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Type I Data Package

Prepared for:

Olin Corporation
Suite 200
3855 North Ocoee Street
Cleveland TN 37312

Project: Olin Wilmington, MA Superfund Site/6107090016
Soil Samples
Collected on 06/03/10

SDG# OLN31

GROUP	SAMPLE NUMBERS
1197261	5997219-5997221

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-08A-TX

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Luz C Torres

Luz C Torres
Group Leader

Date 7/14/10

Any questions or concerns you might have regarding this data package should be directed to your client representative, Nicole Maljovec at Ext. 1537.

Total Number of Pages 81

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Sample Reference List for SDG Number OLN31 with a Data Package Type of I

12670 - Olin Corporation

Project: Olin Wilmington, MA Superfund Site/6107090016

Lab Sample Number	Lab Sample Code	Client Sample Description
5997219	SS441	OC-SS-441-0.0/1.0-XXX Grab Soil
5997220	SS443	OC-SS-443-0.0/1.0-XXX Grab Soil
5997221	SS447	OC-SS-447-0.0/1.0-XXX Grab Soil

Shipped Thursday 6/3/10

12670|1197261|5997219-21

Lancaster

Page 1 of 2

Client: Olin Corporation	Client Project #: 6107090016	INVOICE INFO	Shaded Areas for office use only
Address: 3855 North Ocoee St. Suite 200	Work Site ID: Wilmington, MA	Company Name: Olin Corp	
Cleveland, TN 37312	Reports Sent To: Steve Morrow	Company Contact: ERG Accounts Payable	
Phone: 423-336-4511 Fax: 423-336-1466	Email SGMorrow@olin.com Email Rpt:____	Address: Same as Client	
Requested Turnaround Time (SPECIFY)	Regulatory Programs: MADEP MCP____ Superfund ____	Phone: Email	
Standard_____ Rush_____ (Lab Approval Required)	Report Requirements Level IV Package ____ Level II Package ____		
	EDD Requirements: MACTEC EQUIS EZ EDD _____	Job #	Quote #
		Lab SDG #	PO #

MACTEC

Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Composite (C) or Grab (G)	Total # of Containers	Cr+6 (3060A / 7199)	Cr+6 (7199)	DMF (Mod 8033 - GC/NPD)	DMF (Mod 8033 - GC/NPD)	Opex / Kempore (8000B - HPLC)	Perchlorate (6850)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Comments (Special Instructions)
							G	P	G	V	V	V	AG	Zn AV	<--Preservative Type (4) / <--Bottle Type (5)
OC-SS-441-0.0/1.0-XXX	6/3/2010 1:50:00 PM	T	FS	SO	G	1							X		Category 1

Special Instructions For Lab

Notes:

1.) Fraction: T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable

2.) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank

3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil

4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water

5.) Bottle Type: G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass, AV = 40mL VOA Amber Glass Vial,

Relinquished: [signature] Date: 6/3/10 Time: 1530 Received: _____ Date: __/__/__ Time: _____

Relinquished: _____ Date: __/__/__ Time: _____ Received: [signature] Date: 6/4/10 Time: 805

Cooler ? Y / N	MADEP Requirement
	Samples Iced? Y / N
Temp @ receipt: 5.2 Deg C	
Preservation / pH checked? Y / N	N/A
By: _____ Date: _____	N/A 6/7/10

12670|1197261|5997219-21

Lancaster

MACTEC

Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Composite (C) or Grab (G)	Total # of Containers	Cr+6 (3060A / 7199)	Cr+6 (7199)	DMF (Mod 8033 - GC/NPD)	DMF (Mod 8033 - GC/NPD)	Dpex / Kempore (8000B - HPLC)	Perchlorate (6850)														Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)			Comments (Special Instructions)
							G	P	G	V	V	V														AG	AV			<--Preservative Type (4) <--Bottle Type (5)
OC-SS-443-0.0/1.0-XXX	6/3/2010 12:50:00	T	FS	SO	G	1																				X				Category 1
OC-SS-447-0.0/1.0-XXX	6/3/2010 1:35:00 PM	T	FS	SO	G	1																				X				Category 1

Special Instructions For Lab

Notes:

1.) Fraction: T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable

2.) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank

3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil

4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water

5.) Bottle Type: G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass, AV = 40mL VOA Amber Glass Vial,

Cooler ? Y / N | MADEP Requirement Samples Iced? Y / N

Temp @ receipt: 5.2 Deg C

Preservation / pH checked? Y / N N/A

By: _____ Date: _____

NLM 6/7/10

Relinquished: [signature] **Date:** 6 / 3 / 10 **Time:** 1530 **Received:** _____ **Date:** __/__/__ **Time:** __

Relinquished: _____ **Date:** __/__/__ **Time:** __ **Received:** [signature] **Date:** 6 / 4 / 10 **Time:** 805

2009 TCHO

Lancaster Laboratories

Environmental Sample Administration
Receipt Documentation Log

Client/Project: Olin Corp.

Date of Receipt: 6/4/10

Time of Receipt: 805

Source Code: E50

Unpacker Emp. No.: 2376

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	9493	5.2°C	TB	WI	Y	B	
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody 0

Paperwork Discrepancy/Unpacking Problems:

Sample Administration Internal Chain of Custody			
Name	Date	Time	Reason for Transfer
[illegible]	6/4/10	835	Unpacking to storage
[illegible]	6/4/10	0847	Place in Storage or Entry
			Entry
			Entry

Issued by Dept. 6042 Management
2174.05

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10346 Hydrazines in Soil

The soil is extracted with a buffer solution of known pH. An aliquot of the supernatant is derivatized and directly analyzed by HPLC/MS/MS.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8315A modified, December 1996.

00111 Moisture

A well-mixed sample is placed in a tared container and dried to a constant weight in an oven at 103-105C. The increase in weight is the total solids.

Reference: Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, Method 2540 G

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Olin Corporation
Suite 200
3855 North Ocoee Street
Cleveland TN 37312

June 19, 2010

Project: Olin Wilmington, MA Superfund Site/6107090016

Submittal Date: 06/04/2010
Group Number: 1197261
PO Number: REWI0012
Release Number: ERRE9813
State of Sample Origin: MA

Client Sample Description	Lancaster Labs (LLI) #
OC-SS-441-0.0/1.0-XXX Grab Soil	5997219
OC-SS-443-0.0/1.0-XXX Grab Soil	5997220
OC-SS-447-0.0/1.0-XXX Grab Soil	5997221

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Olin Chemicals	Attn: Steve Morrow
ELECTRONIC COPY TO	MACTEC	Attn: Kelly Chatterton
ELECTRONIC COPY TO	MACTEC	Attn: Chris Ricardi
1 COPY TO	Data Package Group	

OLN31 0006

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Lancaster Laboratories

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Charles J. Neslund
Manager

01N31 0087

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Lancaster Laboratories

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)

<	less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.
>	greater than
J	estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Analysis Report

Lancaster Laboratories

Sample Description: OC-SS-441-0.0/1.0-XXX Grab Soil
Wilmington MA Superfund Site

LLI Sample # SW 5997219
LLI Group # 1197261
Account # 12670

Project Name: Olin Wilmington, MA Superfund Site/6107090016

Collected: 06/03/2010 13:50

Submitted: 06/04/2010 08:05
Reported: 06/19/2010 19:57
Discard: 07/05/2010

Olin Corporation
Suite 200
3855 North Ocoee Street
Cleveland TN 37312

SS441 SDG#: OLN31-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Misc. Organics	**SW-846 8315A modified**		**ng/g**		**ng/g**	**ng/g**	
10346	1,1-Dimethylhydrazine	57-14-7	N.D.		2.9	7.3	1
10346	Hydrazine	302-01-2	1.1	J	0.73	2.9	1
10346	Methylhydrazine	60-34-4	N.D.		2.9	7.3	1
Wet Chemistry	**SM20 2540 G**		**%**		**%**	**%**	
00111	Moisture	n.a.	31.1		0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10346	Hydrazines in Soil	SW-846 8315A modified	1	101610013A	06/11/2010 21:50	Richard A Shober	1
00111	Moisture	SM20 2540 G	1	10155820005A	06/04/2010 16:29	Scott W Freisher	1

OLN31 0009

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*=This limit was used in the evaluation of the final result

Analysis Report

Lancaster Laboratories

Sample Description: OC-SS-443-0.0/1.0-XXX Grab Soil
Wilmington MA Superfund Site

LLI Sample # SW 5997220
LLI Group # 1197261
Account # 12670

Project Name: Olin Wilmington, MA Superfund Site/6107090016

Collected: 06/03/2010 12:50

Submitted: 06/04/2010 08:05
Reported: 06/19/2010 19:57
Discard: 07/05/2010

Olin Corporation
Suite 200
3855 North Ocoee Street
Cleveland TN 37312

SS443 SDG#: OLN31-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Misc. Organics	**SW-846 8315A modified**		**ng/g**	**ng/g**	**ng/g**	
10346	1,1-Dimethylhydrazine	57-14-7	N.D.	3.4	8.6	1
10346	Hydrazine	302-01-2	N.D.	0.86	3.4	1
10346	Methylhydrazine	60-34-4	N.D.	3.4	8.6	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	**%**	
00111	Moisture	n.a.	41.8	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10346	Hydrazines in Soil	SW-846 8315A modified	1	101610013A	06/11/2010 22:47	Richard A Shober	1
00111	Moisture	SM20 2540 G	1	10155820005A	06/04/2010 16:29	Scott W Freisher	1

OLN31 0010

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Analysis Report

Lancaster Laboratories

Sample Description: OC-SS-447-0.0/1.0-XXX Grab Soil
Wilmington MA Superfund Site

LLI Sample # SW 5997221
LLI Group # 1197261
Account # 12670

Project Name: Olin Wilmington, MA Superfund Site/6107090016

Collected: 06/03/2010 13:35

Submitted: 06/04/2010 08:05
Reported: 06/19/2010 19:57
Discard: 07/05/2010

Olin Corporation
Suite 200
3855 North Ocoee Street
Cleveland TN 37312

SS447 SDG#: OLN31-03*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Misc. Organics	**SW-846 8315A modified**		**ng/g**		**ng/g**	**ng/g**	
10346	1,1-Dimethylhydrazine	57-14-7	N.D.		6.0	15	1
10346	Hydrazine	302-01-2	1.6	J	1.5	6.0	1
10346	Methylhydrazine	60-34-4	N.D.		6.0	15	1
Wet Chemistry	**SM20 2540 G**		**%**		**%**	**%**	
00111	Moisture	n.a.	66.6		0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10346	Hydrazines in Soil	SW-846 8315A modified	1	101610013A	06/11/2010 23:05	Richard A Shober	1
00111	Moisture	SM20 2540 G	1	10155820005A	06/04/2010 16:29	Scott W Freisher	1

OLN31 0011

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*=This limit was used in the evaluation of the final result

Miscellaneous Organics Data

0EH31 0012

Case Narrative Conformance/Nonconformance Summary

0LN31 0013

Lancaster Laboratories
Where quality is a science.

CASE NARRATIVE
Client: Olin Corporation
SDG #: OLN31

LANCASTER LABORATORIES
MISCELLANEOUS ORGANICS DATA

SAMPLE NUMBER(S) :

LL #'s	Sample Code	Matrix Soil	Matrix Water	Comments
5997219	SS441		X	Unspiked
5997219MS	SS441		X	Matrix Spike
5997219MSD	SS441		X	Matrix Spike Dup
5997220	SS443		X	
5997221	SS447		X	

LABORATORY SUBMITTED QC:

BLANK	Batch 101610013A	X	Method Blank
LCS	Batch 101610013A	X	Lab Control Sample
LCSD	Batch 101610013A	X	Lab Control Sample Dup

SAMPLE PREPARATION:

Samples were derivatized with benzaldehyde prior to analysis.

ANALYSIS:

No problems were encountered during the analysis of these samples.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

The recoveries of hydrazine, 1,1-dimethylhydrazine, and monomethylhydrazine in 5997219 (MS) and 5997219 (MSD) were outside the advisory QC limits.

All recoveries were within specifications in the LCS and LCSD.

Case Narrative (continued)
SDG: OLN31

DATA INTERPRETATION:

Method blank forms could not be generated. None of the reported compounds were detected in the method blank.

An LCS serves as the ICV second source check.

Abbreviation Key

NC = Not calculated
NF = Not found

Case Narrative Reviewed and Approved by:

Lisa C. Jones for _____ Date: 7/14/10

Dana M. Kauffman
Manager, Data Deliverables

Lancaster Laboratories • 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425
Phone: 717-656-2300 • Fax: 717-656-2300 • http:// www.LancasterLabs.com

QC Summary

Hydrazine by LC/MS/MS

Batch: 101610013A
Inj. time blank: 6/11/2010 20:54
Inj. time LCS: 6/11/2010 21:13
Inj. time LCSD: 6/11/2010 21:31

	RT	Added	LCS Found	Rec%	LCSD Found	Rec%	RPD	Limits
Hydrazine	9.78	125	113	90%	108	86%	4.5	70-130
1,1-Dimethylhydrazine	7.57	625	541	87%	537	86%	0.7	advisory
Monomethylhydrazine	5.89	625	703	112%	690	110%	1.9	

5997219	RT	Added	BKG	MS Found	Rec%	MSD Found	Rec%	RPD	Limits
Hydrazine	9.77	125	0.739	2.68	2%	2.71	2%	-1.1	11-102
1,1-Dimethylhydrazine	7.58	625	0	5.59	1%	4.67	1%	17.9	10-92
Monomethylhydrazine	5.9	625	0	25.5	4%	23.8	4%	6.9	10-116

entered by [illegible] 6/24/10

verified by [illegible] 6/24/10

OLMSI 2017

Sample Data

Lancaster Laboratories

LOQ and MDL by Analysis Number
Dept 37

COMPONENT NAME	MDL	LOQ	DEFAULT UNITS
10342: Hydrazines in Water			
Hydrazine	0.050	0.20	ug/l
1,1-Dimethylhydrazine	0.25	0.50	ug/l
Methylhydrazine	0.25	0.50	ug/l

01N31 0019

Lancaster Laboratories
Quant Summary Report (ISTD)

Workbook Name: TQU01408-11Jun2010-1
Current Workbook Path: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Instrument No. TQU01408
Analyst rs0120

File Name	Sample ID	Component Name	Sample Type	Response	ISTD Response	Integration Type	Specified Conc	Calc Amt	Units	% Diff
11Jun2010-1	Conditioner1	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-2	Conditioner2	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-3	MDL	1,1-Dimethylhydrazine	Unknown	22654	N/A	Method Settings	N/A	0.414	ng/mL	N/A
11Jun2010-4	Cal1	1,1-Dimethylhydrazine	Standard	51165	N/A	Method Settings	0.500	0.626	ng/mL	25.28
11Jun2010-5	Cal2	1,1-Dimethylhydrazine	Standard	109296	N/A	Method Settings	1.000	1.060	ng/mL	6.04
11Jun2010-6	Cal3	1,1-Dimethylhydrazine	Standard	264642	N/A	Method Settings	2.500	2.220	ng/mL	-11.20
11Jun2010-7	Cal4	1,1-Dimethylhydrazine	Standard	565783	N/A	Method Settings	5.000	4.468	ng/mL	-10.64
11Jun2010-8	Cal5	1,1-Dimethylhydrazine	Standard	1530714	N/A	Method Settings	12.500	11.671	ng/mL	-6.63
11Jun2010-9	Cal6	1,1-Dimethylhydrazine	Standard	3120291	N/A	Method Settings	25.000	23.537	ng/mL	-5.85
11Jun2010-10	Cal7	1,1-Dimethylhydrazine	Standard	6739290	N/A	Method Settings	50.000	50.553	ng/mL	1.11
11Jun2010-11	Cal8	1,1-Dimethylhydrazine	Standard	17028685	N/A	Method Settings	125.000	127.363	ng/mL	1.89
11Jun2010-12	Conditioner3	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-13	Cal3asQC1a	1,1-Dimethylhydrazine	QC	273027	N/A	Method Settings	2.500	2.283	ng/mL	-8.70
11Jun2010-14	Conditioner4	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-15	Blank	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-16	LCS	1,1-Dimethylhydrazine	Unknown	6894509	N/A	Method Settings	N/A	51.712	ng/mL	N/A

There is no signature data to report.

Lancaster Laboratories
Quant Summary Report (ISTD)

File Name	Sample ID	Component Name	Sample Type	Response	ISTD Response	Integration Type	Specified Conc	Calc Amt	Units	% Diff
11Jun2010-17	LCSD	1,1-Dimethylhydrazine	Unknown	6725598	N/A	Method Settings	N/A	50.451	ng/mL	N/A
11Jun2010-18	5997217	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-19	5997217MS	1,1-Dimethylhydrazine	Unknown	7095925	N/A	Method Settings	N/A	53.215	ng/mL	N/A
11Jun2010-20	5997217MSD	1,1-Dimethylhydrazine	Unknown	7076576	N/A	Method Settings	N/A	53.071	ng/mL	N/A
11Jun2010-21	5997218	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-22	6000328	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-23	6000329	1,1-Dimethylhydrazine	Unknown	21984	N/A	Method Settings	N/A	0.409	ng/mL	N/A
11Jun2010-24	Cal4asQC2a	1,1-Dimethylhydrazine	QC	579414	N/A	Method Settings	5.000	4.570	ng/mL	-8.60
11Jun2010-25	Conditioner5	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-26	6000330	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-27	Blank	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-28	LCS	1,1-Dimethylhydrazine	Unknown	7223603	N/A	Method Settings	N/A	541.686	ng/mL	N/A
11Jun2010-29	LCSD	1,1-Dimethylhydrazine	Unknown	7170971	N/A	Method Settings	N/A	537.757	ng/mL	N/A
11Jun2010-30	5997219	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-31	5997219MS	1,1-Dimethylhydrazine	Unknown	42189	N/A	Method Settings	N/A	5.594	ng/mL	N/A
11Jun2010-32	5997219MSD	1,1-Dimethylhydrazine	Unknown	29891	N/A	Method Settings	N/A	4.676	ng/mL	N/A
11Jun2010-33	5997220	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-34	5997221	1,1-Dimethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-35	Cal5asQC3a	1,1-Dimethylhydrazine	QC	1545612	N/A	Method Settings	12.500	11.782	ng/mL	-5.74

There is no signature data to report.

Lancaster Laboratories
Quant Summary Report (ISTD)

Workbook Name: TQU01408-11Jun2010-1
Current Workbook Path: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Instrument No. TQU01408
Analyst rs0120

File Name	Sample ID	Component Name	Sample Type	Response	ISTD Response	Integration Type	Specified Conc	Calc Amt	Units	% Diff
11Jun2010-1	Conditioner1	Hydrazine	Unknown	37536	N/A	Method Settings	N/A	0.056	ng/mL	N/A
11Jun2010-2	Conditioner2	Hydrazine	Unknown	5795	N/A	Method Settings	N/A	0.017	ng/mL	N/A
11Jun2010-3	MDL	Hydrazine	Unknown	58262	N/A	Method Settings	N/A	0.081	ng/mL	N/A
11Jun2010-4	Cal1	Hydrazine	Standard	85921	N/A	Method Settings	0.100	0.115	ng/mL	15.16
11Jun2010-5	Cal2	Hydrazine	Standard	157186	N/A	Method Settings	0.200	0.203	ng/mL	1.25
11Jun2010-6	Cal3	Hydrazine	Standard	359642	N/A	Method Settings	0.500	0.451	ng/mL	-9.87
11Jun2010-7	Cal4	Hydrazine	Standard	781194	N/A	Method Settings	1.000	0.967	ng/mL	-3.26
11Jun2010-8	Cal5	Hydrazine	Standard	1985963	N/A	Method Settings	2.500	2.444	ng/mL	-2.24
11Jun2010-9	Cal6	Hydrazine	Standard	3909969	N/A	Method Settings	5.000	4.802	ng/mL	-3.95
11Jun2010-10	Cal7	Hydrazine	Standard	8373147	N/A	Method Settings	10.000	10.273	ng/mL	2.73
11Jun2010-11	Cal8	Hydrazine	Standard	20425037	N/A	Method Settings	25.000	25.045	ng/mL	0.18
11Jun2010-12	Conditioner3	Hydrazine	Unknown	25104	N/A	Method Settings	N/A	0.041	ng/mL	N/A
11Jun2010-13	Cal3asQC1a	Hydrazine	QC	379746	N/A	Method Settings	0.500	0.475	ng/mL	-4.94
11Jun2010-14	Conditioner4	Hydrazine	Unknown	4501	N/A	Method Settings	N/A	0.015	ng/mL	N/A
11Jun2010-15	Blank	Hydrazine	Unknown	35933	N/A	Method Settings	N/A	0.054	ng/mL	N/A
11Jun2010-16	LCS	Hydrazine	Unknown	10727097	N/A	Method Settings	N/A	13.158	ng/mL	N/A
11Jun2010-17	LCSD	Hydrazine	Unknown	10861287	N/A	Method Settings	N/A	13.323	ng/mL	N/A
11Jun2010-18	5997217	Hydrazine	Unknown	53698	N/A	Method Settings	N/A	0.076	ng/mL	N/A
11Jun2010-19	5997217MS	Hydrazine	Unknown	10425212	N/A	Method Settings	N/A	12.788	ng/mL	N/A
11Jun2010-20	5997217MSD	Hydrazine	Unknown	9947208	N/A	Method Settings	N/A	12.202	ng/mL	N/A
11Jun2010-21	5997218	Hydrazine	Unknown	54157	N/A	Method Settings	N/A	0.076	ng/mL	N/A
11Jun2010-22	6000328	Hydrazine	Unknown	38610	N/A	Method Settings	N/A	0.057	ng/mL	N/A
11Jun2010-23	6000329	Hydrazine	Unknown	32542	N/A	Method Settings	N/A	0.050	ng/mL	N/A
11Jun2010-24	Cal4asQC2a	Hydrazine	QC	753272	N/A	Method Settings	1.000	0.933	ng/mL	-6.69
11Jun2010-25	Conditioner5	Hydrazine	Unknown	2776	N/A	Method Settings	N/A	0.013	ng/mL	N/A
11Jun2010-26	6000330	Hydrazine	Unknown	25210	N/A	Method Settings	N/A	0.407	ng/mL	N/A
11Jun2010-27	Blank	Hydrazine	Unknown	28064	N/A	Method Settings	N/A	0.442	ng/mL	N/A
11Jun2010-28	LCS	Hydrazine	Unknown	9217358	N/A	Method Settings	N/A	113.077	ng/mL	N/A
11Jun2010-29	LCSD	Hydrazine	Unknown	8858246	N/A	Method Settings	N/A	108.675	ng/mL	N/A
11Jun2010-30	5997219	Hydrazine	Unknown	52222	N/A	Method Settings	N/A	0.739	ng/mL	N/A
11Jun2010-31	5997219MS	Hydrazine	Unknown	210868	N/A	Method Settings	N/A	2.683	ng/mL	N/A
11Jun2010-32	5997219MSD	Hydrazine	Unknown	213545	N/A	Method Settings	N/A	2.716	ng/mL	N/A
11Jun2010-33	5997220	Hydrazine	Unknown	31600	N/A	Method Settings	N/A	0.486	ng/mL	N/A

There is no signature data to report.

Lancaster Laboratories
Quant Summary Report (ISTD)

File Name	Sample ID	Component Name	Sample Type	Response	ISTD Response	Integration Type	Specified Conc	Calc Amt	Units	% Diff
11Jun2010-34	5997221	Hydrazine	Unknown	34809	N/A	Method Settings	N/A	0.525	ng/mL	N/A
11Jun2010-35	Cal5asQC3a	Hydrazine	QC	1877235	N/A	Method Settings	2.500	2.311	ng/mL	-7.57

There is no signature data to report.

Lancaster Laboratories
Quant Summary Report (ISTD)

Workbook Name: TQU01408-11Jun2010-1
Current Workbook Path: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Instrument No. TQU01408
Analyst rs0120

File Name	Sample ID	Component Name	Sample Type	Response	ISTD Response	Integration Type	Specified Conc	Calc Amt	Units	% Diff
11Jun2010-1	Conditioner1	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-2	Conditioner2	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-3	MDL	Monomethylhydrazine	Unknown	34529	N/A	Manual Integration	N/A	0.331	ng/mL	N/A
11Jun2010-4	Cal1	Monomethylhydrazine	Standard	66090	N/A	Manual Integration	0.500	0.570	ng/mL	13.99
11Jun2010-5	Cal2	Monomethylhydrazine	Standard	123336	N/A	Manual Integration	1.000	1.003	ng/mL	0.32
11Jun2010-6	Cal3	Monomethylhydrazine	Standard	284048	N/A	Method Settings	2.500	2.219	ng/mL	-11.24
11Jun2010-7	Cal4	Monomethylhydrazine	Standard	618562	N/A	Method Settings	5.000	4.746	ng/mL	-5.07
11Jun2010-8	Cal5	Monomethylhydrazine	Standard	1641308	N/A	Method Settings	12.500	12.447	ng/mL	-0.42
11Jun2010-9	Cal6	Monomethylhydrazine	Standard	3406612	N/A	Method Settings	25.000	25.648	ng/mL	2.59
11Jun2010-10	Cal7	Monomethylhydrazine	Standard	6696299	N/A	Method Settings	50.000	49.949	ng/mL	-0.10
11Jun2010-11	Cal8	Monomethylhydrazine	Standard	17172246	N/A	Method Settings	125.000	124.917	ng/mL	-0.07
11Jun2010-12	Conditioner3	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-13	Cal3asQC1a	Monomethylhydrazine	QC	290337	N/A	Method Settings	2.500	2.267	ng/mL	-9.34
11Jun2010-14	Conditioner4	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-15	Blank	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-16	LCS	Monomethylhydrazine	Unknown	9098213	N/A	Method Settings	N/A	67.454	ng/mL	N/A

There is no signature data to report.

Lancaster Laboratories
Quant Summary Report (ISTD)

File Name	Sample ID	Component Name	Sample Type	Response	ISTD Response	Integration Type	Specified Conc	Calc Amt	Units	% Diff
11Jun2010-17	LCSD	Monomethylhydrazine	Unknown	8788159	N/A	Method Settings	N/A	65.205	ng/mL	N/A
11Jun2010-18	5997217	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-19	5997217MS	Monomethylhydrazine	Unknown	8883422	N/A	Method Settings	N/A	65.896	ng/mL	N/A
11Jun2010-20	5997217MSD	Monomethylhydrazine	Unknown	8944749	N/A	Method Settings	N/A	66.341	ng/mL	N/A
11Jun2010-21	5997218	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-22	6000328	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-23	6000329	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-24	Cal4asQC2a	Monomethylhydrazine	QC	639559	N/A	Method Settings	5.000	4.905	ng/mL	-1.90
11Jun2010-25	Conditioner5	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-26	6000330	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-27	Blank	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-28	LCS	Monomethylhydrazine	Unknown	9497625	N/A	Method Settings	N/A	703.456	ng/mL	N/A
11Jun2010-29	LCSD	Monomethylhydrazine	Unknown	9324492	N/A	Method Settings	N/A	690.927	ng/mL	N/A
11Jun2010-30	5997219	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-31	5997219MS	Monomethylhydrazine	Unknown	328699	N/A	Method Settings	N/A	25.566	ng/mL	N/A
11Jun2010-32	5997219MSD	Monomethylhydrazine	Unknown	306341	N/A	Method Settings	N/A	23.875	ng/mL	N/A
11Jun2010-33	5997220	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-34	5997221	Monomethylhydrazine	Unknown	NF	N/A	Method Settings	N/A	NC	ng/mL	N/A
11Jun2010-35	Cal5asQC3a	Monomethylhydrazine	QC	1661810	N/A	Method Settings	12.500	12.601	ng/mL	0.81

There is no signature data to report.

Lancaster Laboratories

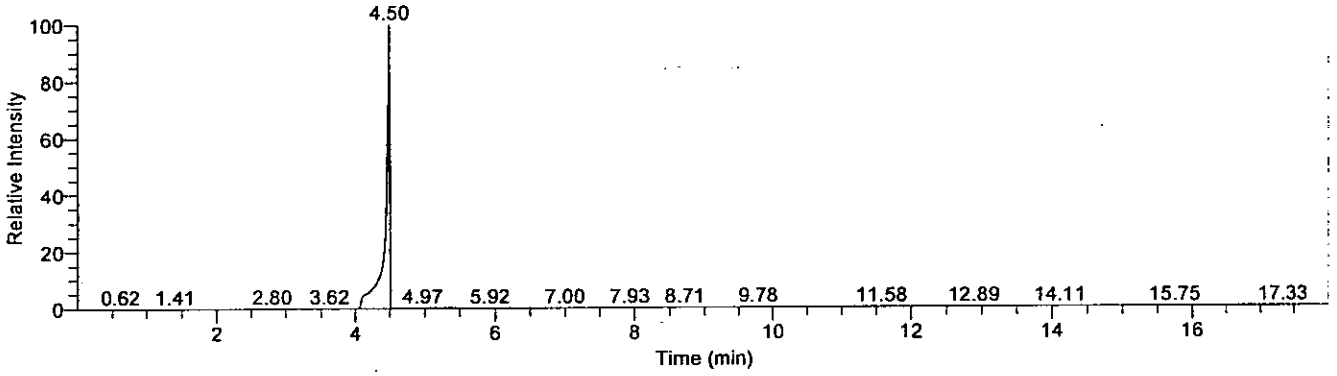
Printed: Saturday, June 12, 2010, 07:47:03

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-30.raw
Sample ID:	5997219
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 9:50:36 PM
Vial:	A:24
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-30 - TIC RT: 0.00 - 18.00 NL: 5.30E6

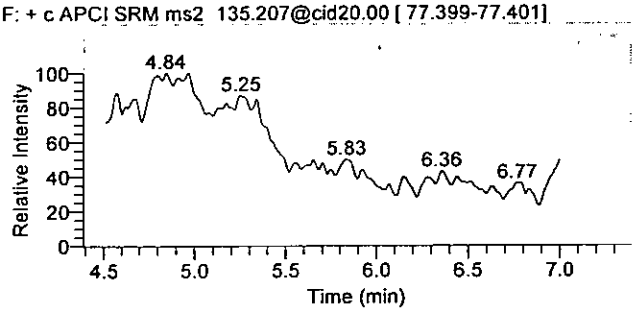


Compound Graphics

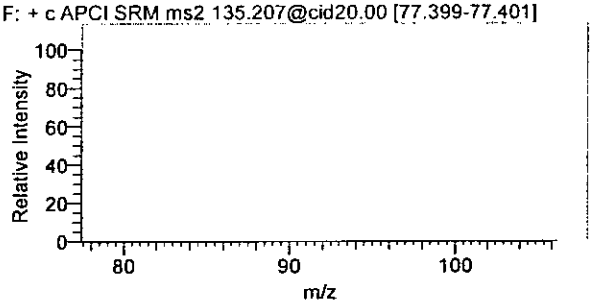
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:24, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-30, Comments: Soil Prep, ID: 5997219

Monomethylhydrazine

11Jun2010-30 - TIC RT: 4.39 - 7.39 NL: 1.06E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

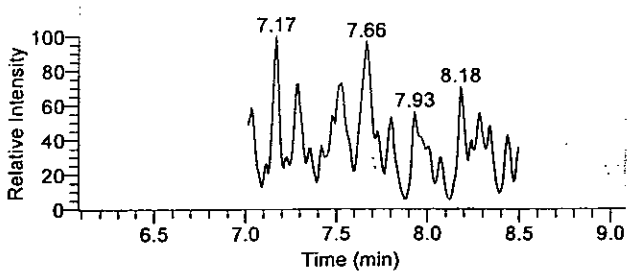


#688 RT: 5.89 NL: 4.26E3
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

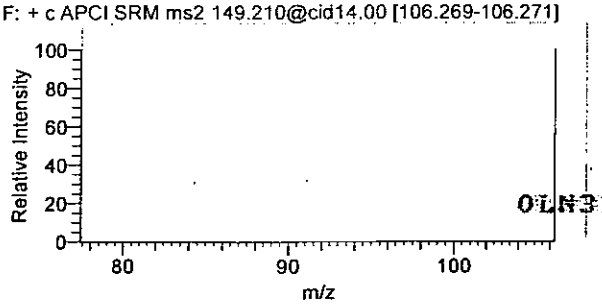


1,1-Dimethylhydrazine

11Jun2010-30 - TIC RT: 6.08 - 9.08 NL: 2.74E2
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#885 RT: 7.58 NL: 9.35E1
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

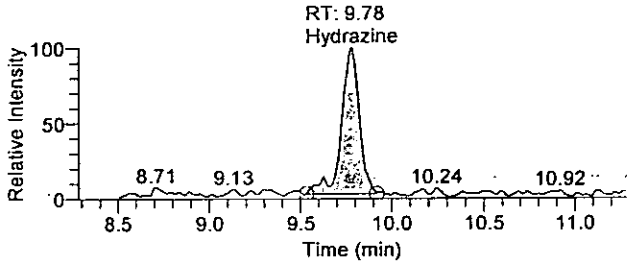


OLN31 8826

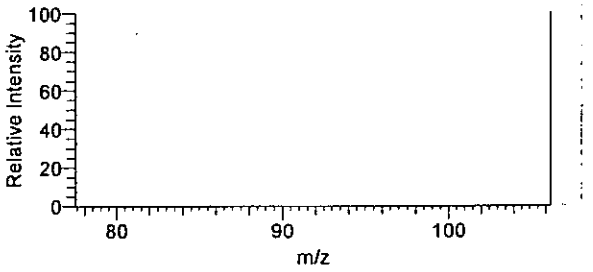
There is no signature data to report.

Hydrazine

11Jun2010-30 - TIC RT: 8.28 - 11.28 NL: 7.78E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 7.78E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
5997219	Method Settings	Hydrazine	9.78	52222	0.739	ng/mL
5997219	Method Settings	1,1-Dimethylhydrazine	N/A	NF	NC	ng/mL
5997219	Method Settings	Monomethylhydrazine	N/A	NF	NC	ng/mL

G/12
6/10/10

OLN31 0227

There is no signature data to report.

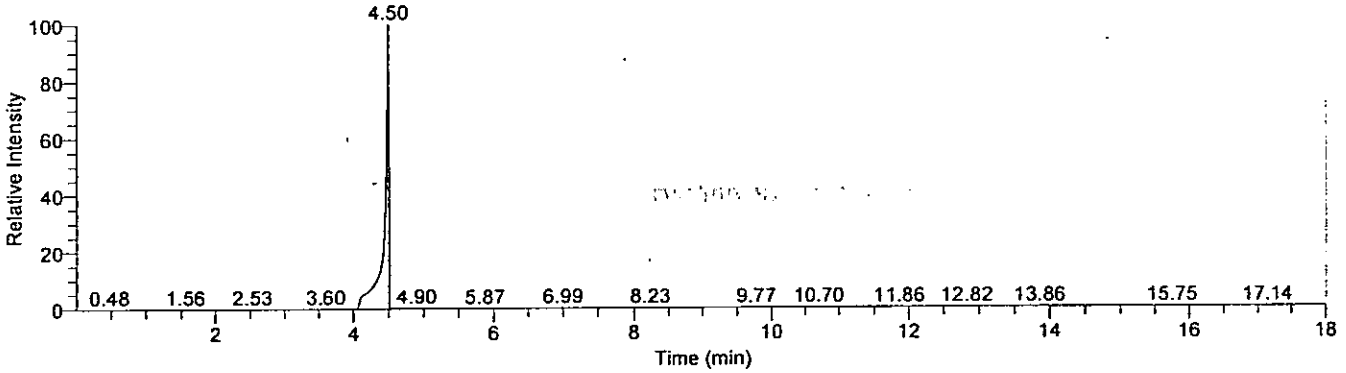
Lancaster Laboratories

Printed: Saturday, June 12, 2010, 07:47:04
Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-33.raw
Sample ID:	5997220
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 10:47:00 PM
Vial:	A:27
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-33 - TIC RT: 0.00 - 18.00 NL: 5.23E6

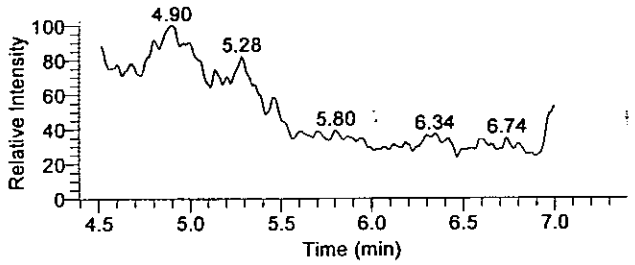


Compound Graphics

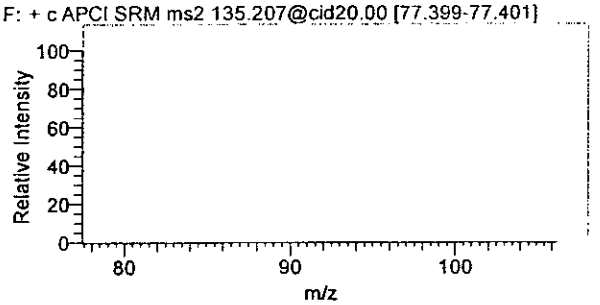
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:27, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-33, Comments: Soil Prep, ID: 5997220

Monomethylhydrazine

11Jun2010-33 - TIC RT: 4.39 - 7.39 NL: 1.14E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

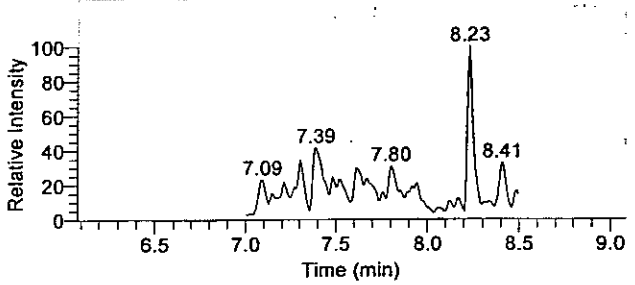


#688 RT: 5.89 NL: 3.95E3
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

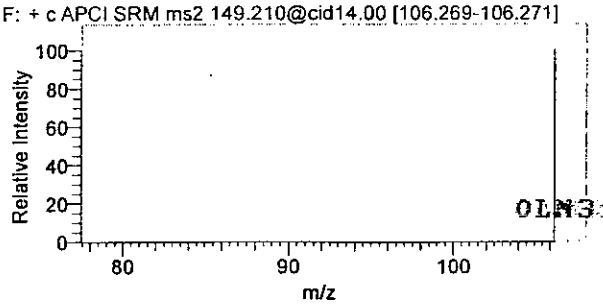


1,1-Dimethylhydrazine

11Jun2010-33 - TIC RT: 6.08 - 9.08 NL: 6.18E2
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#885 RT: 7.58 NL: 5.93E1
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

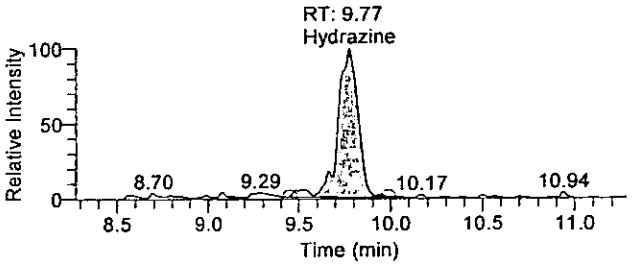


OLM31 8820

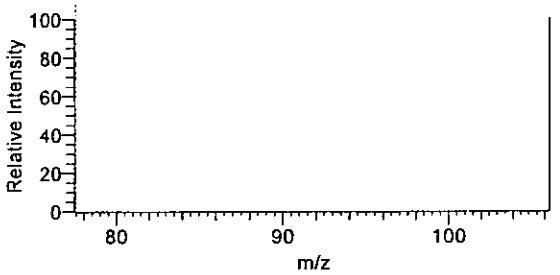
There is no signature data to report.

Hydrazine

11Jun2010-33 - TIC RT: 8.27 - 11.27 NL: 4.21E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1141 RT: 9.77 NL: 4.21E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
5997220	Method Settings	Hydrazine	9.77	31600	0.486	ng/mL
5997220	Method Settings	1,1-Dimethylhydrazine	N/A	NF	NC	ng/mL
5997220	Method Settings	Monomethylhydrazine	N/A	NF	NC	ng/mL

6/19/10

OLH31 0029

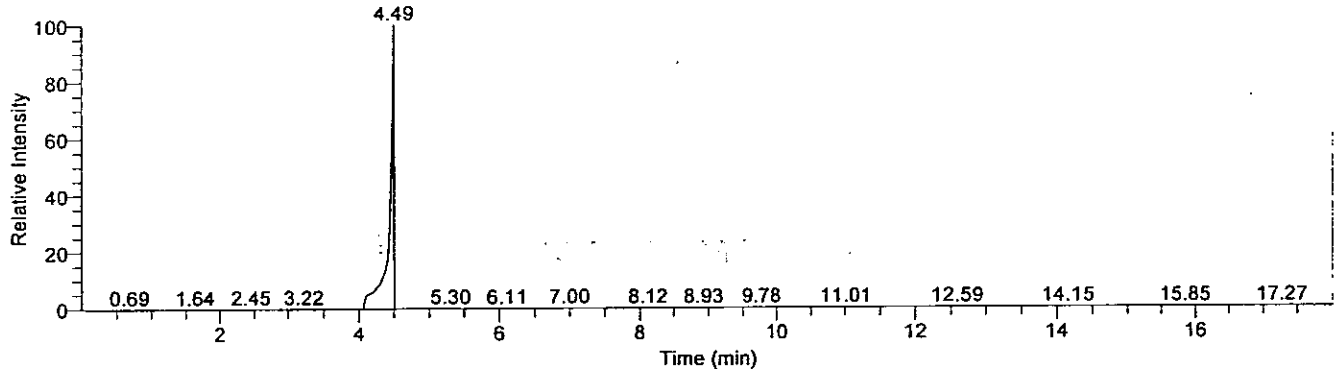
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-34.raw
Sample ID:	5997221
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 11:05:46 PM
Vial:	A:28
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-34 - TIC RT: 0.00 - 17.99 NL: 5.17E6

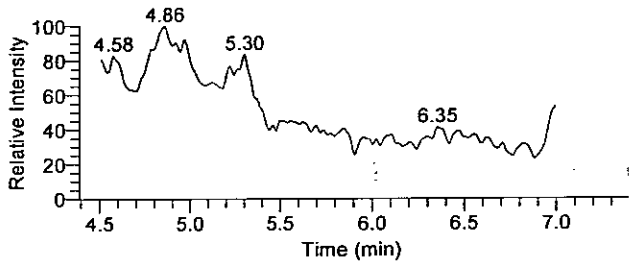


Compound Graphics

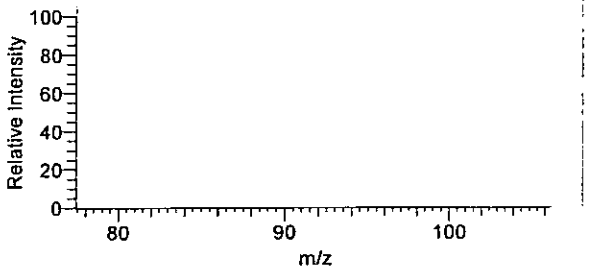
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:28, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-34, Comments: Soil Prep, ID: 5997221

Monomethylhydrazine

11Jun2010-34 - TIC RT: 4.39 - 7.39 NL: 1.15E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

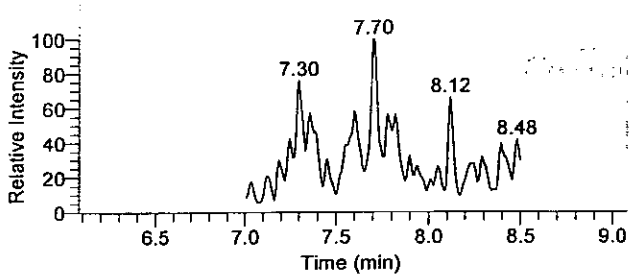


#689 RT: 5.89 NL: 3.28E3
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

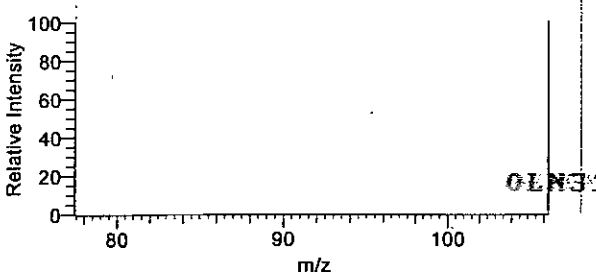


1,1-Dimethylhydrazine

11Jun2010-34 - TIC RT: 6.08 - 9.08 NL: 2.67E2
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#886 RT: 7.58 NL: 1.19E2
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



OLN31 0030

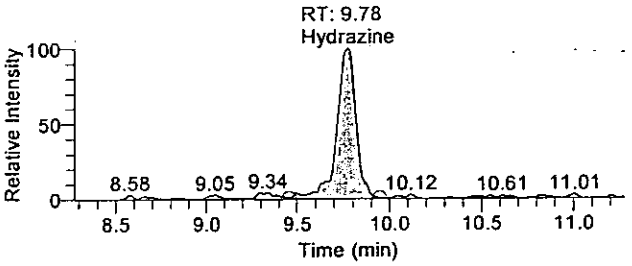
There is no signature data to report.

Lancaster Laboratories

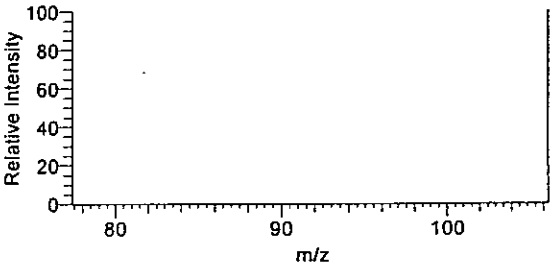
Quantify Sample Report

Hydrazine

11Jun2010-34 - TIC RT: 8.28 - 11.28 NL: 4.93E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 4.93E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
5997221	Method Settings	Hydrazine	9.78	34809	0.525	ng/mL
5997221	Method Settings	1,1-Dimethylhydrazine	N/A	NF	NC	ng/mL
5997221	Method Settings	Monomethylhydrazine	N/A	NF	NC	ng/mL

RMS 6/10/10
6/9/10

OLN31 8831

There is no signature data to report.

Standards Data

0LN31 8832

Lancaster Laboratories

Workbook Name: TQU01408-11Jun2010-1
Instrument No. TQU01408
Analyst rs0120

Sequence Table

Sample ID	File Name	Position	Path	Sample Type	Level	Inj Vol	Batch No.	Dil Factor
Conditioner1	11Jun2010-1	A:1	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	N/A	1.000
Conditioner2	11Jun2010-2	A:1	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	N/A	1.000
MDL	11Jun2010-3	A:2	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	N/A	1.000
Cal1	11Jun2010-4	A:3	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	1	20.00	N/A	1.000
Cal2	11Jun2010-5	A:4	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	2	20.00	N/A	1.000
Cal3	11Jun2010-6	A:5	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	3	20.00	N/A	1.000
Cal4	11Jun2010-7	A:6	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	4	20.00	N/A	1.000
Cal5	11Jun2010-8	A:7	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	5	20.00	N/A	1.000
Cal6	11Jun2010-9	A:8	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	6	20.00	N/A	1.000
Cal7	11Jun2010-10	A:9	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	7	20.00	N/A	1.000
Cal8	11Jun2010-11	A:10	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Standard	8	20.00	N/A	1.000
Conditioner3	11Jun2010-12	A:1	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	N/A	1.000
Cal3asQC1a	11Jun2010-13	A:5	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	QC	CCV1	20.00	N/A	1.000
Conditioner4	11Jun2010-14	A:1	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	N/A	1.000
Blank	11Jun2010-15	A:11	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
LCS	11Jun2010-16	A:12	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000

There is no signature data to report.

Lancaster Laboratories

Sample ID	File Name	Position	Path	Sample Type	Level	Inj Vol	Batch No.	Dil Factor
LCSD	11Jun2010-17	A:13	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
5997217	11Jun2010-18	A:14	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
5997217MS	11Jun2010-19	A:15	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
5997217MSD	11Jun2010-20	A:16	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
5997218	11Jun2010-21	A:17	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
6000328	11Jun2010-22	A:18	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
6000329	11Jun2010-23	A:19	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
Cal4asQC2a	11Jun2010-24	A:6	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	QC	CCV2	20.00	N/A	1.000
Conditioner5	11Jun2010-25	A:1	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	N/A	1.000
6000330	11Jun2010-26	A:20	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610012A	1.000
Blank	11Jun2010-27	A:21	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
LCS	11Jun2010-28	A:22	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
LCSD	11Jun2010-29	A:23	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
5997219	11Jun2010-30	A:24	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
5997219MS	11Jun2010-31	A:25	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
5997219MSD	11Jun2010-32	A:26	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
5997220	11Jun2010-33	A:27	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
5997221	11Jun2010-34	A:28	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	Unknown	N/A	20.00	101610013A	1.000
Cal5asQC3a	11Jun2010-35	A:7	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles	QC	CCV3	20.00	N/A	1.000

There is no signature data to report.

Lancaster Laboratories

Quant Calibration, Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Report

Workbook Name:	TQU01408-11Jun2010-1
Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Instrument No.	TQU01408
Analyst	rs0120

Identification

Component Name:	1,1-Dimethylhydrazine
Detector Type:	MS
Filter:	+ c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]
1st Trace Type:	TIC
Operator:	None
2nd Trace Type:	N/A
Mass Range 1 (m/z):	N/A
Mass Range 2 (m/z):	N/A
Base Peak(BP):	N/A
Mass Range(MR):	N/A

Retention Time

Expected RT (min):	7.58000
Window (sec):	20.00000
View Width (min):	3.00000
RT Reference:	No
Adjust Expected RT:	No
Adjust Using:	N/A

Detection Options

Peak Detection Algorithm:	Genesis
Smoothing Points:	1

Genesis Peak Integration

S/N Threshold:	1.00
Valley Detection:	Disabled
Expected Peak Width (sec):	N/A
Genesis Constrain Peak Width:	No
Genesis Peak Height (%):	N/A
Genesis Tailing Factor:	N/A

Genesis Peak Detection

Genesis Identify By:	Nearest RT
Genesis Minimum Peak Height (S/N):	3.00
Genesis Ion Ratio Confirmation:	No
Genesis Window %:	N/A
Genesis Qualifier Ion Coelution (min):	N/A

Genesis Advanced Detection Options

Baseline (Global)

Baseline Noise Tolerance (%):	10.0
Minimum Number of Scans in Baseline:	16
Baseline Noise Rejection Factor:	2.0

Calibration

Component Type:	Target Compound

Internal Standard

ISTD Amount:	N/A
ISTD Units:	N/A

Concentration of Calibration Standards

Level	Amount
1	0.500 ng/mL
2	1.000 ng/mL
3	2.500 ng/mL
4	5.000 ng/mL
5	12.500 ng/mL
6	25.000 ng/mL
7	50.000 ng/mL
8	125.000 ng/mL

Concentration of ICV/CCV Standards

Level	Amount
CCV1	2.500 ng/mL
CCV2	5.000 ng/mL
CCV3	12.500 ng/mL

OLN31 0035

There is no signature data to report.

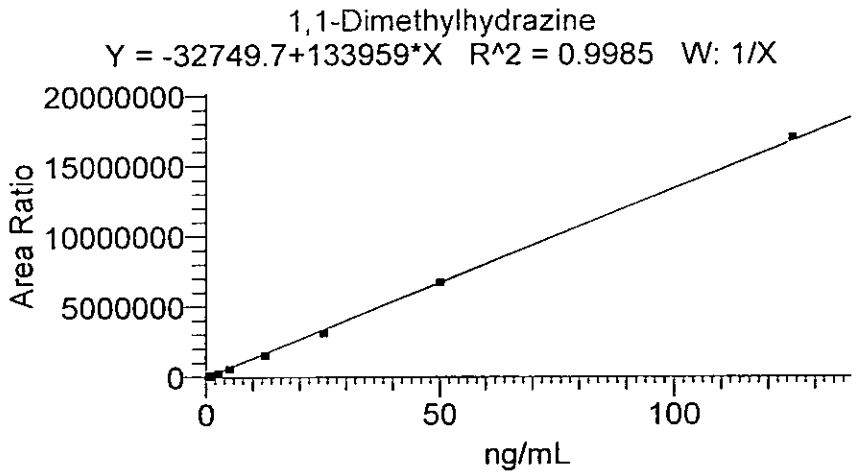
Lancaster Laboratories

Target Compounds

ISTD:
Weighting: 1/X
Origin: IgnoreOrigin
Response: Area
Calibration Curve: Linear
Target Units: ng/mL
Number of Cal. Levels: 8
Number of QC Levels: 3

Options

Calibration By: External Standard



Sample ID	Sample Type	Level	Exclude	Integration Type	Response	ISTD Response	Specified Conc	Units	Calc Amt	% Diff
Cal1	Standard	1	N/A	Method Settings	51165	N/A	0.500	ng/mL	0.626	25.28
Cal2	Standard	2	N/A	Method Settings	109296	N/A	1.000	ng/mL	1.060	6.04
Cal3	Standard	3	N/A	Method Settings	264642	N/A	2.500	ng/mL	2.220	-11.20
Cal4	Standard	4	N/A	Method Settings	565783	N/A	5.000	ng/mL	4.468	-10.64
Cal5	Standard	5	N/A	Method Settings	1530714	N/A	12.500	ng/mL	11.671	-6.63
Cal6	Standard	6	N/A	Method Settings	3120291	N/A	25.000	ng/mL	23.537	-5.85
Cal7	Standard	7	N/A	Method Settings	6739290	N/A	50.000	ng/mL	50.553	1.11
Cal8	Standard	8	N/A	Method Settings	17028685	N/A	125.000	ng/mL	127.363	1.89
Cal3asQC1a	QC	CCV1	N/A	Method Settings	273027	N/A	2.500	ng/mL	2.283	-8.70
Cal4asQC2a	QC	CCV2	N/A	Method Settings	579414	N/A	5.000	ng/mL	4.570	-8.60
Cal5asQC3a	QC	CCV3	N/A	Method Settings	1545612	N/A	12.500	ng/mL	11.782	-5.74

OLN31 8836

There is no signature data to report.

Lancaster Laboratories

Quant Calibration, Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Report

Workbook Name:	TQU01408-11Jun2010-1
Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Instrument No.	TQU01408
Analyst	rs0120

Identification

Component Name:	Hydrazine
Detector Type:	MS
Filter:	+ c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]
1st Trace Type:	TIC
Operator:	None
2nd Trace Type:	N/A
Mass Range 1 (m/z):	N/A
Mass Range 2 (m/z):	N/A
Base Peak(BP):	N/A
Mass Range(MR):	N/A

Retention Time

Expected RT (min):	9.79000
Window (sec):	20.00000
View Width (min):	3.00000
RT Reference:	No
Adjust Expected RT:	No
Adjust Using:	N/A

Detection Options

Peak Detection Algorithm:	Genesis
Smoothing Points:	1

Genesis Peak Integration

S/N Threshold:	1.00
Valley Detection:	Disabled
Expected Peak Width (sec):	N/A
Genesis Constrain Peak Width:	No
Genesis Peak Height (%):	N/A
Genesis Tailing Factor:	N/A

Genesis Peak Detection

Genesis Identify By:	Nearest RT
Genesis Minimum Peak Height (S/N):	3.00
Genesis Ion Ratio Confirmation:	No
Genesis Window %:	N/A
Genesis Qualifier Ion Coelution (min):	N/A

Genesis Advanced Detection Options

Baseline (Global)

Baseline Noise Tolerance (%):	10.0
Minimum Number of Scans in Baseline:	16
Baseline Noise Rejection Factor:	2.0

Calibration

Component Type:	Target Compound

Internal Standard

ISTD Amount:	N/A
ISTD Units:	N/A

Concentration of Calibration Standards

Level	Amount
1	0.100 ng/mL
2	0.200 ng/mL
3	0.500 ng/mL
4	1.000 ng/mL
5	2.500 ng/mL
6	5.000 ng/mL
7	10.000 ng/mL
8	25.000 ng/mL

Concentration of ICV/CCV Standards

Level	Amount
CCV1	0.500 ng/mL
CCV2	1.000 ng/mL
CCV3	2.500 ng/mL

OLN31 8037

There is no signature data to report.

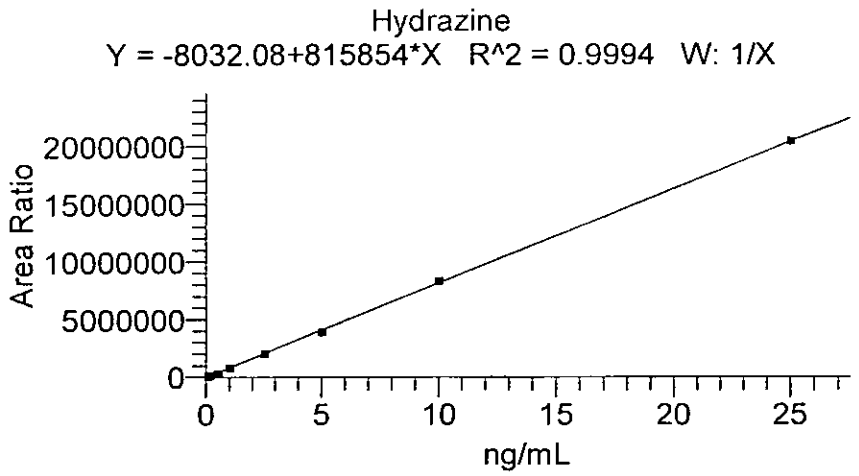
Lancaster Laboratories

Target Compounds

ISTD:
Weighting: 1/X
Origin: IgnoreOrigin
Response: Area
Calibration Curve: Linear
Target Units: ng/mL
Number of Cal. Levels: 8
Number of QC Levels: 3

Options

Calibration By: External Standard



Sample ID	Sample Type	Level	Exclude	Integration Type	Response	ISTD Response	Specified Conc	Units	Calc Amt	% Diff
Cal1	Standard	1	N/A	Method Settings	85921	N/A	0.100	ng/mL	0.115	15.16
Cal2	Standard	2	N/A	Method Settings	157186	N/A	0.200	ng/mL	0.203	1.25
Cal3	Standard	3	N/A	Method Settings	359642	N/A	0.500	ng/mL	0.451	-9.87
Cal4	Standard	4	N/A	Method Settings	781194	N/A	1.000	ng/mL	0.967	-3.26
Cal5	Standard	5	N/A	Method Settings	1985963	N/A	2.500	ng/mL	2.444	-2.24
Cal6	Standard	6	N/A	Method Settings	3909969	N/A	5.000	ng/mL	4.802	-3.95
Cal7	Standard	7	N/A	Method Settings	8373147	N/A	10.000	ng/mL	10.273	2.73
Cal8	Standard	8	N/A	Method Settings	20425037	N/A	25.000	ng/mL	25.045	0.18
Cal3asQC1a	QC	CCV1	N/A	Method Settings	379746	N/A	0.500	ng/mL	0.475	-4.94
Cal4asQC2a	QC	CCV2	N/A	Method Settings	753272	N/A	1.000	ng/mL	0.933	-6.69
Cal5asQC3a	QC	CCV3	N/A	Method Settings	1877235	N/A	2.500	ng/mL	2.311	-7.57

01#31 #038

There is no signature data to report.

Lancaster Laboratories

Quant Calibration, Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) Report

Workbook Name:	TQU01408-11Jun2010-1
Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Instrument No.	TQU01408
Analyst	rs0120

Identification

Component Name:	Monomethylhydrazine
Detector Type:	MS
Filter:	+ c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]
1st Trace Type:	TIC
Operator:	None
2nd Trace Type:	N/A
Mass Range 1 (m/z):	N/A
Mass Range 2 (m/z):	N/A
Base Peak(BP):	N/A
Mass Range(MR):	N/A

Retention Time

Expected RT (min):	5.89000
Window (sec):	20.00000
View Width (min):	3.00000
RT Reference:	No
Adjust Expected RT:	No
Adjust Using:	N/A

Detection Options

Peak Detection Algorithm:	Genesis
Smoothing Points:	1

Genesis Peak Integration

S/N Threshold:	1.00
Valley Detection:	Disabled
Expected Peak Width (sec):	N/A
Genesis Constrain Peak Width:	No
Genesis Peak Height (%):	N/A
Genesis Tailing Factor:	N/A

Genesis Peak Detection

Genesis Identify By:	Nearest RT
Genesis Minimum Peak Height (S/N):	3.00
Genesis Ion Ratio Confirmation:	No
Genesis Window %:	N/A
Genesis Qualifier Ion Coelution (min):	N/A

Genesis Advanced Detection Options

Baseline (Global)

Baseline Noise Tolerance (%):	10.0
Minimum Number of Scans in Baseline:	16
Baseline Noise Rejection Factor:	2.0

Calibration

Component Type:	Target Compound

Internal Standard

ISTD Amount:	N/A
ISTD Units:	N/A

Concentration of Calibration Standards

Level	Amount
1	0.500 ng/mL
2	1.000 ng/mL
3	2.500 ng/mL
4	5.000 ng/mL
5	12.500 ng/mL
6	25.000 ng/mL
7	50.000 ng/mL
8	125.000 ng/mL

Concentration of ICV/CCV Standards

Level	Amount
CCV1	2.500 ng/mL
CCV2	5.000 ng/mL
CCV3	12.500 ng/mL

OLN31 0039

There is no signature data to report.

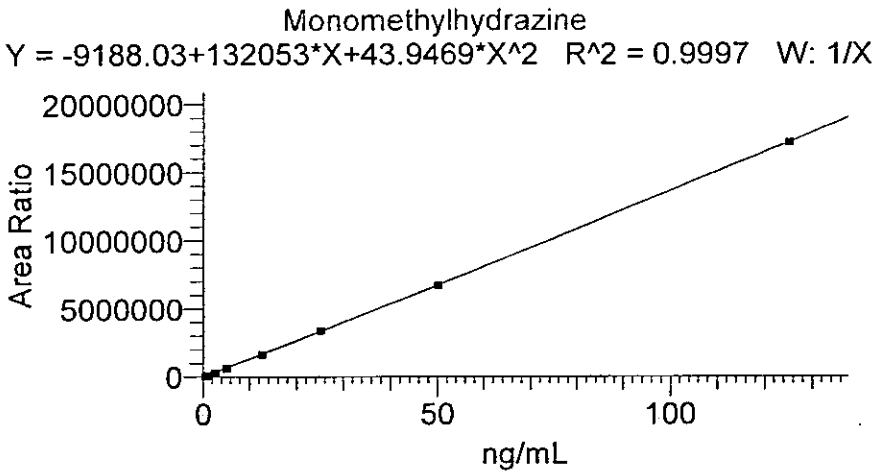
Lancaster Laboratories

Target Compounds

ISTD:
Weighting: 1/X
Origin: IgnoreOrigin
Response: Area
Calibration Curve: Quadratic
Target Units: ng/mL
Number of Cal. Levels: 8
Number of QC Levels: 3

Options

Calibration By: External Standard



Sample ID	Sample Type	Level	Exclude	Integration Type	Response	ISTD Response	Specified Conc	Units	Calc Amt	% Diff
Cal1	Standard	1	N/A	Manual Integration	66090	N/A	0.500	ng/mL	0.570	13.99
Cal2	Standard	2	N/A	Manual Integration	123336	N/A	1.000	ng/mL	1.003	0.32
Cal3	Standard	3	N/A	Method Settings	284048	N/A	2.500	ng/mL	2.219	-11.24
Cal4	Standard	4	N/A	Method Settings	618562	N/A	5.000	ng/mL	4.746	-5.07
Cal5	Standard	5	N/A	Method Settings	1641308	N/A	12.500	ng/mL	12.447	-0.42
Cal6	Standard	6	N/A	Method Settings	3406612	N/A	25.000	ng/mL	25.648	2.59
Cal7	Standard	7	N/A	Method Settings	6696299	N/A	50.000	ng/mL	49.949	-0.10
Cal8	Standard	8	N/A	Method Settings	17172246	N/A	125.000	ng/mL	124.917	-0.07
Cal3asQC1a	QC	CCV1	N/A	Method Settings	290337	N/A	2.500	ng/mL	2.267	-9.34
Cal4asQC2a	QC	CCV2	N/A	Method Settings	639559	N/A	5.000	ng/mL	4.905	-1.90
Cal5asQC3a	QC	CCV3	N/A	Method Settings	1661810	N/A	12.500	ng/mL	12.601	0.81

OLN31 8948

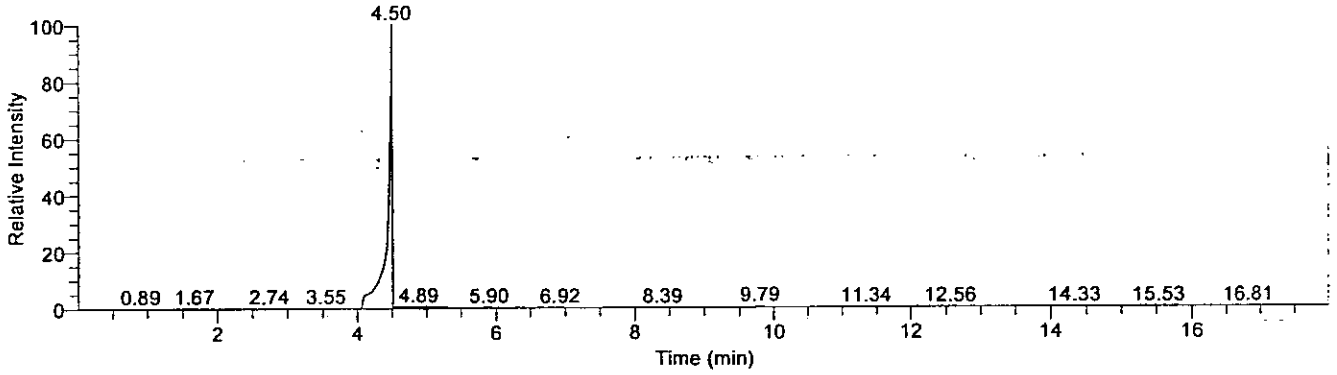
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-3.raw
Sample ID:	MDL
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 1:23:39 PM
Vial:	A:2
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-3 - TIC RT: 0.00 - 17.99 NL: 2.24E6

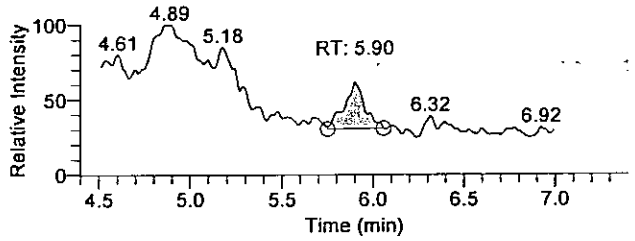


Compound Graphics

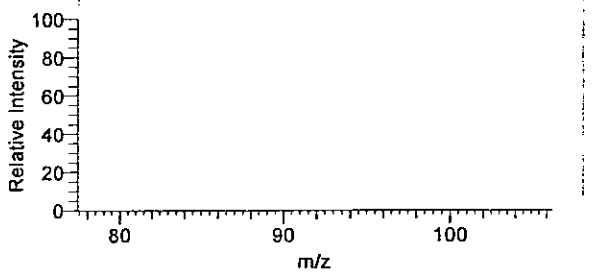
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:2, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-3, Comments: Soil Prep, ID: MDL

Monomethylhydrazine

11Jun2010-3 - TIC RT: 4.40 - 7.40 NL: 1.43E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

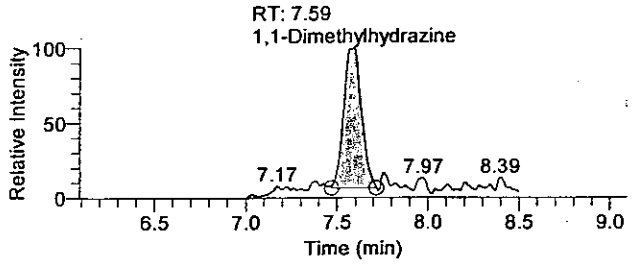


#689 RT: 5.90 NL: 8.80E3
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

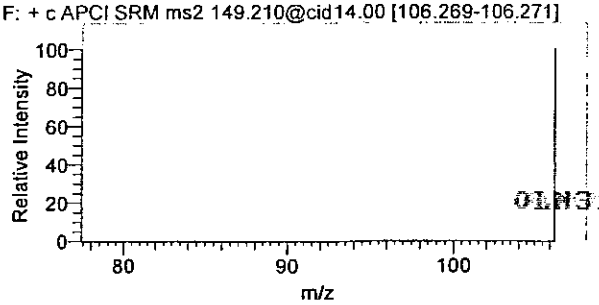


1,1-Dimethylhydrazine

11Jun2010-3 - TIC RT: 6.09 - 9.09 NL: 3.52E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#886 RT: 7.59 NL: 3.52E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

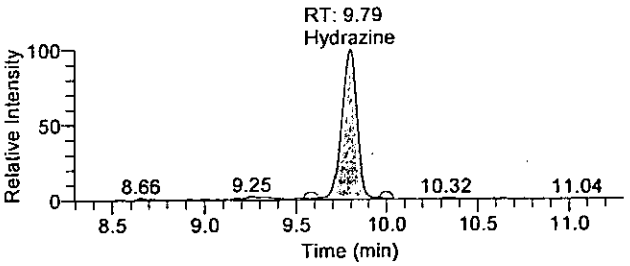


01N31 0041

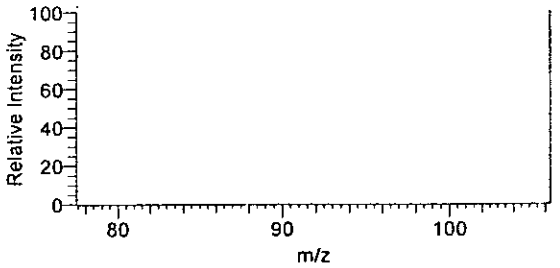
There is no signature data to report.

Hydrazine

11Jun2010-3 - TIC RT: 8.29 - 11.29 NL: 9.82E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1143 RT: 9.79 NL: 9.82E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
MDL	Method Settings	Hydrazine	9.79	58262	0.081	ng/mL
MDL	Method Settings	1,1-Dimethylhydrazine	7.59	22654	0.414	ng/mL
MDL	Manual Integration	Monomethylhydrazine	5.90	34529	0.331	ng/mL

6/18/10

OLN31 0042

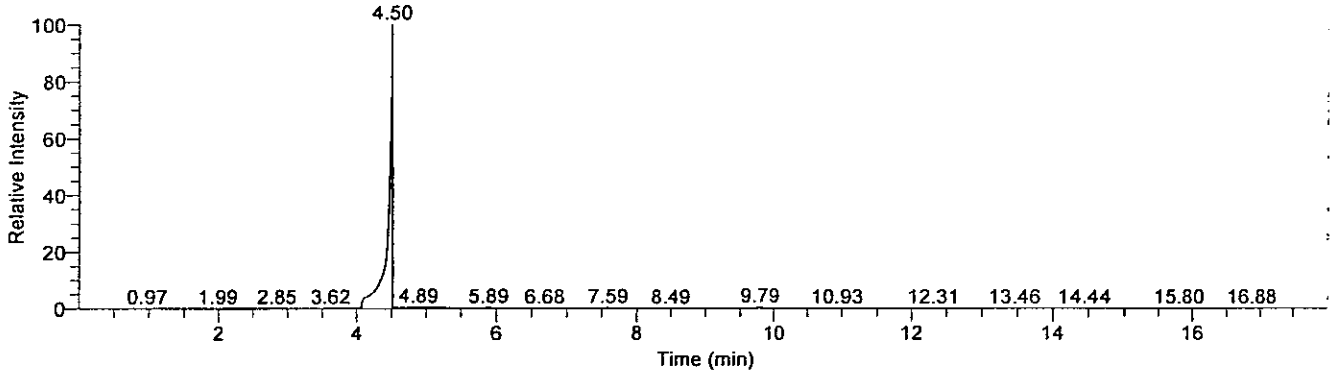
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-4.raw
Sample ID:	Cal1
Sample Type:	Standard
Level:	1
Acquisition Date:	Friday, June 11, 2010 1:42:25 PM
Vial:	A:3
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-4 - TIC RT: 0.00 - 17.99 NL: 2.89E6

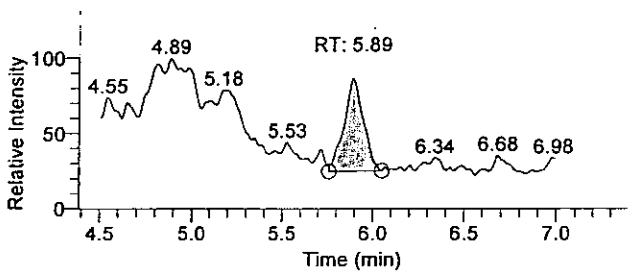


Compound Graphics

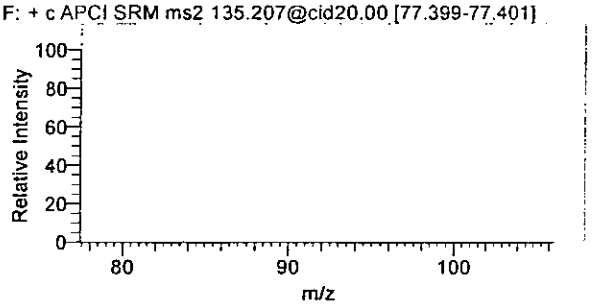
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:3, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-4, Comments: Soil Prep, ID: Cal1

Monomethylhydrazine

11Jun2010-4 - TIC RT: 4.39 - 7.39 NL: 1.44E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

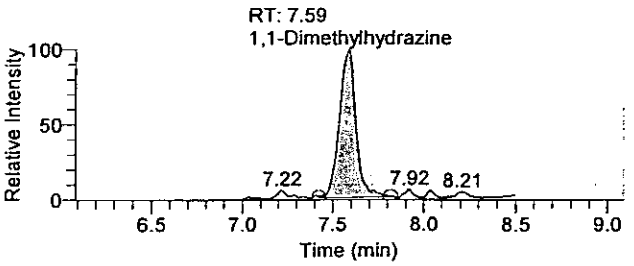


#688 RT: 5.89 NL: 1.24E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

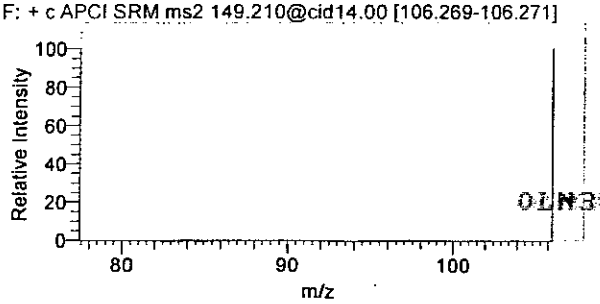


1,1-Dimethylhydrazine

11Jun2010-4 - TIC RT: 6.09 - 9.09 NL: 8.15E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#886 RT: 7.59 NL: 8.15E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

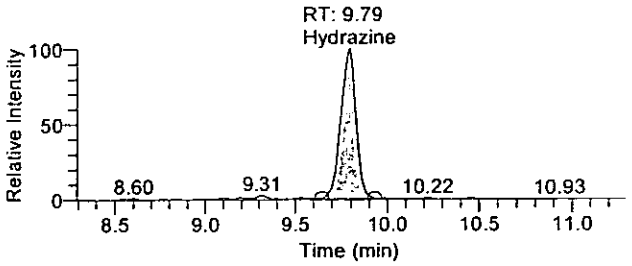


01N31 0843

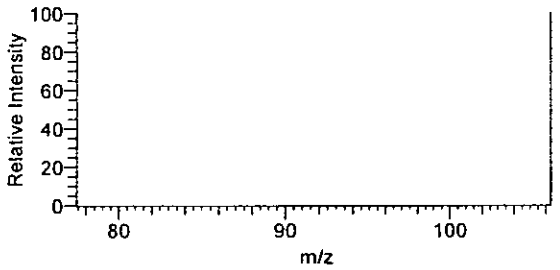
There is no signature data to report.

Hydrazine

11Jun2010-4 - TIC RT: 8.29 - 11.29 NL: 1.54E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1143 RT: 9.79 NL: 1.54E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal1	Method Settings	Hydrazine	9.79	85921	0.115	ng/mL
Cal1	Method Settings	1,1-Dimethylhydrazine	7.59	51165	0.626	ng/mL
Cal1	Manual Integration	Monomethylhydrazine	5.89	66090	0.570	ng/mL

6/14/10 6/14/10 6/14/10

OLN31 8844

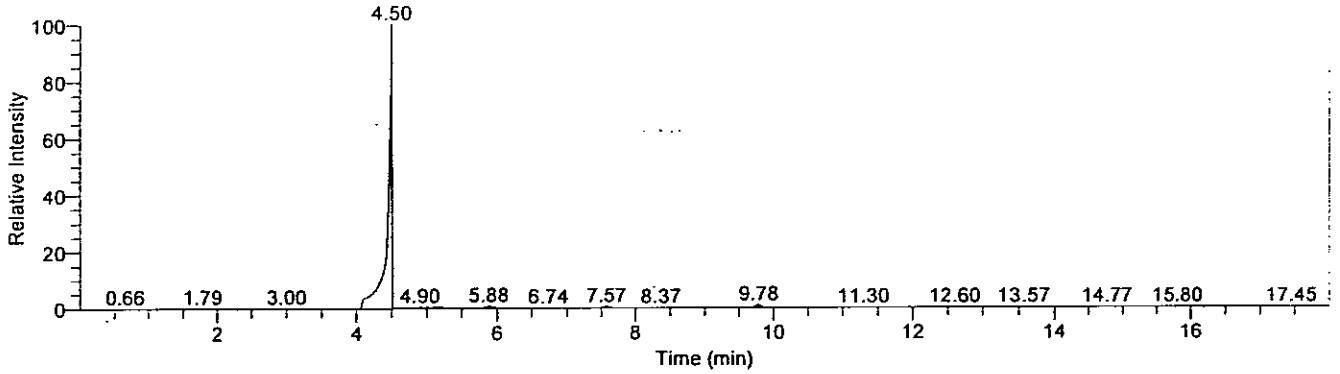
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-5.raw
Sample ID:	Cal2
Sample Type:	Standard
Level:	2
Acquisition Date:	Friday, June 11, 2010 2:01:10 PM
Vial:	A:4
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-5 - TIC RT: 0.00 - 17.99 NL: 3.11E6

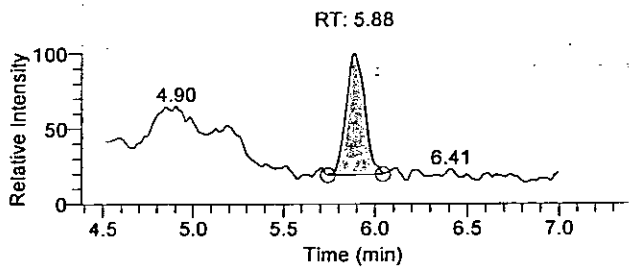


Compound Graphics

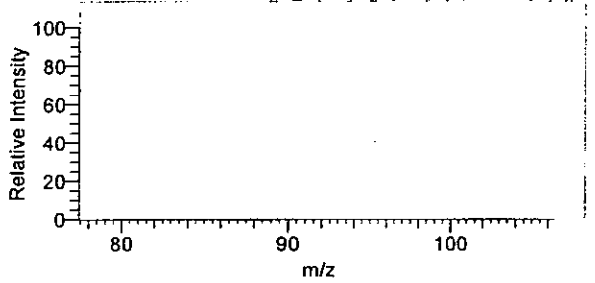
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:4, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-5, Comments: Soil Prep, ID: Cal2

Monomethylhydrazine

11Jun2010-5 - TIC RT: 4.38 - 7.38 NL: 2.15E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

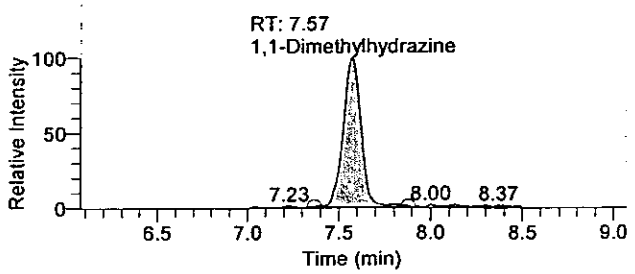


#687 RT: 5.88 NL: 2.15E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

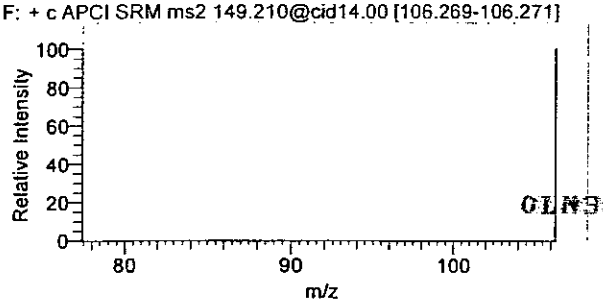


1,1-Dimethylhydrazine

11Jun2010-5 - TIC RT: 6.07 - 9.07 NL: 1.62E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 1.62E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

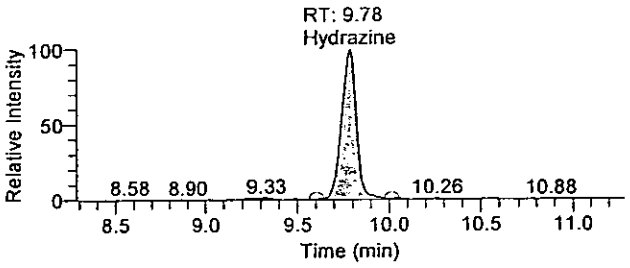


GLN31 8845

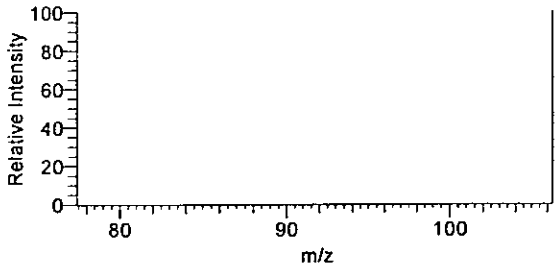
There is no signature data to report.

Hydrazine

11Jun2010-5 - TIC RT: 8.28 - 11.28 NL: 2.81E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 2.81E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal2	Method Settings	Hydrazine	9.78	157186	0.203	ng/mL
Cal2	Method Settings	1,1-Dimethylhydrazine	7.57	109296	1.060	ng/mL
Cal2	Manual Integration	Monomethylhydrazine	5.88	123336	1.003	ng/mL

6/19/10

OLN31 0046

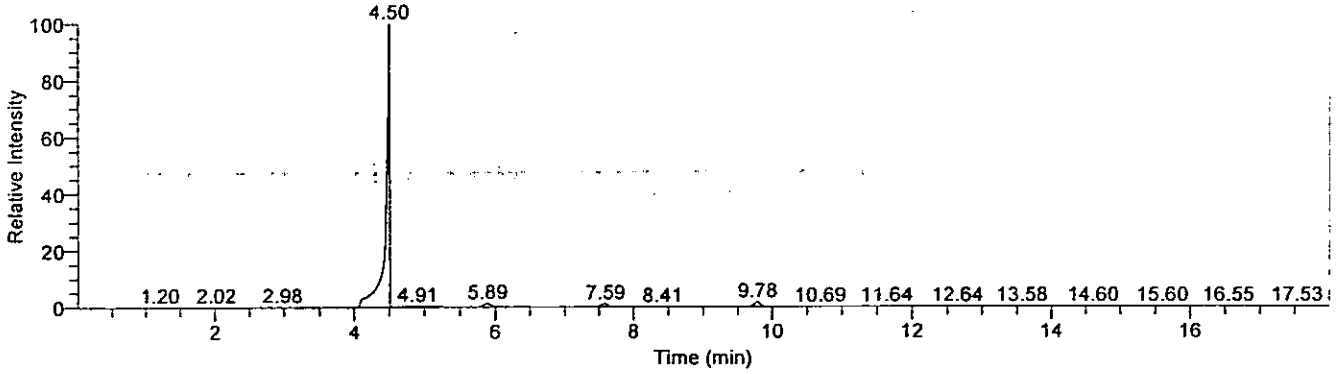
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-6.raw
Sample ID:	Cal3
Sample Type:	Standard
Level:	3
Acquisition Date:	Friday, June 11, 2010 2:19:58 PM
Vial:	A:5
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-6 - TIC RT: 0.00 - 17.99 NL: 3.95E6

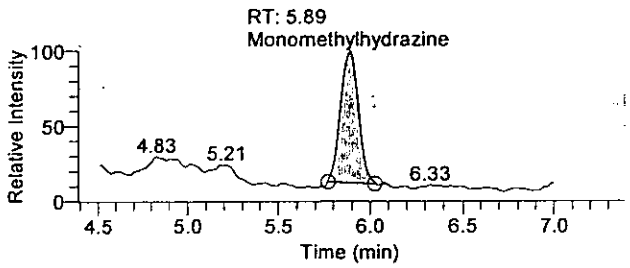


Compound Graphics

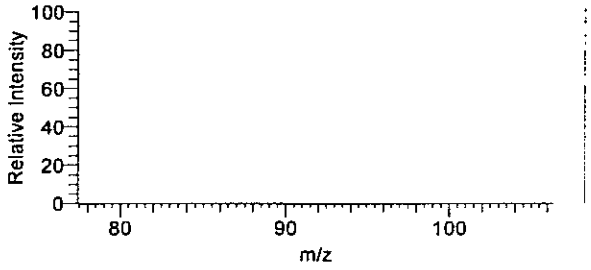
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:5, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-6, Comments: Soil Prep, ID: Cal3

Monomethylhydrazine

11Jun2010-6 - TIC RT: 4.39 - 7.39 NL: 4.73E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

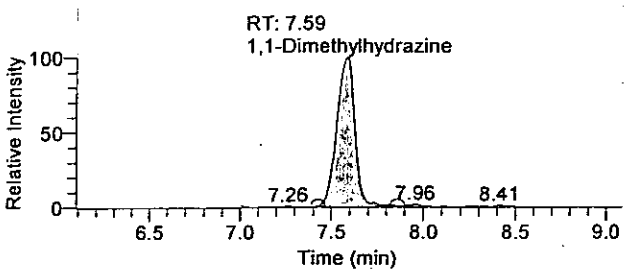


#688 RT: 5.89 NL: 4.73E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

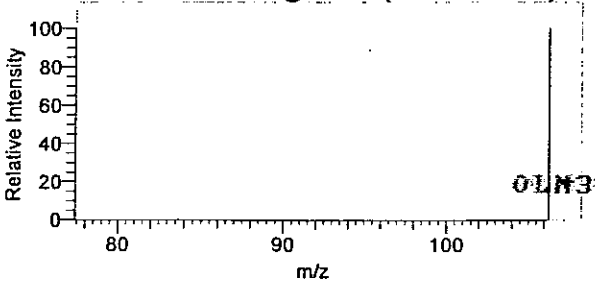


1,1-Dimethylhydrazine

11Jun2010-6 - TIC RT: 6.09 - 9.09 NL: 3.86E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#886 RT: 7.59 NL: 3.86E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

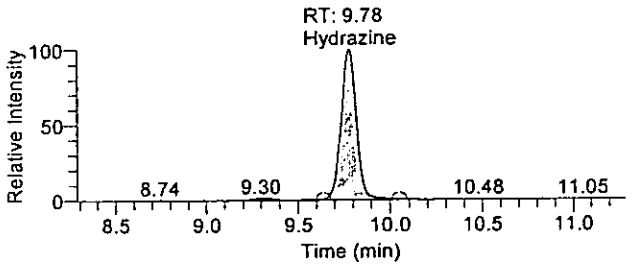


OLM31 0047

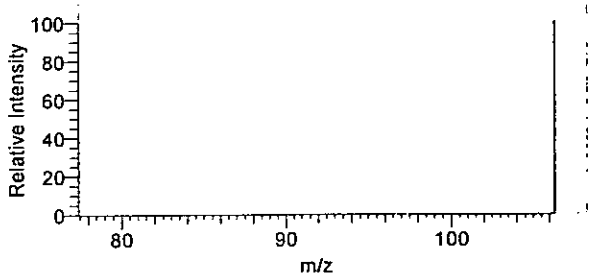
There is no signature data to report.

Hydrazine

11Jun2010-6 - TIC RT: 8.28 - 11.28 NL: 6.15E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 6.15E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal3	Method Settings	Hydrazine	9.78	359642	0.451	ng/mL
Cal3	Method Settings	1,1-Dimethylhydrazine	7.59	264642	2.220	ng/mL
Cal3	Method Settings	Monomethylhydrazine	5.89	284048	2.219	ng/mL

OLN31 0048

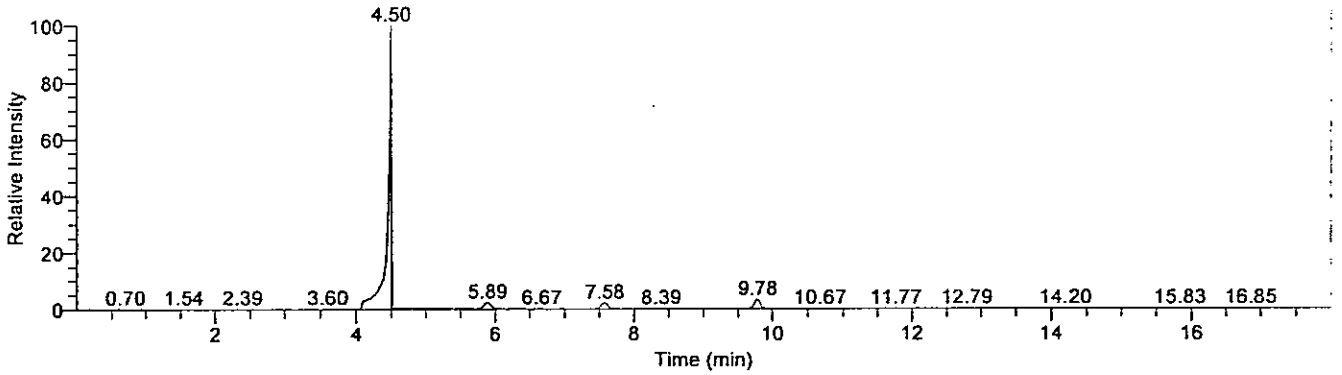
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-7.raw
Sample ID:	Cal4
Sample Type:	Standard
Level:	4
Acquisition Date:	Friday, June 11, 2010 2:38:48 PM
Vial:	A:6
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-7 - TIC RT: 0.00 - 18.00 NL: 3.99E6

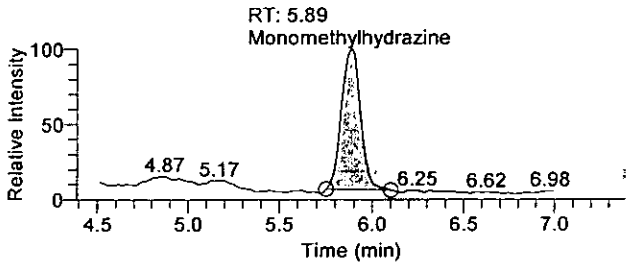


Compound Graphics

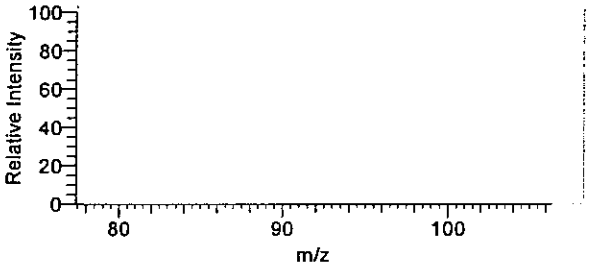
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:6, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-7, Comments: Soil Prep, ID: Cal4

Monomethylhydrazine

11Jun2010-7 - TIC RT: 4.39 - 7.39 NL: 9.17E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

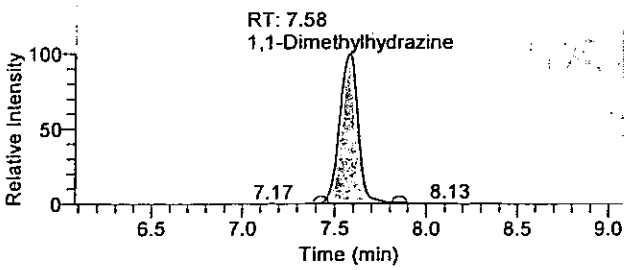


#688 RT: 5.89 NL: 9.17E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

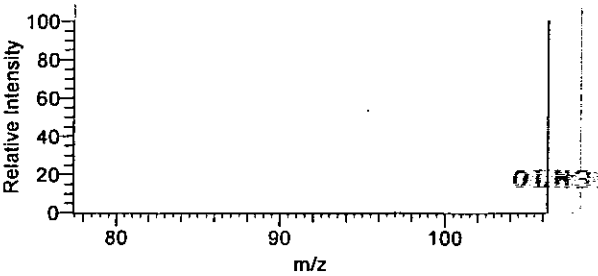


1,1-Dimethylhydrazine

11Jun2010-7 - TIC RT: 6.08 - 9.08 NL: 8.17E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#885 RT: 7.58 NL: 8.17E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

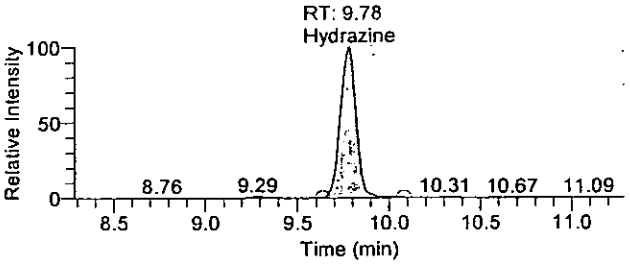


OLH31 0049

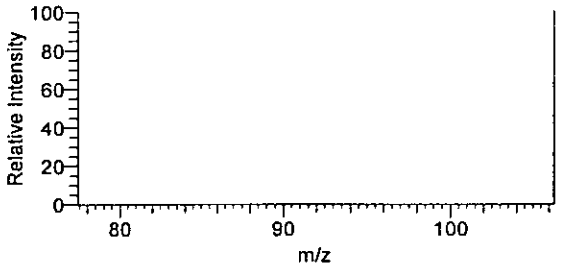
There is no signature data to report.

Hydrazine

11Jun2010-7 - TIC RT: 8.28 - 11.28 NL: 1.28E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 1.28E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal4	Method Settings	Hydrazine	9.78	781194	0.967	ng/mL
Cal4	Method Settings	1,1-Dimethylhydrazine	7.58	565783	4.468	ng/mL
Cal4	Method Settings	Monomethylhydrazine	5.89	618562	4.746	ng/mL

6/19/10

01N31 0050

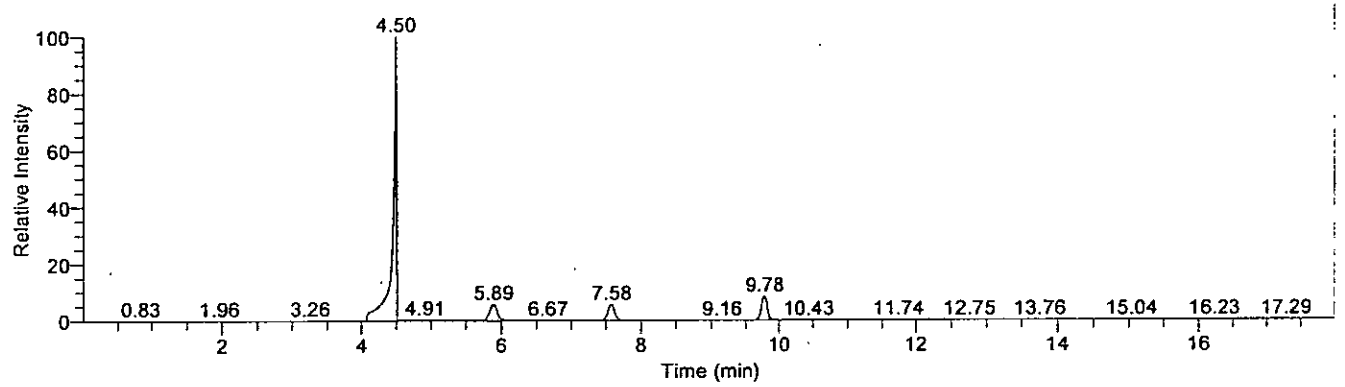
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-8.raw
Sample ID:	Cal5
Sample Type:	Standard
Level:	5
Acquisition Date:	Friday, June 11, 2010 2:57:33 PM
Vial:	A:7
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-8 - TIC RT: 0.00 - 17.99 NL: 3.96E6

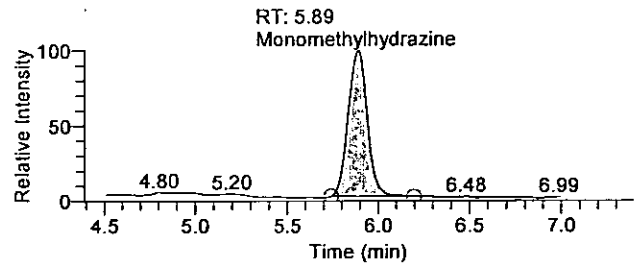


Compound Graphics

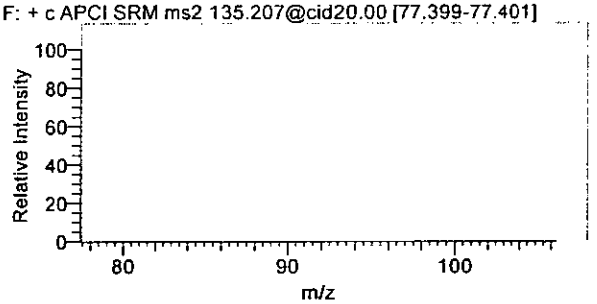
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:7, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-8, Comments: Soil Prep, ID: Cal5

Monomethylhydrazine

11Jun2010-8 - TIC RT: 4.39 - 7.39 NL: 2.30E5
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

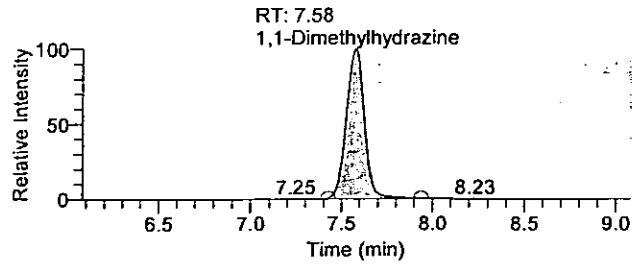


#688 RT: 5.89 NL: 2.30E5
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

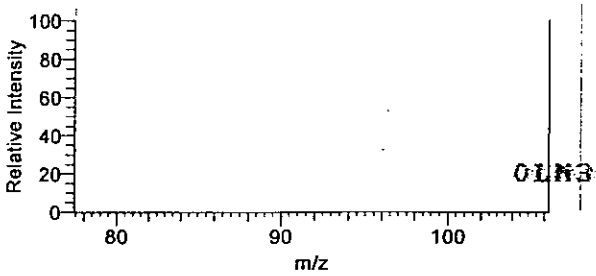


1,1-Dimethylhydrazine

11Jun2010-8 - TIC RT: 6.08 - 9.08 NL: 2.23E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#885 RT: 7.58 NL: 2.23E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

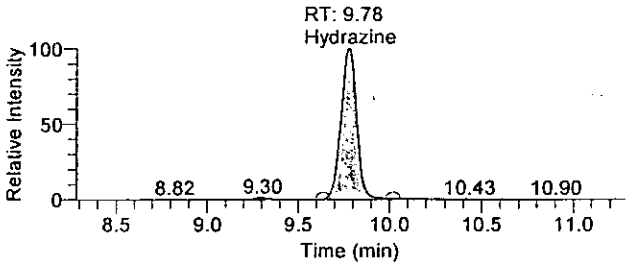


OLN31 0051

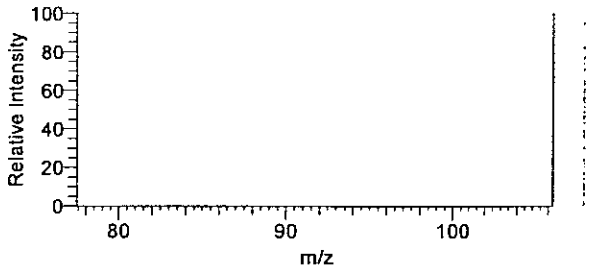
There is no signature data to report.

Hydrazine

11Jun2010-8 - TIC RT: 8.28 - 11.28 NL: 3.32E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 3.32E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal5	Method Settings	Hydrazine	9.78	1985963	2.444	ng/mL
Cal5	Method Settings	1,1-Dimethylhydrazine	7.58	1530714	11.671	ng/mL
Cal5	Method Settings	Monomethylhydrazine	5.89	1641308	12.447	ng/mL

6/14/10

6/14/10

OLN31 0052

There is no signature data to report.

Lancaster Laboratories

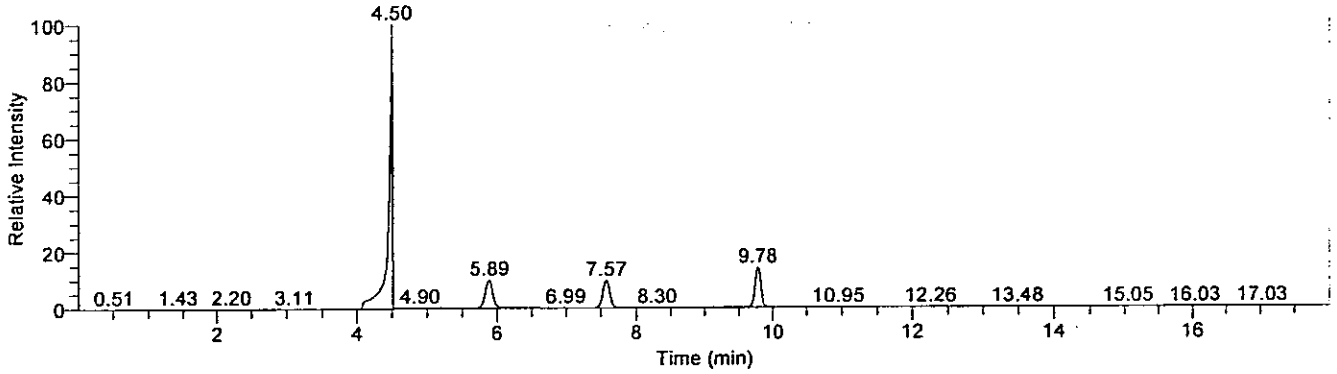
Printed: Saturday, June 12, 2010, 07:46:59

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-9.raw
Sample ID:	Cal6
Sample Type:	Standard
Level:	6
Acquisition Date:	Friday, June 11, 2010 3:16:21 PM
Vial:	A:8
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-9 - TIC RT: 0.00 - 17.99 NL: 4.68E6

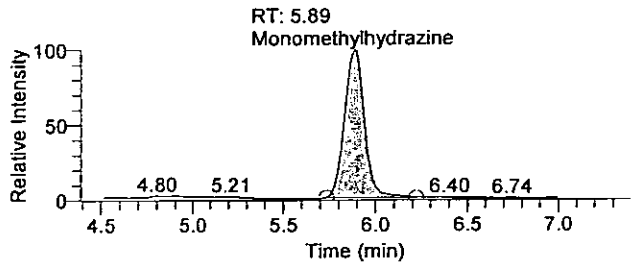


Compound Graphics

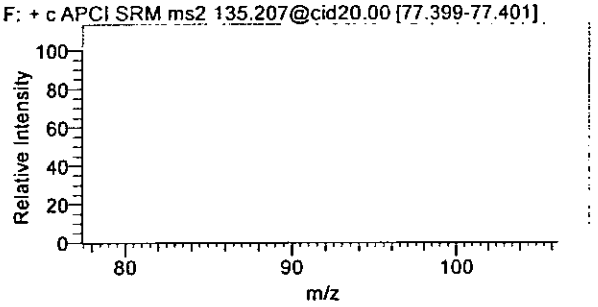
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:8, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-9, Comments: Soil Prep, ID: Cal6

Monomethylhydrazine

11Jun2010-9 - TIC RT: 4.39 - 7.39 NL: 4.65E5
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

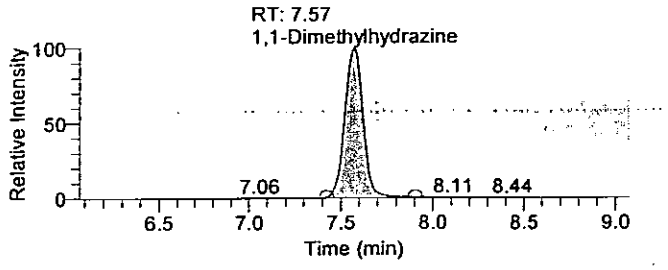


#688 RT: 5.89 NL: 4.65E5
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

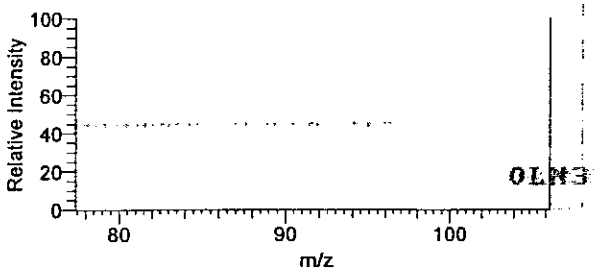


1,1-Dimethylhydrazine

11Jun2010-9 - TIC RT: 6.07 - 9.07 NL: 4.52E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 4.52E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

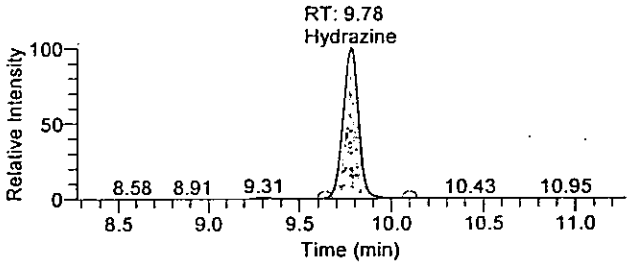


OLN31 0853

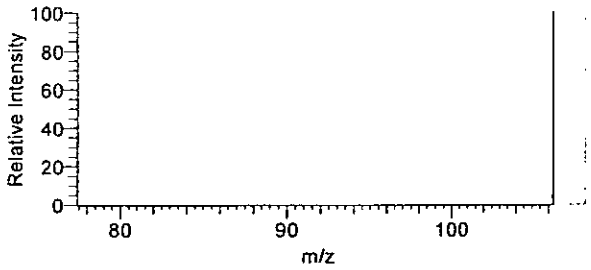
There is no signature data to report.

Hydrazine

11Jun2010-9 - TIC RT: 8.28 - 11.28 NL: 6.59E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1141 RT: 9.78 NL: 6.59E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal6	Method Settings	Hydrazine	9.78	3909969	4.802	ng/mL
Cal6	Method Settings	1,1-Dimethylhydrazine	7.57	3120291	23.537	ng/mL
Cal6	Method Settings	Monomethylhydrazine	5.89	3406612	25.648	ng/mL

6/12/10

6/12/10

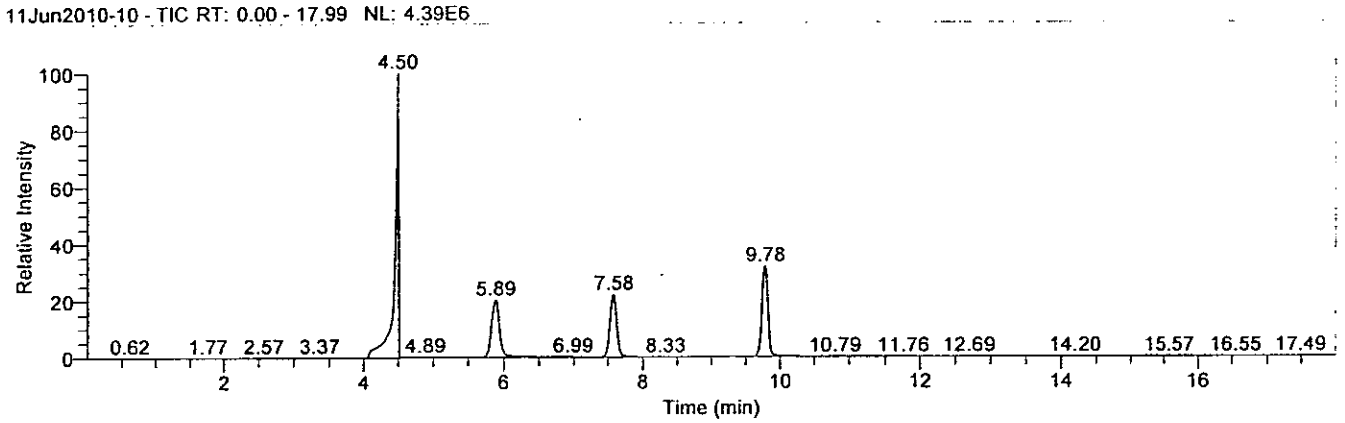
OLN31 8854

There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-10.raw
Sample ID:	Cal7
Sample Type:	Standard
Level:	7
Acquisition Date:	Friday, June 11, 2010 3:35:06 PM
Vial:	A:9
Dilution Factor:	1.00000

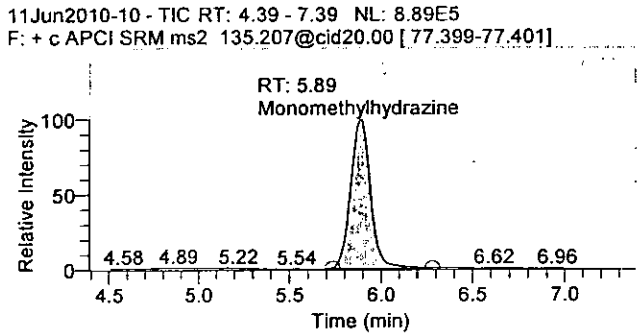
Sample Chromatogram

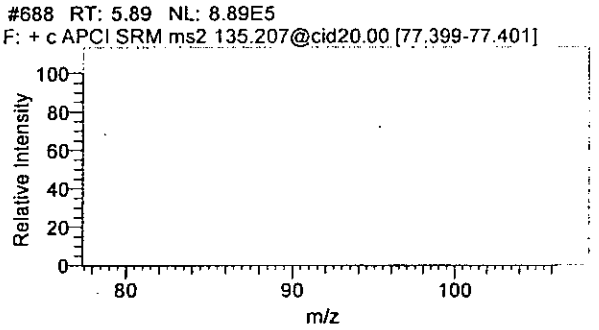


Compound Graphics

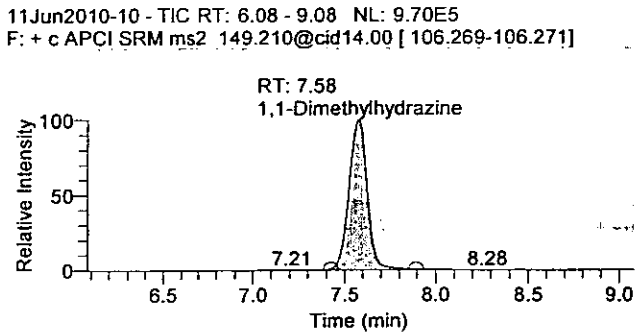
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:9, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-10, Comments: Soil Prep, ID: Cal7

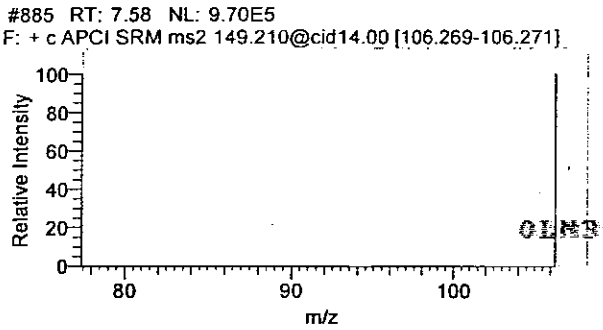
Monomethylhydrazine





1,1-Dimethylhydrazine





OLM31 0055

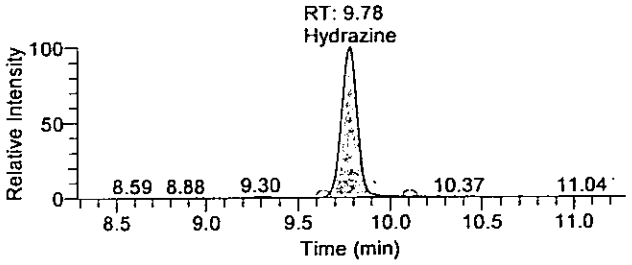
There is no signature data to report.

Lancaster Laboratories

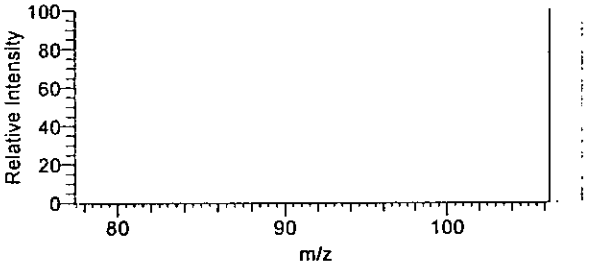
Quantify Sample Report

Hydrazine

11Jun2010-10 - TIC RT: 8.28 - 11.28 NL: 1.40E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 1.40E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal7	Method Settings	Hydrazine	9.78	8373147	10.273	ng/mL
Cal7	Method Settings	1,1-Dimethylhydrazine	7.58	6739290	50.553	ng/mL
Cal7	Method Settings	Monomethylhydrazine	5.89	6696299	49.949	ng/mL

6/10/10

OLN31 0056

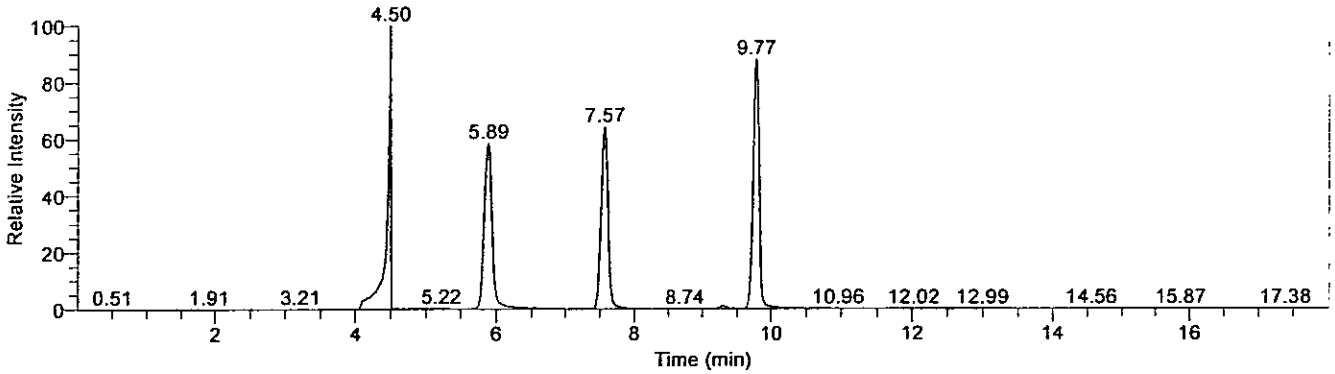
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-11.raw
Sample ID:	Cal8
Sample Type:	Standard
Level:	8
Acquisition Date:	Friday, June 11, 2010 3:53:54 PM
Vial:	A:10
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-11 - TIC RT: 0.00 - 18.00 NL: 3.86E6

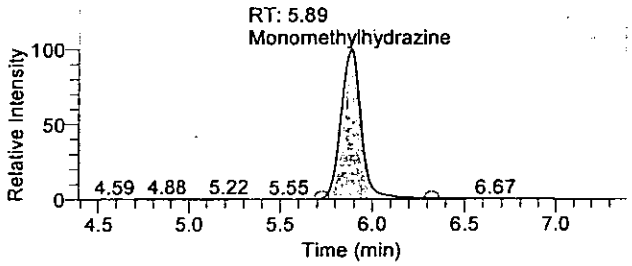


Compound Graphics

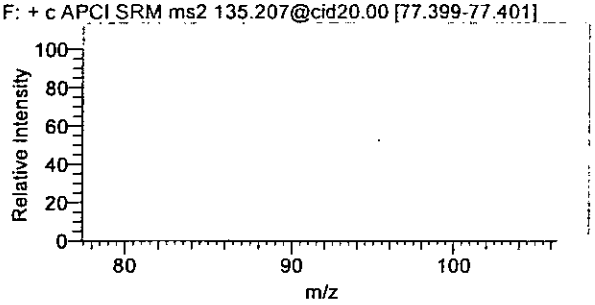
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:10, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-11, Comments: Soil Prep, ID: Cal8

Monomethylhydrazine

11Jun2010-11 - TIC RT: 4.39 - 7.39 NL: 2.26E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

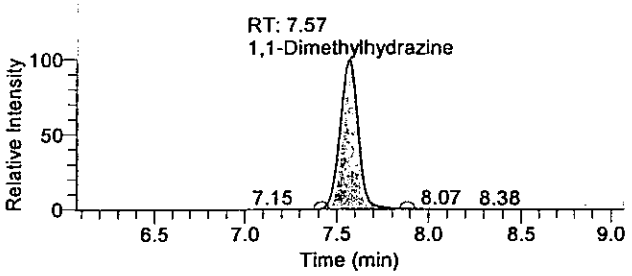


#688 RT: 5.89 NL: 2.26E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

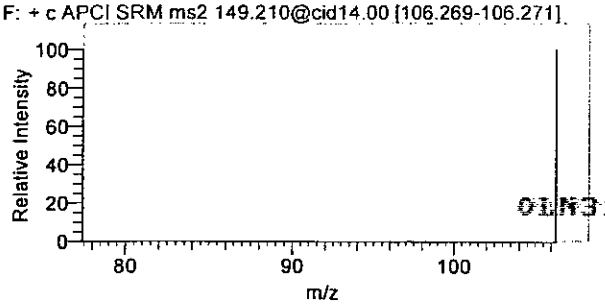


1,1-Dimethylhydrazine

11Jun2010-11 - TIC RT: 6.07 - 9.07 NL: 2.48E6
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 2.48E6
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



01N31 0057

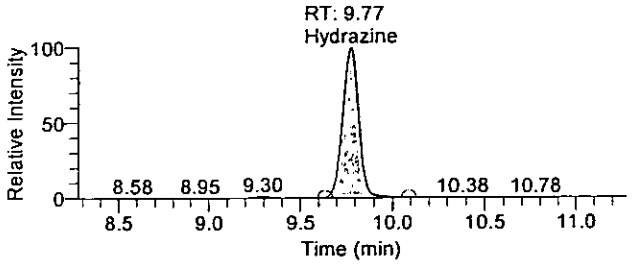
There is no signature data to report.

Lancaster Laboratories

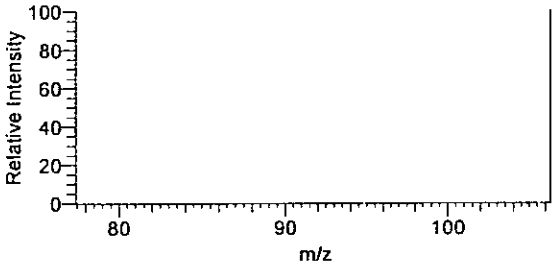
Quantify Sample Report

Hydrazine

11Jun2010-11 - TIC RT: 8.27 - 11.27 NL: 3.39E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1141 RT: 9.77 NL: 3.39E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal8	Method Settings	Hydrazine	9.77	20425037	25.045	ng/mL
Cal8	Method Settings	1,1-Dimethylhydrazine	7.57	17028685	127.363	ng/mL
Cal8	Method Settings	Monomethylhydrazine	5.89	17172246	124.917	ng/mL

6/18/10

OLN31 8858

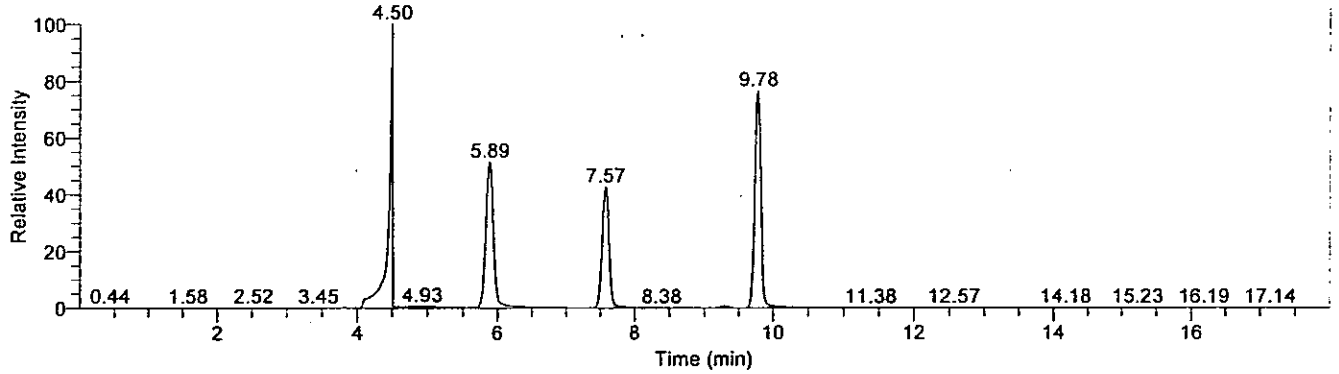
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610012A
Data File:	11Jun2010-16.raw
Sample ID:	LCS
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 5:27:45 PM
Vial:	A:12
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-16 - TIC RT: 0.00 - 17.99 NL: 2.29E6

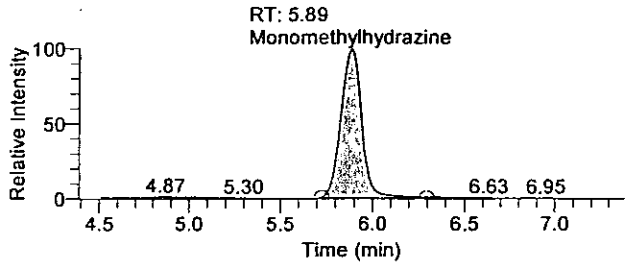


Compound Graphics

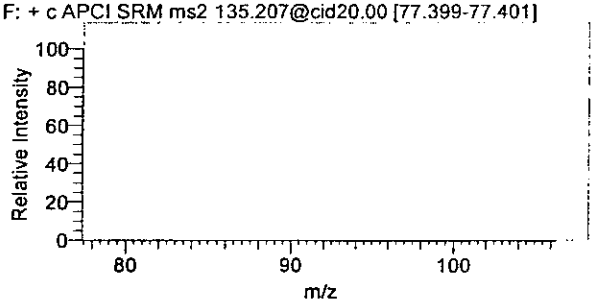
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:12, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-16, Comments: Water Prep, ID: LCS

Monomethylhydrazine

11Jun2010-16 - TIC RT: 4.39 - 7.39 NL: 1.18E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

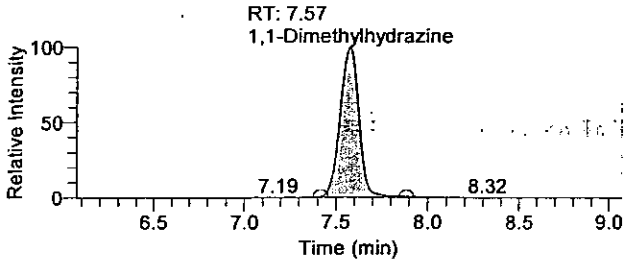


#688 RT: 5.89 NL: 1.18E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

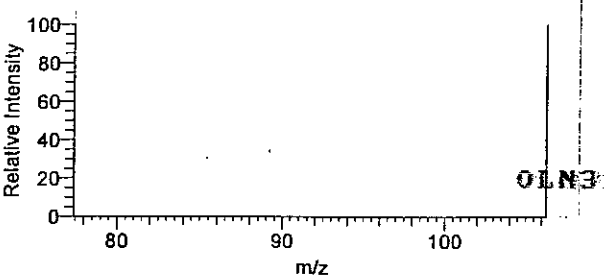


1,1-Dimethylhydrazine

11Jun2010-16 - TIC RT: 6.07 - 9.07 NL: 9.72E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 9.72E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

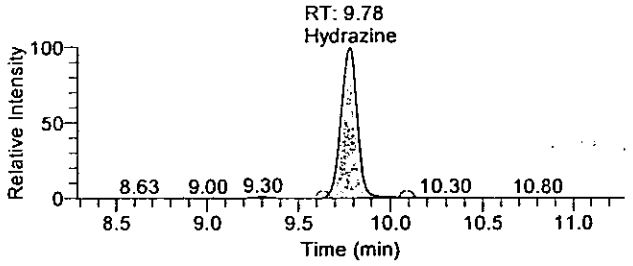


OLN31 0059

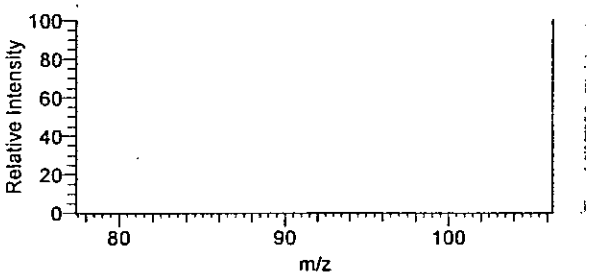
There is no signature data to report.

Hydrazine

11Jun2010-16 - TIC RT: 8.28 - 11.28 NL: 1.75E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 1.75E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
LCS	Method Settings	Hydrazine	9.78	10727097	13.158	ng/mL
LCS	Method Settings	1,1-Dimethylhydrazine	7.57	6894509	51.712	ng/mL
LCS	Method Settings	Monomethylhydrazine	5.89	9098213	67.454	ng/mL

RMB 6/14/10
6/16/10

OLN31 8868

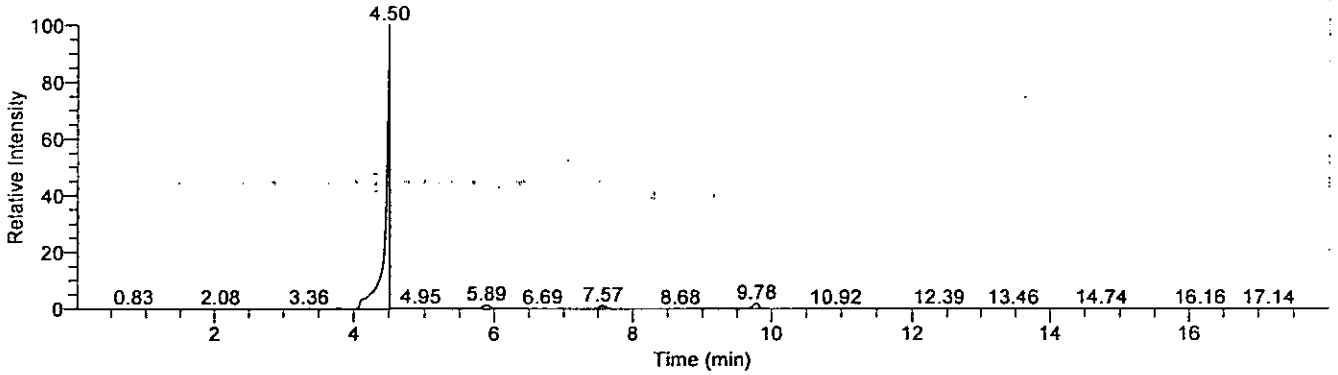
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-13.raw
Sample ID:	Cal3asQC1a
Sample Type:	QC
Level:	CCV1
Acquisition Date:	Friday, June 11, 2010 4:31:25 PM
Vial:	A:5
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-13 - TIC RT: 0.00 - 18.00 NL: 3.63E6

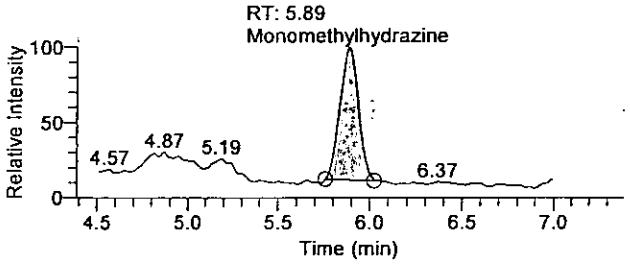


Compound Graphics

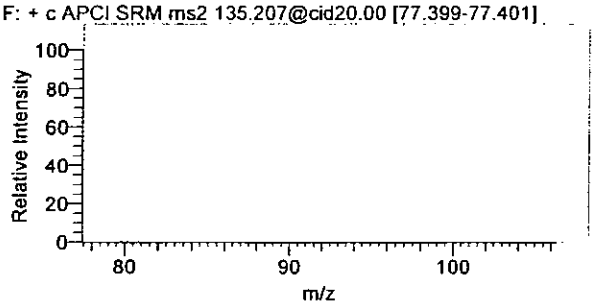
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:5, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-13, Comments: , ID: Cal3asQC1a

Monomethylhydrazine

11Jun2010-13 - TIC RT: 4.39 - 7.39 NL: 4.72E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

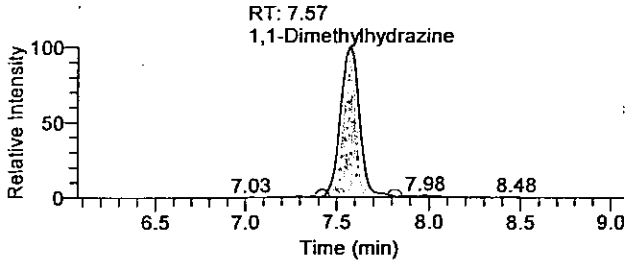


#688 RT: 5.89 NL: 4.72E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

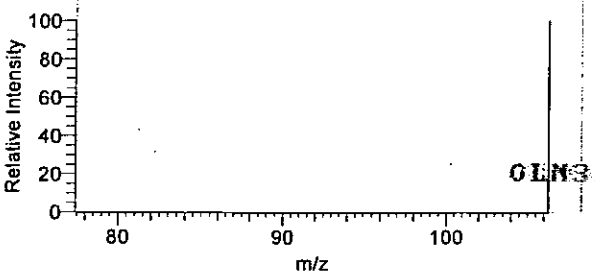


1,1-Dimethylhydrazine

11Jun2010-13 - TIC RT: 6.07 - 9.07 NL: 3.79E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 3.79E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

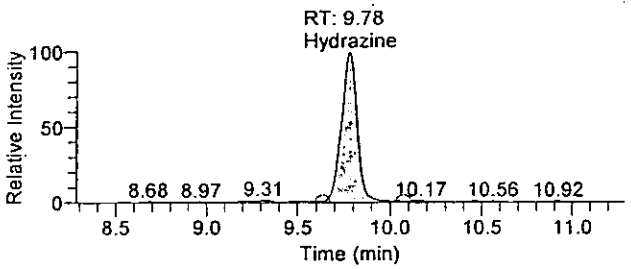


OLN31 8861

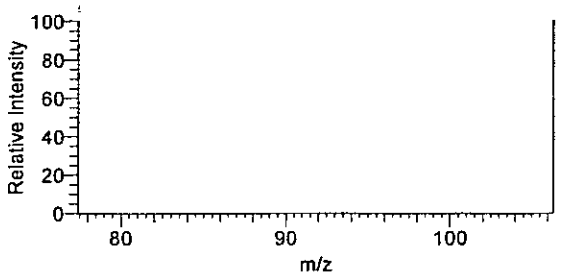
There is no signature data to report.

Hydrazine

11Jun2010-13 - TIC RT: 8.28 - 11.28 NL: 6.51E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 6.51E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal3asQC1a	Method Settings	Hydrazine	9.78	379746	0.475	ng/mL
Cal3asQC1a	Method Settings	1,1-Dimethylhydrazine	7.57	273027	2.283	ng/mL
Cal3asQC1a	Method Settings	Monomethylhydrazine	5.89	290337	2.267	ng/mL

6/14/10
6/15/10

OLN31 0062

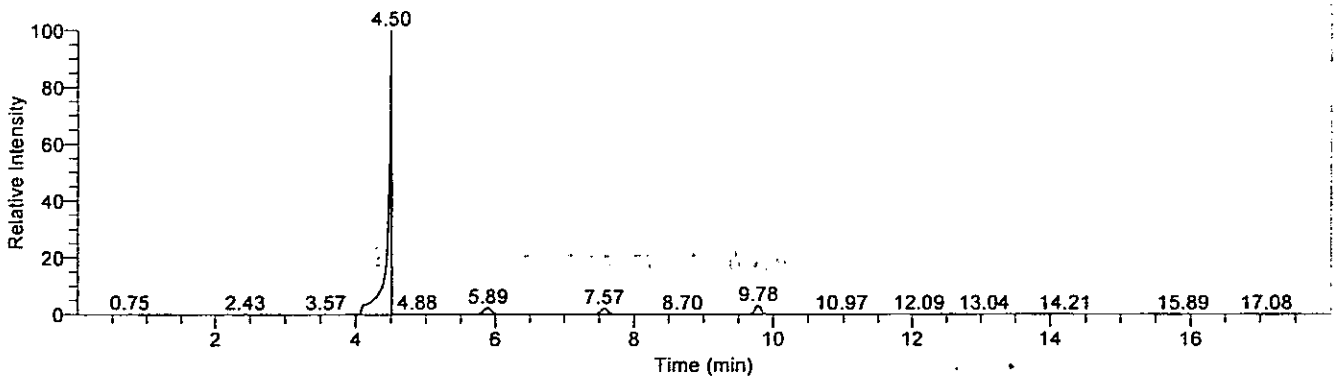
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-24.raw
Sample ID:	Cal4asQC2a
Sample Type:	QC
Level:	CCV2
Acquisition Date:	Friday, June 11, 2010 7:58:00 PM
Vial:	A:6
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-24 - TIC RT: 0.00 - 18.00 NL: 4.00E6

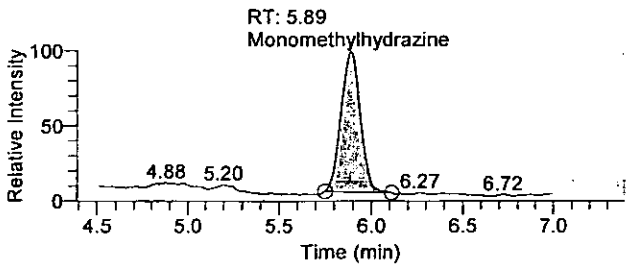


Compound Graphics

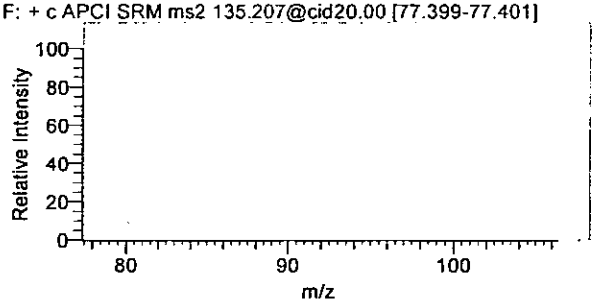
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:6, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-24, Comments: , ID: Cal4asQC2a

Monomethylhydrazine

11Jun2010-24 - TIC RT: 4.39 - 7.39 NL: 9.43E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

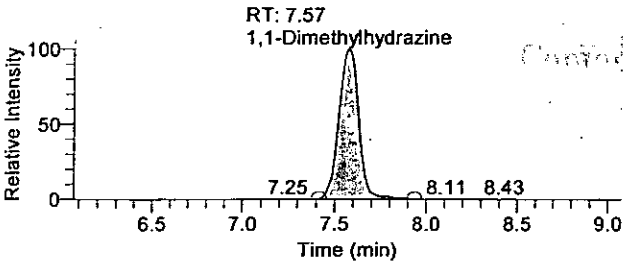


#688 RT: 5.89 NL: 9.43E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

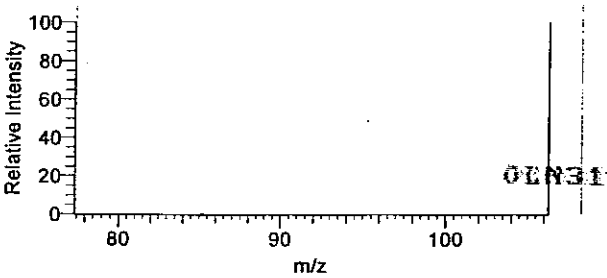


1,1-Dimethylhydrazine

11Jun2010-24 - TIC RT: 6.07 - 9.07 NL: 7.79E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 7.79E4
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

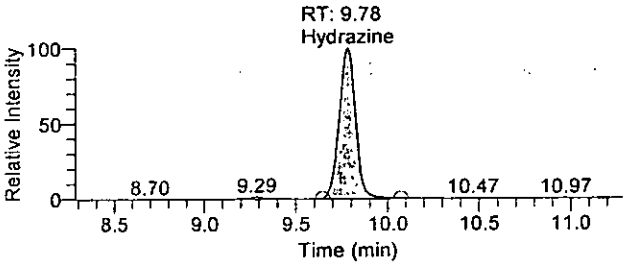


OLN31 0063

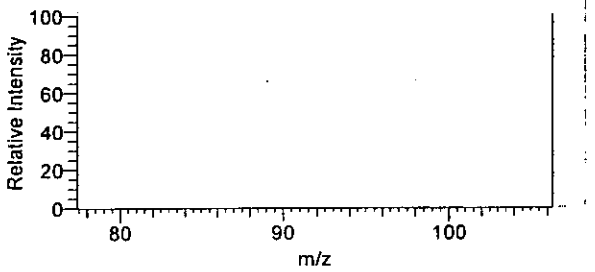
There is no signature data to report.

Hydrazine

11Jun2010-24 - TIC RT: 8.28 - 11.28 NL: 1.22E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 1.22E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal4asQC2a	Method Settings	Hydrazine	9.78	753272	0.933	ng/mL
Cal4asQC2a	Method Settings	1,1-Dimethylhydrazine	7.57	579414	4.570	ng/mL
Cal4asQC2a	Method Settings	Monomethylhydrazine	5.89	639559	4.905	ng/mL

JMSK 6/14/10
6/19/10

OLN31 3864

There is no signature data to report.

Lancaster Laboratories

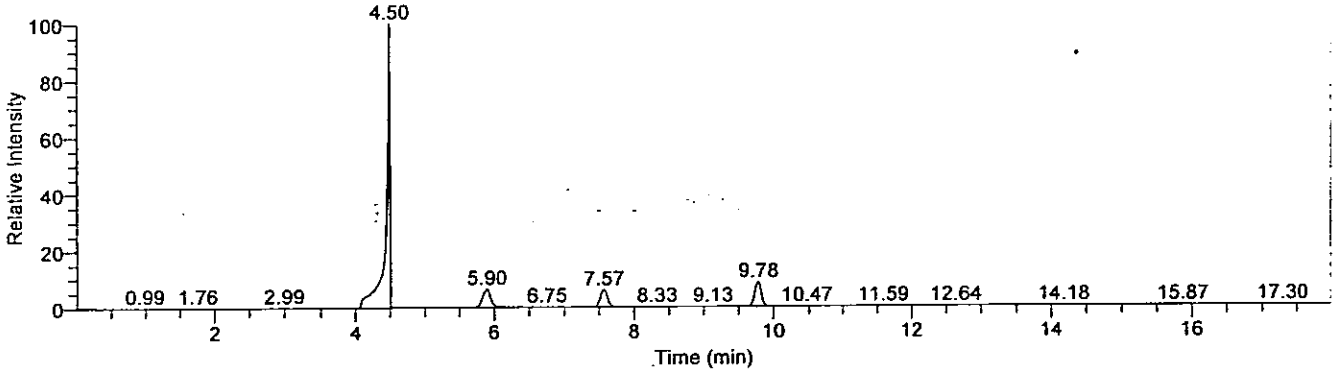
Printed: Saturday, June 12, 2010, 07:47:04

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	N/A
Data File:	11Jun2010-35.raw
Sample ID:	Cal5asQC3a
Sample Type:	QC
Level:	CCV3
Acquisition Date:	Friday, June 11, 2010 11:24:32 PM
Vial:	A:7
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-35 - TIC RT: 0.00 - 18.00 NL: 3.53E6

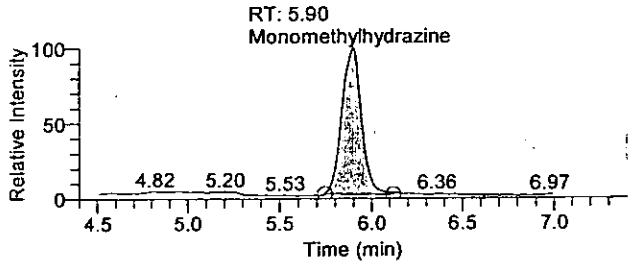


Compound Graphics

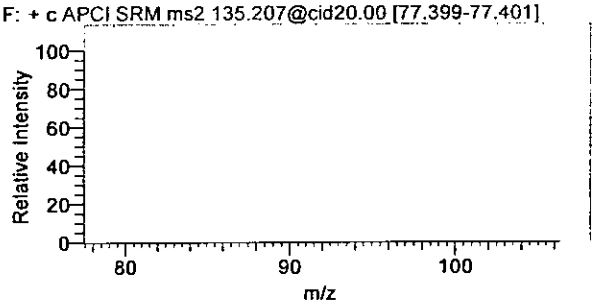
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:7, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-35, Comments: , ID: Cal5asQC3a

Monomethylhydrazine

11Jun2010-35 - TIC RT: 4.40 - 7.40 NL: 2.27E5
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

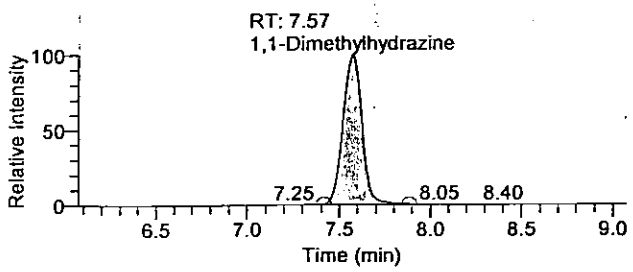


#689 RT: 5.90 NL: 2.27E5
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

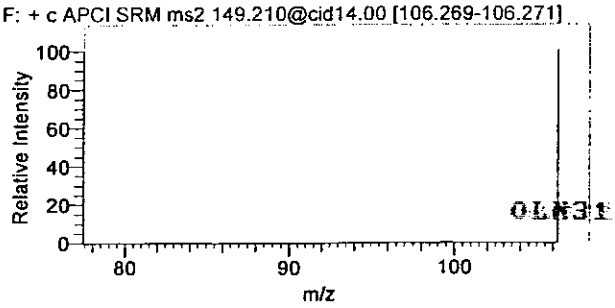


1,1-Dimethylhydrazine

11Jun2010-35 - TIC RT: 6.07 - 9.07 NL: 2.12E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 2.12E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

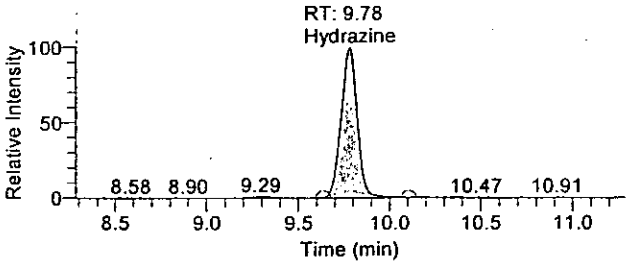


OLN31 9865

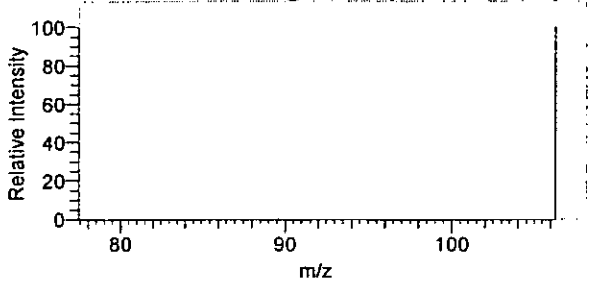
There is no signature data to report.

Hydrazine

11Jun2010-35 - TIC RT: 8.28 - 11.28 NL: 3.01E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 3.01E5
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Cal5asQC3a	Method Settings	Hydrazine	9.78	1877235	2.311	ng/mL
Cal5asQC3a	Method Settings	1,1-Dimethylhydrazine	7.57	1545612	11.782	ng/mL
Cal5asQC3a	Method Settings	Monomethylhydrazine	5.90	1661810	12.601	ng/mL

There is no signature data to report.

Raw QC Data

01N31 0867

Lancaster Laboratories

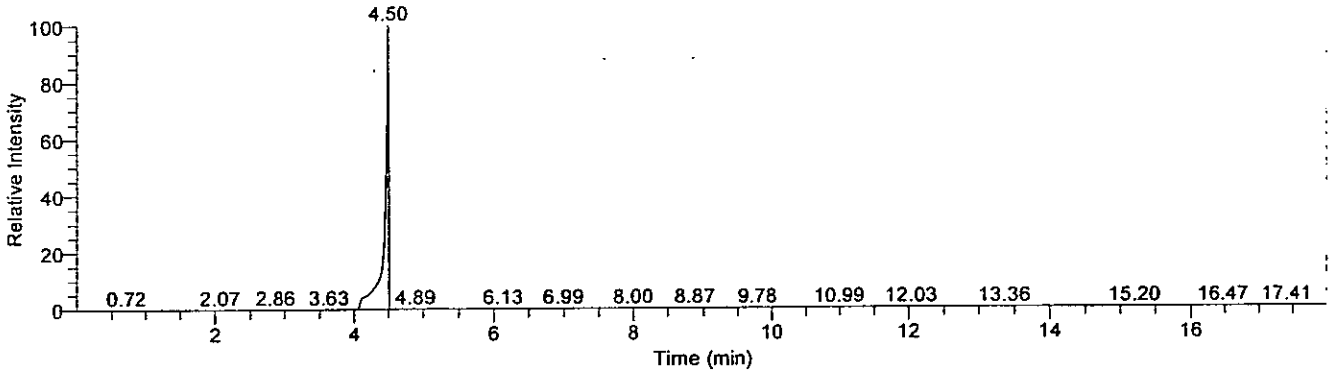
Printed: Saturday, June 12, 2010, 07:47:02

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-27.raw
Sample ID:	Blank
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 8:54:19 PM
Vial:	A:21
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-27 - TIC RT: 0.00 - 18.00 NL: 6.11E6

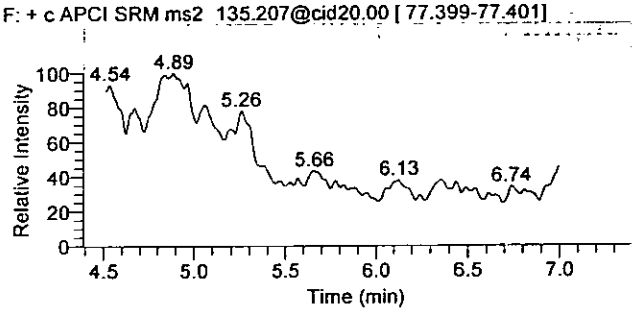


Compound Graphics

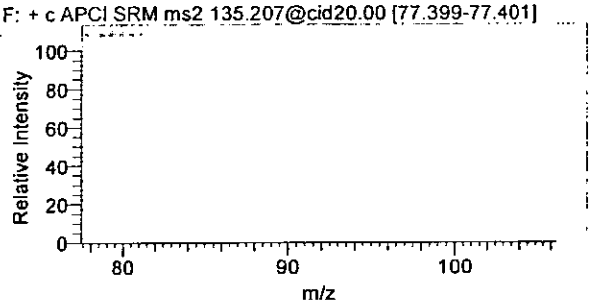
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:21, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-27, Comments: Soil Prep, ID: Blank

Monomethylhydrazine

11Jun2010-27 - TIC RT: 4.39 - 7.39 NL: 1.13E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

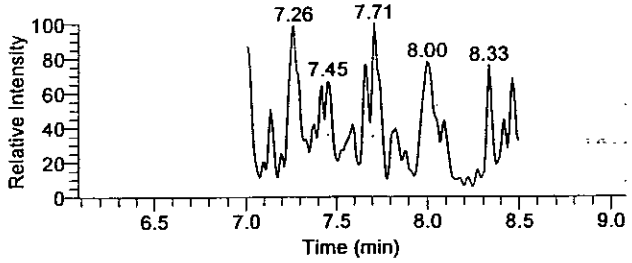


#688 RT: 5.89 NL: 3.77E3
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

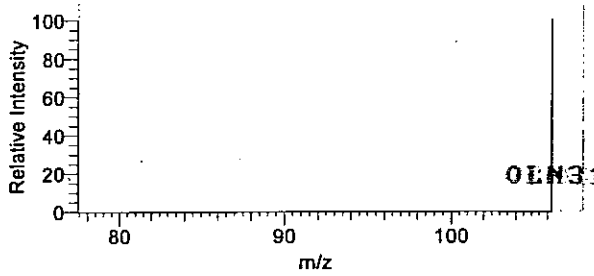


1,1-Dimethylhydrazine

11Jun2010-27 - TIC RT: 6.08 - 9.08 NL: 2.54E2
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#885 RT: 7.58 NL: 9.77E1
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

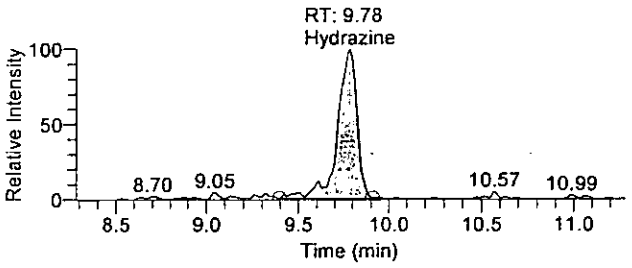


OLN31 0068

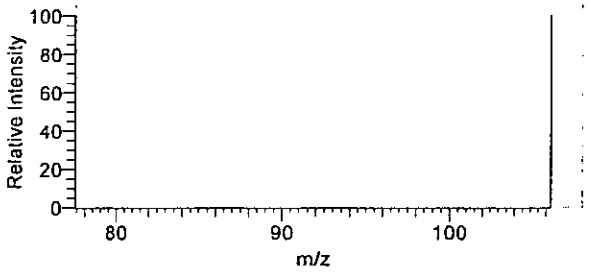
There is no signature data to report.

Hydrazine

11Jun2010-27 - TIC RT: 8.28 - 11.28 NL: 3.76E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 3.76E3
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
Blank	Method Settings	Hydrazine	9.78	28064	0.442	ng/mL
Blank	Method Settings	1,1-Dimethylhydrazine	N/A	NF	NC	ng/mL
Blank	Method Settings	Monomethylhydrazine	N/A	NF	NC	ng/mL

6/14/10

OLN31 0069

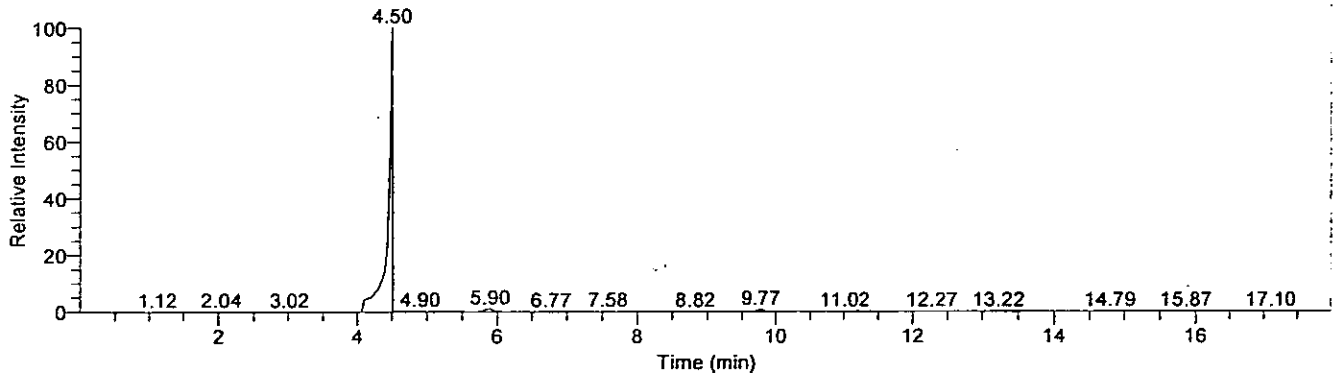
There is no signature data to report.

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-31.raw
Sample ID:	5997219MS
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 10:09:24 PM
Vial:	A:25
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-31 - TIC RT: 0.00 - 17.99 NL: 4.77E6

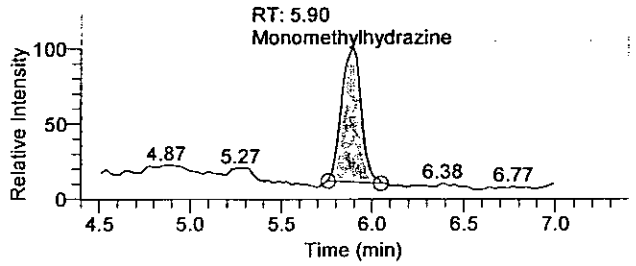


Compound Graphics

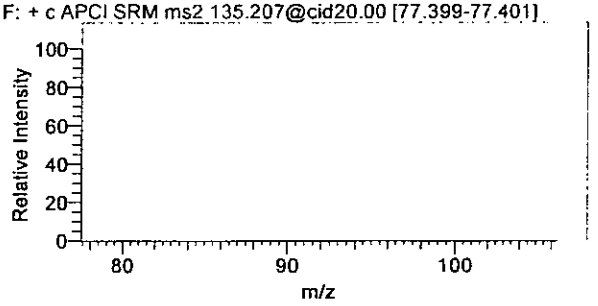
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:25, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-31, Comments: Soil Prep, ID: 5997219MS

Monomethylhydrazine

11Jun2010-31 - TIC RT: 4.40 - 7.40 NL: 4.81E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

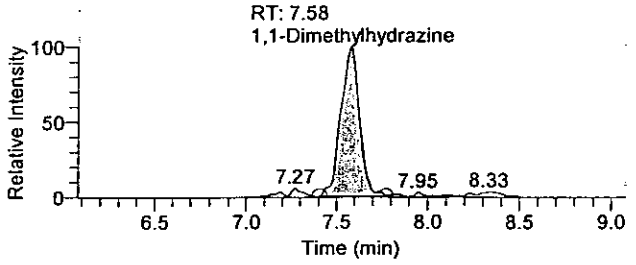


#689 RT: 5.90 NL: 4.81E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

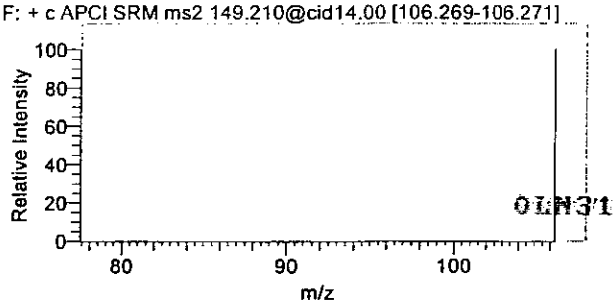


1,1-Dimethylhydrazine

11Jun2010-31 - TIC RT: 6.08 - 9.08 NL: 5.88E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#885 RT: 7.58 NL: 5.88E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]

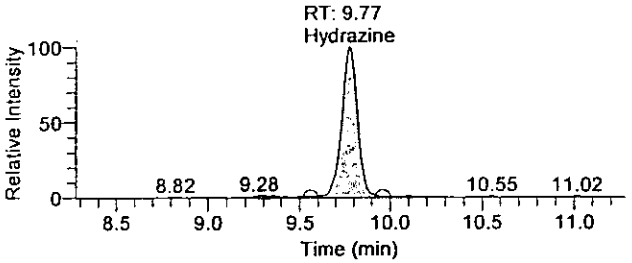


01H31 0570

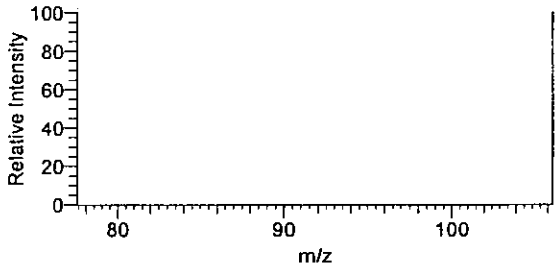
There is no signature data to report.

Hydrazine

11Jun2010-31 - TIC RT: 8.27 - 11.27 NL: 3.46E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1141 RT: 9.77 NL: 3.46E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
5997219MS	Method Settings	Hydrazine	9.77	210868	2.683	ng/mL
5997219MS	Method Settings	1,1-Dimethylhydrazine	7.58	42189	5.594	ng/mL
5997219MS	Method Settings	Monomethylhydrazine	5.90	328699	25.566	ng/mL

6/12/10

OLN31 8871

There is no signature data to report.

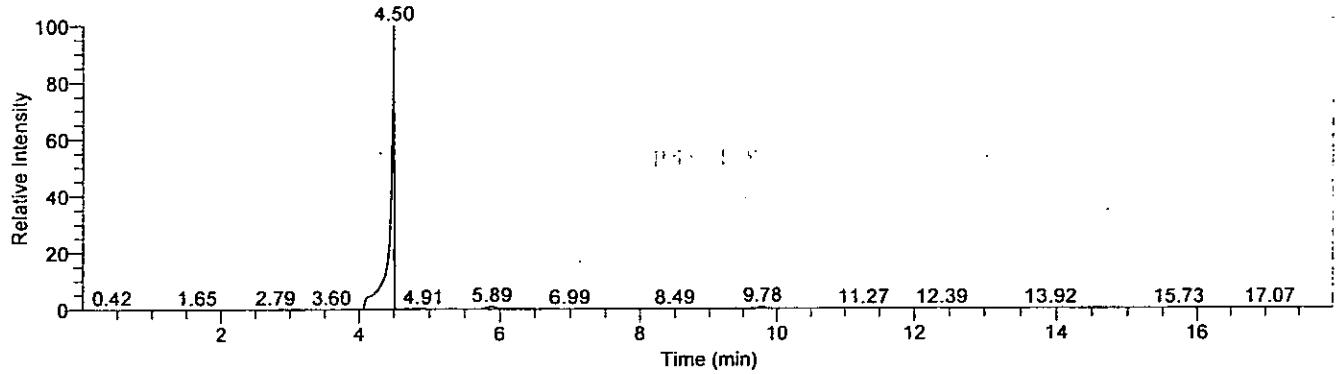
Lancaster Laboratories

Printed: Saturday, June 12, 2010, 07:47:03
Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-32.raw
Sample ID:	5997219MSD
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 10:28:14 PM
Vial:	A:26
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-32 - TIC RT: 0.00 - 18.00 NL: 5.00E6

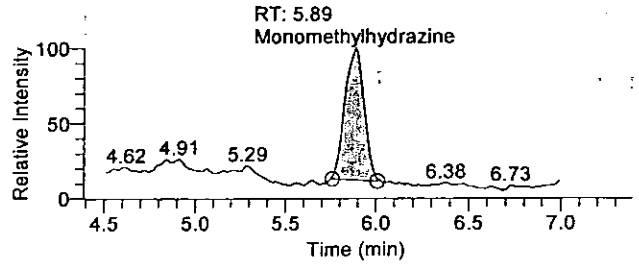


Compound Graphics

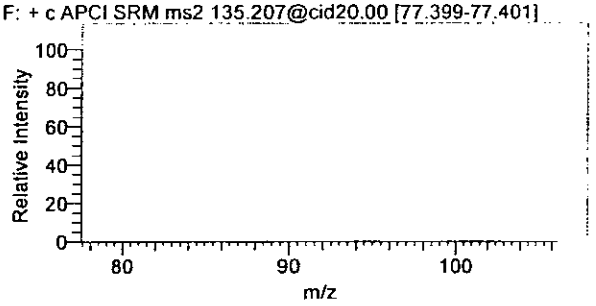
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:26, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-32, Comments: Soil Prep, ID: 5997219MSD

Monomethylhydrazine

11Jun2010-32 - TIC RT: 4.39 - 7.39 NL: 4.74E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

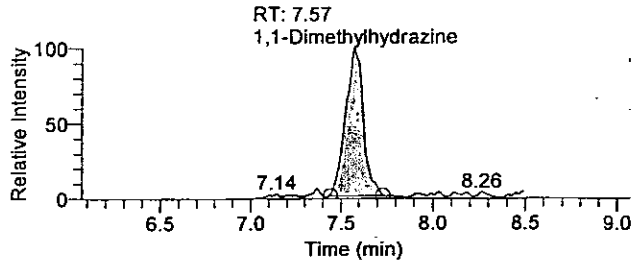


#688 RT: 5.89 NL: 4.74E4
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

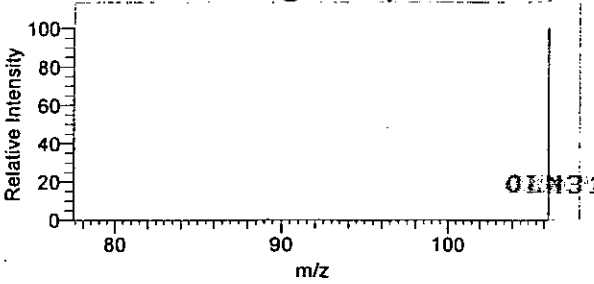


1,1-Dimethylhydrazine

11Jun2010-32 - TIC RT: 6.07 - 9.07 NL: 4.44E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 4.44E3
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



01M31 6872

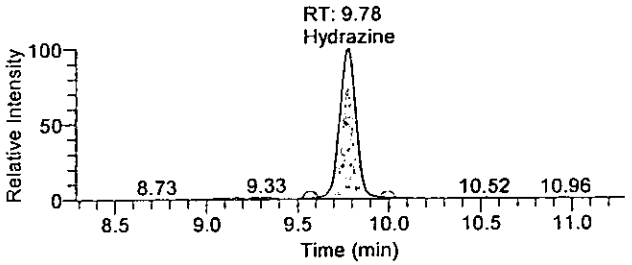
There is no signature data to report.

Lancaster Laboratories

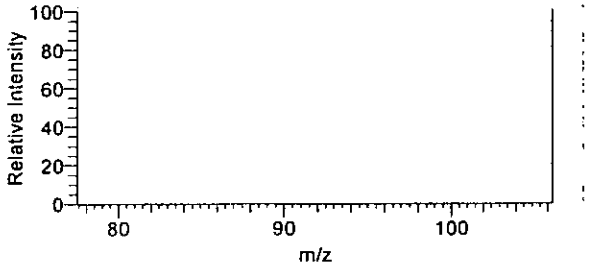
Quantify Sample Report

Hydrazine

11Jun2010-32 - TIC RT: 8.28 - 11.28 NL: 3.36E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 3.36E4
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
5997219MSD	Method Settings	Hydrazine	9.78	213545	2.716	ng/mL
5997219MSD	Method Settings	1,1-Dimethylhydrazine	7.57	29891	4.676	ng/mL
5997219MSD	Method Settings	Monomethylhydrazine	5.89	306341	23.875	ng/mL

6/14/10

6/18/10

0LN31 0873

There is no signature data to report.

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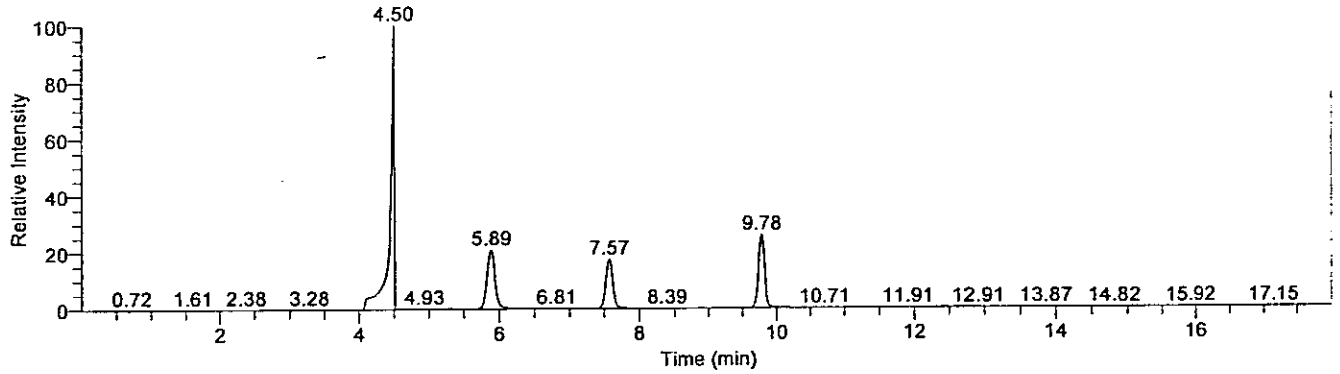
Printed: Saturday, June 12, 2010, 07:47:03

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-28.raw
Sample ID:	LCS
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 9:13:05 PM
Vial:	A:22
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-28 - TIC RT: 0.00 - 17.99 NL: 5.75E6

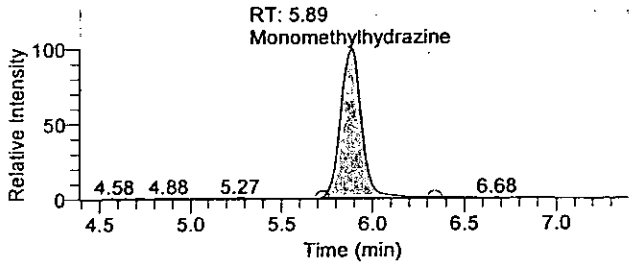


Compound Graphics

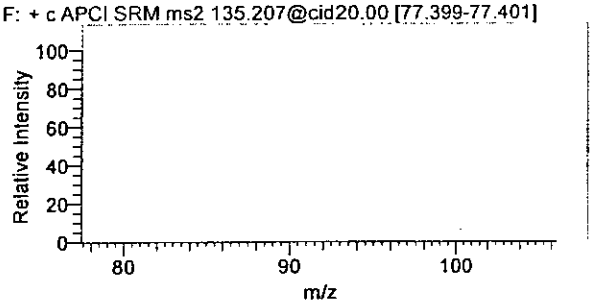
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:22, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-28, Comments: Soil Prep, ID: LCS

Monomethylhydrazine

11Jun2010-28 - TIC RT: 4.39 - 7.39 NL: 1.20E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

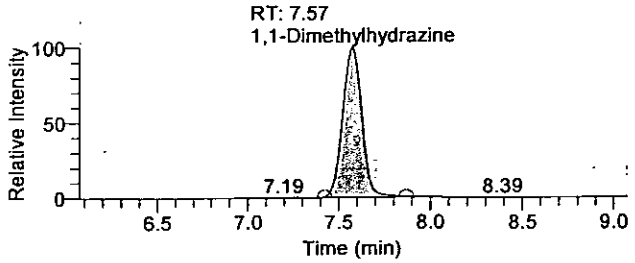


#688 RT: 5.89 NL: 1.20E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

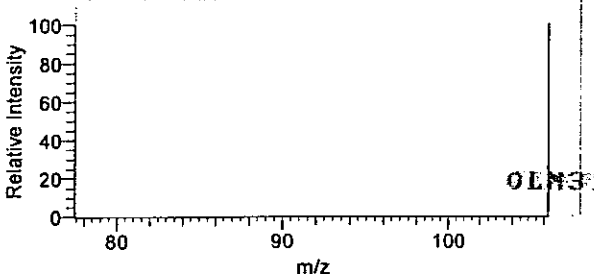


1,1-Dimethylhydrazine

11Jun2010-28 - TIC RT: 6.07 - 9.07 NL: 1.00E6
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 1.00E6
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



OLN3F 0074

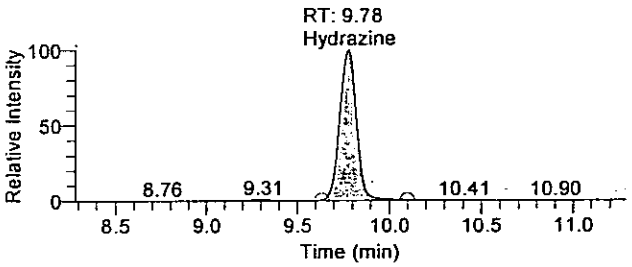
There is no signature data to report.

Lancaster Laboratories

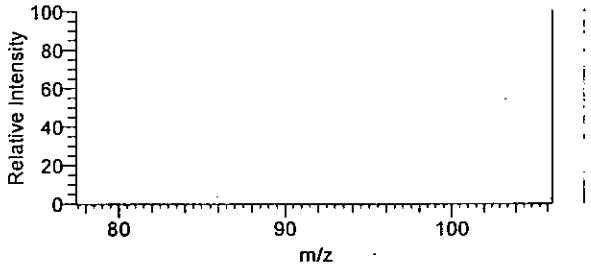
Quantify Sample Report

Hydrazine

11Jun2010-28 - TIC RT: 8.28 - 11.28 NL: 1.48E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 1.48E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
LCS	Method Settings	Hydrazine	9.78	9217358	113.077	ng/mL
LCS	Method Settings	1,1-Dimethylhydrazine	7.57	7223603	541.686	ng/mL
LCS	Method Settings	Monomethylhydrazine	5.89	9497625	703.456	ng/mL

RHS 6/9/10

6/9/10

OEN31 0075

There is no signature data to report.

Lancaster Laboratories

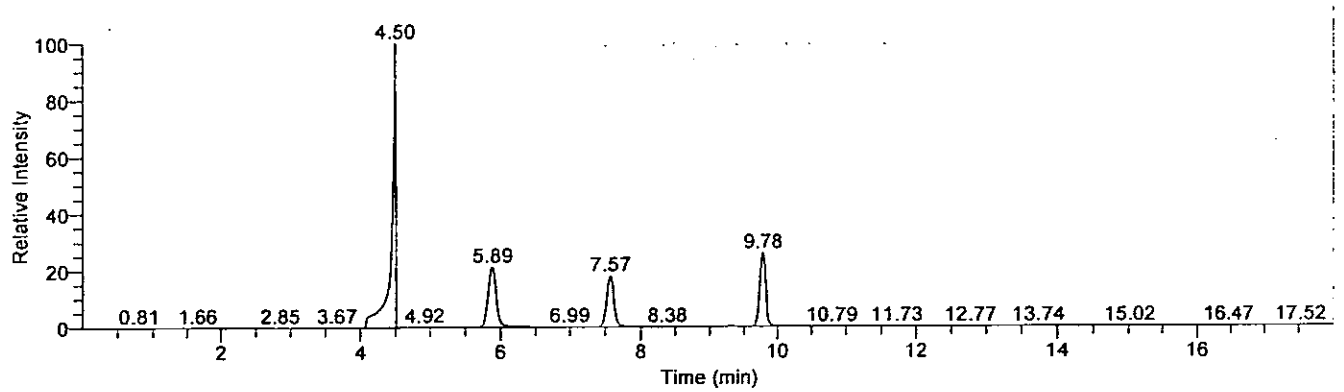
Printed: Saturday, June 12, 2010, 07:47:03

Quantify Sample Report

Current Workbook Path:	C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1
Workbook Name:	TQU01408-11Jun2010-1
Analyst	rs0120
Instrument No.	TQU01408
Batch No.	101610013A
Data File:	11Jun2010-29.raw
Sample ID:	LCSD
Sample Type:	Unknown
Level:	N/A
Acquisition Date:	Friday, June 11, 2010 9:31:51 PM
Vial:	A:23
Dilution Factor:	1.00000

Sample Chromatogram

11Jun2010-29 - TIC RT: 0.00 - 17.99 NL: 5.47E6

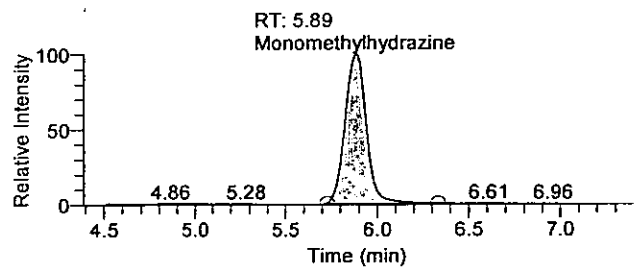


Compound Graphics

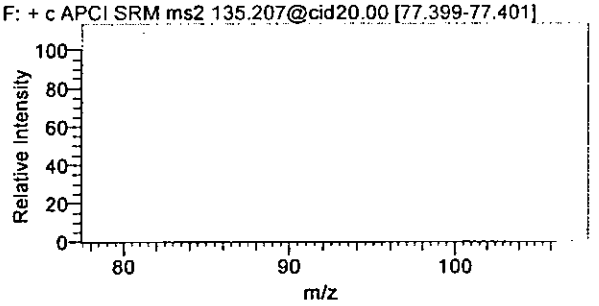
Date: 11-Jun-2010, Instrument: Quantum, Vial: A:23, Name: C:\XCalibur\Hydrazine Analysis\June 2010\TQU01408-11Jun2010-1\Rawfiles\11Jun2010-29, Comments: Soil Prep, ID: LCSD

Monomethylhydrazine

11Jun2010-29 - TIC RT: 4.39 - 7.39 NL: 1.16E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

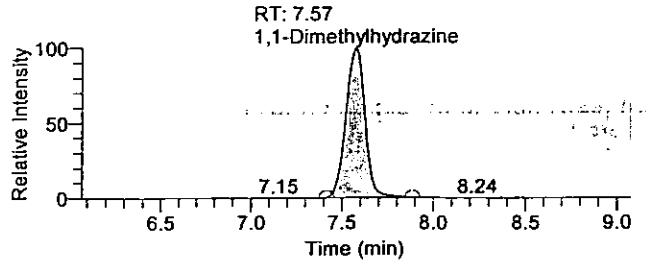


#688 RT: 5.89 NL: 1.16E6
F: + c APCI SRM ms2 135.207@cid20.00 [77.399-77.401]

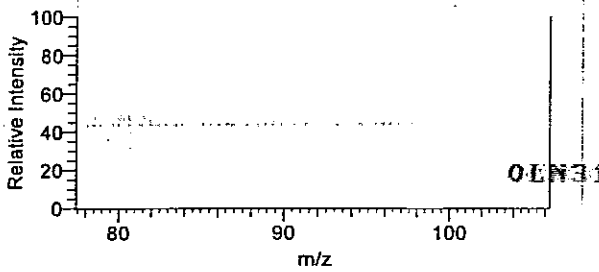


1,1-Dimethylhydrazine

11Jun2010-29 - TIC RT: 6.07 - 9.07 NL: 9.84E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



#884 RT: 7.57 NL: 9.84E5
F: + c APCI SRM ms2 149.210@cid14.00 [106.269-106.271]



OLN31 8876

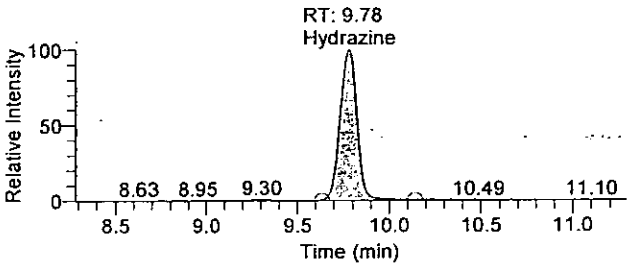
There is no signature data to report.

Lancaster Laboratories

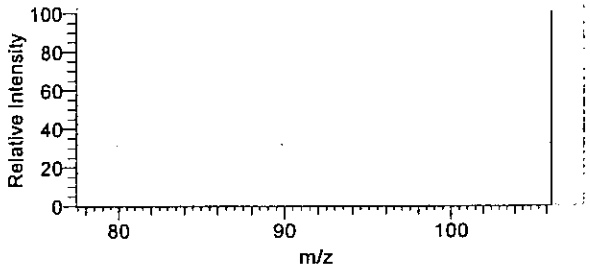
Quantify Sample Report

Hydrazine

11Jun2010-29 - TIC RT: 8.28 - 11.28 NL: 1.41E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



#1142 RT: 9.78 NL: 1.41E6
F: + c APCI SRM ms2 209.128@cid17.00 [106.299-106.301]



Quantitation Results

Sample ID	Integration Type	Component Name	RT	Response	Calculated Conc	Units
LCSD	Method Settings	Hydrazine	9.78	8858246	108.675	ng/mL
LCSD	Method Settings	1,1-Dimethylhydrazine	7.57	7170971	537.757	ng/mL
LCSD	Method Settings	Monomethylhydrazine	5.89	9324492	690.927	ng/mL

6/7/10

6/10/10

OLM31 8077

There is no signature data to report.

Sample Preparation

01N31 0070

Organic Extraction Batchlog

101610013A

Reviewed By: [illegible] Start Date: 6/10/10 Start Time: 1400

HYDRAZINE IN SOIL

Tech 1: [illegible] Tech 2:

Prep Group # 999 Test Prep Group **Dept:** 24 **Prep Analysis #** 00819 Solid Sample Pesticide Extract

QC	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments
BLANKA	PBLKIS	1					10				
LCSA	LCSNH	1			166108-86-1	0.1	10				
LCSDA	LCSDTJ	1				0.1	10				
5997219 MS	55441 MS	.9850				0.1	10			49A	
5997219 MSD	55441 MSD	.9827				0.1	10				

Solvent Used	Lot No.

0.5ml of 0.1% BENZALDEHYDE ADDED TO ALL SAMPLES AND STANDARDS FOR DERIVATIZATION

Sample #	Sample Code	Amt (g)	SS/IS Sol.	Amt (mL)	FV (mL)	pH	pH	BC	Comments	Analyses	Due Date	Pr
5997219	55441	1.020			10			49A		10346	6/16	
5997220	55443	.9836			10							
5997221	55447	1.0163			10							

Rack ID:		Work Station:	
Internal Standard:		Balance #	

S-bath ID	°C	S-bath ID	°C	N-Evap	°C	M-vap	°C	101610013A

Documented temps are NIST corrected.

DF = Dilution Factor FV = Final Volume

B10101610013A

Moisture Data

Lancaster Laboratories

CLIENT: Olin Corporation
SDG: OLN31

MOISTURE

SAMPLE NUMBERS:

Sample #	Sample Code
5997219	SS441
5997220	SS443
5997221	SS447

Laboratory Compliance Quality Control

Analysis Name	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10155820005A	Sample number(s): 5997219-5997221				
Moisture	100		99-101		

Sample Matrix Quality Control

Analysis Name	BKG Conc	DUP Conc	RPD	RPD Max
Batch number: 10155820005A	Sample number(s): 5997219-5997221			
Moisture	4.3	3.7	15	15

* - Outside of specification
(1) - The result for one or both determinations was less than five times the LOQ.

Moisture Data Report

Batch #: 10155820005

Sample ID	Batch ID	Analysis#	Tare Wt	Sample Wt	Dry Wt	%Moisture	Analysis Date (Emp#)	Verified Date (Emp#)
LCS 89.5% Std.			1.1314	5.0168	1.6607	89.45	6/ 4/10 (1201/SWF)	6/ 7/10 (0236/CW)
5997219	A	00111	1.1073	8.6664	7.0765	31.12	6/ 4/10 (1201/SWF)	6/ 7/10 (0236/CW)
5997220	A	00111	1.1140	7.5651	5.5182	41.78	6/ 4/10 (1201/SWF)	6/ 7/10 (0236/CW)
5997221	A	00111	1.1221	6.1556	3.1797	66.57	6/ 4/10 (1201/SWF)	6/ 7/10 (0236/CW)
P997432BKG	A	00111	1.1603	8.4931	9.2920	4.26	6/ 4/10 (1201/SWF)	6/ 7/10 (0236/CW)
P997432DUP	A	00111	1.1310	8.1257	8.9598	3.65	6/ 4/10 (1201/SWF)	6/ 7/10 (0236/CW)

OLN31 5081