2-Dichloroethene	12.105	61	329328	9.02	ppbv	99
21) Hexane	12.713	57	443262	9.95	ppbv	97
22) 1,1-Dichloroethane	13.449	63	493920	9.14	ppbv	99
23) Vinyl acetate	13.601	43	622777	10.49	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	374874	9.44	ppbv	99
25) 2-Butanone (MEK)	15.000	43	548102	10.69	ppbv	96
26) Ethyl acetate	15.043	43	690659m	10.04	ppbv	
27) Tetrahydrofuran	15.450	42	361669	10.35	ppbv	99
28) Chloroform	15.596	83	511593	9.37	ppbv	98
29) Cyclohexane	15.828	56	455711	10.05	ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	515645	9.53	ppbv	100
31) Carbon tetrachloride	16.138	117	524878	10.00	ppbv	97
33) Benzene	16.631	78	847355	9.93	ppbv	98
34) 2,2,4-Trimethylpentane	16.594	57	1445549	10.97	ppbv	99
35) 1,2-Dichloroethane	16.825	62	339527	9.85	ppbv	97
36) Heptane	16.971	43	564691	11.34	ppbv	97
37) Trichloroethene	17.860	130	323313	9.92	ppbv	99
38) 1,2-Dichloropropane	18.365	63	331533	10.15	ppbv	97
39) 1,4-Dioxane	18.559	88	180787	11.60	ppbv	96
40) Bromodichloromethane	18.827	83	547433	10.36	ppbv	98
41) cis-1,3-Dichloropropene	19.593	75	465084	10.14	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	761440	11.81	ppbv	98
44) Toluene	20.074	91	961455	10.75	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	460056	11.95	ppbv	97
46) 1,1,2-Trichloroethane	20.847	97	318006	10.77	ppbv	98
47) Tetrachloroethene	20.926	166	442924	10.68	ppbv	98
48) 2-Hexanone	21.181	43	709338	12.99	ppbv	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:06:10 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	511896	11.37 ppbv	98
50) 1,2-Dibromoethane (EDB)	21.680	107	451349	10.98 ppbv	97
51) Chlorobenzene	22.404	112	730078	10.77 ppbv	99
52) Ethylbenzene	22.489	91	1274221	10.82 ppbv	100
53) m&p-Xylene	22.678	91	1958573	21.78 ppbv	100
54) o-Xylene	23.317	91	978348	11.03 ppbv	100
55) Styrene	23.353	104	796444	11.05 ppbv	99
56) Bromoform	23.730	173	538062	11.36 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	752576	10.74 ppbv	99
58) 4-Ethyltoluene	24.673	105	1287172	11.22 ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1125147	11.07 ppbv	100
60) 1,2,4-Trimethylbenzene	25.367	105	1105822	10.84 ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	768359	10.91 ppbv	98
62) 1,4-Dichlorobenzene	26.042	146	749931	10.89 ppbv	99
63) Benzyl chloride	26.255	91	864580	11.27 ppbv	100
64) 1,2-Dichlorobenzene	26.650	146	738254	10.77 ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	664365	9.82 ppbv	99
66) Hexachlorobutadiene	29.248	225	592213	10.12 ppbv	99

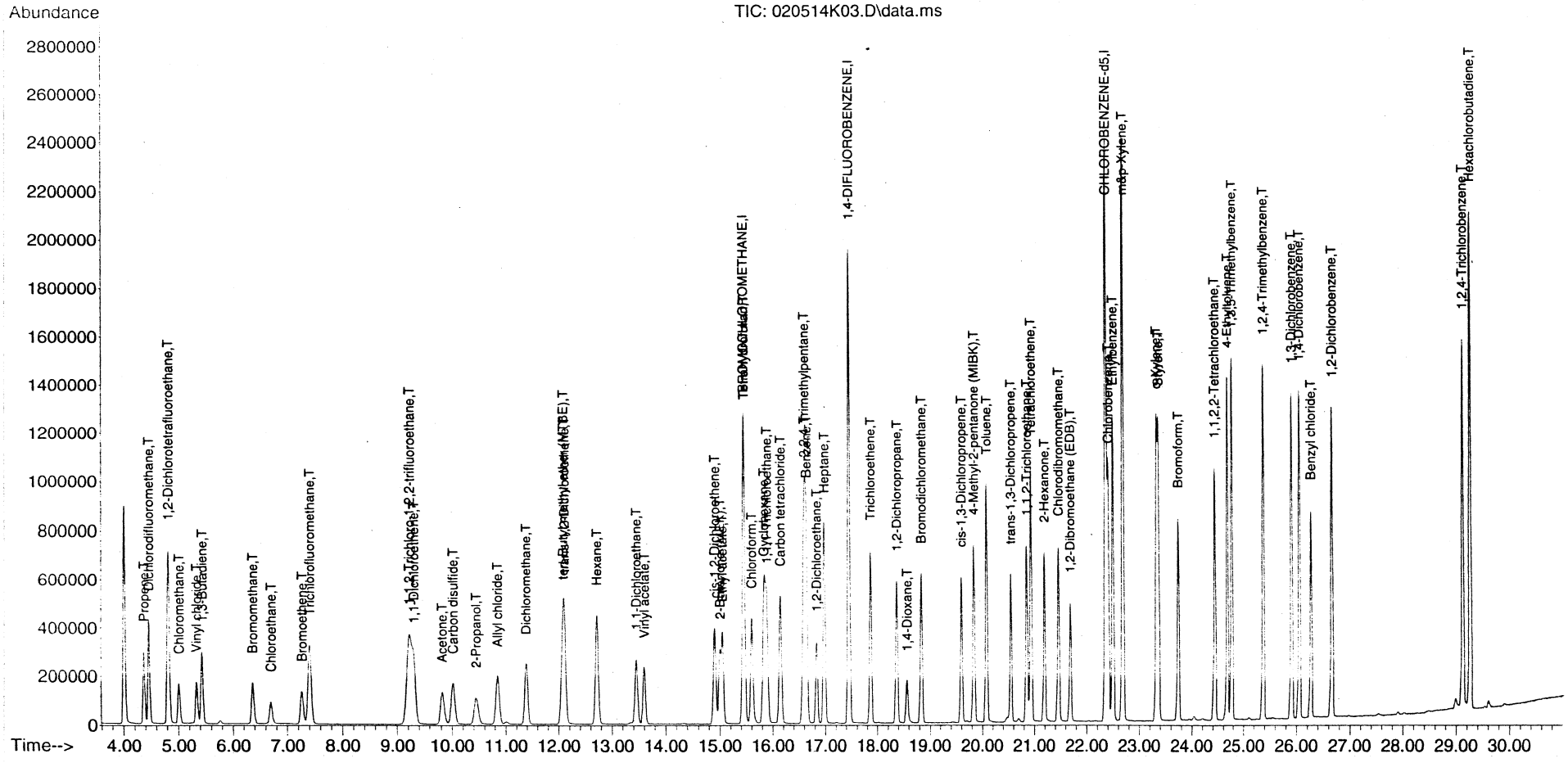
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:06:10 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

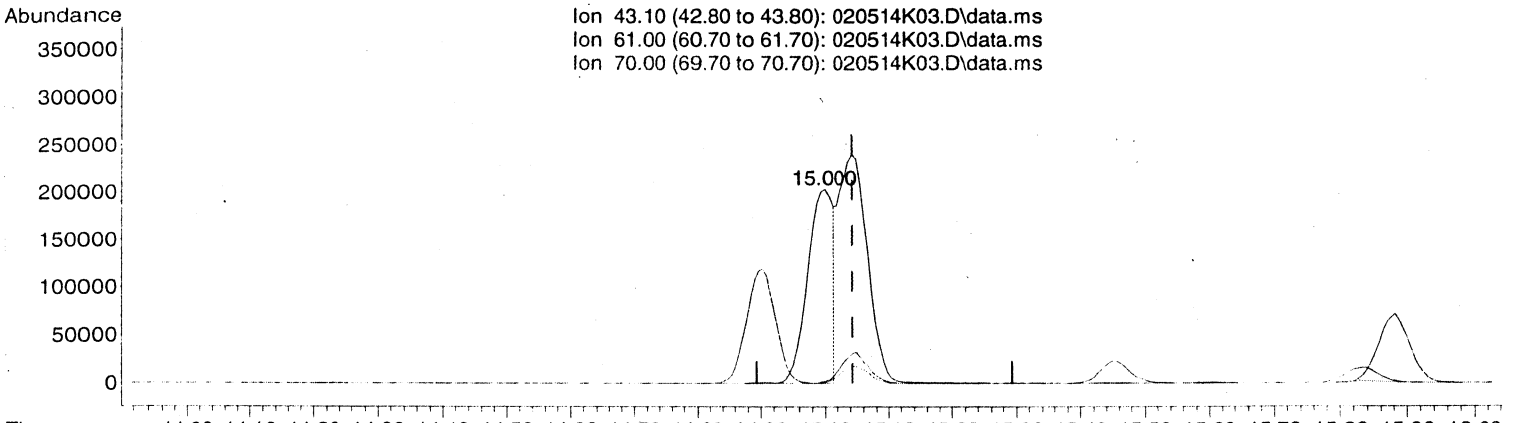


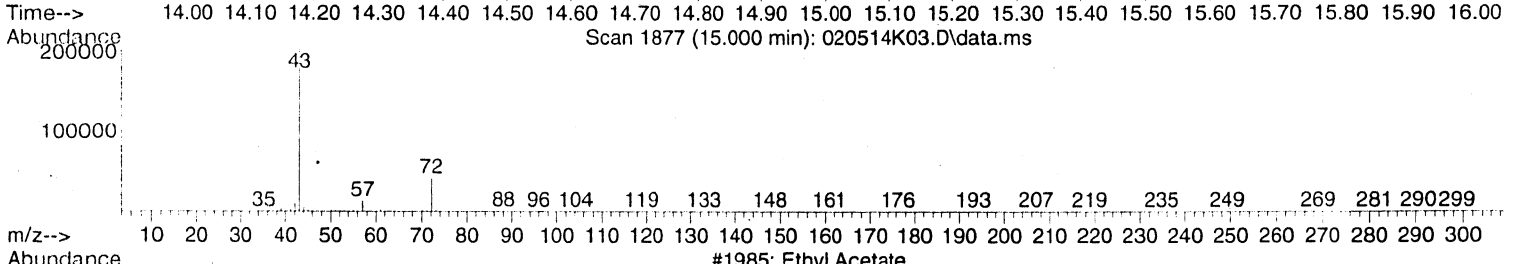
Quantitation Report (Qedit)

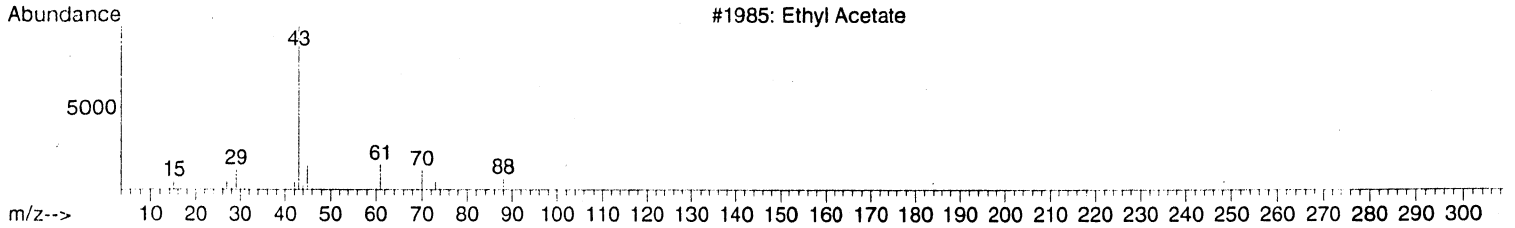
Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M







TIC: 020514K03.D\data.ms

(26) Ethyl acetate (T)

15.000min (-0.043) 7.97 ppbv

response 548433

Ion	Exp%	Act%
43.10	100	100
61.00	14.80	0.00#
70.00	9.30	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: _____

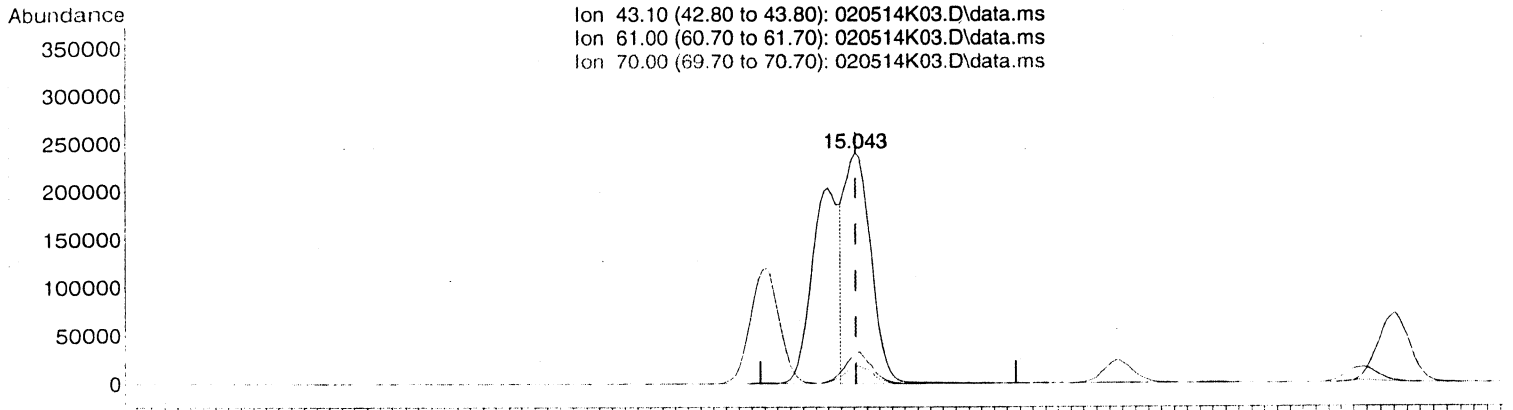
00304

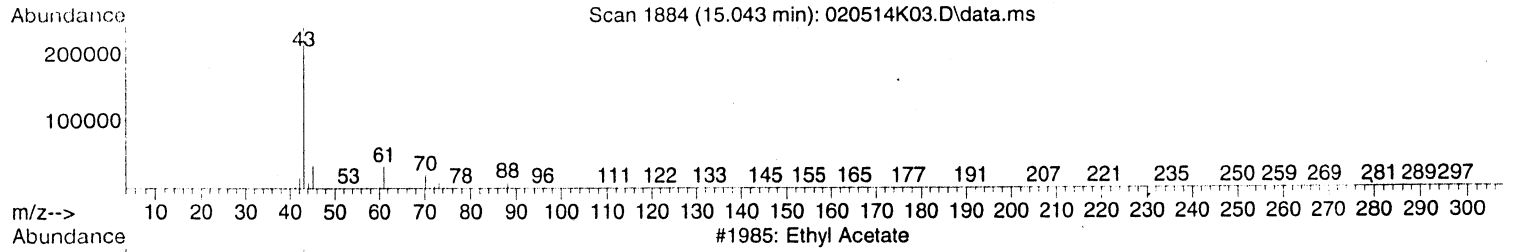
Quantitation Report (Qedit)

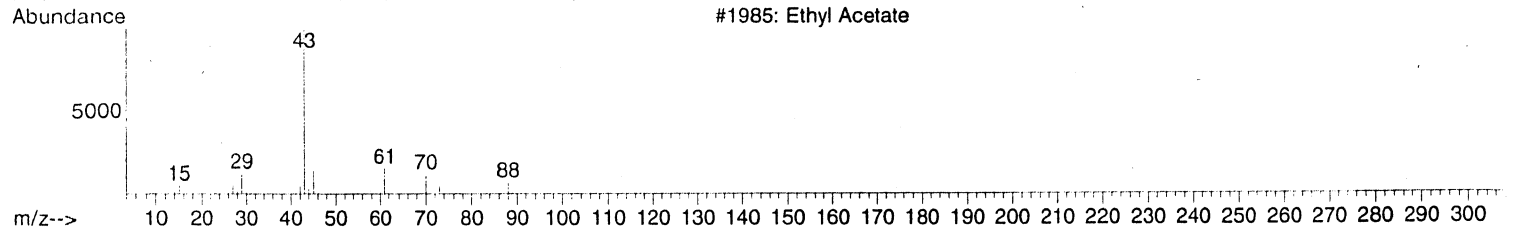
Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M







TIC: 020514K03.D\data.ms

(26) Ethyl acetate (T)

15.043min (-0.000) 10.04 ppbv m

response 690659

Ion	Exp%	Act%
43.10	100	100
61.00	14.80	0.00#
70.00	9.30	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: 5/15/14
Manual integration(s) reviewed by:
Reviewer: TC Date: 5/16/14

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	853839	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2141268	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1814002	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	252854	10.25	ppbv	99
3) Dichlorodifluoromethane	4.464	85	585843	8.75	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	644706	9.38	ppbv	99
5) Chloromethane	5.011	50	286912	10.05	ppbv	99
6) Vinyl chloride	5.333	62	296004	9.77	ppbv	99
7) 1,3-Butadiene	5.437	54	220961	9.75	ppbv	96
8) Bromomethane	6.362	94	205392	9.13	ppbv	99
9) Chloroethane	6.696	64	148114	9.42	ppbv	99
10) Bromoethene	7.268	106	196156	9.34	ppbv	97
11) Trichlorofluoromethane	7.408	101	598592	10.34	ppbv	100
12) 1,1,2-Trichloro-1,2,2-...	9.221	151	356254	8.79	ppbv	100
13) 1,1-Dichloroethene	9.300	61	403793	9.02	ppbv	99
14) Acetone	9.817	43	423382	10.59	ppbv	98
15) Carbon disulfide	10.018	76	604188	9.27	ppbv	98
16) 2-Propanol	10.444	45	387604	9.48	ppbv	97
17) Allyl chloride	10.845	41	335000	10.14	ppbv	95
18) Dichloromethane	11.381	49	344059	8.93	ppbv	96
19) tert-Butyl methyl ethe...	12.080	73	707981	10.68	ppbv	100
20) trans-1,2-Dichloroethene	12.105	61	329328	9.02	ppbv	99
21) Hexane	12.713	57	443262	9.95	ppbv	97
22) 1,1-Dichloroethane	13.449	63	493920	9.14	ppbv	99
23) Vinyl acetate	13.601	43	622777	10.49	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	374874	9.44	ppbv	99
25) 2-Butanone (MEK)	15.000	43	548102	10.69	ppbv	96
26) Ethyl acetate	15.000	43	548433	7.97	ppbv #	68
27) Tetrahydrofuran	15.450	42	361669	10.35	ppbv	99
28) Chloroform	15.596	83	511593	9.37	ppbv	98
29) Cyclohexane	15.828	56	455711	10.05	ppbv	97
30) 1,1,1-Trichloroethane	15.882	97	515645	9.53	ppbv	100
31) Carbon tetrachloride	16.138	117	524878	10.00	ppbv	97
33) Benzene	16.631	78	847355	9.93	ppbv	98
34) 2,2,4-Trimethylpentane	16.594	57	1445549	10.97	ppbv	99
35) 1,2-Dichloroethane	16.825	62	339527	9.85	ppbv	97
36) Heptane	16.971	43	564691	11.34	ppbv	97
37) Trichloroethene	17.860	130	323313	9.92	ppbv	99
38) 1,2-Dichloropropane	18.365	63	331533	10.15	ppbv	97
39) 1,4-Dioxane	18.559	88	180787	11.60	ppbv	96
40) Bromodichloromethane	18.827	83	547433	10.36	ppbv	98
41) cis-1,3-Dichloropropene	19.593	75	465084	10.14	ppbv	98
42) 4-Methyl-2-pentanone (...	19.831	43	761440	11.81	ppbv	98
44) Toluene	20.074	91	961455	10.75	ppbv	99
45) trans-1,3-Dichloropropene	20.542	75	460056	11.95	ppbv	97
46) 1,1,2-Trichloroethane	20.847	97	318006	10.77	ppbv	98
47) Tetrachloroethene	20.926	166	442924	10.68	ppbv	98
48) 2-Hexanone	21.181	43	709338	12.99	ppbv	97

00306

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	511896	11.37 ppbv	98
50) 1,2-Dibromoethane (EDB)	21.680	107	451349	10.98 ppbv	97
51) Chlorobenzene	22.404	112	730078	10.77 ppbv	99
52) Ethylbenzene	22.489	91	1274221	10.82 ppbv	100
53) m&p-Xylene	22.678	91	1958573	21.78 ppbv	100
54) o-Xylene	23.317	91	978348	11.03 ppbv	100
55) Styrene	23.353	104	796444	11.05 ppbv	99
56) Bromoform	23.730	173	538062	11.36 ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.424	83	752576	10.74 ppbv	99
58) 4-Ethyltoluene	24.673	105	1287172	11.22 ppbv	100
59) 1,3,5-Trimethylbenzene	24.764	105	1125147	11.07 ppbv	100
60) 1,2,4-Trimethylbenzene	25.367	105	1105822	10.84 ppbv	100
61) 1,3-Dichlorobenzene	25.896	146	768359	10.91 ppbv	98
62) 1,4-Dichlorobenzene	26.042	146	749931	10.89 ppbv	99
63) Benzyl chloride	26.255	91	864580	11.27 ppbv	100
64) 1,2-Dichlorobenzene	26.650	146	738254	10.77 ppbv	98
65) 1,2,4-Trichlorobenzene	29.108	180	664365	9.82 ppbv	99
66) Hexachlorobutadiene	29.248	225	592213	10.12 ppbv	99

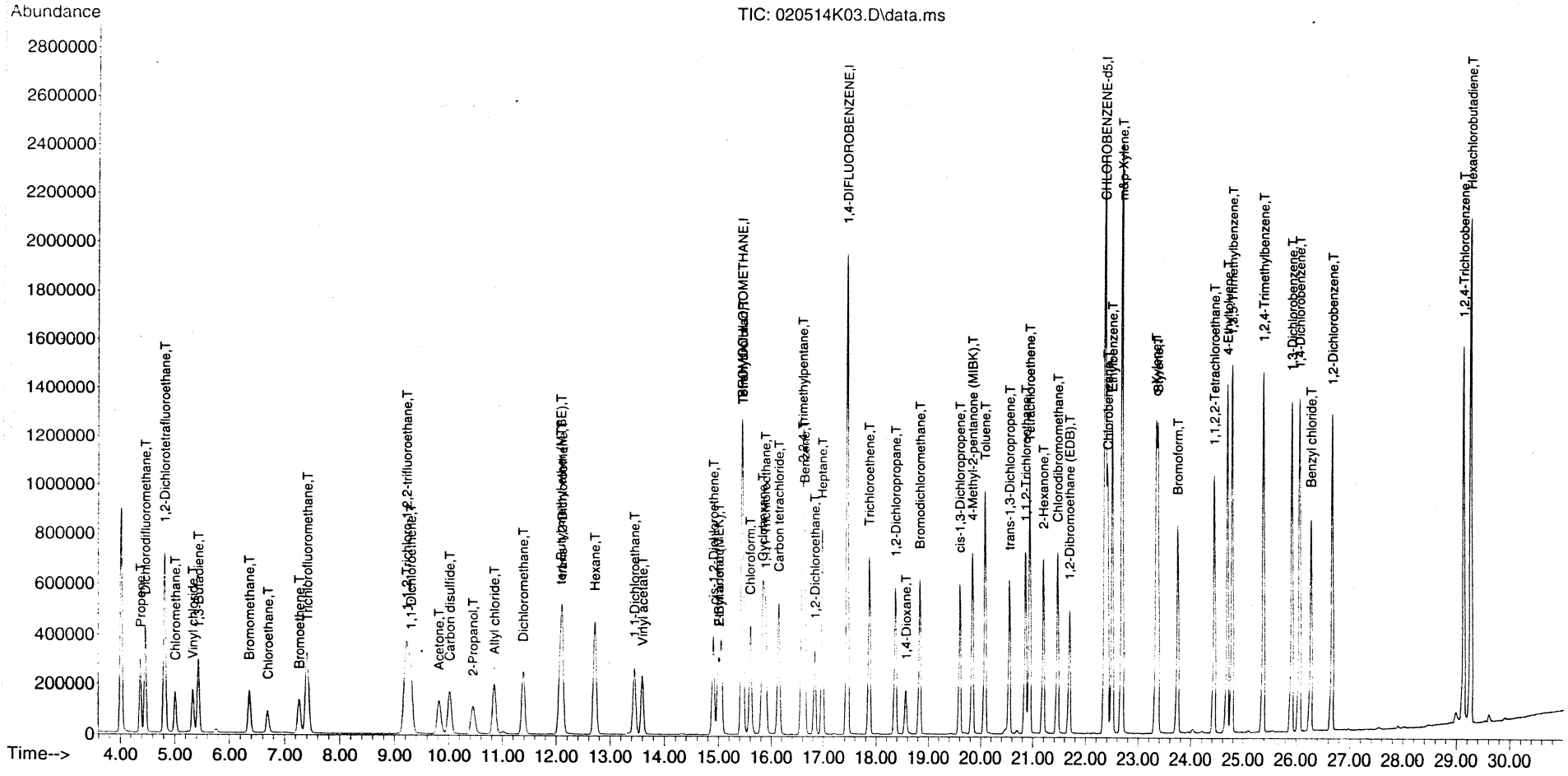
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K03.D
Acq On : 5 Feb 2014 13:45
Instrument: HP5973K
Operator : EM
Sample : 020514-BS1
Misc : 10 ppbv 1402036
ALS Vial : 32
Multiplier: 1

Quant Time: May 06 10:05:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M



QLS REPORT

1 out
em 1/15/14

Instrument Name: HP5973K
Sample Name: 020514-CRL1
Misc Info: 1.0 ppbv 1402037
Date Acquired: 2/5/2014 14:31
QLast Update: Fri Jan 24 15:09:46 2014
Operator: EM

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	BROMOCHLOROMETHANE	15.44	22.00	22.00	100%	60.0	140.0	pass
2)	Propene	4.37	1.07	1.43	133%	60.0	140.0	pass
3)	Dichlorodifluoromethane	4.46	1.03	1.31	127%	60.0	140.0	pass
4)	1,2-Dichlorotetrafluoroethane	4.82	1.05	1.24	118%	60.0	140.0	pass
5)	Chloromethane	5.01	1.05	1.33	127%	60.0	140.0	pass
6)	Vinyl chloride	5.33	1.05	1.30	123%	60.0	140.0	pass
7)	1,3-Butadiene	5.43	1.02	1.26	123%	60.0	140.0	pass
8)	Bromomethane	6.37	1.03	1.27	123%	60.0	140.0	pass
9)	Chloroethane	6.70	1.03	1.31	127%	60.0	140.0	pass
10)	Bromoethene	7.26	1.03	1.21	118%	60.0	140.0	pass
11)	Trichlorofluoromethane	7.41	1.07	1.37	128%	60.0	140.0	pass
12)	1,1,2-Trichloro-1,2,2-trifluoroethane	9.23	0.97	1.18	122%	60.0	140.0	pass
13)	1,1-Dichloroethene	9.29	0.96	1.17	122%	60.0	140.0	pass
14)	Acetone	9.85	1.06	1.40	132%	60.0	140.0	pass
15)	Carbon disulfide	10.02	1.02	1.25	122%	60.0	140.0	pass
16)	2-Propanol	10.50	0.95	1.15	121%	60.0	140.0	pass
17)	Allyl chloride	10.85	1.01	1.26	125%	60.0	140.0	pass
18)	Dichloromethane	11.38	0.98	1.66	169%	60.0	140.0	FAIL
19)	tert-Butyl methyl ether (MTBE)	12.12	1.09	1.27	116%	60.0	140.0	pass
20)	trans-1,2-Dichloroethene	12.10	0.95	1.16	122%	60.0	140.0	pass
21)	Hexane	12.71	1.02	1.22	120%	60.0	140.0	pass
22)	1,1-Dichloroethane	13.45	0.97	1.22	126%	60.0	140.0	pass
23)	Vinyl acetate	13.60	1.00	1.18	118%	60.0	140.0	pass
24)	cis-1,2-Dichloroethene	14.90	1.01	1.21	120%	60.0	140.0	pass
25)	2-Butanone (MEK)	15.02	1.04	1.16	111%	60.0	140.0	pass
26)	Ethyl acetate	15.05	1.04	1.42	136%	60.0	140.0	pass
27)	Tetrahydrofuran	15.48	1.03	1.30	126%	60.0	140.0	pass
28)	Chloroform	15.60	1.02	1.25	122%	60.0	140.0	pass
29)	Cyclohexane	15.83	1.04	1.25	120%	60.0	140.0	pass
30)	1,1,1-Trichloroethane	15.88	1.01	1.25	124%	60.0	140.0	pass
31)	Carbon tetrachloride	16.14	1.03	1.29	125%	60.0	140.0	pass
32)	1,4-DIFLUOROBENZENE	17.45	22.00	22.00	100%	60.0	140.0	pass
33)	Benzene	16.63	1.01	1.29	128%	60.0	140.0	pass
34)	2,2,4-Trimethylpentane	16.59	1.05	1.33	127%	60.0	140.0	pass
35)	1,2-Dichloroethane	16.83	0.98	1.30	133%	60.0	140.0	pass
36)	Heptane	16.97	1.05	1.36	130%	60.0	140.0	pass
37)	Trichloroethene	17.87	1.01	1.31	129%	60.0	140.0	pass
38)	1,2-Dichloropropane	18.36	1.03	1.37	133%	60.0	140.0	pass
39)	1,4-Dioxane	18.60	1.06	1.19	112%	60.0	140.0	pass
40)	Bromodichloromethane	18.83	1.06	1.35	127%	60.0	140.0	pass
41)	cis-1,3-Dichloropropene	19.59	1.03	1.28	124%	60.0	140.0	pass
42)	4-Methyl-2-pentanone (MIBK)	19.84	1.05	1.33	127%	60.0	140.0	pass
43)	CHLOROBENZENE-d5	22.36	22.00	22.00	100%	60.0	140.0	pass
44)	Toluene	20.07	1.02	1.36	133%	60.0	140.0	pass
45)	trans-1,3-Dichloropropene	20.54	1.07	1.48	139%	60.0	140.0	pass

46)	1,1,2-Trichloroethane	20.85	1.03	1.44	140%	60.0	140.0	pass
47)	Tetrachloroethene	20.93	1.00	1.37	137%	60.0	140.0	pass
48)	2-Hexanone	21.19	1.03	1.30	126%	60.0	140.0	pass
49)	Chlorodibromomethane	21.45	1.04	1.43	138%	60.0	140.0	pass
50)	1,2-Dibromoethane (EDB)	21.68	1.03	1.40	136%	60.0	140.0	pass
51)	Chlorobenzene	22.40	1.04	1.41	135%	60.0	140.0	pass
52)	Ethylbenzene	22.50	1.02	1.34	132%	60.0	140.0	pass
53)	m&p-Xylene	22.67	2.04	2.54	125%	60.0	140.0	pass
54)	o-Xylene	23.32	1.03	1.29	125%	60.0	140.0	pass
55)	Styrene	23.36	1.01	1.23	122%	60.0	140.0	pass
56)	Bromoform	23.73	1.03	1.36	132%	60.0	140.0	pass
57)	1,1,2,2-Tetrachloroethane	24.43	1.02	1.38	135%	60.0	140.0	pass
58)	4-Ethyltoluene	24.67	1.05	1.30	123%	60.0	140.0	pass
59)	1,3,5-Trimethylbenzene	24.76	1.03	1.25	122%	60.0	140.0	pass
60)	1,2,4-Trimethylbenzene	25.37	1.01	1.22	121%	60.0	140.0	pass
61)	1,3-Dichlorobenzene	25.90	0.99	1.28	129%	60.0	140.0	pass
62)	1,4-Dichlorobenzene	26.04	0.99	1.25	126%	60.0	140.0	pass
63)	Benzyl chloride	26.25	1.03	1.24	120%	60.0	140.0	pass
64)	1,2-Dichlorobenzene	26.64	0.99	1.25	127%	60.0	140.0	pass
65)	1,2,4-Trichlorobenzene	29.11	0.91	0.99	109%	60.0	140.0	pass
66)	Hexachlorobutadiene	29.25	0.95	1.19	125%	60.0	140.0	pass

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:07:04 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.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: [illegible]
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 5/14/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	873753	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2165602	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1850452	22.00	ppbv	0.00
Target Compounds						Qvalue
2) Propene	4.372	41	36051	1.43	ppbv	98
3) Dichlorodifluoromethane	4.463	85	89522	1.31	ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	87409	1.24	ppbv	99
5) Chloromethane	5.011	50	38833	1.33	ppbv	98
6) Vinyl chloride	5.333	62	40151	1.30	ppbv	98
7) 1,3-Butadiene	5.431	54	29155	1.26	ppbv	91
8) Bromomethane	6.367	94	29293	1.27	ppbv	97
9) Chloroethane	6.696	64	21121	1.31	ppbv	97
10) Bromoethene	7.262	106	26030	1.21	ppbv	97
11) Trichlorofluoromethane	7.408	101	81428	1.37	ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.227	151	49101	1.18	ppbv	99
13) 1,1-Dichloroethene	9.294	61	53530	1.17	ppbv	99
14) Acetone	9.853	43	57345	1.40	ppbv	98
15) Carbon disulfide	10.018	76	83198	1.25	ppbv	89
16) 2-Propanol	10.504	45	48246	1.15	ppbv	88
17) Allyl chloride	10.851	41	42677	1.26	ppbv	98
18) Dichloromethane	11.380	49	65430	1.66	ppbv	96
19) tert-Butyl methyl ethe...	12.116	73	86030	1.27	ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	43353	1.16	ppbv	99
21) Hexane	12.713	57	55594	1.22	ppbv	96
22) 1,1-Dichloroethane	13.455	63	67490	1.22	ppbv	98
23) Vinyl acetate	13.601	43	71942	1.18	ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	49257	1.21	ppbv	100
25) 2-Butanone (MEK)	15.018	43	60679	1.16	ppbv	97
26) Ethyl acetate	15.049	43	99837m	1.42	ppbv	
27) Tetrahydrofuran	15.481	42	46406	1.30	ppbv	97
28) Chloroform	15.596	83	69719	1.25	ppbv	96
29) Cyclohexane	15.827	56	58162	1.25	ppbv	94
30) 1,1,1-Trichloroethane	15.882	97	69163	1.25	ppbv	100
31) Carbon tetrachloride	16.138	117	69091	1.29	ppbv	99
33) Benzene	16.631	78	111609	1.29	ppbv	98
34) 2,2,4-Trimethylpentane	16.594	57	177353	1.33	ppbv	98
35) 1,2-Dichloroethane	16.831	62	45332	1.30	ppbv	95
36) Heptane	16.971	43	68609	1.36	ppbv	97
37) Trichloroethene	17.865	130	43039	1.31	ppbv	99
38) 1,2-Dichloropropane	18.364	63	45121	1.37	ppbv	98
39) 1,4-Dioxane	18.595	88	18700	1.19	ppbv	93
40) Bromodichloromethane	18.827	83	72089	1.35	ppbv	97
41) cis-1,3-Dichloropropene	19.593	75	59454	1.28	ppbv	99
42) 4-Methyl-2-pentanone (...	19.843	43	86838	1.33	ppbv	96
44) Toluene	20.074	91	124238	1.36	ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	58325	1.48	ppbv	96
46) 1,1,2-Trichloroethane	20.846	97	43340	1.44	ppbv	96
47) Tetrachloroethene	20.932	166	58046	1.37	ppbv	98
48) 2-Hexanone	21.193	43	72313	1.30	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:07:04 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49)	Chlorodibromomethane	21.455	129	65772	1.43	ppbv	98
50)	1,2-Dibromoethane (EDB)	21.680	107	58733	1.40	ppbv	95
51)	Chlorobenzene	22.404	112	97262	1.41	ppbv	86
52)	Ethylbenzene	22.495	91	161542	1.34	ppbv	100
53)	m&p-Xylene	22.671	91	233314	2.54	ppbv	99
54)	o-Xylene	23.322	91	116384	1.29	ppbv	99
55)	Styrene	23.359	104	90778	1.23	ppbv	98
56)	Bromoform	23.730	173	65850	1.36	ppbv	99
57)	1,1,2,2-Tetrachloroethane	24.430	83	98729	1.38	ppbv	100
58)	4-Ethyltoluene	24.667	105	151783	1.30	ppbv	99
59)	1,3,5-Trimethylbenzene	24.764	105	130102	1.25	ppbv	97
60)	1,2,4-Trimethylbenzene	25.367	105	126918	1.22	ppbv	97
61)	1,3-Dichlorobenzene	25.896	146	91971	1.28	ppbv	98
62)	1,4-Dichlorobenzene	26.042	146	87790	1.25	ppbv	100
63)	Benzyl chloride	26.255	91	96823	1.24	ppbv	98
64)	1,2-Dichlorobenzene	26.644	146	87591	1.25	ppbv	99
65)	1,2,4-Trichlorobenzene	29.108	180	68634	0.99	ppbv	96
66)	Hexachlorobutadiene	29.248	225	70783	1.19	ppbv	99

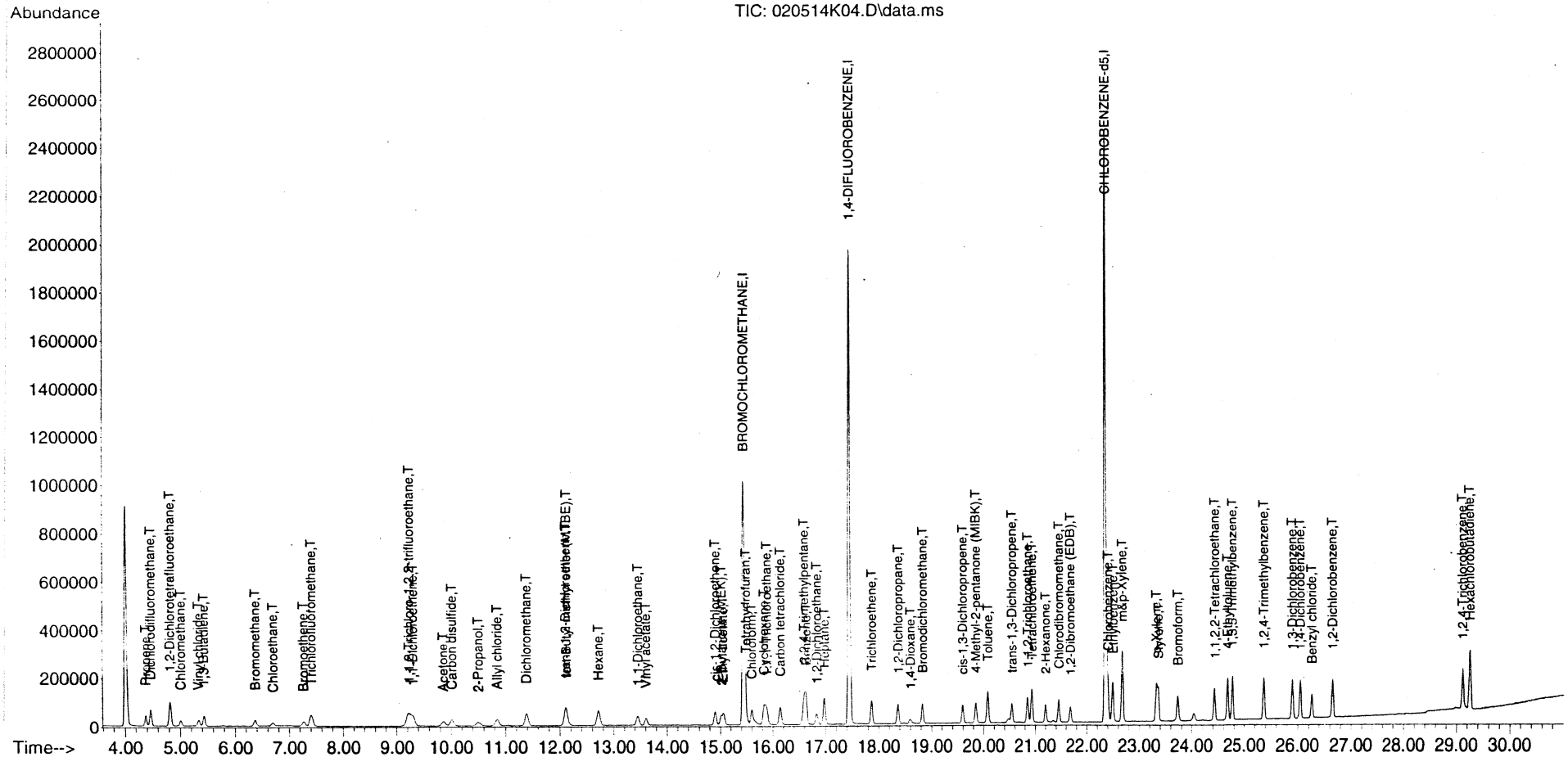
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:07:04 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

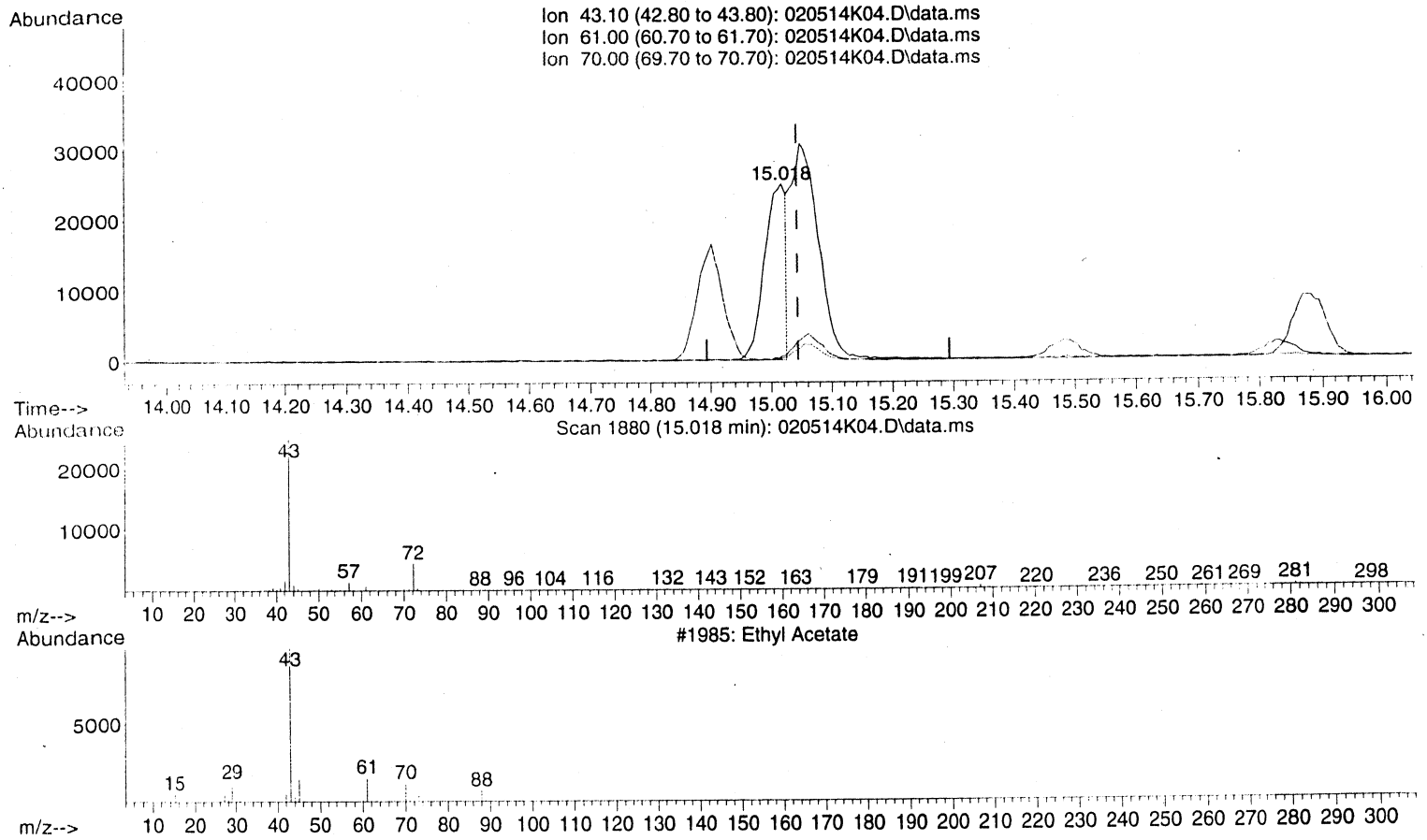


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:06:49 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M



(26) Ethyl acetate (T)

15.018min (-0.025) 0.86 ppbv

response 60679

Ion	Exp%	Act%
43.10	100	100
61.00	14.80	0.00#
70.00	9.30	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: NI
☐ After Manual Integration
Manual integration(s) performed by.
Analyst: _____ Date: _____
Manual integration(s) reviewed by:
Reviewer: _____ Date: _____

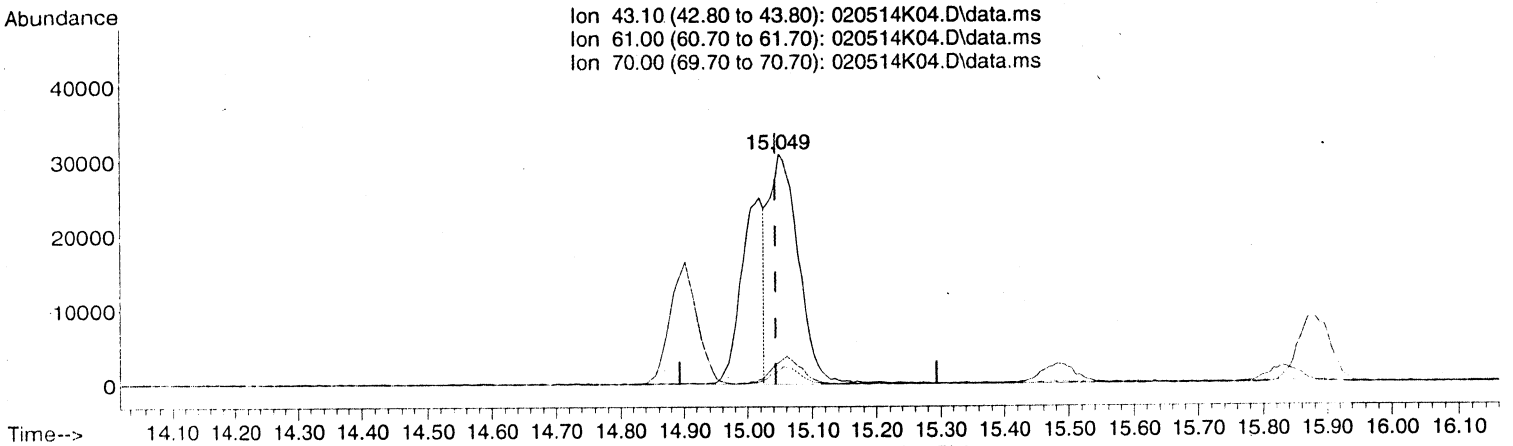
00314

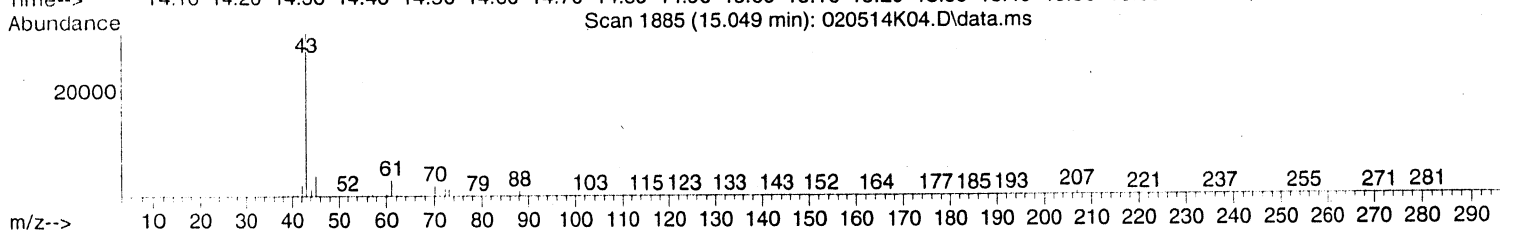
Quantitation Report (Qedit)

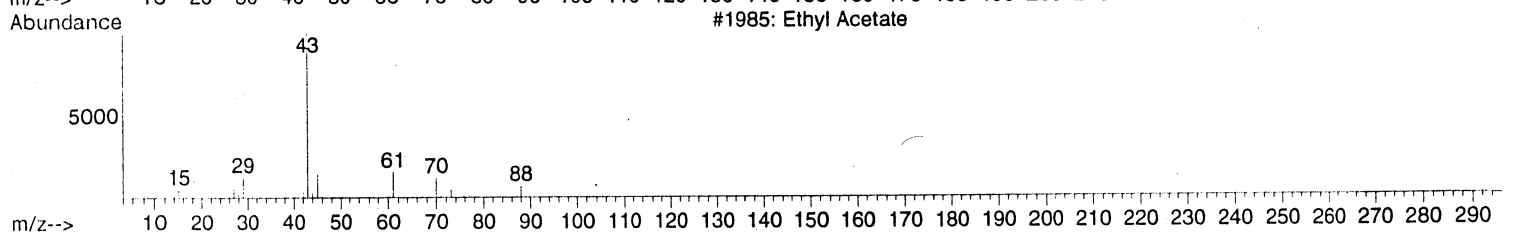
Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:07:04 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M







TIC: 020514K04.D\data.ms

(26) Ethyl acetate (T)

15.049min (+0.006) 1.42 ppbv m

response 99837

Ion	Exp%	Act%
43.10	100	100
61.00	14.80	0.00#
70.00	9.30	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: 5/15/14
Manual integration(s) reviewed by:
Reviewer: [illegible] Date: 5/16/14

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:06:49 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Rel LIT
dm 5/15/14

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	873753	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2165602	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1850452	22.00 ppbv	0.00
Target Compounds					Qvalue
2) Propene	4.372	41	36051	1.43 ppbv	98
3) Dichlorodifluoromethane	4.463	85	89522	1.31 ppbv	99
4) 1,2-Dichlorotetrafluor...	4.816	85	87409	1.24 ppbv	99
5) Chloromethane	5.011	50	38833	1.33 ppbv	98
6) Vinyl chloride	5.333	62	40151	1.30 ppbv	98
7) 1,3-Butadiene	5.431	54	29155	1.26 ppbv	91
8) Bromomethane	6.367	94	29293	1.27 ppbv	97
9) Chloroethane	6.696	64	21121	1.31 ppbv	97
10) Bromoethene	7.262	106	26030	1.21 ppbv	97
11) Trichlorofluoromethane	7.408	101	81428	1.37 ppbv	99
12) 1,1,2-Trichloro-1,2,2-...	9.227	151	49101	1.18 ppbv	99
13) 1,1-Dichloroethene	9.294	61	53530	1.17 ppbv	99
14) Acetone	9.853	43	57345	1.40 ppbv	98
15) Carbon disulfide	10.018	76	83198	1.25 ppbv	89
16) 2-Propanol	10.504	45	48246	1.15 ppbv	88
17) Allyl chloride	10.851	41	42677	1.26 ppbv	98
18) Dichloromethane	11.380	49	65430	1.66 ppbv	96
19) tert-Butyl methyl ethe...	12.116	73	86030	1.27 ppbv	99
20) trans-1,2-Dichloroethene	12.104	61	43353	1.16 ppbv	99
21) Hexane	12.713	57	55594	1.22 ppbv	96
22) 1,1-Dichloroethane	13.455	63	67490	1.22 ppbv	98
23) Vinyl acetate	13.601	43	71942	1.18 ppbv	99
24) cis-1,2-Dichloroethene	14.903	61	49257	1.21 ppbv	100
25) 2-Butanone (MEK)	15.018	43	60679	1.16 ppbv	97
26) Ethyl acetate	15.018	43	60679	0.86 ppbv #	68
27) Tetrahydrofuran	15.481	42	46406	1.30 ppbv	97
28) Chloroform	15.596	83	69719	1.25 ppbv	96
29) Cyclohexane	15.827	56	58162	1.25 ppbv	94
30) 1,1,1-Trichloroethane	15.882	97	69163	1.25 ppbv	100
31) Carbon tetrachloride	16.138	117	69091	1.29 ppbv	99
33) Benzene	16.631	78	111609	1.29 ppbv	98
34) 2,2,4-Trimethylpentane	16.594	57	177353	1.33 ppbv	98
35) 1,2-Dichloroethane	16.831	62	45332	1.30 ppbv	95
36) Heptane	16.971	43	68609	1.36 ppbv	97
37) Trichloroethene	17.865	130	43039	1.31 ppbv	99
38) 1,2-Dichloropropane	18.364	63	45121	1.37 ppbv	98
39) 1,4-Dioxane	18.595	88	18700	1.19 ppbv	93
40) Bromodichloromethane	18.827	83	72089	1.35 ppbv	97
41) cis-1,3-Dichloropropene	19.593	75	59454	1.28 ppbv	99
42) 4-Methyl-2-pentanone (...	19.843	43	86838	1.33 ppbv	96
44) Toluene	20.074	91	124238	1.36 ppbv	100
45) trans-1,3-Dichloropropene	20.542	75	58325	1.48 ppbv	96
46) 1,1,2-Trichloroethane	20.846	97	43340	1.44 ppbv	96
47) Tetrachloroethene	20.932	166	58046	1.37 ppbv	98
48) 2-Hexanone	21.193	43	72313	1.30 ppbv	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:06:49 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Chlorodibromomethane	21.455	129	65772	1.43	ppbv	98
50) 1,2-Dibromoethane (EDB)	21.680	107	58733	1.40	ppbv	95
51) Chlorobenzene	22.404	112	97262	1.41	ppbv	86
52) Ethylbenzene	22.495	91	161542	1.34	ppbv	100
53) m&p-Xylene	22.671	91	233314	2.54	ppbv	99
54) o-Xylene	23.322	91	116384	1.29	ppbv	99
55) Styrene	23.359	104	90778	1.23	ppbv	98
56) Bromoform	23.730	173	65850	1.36	ppbv	99
57) 1,1,2,2-Tetrachloroethane	24.430	83	98729	1.38	ppbv	100
58) 4-Ethyltoluene	24.667	105	151783	1.30	ppbv	99
59) 1,3,5-Trimethylbenzene	24.764	105	130102	1.25	ppbv	97
60) 1,2,4-Trimethylbenzene	25.367	105	126918	1.22	ppbv	97
61) 1,3-Dichlorobenzene	25.896	146	91971	1.28	ppbv	98
62) 1,4-Dichlorobenzene	26.042	146	87790	1.25	ppbv	100
63) Benzyl chloride	26.255	91	96823	1.24	ppbv	98
64) 1,2-Dichlorobenzene	26.644	146	87591	1.25	ppbv	99
65) 1,2,4-Trichlorobenzene	29.108	180	68634	0.99	ppbv	96
66) Hexachlorobutadiene	29.248	225	70783	1.19	ppbv	99

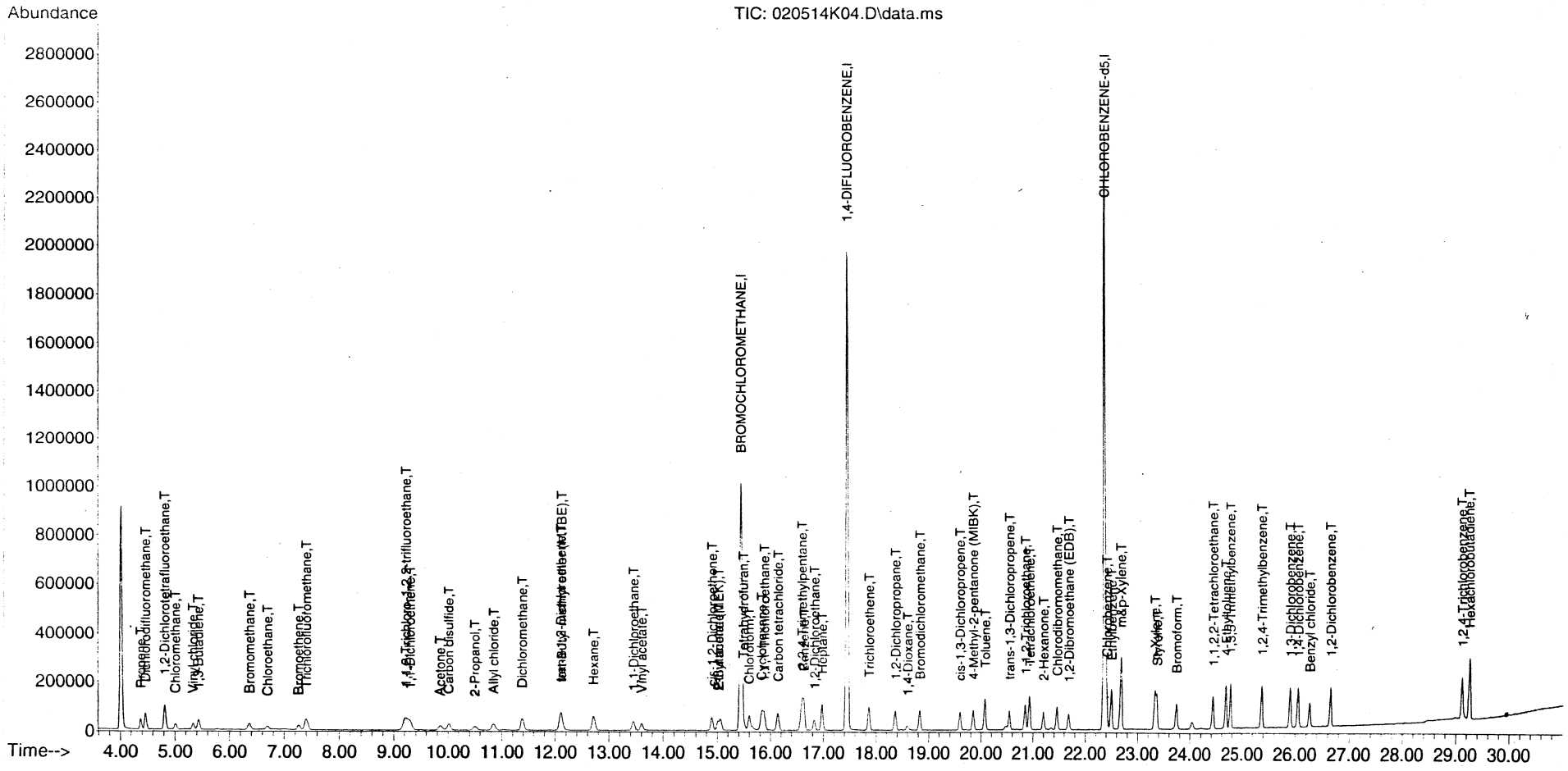
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K04.D
Acq On : 5 Feb 2014 14:31
Instrument: HP5973K
Operator : EM
Sample : 020514-CRL1
Misc : 1.0 ppbv 1402037
ALS Vial : 33
Multiplier: 1

Quant Time: May 06 10:06:49 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K09.D
Acq On : 5 Feb 2014 18:37
Instrument: HP5973K
Operator : EM
Sample : CAN 852
Misc : CAN 852
ALS Vial : 38
Multiplier: 1

Quant Time: May 06 10:08:28 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	853840	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2155644	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1898070	22.00 ppbv	0.00

Target Compounds Qvalue

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

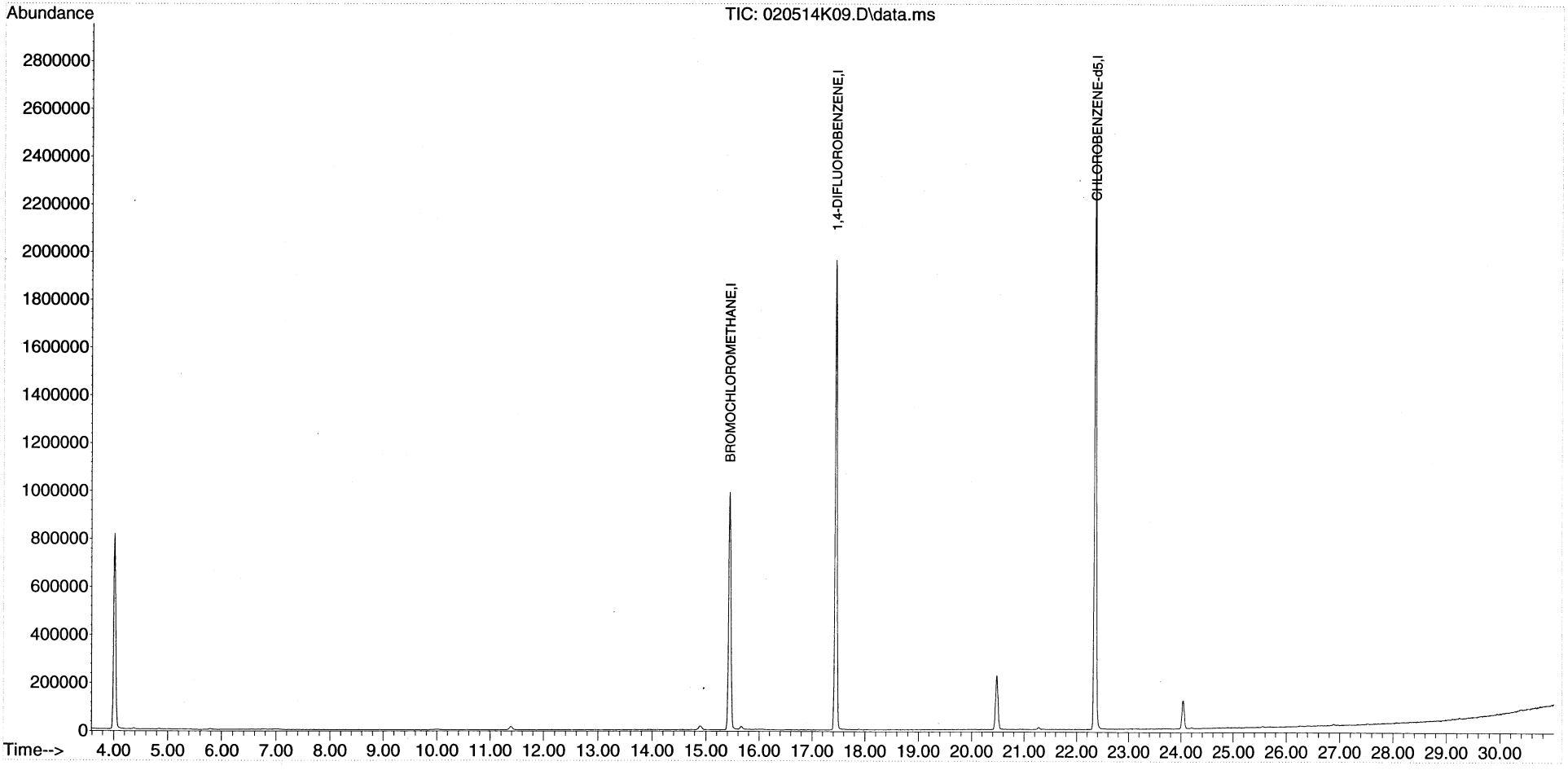
00315

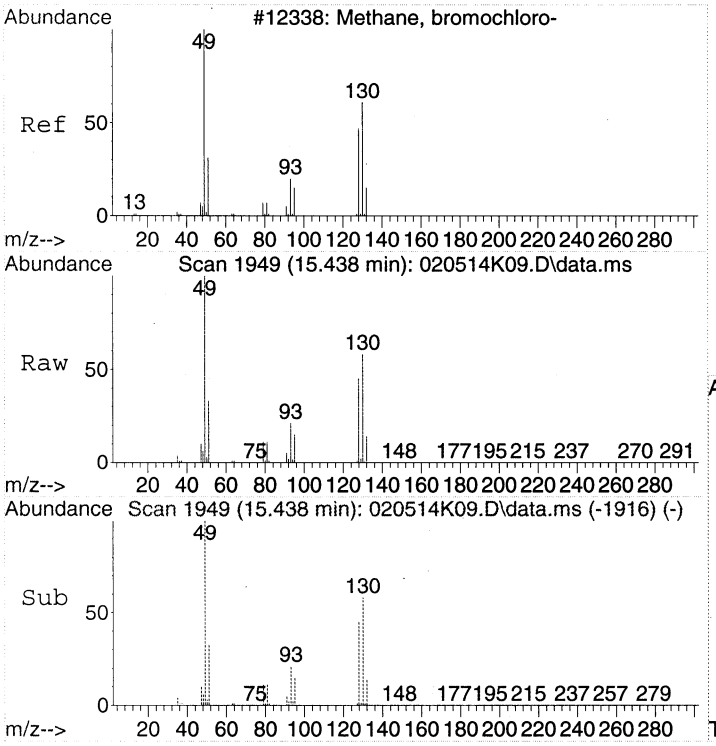
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K09.D
Acq On : 5 Feb 2014 18:37
Instrument: HP5973K
Operator : EM
Sample : CAN 852
Misc : CAN 852
ALS Vial : 38
Multiplier: 1

Quant Time: May 06 10:08:28 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

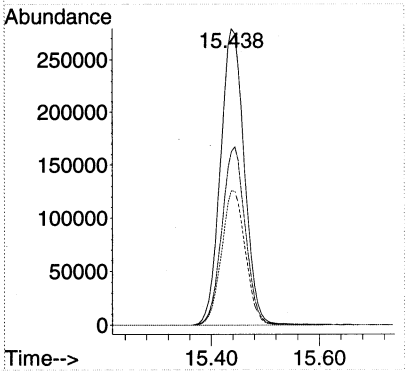


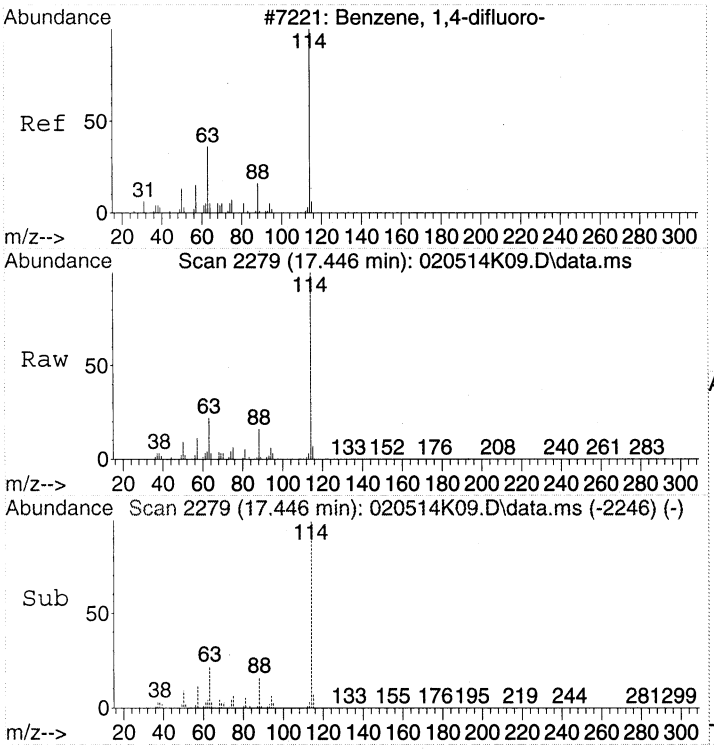


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K09.D
Acq: 5 Feb 2014 18:37

Tgt Ion: 49 Resp: 853840

Ion	Ratio	Lower	Upper
49	100		
130	59.0	39.6	79.6
128	45.0	26.9	66.9

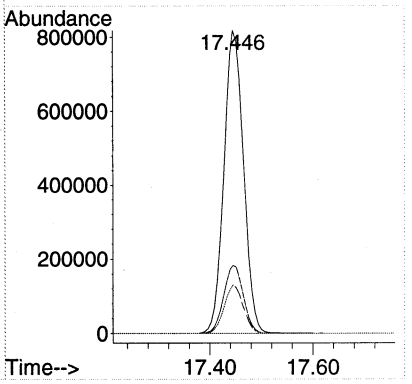




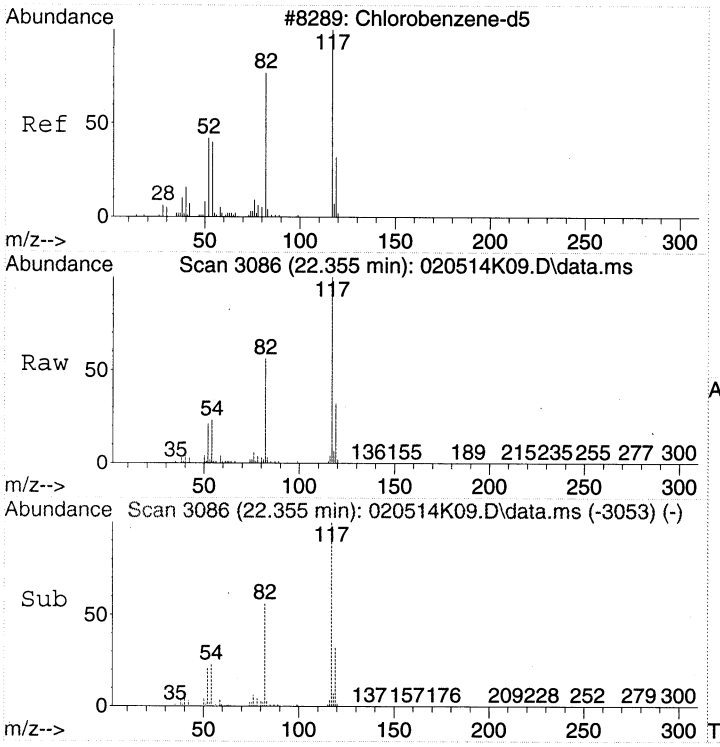
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K09.D
Acq: 5 Feb 2014 18:37

Tgt Ion:114 Resp: 2155644

Ion	Ratio	Lower	Upper
114	100		
63	22.5	2.3	42.3
88	15.6	0.0	35.2



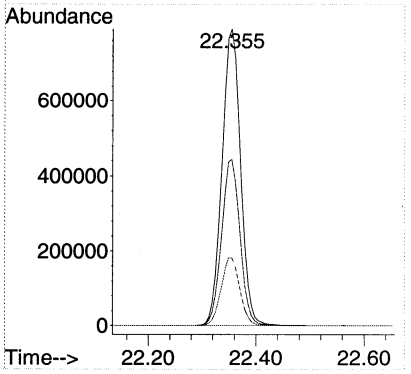
00321



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K09.D
Acq: 5 Feb 2014 18:37

Tgt Ion:117 Resp: 1898070

Ion	Ratio	Lower	Upper
117	100		
82	55.8	37.1	77.1
54	23.3	3.3	43.3



00322

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K10.D
Acq On : 5 Feb 2014 19:26
Instrument: HP5973K
Operator : EM
Sample : CAN 876
Misc : CAN 876
ALS Vial : 39
Multiplier: 1

Quant Time: May 06 10:08:33 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	851922	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2115589	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1850265	22.00 ppbv	0.00

Target Compounds Qvalue

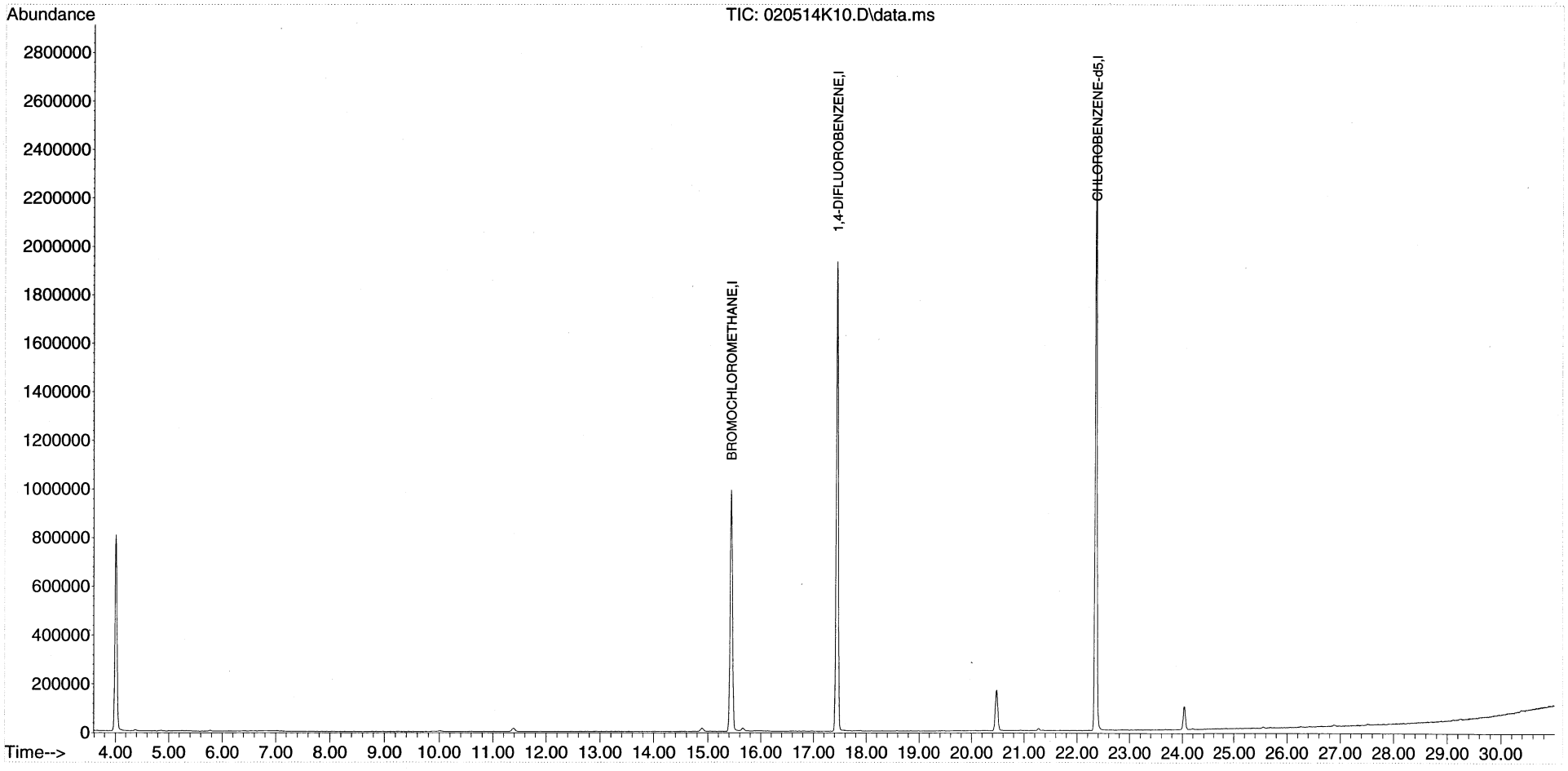
(#) = qualifier out of range (m) = manual integration (+) = signals summed

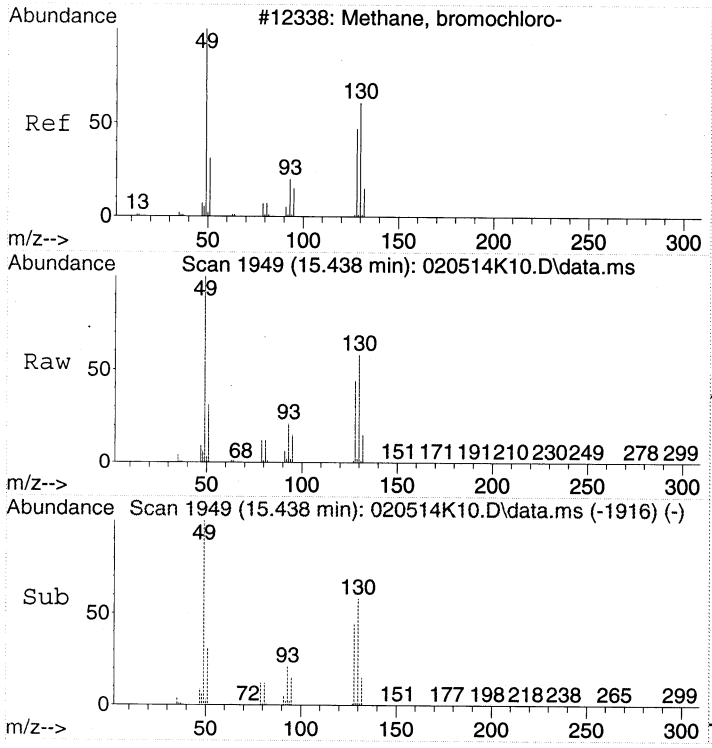
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K10.D
Acq On : 5 Feb 2014 19:26
Instrument: HP5973K
Operator : EM
Sample : CAN 876
Misc : CAN 876
ALS Vial : 39
Multiplier: 1

Quant Time: May 06 10:08:33 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

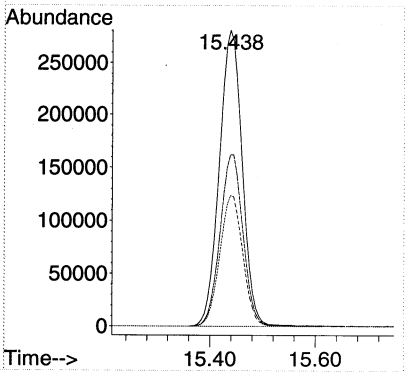


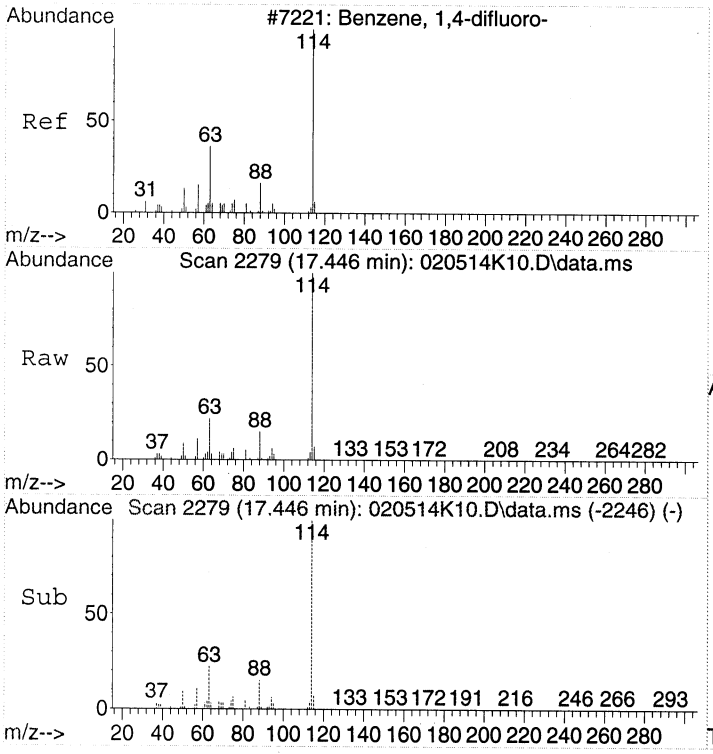


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K10.D
Acq: 5 Feb 2014 19:26

Tgt Ion: 49 Resp: 851922

Ion	Ratio	Lower	Upper
49	100		
130	58.0	39.6	79.6
128	44.4	26.9	66.9

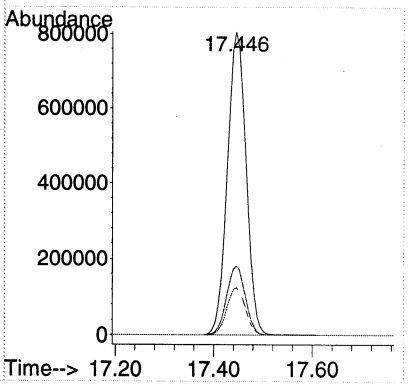


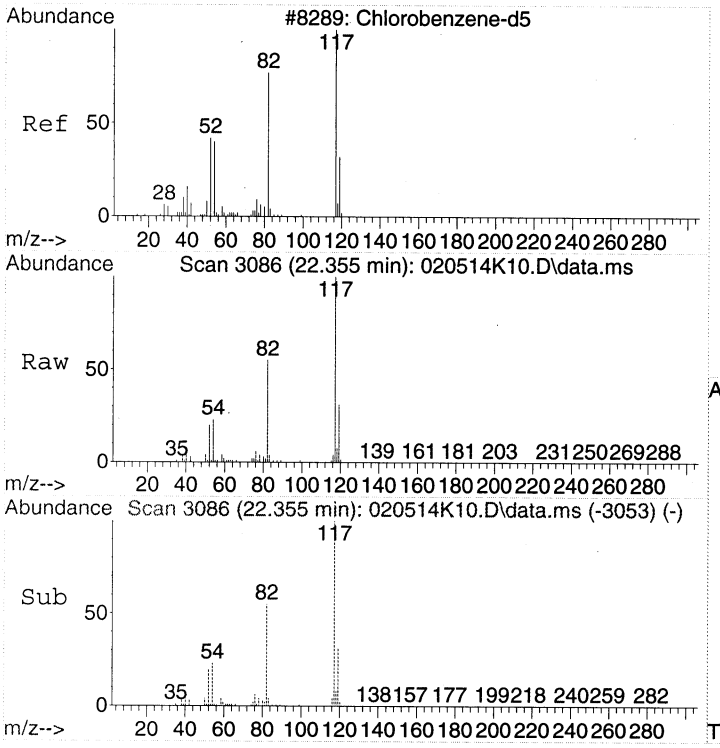


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K10.D
Acq: 5 Feb 2014 19:26

Tgt Ion:114 Resp: 2115589

Ion	Ratio	Lower	Upper
114	100		
63	22.6	2.3	42.3
88	15.5	0.0	35.2

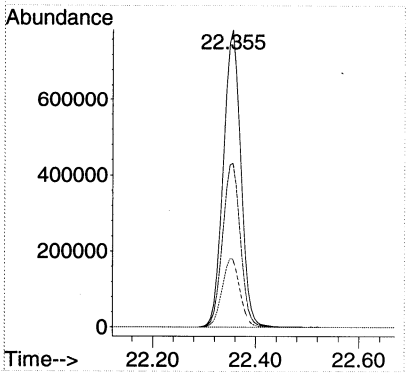




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K10.D
Acq: 5 Feb 2014 19:26

Tgt Ion:117 Resp: 1850265

Ion	Ratio	Lower	Upper
117	100		
82	56.1	37.1	77.1
54	23.6	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K11.D
Acq On : 5 Feb 2014 20:16
Instrument: HP5973K
Operator : EM
Sample : CAN 883
Misc : CAN 883
ALS Vial : 10
Multiplier: 1

Quant Time: May 06 10:08:38 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.444	49	856825	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.452	114	2188442	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1927032	22.00 ppbv	0.00

Target Compounds Qvalue

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

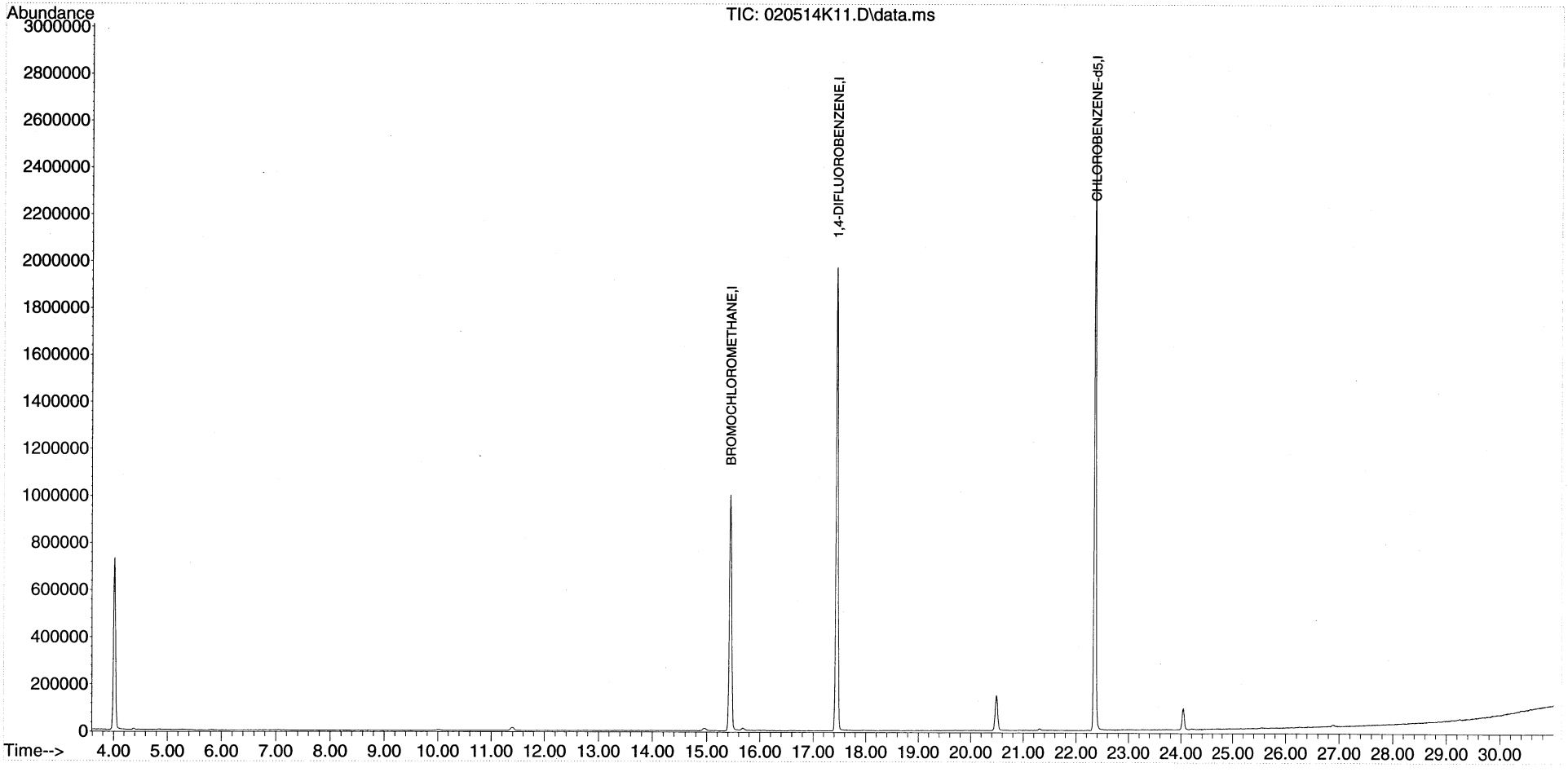
68327

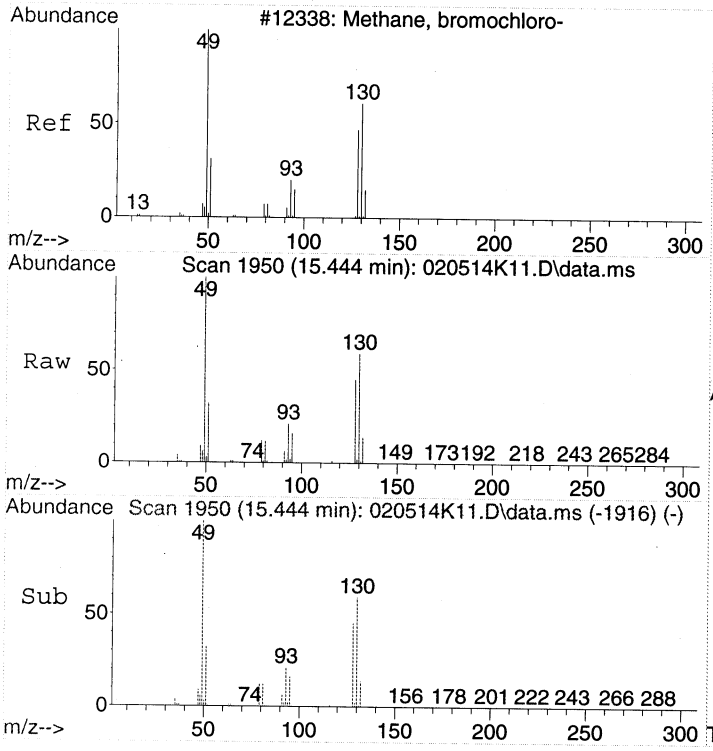
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K11.D
Acq On : 5 Feb 2014 20:16
Instrument: HP5973K
Operator : EM
Sample : CAN 883
Misc : CAN 883
ALS Vial : 10
Multiplier: 1

Quant Time: May 06 10:08:38 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

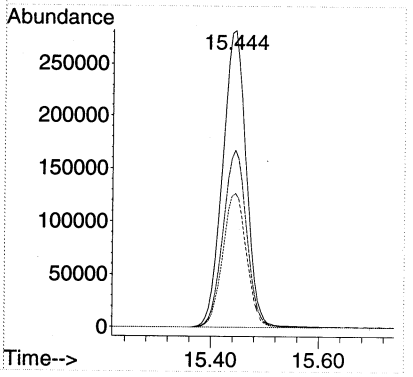


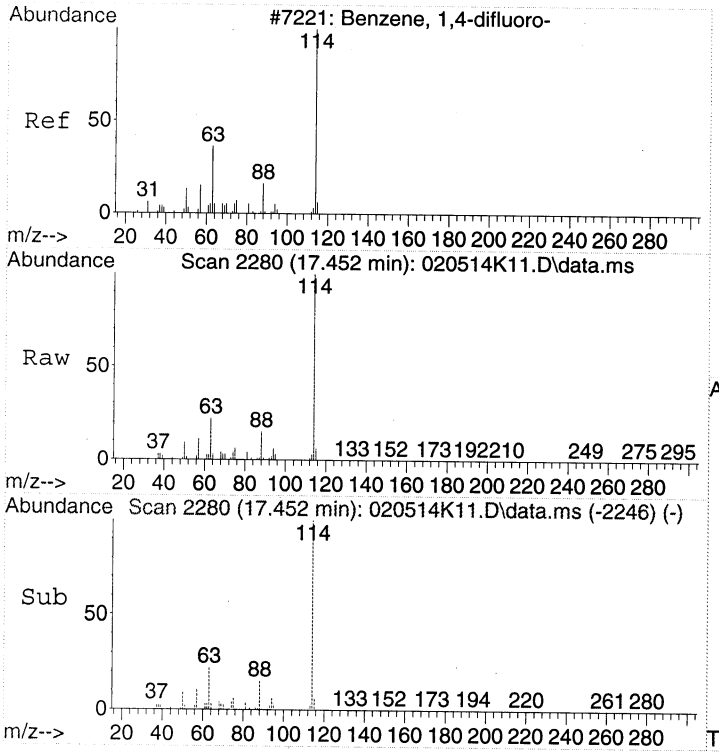


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.444 min Scan# 1950
Delta R.T. 0.006 min
Lab File: 020514K11.D
Acq: 5 Feb 2014 20:16

Tgt Ion: 49 Resp: 856825

Ion	Ratio	Lower	Upper
49	100		
130	59.5	39.6	79.6
128	45.6	26.9	66.9

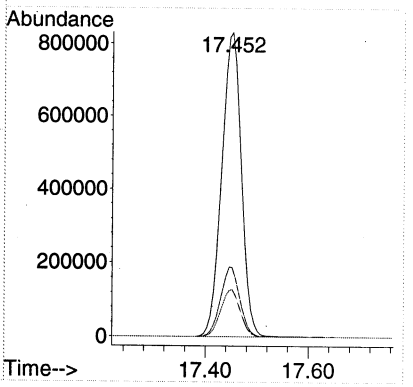


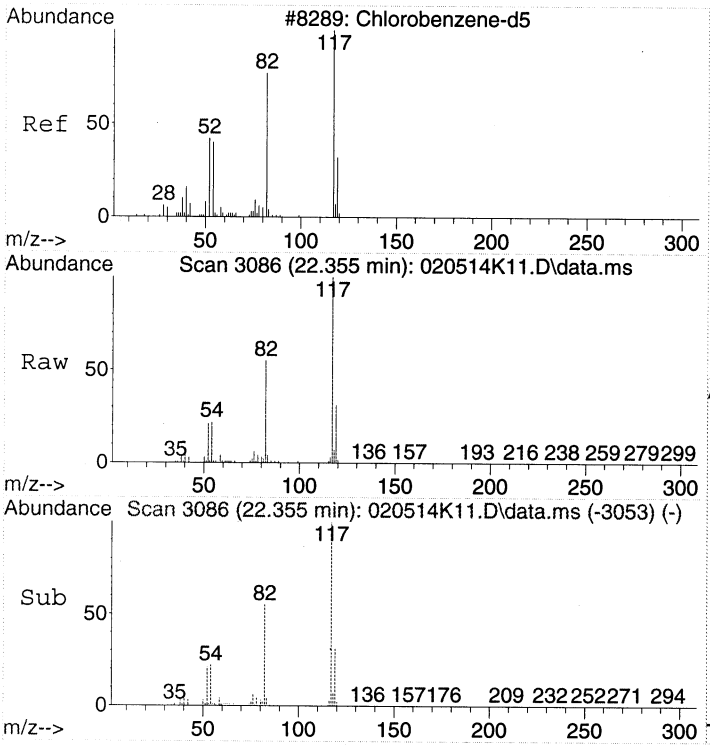


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.452 min Scan# 2280
Delta R.T. 0.006 min
Lab File: 020514K11.D
Acq: 5 Feb 2014 20:16

Tgt Ion:114 Resp: 2188442

Ion	Ratio	Lower	Upper
114	100		
63	22.3	2.3	42.3
88	15.3	0.0	35.2

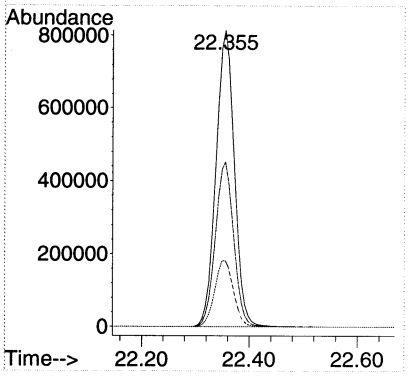




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K11.D
Acq: 5 Feb 2014 20:16

Tgt Ion:117 Resp: 1927032

Ion	Ratio	Lower	Upper
117	100		
82	55.6	37.1	77.1
54	23.0	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K12.D
Acq On : 5 Feb 2014 21:05
Instrument: HP5973K
Operator : EM
Sample : CAN 892
Misc : CAN 892
ALS Vial : 11
Multiplier: 1

Quant Time: May 06 10:08:42 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	866474	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2200758	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1946099	22.00 ppbv	0.00

Target Compounds Qvalue

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

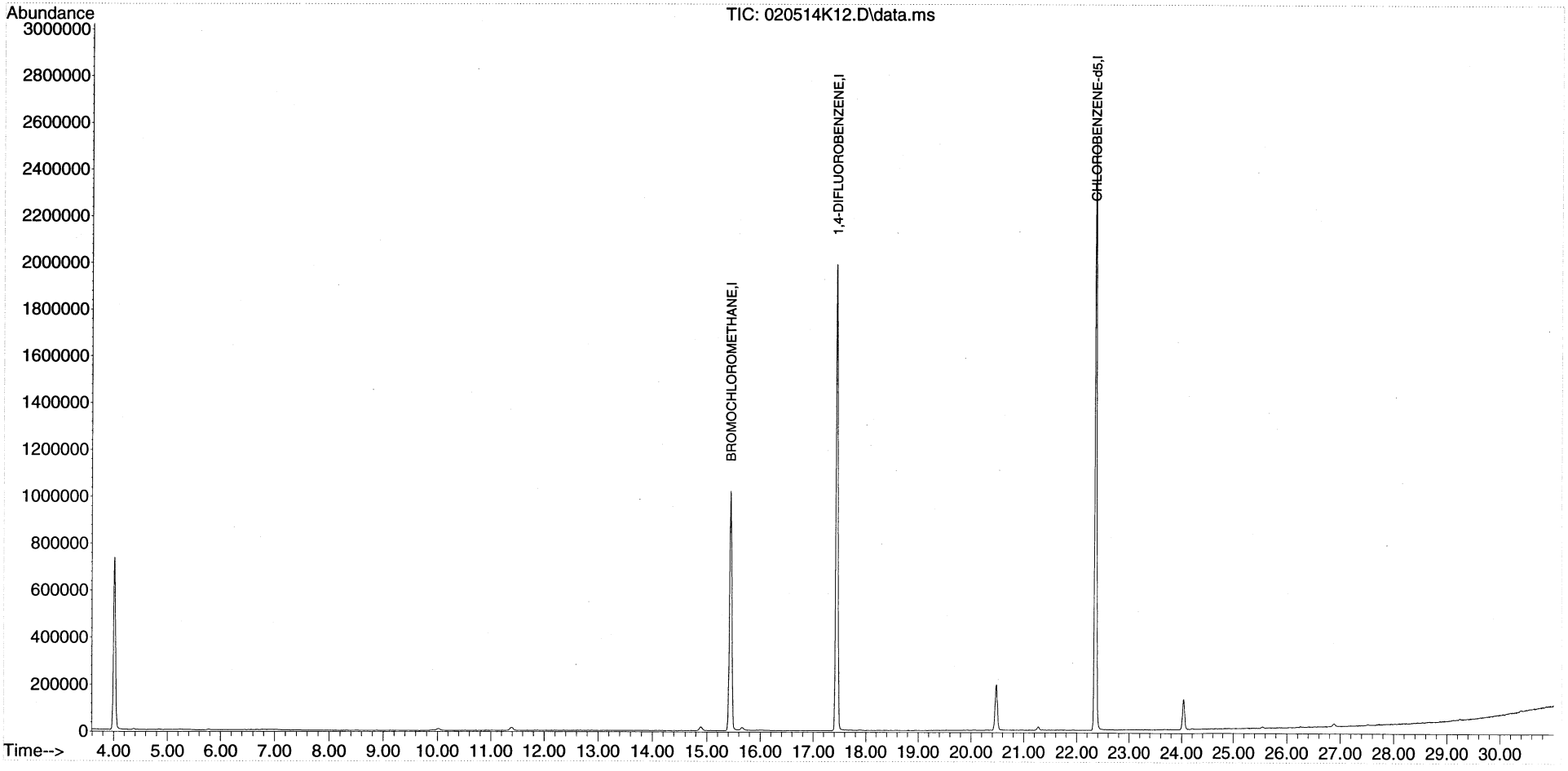
00331

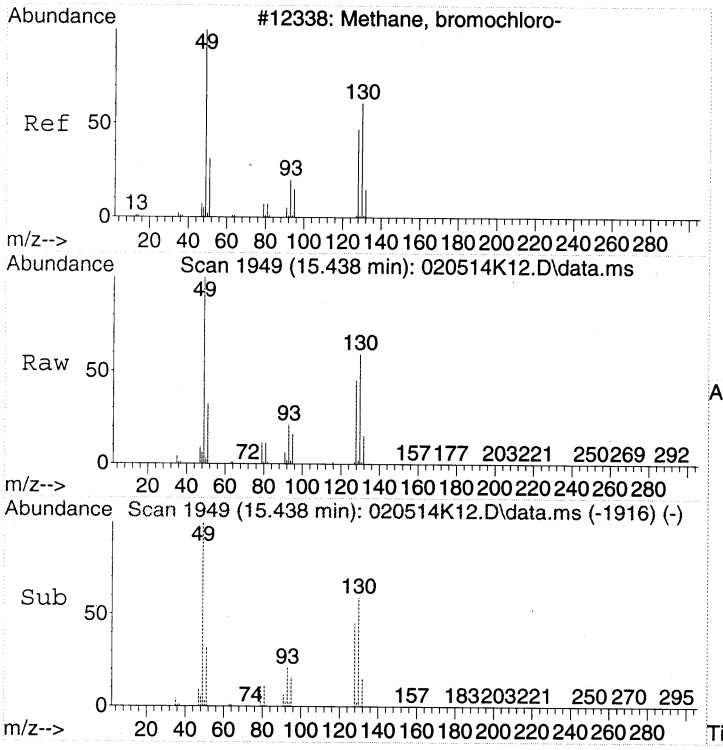
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K12.D
Acq On : 5 Feb 2014 21:05
Instrument: HP5973K
Operator : EM
Sample : CAN 892
Misc : CAN 892
ALS Vial : 11
Multiplier: 1

Quant Time: May 06 10:08:42 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

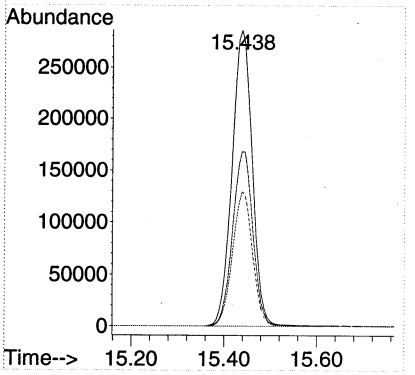


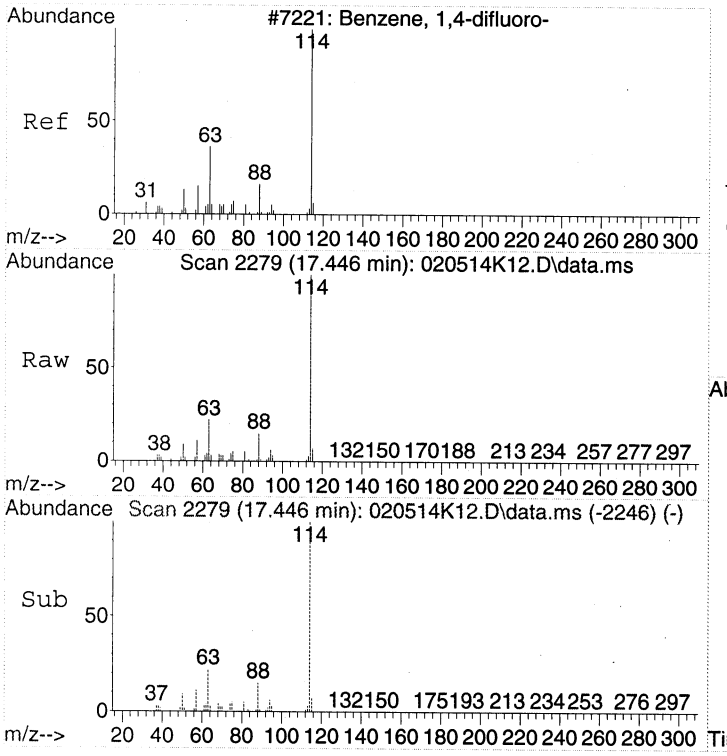


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K12.D
Acq: 5 Feb 2014 21:05

Tgt Ion: 49 Resp: 866474

Ion	Ratio	Lower	Upper
49	100		
130	59.4	39.6	79.6
128	45.2	26.9	66.9

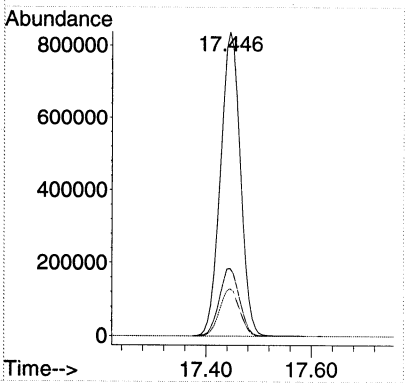




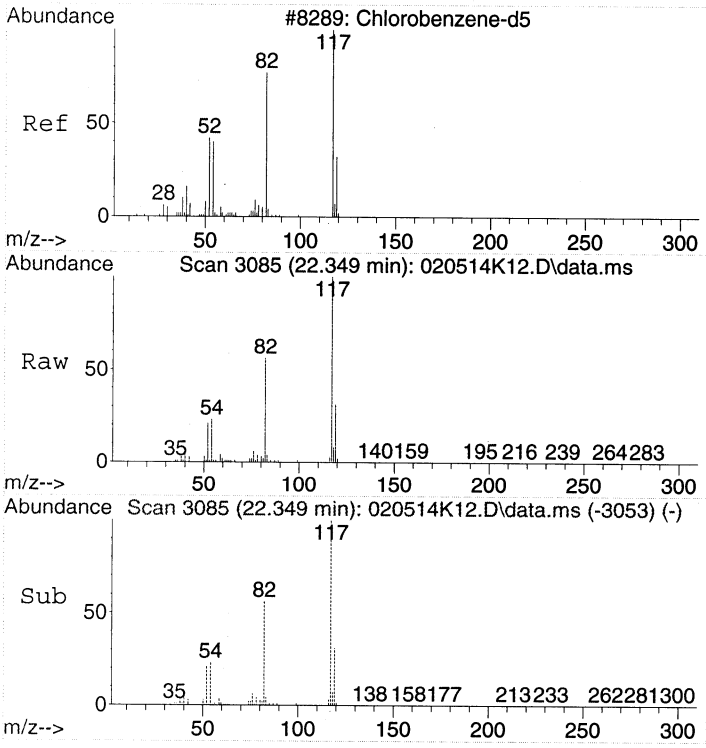
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K12.D
Acq: 5 Feb 2014 21:05

Tgt Ion:114 Resp: 2200758

Ion	Ratio	Lower	Upper
114	100		
63	22.3	2.3	42.3
88	15.5	0.0	35.2



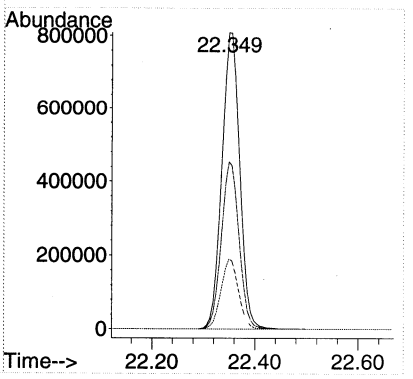
00333



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.006 min
Lab File: 020514K12.D
Acq: 5 Feb 2014 21:05

Tgt Ion:117 Resp: 1946099

Ion	Ratio	Lower	Upper
117	100		
82	55.6	37.1	77.1
54	23.1	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K13.D
Acq On : 5 Feb 2014 21:55
Instrument: HP5973K
Operator : EM
Sample : CAN 895
Misc : CAN 895
ALS Vial : 12
Multiplier: 1

Quant Time: May 06 10:08:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	846111	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2104482	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1868099	22.00 ppbv	0.00

Target Compounds Qvalue

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

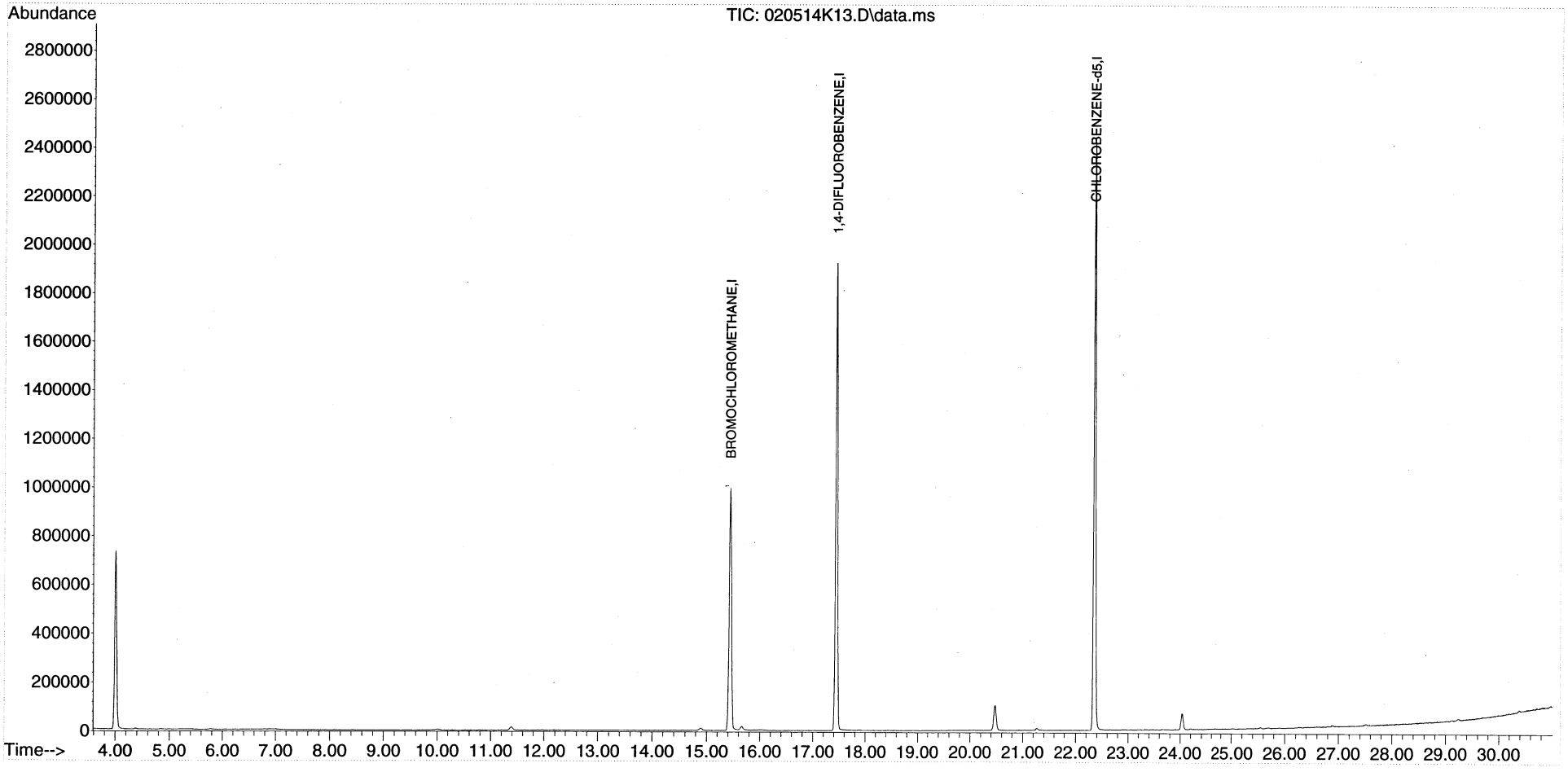
00335

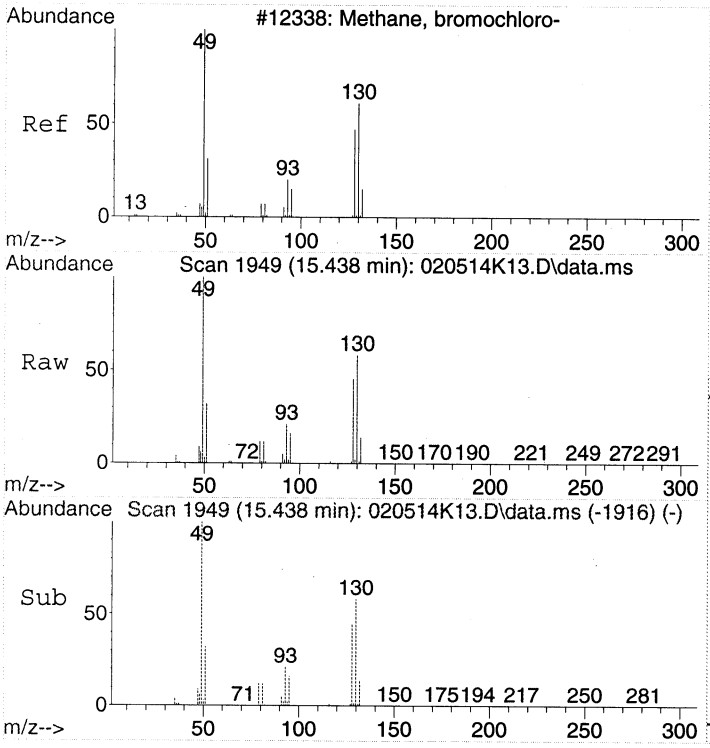
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K13.D
Acq On : 5 Feb 2014 21:55
Instrument: HP5973K
Operator : EM
Sample : CAN 895
Misc : CAN 895
ALS Vial : 12
Multiplier: 1

Quant Time: May 06 10:08:47 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

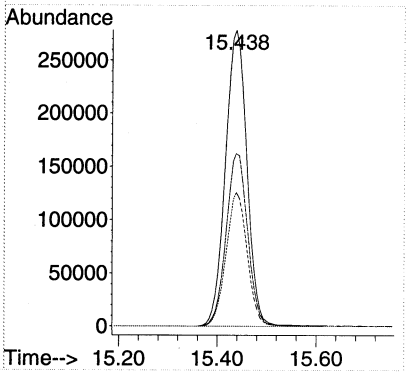


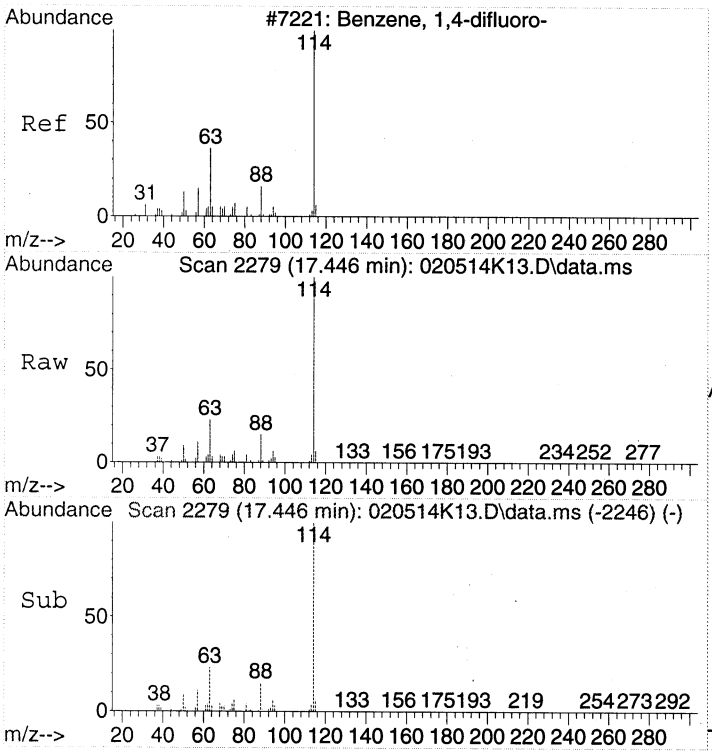


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K13.D
Acq: 5 Feb 2014 21:55

Tgt Ion: 49 Resp: 846111

Ion	Ratio	Lower	Upper
49	100		
130	58.4	39.6	79.6
128	44.5	26.9	66.9

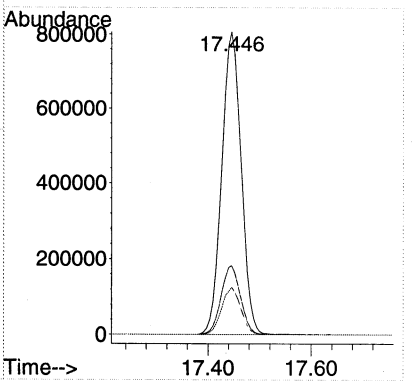




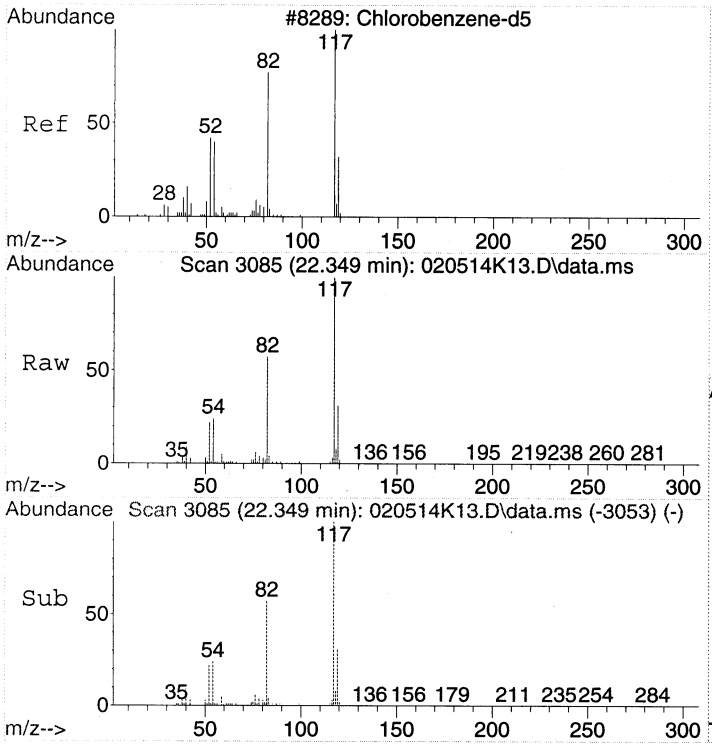
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 020514K13.D
Acq: 5 Feb 2014 21:55

Tgt Ion:114 Resp: 2104482

Ion	Ratio	Lower	Upper
114	100		
63	22.7	2.3	42.3
88	15.4	0.0	35.2



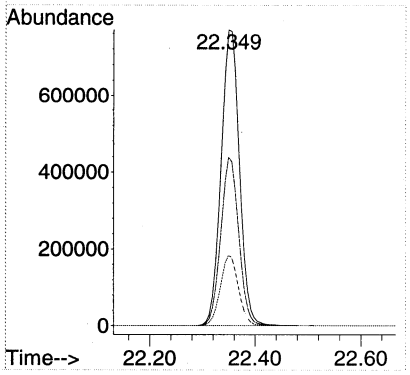
0033T



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.006 min
Lab File: 020514K13.D
Acq: 5 Feb 2014 21:55

Tgt Ion:117 Resp: 1868099

Ion	Ratio	Lower	Upper
117	100		
82	56.0	37.1	77.1
54	23.6	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K14.D
Acq On : 5 Feb 2014 22:44
Instrument: HP5973K
Operator : EM
Sample : CAN 1075
Misc : CAN 1075
ALS Vial : 41
Multiplier: 1

Quant Time: May 06 10:08:52 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	840306	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2100281	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1857905	22.00 ppbv	0.00

Target Compounds Qvalue

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

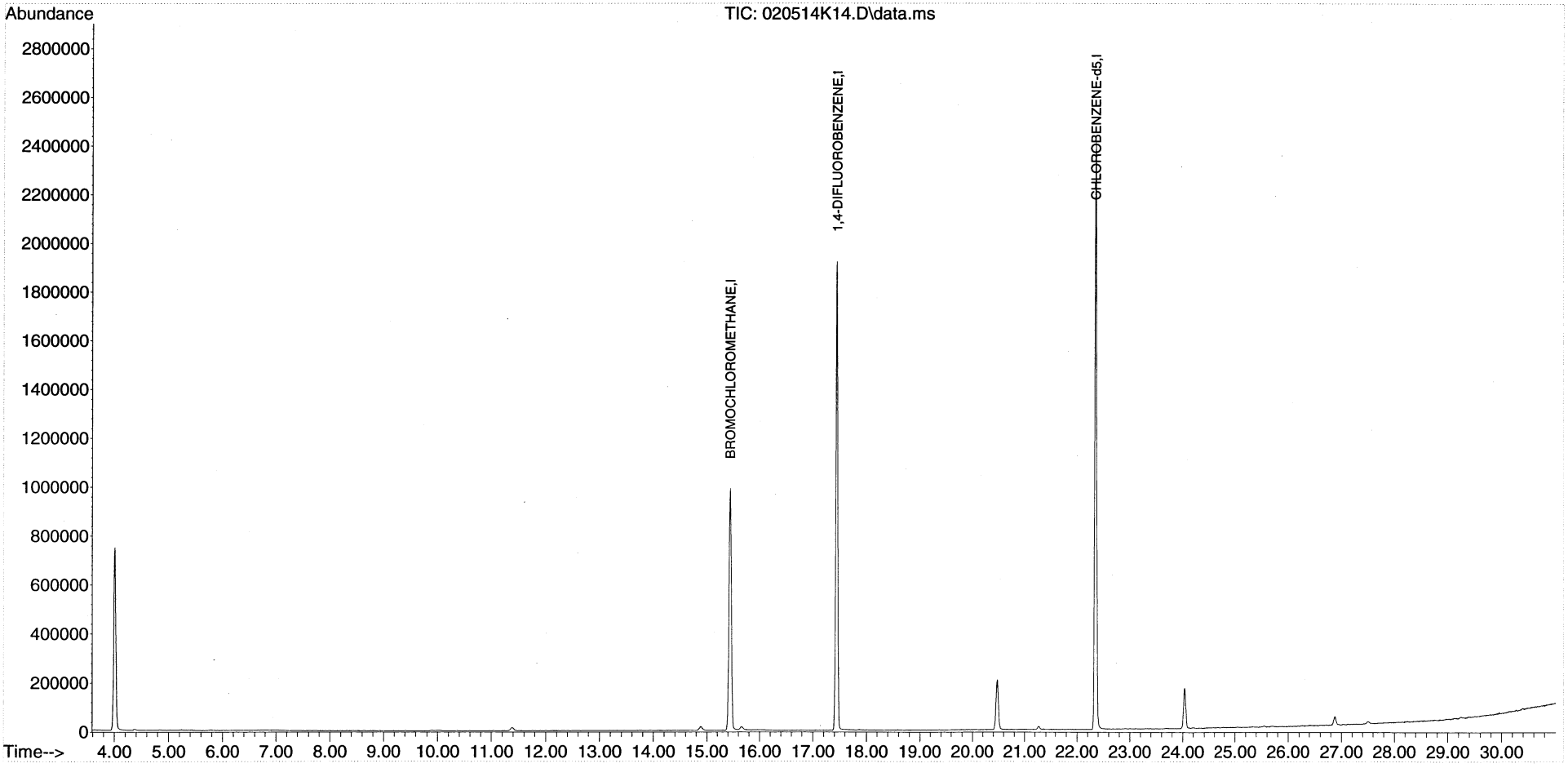
00339

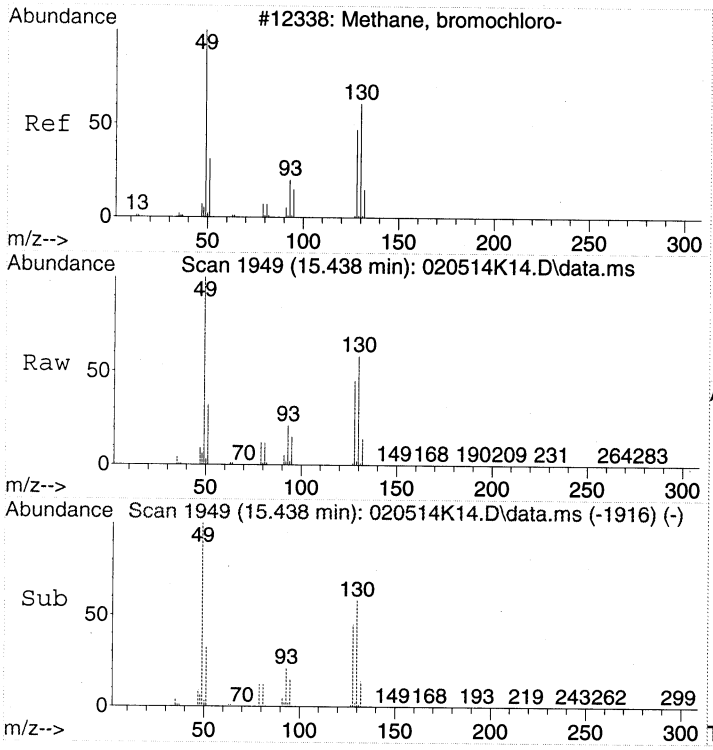
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K14.D
Acq On : 5 Feb 2014 22:44
Instrument: HP5973K
Operator : EM
Sample : CAN 1075
Misc : CAN 1075
ALS Vial : 41
Multiplier: 1

Quant Time: May 06 10:08:52 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

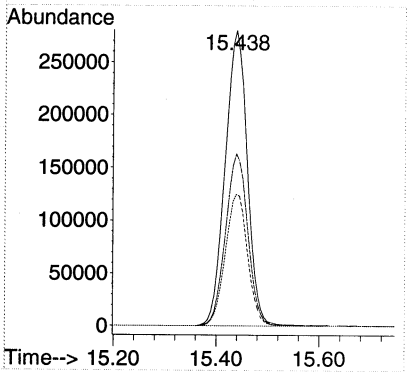


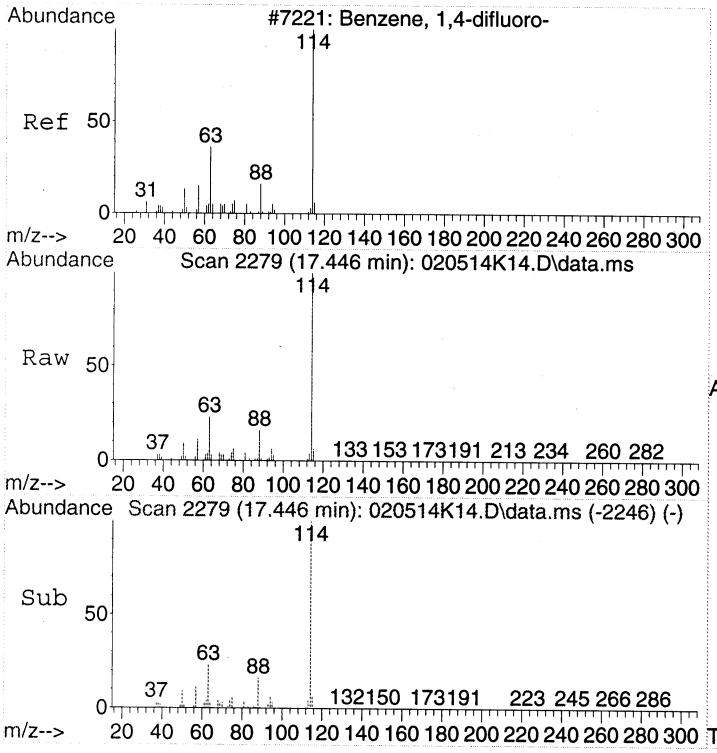


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K14.D
Acq: 5 Feb 2014 22:44

Tgt Ion: 49 Resp: 840306

Ion	Ratio	Lower	Upper
49	100		
130	58.8	39.6	79.6
128	45.1	26.9	66.9

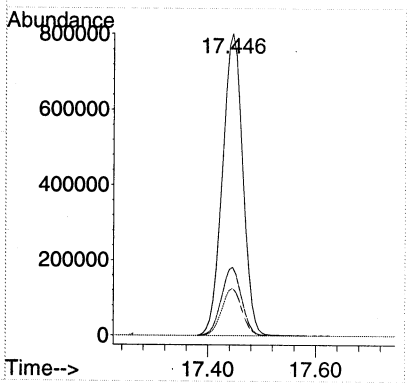


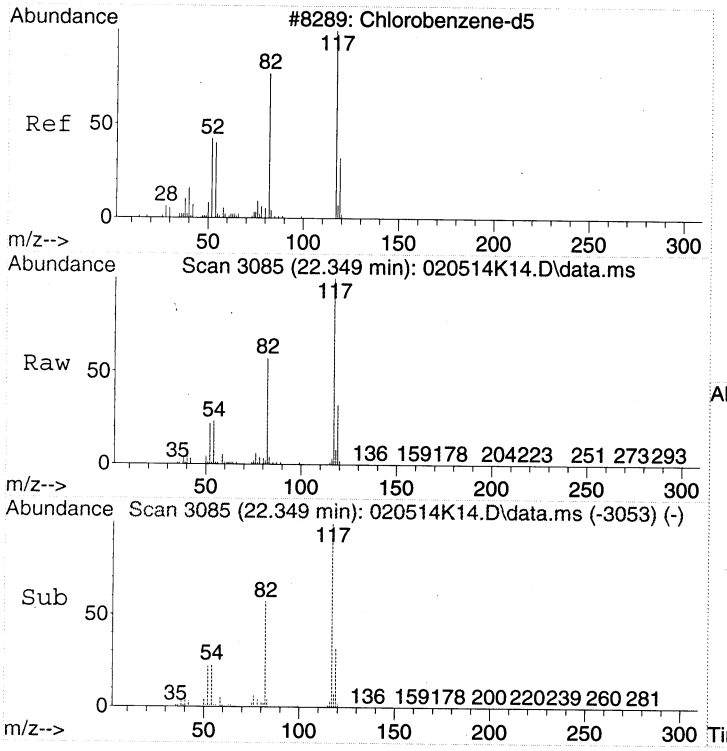


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K14.D
Acq: 5 Feb 2014 22:44

Tgt Ion:114 Resp: 2100281

Ion	Ratio	Lower	Upper
114	100		
63	22.6	2.3	42.3
88	15.5	0.0	35.2

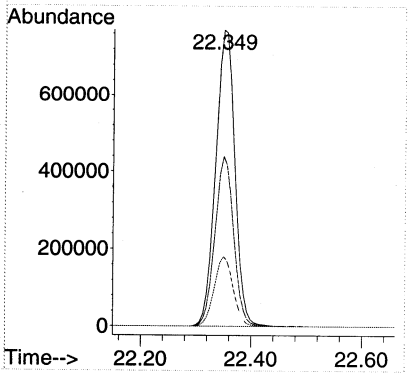




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.006 min
Lab File: 020514K14.D
Acq: 5 Feb 2014 22:44

Tgt Ion:117 Resp: 1857905

Ion	Ratio	Lower	Upper
117	100		
82	55.7	37.1	77.1
54	23.3	3.3	43.3



00342

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K15.D
Acq On : 5 Feb 2014 23:34
Instrument: HP5973K
Operator : EM
Sample : CAN 1090
Misc : CAN 1090
ALS Vial : 42
Multiplier: 1

Quant Time: May 06 10:08:57 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	840052	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2119306	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1866808	22.00	ppbv	0.00

Target Compounds Qvalue

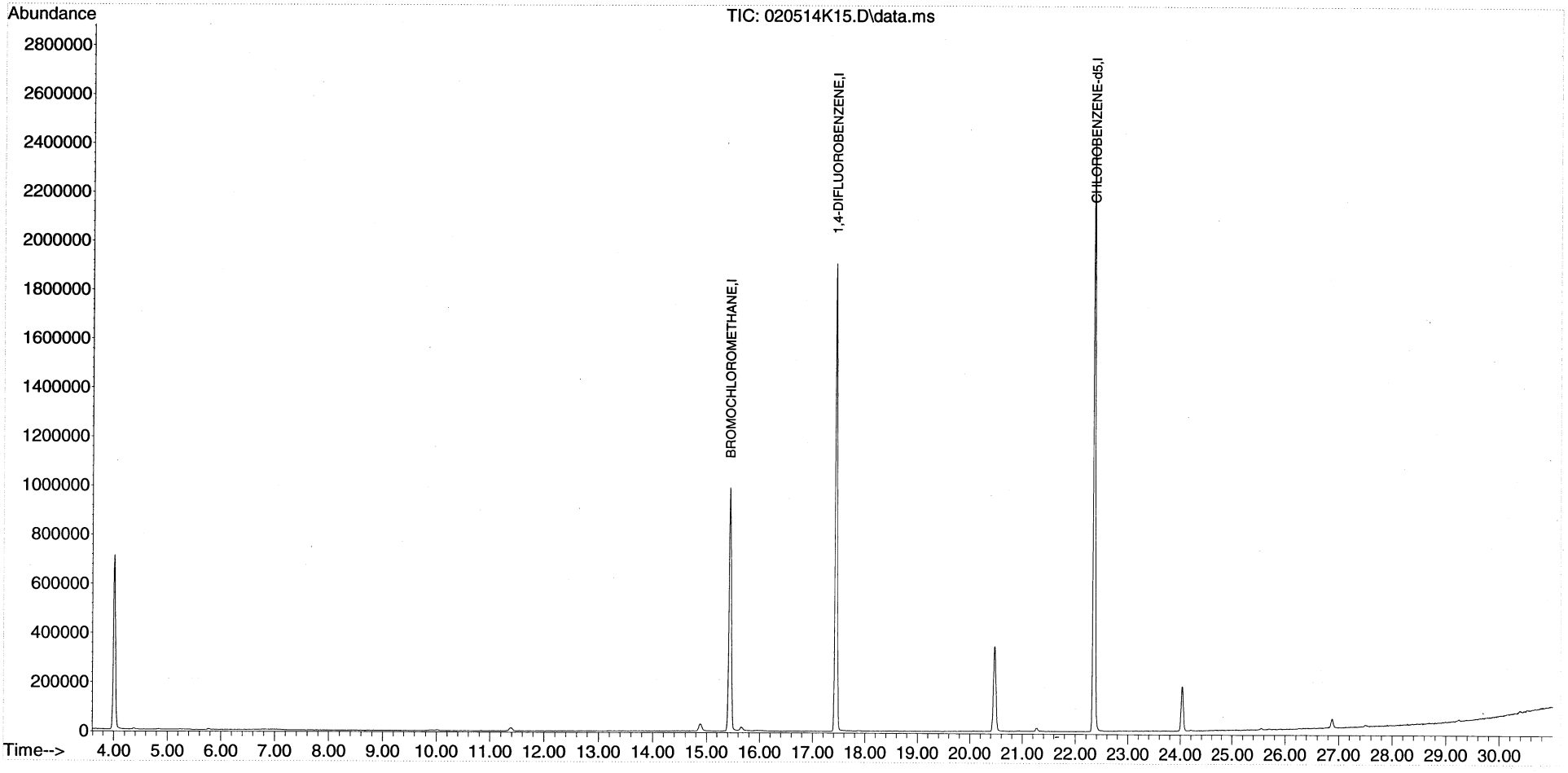
(#) = qualifier out of range (m) = manual integration (+) = signals summed

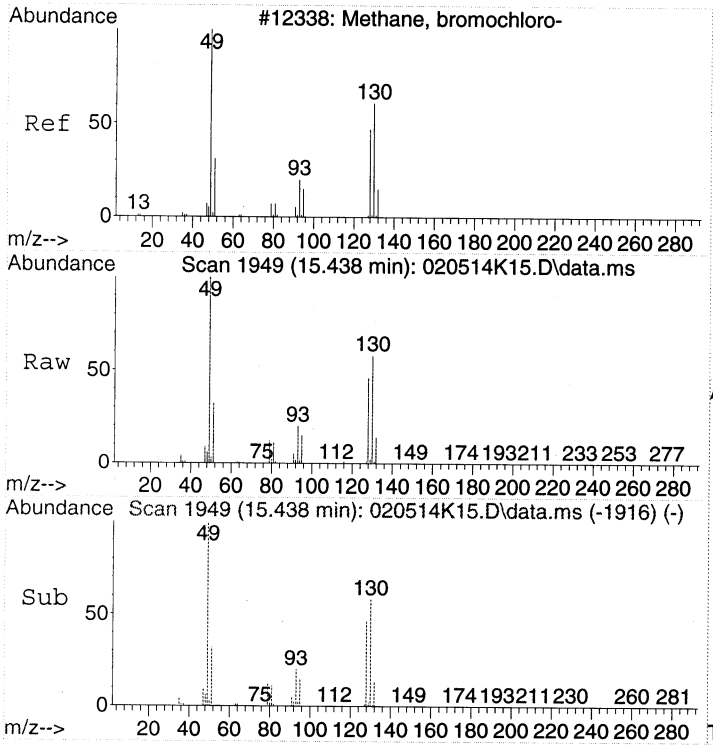
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K15.D
Acq On : 5 Feb 2014 23:34
Instrument: HP5973K
Operator : EM
Sample : CAN 1090
Misc : CAN 1090
ALS Vial : 42
Multiplier: 1

Quant Time: May 06 10:08:57 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

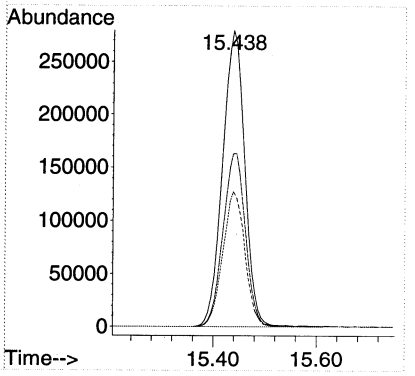


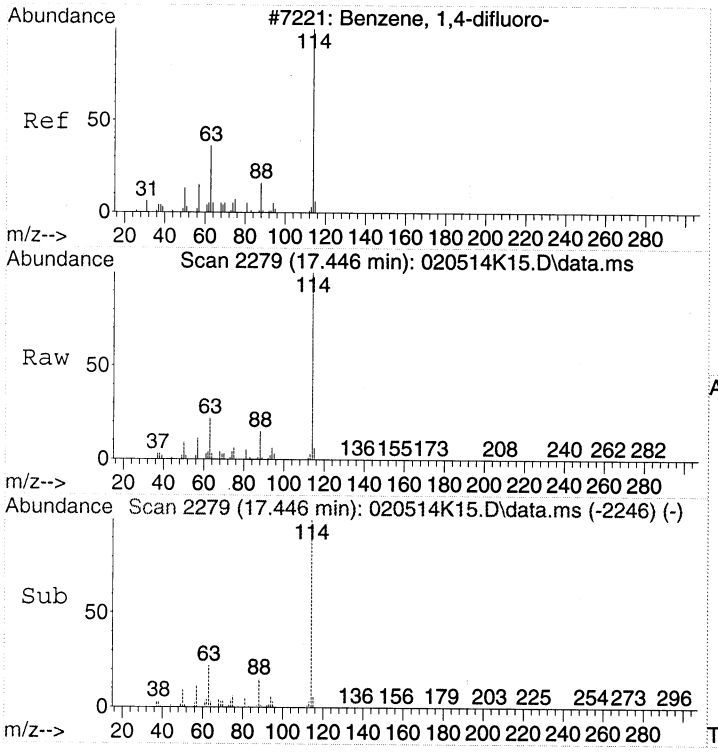


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K15.D
Acq: 5 Feb 2014 23:34

Tgt Ion: 49 Resp: 840052

Ion	Ratio	Lower	Upper
49	100		
130	59.1	39.6	79.6
128	45.4	26.9	66.9

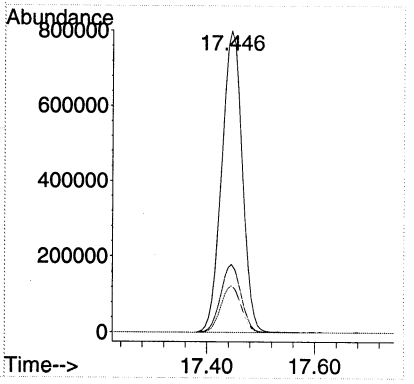




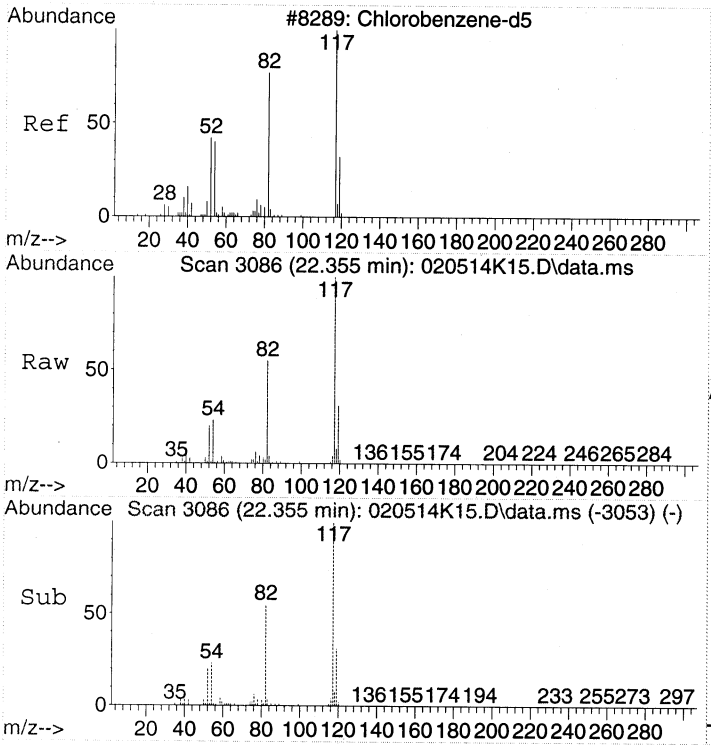
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K15.D
Acq: 5 Feb 2014 23:34

Tgt Ion:114 Resp: 2119306

Ion	Ratio	Lower	Upper
114	100		
63	22.3	2.3	42.3
88	15.3	0.0	35.2



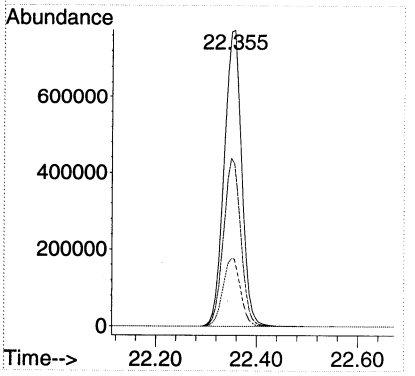
00345



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K15.D
Acq: 5 Feb 2014 23:34

Tgt Ion:117 Resp: 1866808

Ion	Ratio	Lower	Upper
117	100		
82	55.8	37.1	77.1
54	23.0	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K16.D
Acq On : 6 Feb 2014 00:24
Instrument: HP5973K
Operator : EM
Sample : CAN 1099
Misc : CAN 1099
ALS Vial : 43
Multiplier: 1

Quant Time: May 06 10:09:02 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) BROMOCHLOROMETHANE	15.438	49	835641	22.00 ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2068179	22.00 ppbv	0.00
43) CHLOROBENZENE-d5	22.349	117	1835421	22.00 ppbv	0.00

Target Compounds Qvalue

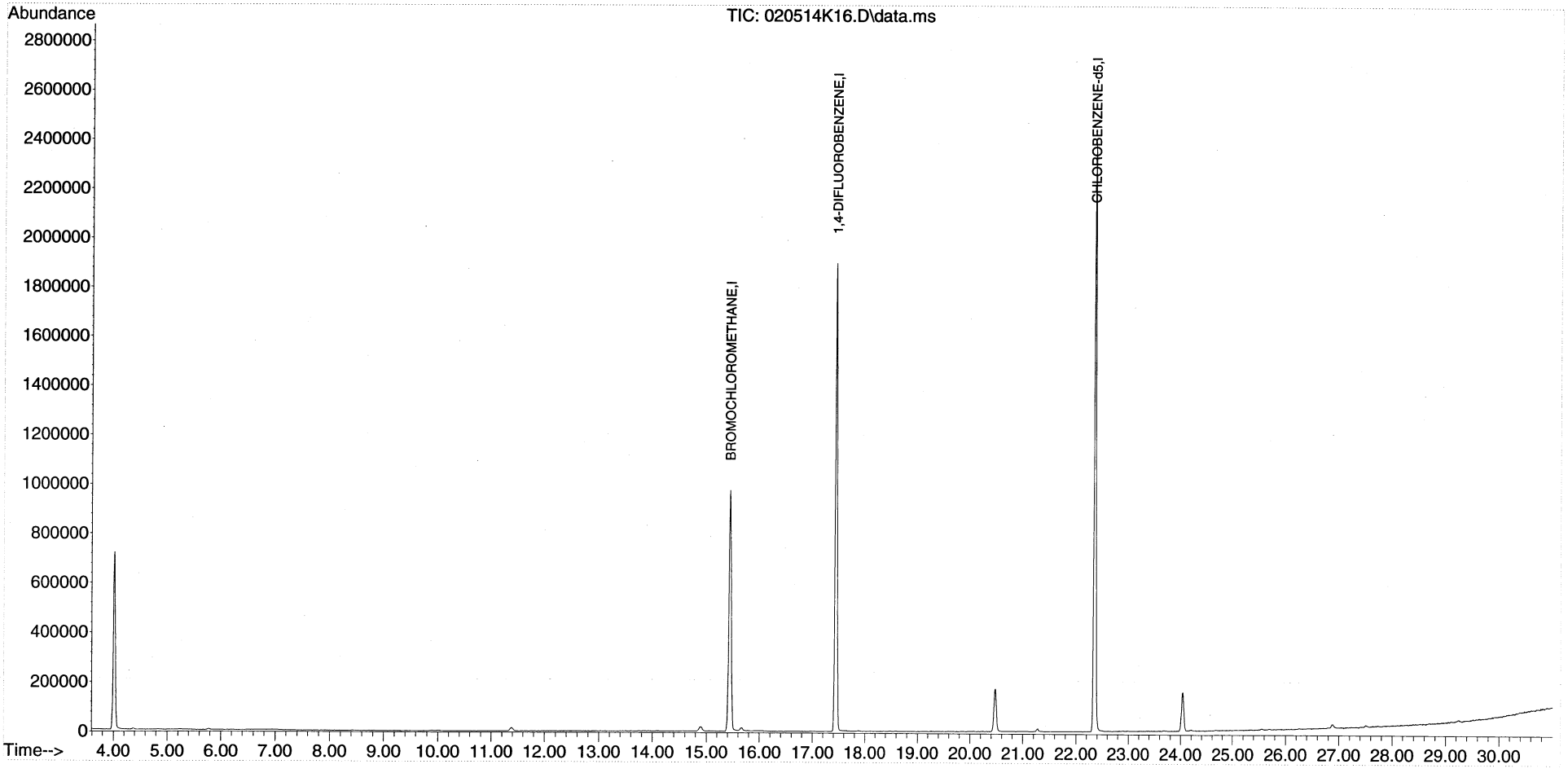
(#) = qualifier out of range (m) = manual integration (+) = signals summed

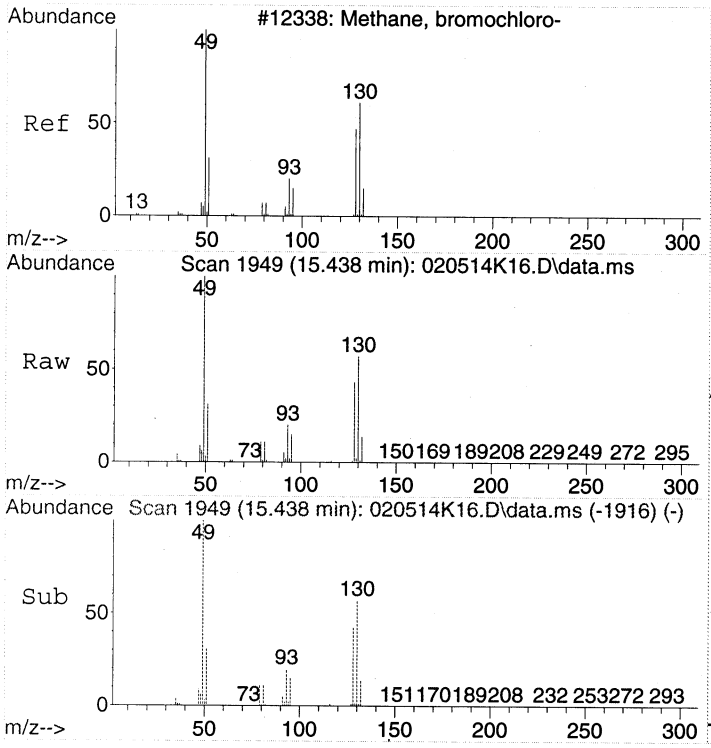
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K16.D
Acq On : 6 Feb 2014 00:24
Instrument: HP5973K
Operator : EM
Sample : CAN 1099
Misc : CAN 1099
ALS Vial : 43
Multiplier: 1

Quant Time: May 06 10:09:02 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

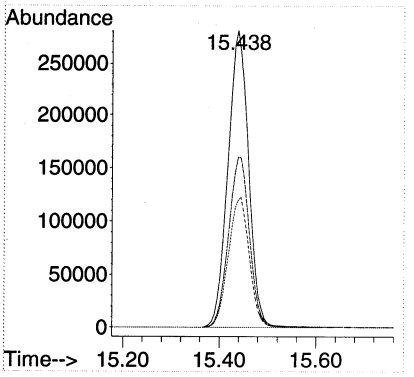


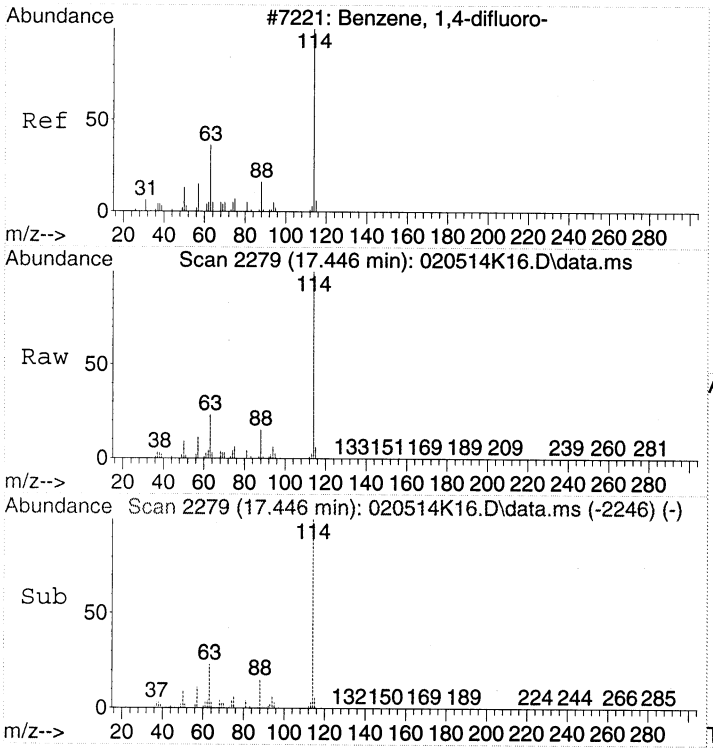


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K16.D
Acq: 6 Feb 2014 00:24

Tgt Ion: 49 Resp: 835641

Ion	Ratio	Lower	Upper
49	100		
130	58.1	39.6	79.6
128	44.4	26.9	66.9

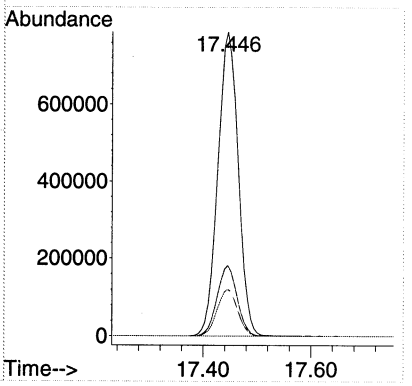


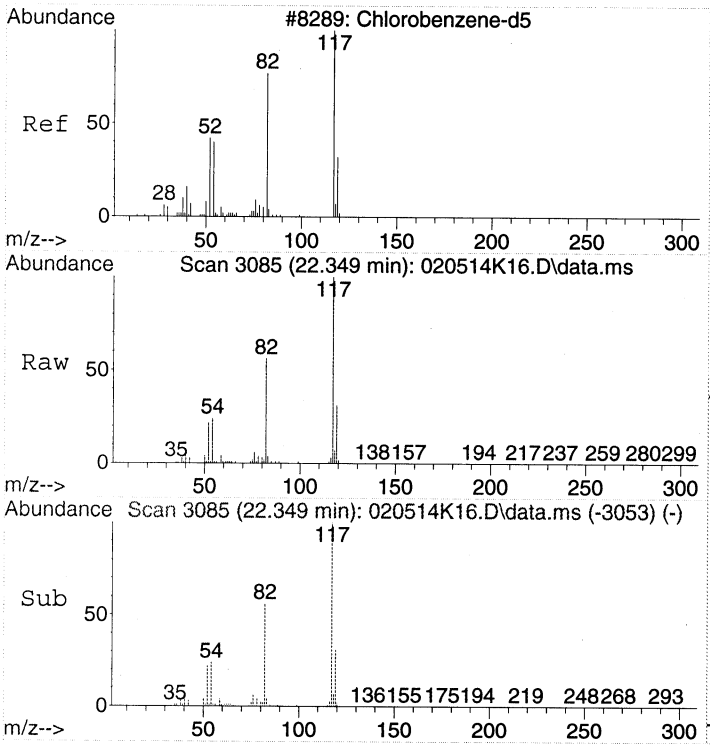


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K16.D
Acq: 6 Feb 2014 00:24

Tgt Ion:114 Resp: 2068179

Ion	Ratio	Lower	Upper
114	100		
63	22.8	2.3	42.3
88	15.5	0.0	35.2

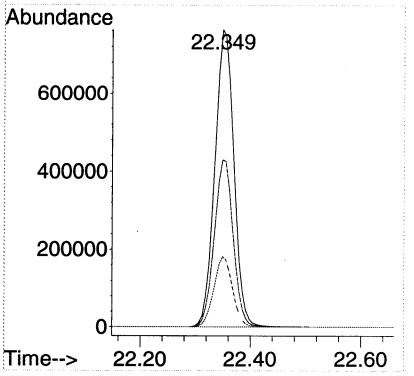




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.349 min Scan# 3085
Delta R.T. -0.006 min
Lab File: 020514K16.D
Acq: 6 Feb 2014 00:24

Tgt Ion:117 Resp: 1835421

Ion	Ratio	Lower	Upper
117	100		
82	56.1	37.1	77.1
54	23.4	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K17.D
Acq On : 6 Feb 2014 1:14
Instrument: HP5973K
Operator : EM
Sample : CAN 1101
Misc : CAN 1101
ALS Vial : 44
Multiplier: 1

Quant Time: May 06 10:09:07 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	866809	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2189052	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1941182	22.00	ppbv	0.00

Target Compounds Qvalue

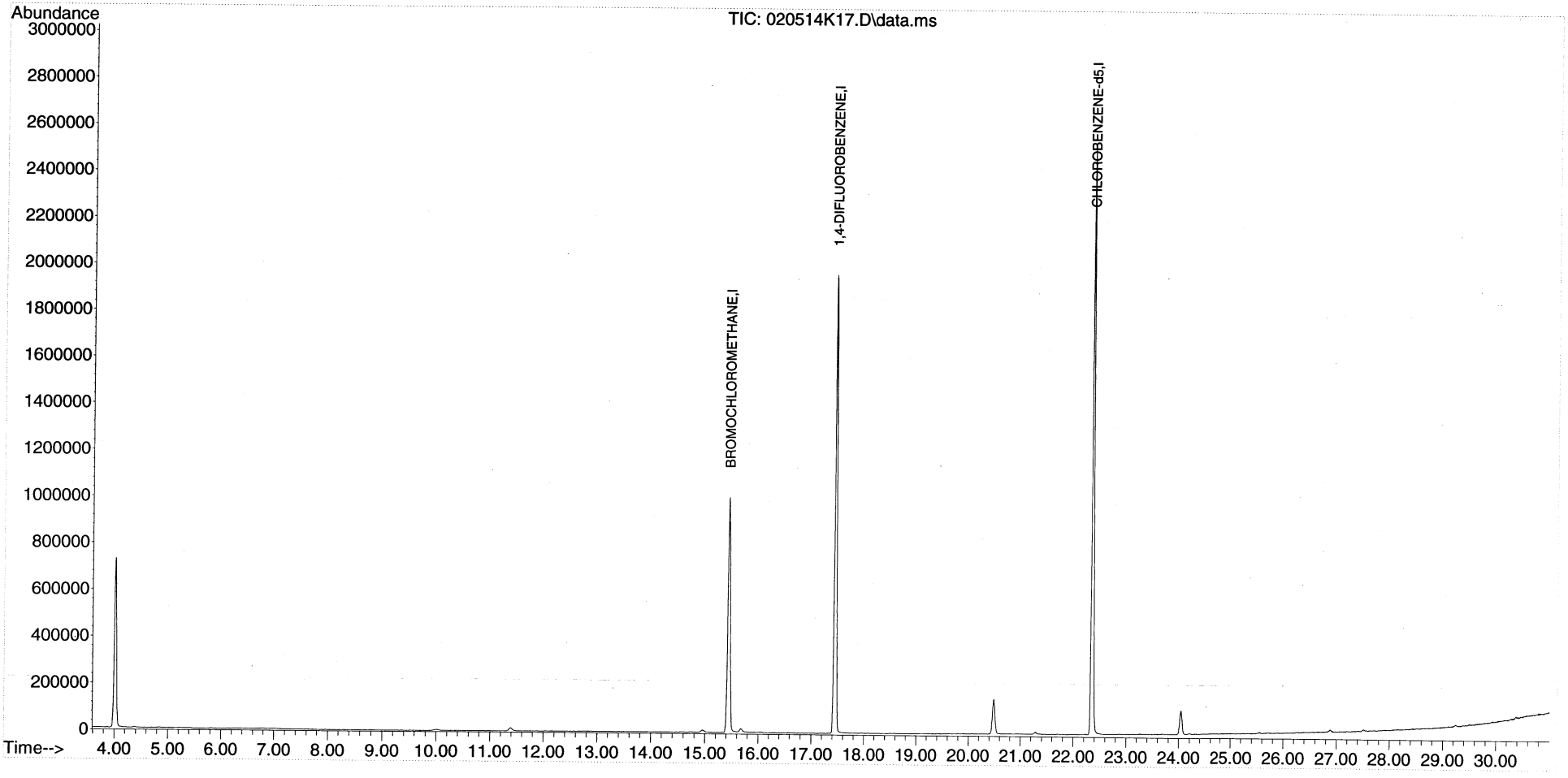
(#) = qualifier out of range (m) = manual integration (+) = signals summed

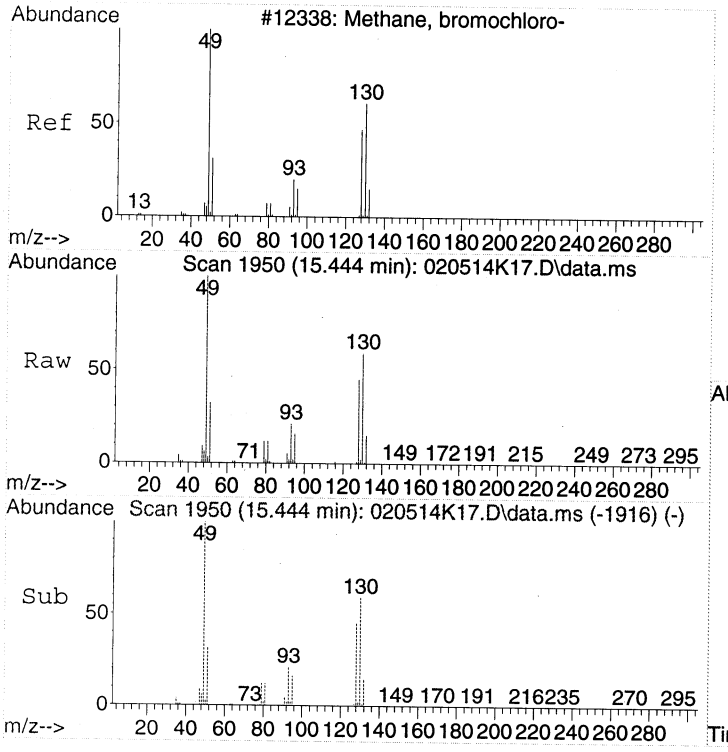
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K17.D
Acq On : 6 Feb 2014 1:14
Instrument: HP5973K
Operator : EM
Sample : CAN 1101
Misc : CAN 1101
ALS Vial : 44
Multiplier: 1

Quant Time: May 06 10:09:07 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

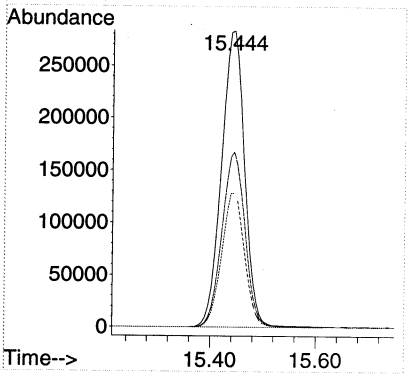


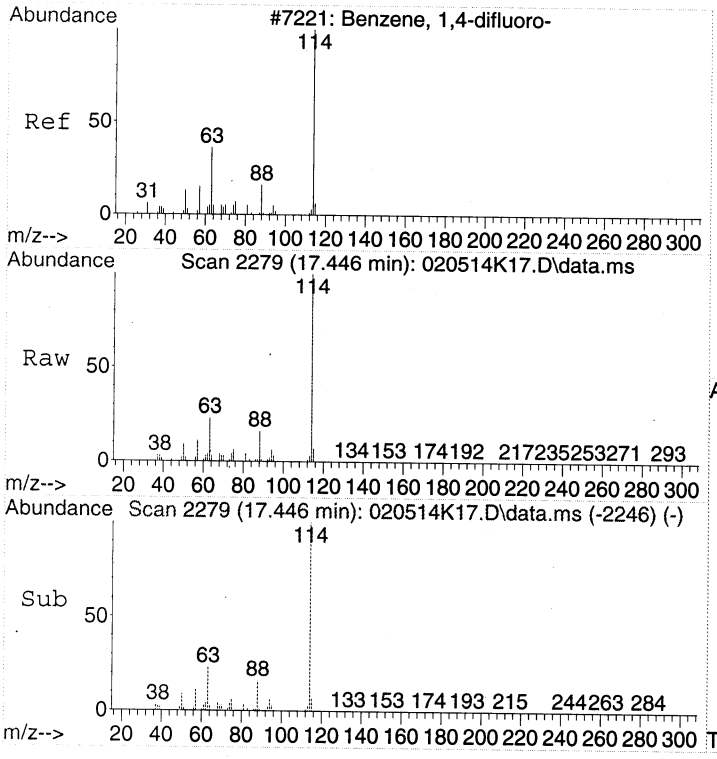


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.444 min Scan# 1950
Delta R.T. 0.006 min
Lab File: 020514K17.D
Acq: 6 Feb 2014 1:14

Tgt Ion: 49 Resp: 866809

Ion	Ratio	Lower	Upper
49	100		
130	59.1	39.6	79.6
128	45.1	26.9	66.9

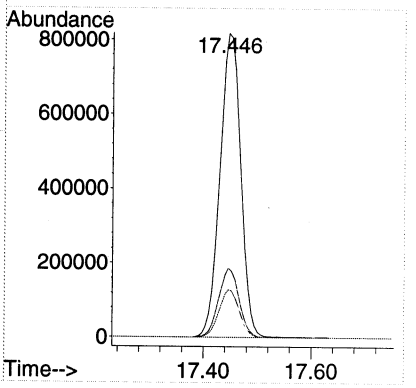




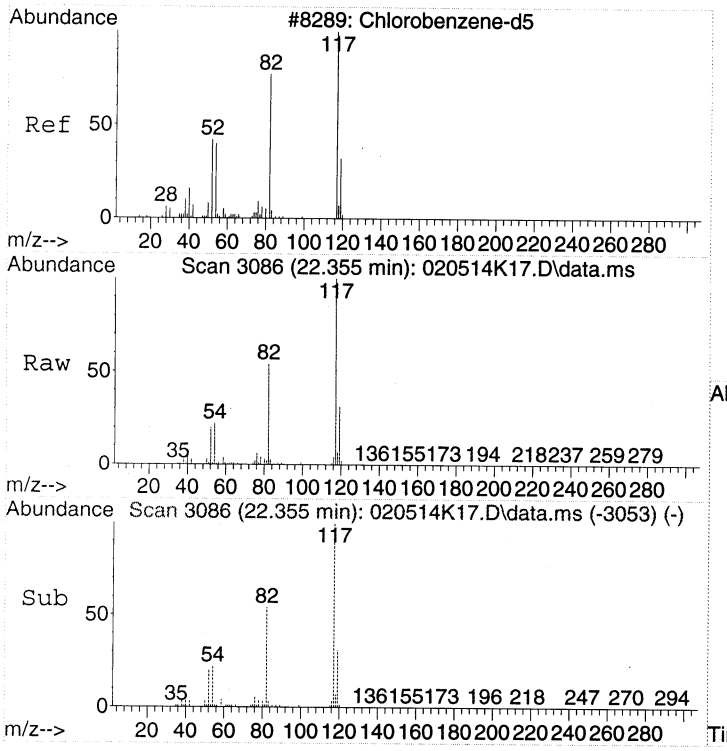
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K17.D
Acq: 6 Feb 2014 1:14

Tgt Ion:114 Resp: 2189052

Ion	Ratio	Lower	Upper
114	100		
63	22.4	2.3	42.3
88	15.4	0.0	35.2



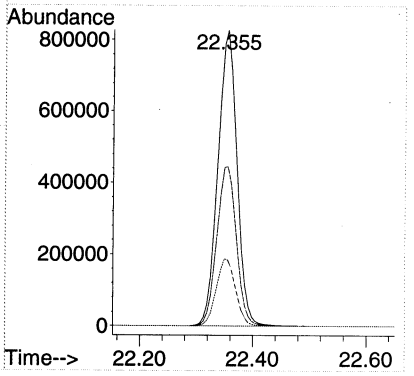
00353



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K17.D
Acq: 6 Feb 2014 1:14

Tgt Ion:117 Resp: 1941182

Ion	Ratio	Lower	Upper
117	100		
82	55.5	37.1	77.1
54	23.1	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K19.D
Acq On : 6 Feb 2014 2:53
Instrument: HP5973K
Operator : EM
Sample : CAN 1136
Misc : CAN 1136
ALS Vial : 46
Multiplier: 1

Quant Time: May 06 10:09:17 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	855579	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2170970	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1929352	22.00	ppbv	0.00

Target Compounds Qvalue

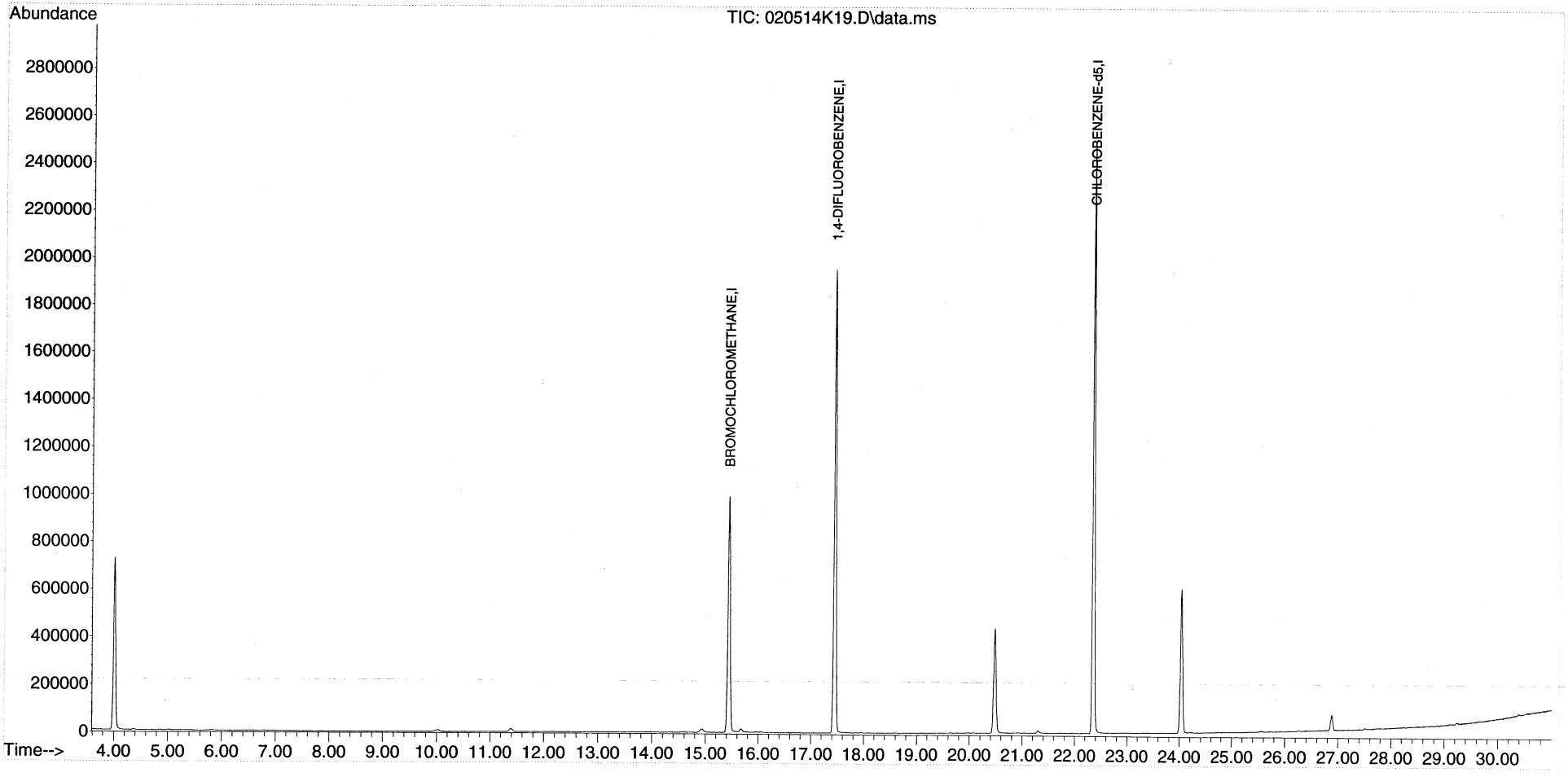
(#) = qualifier out of range (m) = manual integration (+) = signals summed

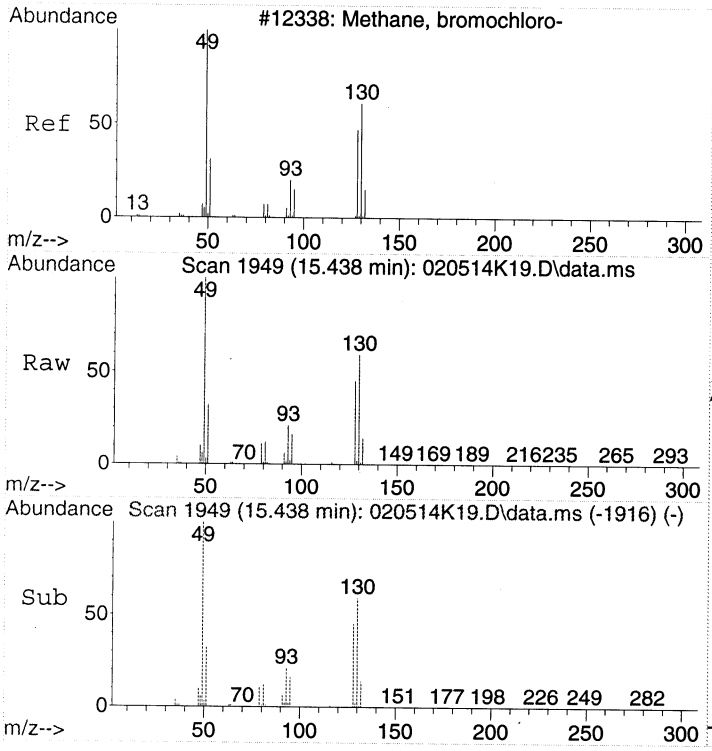
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K19.D
Acq On : 6 Feb 2014 2:53
Instrument: HP5973K
Operator : EM
Sample : CAN 1136
Misc : CAN 1136
ALS Vial : 46
Multiplier: 1

Quant Time: May 06 10:09:17 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

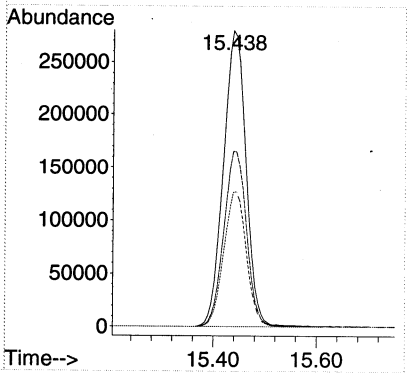


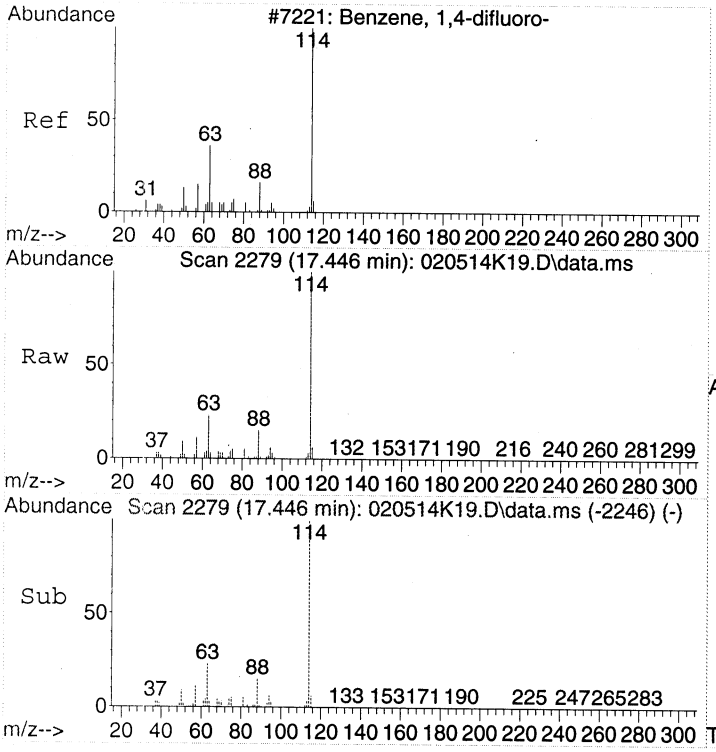


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K19.D
Acq: 6 Feb 2014 2:53

Tgt Ion: 49 Resp: 855579

Ion	Ratio	Lower	Upper
49	100		
130	59.5	39.6	79.6
128	45.6	26.9	66.9

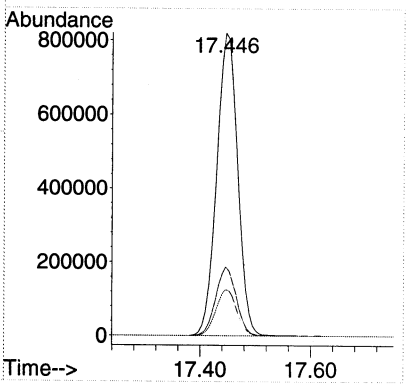




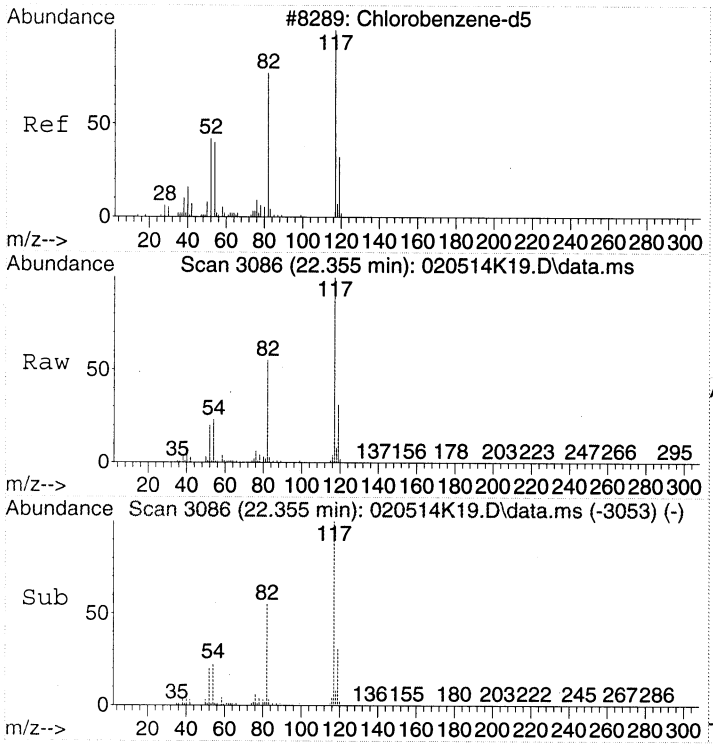
#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K19.D
Acq: 6 Feb 2014 2:53

Tgt Ion:114 Resp: 2170970

Ion	Ratio	Lower	Upper
114	100		
63	22.5	2.3	42.3
88	15.3	0.0	35.2



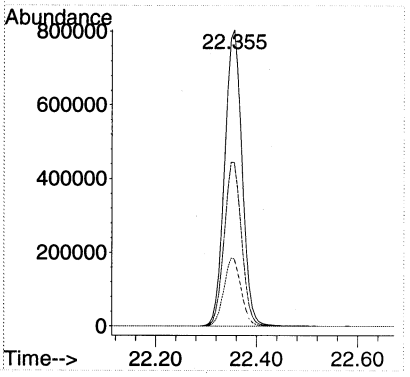
00357



#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K19.D
Acq: 6 Feb 2014 2:53

Tgt Ion:117 Resp: 1929352

Ion	Ratio	Lower	Upper
117	100		
82	55.3	37.1	77.1
54	22.8	3.3	43.3



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K20.D
Acq On : 6 Feb 2014 3:42
Instrument: HP5973K
Operator : EM
Sample : CAN 1137
Misc : CAN 1137
ALS Vial : 47
Multiplier: 1

Quant Time: May 06 10:09:22 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.438	49	856165	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2149721	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1898973	22.00	ppbv	0.00

Target Compounds Qvalue

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

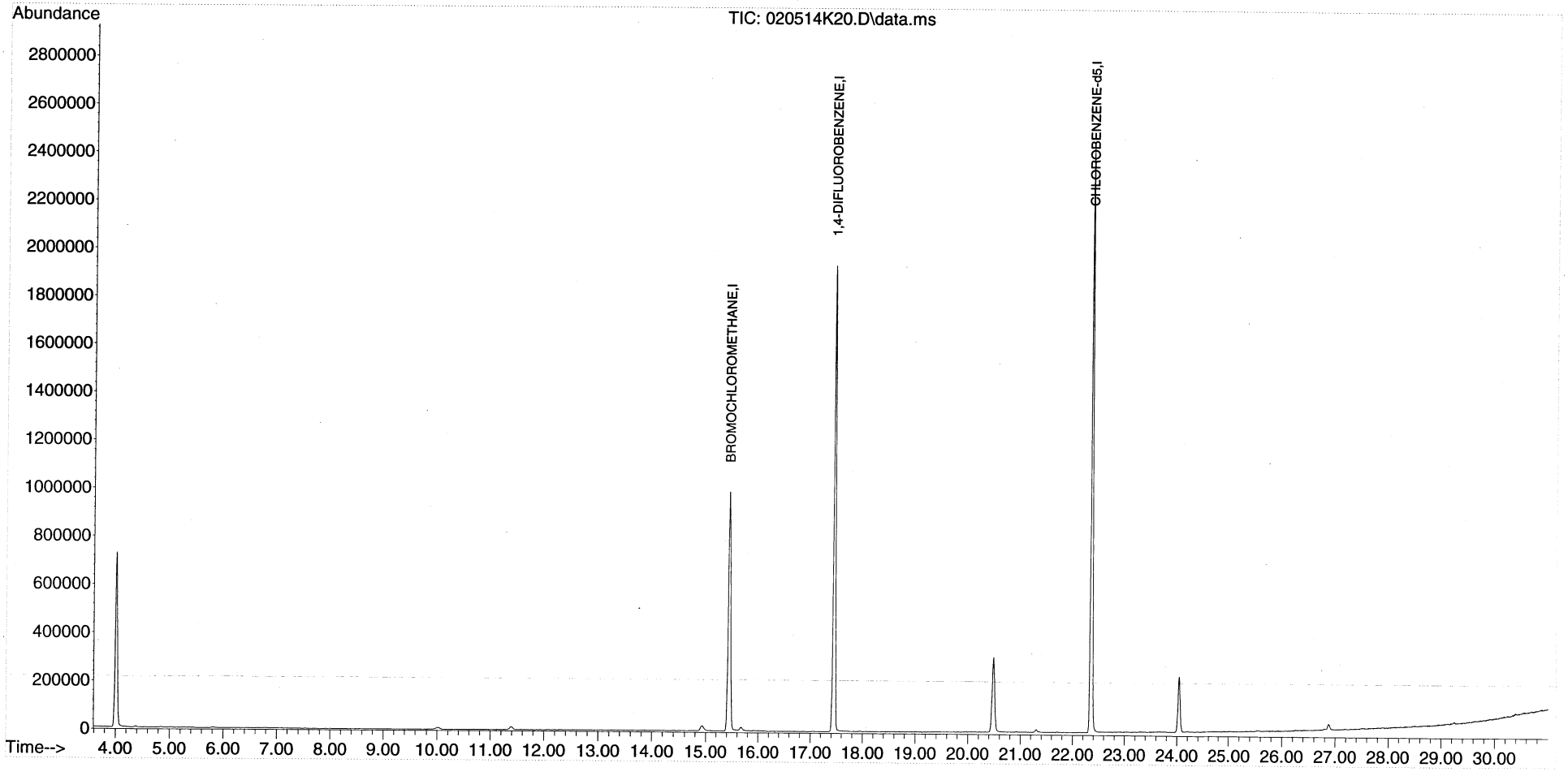
00359

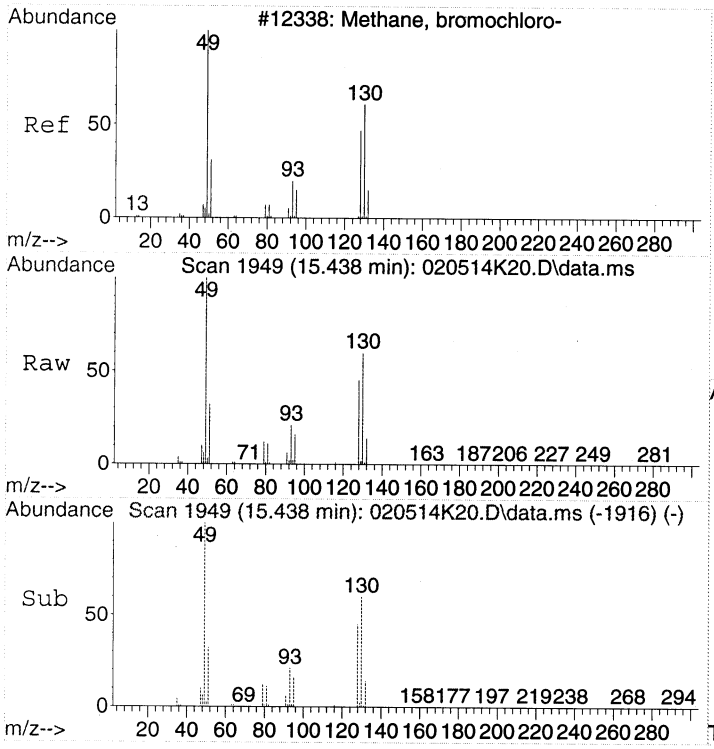
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K20.D
Acq On : 6 Feb 2014 3:42
Instrument: HP5973K
Operator : EM
Sample : CAN 1137
Misc : CAN 1137
ALS Vial : 47
Multiplier: 1

Quant Time: May 06 10:09:22 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

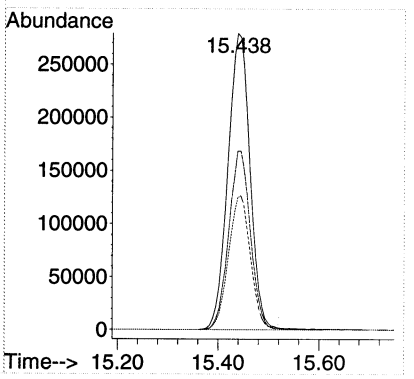


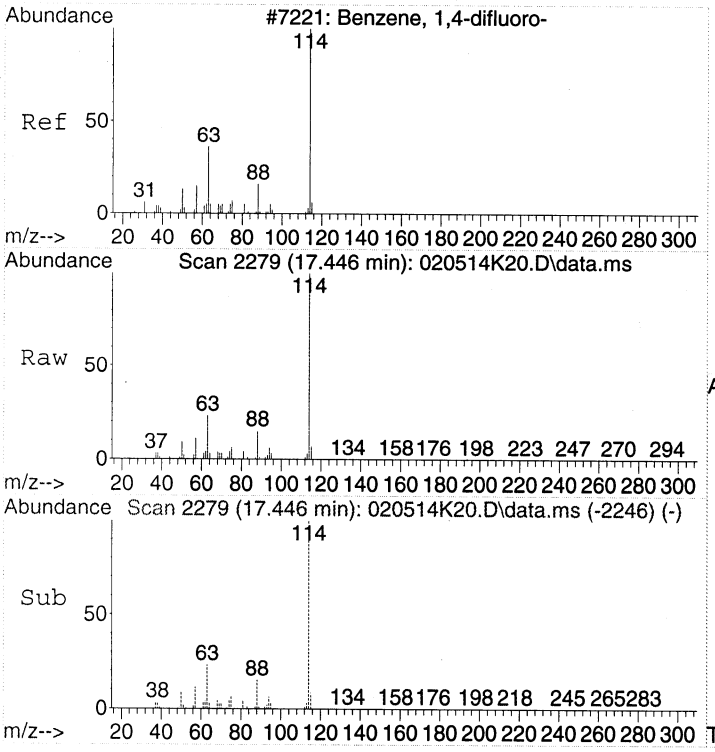


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.438 min Scan# 1949
Delta R.T. 0.000 min
Lab File: 020514K20.D
Acq: 6 Feb 2014 3:42

Tgt Ion: 49 Resp: 856165

Ion	Ratio	Lower	Upper
49	100		
130	59.5	39.6	79.6
128	45.1	26.9	66.9

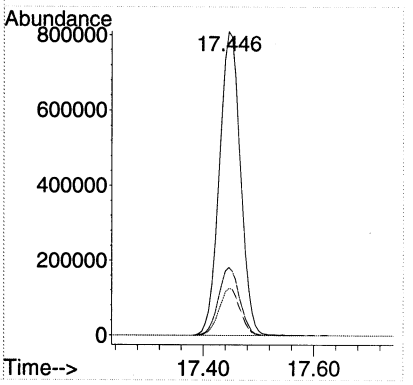


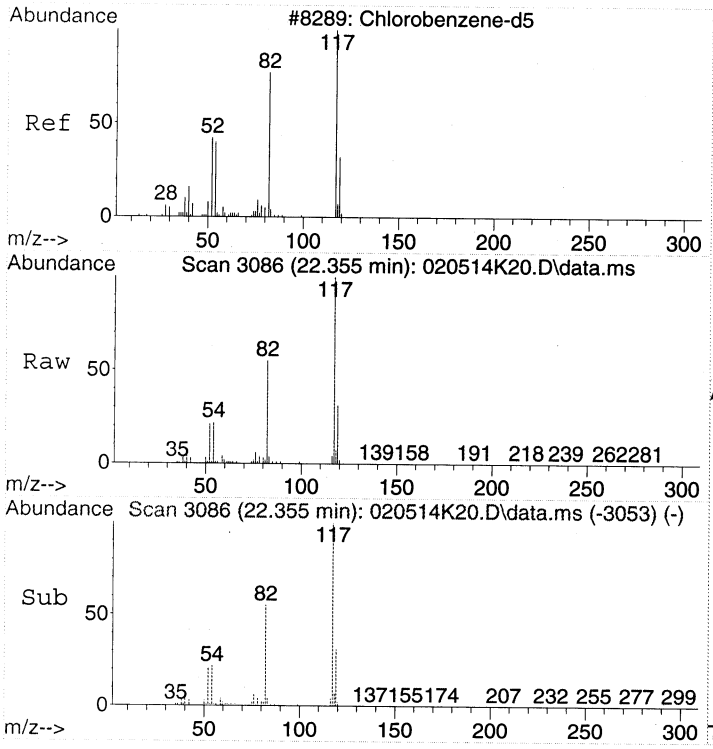


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. 0.000 min
Lab File: 020514K20.D
Acq: 6 Feb 2014 3:42

Tgt Ion:114 Resp: 2149721

Ion	Ratio	Lower	Upper
114	100		
63	22.4	2.3	42.3
88	15.4	0.0	35.2

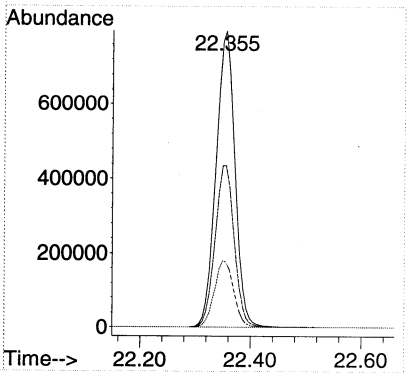




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. 0.000 min
Lab File: 020514K20.D
Acq: 6 Feb 2014 3:42

Tgt Ion:117 Resp: 1898973

Ion	Ratio	Lower	Upper
117	100		
82	55.6	37.1	77.1
54	23.2	3.3	43.3



00362

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K21.D
Acq On : 6 Feb 2014 4:32
Instrument: HP5973K
Operator : EM
Sample : CAN 1179
Misc : CAN 1179
ALS Vial : 48
Multiplier: 1

Quant Time: May 06 10:09:27 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) BROMOCHLOROMETHANE	15.444	49	856006	22.00	ppbv	0.00
32) 1,4-DIFLUOROBENZENE	17.446	114	2128093	22.00	ppbv	0.00
43) CHLOROBENZENE-d5	22.355	117	1877445	22.00	ppbv	0.00

Target Compounds Qvalue

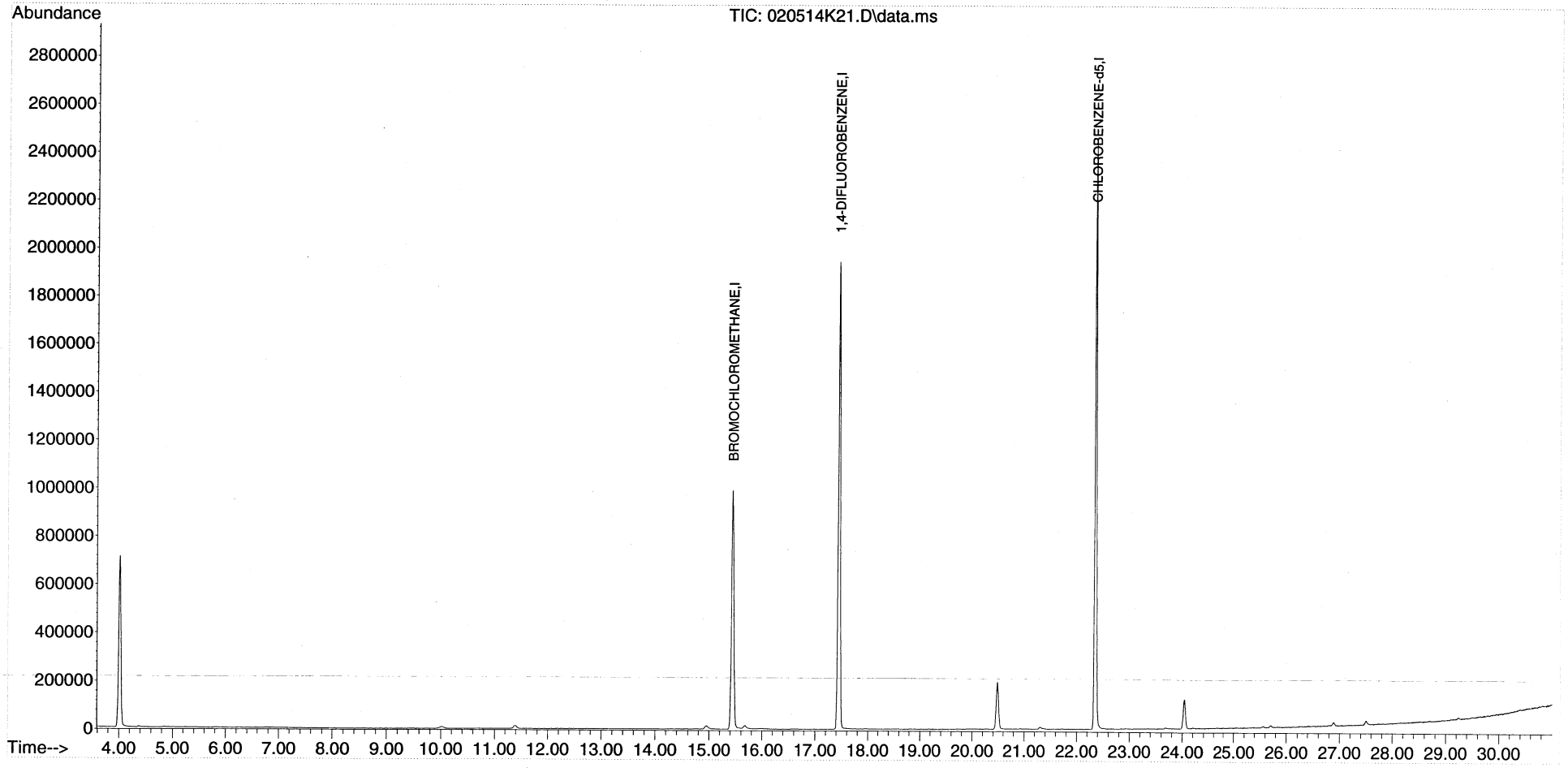
(#) = qualifier out of range (m) = manual integration (+) = signals summed

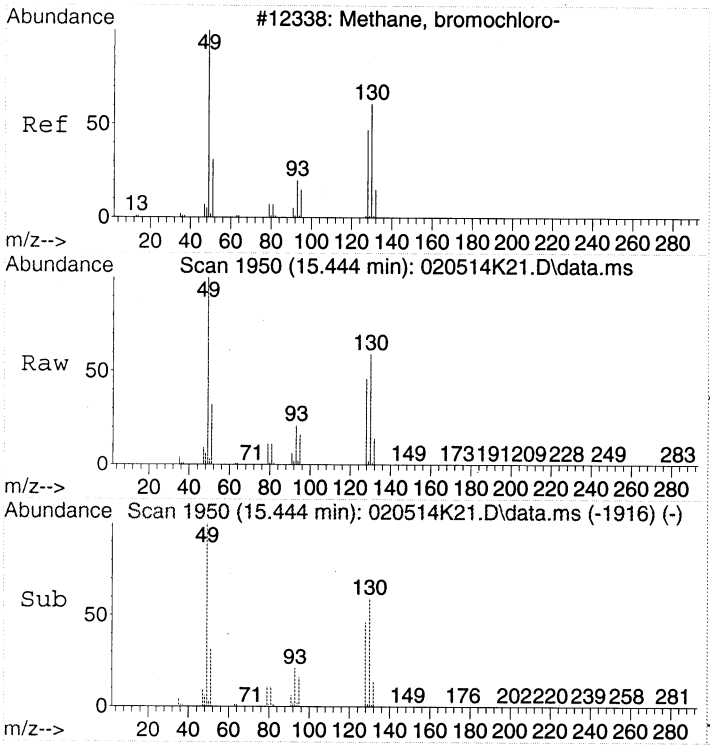
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2014\020514KA\
Data File : 020514K21.D
Acq On : 6 Feb 2014 4:32
Instrument: HP5973K
Operator : EM
Sample : CAN 1179
Misc : CAN 1179
ALS Vial : 48
Multiplier: 1

Quant Time: May 06 10:09:27 2014
Quant Title : TO15
QLast Update : Fri Jan 24 15:09:46 2014
Response via : Initial Calibration

DataAcq Meth:020514KAA.M
Quant Method : C:\msdchem\1\METHODS\2014\020514KAA.M

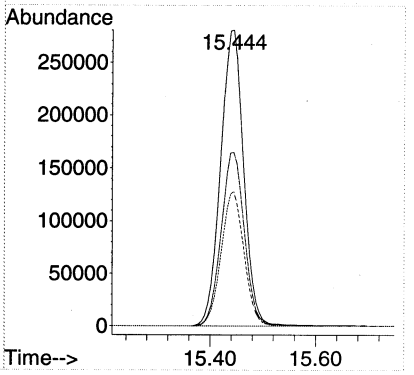


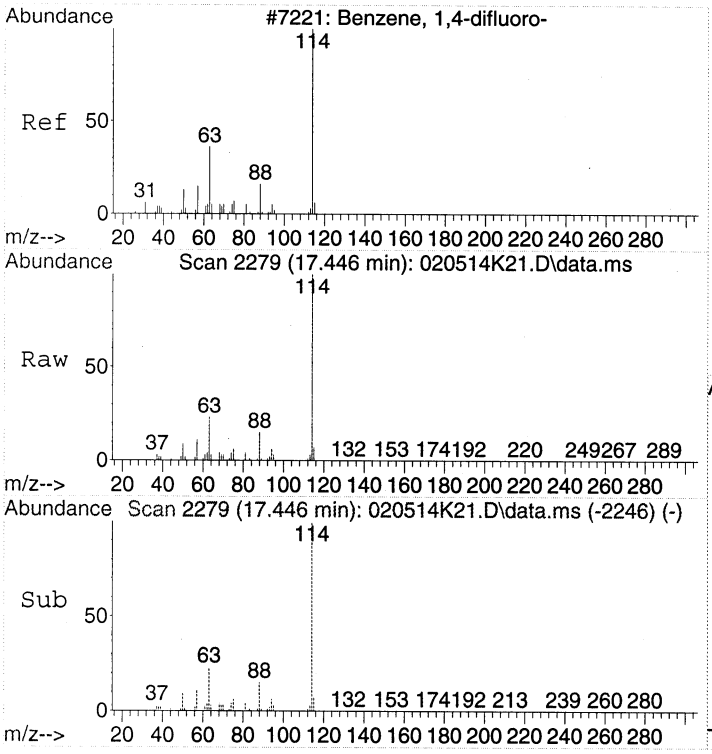


#1
BROMOCHLOROMETHANE
Concen: 22.00 ppbv
RT: 15.444 min Scan# 1950
Delta R.T. 0.006 min
Lab File: 020514K21.D
Acq: 6 Feb 2014 4:32

Tgt Ion: 49 Resp: 856006

Ion	Ratio	Lower	Upper
49	100		
130	59.1	39.6	79.6
128	45.2	26.9	66.9

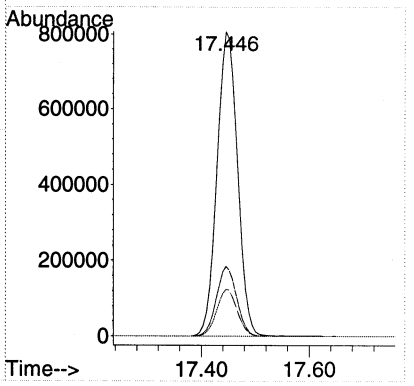


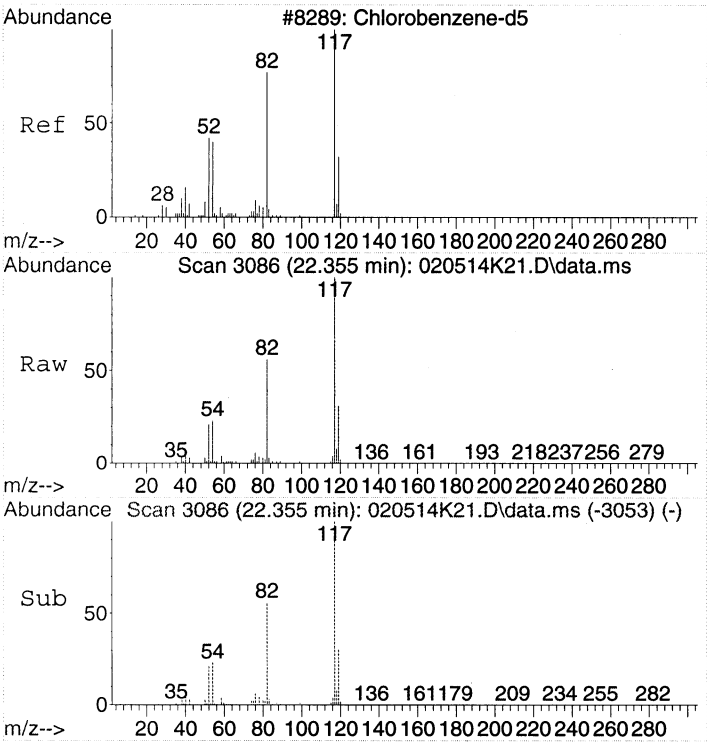


#32
1,4-DIFLUOROBENZENE
Concen: 22.00 ppbv
RT: 17.446 min Scan# 2279
Delta R.T. -0.000 min
Lab File: 020514K21.D
Acq: 6 Feb 2014 4:32

Tgt Ion:114 Resp: 2128093

Ion	Ratio	Lower	Upper
114	100		
63	22.6	2.3	42.3
88	15.4	0.0	35.2

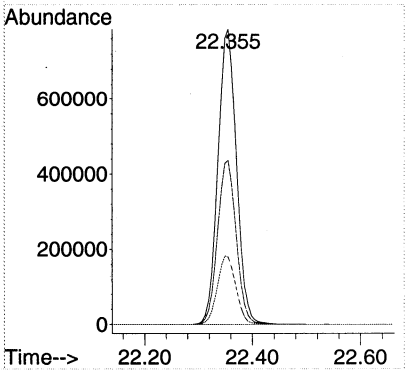




#43
CHLOROBENZENE-d5
Concen: 22.00 ppbv
RT: 22.355 min Scan# 3086
Delta R.T. -0.000 min
Lab File: 020514K21.D
Acq: 6 Feb 2014 4:32

Tgt Ion:117 Resp: 1877445

Ion	Ratio	Lower	Upper
117	100		
82	55.9	37.1	77.1
54	23.3	3.3	43.3



00355