ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Case Narrative for:

Louisiana Department of Environmental Quality

Certificate of Analysis Number:

12090195

Report To:	**Project Name:** Al#/AQS#/Texas Brine Drill Rig
Louisiana Department of Environmental Quality	**Site:** TEXAS BRINE DRILL RIG
Randy Creighton	**Site Address:**
1209 Leesville Ave.	
Baton Rouge	**PO Number:** Contract# 687758
LA	**State:** Louisiana
70802-	**State Cert. No.:** 04004
ph: (225) 219-3676 fax: (225) 219-9898	**Date Reported:** 10/11/2012

Revision I:

Report revised on October 11, 2012 to correct for the preliminary result of 30354.7 ppbv for anlayte 1,2-Dichloroethane on sample ID "497-092212-03A" (Accutest ID: 12090195-03A). The final result of 3262.74 ppbv is reported in this revised report. Discrepency in result is due to a an artifact which we think came from the canister used to make the dilution. Sample ID "497-092212-02" (12090195-02A) was analyzed at a lower dilution.

I. SAMPLE RECEIPT:

All samples were received intact.

Please see attached sample receipt checklist for any nonconformance issues.

II: ANALYSES AND EXCEPTIONS:

PAMS Air Analysis:

Comparison of results for random samples analyzed by PAMS GC/FID and by qualitative analysis by GCMS has shown over 95% of positive results over 2ppbC for butene and pentene isomers to be false positives due to matrix interference from polar compounds. When a large non-symmetrical peak, characteristic of polar compounds such as methanol, acetone or isopropanol, is identified as a target compound, the analyte result will be set to zero, reported as ND and Y flagged. The area of the deleted peak(s) will be added to the TNMOC result. When obvious matrix interference is present, the presence of a coeluting target analyte cannot be absolutely ruled out and therefore these results will be reported, but qualified with a Y Flag. The Y qualifier on a detected analyte signifies a possible false positive due to matrix interference.

III. GENERAL REPORTING COMMENTS:

The PAMS results are reported down to 0.0 ppbC. Non-detect samples are reported with a ND to indicate that the target compounds were not detected and results below the PQL (5 ppbC on an undiluted sample) are reported with a J flag.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples to ensure method criteria are achieved throughout the entire analytical process. A random sample was chosen to run as sample duplicate.

Some of the RPD's on the QC report for the sample/sample duplicate may be different than the c RPD's using the sample results that appear on the report because, the actual raw result is used to perform the calculations for RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of

10/11/2012

Neaundra Wyatt
Client Services

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

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Louisiana Department of Environmental Quality

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Analysis Number.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.The software used to prepare this data package calculates according to EPA mandated rounding rules and the final results calculated may differ slightly from the results in the quantitation reports.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

Accutest Labs of Gulf Coast, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

12090195 Page 2

10/11/2012

Neaundra Wyatt
Client Services

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

Version 2.1 - Modified February 11, 2011

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Louisiana Department of Environmental Quality

Certificate of Analysis Number:

12090195

Report To: **Louisiana Department of Environmental Quality**
Randy Creighton
1209 Leesville Ave.

Baton Rouge
LA
70802-
ph: (225) 219-3676 **fax: (225) 219-9898**

Fax To:

Project Name: **AI#/AQS#/Texas Brine Drill Rig**
Site: **TEXAS BRINE DRILL RIG**
Site Address:

PO Number: **Contract# 687758**
State: **Louisiana**
State Cert. No.: **04004**
Date Reported: **10/11/2012**
Field Sampler: **Terry Dedon**

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
497-092212-01	12090195-01	Air	09/22/2012 23:00	9/25/2012 11:40:00 AM		☐
497-092212-02	12090195-02	Air	09/22/2012 22:50	9/25/2012 11:40:00 AM		☐
497-092212-03	12090195-03	Air	09/22/2012 23:50	9/25/2012 11:40:00 AM		☐
497-092212-04	12090195-04	Air	09/22/2012 23:59	9/25/2012 11:40:00 AM		☐

10/11/2012

Neaundra Wyatt
Client Services

Date

Richard Rodriguez
Laboratory Director

Ted Yen
Quality Assurance Officer

ACCUTEST GULF COAST
10165 HARWIN DRIVE
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Client Sample ID: 497-092212-01 **Collected:** 09/22/2012 23:00 **Lab Sample ID:** 12090195-01

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method	**DURATION**				**SUMMA SAMPLING**		**Units:**	**Hours**
Parameter	**Result**	**Qual**	**MDL**	**PQL**	**Dil. Factor**	**Date Analyzed**	**Analyst**	**Seq. #**
Duration	0.004		0	0	1	10/02/12 0:00	BF	5819720

Neaundra Wyatt
Client Services

Qualifiers:
ND/U - Not Detected At The MDL
J - Estimated value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST GULF COAST
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Client Sample ID: 497-092212-01 **Collected:** 09/22/2012 23:00 **Lab Sample ID:** 12090195-01

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL	PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,1,1-Trichloroethane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,1,2,2-Tetrachloroethane	89.97	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,1,2-Trichloroethane	190.89	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,1-Dichloroethane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,1-Dichloroethene	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,2,4-Trichlorobenzene	205.09	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,2,4-Trimethylbenzene	846.94	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,2-Dibromoethane	161.21	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,2-Dichloroethane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,2-Dichloropropane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,3,5-Trimethylbenzene	688.37	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
1,3-Butadiene	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
2-Butanone	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
2-Hexanone	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
4-Methyl-2-pentanone	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Acetone	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Acetonitrile	565.42	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Acrylonitrile	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Allyl chloride	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Benzene	64559.50		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Benzyl chloride	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Bromomethane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Carbon disulfide	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Carbon tetrachloride	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Chloroacetonitrile	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Chlorobenzene	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Chlorobutane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Chloroethane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Chloroform	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Chloromethane	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
cis-1,2-Dichloroethylene	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
cis-1,3-dichloropropylene	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Diethyl ether	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Ethyl methacrylate	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Ethylbenzene	4505.46	J	< 0.2	6400	12800	10/05/12 12:53	E_G	5819955
Freon 11	ND		< 0.2	6400	12800	10/05/12 12:53	E_G	5819955

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Client Services

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MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
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Client Sample ID: 497-092212-01 **Collected:** 09/22/2012 23:00 **Lab Sample ID:** 12090195-01

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL		PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
Freon 113	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Freon 114	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Freon 12	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Hexachlorobutadiene	303.85	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
m+p-Xylenes	7669.48	J	< 0.2		13000	12800	10/05/12 12:53	E_G	5819955
m-Dichlorobenzene	255.99	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Methacrylonitrile	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Methyl acrylate	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Methyl methacrylate	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Methyl tert-butyl ether	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Methylene chloride	928.79	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Nitrobenzene	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Nitropropane	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
o-Dichlorobenzene	275.70	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
o-Xylene	2199.05	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
p-Dichlorobenzene	254.20	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Styrene	265.77	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Tetrachloroethylene	129.96	J	< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Tetrahydrofuran	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Toluene	46760.90		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
trans-1,3-Dichloropropene	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Trichloroethylene	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Vinyl chloride	ND		< 0.2		6400	12800	10/05/12 12:53	E_G	5819955
Surr: 4-Bromofluorobenzene	93.70		< 0.2	%	70-130	12800	10/05/12 12:53	E_G	5819955

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ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-02 **Collected:** 09/22/2012 22:50 **Lab Sample ID:** 12090195-02

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method	**DURATION**				**SUMMA SAMPLING**		**Units:**	**Hours**
Parameter	**Result**	**Qual**	**MDL**	**PQL**	**Dil. Factor**	**Date Analyzed**	**Analyst**	**Seq. #**
Duration	0.004		0	0	1	10/02/12 0:00	BF	5819721

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Qualifiers:
ND/U - Not Detected At The MDL
J - Estimated value between MDL and PQL
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B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST GULF COAST
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HOUSTON, TX 77036
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Client Sample ID: 497-092212-02 **Collected:** 09/22/2012 22:50 **Lab Sample ID:** 12090195-02

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL	PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,1,1-Trichloroethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,1,2,2-Tetrachloroethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,1,2-Trichloroethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,1-Dichloroethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,1-Dichloroethene	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,2,4-Trichlorobenzene	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,2,4-Trimethylbenzene	902.54	J	< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,2-Dibromoethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,2-Dichloroethane	2216.50	J	< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,2-Dichloropropane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,3,5-Trimethylbenzene	605.89	J	< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
1,3-Butadiene	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
2-Butanone	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
2-Hexanone	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
4-Methyl-2-pentanone	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Acetone	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Acetonitrile	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Acrylonitrile	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Allyl chloride	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Benzene	67574.80		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Benzyl chloride	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Bromomethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Carbon disulfide	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Carbon tetrachloride	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Chloroacetonitrile	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Chlorobenzene	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Chlorobutane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Chloroethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Chloroform	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Chloromethane	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
cis-1,2-Dichloroethylene	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
cis-1,3-dichloropropylene	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Diethyl ether	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Ethyl methacrylate	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Ethylbenzene	2893.24	J	< 0.2	6400	12800	10/10/12 16:21	E_G	5820202
Freon 11	ND		< 0.2	6400	12800	10/10/12 16:21	E_G	5820202

Neaundra Wyatt
Client Services

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D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-02 **Collected:** 09/22/2012 22:50 **Lab Sample ID:** 12090195-02

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL		PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
Freon 113	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Freon 114	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Freon 12	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Hexachlorobutadiene	202.46	J	< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
m+p-Xylenes	4619.24	J	< 0.2		13000	12800	10/10/12 16:21	E_G	5820202
m-Dichlorobenzene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Methacrylonitrile	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Methyl acrylate	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Methyl methacrylate	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Methyl tert-butyl ether	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Methylene chloride	3086.92	J	< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Nitrobenzene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Nitropropane	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
o-Dichlorobenzene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
o-Xylene	1239.43	J	< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
p-Dichlorobenzene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Styrene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Tetrachloroethylene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Tetrahydrofuran	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Toluene	32827.20		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
trans-1,3-Dichloropropene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Trichloroethylene	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Vinyl chloride	ND		< 0.2		6400	12800	10/10/12 16:21	E_G	5820202
Surr: 4-Bromofluorobenzene	97.60		< 0.2	%	70-130	12800	10/10/12 16:21	E_G	5820202

Neaundra Wyatt
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ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-03 **Collected:** 09/22/2012 23:50 **Lab Sample ID:** 12090195-03

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method	**DURATION**				**SUMMA SAMPLING**		**Units:**	**Hours**
Parameter	**Result**	**Qual**	**MDL**	**PQL**	**Dil. Factor**	**Date Analyzed**	**Analyst**	**Seq. #**
Duration	0.003		0	0	1	10/02/12 0:00	BF	5819722

Neaundra Wyatt
Client Services

Qualifiers:
ND/U - Not Detected At The MDL
J - Estimated value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-03 **Collected:** 09/22/2012 23:50 **Lab Sample ID:** 12090195-03

Site: TEXAS BRINE DRILL RIG

Analyses/Method TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS TO-15_LDEQ **Units:** ppbv

Parameter	Result	Qual	MDL	PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,1,1-Trichloroethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,1,2,2-Tetrachloroethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,1,2-Trichloroethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,1-Dichloroethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,1-Dichloroethene	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,2,4-Trichlorobenzene	342.21	J	< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,2,4-Trimethylbenzene	3256.62	J	< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,2-Dibromoethane	75.08	J	< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,2-Dichloroethane	3262.74	J	< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,2-Dichloropropane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,3,5-Trimethylbenzene	2180.23	J	< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
1,3-Butadiene	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
2-Butanone	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
2-Hexanone	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
4-Methyl-2-pentanone	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Acetone	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Acetonitrile	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Acrylonitrile	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Allyl chloride	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Benzene	131246.00		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Benzyl chloride	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Bromomethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Carbon disulfide	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Carbon tetrachloride	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Chloroacetonitrile	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Chlorobenzene	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Chlorobutane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Chloroethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Chloroform	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Chloromethane	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
cis-1,2-Dichloroethylene	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
cis-1,3-dichloropropylene	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Diethyl ether	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Ethyl methacrylate	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Ethylbenzene	12982.50		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168
Freon 11	ND		< 0.2	6400	12800	10/10/12 6:13	E_G	5820168

Neaundra Wyatt
Client Services

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MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-03 **Collected:** 09/22/2012 23:50 **Lab Sample ID:** 12090195-03

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL		PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
Freon 113	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Freon 114	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Freon 12	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Hexachlorobutadiene	376.62	J	< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
m+p-Xylenes	22633.80		< 0.2		13000	12800	10/10/12 6:13	E_G	5820168
m-Dichlorobenzene	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Methacrylonitrile	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Methyl acrylate	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Methyl methacrylate	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Methyl tert-butyl ether	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Methylene chloride	989.62	J	< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Nitrobenzene	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Nitropropane	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
o-Dichlorobenzene	314.21	J	< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
o-Xylene	6643.84		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
p-Dichlorobenzene	279.08	J	< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Styrene	257.98	J	< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Tetrachloroethylene	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Tetrahydrofuran	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Toluene	112518.00		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
trans-1,3-Dichloropropene	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Trichloroethylene	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Vinyl chloride	ND		< 0.2		6400	12800	10/10/12 6:13	E_G	5820168
Surr: 4-Bromofluorobenzene	94.40		< 0.2	%	70-130	12800	10/10/12 6:13	E_G	5820168

Neaundra Wyatt
Client Services

Qualifiers:
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MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-04 **Collected:** 09/22/2012 23:59 **Lab Sample ID:** 12090195-04

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method	**DURATION**				**SUMMA SAMPLING**		**Units:**	**Hours**
Parameter	**Result**	**Qual**	**MDL**	**PQL**	**Dil. Factor**	**Date Analyzed**	**Analyst**	**Seq. #**
Duration	0.004		0	0	1	10/02/12 0:00	BF	5819723

Neaundra Wyatt
Client Services

Qualifiers:
ND/U - Not Detected At The MDL
J - Estimated value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-04 **Collected:** 09/22/2012 23:59 **Lab Sample ID:** 12090195-04

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL	PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,1,1-Trichloroethane	1463.91	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,1,2,2-Tetrachloroethane	1309.44	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,1,2-Trichloroethane	1253.31	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,1-Dichloroethane	1652.48	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,1-Dichloroethene	1453.33	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,2,4-Trichlorobenzene	743.02	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,2,4-Trimethylbenzene	1042.82	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,2-Dibromoethane	1210.93	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,2-Dichloroethane	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,2-Dichloropropane	1218.42	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,3,5-Trimethylbenzene	1008.41	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
1,3-Butadiene	1455.13	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
2-Butanone	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
2-Hexanone	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
4-Methyl-2-pentanone	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Acetone	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Acetonitrile	1834.89	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Acrylonitrile	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Allyl chloride	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Benzene	8265.58	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Benzyl chloride	851.16	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Bromomethane	2008.50	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Carbon disulfide	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Carbon tetrachloride	1601.35	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Chloroacetonitrile	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Chlorobenzene	1675.19	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Chlorobutane	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Chloroethane	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Chloroform	1604.75	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Chloromethane	2206.33	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
cis-1,2-Dichloroethylene	1306.74	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
cis-1,3-dichloropropylene	788.68	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Diethyl ether	1256.46	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Ethyl methacrylate	ND		< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Ethylbenzene	1446.11	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954
Freon 11	1912.89	J	< 0.2	16000	32000	10/05/12 11:47	E_G	5819954

Neaundra Wyatt
Client Services

Qualifiers:
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D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Client Sample ID: 497-092212-04 **Collected:** 09/22/2012 23:59 **Lab Sample ID:** 12090195-04

Site: **TEXAS BRINE DRILL RIG**

Analyses/Method **TARGET TOXIC COMPOUNDS IN AMBIENT AIR BY GC/MS** **TO-15_LDEQ** **Units:** **ppbv**

Parameter	Result	Qual	MDL		PQL	Dil. Factor	Date Analyzed	Analyst	Seq. #
Freon 113	1710.33	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Freon 114	2115.62	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Freon 12	2108.02	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Hexachlorobutadiene	1394.32	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
m+p-Xylenes	3009.79	J	< 0.2		32000	32000	10/05/12 11:47	E_G	5819954
m-Dichlorobenzene	1144.11	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Methacrylonitrile	ND		< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Methyl acrylate	ND		< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Methyl methacrylate	1103.48	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Methyl tert-butyl ether	ND		< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Methylene chloride	3599.70	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Nitrobenzene	ND		< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Nitropropane	946.58	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
o-Dichlorobenzene	1125.17	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
o-Xylene	1162.64	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
p-Dichlorobenzene	1068.93	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Styrene	902.89	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Tetrachloroethylene	1251.61	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Tetrahydrofuran	ND		< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Toluene	5317.02	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
trans-1,3-Dichloropropene	1029.79	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Trichloroethylene	1683.41	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Vinyl chloride	1642.28	J	< 0.2		16000	32000	10/05/12 11:47	E_G	5819954
Surr: 4-Bromofluorobenzene	95.40		< 0.2	%	70-130	32000	10/05/12 11:47	E_G	5819954

Neaundra Wyatt
Client Services

Qualifiers:
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MI - Matrix Interference

Quality Control Documentation

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Duration**	**WorkOrder:**	**12090195**
Method:	**Summa Sampling**	**Lab Batch ID:**	**R321753**

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
12090195-01A	497-092212-01
12090195-02A	497-092212-02
12090195-03A	497-092212-03
12090195-04A	497-092212-04

Qualifiers:
ND/U - Not Detected at the MDL
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
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Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Dry Air Blank

RunID:	M_121005A-5819933	Units:	ppbv
Analysis Date:	10/04/2012 21:24	Analyst:	E_G

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
12090195-01A	497-092212-01
12090195-04A	497-092212-04

Analyte	Result	Qual	Rep Limit	MDL
1,1,1-Trichloroethane	ND		0.20	0
1,1,2,2-Tetrachloroethane	ND		0.20	0
1,1,2-Trichloroethane	ND		0.20	0
1,1-Dichloroethane	ND		0.20	0
1,1-Dichloroethene	ND		0.20	0
1,2,4-Trichlorobenzene	0.046	J	0.20	0
1,2,4-Trimethylbenzene	0.006	J	0.20	0
1,2-Dibromoethane	ND		0.20	0
1,2-Dichloroethane	ND		0.20	0
1,2-Dichloropropane	ND		0.20	0
1,3,5-Trimethylbenzene	ND		0.20	0
1,3-Butadiene	ND		0.20	0
2-Butanone	ND		0.20	0
2-Hexanone	ND		0.20	0
4-Methyl-2-pentanone	ND		0.20	0
Acetone	0.13	J	1.0	0
Acetonitrile	ND		0.20	0
Acrylonitrile	ND		0.20	0
Allyl chloride	ND		0.20	0
Benzene	ND		0.20	0
Benzyl chloride	ND		0.20	0
Bromomethane	ND		0.20	0
Carbon disulfide	ND		0.20	0
Carbon tetrachloride	ND		0.20	0
Chloroacetonitrile	ND		0.20	0
Chlorobenzene	ND		0.20	0
Chlorobutane	ND		0.20	0
Chloroethane	ND		0.20	0
Chloroform	ND		0.20	0
Chloromethane	ND		0.20	0
cis-1,2-Dichloroethylene	ND		0.20	0
cis-1,3-dichloropropylene	ND		0.20	0
Diethyl ether	ND		0.20	0
Ethyl methacrylate	ND		0.20	0
Ethylbenzene	ND		0.20	0
Freon 11	ND		0.20	0
Freon 113	ND		0.20	0
Freon 114	ND		0.20	0
Freon 12	ND		0.20	0
Hexachlorobutadiene	0.015	J	0.20	0
m+p-Xylenes	ND		0.40	0

Qualifiers:
ND/U - Not Detected at the MDL
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Dry Air Blank

RunID: M_121005A-5819933 Units: ppbv

Analysis Date: 10/04/2012 21:24 Analyst: E_G

Analyte	Result	Qual	Rep Limit	MDL
m-Dichlorobenzene	0.011	J	0.20	0
Methacrylonitrile	ND		0.20	0
Methyl acrylate	ND		0.20	0
Methyl methacrylate	ND		0.20	0
Methyl tert-butyl ether	ND		0.20	0
Methylene chloride	0.089	J	0.20	0
Nitrobenzene	0.088	J	0.20	0
Nitropropane	ND		0.20	0
o-Dichlorobenzene	0.015	J	0.20	0
o-Xylene	ND		0.20	0
p-Dichlorobenzene	0.013	J	0.20	0
Styrene	ND		0.20	0
Tetrachloroethylene	ND		0.20	0
Tetrahydrofuran	ND		0.20	0
Toluene	ND		0.20	0
trans-1,3-Dichloropropene	ND		0.20	0
Trichloroethylene	ND		0.20	0
Vinyl chloride	ND		0.20	0
Surr: 4-Bromofluorobenzene	93.7		70-130	0

Humid Air Blank

RunID: M_121005A-5819934 Units: ppbv

Analysis Date: 10/04/2012 22:31 Analyst: E_G

Analyte	Result	Qual	Rep Limit
1,1,1-Trichloroethane	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,1,2-Trichloroethane	ND		0.20
1,1-Dichloroethane	ND		0.20
1,1-Dichloroethene	ND		0.20
1,2,4-Trichlorobenzene	0.0293	J	0.20
1,2,4-Trimethylbenzene	0.00431	J	0.20
1,2-Dibromoethane	ND		0.20
1,2-Dichloroethane	ND		0.20
1,2-Dichloropropane	ND		0.20
1,3,5-Trimethylbenzene	0.00266	J	0.20

Qualifiers:
ND/U - Not Detected at the MDL
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Humid Air Blank

RunID:	M_121005A-5819934	Units:	ppbv
Analysis Date:	10/04/2012 22:31	Analyst:	E_G

Analyte	Result	Qual	Rep Limit
1,3-Butadiene	ND		0.20
2-Butanone	0.0115	J	0.20
2-Hexanone	ND		0.20
4-Methyl-2-pentanone	ND		0.20
Acetone	0.202	J	1.0
Acetonitrile	ND		0.20
Acrylonitrile	ND		0.20
Allyl chloride	ND		0.20
Benzene	ND		0.20
Benzyl chloride	0.00628	J	0.20
Bromomethane	ND		0.20
Carbon disulfide	ND		0.20
Carbon tetrachloride	ND		0.20
Chloroacetonitrile	ND		0.20
Chlorobenzene	0.00399	J	0.20
Chlorobutane	ND		0.20
Chloroethane	ND		0.20
Chloroform	ND		0.20
Chloromethane	ND		0.20
cis-1,2-Dichloroethylene	ND		0.20
cis-1,3-dichloropropylene	ND		0.20
Diethyl ether	ND		0.20
Ethyl methacrylate	ND		0.20
Ethylbenzene	ND		0.20
Freon 11	ND		0.20
Freon 113	ND		0.20
Freon 114	ND		0.20
Freon 12	ND		0.20
Hexachlorobutadiene	0.0086	J	0.20
m+p-Xylenes	ND		0.40
m-Dichlorobenzene	0.00917	J	0.20
Methacrylonitrile	ND		0.20
Methyl acrylate	ND		0.20
Methyl methacrylate	ND		0.20
Methyl tert-butyl ether	ND		0.20
Methylene chloride	0.0785	J	0.20
Nitrobenzene	0.0466	J	0.20
Nitropropane	ND		0.20
o-Dichlorobenzene	0.00764	J	0.20
o-Xylene	ND		0.20
p-Dichlorobenzene	0.0096	J	0.20

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Quality Control Report

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Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Humid Air Blank

RunID: M_121005A-5819934 Units: ppbv

Analysis Date: 10/04/2012 22:31 Analyst: E_G

Analyte	Result	Qual	Rep Limit
Styrene	ND		0.20
Tetrachloroethylene	ND		0.20
Tetrahydrofuran	ND		0.20
Toluene	ND		0.20
trans-1,3-Dichloropropene	ND		0.20
Trichloroethylene	ND		0.20
Vinyl chloride	ND		0.20
Surr: 4-Bromofluorobenzene	96.6		70-130

Laboratory Control Sample (LCS)

RunID: M_121005A-5819932 Units: ppbv

Analysis Date: 10/04/2012 20:09 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
1,1,1-Trichloroethane	7.50	8.70	116		70	130
1,1,2,2-Tetrachloroethane	7.50	7.39	98.5		70	130
1,1,2-Trichloroethane	7.50	7.42	98.9		70	130
1,1-Dichloroethane	7.50	8.17	109		70	130
1,1-Dichloroethene	7.50	8.50	113		70	130
1,2,4-Trichlorobenzene	7.50	7.87	105		70	130
1,2,4-Trimethylbenzene	7.50	8.53	114		70	130
1,2-Dibromoethane	7.50	7.72	103		70	130
1,2-Dichloroethane	7.50	8.69	116		70	130
1,2-Dichloropropane	7.50	7.16	95.4		70	130
1,3,5-Trimethylbenzene	7.50	8.31	111		70	130
1,3-Butadiene	7.50	8.28	110		70	130
2-Butanone	7.50	8.22	110		70	130
2-Hexanone	7.50	7.40	98.7		70	130
4-Methyl-2-pentanone	7.50	7.27	97.0		70	130
Acetone	7.50	8.34	111		70	130
Acetonitrile	7.50	7.04	93.9		70	130

Qualifiers:
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Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Laboratory Control Sample (LCS)

RunID:	M_121005A-5819932	Units:	ppbv
Analysis Date:	10/04/2012 20:09	Analyst:	E_G

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Acrylonitrile	7.50	8.26	110		70	130
Allyl chloride	7.50	8.10	108		70	130
Benzene	7.50	8.73	116		70	130
Benzyl chloride	7.50	7.63	102		70	130
Bromomethane	7.50	9.22	123		70	130
Carbon disulfide	7.50	8.10	108		70	130
Carbon tetrachloride	7.50	8.46	113		70	130
Chloroacetonitrile	7.50	7.70	103		70	130
Chlorobenzene	7.50	7.71	103		70	130
Chlorobutane	7.50	8.78	117		70	130
Chloroethane	7.50	8.73	116		70	130
Chloroform	7.50	8.74	117		70	130
Chloromethane	7.50	7.75	103		70	130
cis-1,2-Dichloroethylene	7.50	8.47	113		70	130
cis-1,3-dichloropropylene	7.50	7.32	97.6		70	130
Diethyl ether	7.50	9.25	123		70	130
Ethyl methacrylate	7.50	7.83	104		70	130
Ethylbenzene	7.50	8.22	110		70	130
Freon 11	7.50	9.31	124		70	130
Freon 113	7.50	8.48	113		70	130
Freon 114	7.50	10.2	136 *		70	130
Freon 12	7.50	9.15	122		70	130
Hexachlorobutadiene	7.50	7.80	104		70	130
m+p-Xylenes	15.0	16.4	109		70	130
m-Dichlorobenzene	7.50	8.26	110		70	130
Methacrylonitrile	7.50	9.34	125		70	130
Methyl acrylate	7.50	8.88	118		70	130
Methyl methacrylate	7.50	8.31	111		70	130
Methyl tert-butyl ether	7.50	9.71	129		70	130
Methylene chloride	7.50	7.01	93.5		70	130

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Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Laboratory Control Sample (LCS)

RunID: M_121005A-5819932 Units: ppbv
Analysis Date: 10/04/2012 20:09 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Nitrobenzene	7.50	5.42	72.3		70	130
Nitropropane	7.50	7.09	94.5		70	130
o-Dichlorobenzene	7.50	8.18	109		70	130
o-Xylene	7.50	8.29	111		70	130
p-Dichlorobenzene	7.50	8.54	114		70	130
Styrene	7.50	8.49	113		70	130
Tetrachloroethylene	7.50	7.94	106		70	130
Tetrahydrofuran	7.50	8.33	111		70	130
Toluene	7.50	8.21	110		70	130
trans-1,3-Dichloropropene	7.50	8.85	118		70	130
Trichloroethylene	7.50	7.70	103		70	130
Vinyl chloride	7.50	8.51	113		70	130
Surr: 4-Bromofluorobenzene	100	103	103		70	130

Sample Duplicate

Original Sample: 12090159-01
RunID: M_121005A-5819935 Units: ppbv
Analysis Date: 10/05/2012 1:49 Analyst: E_G

Analyte	Sample Result	DUP Result	Qual	RPD	RPD Limit
1,1,1-Trichloroethane	ND	ND		0	25
1,1,2,2-Tetrachloroethane	ND	ND		0	25
1,1,2-Trichloroethane	ND	ND		0	25
1,1-Dichloroethane	ND	ND		0	25
1,1-Dichloroethene	ND	ND		0	25
1,2,4-Trichlorobenzene	0.01	0.01	J	0	25
1,2,4-Trimethylbenzene	0.08	0.09	J	0	25
1,2-Dibromoethane	ND	ND		0	25

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Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Sample Duplicate

Original Sample:	12090159-01		
RunID:	M_121005A-5819935	Units:	ppbv
Analysis Date:	10/05/2012 1:49	Analyst:	E_G

Analyte	Sample Result	DUP Result	Qual	RPD	RPD Limit
1,2-Dichloroethane	ND	ND		0	25
1,2-Dichloropropane	ND	ND		0	25
1,3,5-Trimethylbenzene	0.03	0.03	J	0	25
1,3-Butadiene	0.11	0.1	J	0	25
2-Butanone	0.69	0.7		2.0	25
2-Hexanone	ND	ND		0	25
4-Methyl-2-pentanone	0.04	0.04	J	0	25
Acetone	7.02	7.23		2.89	25
Acetonitrile	0.18	0.2	J	0	25
Acrylonitrile	0.05	0.09	J	0	25
Allyl chloride	ND	ND		0	25
Benzene	0.42	0.41	J	0	25
Benzyl chloride	ND	ND		0	25
Bromomethane	ND	ND		0	25
Carbon disulfide	ND	ND		0	25
Carbon tetrachloride	0.08	0.08	J	0	25
Chloroacetonitrile	ND	ND		0	25
Chlorobenzene	ND	ND		0	25
Chlorobutane	ND	ND		0	25
Chloroethane	ND	ND		0	25
Chloroform	0.03	0.03	J	0	25
Chloromethane	0.65	0.65		0.45	25
cis-1,2-Dichloroethylene	ND	ND		0	25
cis-1,3-dichloropropylene	0.06	0.07	J	0	25
Diethyl ether	ND	ND		0	25
Ethyl methacrylate	ND	ND		0	25
Ethylbenzene	0.09	0.1	J	0	25
Freon 11	0.27	0.27	J	0	25

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Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321767**

Sample Duplicate

Original Sample:	12090159-01		
RunID:	M_121005A-5819935	Units:	ppbv
Analysis Date:	10/05/2012 1:49	Analyst:	E_G

Analyte	Sample Result	DUP Result	Qual	RPD	RPD Limit
Freon 113	0.08	0.08	J	0	25
Freon 114	0.02	0.02	J	0	25
Freon 12	0.57	0.58		0.80	25
Hexachlorobutadiene	ND	ND		0	25
m+p-Xylenes	0.32	0.34	J	0	25
m-Dichlorobenzene	ND	ND		0	25
Methacrylonitrile	0.3	0.29	J	0	25
Methyl acrylate	ND	ND		0	25
Methyl methacrylate	ND	ND		0	25
Methyl tert-butyl ether	ND	ND		0	25
Methylene chloride	0.15	0.15	J	0	25
Nitrobenzene	ND	ND		0	25
Nitropropane	ND	ND		0	25
o-Dichlorobenzene	ND	ND		0	25
o-Xylene	0.11	0.12	J	0	25
p-Dichlorobenzene	0.04	0.04	J	0	25
Styrene	0.03	0.03	J	0	25
Tetrachloroethylene	0.02	0.02	J	0	25
Tetrahydrofuran	ND	ND		0	25
Toluene	0.76	0.82		6.7	25
trans-1,3-Dichloropropene	0.06	0.07	J	0	25
Trichloroethylene	ND	ND		0	25
Vinyl chloride	ND	ND		0	25
Surr: 4-Bromofluorobenzene	95.8	96.5		0.7226	30

Qualifiers:
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Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Dry Air Blank

RunID:	M_121010A-5820163	Units:	ppbv
Analysis Date:	10/10/2012 1:45	Analyst:	E_G

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
12090195-02A	497-092212-02
12090195-03A	497-092212-03

Analyte	Result	Qual	Rep Limit	MDL
1,1,1-Trichloroethane	ND		0.20	0
1,1,2,2-Tetrachloroethane	ND		0.20	0
1,1,2-Trichloroethane	ND		0.20	0
1,1-Dichloroethane	ND		0.20	0
1,1-Dichloroethene	ND		0.20	0
1,2,4-Trichlorobenzene	0.015	J	0.20	0
1,2,4-Trimethylbenzene	ND		0.20	0
1,2-Dibromoethane	ND		0.20	0
1,2-Dichloroethane	ND		0.20	0
1,2-Dichloropropane	ND		0.20	0
1,3,5-Trimethylbenzene	ND		0.20	0
1,3-Butadiene	ND		0.20	0
2-Butanone	ND		0.20	0
2-Hexanone	ND		0.20	0
4-Methyl-2-pentanone	ND		0.20	0
Acetone	0.13	J	1.0	0
Acetonitrile	ND		0.20	0
Acrylonitrile	ND		0.20	0
Allyl chloride	ND		0.20	0
Benzene	ND		0.20	0
Benzyl chloride	ND		0.20	0
Bromomethane	ND		0.20	0
Carbon disulfide	ND		0.20	0
Carbon tetrachloride	ND		0.20	0
Chloroacetonitrile	ND		0.20	0
Chlorobenzene	ND		0.20	0
Chlorobutane	ND		0.20	0
Chloroethane	ND		0.20	0
Chloroform	ND		0.20	0
Chloromethane	ND		0.20	0
cis-1,2-Dichloroethylene	ND		0.20	0
cis-1,3-dichloropropylene	ND		0.20	0
Diethyl ether	ND		0.20	0
Ethyl methacrylate	ND		0.20	0
Ethylbenzene	ND		0.20	0
Freon 11	ND		0.20	0
Freon 113	ND		0.20	0
Freon 114	ND		0.20	0
Freon 12	ND		0.20	0
Hexachlorobutadiene	ND		0.20	0
m+p-Xylenes	ND		0.40	0

Qualifiers:
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Quality Control Report

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AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Dry Air Blank

RunID: M_121010A-5820163 Units: ppbv

Analysis Date: 10/10/2012 1:45 Analyst: E_G

Analyte	Result	Qual	Rep Limit	MDL
m-Dichlorobenzene	0.0047	J	0.20	0
Methacrylonitrile	ND		0.20	0
Methyl acrylate	ND		0.20	0
Methyl methacrylate	ND		0.20	0
Methyl tert-butyl ether	ND		0.20	0
Methylene chloride	0.085	J	0.20	0
Nitrobenzene	0.031	J	0.20	0
Nitropropane	ND		0.20	0
o-Dichlorobenzene	0.0048	J	0.20	0
o-Xylene	ND		0.20	0
p-Dichlorobenzene	ND		0.20	0
Styrene	ND		0.20	0
Tetrachloroethylene	ND		0.20	0
Tetrahydrofuran	ND		0.20	0
Toluene	0.0036	J	0.20	0
trans-1,3-Dichloropropene	ND		0.20	0
Trichloroethylene	ND		0.20	0
Vinyl chloride	ND		0.20	0
Surr: 4-Bromofluorobenzene	95.8		70-130	0

Humid Air Blank

RunID: M_121010A-5820164 Units: ppbv

Analysis Date: 10/10/2012 2:52 Analyst: E_G

Analyte	Result	Qual	Rep Limit
1,1,1-Trichloroethane	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,1,2-Trichloroethane	ND		0.20
1,1-Dichloroethane	ND		0.20
1,1-Dichloroethene	ND		0.20
1,2,4-Trichlorobenzene	ND		0.20
1,2,4-Trimethylbenzene	ND		0.20
1,2-Dibromoethane	ND		0.20
1,2-Dichloroethane	ND		0.20
1,2-Dichloropropane	ND		0.20
1,3,5-Trimethylbenzene	ND		0.20

Qualifiers:
ND/U - Not Detected at the MDL
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

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ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Humid Air Blank

RunID:	M_121010A-5820164	Units:	ppbv
Analysis Date:	10/10/2012 2:52	Analyst:	E_G

Analyte	Result	Qual	Rep Limit
1,3-Butadiene	ND		0.20
2-Butanone	ND		0.20
2-Hexanone	ND		0.20
4-Methyl-2-pentanone	ND		0.20
Acetone	0.186	J	1.0
Acetonitrile	ND		0.20
Acrylonitrile	ND		0.20
Allyl chloride	ND		0.20
Benzene	ND		0.20
Benzyl chloride	ND		0.20
Bromomethane	ND		0.20
Carbon disulfide	ND		0.20
Carbon tetrachloride	ND		0.20
Chloroacetonitrile	ND		0.20
Chlorobenzene	ND		0.20
Chlorobutane	ND		0.20
Chloroethane	ND		0.20
Chloroform	ND		0.20
Chloromethane	ND		0.20
cis-1,2-Dichloroethylene	ND		0.20
cis-1,3-dichloropropylene	ND		0.20
Diethyl ether	ND		0.20
Ethyl methacrylate	ND		0.20
Ethylbenzene	ND		0.20
Freon 11	ND		0.20
Freon 113	ND		0.20
Freon 114	ND		0.20
Freon 12	ND		0.20
Hexachlorobutadiene	ND		0.20
m+p-Xylenes	ND		0.40
m-Dichlorobenzene	ND		0.20
Methacrylonitrile	ND		0.20
Methyl acrylate	ND		0.20
Methyl methacrylate	ND		0.20
Methyl tert-butyl ether	ND		0.20
Methylene chloride	0.0789	J	0.20
Nitrobenzene	0.0189	J	0.20
Nitropropane	ND		0.20
o-Dichlorobenzene	ND		0.20
o-Xylene	ND		0.20
p-Dichlorobenzene	0.00377	J	0.20

Qualifiers:
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Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Humid Air Blank

RunID: M_121010A-5820164 Units: ppbv

Analysis Date: 10/10/2012 2:52 Analyst: E_G

Analyte	Result	Qual	Rep Limit
Styrene	ND		0.20
Tetrachloroethylene	ND		0.20
Tetrahydrofuran	ND		0.20
Toluene	ND		0.20
trans-1,3-Dichloropropene	ND		0.20
Trichloroethylene	ND		0.20
Vinyl chloride	ND		0.20
Surr: 4-Bromofluorobenzene	96.0		70-130

Laboratory Control Sample (LCS)

RunID: M_121010A-5820162 Units: ppbv

Analysis Date: 10/09/2012 21:20 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
1,1,1-Trichloroethane	7.50	7.72	103		70	130
1,1,2,2-Tetrachloroethane	7.50	7.03	93.7		70	130
1,1,2-Trichloroethane	7.50	6.71	89.5		70	130
1,1-Dichloroethane	7.50	7.07	94.2		70	130
1,1-Dichloroethene	7.50	7.28	97.0		70	130
1,2,4-Trichlorobenzene	7.50	7.74	103		70	130
1,2,4-Trimethylbenzene	7.50	8.07	108		70	130
1,2-Dibromoethane	7.50	7.06	94.1		70	130
1,2-Dichloroethane	7.50	7.54	101		70	130
1,2-Dichloropropane	7.50	6.43	85.7		70	130
1,3,5-Trimethylbenzene	7.50	7.83	104		70	130
1,3-Butadiene	7.50	7.21	96.1		70	130
2-Butanone	7.50	7.47	99.6		70	130
2-Hexanone	7.50	6.93	92.4		70	130
4-Methyl-2-pentanone	7.50	6.68	89.1		70	130
Acetone	7.50	7.14	95.2		70	130
Acetonitrile	7.50	6.25	83.3		70	130

Qualifiers:
ND/U - Not Detected at the MDL
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B - Analyte In Blank At Or Above 2 ppbC/For TO-15 0.2 ppbv
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
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10165 HARWIN DRIVE
HOUSTON, TX 77036
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Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Laboratory Control Sample (LCS)

RunID:	M_121010A-5820162	Units:	ppbv
Analysis Date:	10/09/2012 21:20	Analyst:	E_G

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Acrylonitrile	7.50	7.11	94.7		70	130
Allyl chloride	7.50	7.28	97.0		70	130
Benzene	7.50	7.39	98.5		70	130
Benzyl chloride	7.50	7.94	106		70	130
Bromomethane	7.50	7.79	104		70	130
Carbon disulfide	7.50	7.53	100		70	130
Carbon tetrachloride	7.50	7.70	103		70	130
Chloroacetonitrile	7.50	6.88	91.8		70	130
Chlorobenzene	7.50	7.24	96.6		70	130
Chlorobutane	7.50	7.73	103		70	130
Chloroethane	7.50	7.41	98.7		70	130
Chloroform	7.50	7.54	100		70	130
Chloromethane	7.50	6.84	91.2		70	130
cis-1,2-Dichloroethylene	7.50	7.27	96.9		70	130
cis-1,3-dichloropropylene	7.50	6.81	90.8		70	130
Diethyl ether	7.50	8.03	107		70	130
Ethyl methacrylate	7.50	6.98	93.1		70	130
Ethylbenzene	7.50	7.78	104		70	130
Freon 11	7.50	8.13	108		70	130
Freon 113	7.50	7.26	96.8		70	130
Freon 114	7.50	8.79	117		70	130
Freon 12	7.50	8.07	108		70	130
Hexachlorobutadiene	7.50	7.22	96.2		70	130
m+p-Xylenes	15.0	15.7	104		70	130
m-Dichlorobenzene	7.50	7.90	105		70	130
Methacrylonitrile	7.50	7.95	106		70	130
Methyl acrylate	7.50	7.82	104		70	130
Methyl methacrylate	7.50	7.53	100		70	130
Methyl tert-butyl ether	7.50	8.58	114		70	130
Methylene chloride	7.50	6.16	82.1		70	130

Qualifiers:
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10165 HARWIN DRIVE
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Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Laboratory Control Sample (LCS)

RunID: M_121010A-5820162 Units: ppbv
Analysis Date: 10/09/2012 21:20 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Nitrobenzene	7.50	6.24	83.2		70	130
Nitropropane	7.50	7.11	94.8		70	130
o-Dichlorobenzene	7.50	7.75	103		70	130
o-Xylene	7.50	7.87	105		70	130
p-Dichlorobenzene	7.50	8.10	108		70	130
Styrene	7.50	8.00	107		70	130
Tetrachloroethylene	7.50	7.08	94.4		70	130
Tetrahydrofuran	7.50	7.51	100		70	130
Toluene	7.50	7.32	97.6		70	130
trans-1,3-Dichloropropene	7.50	8.39	112		70	130
Trichloroethylene	7.50	6.84	91.1		70	130
Vinyl chloride	7.50	7.29	97.2		70	130
Surr: 4-Bromofluorobenzene	100	104	104		70	130

Sample Duplicate

Original Sample: 12100007-01
RunID: M_121010A-5820165 Units: ppbv
Analysis Date: 10/10/2012 3:59 Analyst: E_G

Analyte	Sample Result	DUP Result	Qual	RPD	RPD Limit
1,1,1-Trichloroethane	ND	ND		0	25
1,1,2,2-Tetrachloroethane	ND	ND		0	25
1,1,2-Trichloroethane	ND	ND		0	25
1,1-Dichloroethane	ND	ND		0	25
1,1-Dichloroethene	ND	ND		0	25
1,2,4-Trichlorobenzene	0.01	0.01	J	0	25
1,2,4-Trimethylbenzene	0.01	0.01	J	0	25
1,2-Dibromoethane	ND	ND		0	25

Qualifiers:
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Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Sample Duplicate

Original Sample:	12100007-01		
RunID:	M_121010A-5820165	Units:	ppbv
Analysis Date:	10/10/2012 3:59	Analyst:	E_G

Analyte	Sample Result	DUP Result	Qual	RPD	RPD Limit
1,2-Dichloroethane	ND	ND		0	25
1,2-Dichloropropane	ND	ND		0	25
1,3,5-Trimethylbenzene	ND	ND		0	25
1,3-Butadiene	ND	ND		0	25
2-Butanone	0.15	0.15	J	0	25
2-Hexanone	ND	ND		0	25
4-Methyl-2-pentanone	ND	ND		0	25
Acetone	2.75	2.53		8.04	25
Acetonitrile	0.17	0.16	J	0	25
Acrylonitrile	ND	ND		0	25
Allyl chloride	ND	ND		0	25
Benzene	0.08	0.08	J	0	25
Benzyl chloride	ND	ND		0	25
Bromomethane	ND	ND		0	25
Carbon disulfide	0.08	0.08	J	0	25
Carbon tetrachloride	0.09	0.09	J	0	25
Chloroacetonitrile	ND	ND		0	25
Chlorobenzene	ND	ND		0	25
Chlorobutane	ND	ND		0	25
Chloroethane	ND	ND		0	25
Chloroform	0.02	0.02	J	0	25
Chloromethane	0.64	0.61		3.9	25
cis-1,2-Dichloroethylene	ND	ND		0	25
cis-1,3-dichloropropylene	ND	ND		0	25
Diethyl ether	ND	ND		0	25
Ethyl methacrylate	ND	ND		0	25
Ethylbenzene	0.01	ND	J	0	25
Freon 11	0.27	0.25	J	0	25

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Quality Control Report

Louisiana Department of Environmental Quality

AI#/AQS#/Texas Brine Drill Rig

Analysis:	**Target Toxic Compounds in Ambient Air by GC/MS**	**WorkOrder:**	**12090195**
Method:	**TO-15_LDEQ**	**Lab Batch ID:**	**R321783**

Sample Duplicate

Original Sample:	12100007-01		
RunID:	M_121010A-5820165	Units:	ppbv
Analysis Date:	10/10/2012 3:59	Analyst:	E_G

Analyte	Sample Result	DUP Result	Qual	RPD	RPD Limit
Freon 113	0.08	0.08	J	0	25
Freon 114	0.02	0.02	J	0	25
Freon 12	0.58	0.58		0.16	25
Hexachlorobutadiene	ND	ND		0	25
m+p-Xylenes	0.02	0.03	J	0	25
m-Dichlorobenzene	ND	ND		0	25
Methacrylonitrile	ND	ND		0	25
Methyl acrylate	ND	ND		0	25
Methyl methacrylate	ND	ND		0	25
Methyl tert-butyl ether	ND	ND		0	25
Methylene chloride	1.02	0.98		4.01	25
Nitrobenzene	0.02	ND	J	0	25
Nitropropane	ND	ND		0	25
o-Dichlorobenzene	ND	ND		0	25
o-Xylene	0.01	0.01	J	0	25
p-Dichlorobenzene	0.01	0.01	J	0	25
Styrene	0.01	0.01	J	0	25
Tetrachloroethylene	ND	ND		0	25
Tetrahydrofuran	ND	ND		0	25
Toluene	0.05	0.05	J	0	25
trans-1,3-Dichloropropene	ND	ND		0	25
Trichloroethylene	ND	ND		0	25
Vinyl chloride	ND	ND		0	25
Surr: 4-Bromofluorobenzene	91.9	91.2		0.7496	30

Qualifiers:
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Sample Receipt Checklist
And
Chain of Custody

ACCUTEST GULF COAST
10165 HARWIN DRIVE
HOUSTON, TX 77036
(713) 271-4700

Sample Receipt Checklist

Workorder:	**12090195**	Received By:	**E_G**
Date and Time Received:	**9/25/2012 11:40:00 AM**	Carrier name:	**ACCUTEST**
Temperature:	**25.2°C**	Chilled by:	**Not Chilled**

1.	**Shipping container/cooler in good condition?**	Yes ☑	No ☐	Not Present ☐
2.	**Custody seals intact on shippping container/cooler?**	Yes ☐	No ☐	Not Present ☑
3.	**Custody seals intact on sample bottles?**	Yes ☐	No ☐	Not Present ☑
4.	**Chain of custody present?**	Yes ☑	No ☐	
5.	**Chain of custody signed when relinquished and received?**	Yes ☑	No ☐	
6.	**Chain of custody agrees with sample labels?**	Yes ☑	No ☐	
7.	**Samples in proper container/bottle?**	Yes ☑	No ☐	
8.	**Sample containers intact?**	Yes ☑	No ☐	
9.	**Sufficient sample volume for indicated test?**	Yes ☑	No ☐	
10.	**All samples received within holding time?**	Yes ☑	No ☐	
11.	**Container/Temp Blank temperature in compliance?**	Yes ☑	No ☐	
12.	**Water - VOA vials have zero headspace?**	Yes ☐	No ☐	VOA Vials Not Present ☑
13.	**Water - Preservation checked upon receipt (except VOA*)?**	Yes ☐	No ☐	Not Applicable ☑

***VOA Preservation Checked After Sample Analysis**

Accutest Representative: _____ **Contact Date & Time:** _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

Accutest

12090195
497-09222-01

"Grab" Sample Collection Worksheet
Louisiana Department of Environmental Quality
Surveillance Division

Date of Collection: 9.22.12	Canister Number: H2942 / LA2253
Collected By: Terry Dedon	Sample Location: Texas Brine Drill Rig
Print Name: Terry Dedon	(GPS) Latitude:
Signature: Terry Dedon	(GPS) Longitude:
Phone No.:	
Witness: Bob Crain	Witness:
Analysis Requested: TO15	

Weather Conditions:	Odor Intensity:	Photograph:
Clear (✓)	None ( )	No (✓)
PC ( )	Mild ( )	
Cloudy ( )	Moderate ( )	Yes ( )
Rainy ( )	Strong ( )	

Describe odors present: Diesel

Wind direction & speed: /	Ambient temperature: /
Relative humidity: /	Barometric pressure: /

Sampling Data (24:00)

Start Time: 1100 PM | End Time: 1100 PM | Total Time (min): ~ 15 sec

NOTE: Please include all other sampling readings (PID, FID, Draeger Tubes, etc.)

Some fluid drawn in

***** (draw map on back of sheet showing sampling location and wind direction) *****

Chain of Custody Record

Relinquished By:	Received By:
Name: Terry Dedon	Name: RE Guillet
Signature: Terry Dedon	Signature: RE Guillet
Date: 9.24.12 Time: 1437	Date: 9.25.12 Time: 1140
Name:	Name: Gina Smith
Signature: RE Guillet	Signature:
Date: 9.27.12 Time: 1440	Date: 9-27-12 Time: 1440
Name: Gina Smith	Name:
Signature:	Signature:
Date: 9.27.12 Time: 1730	Date: 9/27/12 Time: 1730
Name:	Name:
Signature:	Signature: Elizabeth Gonzalez
Date: 9/27/12 Time: 2030	Date: 9/27/12 Time: 2030

Form Rev. 1 Revised 2/14/2008

Accutest

1209019~~5~~ EG 9-27-12

497-092212-02

"Grab" Sample Collection Worksheet
Louisiana Department of Environmental Quality
Surveillance Division

Date of Collection: 9.22.12	Canister Number: ~~[illegible]~~ 1164 LA10T3
Collected By: T. Dedon	Sample Location: Texas Brine Site Drill Rig
Print Name: Terry Dedon	(GPS) Latitude:
Signature: Terry Dedon	(GPS) Longitude:
Phone No.:	
Witness: Bob Crain	Witness:
Analysis Requested: TO 15	

Weather Conditions:	Odor Intensity:	Photograph:
Clear ( )	None ( )	No ( )
PC ( )	Mild ( )	
Cloudy ( )	Moderate ( )	Yes ( )
Rainy ( )	Strong ( )	

Describe odors present: Diesel/Hydrocarbon

Wind direction & speed:	Ambient temperature:
Relative humidity:	Barometric pressure:

Sampling Data (24:00)

Start Time: 1050 PM | End Time: 1250 PM | Total Time (min): 15 sec

NOTE: Please include all other sampling readings (PID, FID, Draeger Tubes, etc.)

some fluid drawn in

*** (draw map on back of sheet showing sampling location and wind direction) ***

Chain of Custody Record

Relinquished By:	Received By:
Name: Terry Dedon	Name: RE Guillet
Signature: Terry Dedon	Signature: RE Guillet
Date: 9.24.12 Time: 1439	Date: 9.25.12 Time: 1140
Name:	Name: Gina Smith
Signature: RE Guillet	Signature:
Date: 9.27.12 Time: 1440	Date: 9.27.12 Time: 1440
Name: Gina Smith	Name:
Signature:	Signature:
Date: 9.27.12 Time: 1440	Date: 9/27/12 Time: 1730
Name:	Name:
Signature:	Signature: Elizabeth Gonzalez
Date: 9/28/12 Time: 2030	Date: Time:

Form Rev. 1

Revised 2/14/2008

Acutest

12090195

497-092212-03

"Grab" Sample Collection Worksheet
Louisiana Department of Environmental Quality
Surveillance Division

Date of Collection: 9.22.12	Canister Number: H3019 | LA2557
Collected By: TAD	Sample Location: Texas Brine Drill Rig
Print Name: Terry Dedon	(GPS) Latitude:
Signature: Terry Dedon	(GPS) Longitude:
Phone No.: 2-3331	
Witness: Earle Wright	Witness: Bob Crain
Analysis Requested: TO15	

Weather Conditions:	Odor Intensity:	Photograph:
Clear (✓)	None ( )	No (✓)
PC ( )	Mild ( )	
Cloudy ( )	Moderate ( )	Yes ( )
Rainy ( )	Strong (✓)	

Describe odors present:

Wind direction & speed: /	Ambient temperature: /
Relative humidity: /	Barometric pressure: /

Sampling Data (24:00)

Start Time: 1150 PM | End Time: 1150 PM | Total Time (min): 10 sec

NOTE: Please include all other sampling readings (PID, FID, Draeger Tubes, etc.)

some fluid drawn in

***** (draw map on back of sheet showing sampling location and wind direction) *****

Chain of Custody Record

Relinquished By:	Received By:
Name: Terry Dedon	Name: R E Guillet
Signature: Terry Dedon	Signature: R E Guillet
Date: 9.24.12 Time: 1436	Date: 9.25.12 Time: 1140
Name:	Name: Gina Smith
Signature: R E Guillet	Signature:
Date: 9-27-12 Time: 1448	Date: 9-27-12 Time: 1440
Name: Gina Smith	Name:
Signature:	Signature:
Date: 9-27-12 Time:	Date: 9/27/12 Time: 1730
Name:	Name:
Signature:	Signature: Elizabeth Gonzalez
Date: 9/27/12 Time: 20:30	Date: Time:

Revised 2/14/2008

Form Rev. 1

Accutest

12090195

497-092212-04

"Grab" Sample Collection Worksheet
Louisiana Department of Environmental Quality
Surveillance Division

LA2094

Date of Collection: 9.22.12	Canister Number: 2596 Drill
Collected By: TD	Sample Location: Texas Brine Rog
Print Name: Terry Dedon	(GPS) Latitude:
Signature: Terry Dedon	(GPS) Longitude:
Phone No.: 2-3331	
Witness: Earle Wright	Witness:
Analysis Requested: TO15	

Weather Conditions:	Odor Intensity:	Photograph:
Clear (✓)	None ( )	No (✓)
PC ( )	Mild ( )	
Cloudy ( )	Moderate ( )	Yes ( )
Rainy ( )	Strong (✓)	

Describe odors present: Diesel/hydrocarbon

Wind direction & speed: /	Ambient temperature: /
Relative humidity:	Barometric pressure:

Sampling Data (24:00)

Start Time: 1159 PM | End Time: 1159 PM | Total Time (min): 15 secs

NOTE: Please include all other sampling readings (PID, FID, Draeger Tubes, etc.)

CLEAN SAMPLE - NO FLUID DRAWN IN

*** (draw map on back of sheet showing sampling location and wind direction) ***

Chain of Custody Record

Relinquished By:	Received By:
Name: Terry Dedon	Name: R E Guillot
Signature: Terry Dedon	Signature: R E Guillot
Date: 9-24-12 Time: 1438	Date: 9.25.12 Time: 1140
Name:	Name: Gina Smith
Signature: R E Guillot	Signature:
Date: 9-22-12 Time: 1440	Date: 9-22-12 Time: 1440
Name: Gina Smith	Name:
Signature:	Signature:
Date: Time: 1730	Date: 9/22/12 Time: 1730
Name:	Name:
Signature:	Signature: Elizabeth Gonzalez
Date: 9/22/12 Time: 2030	Date: Time:

Revised 2/14/2008

Form Rev. 1

Volatile Organic (TO-15)

Library Search (TIC's)

Tentatively Identified Compound (LSC) summary

Data Path : M:\AIR_M\2A12-1004\
Data File : M12J076.D
Acq On : 5 Oct 2012 12:53 pm
Operator : E_G
Sample : 12090195-01A
Misc : SAMP;TO-15_LDEQ
ALS Vial : 17 Sample Multiplier: 12800

Quant Method : M:\AIR_M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Propane	8.232	2698650.0	ppbv	34446900	1	14.838	1021160	6.3
Isobutane	8.625	2117580.0	ppbv	27029900	1	14.838	1021160	6.3
Butane	8.973	1650050.0	ppbv	21062000	1	14.838	1021160	6.3
Butane, 2,2-dim...	12.079	502989.0	ppbv	6420410	1	14.838	1021160	6.3
Butane, 2,3-dim...	13.281	600623.0	ppbv	7666660	1	14.838	1021160	6.3
Pentane, 2-methyl-	13.453	529384.0	ppbv	6757320	1	14.838	1021160	6.3
Cyclohexane, me...	21.915	375773.0	ppbv	9069600	2	18.527	1930870	6.3
Butane, 2-methyl-	10.237	1331220.0	ppbv	16992400	1	14.838	1021160	6.3
Pentane	10.903	800184.0	ppbv	10213900	1	14.838	1021160	6.3
Hexane	14.950	458208.0	ppbv	5848790	1	14.838	1021160	6.3

Library Search Compound Report

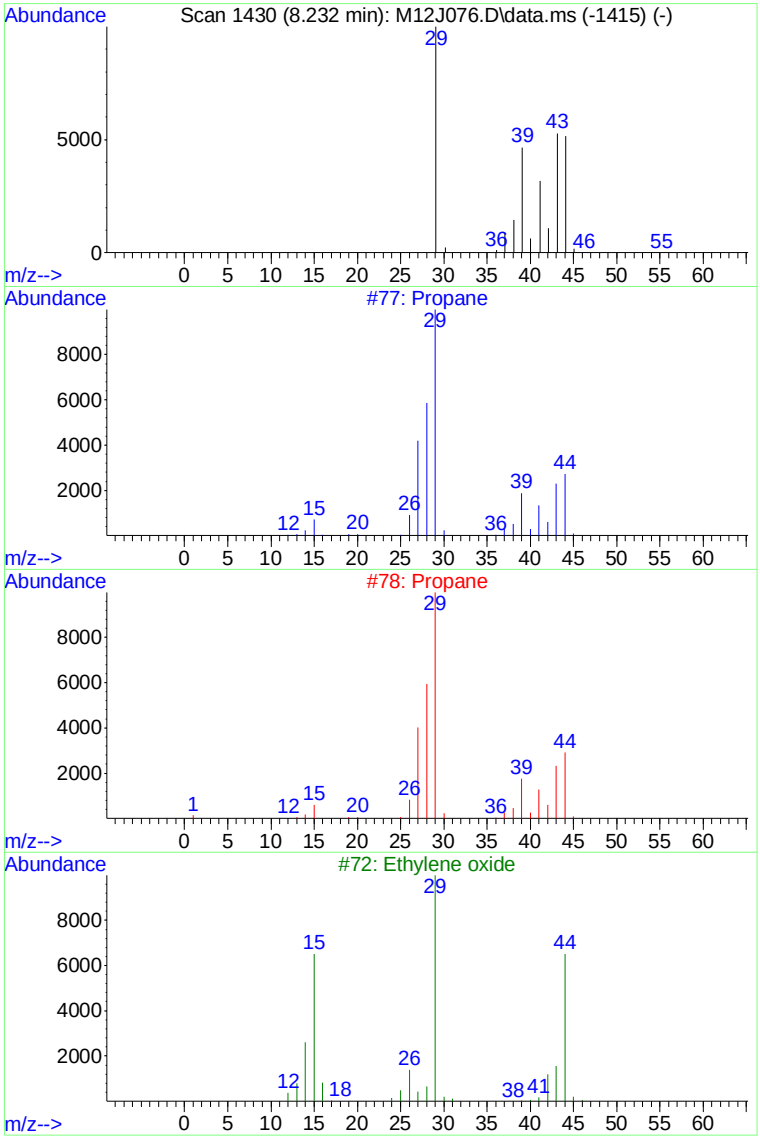
```
Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On    :  5 Oct 2012  12:53 pm
Operator  : E G
Sample    : 12090195-01A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 17   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```

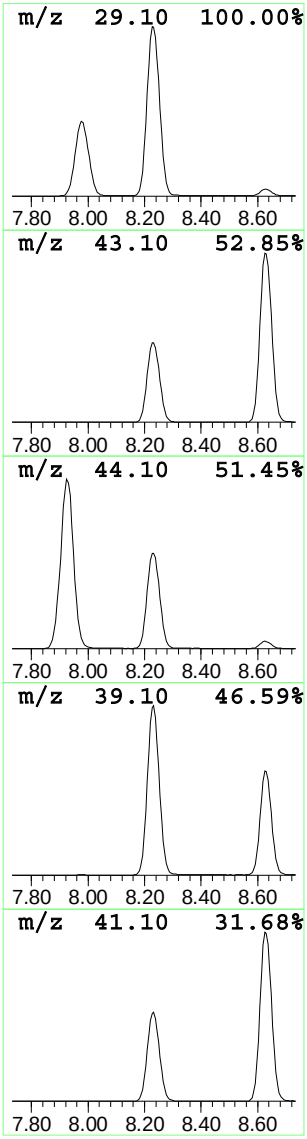
****

Peak Number 1 Propane — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.232	2698650.00 ppbv	34446900	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane	44	C3H8	000074-98-6	91
2	Propane	44	C3H8	000074-98-6	64
3	Ethylene oxide	44	C2H4O	000075-21-8	40
4	Ethylene oxide	44	C2H4O	000075-21-8	40
5	Propane	44	C3H8	000074-98-6	9





Library Search Compound Report

Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On : 5 Oct 2012 12:53 pm
Operator : E G
Sample : 12090195-01A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 17 Sample Multiplier: 12800

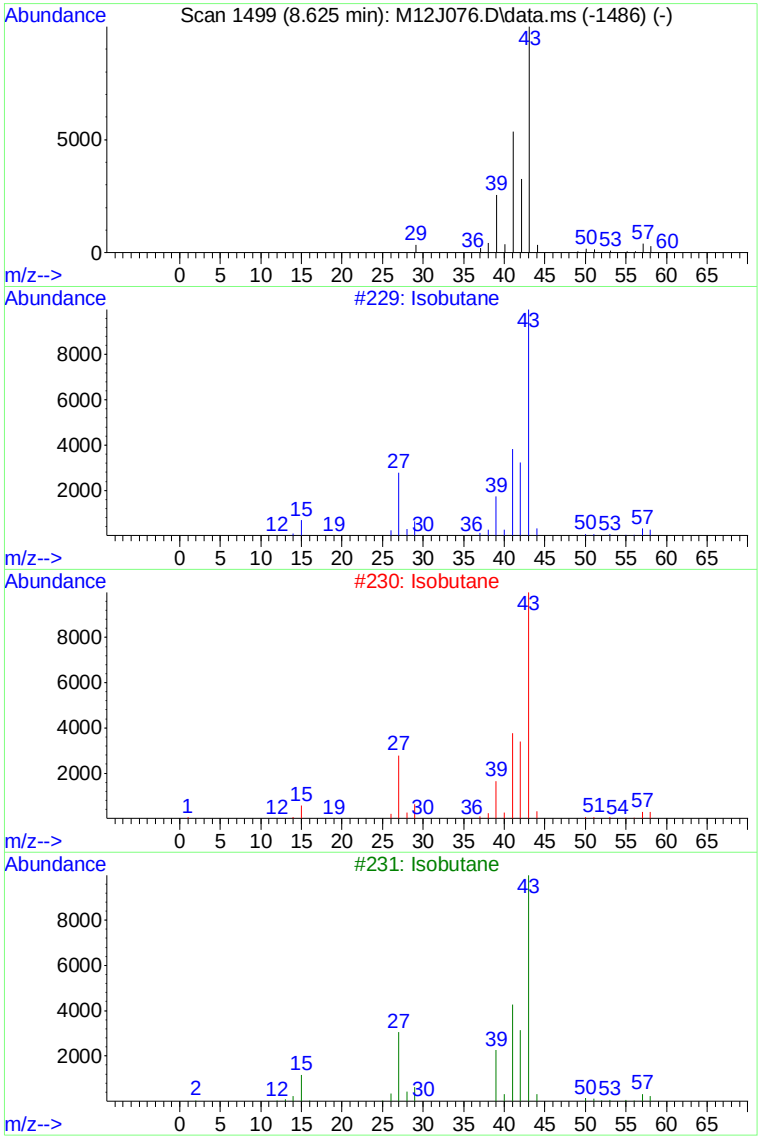
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

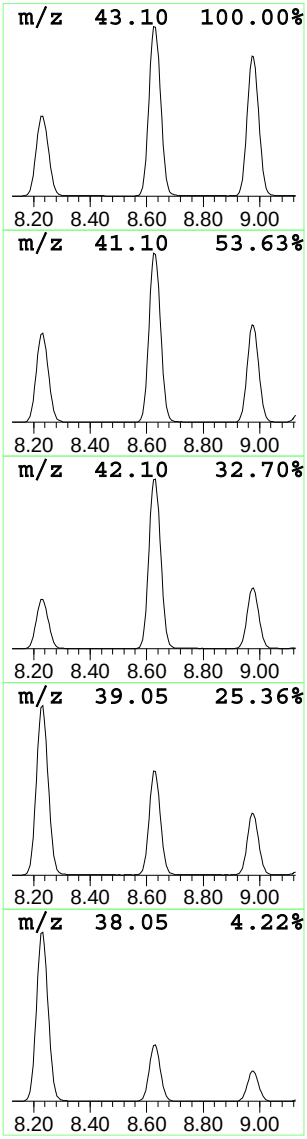
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 2 Isobutane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.625	2117580.00 ppbv	27029900	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isobutane	58	C4H10	000075-28-5	72
2	Isobutane	58	C4H10	000075-28-5	64
3	Isobutane	58	C4H10	000075-28-5	64
4	Isobutane	58	C4H10	000075-28-5	59
5	Propane, 1-nitro-	89	C3H7NO2	000108-03-2	9





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On    :  5 Oct 2012  12:53 pm
Operator  : E G
Sample    : 12090195-01A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 17   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

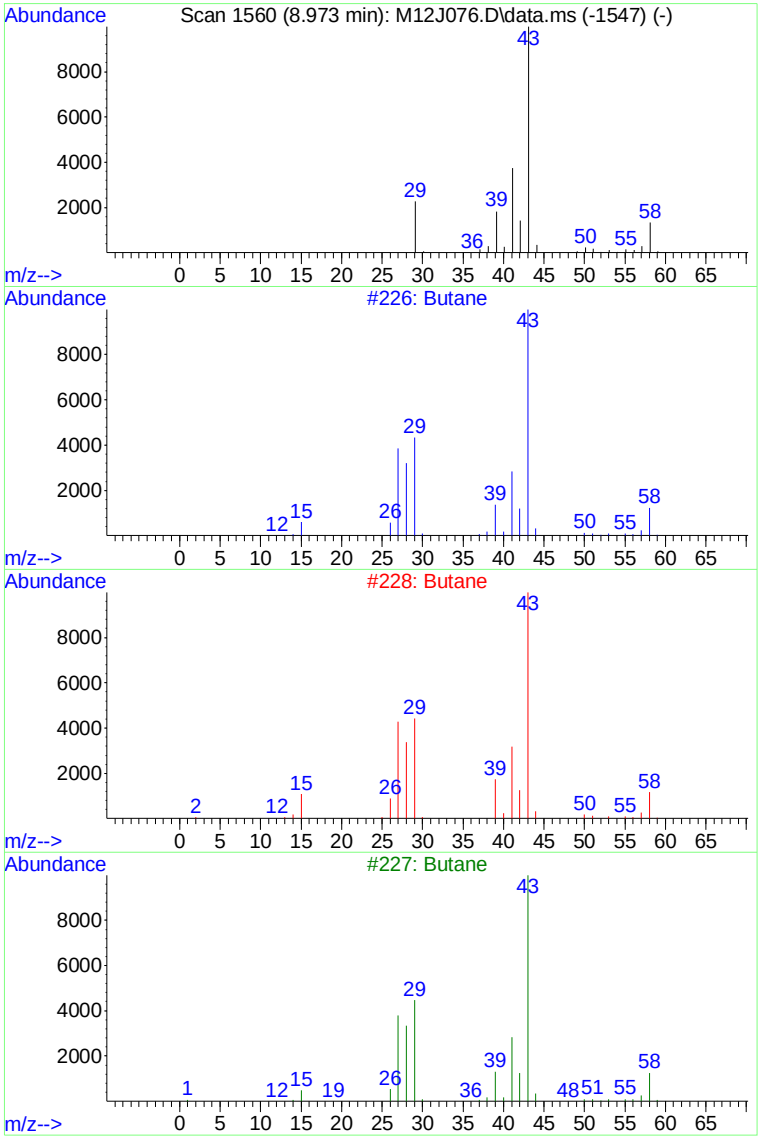
TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```

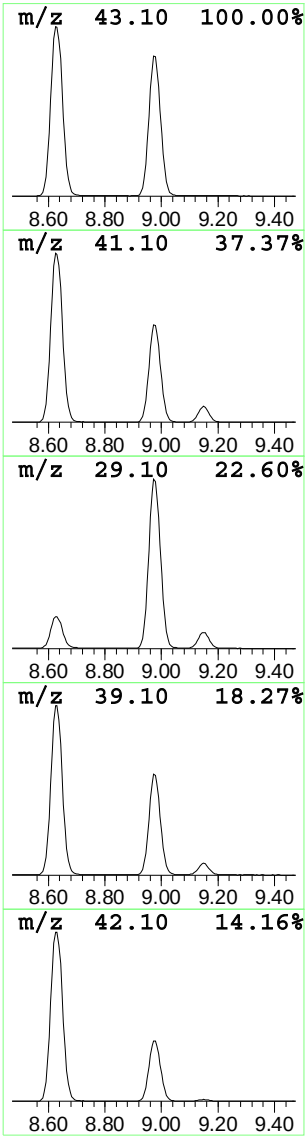
****

Peak Number 3 Butane — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.973	1650050.00 ppbv	21062000	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	Acetic acid, 2-propenyl ester	100	C5H8O2	000591-87-7	9
5	Isobutane	58	C4H10	000075-28-5	9





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On    :  5 Oct 2012  12:53 pm
Operator  : E G
Sample    : 12090195-01A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 17   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```
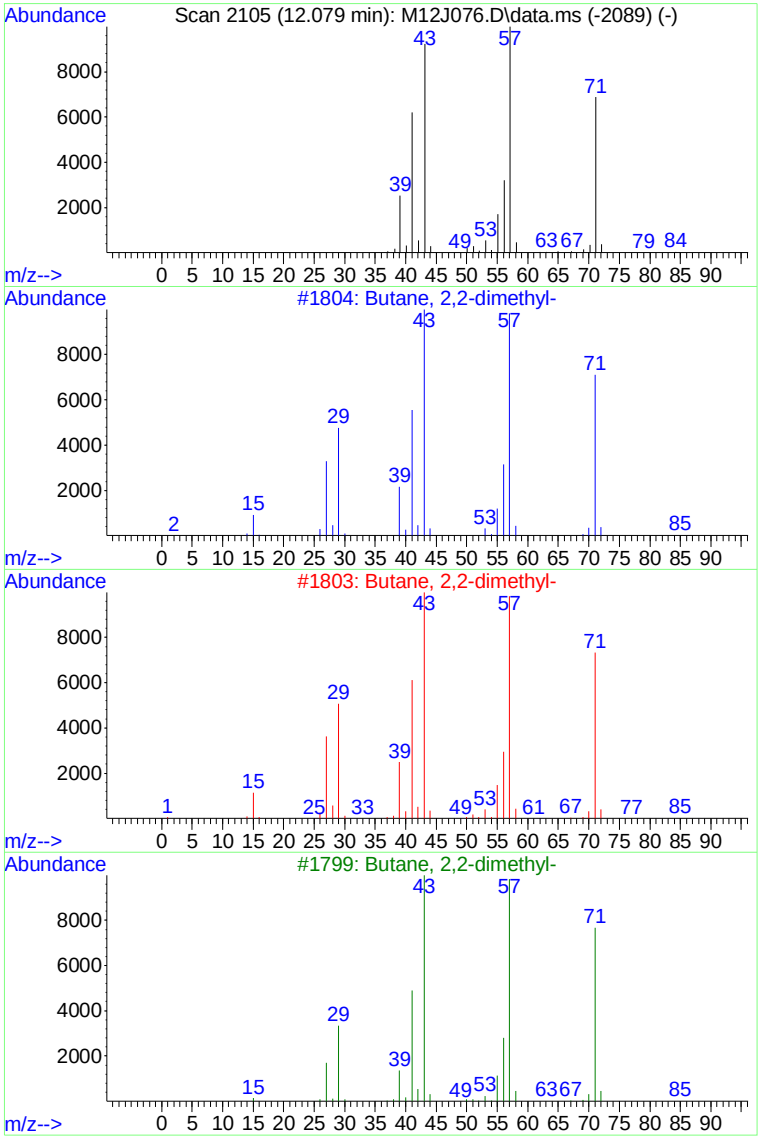
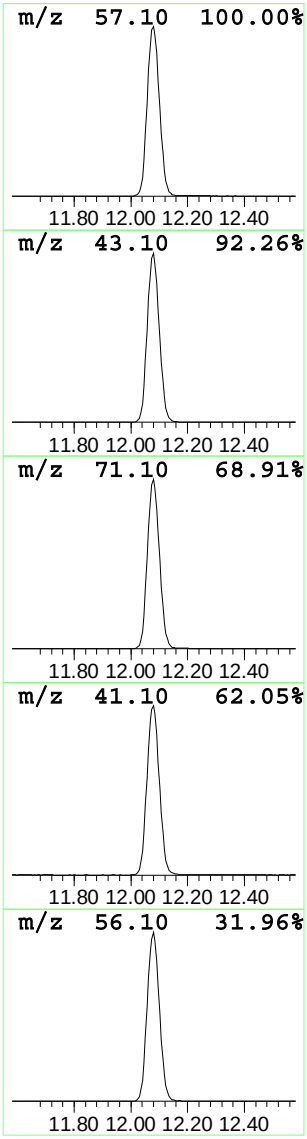

****

Peak Number 5 Butane, 2,2-dimethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.079	502989.00 ppbv	6420410	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	90
2	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	90
3	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
4	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
5	Oxalic acid, isobutyl pentyl ester	216	C11H20O4	1000309-37-0	43





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On    :  5 Oct 2012  12:53 pm
Operator  : E G
Sample    : 12090195-01A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 17   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

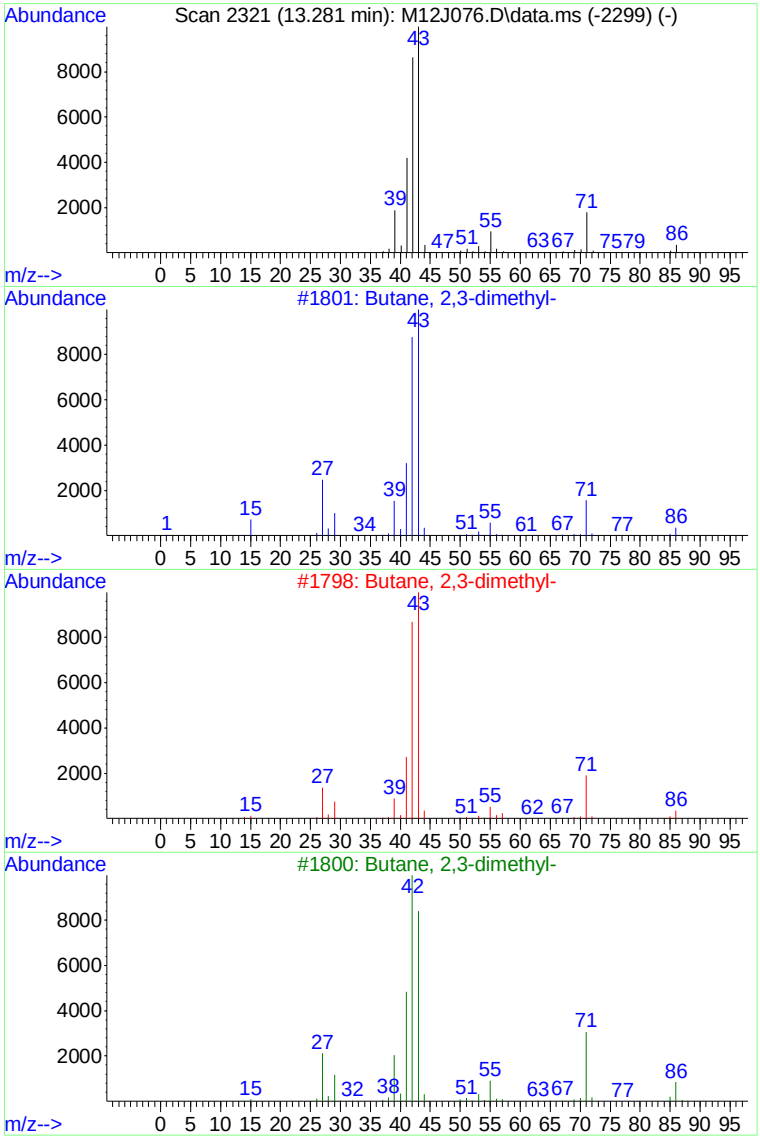
TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```

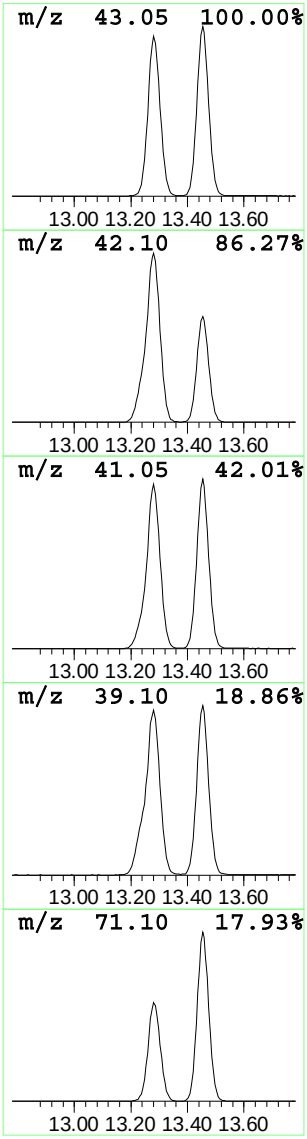
****

Peak Number 6 Butane, 2,3-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.281	600623.00 ppbv	7666660	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	91
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	80
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	43
5	Pentane	72	C5H12	000109-66-0	39





Library Search Compound Report

Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On : 5 Oct 2012 12:53 pm
Operator : E G
Sample : 12090195-01A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 17 Sample Multiplier: 12800

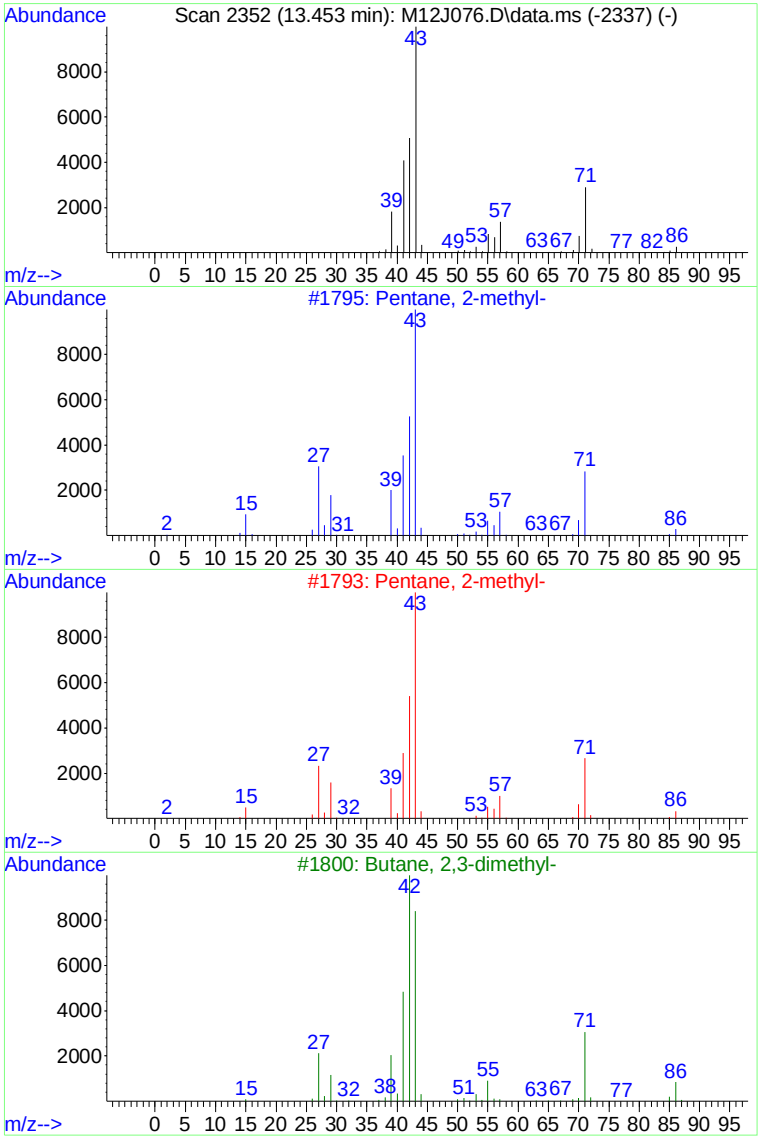
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

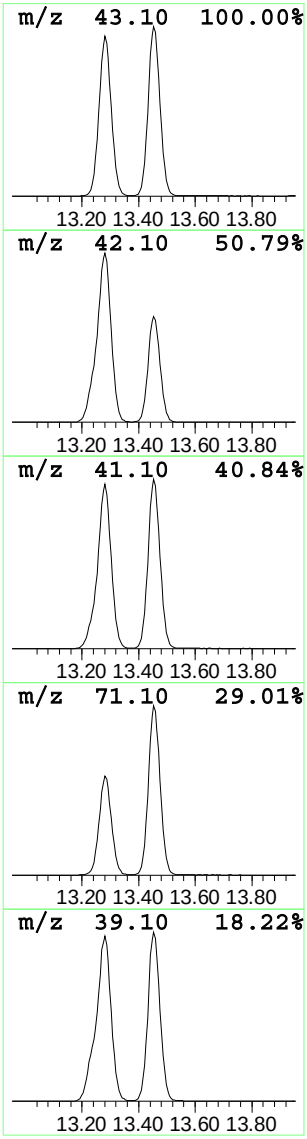
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 7 Pentane, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.453	529384.00 ppbv	6757320	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	53
4	Pentane	72	C5H12	000109-66-0	53
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	45





Library Search Compound Report

Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On : 5 Oct 2012 12:53 pm
Operator : E G
Sample : 12090195-01A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 17 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

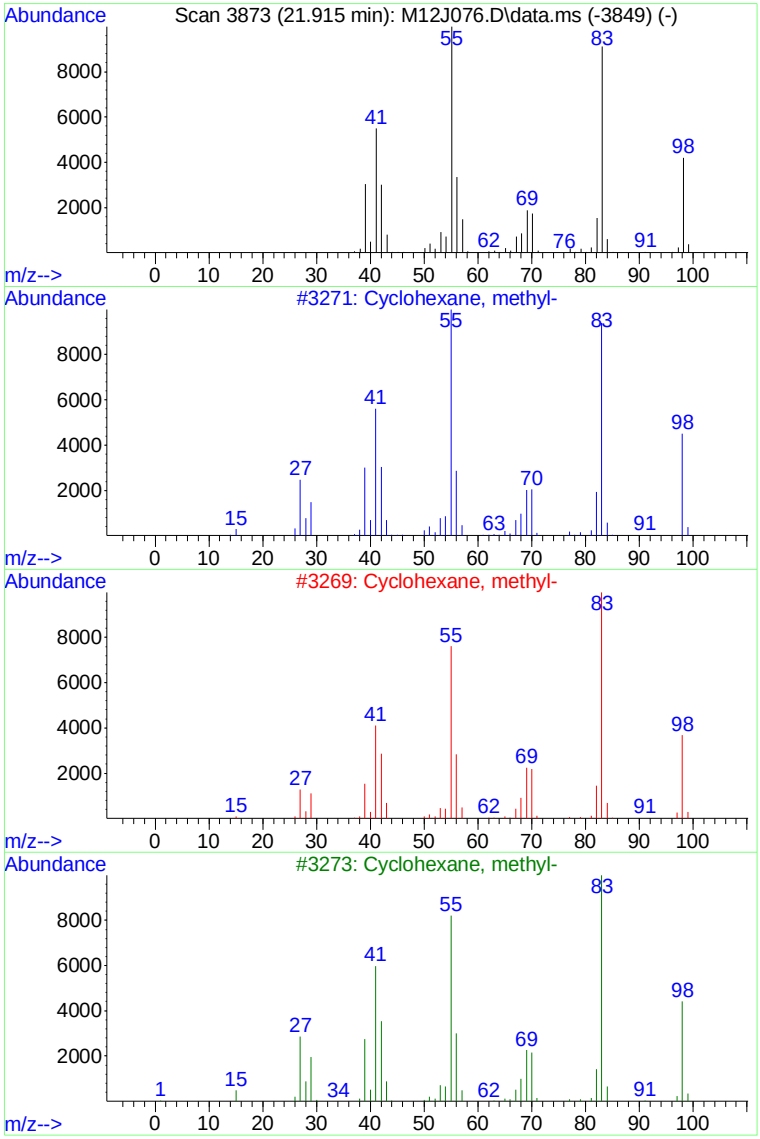
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

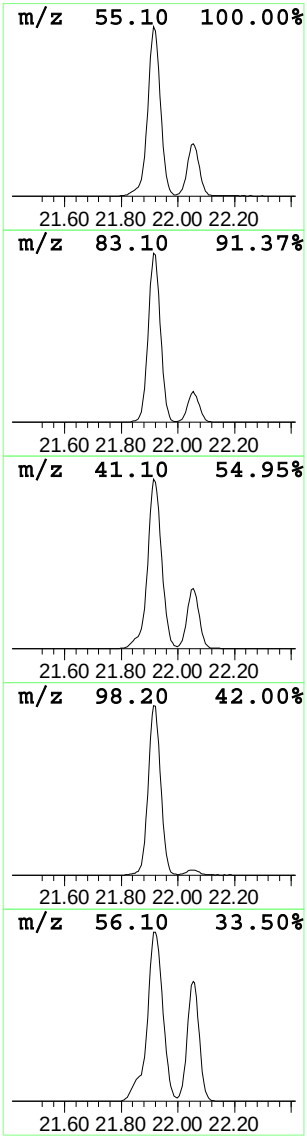
****

Peak Number 16 Cyclohexane, methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.915	375773.00 ppbv	9069600	1,4-Difluorobenzene	18.527

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
4	2-Pentene, 2,3-dimethyl-	98	C7H14	010574-37-5	72
5	2-Pentene, 3,4-dimethyl-, (E)-	98	C7H14	004914-92-5	72





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On    :  5 Oct 2012  12:53 pm
Operator  : E G
Sample    : 12090195-01A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 17   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```
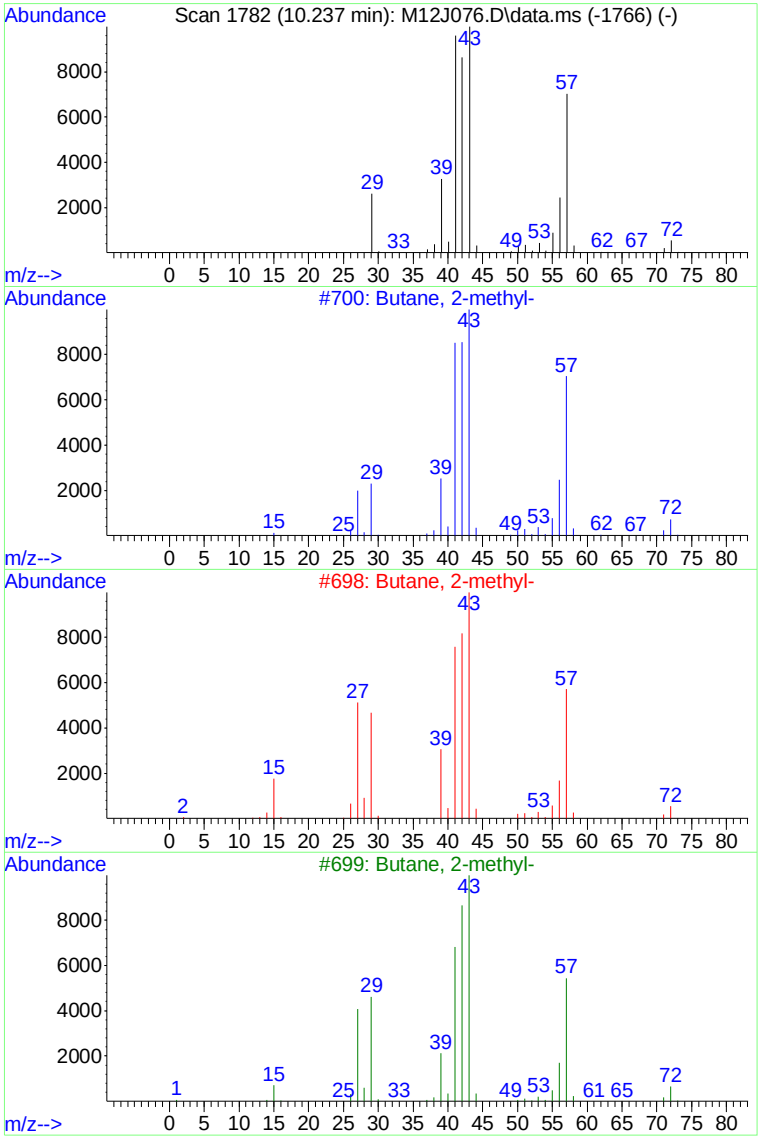
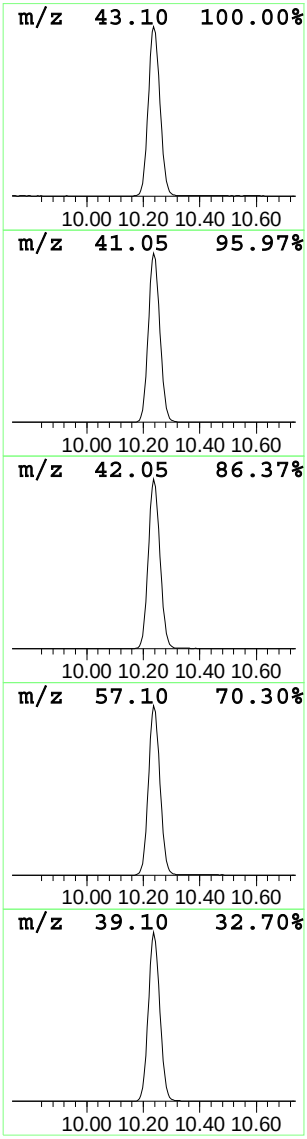

****

Peak Number 21 Butane, 2-methyl- Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.237	1331220.00 ppbv	16992400	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	86
3	Butane, 2-methyl-	72	C5H12	000078-78-4	78
4	Pentane	72	C5H12	000109-66-0	36
5	3-Buten-2-ol	72	C4H8O	000598-32-3	9





Library Search Compound Report

Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On : 5 Oct 2012 12:53 pm
Operator : E G
Sample : 12090195-01A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 17 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

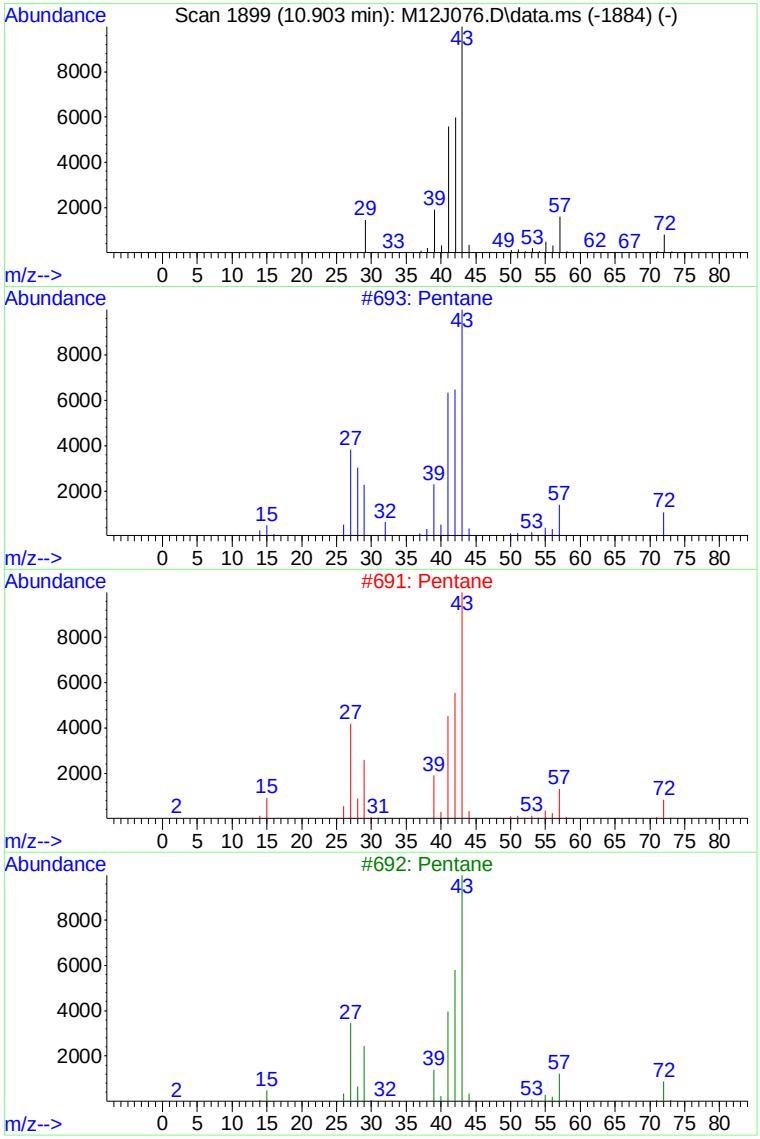
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

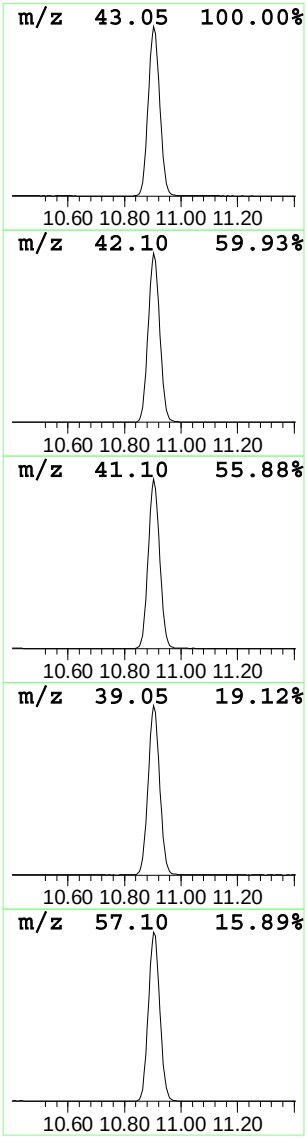
****

Peak Number 22 Pentane Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.903	800184.00 ppbv	10213900	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	91
2	Pentane	72	C5H12	000109-66-0	90
3	Pentane	72	C5H12	000109-66-0	86
4	Pentane	72	C5H12	000109-66-0	83
5	Pentane	72	C5H12	000109-66-0	78





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1004\
Data File : M12J076.D
Acq On    :  5 Oct 2012  12:53 pm
Operator  : E G
Sample    : 12090195-01A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 17   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

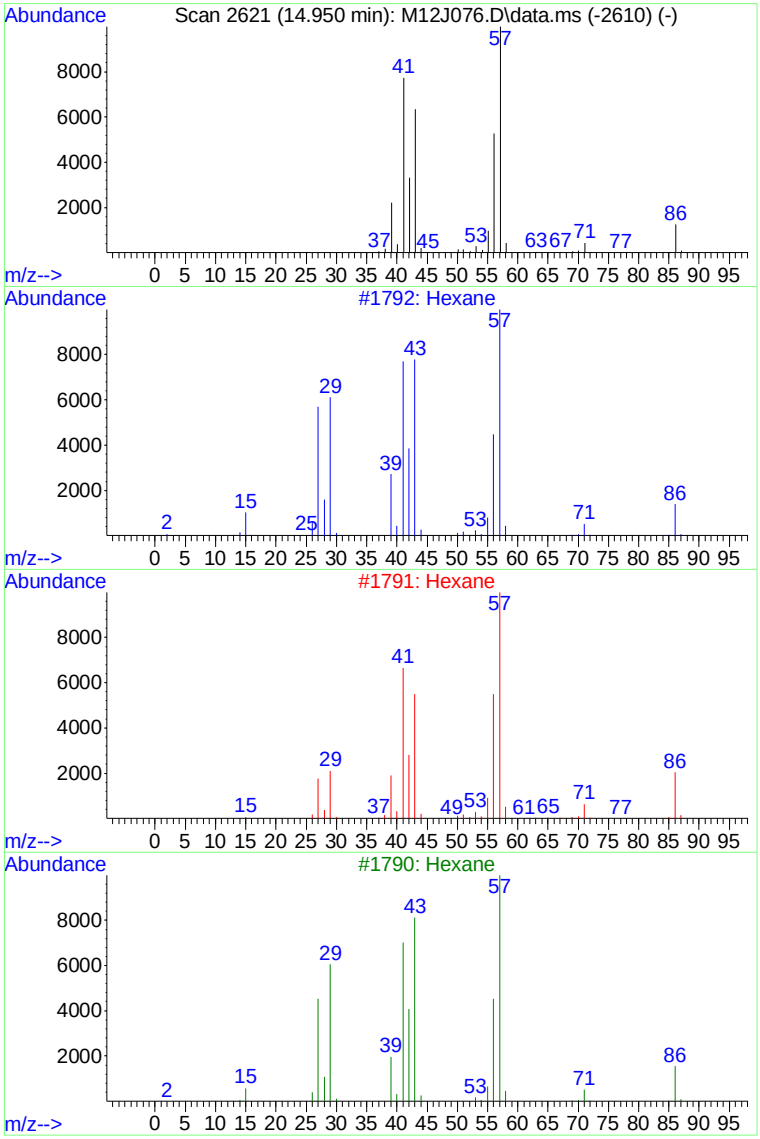
TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```

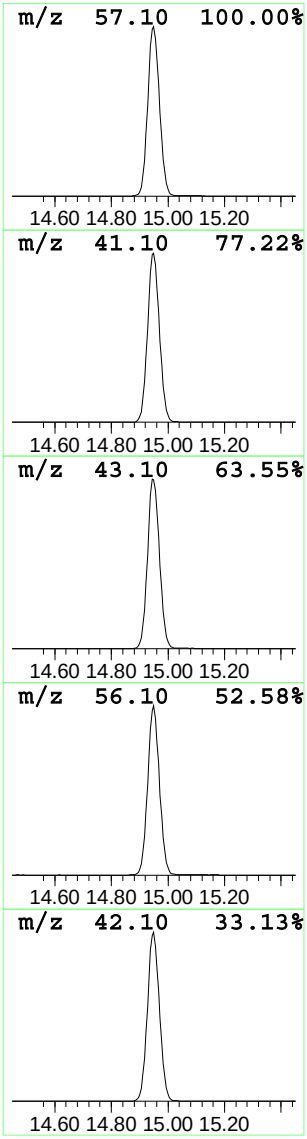
****

Peak Number 23 Hexane Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.950	458208.00 ppbv	5848790	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane	86	C6H14	000110-54-3	91
2	Hexane	86	C6H14	000110-54-3	91
3	Hexane	86	C6H14	000110-54-3	91
4	Furan, tetrahydro-3-methyl-	86	C5H10O	013423-15-9	50
5	Pentane, 2,2,3,4-tetramethyl-	128	C9H20	001186-53-4	38





Tentatively Identified Compound (LSC) summary

Data Path : M:\AIR_M\2A12-1009\
Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E_G
Sample : 12090195-02A
Misc : SAMP;TO-15_LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR_M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Propane	8.226	6100650.0	ppbv	59240800	1	14.838	776846	6.3
Isobutane	8.625	5204640.0	ppbv	50540000	1	14.838	776846	6.3
Neopentane	9.149	595650.0	ppbv	5784110	1	14.838	776846	6.3
Butane, 2,2-dim...	12.079	1049290.0	ppbv	10189200	1	14.838	776846	6.3
Pentane, 2-methyl-	13.453	826602.0	ppbv	8026780	1	14.838	776846	6.3
Pentane, 3-methyl-	14.115	516510.0	ppbv	5015610	1	14.838	776846	6.3
Butane	8.973	4162610.0	ppbv	40421400	1	14.838	776846	6.3
Butane, 2-methyl-	10.237	3245170.0	ppbv	31512500	1	14.838	776846	6.3
Pentane	10.903	1822090.0	ppbv	17693600	1	14.838	776846	6.3
Butane, 2,3-dim...	13.281	1020670.0	ppbv	9911320	1	14.838	776846	6.3
Hexane	14.950	589022.0	ppbv	5719740	1	14.838	776846	6.3

Library Search Compound Report

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Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On    : 10 Oct 2012   4:21 pm
Operator  : E G
Sample    : 12090195-02A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```
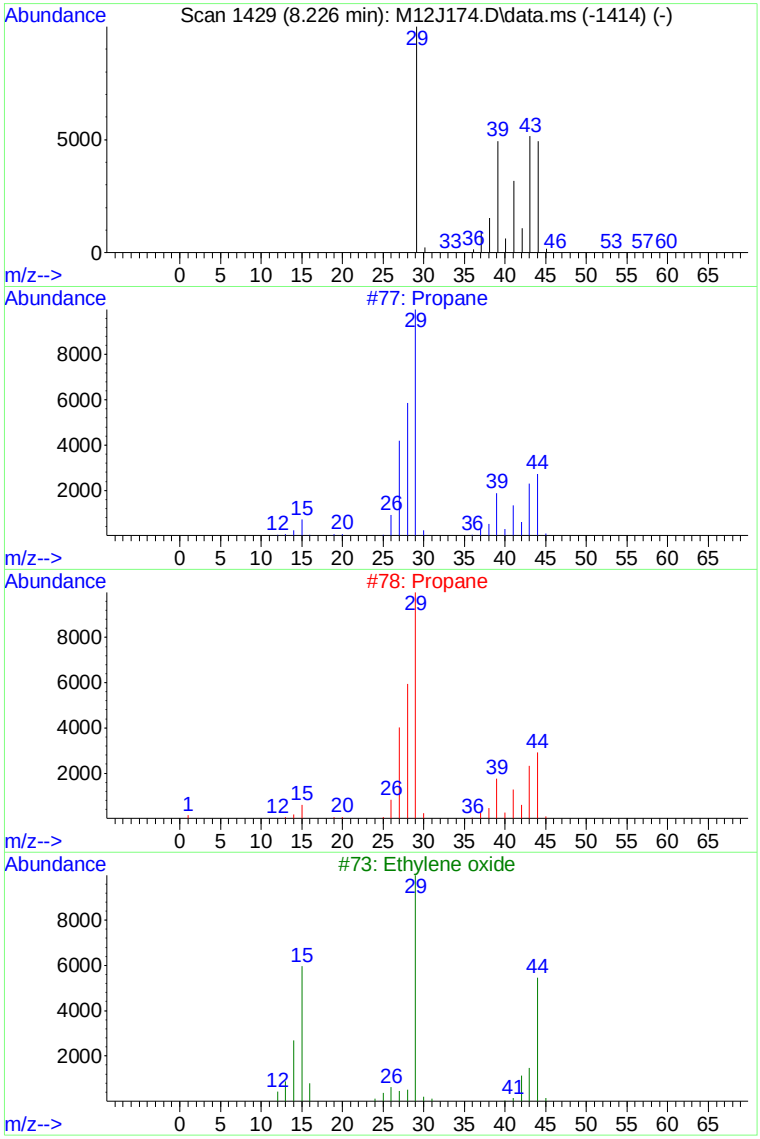
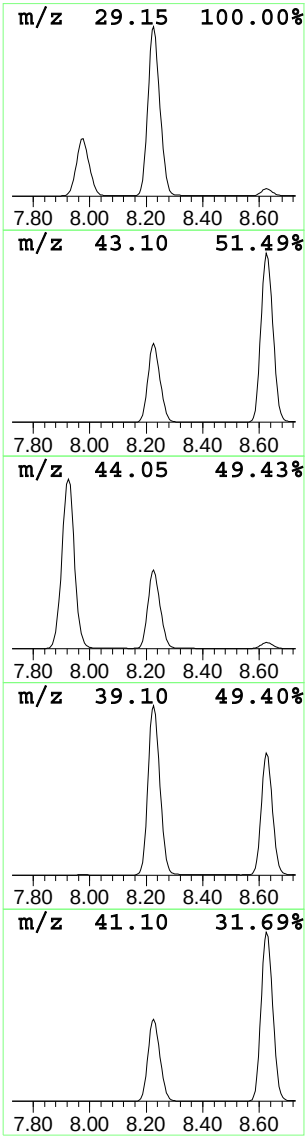

****

Peak Number 1 Propane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.226	6100650.00 ppbv	59240800	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane	44	C3H8	000074-98-6	80
2	Propane	44	C3H8	000074-98-6	53
3	Ethylene oxide	44	C2H4O	000075-21-8	37
4	Ethylene oxide	44	C2H4O	000075-21-8	37
5	Propane	44	C3H8	000074-98-6	9





Library Search Compound Report

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Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E G
Sample : 12090195-02A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

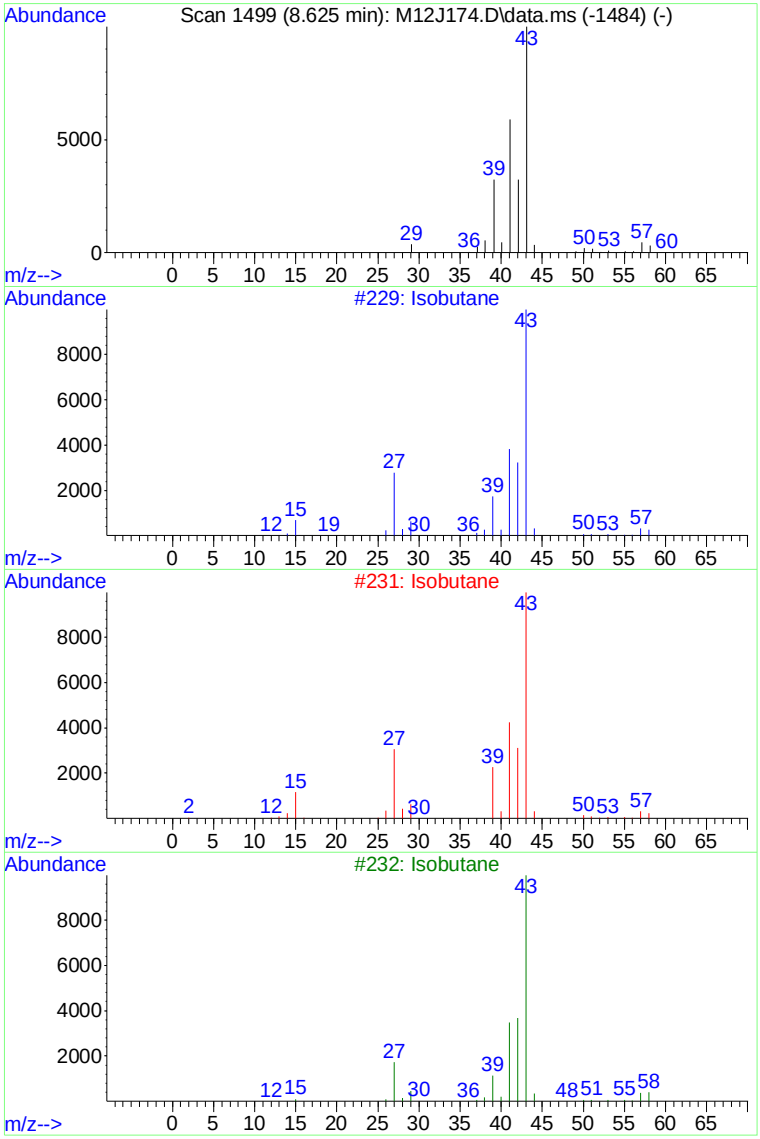
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

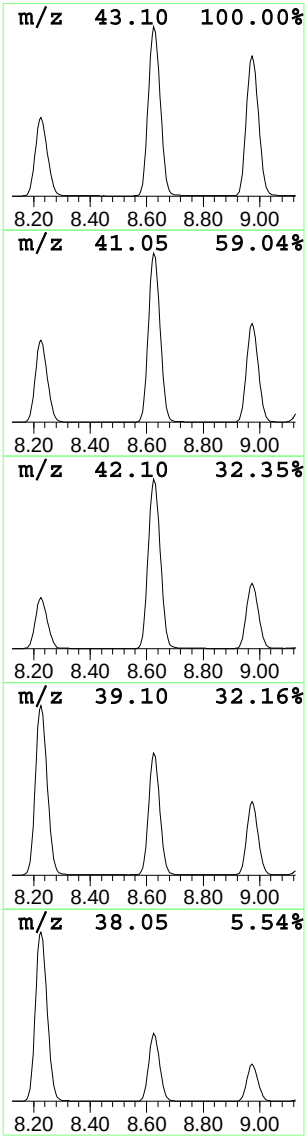
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 2 Isobutane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.625	5204640.00 ppbv	50540000	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isobutane	58	C4H10	000075-28-5	72
2	Isobutane	58	C4H10	000075-28-5	72
3	Isobutane	58	C4H10	000075-28-5	64
4	Isobutane	58	C4H10	000075-28-5	59
5	Propane, 1-nitro-	89	C3H7NO2	000108-03-2	9





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E G
Sample : 12090195-02A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

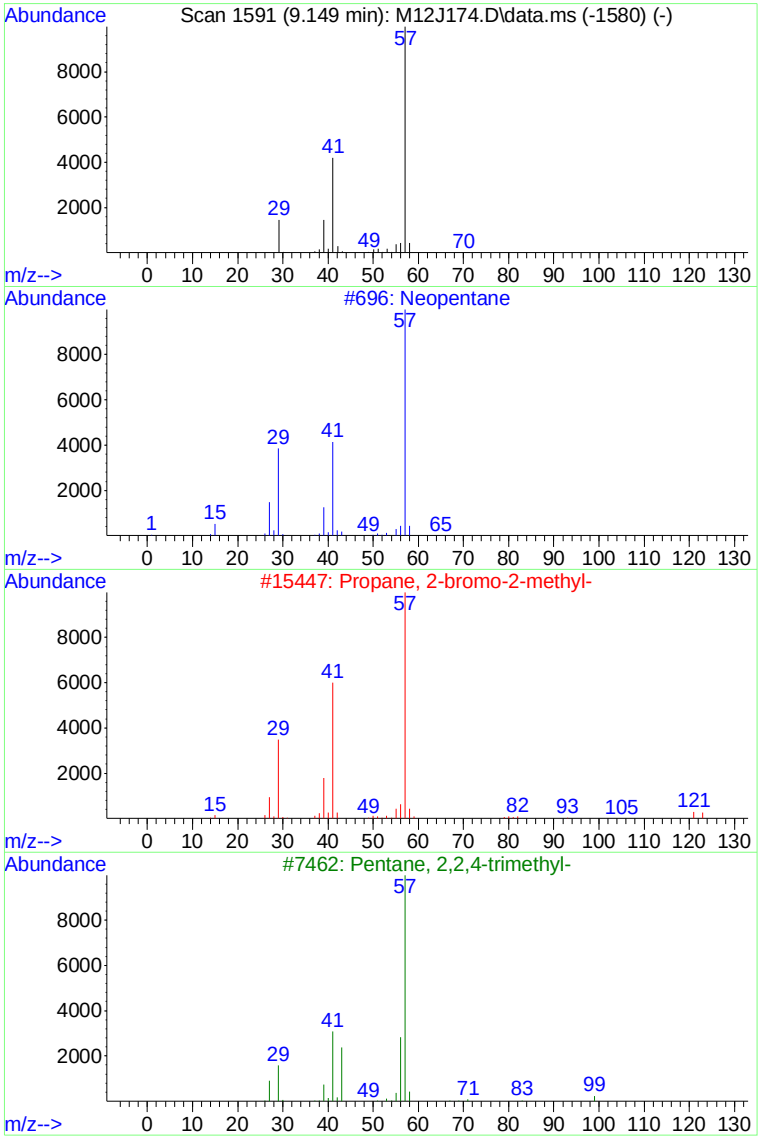
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

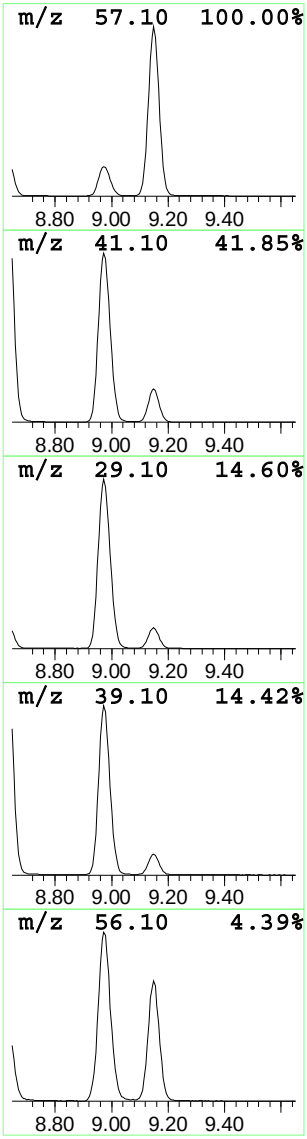
****

Peak Number 3 Neopentane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.149	595650.00 ppbv	5784110	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Neopentane	72	C5H12	000463-82-1	72
2	Propane, 2-bromo-2-methyl-	136	C4H9Br	000507-19-7	64
3	Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	42
4	Butane, 2-bromo-	136	C4H9Br	000078-76-2	39
5	Pentane, 2,2,4,4-tetramethyl-	128	C9H20	001070-87-7	36





Library Search Compound Report

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Data File : M12J174.D
Acq On    : 10 Oct 2012   4:21 pm
Operator  : E G
Sample    : 12090195-02A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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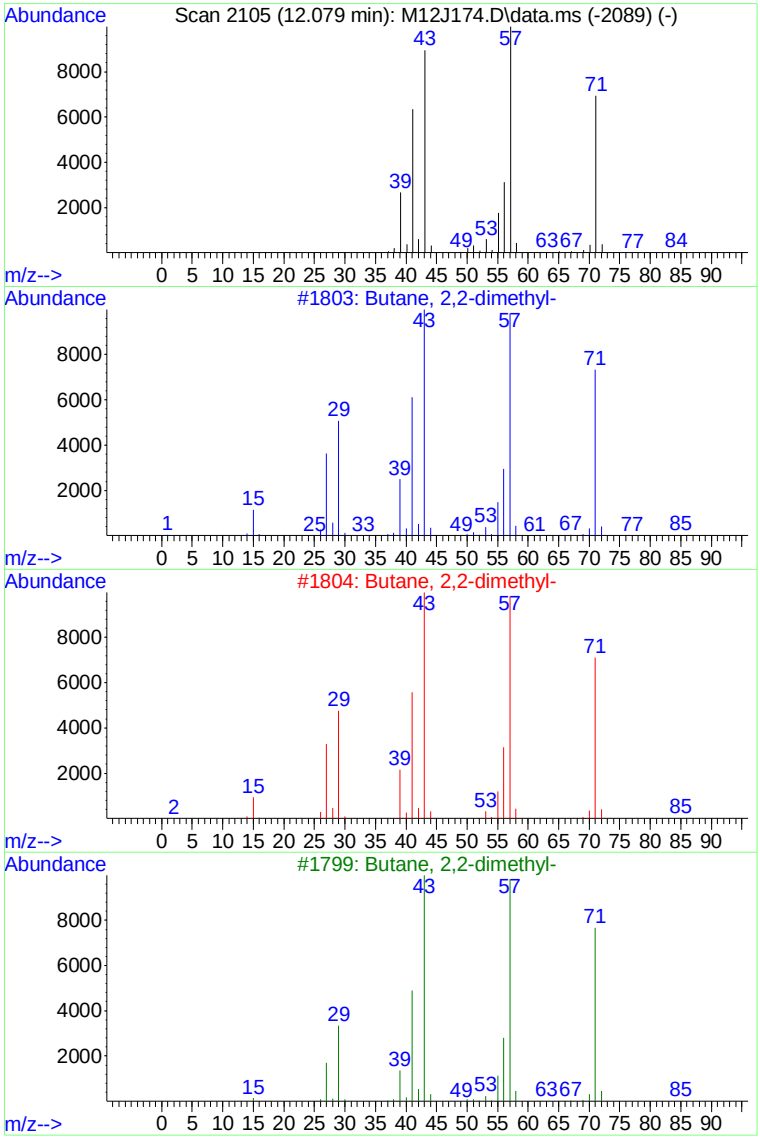
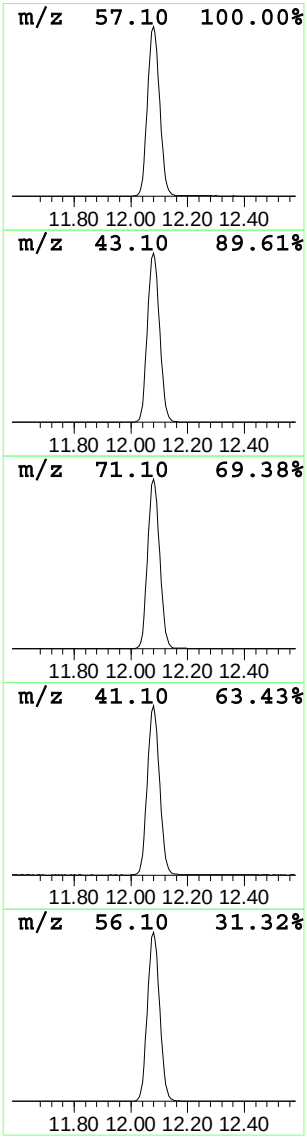
****

Peak Number 4 Butane, 2,2-dimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.079	1049290.00 ppbv	10189200	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	90
2	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
3	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
4	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
5	Oxalic acid, isobutyl pentyl ester	216	C11H20O4	1000309-37-0	64





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E G
Sample : 12090195-02A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

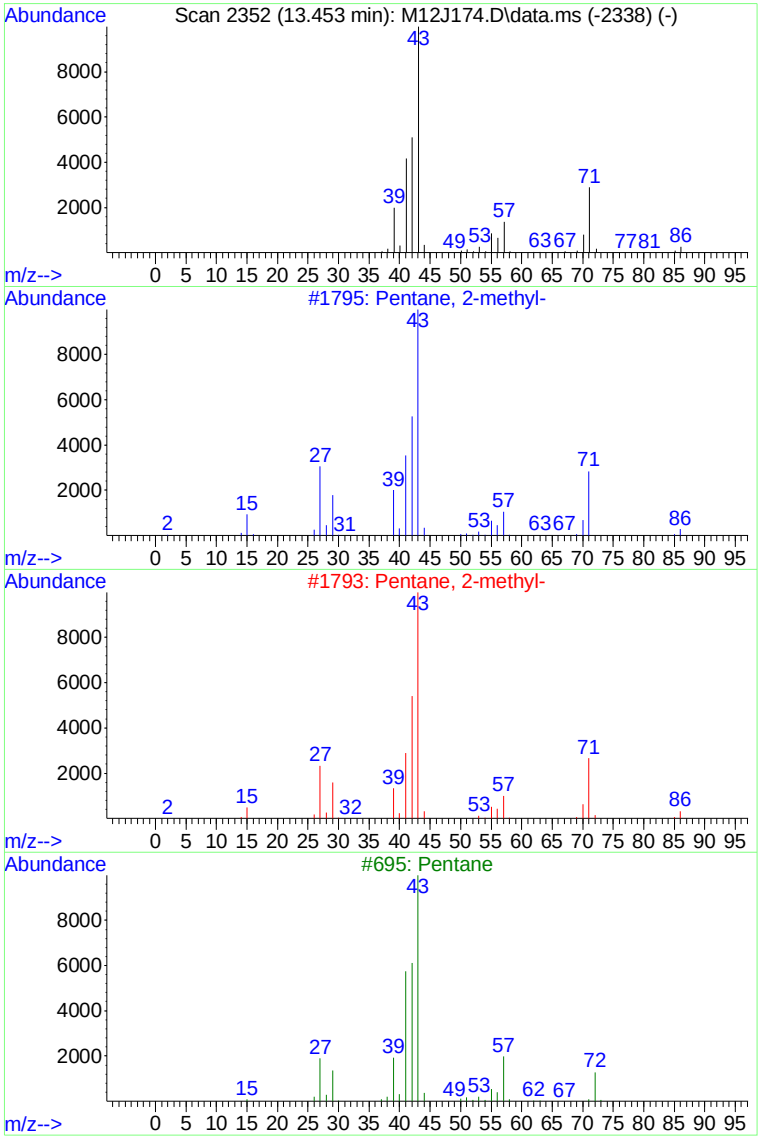
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

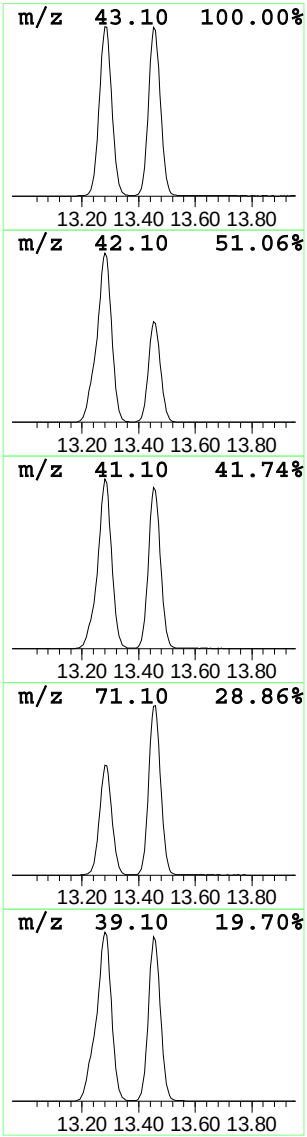
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 5 Pentane, 2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.453	826602.00 ppbv	8026780	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Pentane	72	C5H12	000109-66-0	53
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	53
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	45





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On    : 10 Oct 2012   4:21 pm
Operator  : E G
Sample    : 12090195-02A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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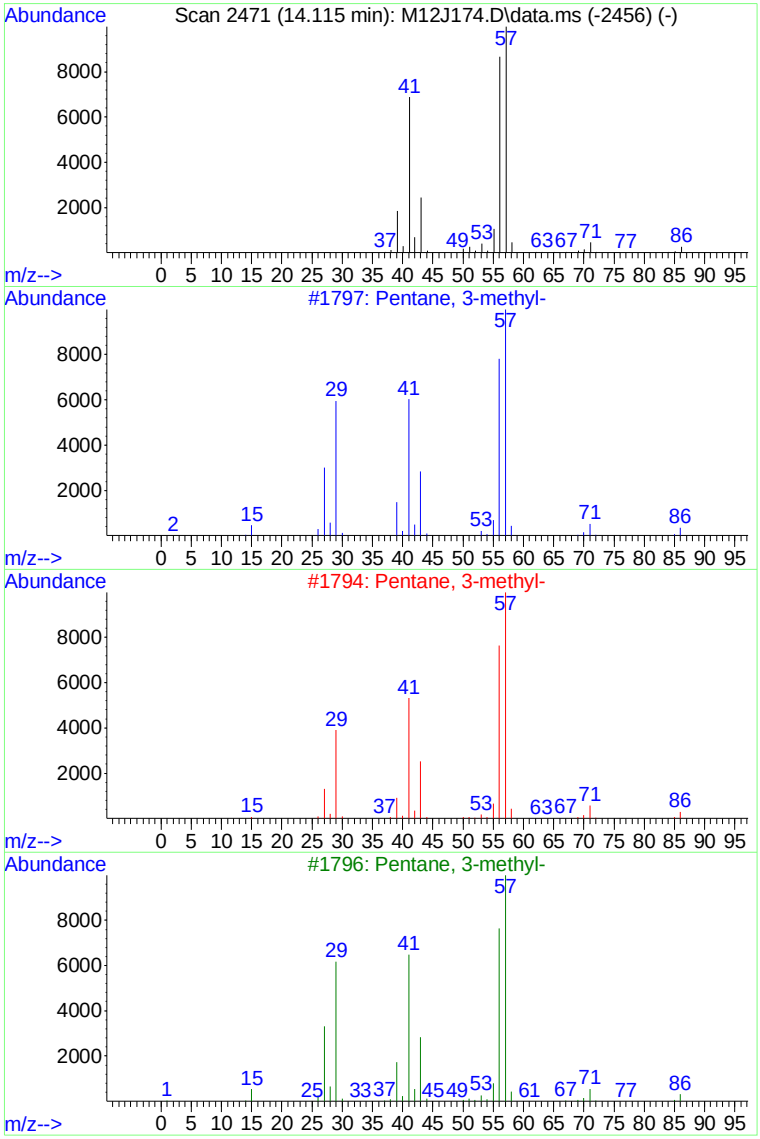
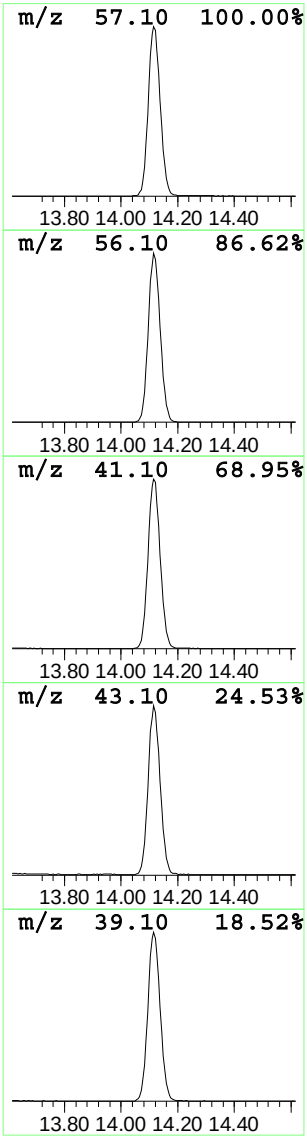
****

Peak Number 6 Pentane, 3-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.115	516510.00 ppbv	5015610	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
4	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	43
5	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	43





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E G
Sample : 12090195-02A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

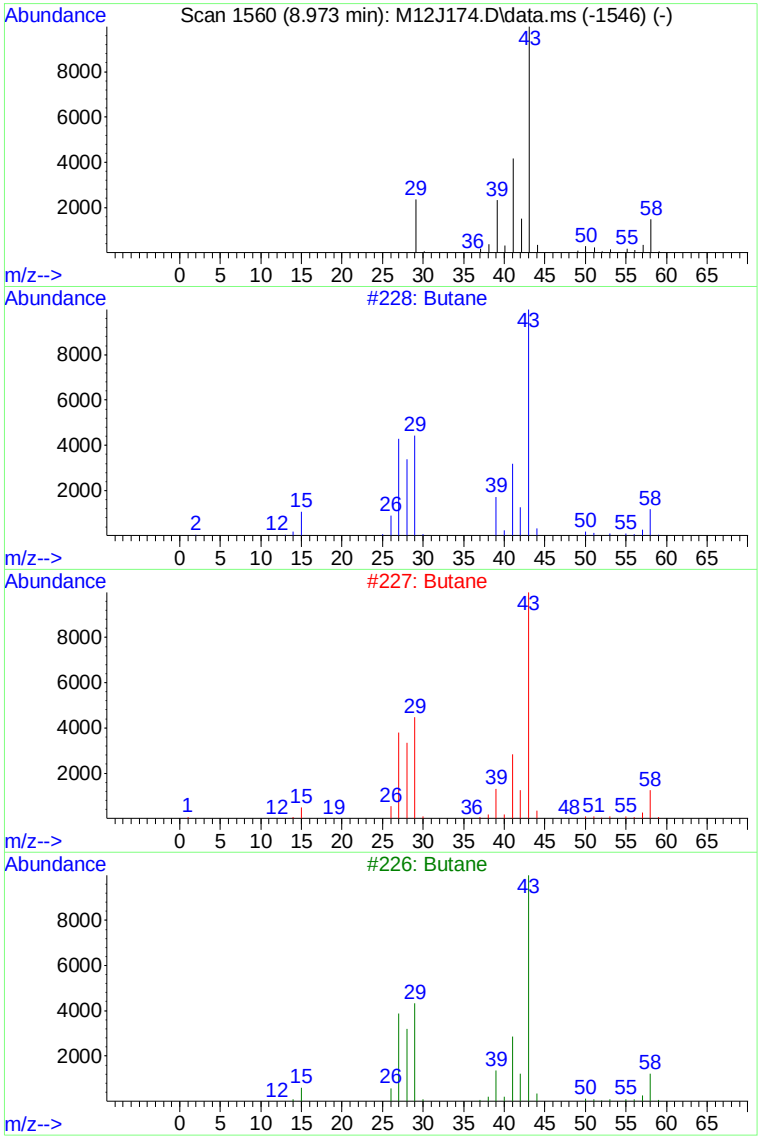
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

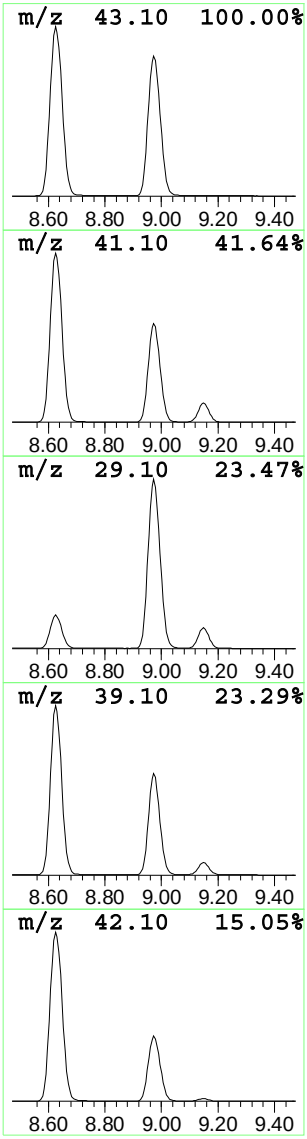
****

Peak Number 21 Butane Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.973	4162610.00 ppbv	40421400	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	59
3	Butane	58	C4H10	000106-97-8	43
4	Isobutane	58	C4H10	000075-28-5	9
5	Propane, 2-nitro-	89	C3H7NO2	000079-46-9	9





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E G
Sample : 12090195-02A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

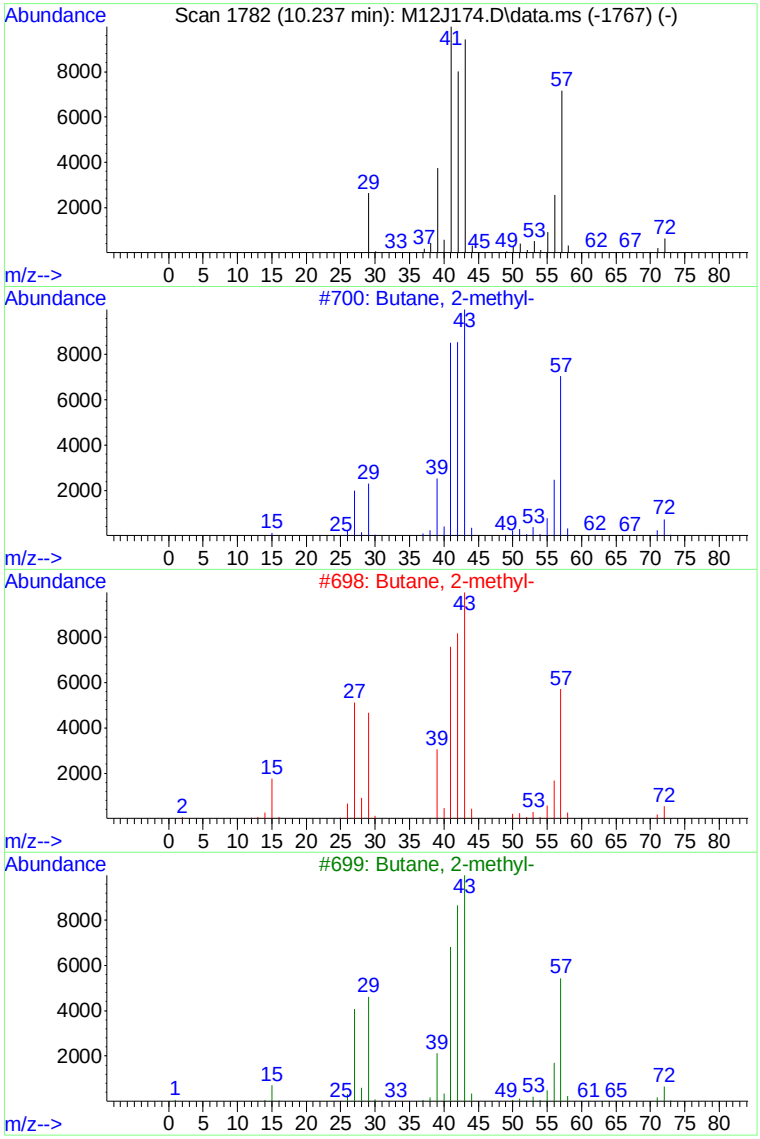
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

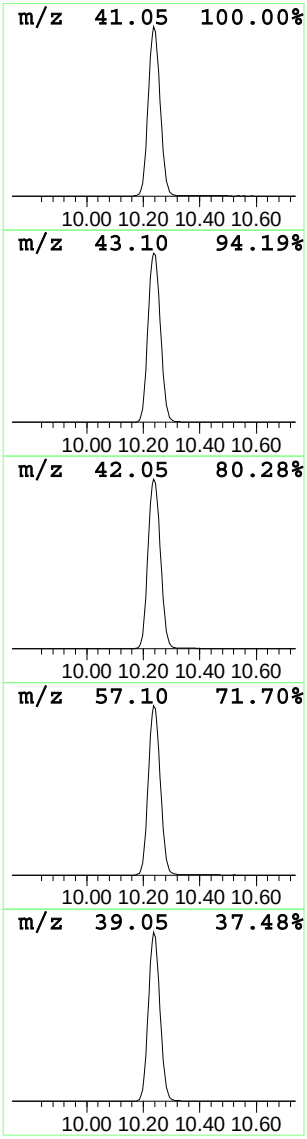
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 22 Butane, 2-methyl- Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.237	3245170.00 ppbv	31512500	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	78
3	Butane, 2-methyl-	72	C5H12	000078-78-4	72
4	Pentane	72	C5H12	000109-66-0	36
5	Pentane	72	C5H12	000109-66-0	36





Library Search Compound Report

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Data File : M12J174.D
Acq On    : 10 Oct 2012   4:21 pm
Operator  : E G
Sample    : 12090195-02A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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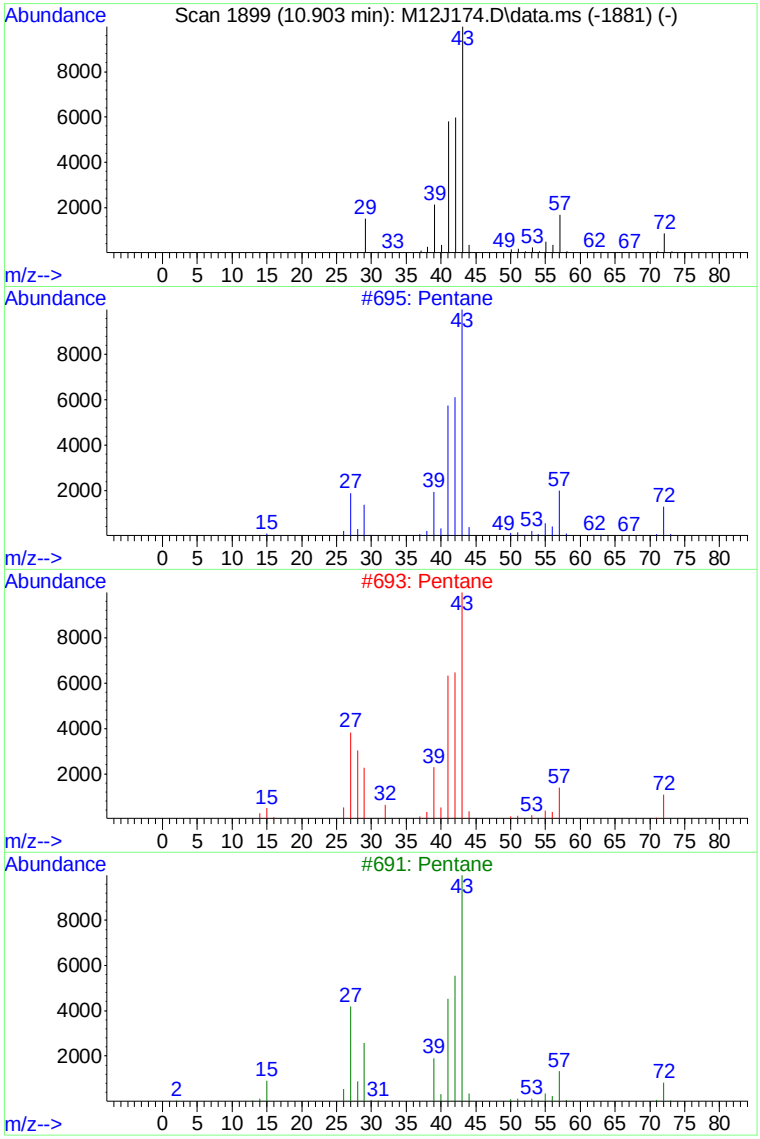
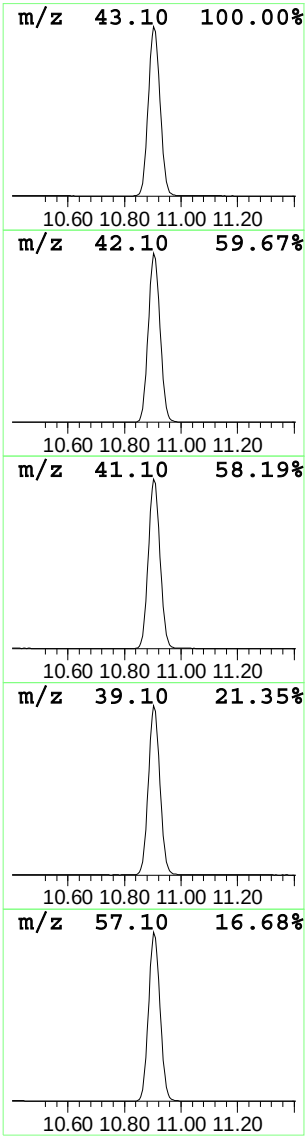
****

Peak Number 23 Pentane Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.903	1822090.00 ppbv	17693600	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	91
2	Pentane	72	C5H12	000109-66-0	91
3	Pentane	72	C5H12	000109-66-0	90
4	Pentane	72	C5H12	000109-66-0	86
5	Pentane	72	C5H12	000109-66-0	78





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On : 10 Oct 2012 4:21 pm
Operator : E G
Sample : 12090195-02A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

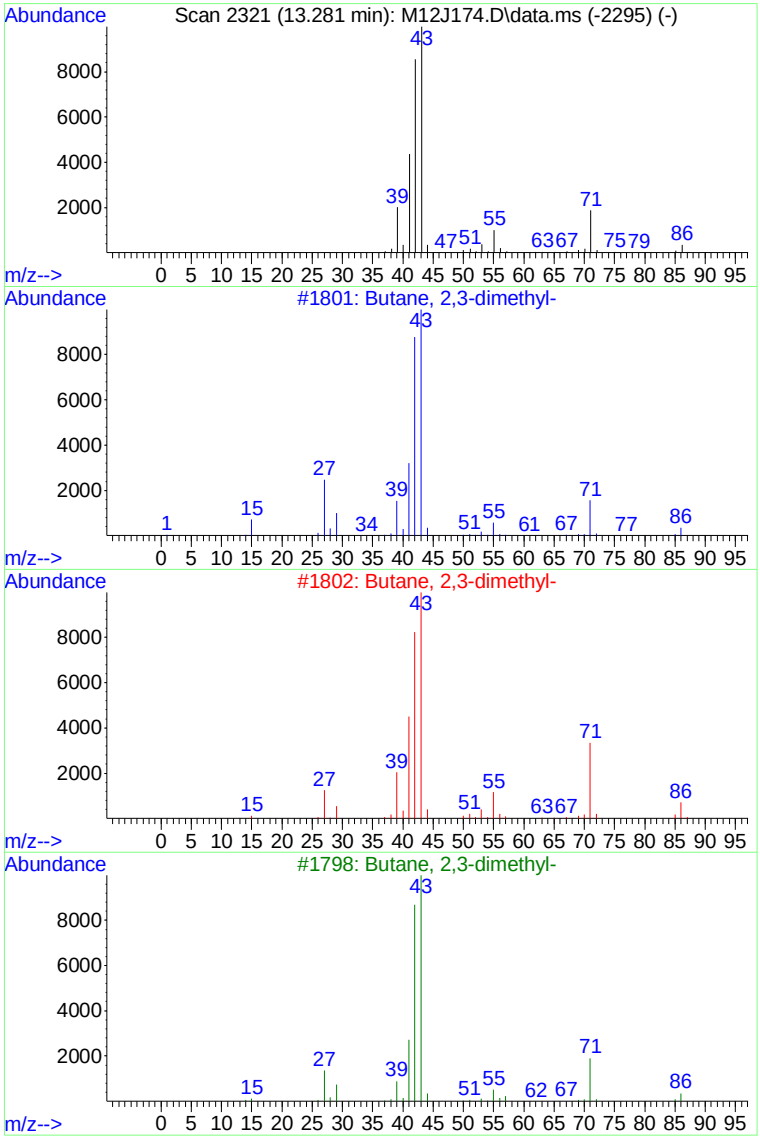
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

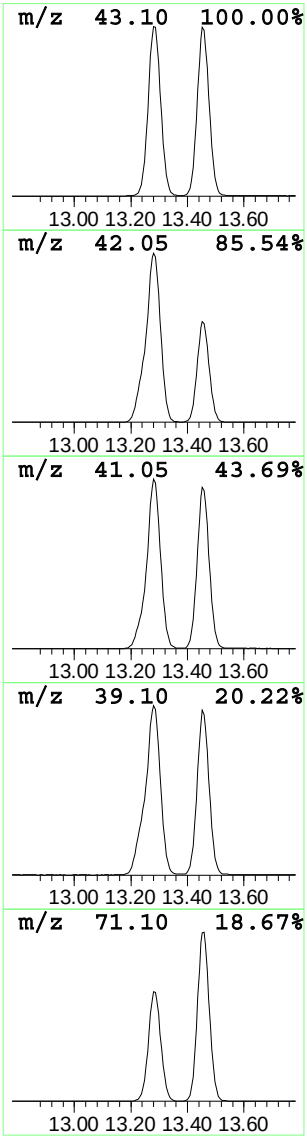
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 24 Butane, 2,3-dimethyl- Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.281	1020670.00 ppbv	9911320	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	91
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	90
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	83
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	25





Library Search Compound Report

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Data Path : M:\AIR M\2A12-1009\
Data File : M12J174.D
Acq On    : 10 Oct 2012   4:21 pm
Operator  : E G
Sample    : 12090195-02A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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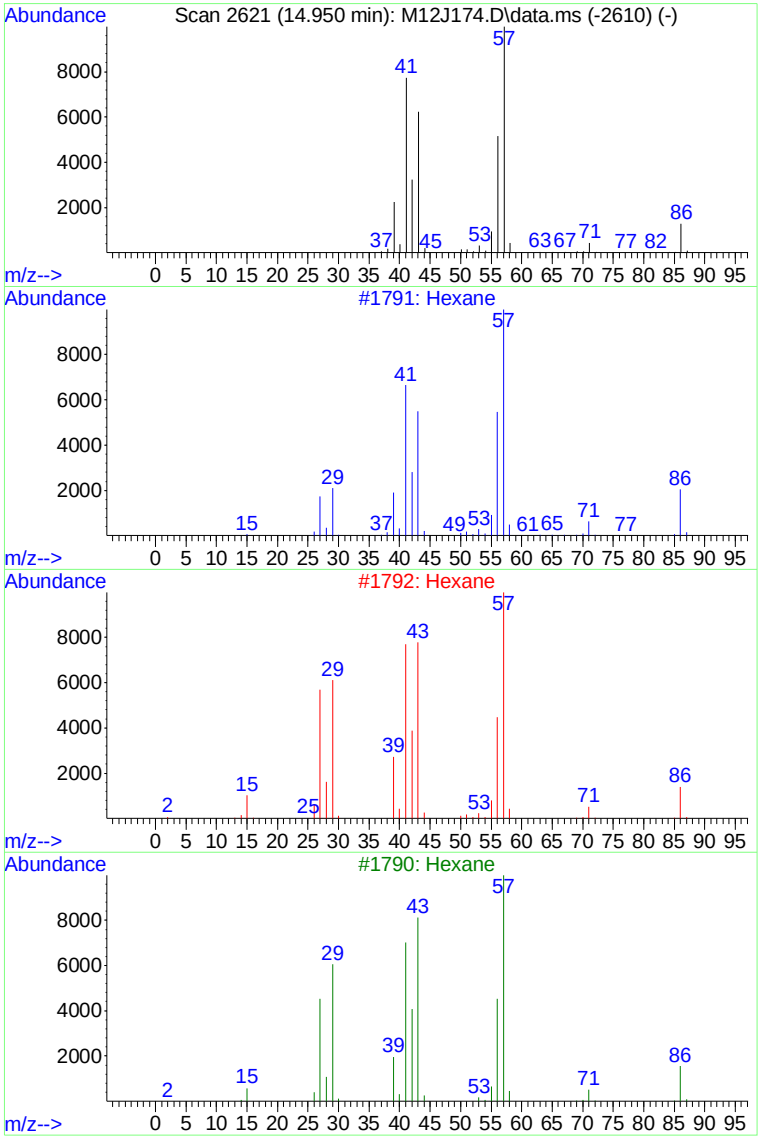
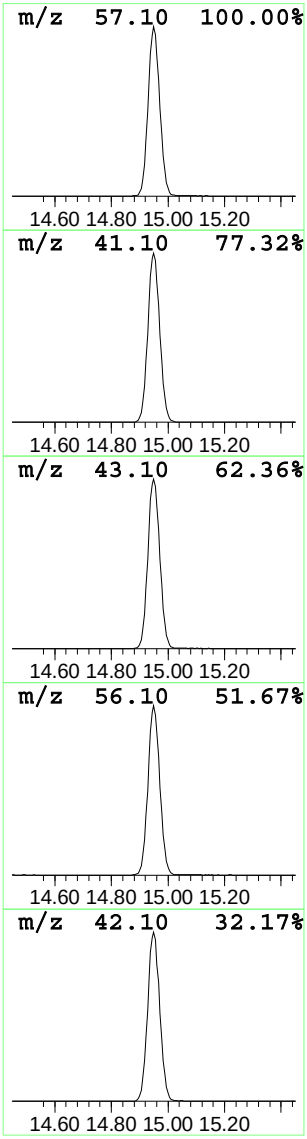
Peak Number 25 Hexane Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.950	589022.00 ppbv	5719740	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane	86	C6H14	000110-54-3	91
2	Hexane	86	C6H14	000110-54-3	91
3	Hexane	86	C6H14	000110-54-3	91
4	Furan, tetrahydro-3-methyl-	86	C5H10O	013423-15-9	50
5	Pentane, 2,2,3,4-tetramethyl-	128	C9H20	001186-53-4	38





Tentatively Identified Compound (LSC) summary

Data Path : M:\AIR_M\2A12-1009\
Data File : M12J165.D
Acq On : 10 Oct 2012 6:13 am
Operator : E_G
Sample : 12090195-03A
Misc : SAMP;TO-15_LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR_M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Propane	8.232	4206740.0	ppbv	43668100	1	14.844	830441	6.3
Isobutane	8.631	3735320.0	ppbv	38774500	1	14.844	830441	6.3
Butane	8.978	3017820.0	ppbv	31326500	1	14.844	830441	6.3
Butane, 2,2-dim...	12.079	977112.0	ppbv	10142900	1	14.844	830441	6.3
Butane, 2,3-dim...	13.286	1124260.0	ppbv	11670400	1	14.844	830441	6.3
Pentane, 2-methyl-	13.459	952454.0	ppbv	9886960	1	14.844	830441	6.3
Cyclohexane, me...	21.926	839914.0	ppbv	15364500	2	18.527	1463440	6.3
Butane, 2-methyl-	10.243	2520310.0	ppbv	26162100	1	14.844	830441	6.3
Pentane	10.909	1542290.0	ppbv	16009800	1	14.844	830441	6.3
Hexane	14.950	833539.0	ppbv	8652570	1	14.844	830441	6.3

Library Search Compound Report

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Data Path : M:\AIR M\2A12-1009\
Data File : M12J165.D
Acq On    : 10 Oct 2012   6:13 am
Operator  : E G
Sample    : 12090195-03A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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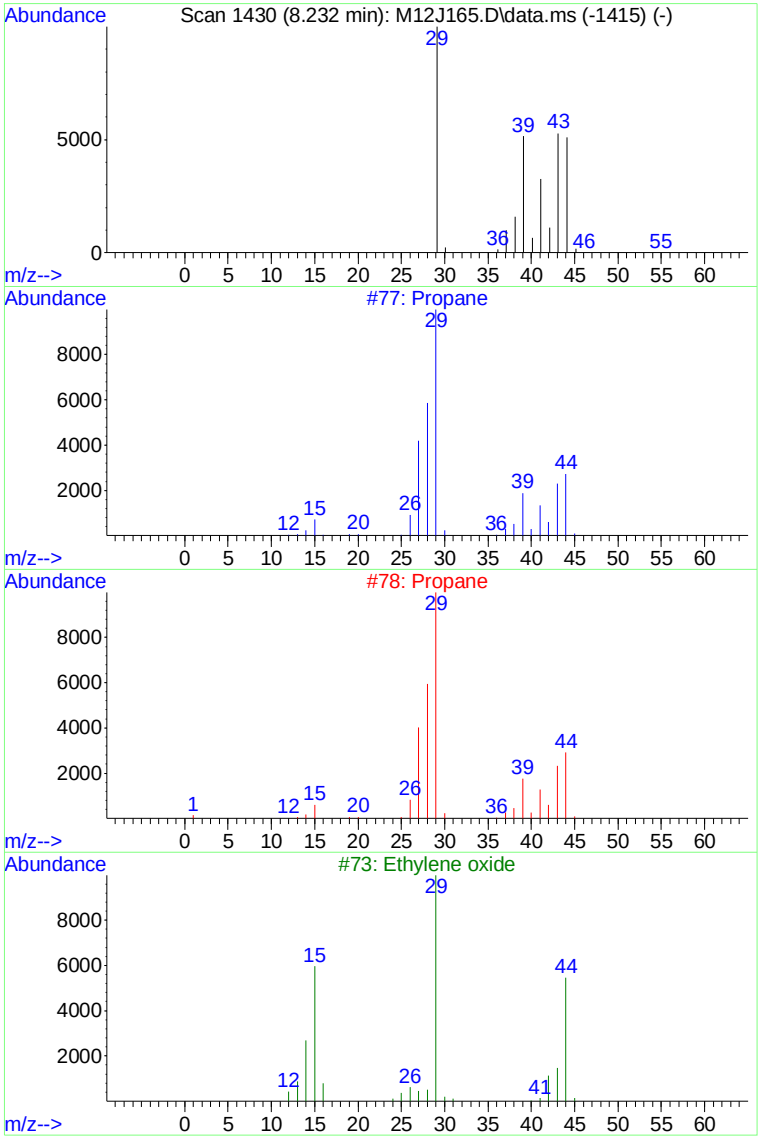
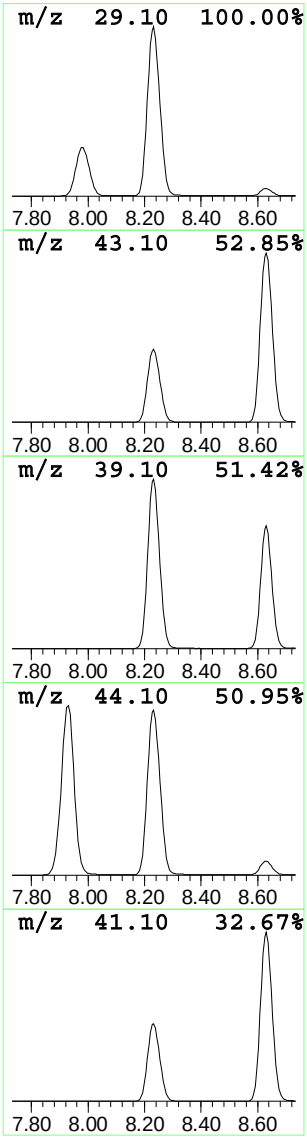
****

Peak Number 1 Propane — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.232	4206740.00 ppbv	43668100	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane	44	C3H8	000074-98-6	80
2	Propane	44	C3H8	000074-98-6	53
3	Ethylene oxide	44	C2H4O	000075-21-8	37
4	Ethylene oxide	44	C2H4O	000075-21-8	37
5	Propane	44	C3H8	000074-98-6	9





Library Search Compound Report

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Data File : M12J165.D
Acq On    : 10 Oct 2012   6:13 am
Operator  : E G
Sample    : 12090195-03A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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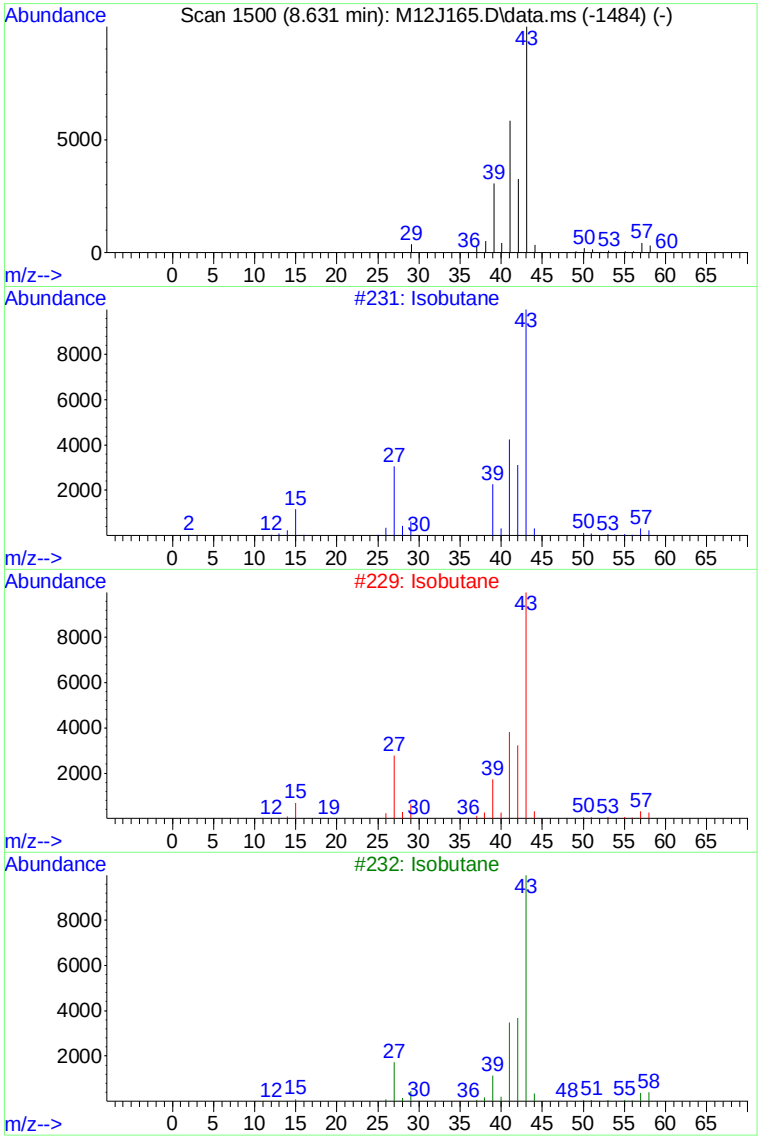
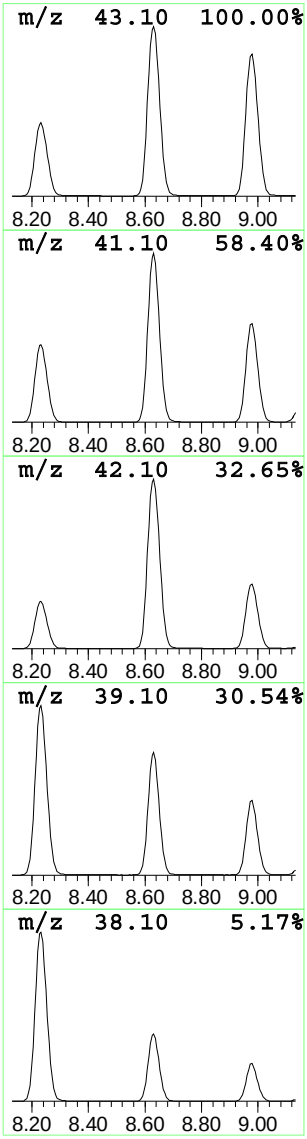
****

Peak Number 2 Isobutane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.631	3735320.00 ppbv	38774500	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isobutane	58	C4H10	000075-28-5	64
2	Isobutane	58	C4H10	000075-28-5	64
3	Isobutane	58	C4H10	000075-28-5	59
4	Isobutane	58	C4H10	000075-28-5	59
5	Propane, 1-nitro-	89	C3H7NO2	000108-03-2	9





Library Search Compound Report

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Acq On : 10 Oct 2012 6:13 am
Operator : E G
Sample : 12090195-03A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

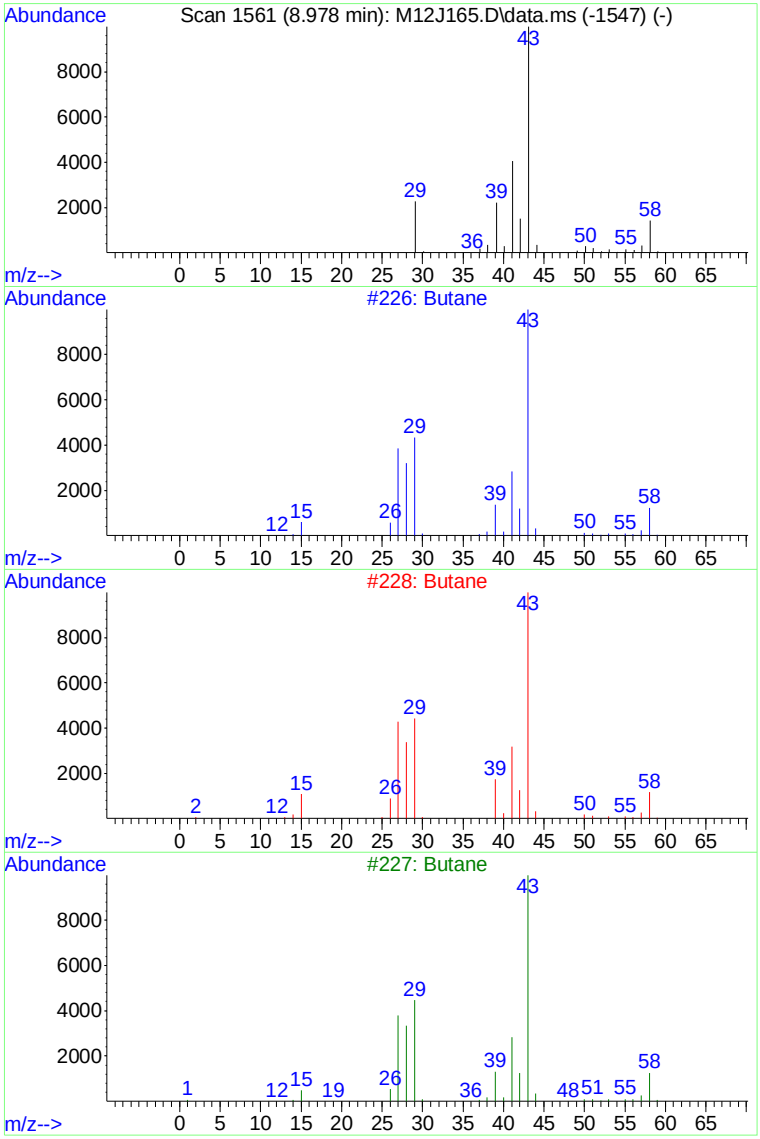
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

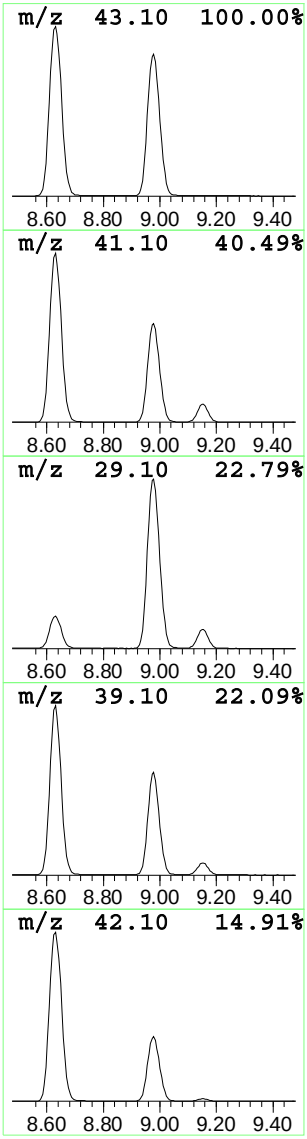
****

Peak Number 3 Butane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.978	3017820.00 ppbv	31326500	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	64
3	Butane	58	C4H10	000106-97-8	59
4	Isobutane	58	C4H10	000075-28-5	9
5	Propane, 2-nitro-	89	C3H7NO2	000079-46-9	9





Library Search Compound Report

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Acq On    : 10 Oct 2012   6:13 am
Operator  : E G
Sample    : 12090195-03A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

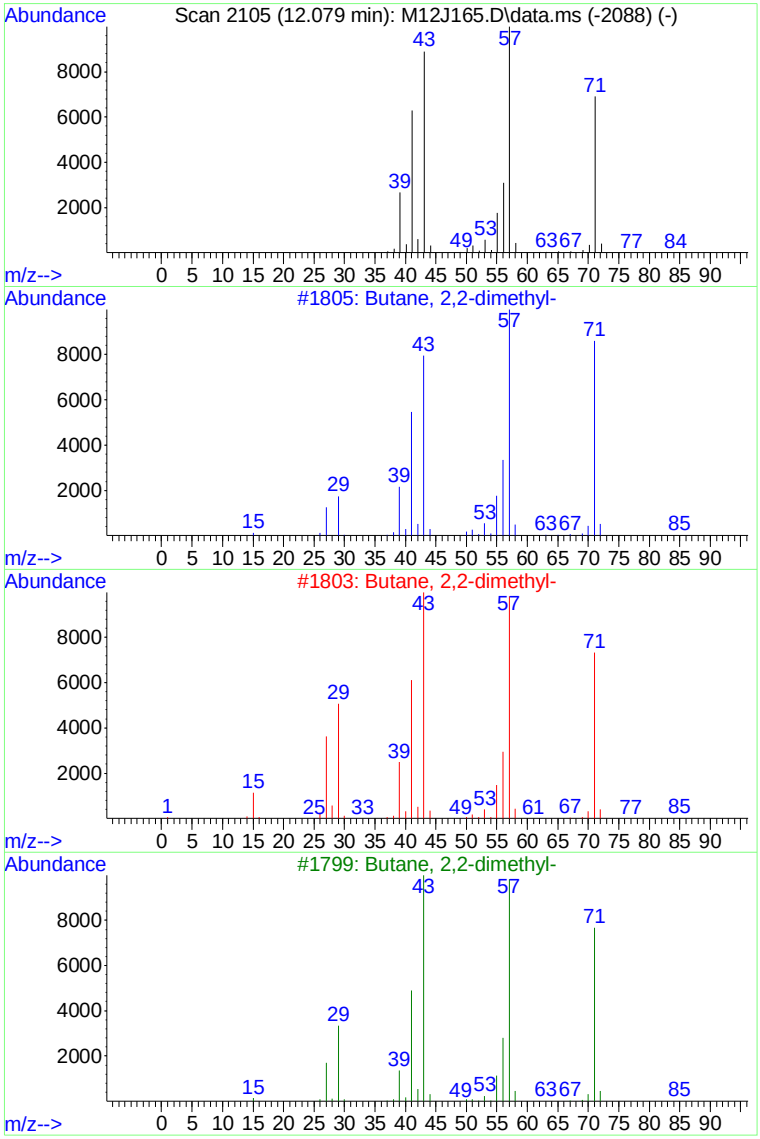
TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```

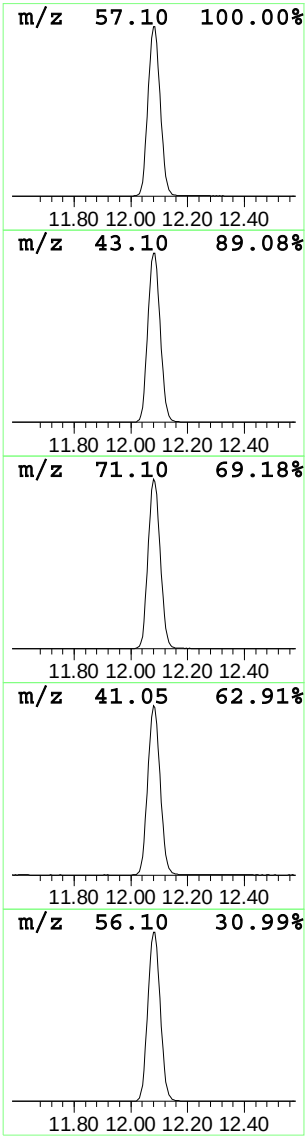
****

Peak Number 5 Butane, 2,2-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.079	977112.00 ppbv	10142900	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	90
2	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	90
3	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
4	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	83
5	Oxalic acid, isobutyl pentyl ester	216	C11H20O4	1000309-37-0	64





Library Search Compound Report

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Data File : M12J165.D
Acq On    : 10 Oct 2012   6:13 am
Operator  : E G
Sample    : 12090195-03A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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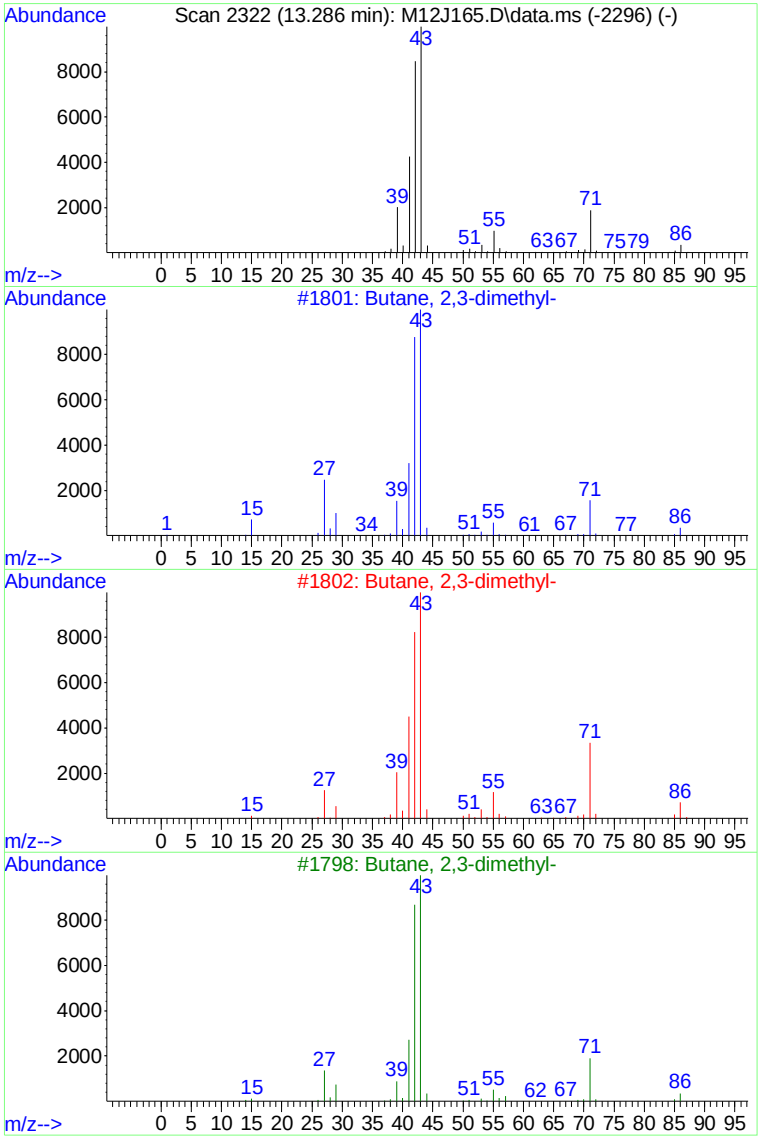
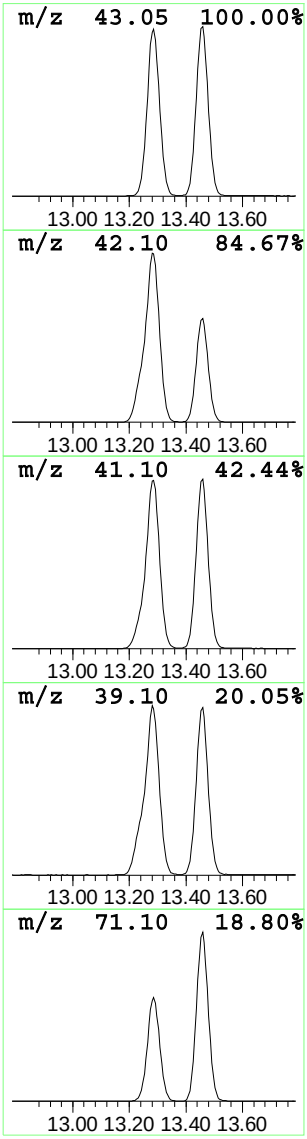
Peak Number 6 Butane, 2,3-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.286	1124260.00 ppbv	11670400	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	91
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	90
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	25





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J165.D
Acq On : 10 Oct 2012 6:13 am
Operator : E G
Sample : 12090195-03A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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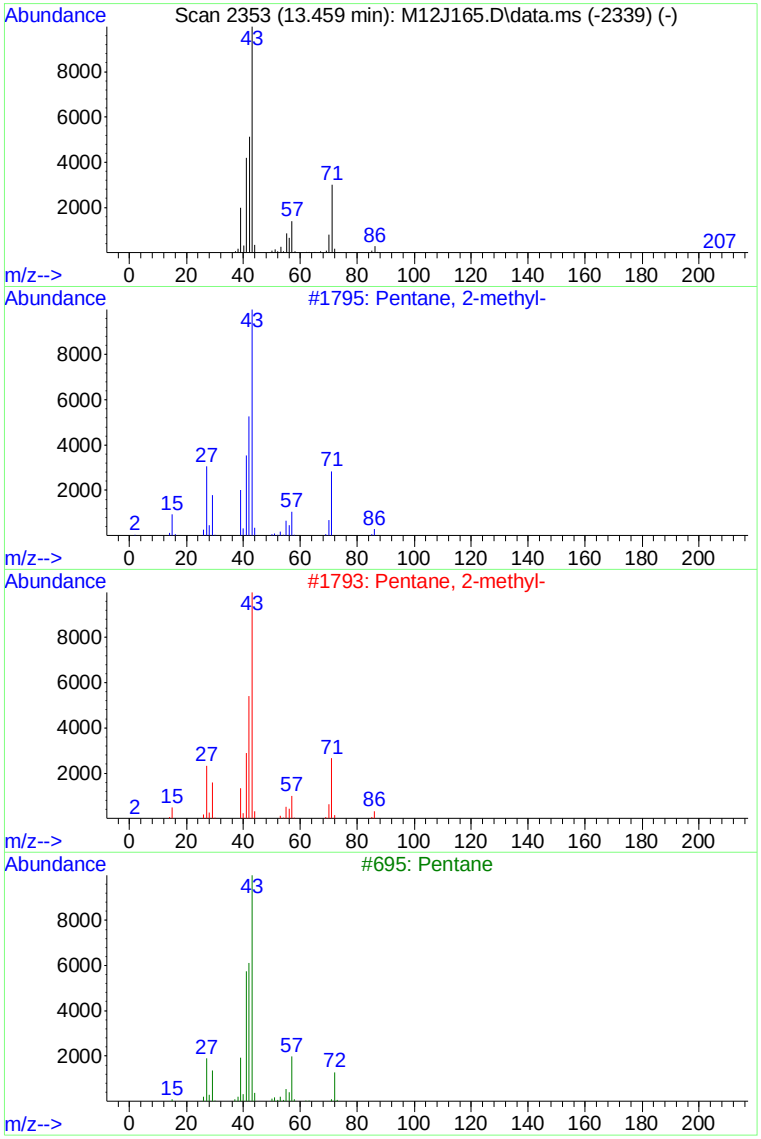
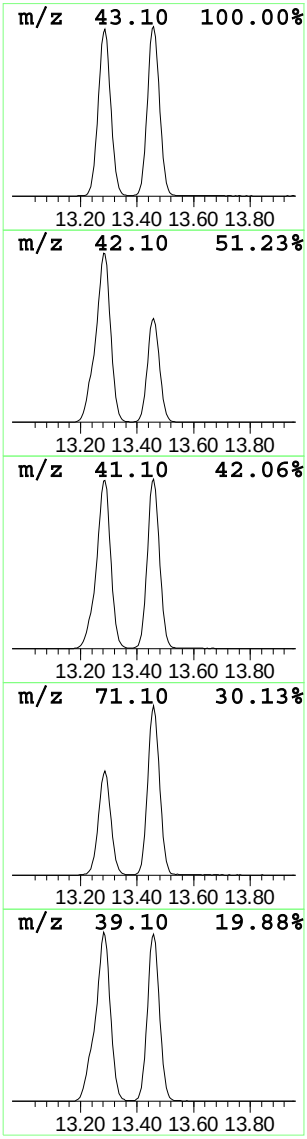
Peak Number 7 Pentane, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.459	952454.00 ppbv	9886960	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Pentane	72	C5H12	000109-66-0	53
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	53
5	Pentane	72	C5H12	000109-66-0	36





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
Data File : M12J165.D
Acq On : 10 Oct 2012 6:13 am
Operator : E G
Sample : 12090195-03A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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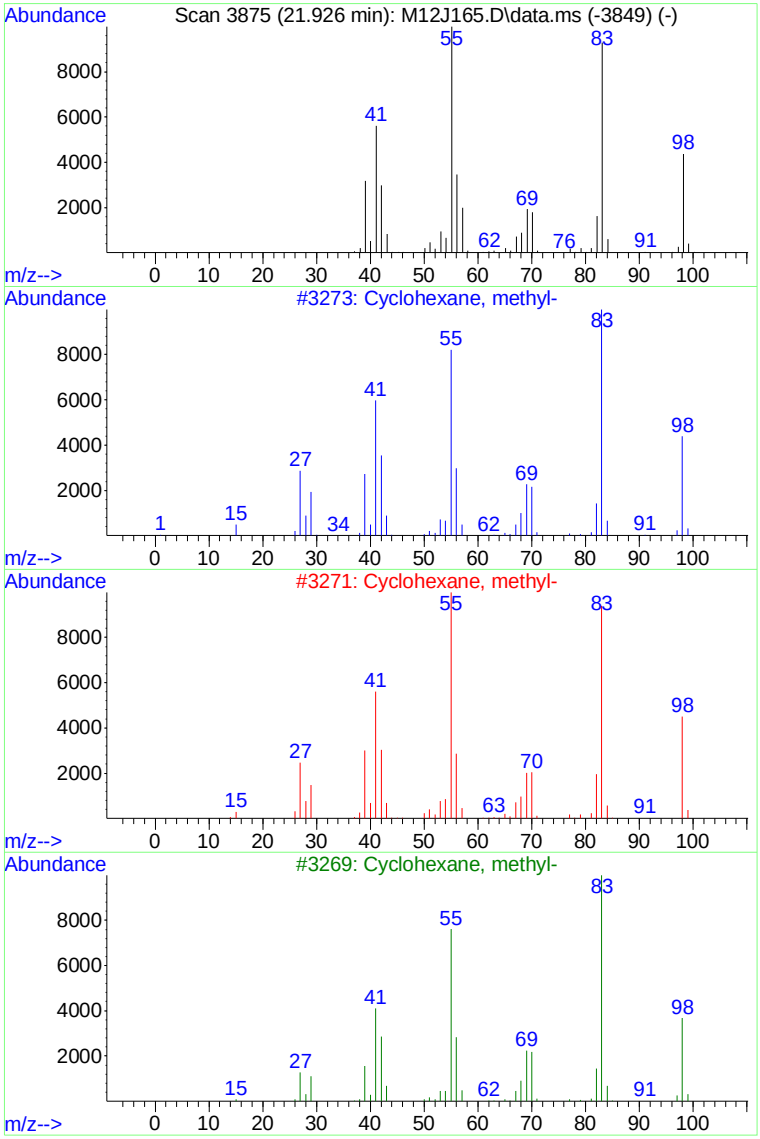
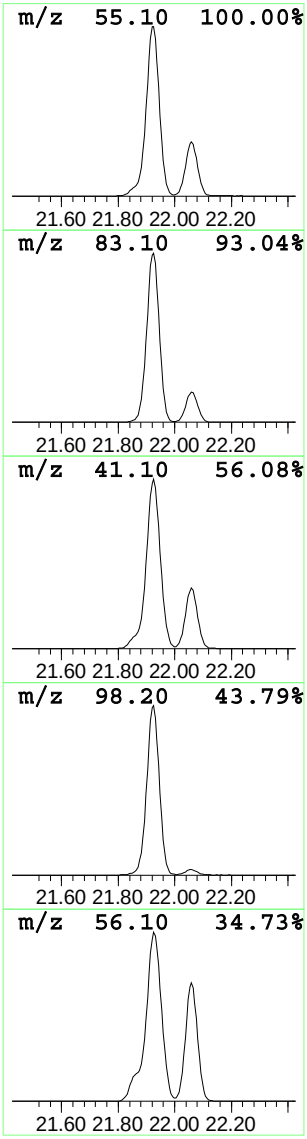
Peak Number 16 Cyclohexane, methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.926	839914.00 ppbv	15364500	1,4-Difluorobenzene	18.527

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	95
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	93
4	2-Pentene, 3,4-dimethyl-, (E)-	98	C7H14	004914-92-5	72
5	2-Pentene, 2,3-dimethyl-	98	C7H14	010574-37-5	72





Library Search Compound Report

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Acq On    : 10 Oct 2012   6:13 am
Operator  : E G
Sample    : 12090195-03A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 10   Sample Multiplier: 12800

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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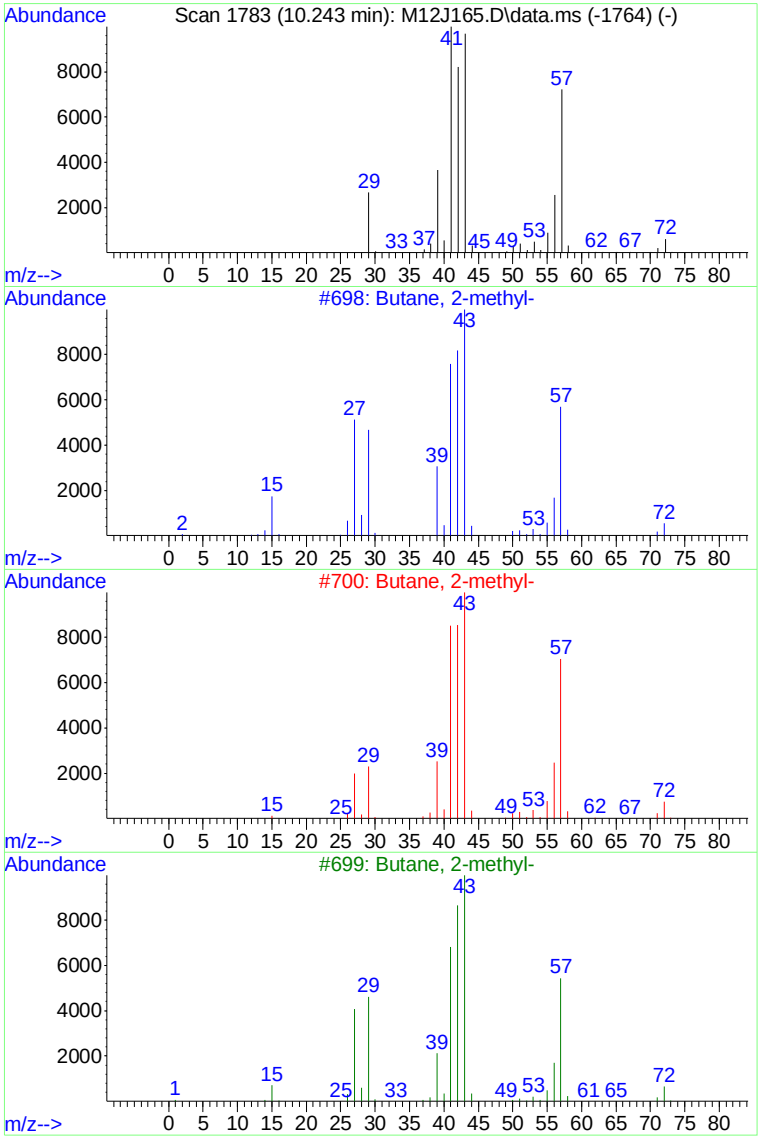
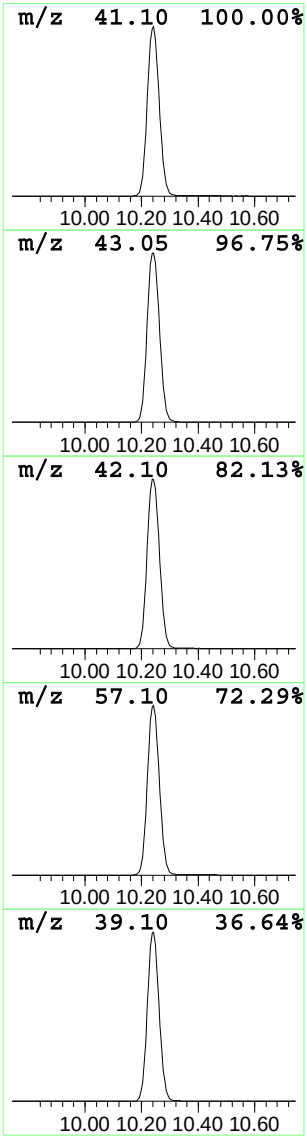
Peak Number 21 Butane, 2-methyl- Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.243	2520310.00 ppbv	26162100	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	90
2	Butane, 2-methyl-	72	C5H12	000078-78-4	90
3	Butane, 2-methyl-	72	C5H12	000078-78-4	78
4	Pentane	72	C5H12	000109-66-0	36
5	Pentane	72	C5H12	000109-66-0	36





Library Search Compound Report

Data Path : M:\AIR M\2A12-1009\
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Acq On : 10 Oct 2012 6:13 am
Operator : E G
Sample : 12090195-03A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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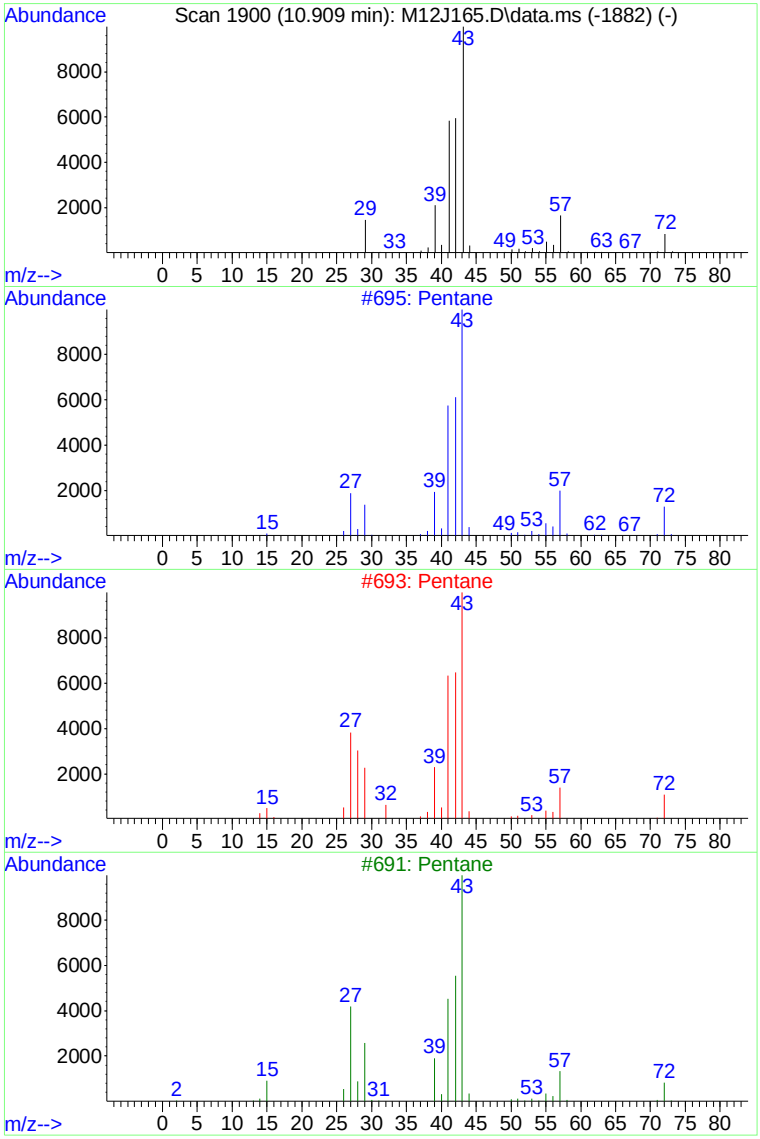
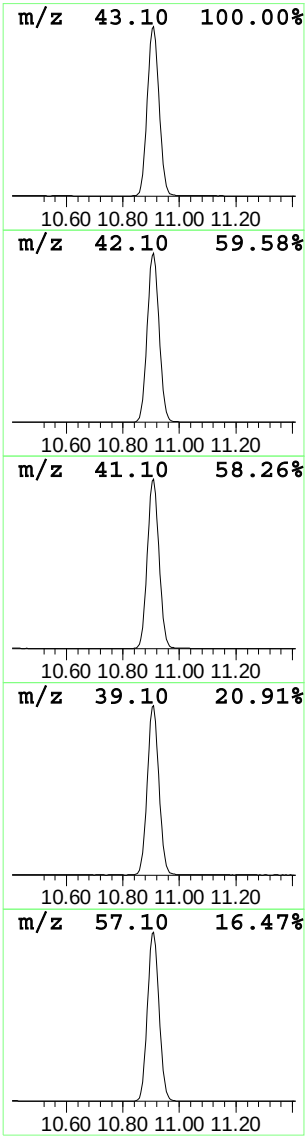
Peak Number 22 Pentane Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.909	1542290.00 ppbv	16009800	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	91
2	Pentane	72	C5H12	000109-66-0	91
3	Pentane	72	C5H12	000109-66-0	90
4	Pentane	72	C5H12	000109-66-0	86
5	Pentane	72	C5H12	000109-66-0	78





Library Search Compound Report

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Data File : M12J165.D
Acq On : 10 Oct 2012 6:13 am
Operator : E G
Sample : 12090195-03A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 10 Sample Multiplier: 12800

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

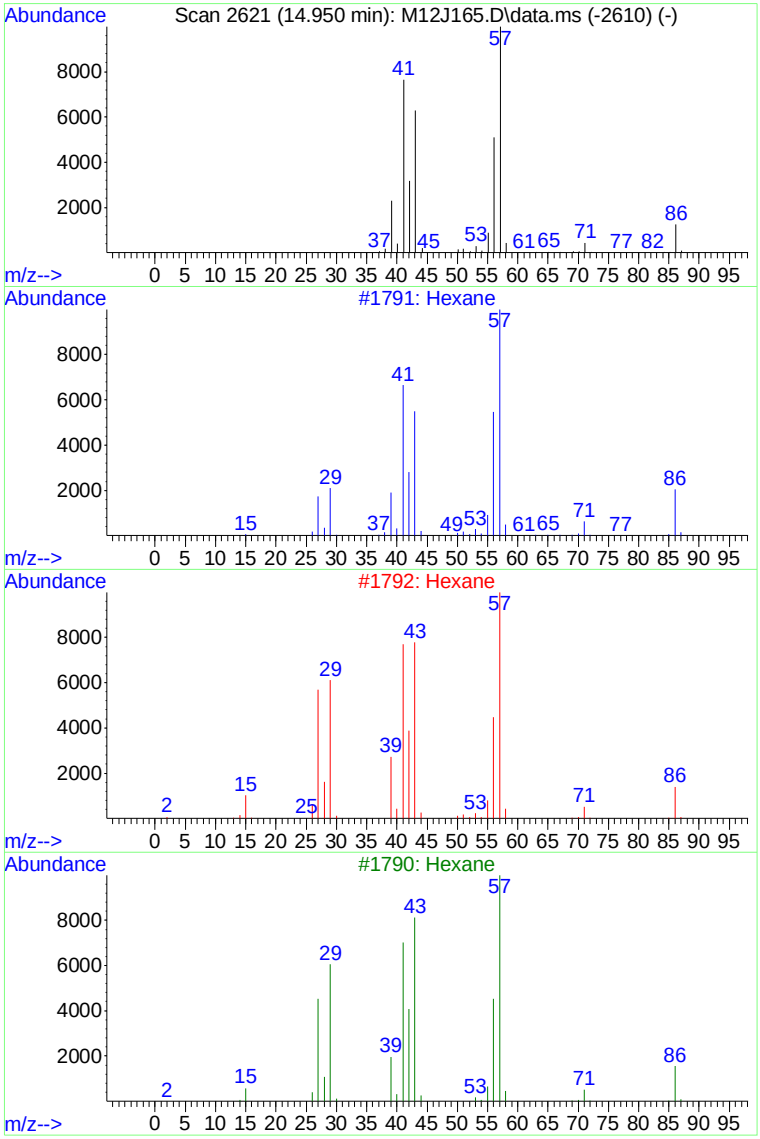
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

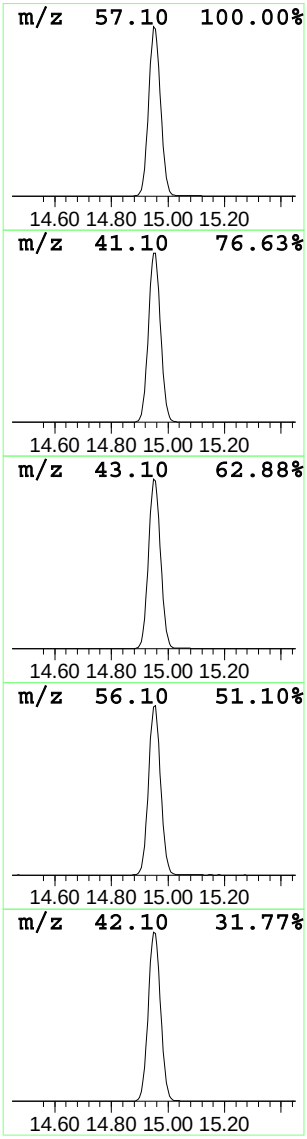
****

Peak Number 23 Hexane Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.950	833539.00 ppbv	8652570	Bromochloromethane	14.844

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane	86	C6H14	000110-54-3	91
2	Hexane	86	C6H14	000110-54-3	91
3	Hexane	86	C6H14	000110-54-3	91
4	Furan, tetrahydro-3-methyl-	86	C5H10O	013423-15-9	50
5	Pentane, 2,2,3,4-tetramethyl-	128	C9H20	001186-53-4	38





Tentatively Identified Compound (LSC) summary

Data Path : M:\AIR_M\2A12-1004\
Data File : M12J075.D
Acq On : 5 Oct 2012 11:47 am
Operator : E_G
Sample : 12090195-04A
Misc : SAMP;TO-15_LDEQ
ALS Vial : 16 Sample Multiplier: 32000

Quant Method : M:\AIR_M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--- #	RT	Resp	Conc
Propane	8.232	3367870.0	ppbv	15793200	1	14.838	937878	6.3
Isobutane	8.631	1821100.0	ppbv	8539830	1	14.838	937878	6.3
Butane	8.978	1102390.0	ppbv	5169530	1	14.838	937878	6.3
Neopentane	9.149	113318.0	ppbv	531394	1	14.838	937878	6.3
Butane, 2,2-dim...	12.085	117969.0	ppbv	553204	1	14.838	937878	6.3
Butane, 2,3-dim...	13.281	116265.0	ppbv	545210	1	14.838	937878	6.3
Pentane, 2-methyl-	13.453	104628.0	ppbv	490640	1	14.838	937878	6.3
Hexane	14.950	74490.1	ppbv	349313	1	14.838	937878	6.3
Butane, 2-methyl-	10.243	525644.0	ppbv	2464950	1	14.838	937878	6.3
Pentane	10.903	250768.0	ppbv	1175950	1	14.838	937878	6.3

Library Search Compound Report

Data Path : M:\AIR M\2A12-1004\
Data File : M12J075.D
Acq On : 5 Oct 2012 11:47 am
Operator : E G
Sample : 12090195-04A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 16 Sample Multiplier: 32000

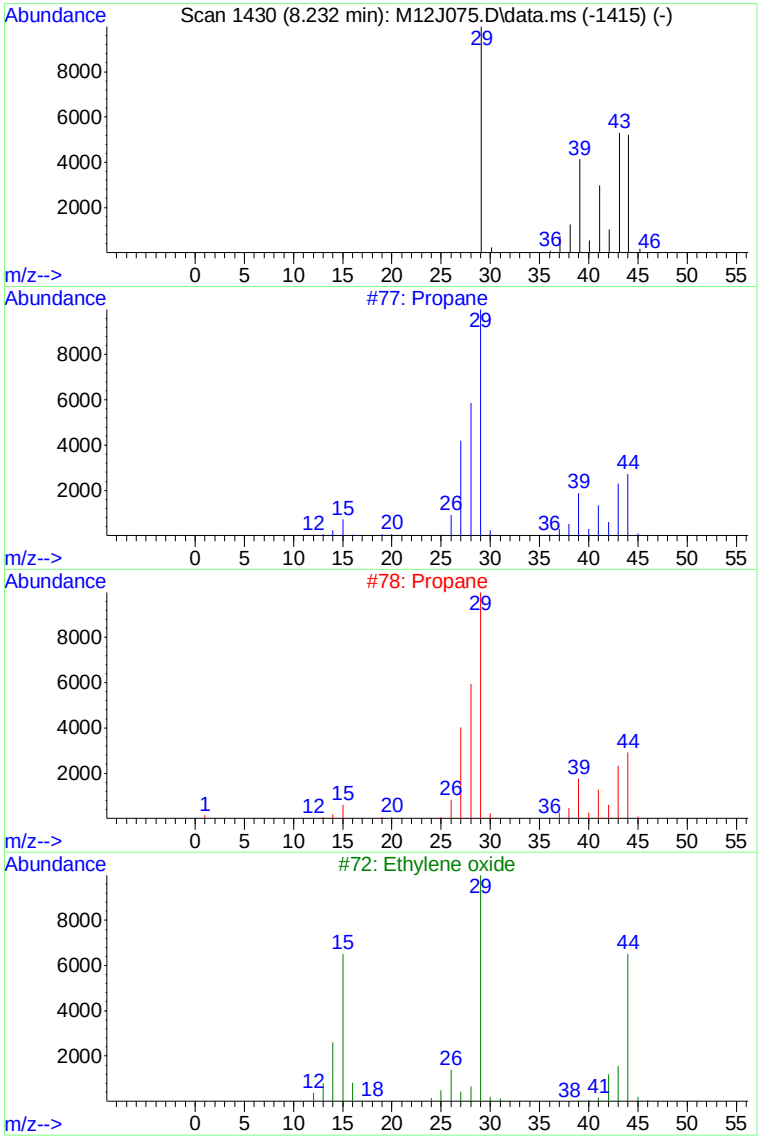
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

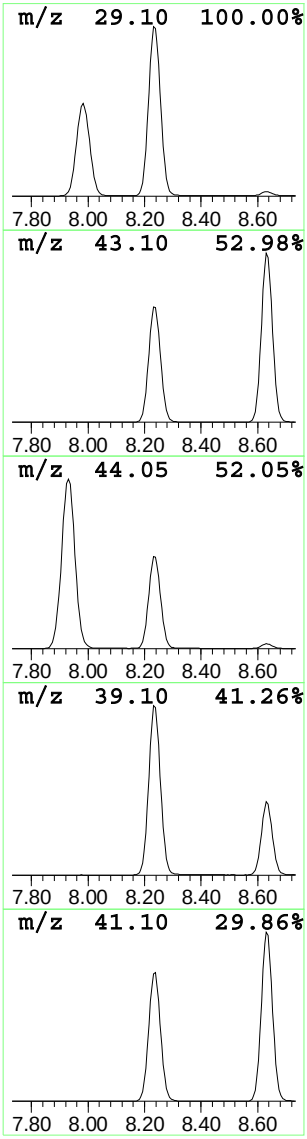
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 1 Propane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.232	3367870.00 ppbv	15793200	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane	44	C3H8	000074-98-6	91
2	Propane	44	C3H8	000074-98-6	90
3	Ethylene oxide	44	C2H4O	000075-21-8	40
4	Ethylene oxide	44	C2H4O	000075-21-8	40
5	Propane	44	C3H8	000074-98-6	9





Library Search Compound Report

Data Path : M:\AIR M\2A12-1004\
Data File : M12J075.D
Acq On : 5 Oct 2012 11:47 am
Operator : E G
Sample : 12090195-04A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 16 Sample Multiplier: 32000

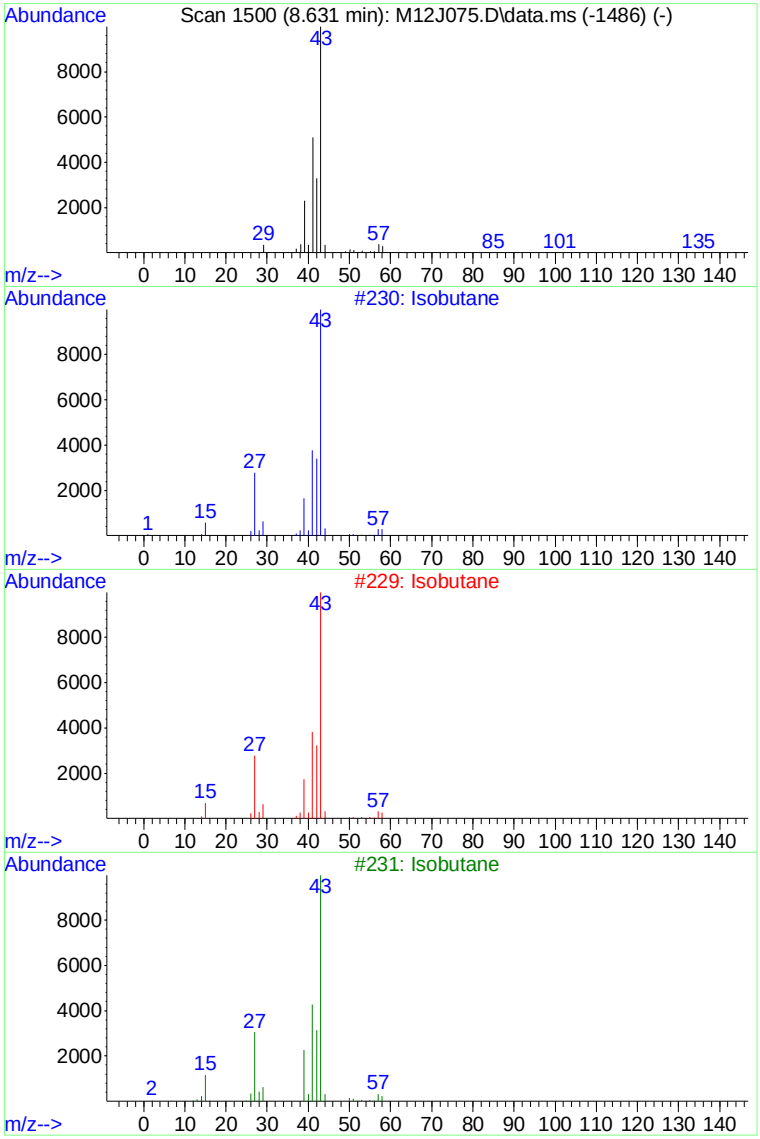
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

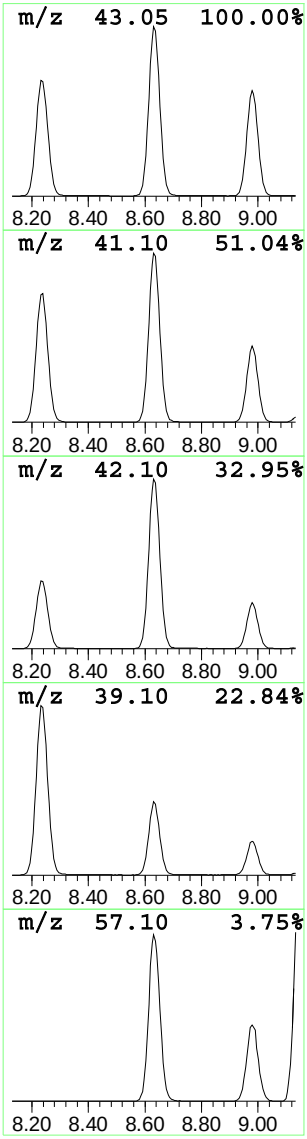
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 2 Isobutane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.631	1821100.00 ppbv	8539830	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isobutane	58	C4H10	000075-28-5	80
2	Isobutane	58	C4H10	000075-28-5	72
3	Isobutane	58	C4H10	000075-28-5	64
4	Isobutane	58	C4H10	000075-28-5	59
5	Propane, 1-nitro-	89	C3H7NO2	000108-03-2	9





Library Search Compound Report

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Data File : M12J075.D
Acq On    :  5 Oct 2012  11:47 am
Operator  : E G
Sample    : 12090195-04A
Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 16   Sample Multiplier: 32000

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
```

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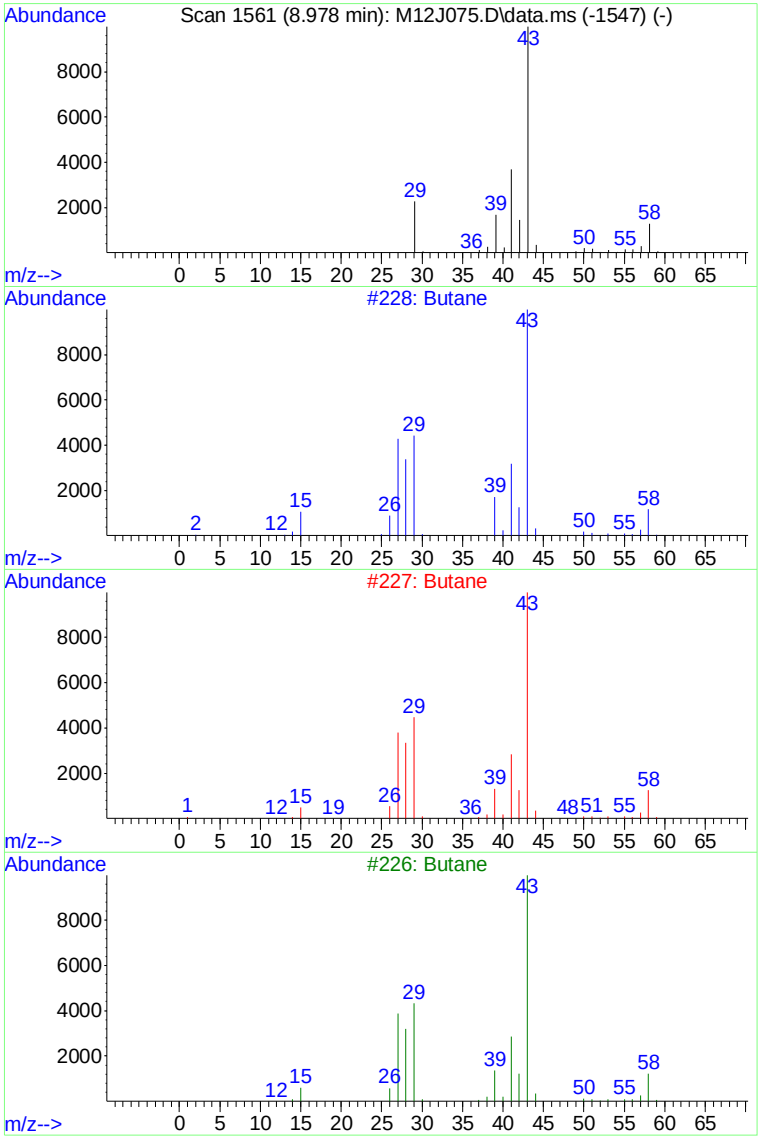
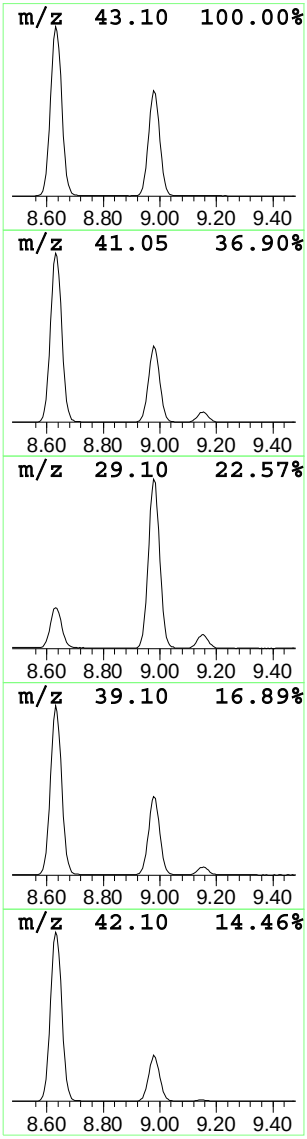
Peak Number 3 Butane — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.978	1102390.00 ppbv	5169530	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	59
3	Butane	58	C4H10	000106-97-8	59
4	Isobutane	58	C4H10	000075-28-5	9
5	Acetic acid, 2-propenyl ester	100	C5H8O2	000591-87-7	9





Library Search Compound Report

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Operator : E G
Sample : 12090195-04A
Misc : SAMP;TO-15 LDEQ
ALS Vial : 16 Sample Multiplier: 32000

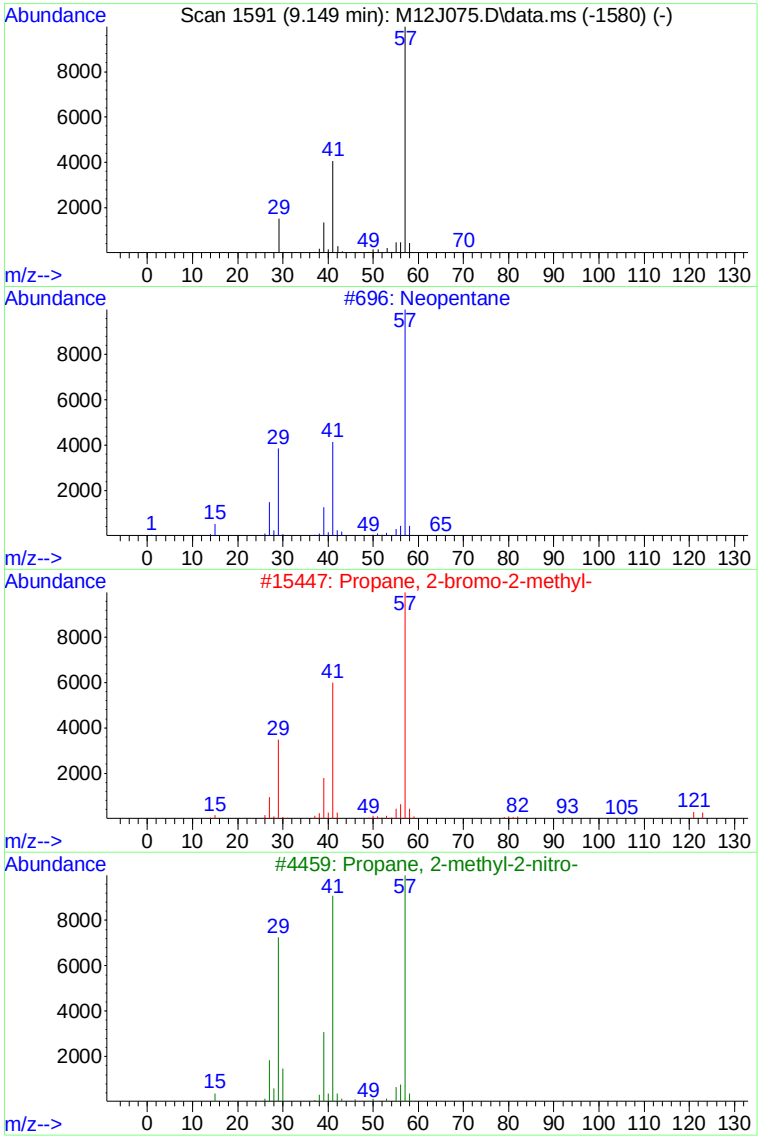
Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

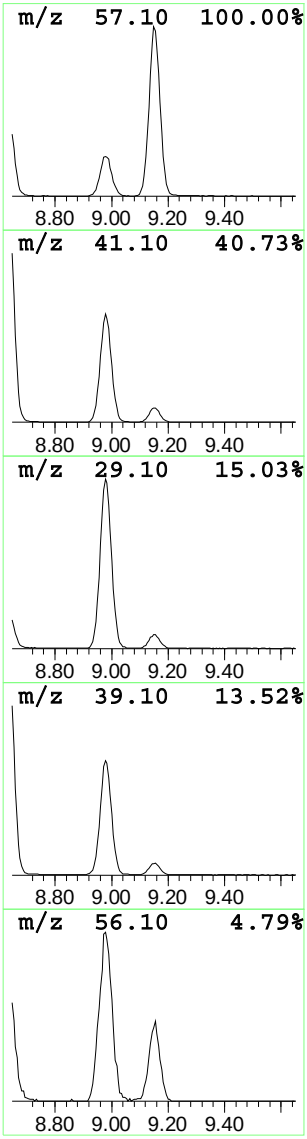
TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

****
Peak Number 4 Neopentane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.149	113318.00 ppbv	531394	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Neopentane	72	C5H12	000463-82-1	72
2	Propane, 2-bromo-2-methyl-	136	C4H9Br	000507-19-7	56
3	Propane, 2-methyl-2-nitro-	103	C4H9NO2	000594-70-7	45
4	Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	42
5	Pentane, 2,2,4,4-tetramethyl-	128	C9H20	001070-87-7	38





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ALS Vial  : 16   Sample Multiplier: 32000

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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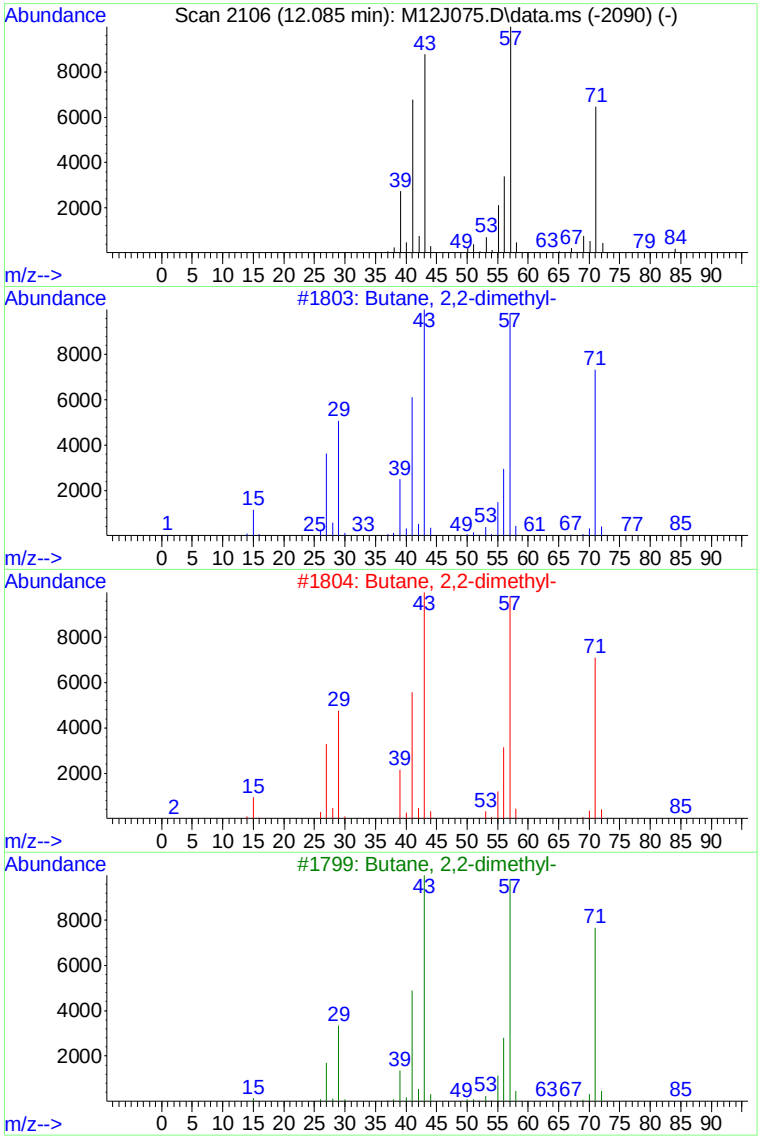
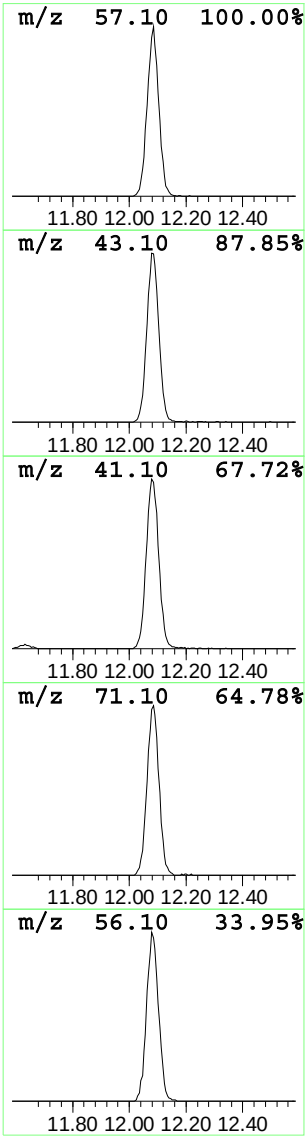
Peak Number 5 Butane, 2,2-dimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.085	117969.00 ppbv	553204	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	86
2	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	78
3	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	78
4	Butane, 2,2-dimethyl-	86	C6H14	000075-83-2	78
5	Oxalic acid, isobutyl pentyl ester	216	C11H20O4	1000309-37-0	64





Library Search Compound Report

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Misc : SAMP;TO-15 LDEQ
ALS Vial : 16 Sample Multiplier: 32000

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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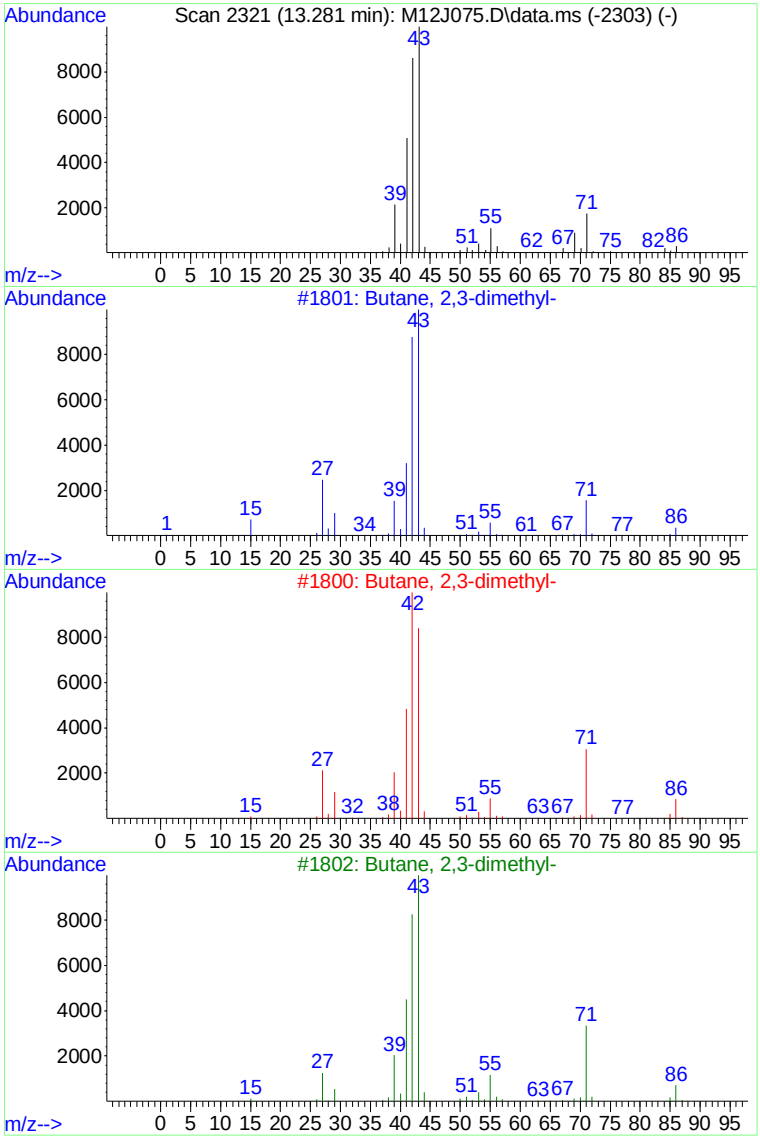
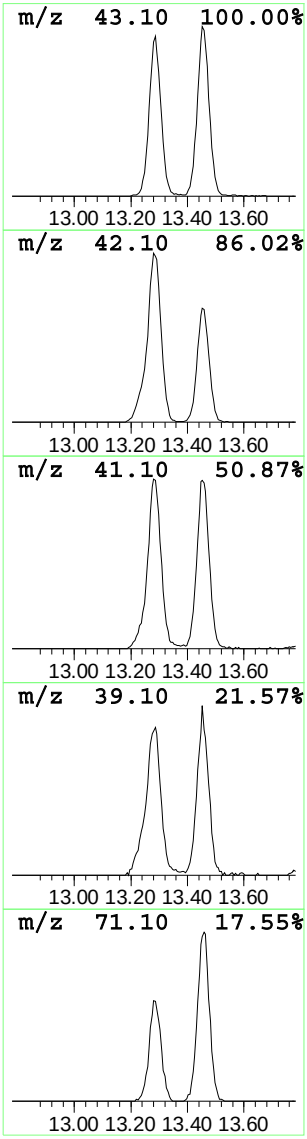
Peak Number 6 Butane, 2,3-dimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.281	116265.00 ppbv	545210	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	80
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
5	1-Pentene	70	C5H10	000109-67-1	36





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Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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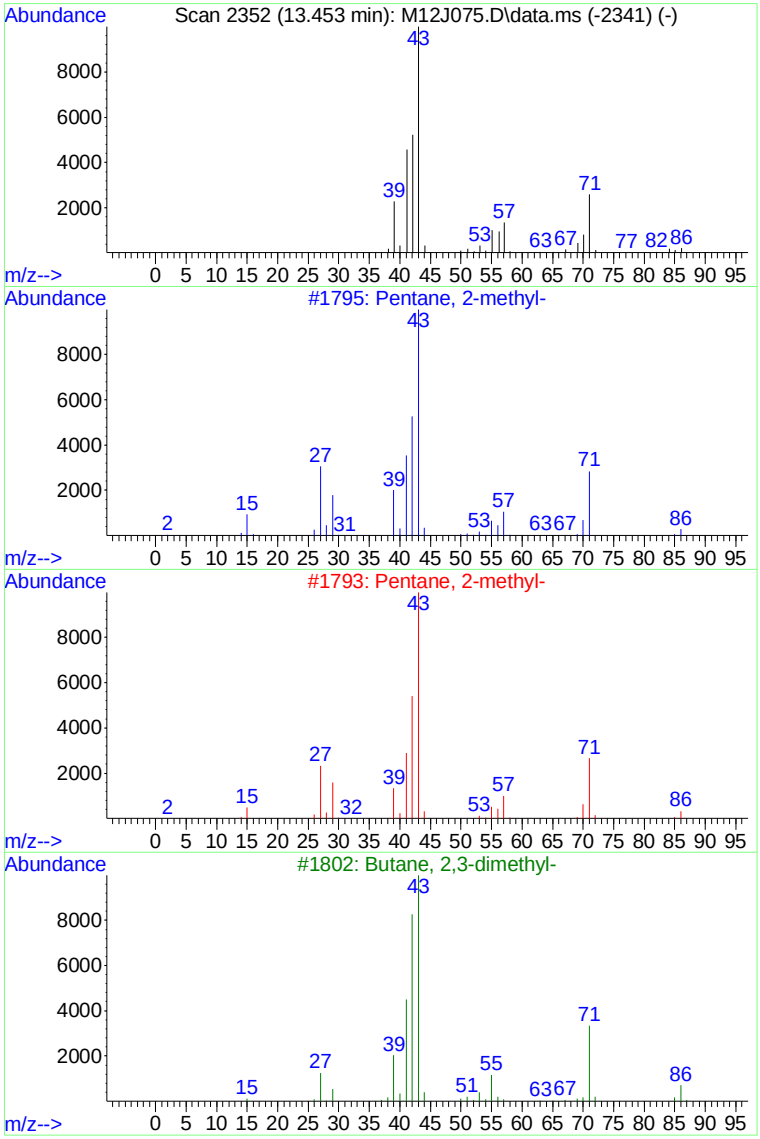
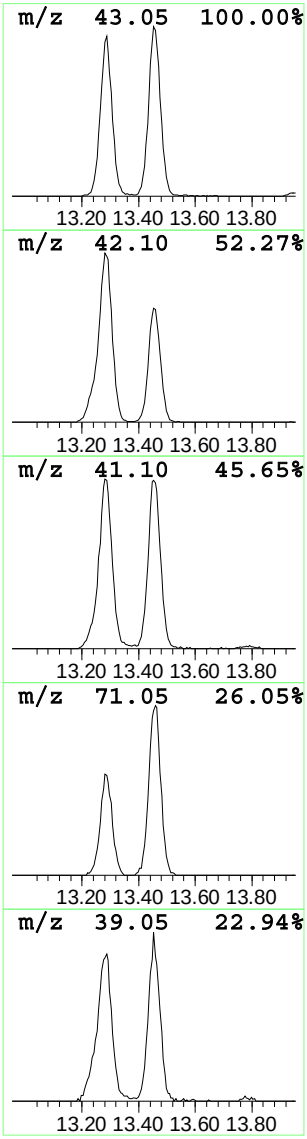
Peak Number 7 Pentane, 2-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.453	104628.00 ppbv	490640	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	42
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	40
5	Acetic acid, trifluoro-, 3-methy...	184	C7H11F3O2	000327-69-5	39





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ALS Vial : 16 Sample Multiplier: 32000

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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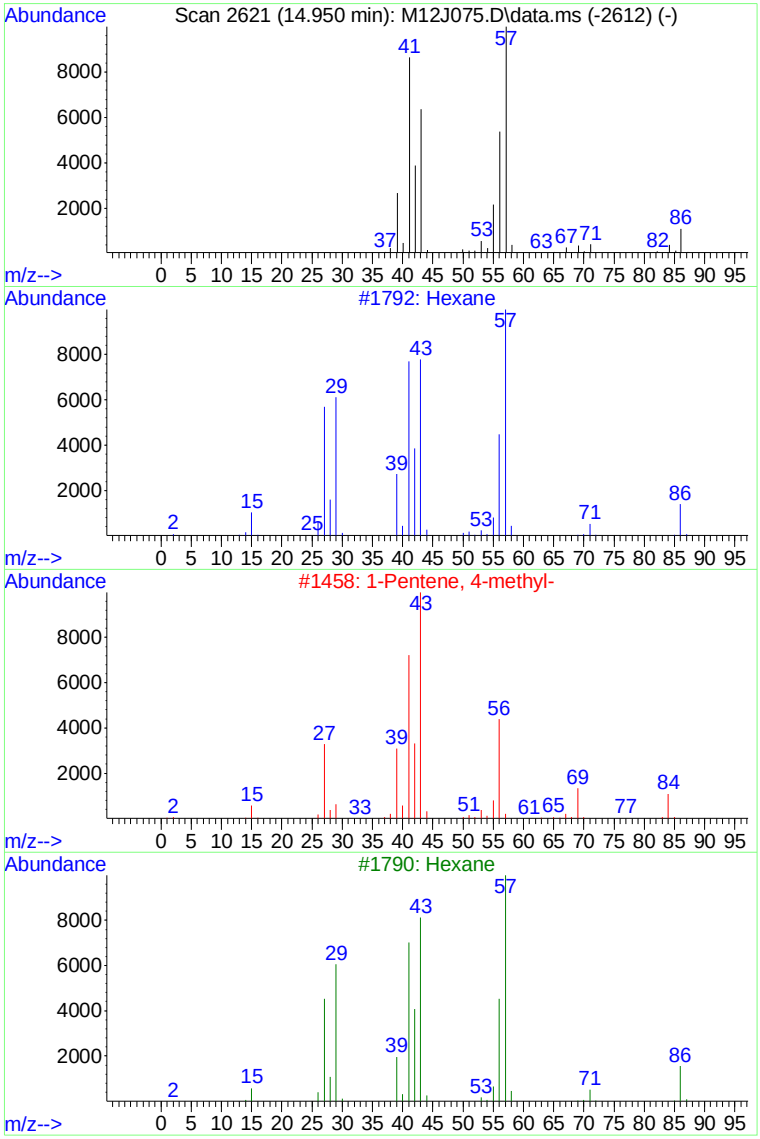
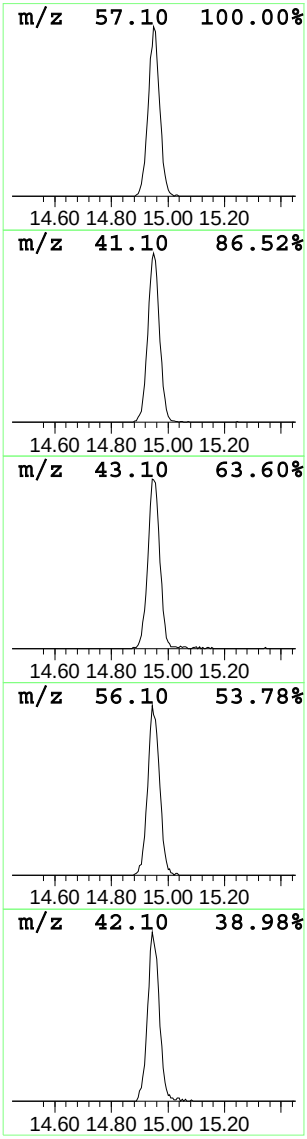
Peak Number 9 Hexane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.950	74490.10 ppbv	349313	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane	86	C6H14	000110-54-3	64
2	1-Pentene, 4-methyl-	84	C6H12	000691-37-2	53
3	Hexane	86	C6H14	000110-54-3	53
4	Hexane	86	C6H14	000110-54-3	45
5	Butane, 2,2,3-trimethyl-	100	C7H16	000464-06-2	43





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ALS Vial : 16 Sample Multiplier: 32000

Quant Method : M:\AIR M_METHODS\M12I29.M
Quant Title : TO-15 LA

TIC Library : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P

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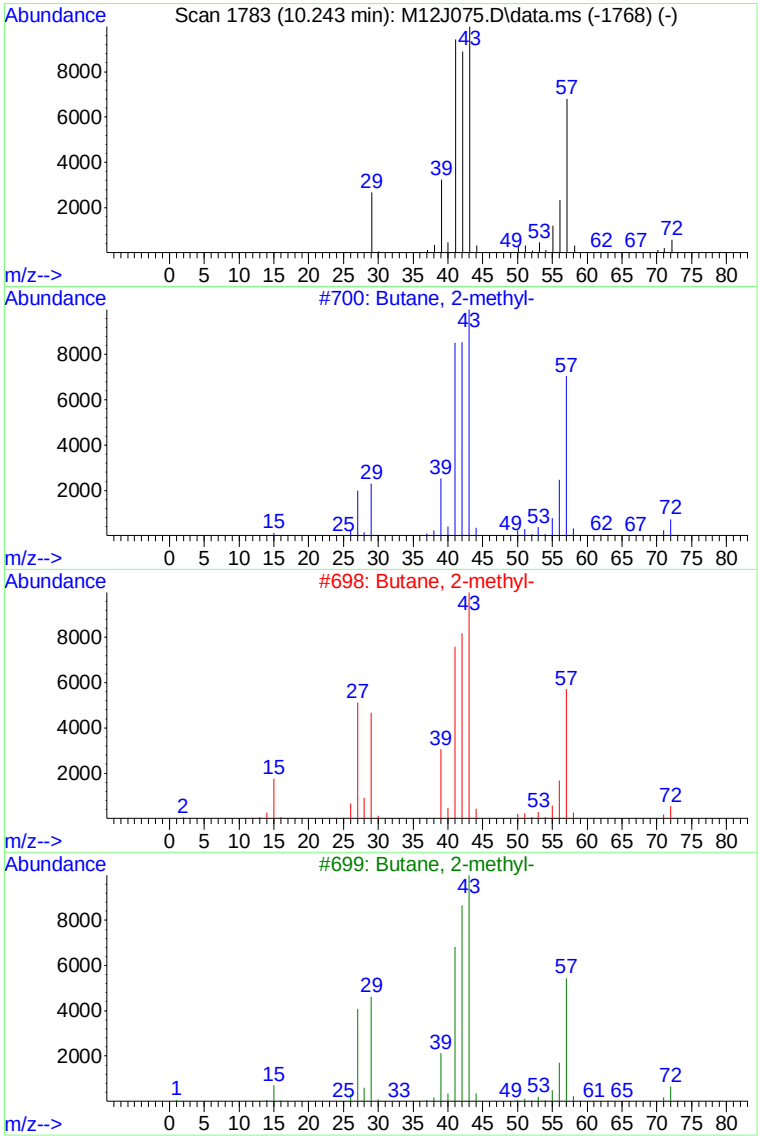
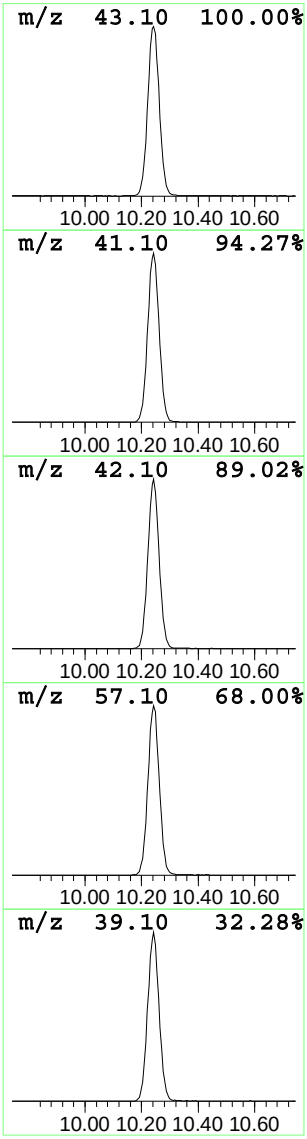
Peak Number 14 Butane, 2-methyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.243	525644.00 ppbv	2464950	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	91
2	Butane, 2-methyl-	72	C5H12	000078-78-4	90
3	Butane, 2-methyl-	72	C5H12	000078-78-4	64
4	Pentane	72	C5H12	000109-66-0	42
5	1-Butene	56	C4H8	000106-98-9	14





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Misc      : SAMP;TO-15 LDEQ
ALS Vial  : 16   Sample Multiplier: 32000

Quant Method : M:\AIR M\_METHODS\M12I29.M
Quant Title  : TO-15 LA

TIC Library    : C:\Database\NIST05.L
TIC Integration Parameters: RTEINT_D.P
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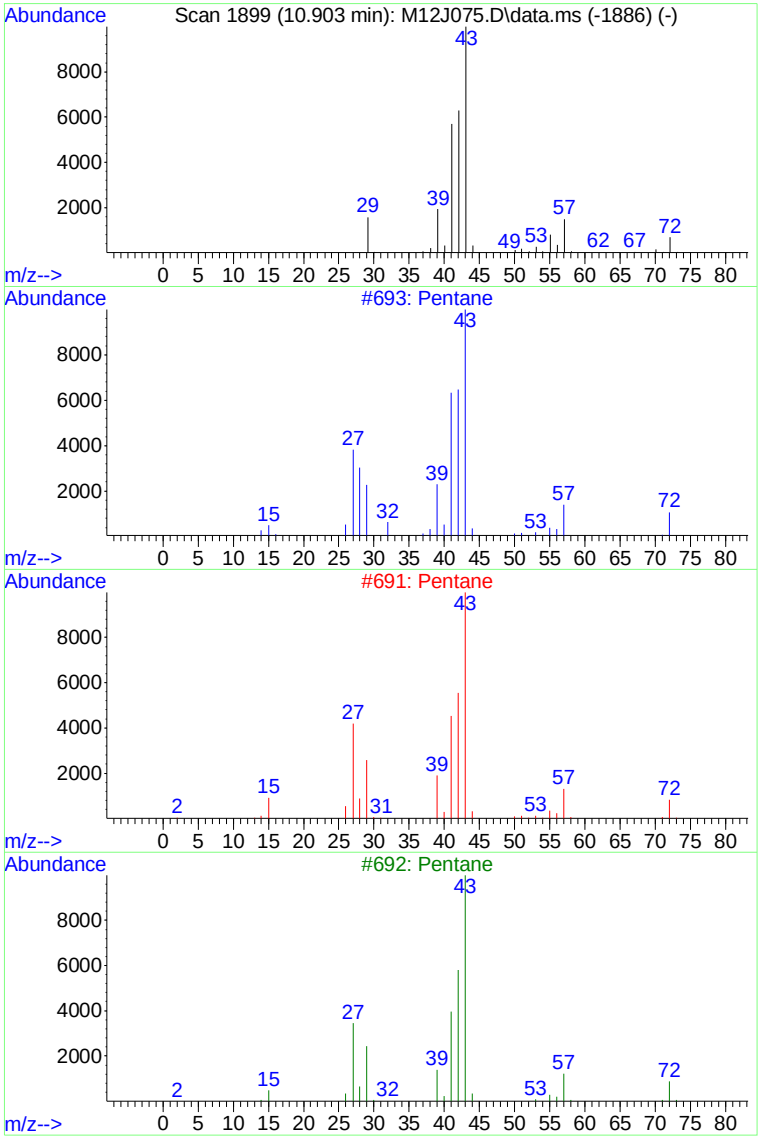
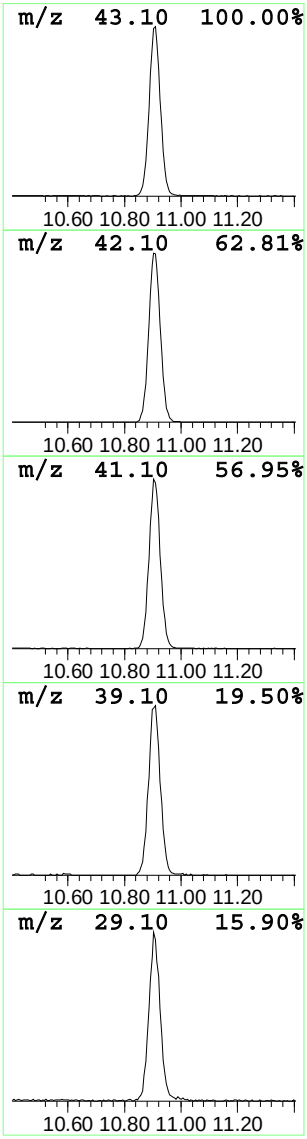
Peak Number 15 Pentane Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.903	250768.00 ppbv	1175950	Bromochloromethane	14.838

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	87
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	80
4	Pentane	72	C5H12	000109-66-0	72
5	Butane, 2-methyl-	72	C5H12	000078-78-4	64