eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 | 717-656-2300 | Fax: 717-656-2681 | www.LancasterLabs.com

Type I Data Package

Prepared for:

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

Project: SSP-1428
Air Sample
Collected on 10/14/15

SDG# SSX26

GROUP	SAMPLE NUMBERS
1601009	8089423

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: Dana M Kauffman **Date:** **11/10/2015**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Natalie Luciano at (717) 556-7258.

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Table of Contents for SDG# SSX26

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Sample Reference List for SDG Number SSX26
with a Data Package Type of I

20613 - CenterPoint Properties

Project: SSP-1428

Lab Sample Number	Lab Sample Code	Client Sample Description
8089423	06-R-	SVMP-06R Grab Air SUMMA# 994

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 · 717-656-2300 Fax: 717-656-2681 · www.lancasterlabs.com

05298 TO 15 VOA Ext. List

Air samples are collected in passivated SUMMA canisters. A volume of the air is cryogenically trapped and desorbed into a gas chromatograph equipped with a capillary column and interfaced directly to a mass selective (MS) detector.

Reference: EPA Method TO-15, "Methods for the Determination of Toxic Organic Compounds in Air," 1999

Analysis Reports / Field Chain of Custody

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

October 30, 2015

Project: SSP-1428

Submittal Date: 10/15/2015
Group Number: 1601009
SDG: SSX26
State of Sample Origin: MO

Client Sample Description	Lancaster Labs (LL) #
SVMP-06R Grab Air	8089423

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	S.S. Papadopulos & Assoc Inc.	Attn: Don A. Trego
ELECTRONIC COPY TO	S.S. Papadopulos & Assoc Inc.	Attn: Rachel Shannon
ELECTRONIC COPY TO	S.S. Papadopulos & Assoc Inc.	Attn: Harvey A. Cohen

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

Sample Description: SVMP-06R Grab Air
SUMMA# 994
SSP-1428

LL Sample # AQ 8089423
LL Group # 1601009
Account # 20613

Project Name: SSP-1428

Collected: 10/14/2015 10:12 by OS
through 10/14/2015 11:47
Submitted: 10/15/2015 09:20
Reported: 10/30/2015 15:57

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

06-R- SDG#: SSX26-01

CAT No.	Analysis Name	CAS Number	Final Result		LOQ	Final Result		LOQ	DF
Volatiles in Air EPA TO-15			ug/m3		ug/m3	ppb(v)		ppb(v)	
05298	Acetone	67-64-1	210		48	89		20	10
05298	Benzene	71-43-2	860		32	270		10	10
05298	Bromobenzene	108-86-1	64	U	64	10	U	10	10
05298	Bromodichloromethane	75-27-4	67	U	67	10	U	10	10
05298	Bromoform	75-25-2	100	U	100	10	U	10	10
05298	Bromomethane	74-83-9	39	U	39	10	U	10	10
05298	1,3-Butadiene	106-99-0	27	J	44	12	J	20	10
05298	2-Butanone	78-93-3	50	J	59	17	J	20	10
05298	Carbon Disulfide	75-15-0	1,200		310	370		100	100
05298	Carbon Tetrachloride	56-23-5	63	U	63	10	U	10	10
05298	Chlorobenzene	108-90-7	46	U	46	10	U	10	10
05298	Chlorodifluoromethane	75-45-6	14	J	35	4.0	J	10	10
05298	Chloroethane	75-00-3	26	U	26	10	U	10	10
05298	Chloroform	67-66-3	24	J	49	4.9	J	10	10
05298	Chloromethane	74-87-3	21	U	21	10	U	10	10
05298	3-Chloropropene	107-05-1	31	U	31	10	U	10	10
05298	Cumene	98-82-8	27	J	49	5.4	J	10	10
05298	Dibromochloromethane	124-48-1	85	U	85	10	U	10	10
05298	1,2-Dibromoethane	106-93-4	77	U	77	10	U	10	10
05298	Dibromomethane	74-95-3	71	U	71	10	U	10	10
05298	1,2-Dichlorobenzene	95-50-1	60	U	60	10	U	10	10
05298	1,3-Dichlorobenzene	541-73-1	60	U	60	10	U	10	10
05298	1,4-Dichlorobenzene	106-46-7	60	U	60	10	U	10	10
05298	Dichlorodifluoromethane	75-71-8	49	U	49	10	U	10	10
05298	1,1-Dichloroethane	75-34-3	40	U	40	10	U	10	10
05298	1,2-Dichloroethane	107-06-2	40	U	40	10	U	10	10
05298	1,1-Dichloroethene	75-35-4	27	J	40	6.7	J	10	10
05298	cis-1,2-Dichloroethene	156-59-2	3,200		400	810		100	100
05298	trans-1,2-Dichloroethene	156-60-5	240		40	60		10	10
05298	Dichlorofluoromethane	75-43-4	42	U	42	10	U	10	10
05298	1,2-Dichloropropane	78-87-5	46	U	46	10	U	10	10
05298	cis-1,3-Dichloropropene	10061-01-5	45	U	45	10	U	10	10
05298	trans-1,3-Dichloropropene	10061-02-6	45	U	45	10	U	10	10
05298	Ethylbenzene	100-41-4	1,100		43	250		10	10
05298	4-Ethyltoluene	622-96-8	49	U	49	10	U	10	10
05298	Freon 113	76-13-1	150	U	150	20	U	20	10
05298	Freon 114	76-14-2	70	U	70	10	U	10	10
05298	Heptane	142-82-5	160		41	38		10	10
05298	Hexachloroethane	67-72-1	97	U	97	10	U	10	10
05298	Hexane	110-54-3	290		35	81		10	10
05298	2-Hexanone	591-78-6	82	U	82	20	U	20	10
05298	Isooctane	540-84-1	240		47	50		10	10
05298	Methyl t-Butyl Ether	1634-04-4	40		36	11		10	10
05298	4-Methyl-2-pentanone	108-10-1	36	J	82	8.7	J	20	10
05298	Methylene Chloride	75-09-2	35	U	35	10	U	10	10
05298	Octane	111-65-9	210		47	45		10	10
05298	Pentane	109-66-0	920		30	310		10	10
05298	Styrene	100-42-5	43	U	43	10	U	10	10
05298	1,1,1,2-Tetrachloroethane	630-20-6	69	U	69	10	U	10	10
05298	1,1,2,2-Tetrachloroethane	79-34-5	69	U	69	10	U	10	10
05298	Tetrachloroethene	127-18-4	39	J	68	5.8	J	10	10

Sample Description: SVMP-06R Grab Air
SUMMA# 994
SSP-1428

LL Sample # AQ 8089423
LL Group # 1601009
Account # 20613

Project Name: SSP-1428

Collected: 10/14/2015 10:12 by OS
through 10/14/2015 11:47
Submitted: 10/15/2015 09:20
Reported: 10/30/2015 15:57

CenterPoint Properties
Suite 200
1301 Burlington Street
North Kansas City MO 64116

06-R- SDG#: SSX26-01

CAT No.	Analysis Name	CAS Number	Final Result		LOQ	Final Result		LOQ	DF
Volatiles in Air EPA TO-15			ug/m3		ug/m3	ppb(v)		ppb(v)	
05298	Toluene	108-88-3	550		38	150		10	10
05298	1,1,1-Trichloroethane	71-55-6	55	U	55	10	U	10	10
05298	1,1,2-Trichloroethane	79-00-5	55	U	55	10	U	10	10
05298	Trichloroethene	79-01-6	140		54	26		10	10
05298	Trichlorofluoromethane	75-69-4	56	U	56	10	U	10	10
05298	1,2,3-Trichloropropane	96-18-4	60	U	60	10	U	10	10
05298	1,2,4-Trimethylbenzene	95-63-6	49	U	49	10	U	10	10
05298	1,3,5-Trimethylbenzene	108-67-8	49	U	49	10	U	10	10
05298	Vinyl Chloride	75-01-4	16,000		260	6,200		100	100
05298	m/p-Xylene	179601-23-1	2,100		43	480		10	10
05298	o-Xylene	95-47-6	1,400		43	330		10	10

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
tetrachloroethene

Reporting limits were raised due to interference from the sample matrix.

LOQ = Limit of Quantitation

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
05298	TO 15 VOA Ext. List	EPA TO-15	1	C1528830AB	10/17/2015 07:01	Jacob E Bailey	10
05298	TO 15 VOA Ext. List	EPA TO-15	1	C1528830AC	10/19/2015 21:47	Jacob E Bailey	100

FORM 01(TIC)
VOLATILE ORGANICS IN AIR
TENTATIVELY IDENTIFIED COMPOUNDS

SDG No.:

Sample Media:	CANISTER	Lab Sample ID:	8089423
Canister ID:	994	Lab File ID:	cj00370.d
Pressure Received:	26.5 psia	Date Collected:	10/14/2015
Final Pressure:	13.2 psia	Date Received:	10/15/2015
Nominal Volume:	250 cc	Analyzed Date:	10/17/2015
Injection Volume:	50 cc	Analyzed Time:	07:01
Instrument ID:	09464	Dilution Factor:	10

Number TICs Found: 13 Concentration Units: ppb(v)

CAS NUMBER	COMPOUND	RT	EST. CONC.	Q
75-28-5	Isobutane	2.05	55	J
78-78-4	Butane, 2-methyl-	2.81	220	J
	Unknown	3.54	38	J
107-83-5	Pentane, 2-methyl-	4.52	80	J
96-37-7	Cyclopentane, methyl-	6.59	44	J
589-34-4	Hexane, 3-methyl-	8.20	30	J
	Unknown Cycloalkane	8.55	19	J
	Unknown Cycloalkane	8.76	29	J
	Unknown Alkane	10.94	20	J
	Unknown Cycloalkane	12.13	20	J
	Unknown	12.92	16	J
	Unknown Cycloalkane	14.43	17	J
460-00-4	p-Bromofluorobenzene	18.56	140	J
TOTVOATIC	Total Tics		720	J

Abbreviations:
B = The compound was found in blank with a result greater than the limit being reported.
J = The result is between the MDL and LOQ.

FORM I-TIC VOA

Quality Control Summary

Client Name: CenterPoint Properties Group Number: 1601009
Reported: 10/30/2015 15:57

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: C1528830AB	Sample number(s): 8089423								
Acetone	4.8	U	4.8	ug/m3	70	81	61-134	15	25
Benzene	3.2	U	3.2	ug/m3	74	89	70-130	18	25
Bromobenzene	6.4	U	6.4	ug/m3	73	88	70-130	20	25
Bromodichloromethane	6.7	U	6.7	ug/m3	78	91	62-129	16	25
Bromoform	10	U	10.	ug/m3	75	91	64-141	20	25
Bromomethane	3.9	U	3.9	ug/m3	82	98	70-130	17	25
1,3-Butadiene	4.4	U	4.4	ug/m3	84	98	57-138	16	25
2-Butanone	5.9	U	5.9	ug/m3	78	92	60-135	16	25
Carbon Tetrachloride	6.3	U	6.3	ug/m3	88	93	70-130	5	25
Chlorobenzene	4.6	U	4.6	ug/m3	74	93	70-130	23	25
Chlorodifluoromethane	3.5	U	3.5	ug/m3	80	91	70-130	13	25
Chloroethane	2.6	U	2.6	ug/m3	80	96	63-119	18	25
Chloroform	4.9	U	4.9	ug/m3	78	86	70-130	10	25
Chloromethane	2.1	U	2.1	ug/m3	89	108	54-118	19	25
3-Chloropropene	3.1	U	3.1	ug/m3	75	84	70-130	11	25
Cumene	4.9	U	4.9	ug/m3	77	96	70-130	22	25
Dibromochloromethane	8.5	U	8.5	ug/m3	80	96	65-127	18	25
1,2-Dibromoethane	7.7	U	7.7	ug/m3	72	89	65-126	22	25
Dibromomethane	7.1	U	7.1	ug/m3	72	84	70-130	15	25
1,2-Dichlorobenzene	6.0	U	6.0	ug/m3	71	89	62-132	23	25
1,3-Dichlorobenzene	6.0	U	6.0	ug/m3	73	88	63-125	19	25
1,4-Dichlorobenzene	6.0	U	6.0	ug/m3	72	86	63-127	18	25
Dichlorodifluoromethane	4.9	U	4.9	ug/m3	86	96	61-149	11	25
1,1-Dichloroethane	4.0	U	4.0	ug/m3	78	86	67-124	9	25
1,2-Dichloroethane	4.0	U	4.0	ug/m3	75	89	70-130	17	25
1,1-Dichloroethene	4.0	U	4.0	ug/m3	84	97	61-128	15	25
trans-1,2-Dichloroethene	4.0	U	4.0	ug/m3	82	93	66-121	13	25
Dichlorofluoromethane	4.2	U	4.2	ug/m3	79	91	70-130	14	25
1,2-Dichloropropane	4.6	U	4.6	ug/m3	74	90	70-130	20	25
cis-1,3-Dichloropropene	4.5	U	4.5	ug/m3	68	84	64-136	21	25
trans-1,3-Dichloropropene	4.5	U	4.5	ug/m3	69	88	61-126	24	25
Ethylbenzene	4.3	U	4.3	ug/m3	78	94	70-130	18	25
4-Ethyltoluene	4.9	U	4.9	ug/m3	80	97	59-126	19	25
Freon 113	15	U	15.	ug/m3	79	90	63-114	14	25
Freon 114	7.0	U	7.0	ug/m3	72	84	63-123	16	25
Heptane	4.1	U	4.1	ug/m3	81	97	56-123	18	25
Hexachloroethane	19	U	19.	ug/m3	71	85	70-130	17	25
Hexane	3.5	U	3.5	ug/m3	82	93	63-117	12	25
2-Hexanone	8.2	U	8.2	ug/m3	80	101	47-150	23	25
Isooctane	4.7	U	4.7	ug/m3	83	96	70-130	15	25
Methyl t-Butyl Ether	3.6	U	3.6	ug/m3	76	90	52-129	17	25
4-Methyl-2-pentanone	8.2	U	8.2	ug/m3	82	98	53-140	18	25
Methylene Chloride	3.5	U	3.5	ug/m3	75	85	70-130	12	25

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CenterPoint Properties Group Number: 1601009
Reported: 10/30/2015 15:57

Analysis Name	Blank Result		Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Octane	4.7	U	4.7	ug/m3	86	103	70-130	19	25
Pentane	3.0	U	3.0	ug/m3	85	98	70-130	14	25
Styrene	4.3	U	4.3	ug/m3	75	93	64-130	21	25
1,1,1,2-Tetrachloroethane	6.9	U	6.9	ug/m3	74	90	70-130	19	25
1,1,2,2-Tetrachloroethane	6.9	U	6.9	ug/m3	73	90	58-133	21	25
Tetrachloroethene	6.8	U	6.8	ug/m3	68*	82	70-130	19	25
Toluene	3.8	U	3.8	ug/m3	77	95	70-130	21	25
1,1,1-Trichloroethane	5.5	U	5.5	ug/m3	82	88	70-130	7	25
1,1,2-Trichloroethane	5.5	U	5.5	ug/m3	75	93	59-131	21	25
Trichloroethene	5.4	U	5.4	ug/m3	76	88	70-130	15	25
Trichlorofluoromethane	5.6	U	5.6	ug/m3	87	97	70-130	11	25
1,2,3-Trichloropropane	6.0	U	6.0	ug/m3	74	90	70-130	19	25
1,2,4-Trimethylbenzene	4.9	U	4.9	ug/m3	78	94	60-128	18	25
1,3,5-Trimethylbenzene	4.9	U	4.9	ug/m3	77	95	61-132	21	25
m/p-Xylene	4.3	U	4.3	ug/m3	75	93	70-130	21	25
o-Xylene	4.3	U	4.3	ug/m3	75	92	70-130	21	25
Batch number: C1528830AC	Sample number(s): 8089423								
Carbon Disulfide	3.1	U	3.1	ug/m3	78	89	55-121	13	25
cis-1,2-Dichloroethene	4.0	U	4.0	ug/m3	80	89	65-121	11	25
Vinyl Chloride	2.6	U	2.6	ug/m3	82	100	70-130	20	25

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Summa Canister Field Test Data/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 20613 Group # 1601009 Sample # 8089423 Bottle Order (SCR) # _____

For Eurofins Lancaster Laboratories Environmental use only

Instructions on reverse side correspond with circled numbers.

(1) Client Information

Client: Center Point Properties — Account #:

Project Name/#: Bannister Federal Center SSPA1428

Project Manager: HARVEY COHEN — P.O. #:

Sampler: ONNIK SIVASLIAN — Quote #:

Name of state where samples were collected:

(3) Turnaround Time Requested (TAT) (circle one)

(Standard) Rush (specify) _____

(4) Data Package Required? (Yes) No

(5) EDD Required? (Yes) No

	Temperature (F)		Pressure ("Hg)	
	Start	Stop	Start	Stop
Ambient				
Maximum				
Minimum				

(6) Analyses Requested

EPA TO - 15 | ☐ MTBE | ☐ BTEX | EPA 18 | EPA 25 (select range below) | Helium as tracer | O2/CO2 | Library Search

(2) Sample Identification	Start Date/Time (24-hour clock)	Stop Date/Time (24-hour clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Flow Reg. ID	Can ID	Can Size (L)	Controller Flowrate (mL/min)	EPA TO - 15
SVMP-06R	10/14 10:12	10/14 11:47	28.7	2.0	—	—	342153	944	1	168	X

(7) Instructions/QC Requirements & Comments

EPA 25 (check one) ☐ C1 - C4 ☐ C2 - C10 ☐ C1 - C10 ☐ C4 - C10 (GRO) ☐ C2 - C4

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time: (8)
13:50	10-13-15		9.00 10/14		10/14 15:00	804713155473	10/14 15:00
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Relinquished by:	Date/Time:	Received by:	Date/Time:
							0920

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 114284

Group Number(s): 1601009

Client: Center Point

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	10/15/2015 9:20
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	N/A	VOA Vial Headspace ≥ 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	Yes
Missing Samples:	No	Air Quality Flow Controllers Present:	Yes
Extra Samples:	No	Flow Controller Quantity:	1
Discrepancy in Container Qty on COC:	No	Air Quality Returns:	No

Unpacked by Krista Abel (3058) at 10:25 on 10/15/2015

General Comments: 1- tubing

2425 New Holland Pike
Lancaster, PA 17601-5440
T : 717-656-2300
F : 717-656-2681
www.LancasterLabs.com

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Project Name: SSP-1428
Field ID Number: SVMP-06R
Laboratory ID Number: 8089423
SDG Number: SSX26

Sampling Date: 10/14/2015
Analysis Date: 10/17/2015

TARGET ANALYTES -
AIR RESULT

Chemical	CAS Number	Molecular Weight	Lab Results	Q	Corrected Results	Retention Time NT Only	QAS Decision	Footnote
EPA TO-15			***ug/m3***		***ppb(v)***			
Acetone (2-propanone)	67-64-1	58.08	210		89			
Benzene	71-43-2	78.11	860		270			
Bromobenzene	108-86-1	157.0	64	U	10			
Bromodichloromethane	75-27-4	163.8	67	U	10			
Bromoform	75-25-2	252.8	100	U	10			
Bromomethane (Methyl bromide)	74-83-9	94.94	39	U	10			
1,3-Butadiene	106-99-0	54.09	27	J	12			
2-Butanone (Methyl ethyl ketone)	78-93-3	72.11	50	J	17			
Carbon disulfide	75-15-0	76.14	1,200		370			
Carbon tetrachloride	56-23-5	153.8	63	U	10			
Chlorobenzene	108-90-7	112.6	46	U	10			
Chlorodifluoromethane	75-45-6	86.47	14	J	4.0			
Chloroethane	75-00-3	64.52	26	U	10			
Chloroform	67-66-3	119.4	24	J	4.9			
Chloromethane (Methyl chloride)	74-87-3	50.49	21	U	10			
3-Chloropropene (allyl chloride)	107-05-1	76.53	31	U	10			
Cumene	98-82-8	120.2	27	J	5.4			
Dibromochloromethane	124-48-1	208.3	85	U	10			
1,2-Dibromoethane	106-93-4	187.9	77	U	10			
Dibromomethane	74-95-3	173.8	71	U	10			
1,2-Dichlorobenzene	95-50-1	147.0	60	U	10			
1,3-Dichlorobenzene	541-73-1	147.0	60	U	10			
1,4-Dichlorobenzene	106-46-7	147.0	60	U	10			
Dichlorodifluoromethane	75-71-8	120.9	49	U	10			
1,1-Dichloroethane	75-34-3	98.96	40	U	10			
1,2-Dichloroethane	107-06-2	98.96	40	U	10			
1,1-Dichloroethene	75-35-4	96.94	27	J	6.7			
1,2-Dichloroethene (cis)	156-59-2	96.94	3,200		810			
1,2-Dichloroethene (trans)	156-60-5	96.94	240		60			
Dichlorofluoromethane	75-43-4	102.9	42	U	10			
1,2-Dichloropropane	78-87-5	113.0	46	U	10			
cis-1,3-Dichloropropene	10061-01-5	111.0	45	U	10			
trans-1,3-Dichloropropene	10061-02-6	111.0	45	U	10			
Ethylbenzene	100-41-4	106.2	1,100		250			
4-Ethyltoluene (p-Ethyltoluene)	622-96-8	120.2	49	U	10			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon TF)	76-13-1	187.4	150	U	20			
1,2-Dichlorotetrafluoroethane (Freon 114)	76-14-2	170.9	70	U	10			
n-Heptane	142-82-5	100.2	160		38			
Hexachloroethane	67-72-1	236.7	97	U	10			
n-Hexane	110-54-3	86.17	290		81			
2-Hexanone	591-78-6	100.2	82	U	20			
2,2,4-Trimethylpentane	540-84-1	114.2	240		50			
MTBE (Methyl tert-butyl ether)	1634-04-4	88.15	40		11			
4-Methyl-2-pentanone (MIBK)	108-10-1	100.2	36	J	8.7			
Methylene chloride	75-09-2	84.94	35	U	10			
Octane	111-65-9	114.2	210		45			
Pentane	109-66-0	72.15	920		310			
Styrene	100-42-5	104.1	43	U	10			
1,1,1,2-Tetrachloroethane	630-20-6	167.8	69	U	10			
1,1,2,2-Tetrachloroethane	79-34-5	167.9	69	U	10			
Tetrachloroethene (PCE)	127-18-4	165.8	39	J	5.8			
Toluene	108-88-3	92.14	550		150			
1,1,1-Trichloroethane	71-55-6	133.4	55	U	10			
1,1,2-Trichloroethane	79-00-5	133.4	55	U	10			
Trichloroethene (TCE)	79-01-6	131.4	140		26			
Trichlorofluoromethane (Freon 11)	75-69-4	137.4	56	U	10			
1,2,3-Trichloropropane	96-18-4	147.4	60	U	10			
1,2,4-Trimethylbenzene	95-63-6	120.2	49	U	10			
1,3,5-Trimethylbenzene	108-67-8	120.2	49	U	10			
Vinyl chloride	75-01-4	62.50	16,000		6,200			
Xylenes (m&p)	179601-23-1	106.2	2,100		480			

Project Name: SSP-1428
Field ID Number: SVMP-06R
Laboratory ID Number: 8089423
SDG Number: SSX26

Sampling Date: 10/14/2015
Analysis Date: 10/17/2015

TARGET ANALYTES -
AIR RESULT

Chemical	CAS Number	Molecular Weight	Lab Results	Q	Corrected Results	Retention Time NT Only	QAS Decision	Footnote
EPA TO-15			***ug/m3***		***ppb(v)***			
Xylenes (o)	95-47-6	106.2	1,400		330			

Volatile Tentatively Identified Compounds	CAS Number	Molecular Weight	Lab Results	Q	Corrected Results	Retention Time NT Only	QAS Decision	Footnote
EPA TO-15			***ug/m3***		***ppb(v)***			
Isobutane	75-28-5		55	J		2.05		
Butane, 2-methyl-	78-78-4		220	J		2.81		
Unknown			38	J		3.54		
Pentane, 2-methyl-	107-83-5		80	J		4.52		
Cyclopentane, methyl-	96-37-7		44	J		6.59		
Hexane, 3-methyl-	589-34-4		30	J		8.20		
Unknown Cycloalkane			19	J		8.55		
Unknown Cycloalkane			29	J		8.76		
Unknown Alkane			20	J		10.94		
Unknown Cycloalkane			20	J		12.13		
Unknown			16	J		12.92		
Unknown Cycloalkane			17	J		14.43		
p-Bromofluorobenzene	460-00-4		140	J		18.56		
Total Tics	TOTVOATIC		720	J				

Volatile Organics in Air by GC/MS Data

Case Narrative/Conformance Summary

Volatile Organics in Air by GC/MS

eurofins | Lancaster Laboratories Environmental

Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX26

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

Sample #	Client ID	DF	Comments
8089423	SVMP-06R	10; 100	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

(Sample number(s): 8089423: Analysis: 05298)
The LCS and/or LCSD recoveries are outside the stated QC window
but within the marginal exceedance allowance of +/- 4 standard
deviations as defined in the NELAC Standards. The following
analytes are accepted based on this allowance:
tetrachloroethene

Batch#: C1528830AA
The recovery(ies) for the following analyte(s) in the LCS is below the acceptance window:
Tetrachloroethene

SAMPLE ANALYSIS:

(Sample number(s): 8089423: Analysis: 05298)
Reporting limits were raised due to interference from the sample matrix.

Case Narrative/Conformance Summary

CLIENT: CenterPoint Properties
SDG: SSX26

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

Abbreviation Key

LOQ = Limit of Quantitation	LCS = Lab Control Sample
MDL = Method Detection Limit	LCSD = Lab Control Sample Duplicate
ND = Not Detected	RE = Repreparation/Reanalysis
J = Estimated Value	* = Out of Specification
E= out of calibration range	

MDL Summary

Volatile Organics in Air by GC/MS

Analytical Method:
TO-15
Instrument type: HP6890/5973

GC/MS Volatiles in Air MDL Study

Instrument ID	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i
Datafile	db00511.d	db00512.d	db00513.d	db00514.d	db00515.d	db00516.d	db00517.d
Injection Date	2/24/2015 11:09	2/24/2015 11:55	2/24/2015 12:41	2/24/2015 13:27	2/24/2015 14:14	2/24/2015 15:01	2/24/2015 15:48
Lab Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5
Client Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5

Compound Name	Concentration (ppbv)	Concentration (ppbv)	Concentration (ppbv)	Concentration (ppbv)	Concentration (ppbv)	Concentration (ppbv)	Concentration (ppbv)	Mean Concentration (ppbv)	Standard Deviation	Student T value used	Sample MDL (ppbv)	Sample Spike Level (ppbv)	Average %Rec.	10x Rule?	4x Rule?
Propene	0.580	0.611	0.653	0.583	0.618	0.615	0.643	0.615	0.027	3.143	0.086	0.50	123	pass	pass
Dichlorodifluoromethane	0.501	0.513	0.498	0.499	0.496	0.516	0.530	0.508	0.013	3.143	0.039	0.50	102	fail	pass
Chlorodifluoromethane	0.576	0.575	0.647	0.630	0.600	0.612	0.646	0.612	0.030	3.143	0.095	0.50	122	pass	pass
Freon 114	0.432	0.439	0.438	0.425	0.433	0.438	0.468	0.439	0.014	3.143	0.043	0.50	88	fail	pass
Chloromethane	0.473	0.428	0.453	0.524	0.496	0.521	0.498	0.485	0.035	3.143	0.111	0.50	97	pass	pass
Vinyl Chloride	0.376	0.387	0.400	0.387	0.421	0.397	0.455	0.403	0.027	3.143	0.084	0.50	81	pass	pass
1,3-Butadiene	0.316	0.318	0.309	0.329	0.352	0.390	0.352	0.338	0.029	3.143	0.090	0.50	68	pass	pass
Bromomethane	0.425	0.441	0.444	0.450	0.439	0.443	0.480	0.446	0.017	3.143	0.053	0.50	89	pass	pass
Chloroethane	0.423	0.471	0.434	0.430	0.453	0.465	0.499	0.454	0.027	3.143	0.085	0.50	91	pass	pass
Bromoethene	0.461	0.455	0.449	0.480	0.470	0.461	0.489	0.466	0.014	3.143	0.044	0.50	93	fail	pass
Dichlorofluoromethane	0.496	0.518	0.505	0.513	0.519	0.534	0.545	0.519	0.017	3.143	0.052	0.50	104	pass	pass
Trichlorofluoromethane	0.487	0.493	0.479	0.484	0.477	0.492	0.510	0.489	0.011	3.143	0.035	0.50	98	fail	pass
Pentane	0.497	0.518	0.533	0.517	0.543	0.541	0.560	0.530	0.021	3.143	0.065	0.50	106	pass	pass
Ethanol	1.739	1.863	1.803	1.878	1.852	2.022	2.088	1.892	0.122	3.143	0.383	0.50	378	pass	pass
Freon123a	0.578	0.600	0.557	0.591	0.596	0.614	0.638	0.596	0.026	3.143	0.081	0.50	119	pass	pass
Acrolein	0.613	0.683	0.618	0.585	0.640	0.637	0.674	0.636	0.034	3.143	0.108	0.50	127	pass	pass
1,1-Dichloroethene	0.481	0.506	0.472	0.493	0.494	0.520	0.518	0.498	0.018	3.143	0.057	0.50	100	pass	pass
Freon 113	0.452	0.485	0.455	0.476	0.485	0.502	0.536	0.484	0.029	3.143	0.090	0.50	97	pass	pass
Acetone	1.417	1.475	1.416	1.494	1.564	1.652	1.759	1.540	0.128	3.143	0.402	0.50	308	pass	pass
Methyl Iodide	0.495	0.510	0.498	0.510	0.511	0.516	0.550	0.513	0.018	3.143	0.057	0.50	103	pass	pass
Carbon Disulfide	0.638	0.633	0.626	0.639	0.635	0.680	0.691	0.649	0.026	3.143	0.080	0.50	130	pass	pass
Isopropanol	0.781	0.835	0.838	0.835	0.896	0.851	0.885	0.846	0.038	3.143	0.119	0.50	169	pass	pass
Acetonitrile	0.621	0.681	0.689	0.661	0.727	0.726	0.767	0.696	0.048	3.143	0.152	1.00	70	pass	pass
3-Chloropropene	0.474	0.492	0.522	0.486	0.529	0.547	0.536	0.512	0.028	3.143	0.088	0.50	102	pass	pass
Methylene Chloride	1.060	1.062	1.046	1.103	1.096	1.135	1.178	1.097	0.047	3.143	0.148	0.50	219	pass	pass
tert-Butyl Alcohol	0.457	0.466	0.455	0.363	0.541	0.442	0.302	0.432	0.077	3.143	0.243	0.50	86	pass	pass
Acrylonitrile	0.506	0.591	0.535	0.531	0.573	0.554	0.553	0.549	0.028	3.143	0.088	0.50	110	pass	pass
trans-1,2-Dichloroethene	0.503	0.530	0.495	0.492	0.513	0.536	0.540	0.516	0.020	3.143	0.062	0.50	103	pass	pass
Methyl t-Butyl Ether	0.488	0.547	0.523	0.543	0.542	0.561	0.591	0.542	0.032	3.143	0.100	0.50	108	pass	pass

Analytical Method:
TO-15
Instrument type: HP6890/5973

GC/MS Volatiles in Air MDL Study

Instrument ID	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i
Datafile	db00511.d	db00512.d	db00513.d	db00514.d	db00515.d	db00516.d	db00517.d
Injection Date	2/24/2015 11:09	2/24/2015 11:55	2/24/2015 12:41	2/24/2015 13:27	2/24/2015 14:14	2/24/2015 15:01	2/24/2015 15:48
Lab Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5
Client Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5

Compound Name	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Mean Concentration (ppbv)**	**Standard Deviation**	**Student T value used**	**Sample MDL (ppbv)**	**Sample Spike Level (ppbv)**	**Average %Rec.**	**10x Rule?**	**4x Rule?**
Hexane	0.409	0.435	0.416	0.438	0.453	0.488	0.498	0.448	0.034	3.143	0.107	0.50	90	pass	pass
1,1-Dichloroethane	0.517	0.539	0.522	0.552	0.556	0.561	0.595	0.549	0.026	3.143	0.083	0.50	110	pass	pass
Vinyl Acetate	0.263	0.373	0.263	0.259	0.317	0.375	0.372	0.317	0.056	3.143	0.176	1.00	32	pass	pass
Di-Isopropyl Ether	0.368	0.409	0.387	0.386	0.407	0.404	0.445	0.401	0.024	3.143	0.077	0.50	80	pass	pass
Ethyl Tert-Butyl Ether	0.349	0.397	0.387	0.394	0.396	0.416	0.448	0.398	0.030	3.143	0.094	0.50	80	pass	pass
cis-1,2-Dichloroethene	0.426	0.475	0.455	0.486	0.478	0.497	0.527	0.478	0.032	3.143	0.100	0.50	96	pass	pass
1,2-Dichloroethene (total)	0.928	1.006	0.950	0.978	0.991	1.032	1.067	0.993	0.047	3.143	0.149	0.50	199	pass	pass
2-Butanone	0.474	0.543	0.513	0.577	0.566	0.593	0.658	0.561	0.059	3.143	0.186	0.50	112	pass	pass
Ethyl Acetate	0.455	0.453	0.454	0.494	0.478	0.582	0.465	0.483	0.046	3.143	0.145	0.50	97	pass	pass
Methyl Acrylate	0.372	0.419	0.400	0.416	0.440	0.456	0.489	0.427	0.038	3.143	0.120	0.50	85	pass	pass
Tetrahydrofuran	0.389	0.457	0.386	0.421	0.427	0.421	0.479	0.426	0.034	3.143	0.106	0.50	85	pass	pass
Chloroform	0.515	0.553	0.517	0.546	0.546	0.552	0.601	0.547	0.029	3.143	0.090	0.50	109	pass	pass
1,1,1-Trichloroethane	0.477	0.519	0.473	0.499	0.501	0.525	0.525	0.503	0.022	3.143	0.068	0.50	101	pass	pass
Cyclohexane	0.340	0.362	0.353	0.360	0.363	0.391	0.391	0.366	0.019	3.143	0.060	0.50	73	pass	pass
Carbon Tetrachloride	0.490	0.511	0.474	0.497	0.507	0.513	0.549	0.506	0.023	3.143	0.074	0.50	101	pass	pass
Benzene	0.535	0.597	0.555	0.599	0.592	0.626	0.652	0.594	0.040	3.143	0.125	0.50	119	pass	pass
1,2-Dichloroethane	0.544	0.571	0.537	0.583	0.560	0.601	0.631	0.575	0.033	3.143	0.104	0.50	115	pass	pass
Isooctane	0.355	0.382	0.371	0.391	0.404	0.405	0.429	0.391	0.024	3.143	0.077	0.50	78	pass	pass
Tert-Amyl Methyl Ether	0.375	0.425	0.393	0.420	0.415	0.452	0.472	0.422	0.033	3.143	0.104	0.50	84	pass	pass
Heptane	0.348	0.391	0.387	0.391	0.411	0.436	0.435	0.400	0.031	3.143	0.097	0.50	80	pass	pass
Trichloroethene	0.453	0.498	0.470	0.488	0.511	0.517	0.550	0.498	0.032	3.143	0.101	0.50	100	pass	pass
Ethyl Acrylate	0.317	0.380	0.358	0.387	0.413	0.421	0.422	0.385	0.038	3.143	0.121	0.50	77	pass	pass
1,2-Dichloropropane	0.478	0.531	0.480	0.522	0.529	0.565	0.574	0.526	0.037	3.143	0.117	0.50	105	pass	pass
Dibromomethane	0.505	0.545	0.504	0.540	0.549	0.580	0.576	0.543	0.030	3.143	0.095	0.50	109	pass	pass
1,4-Dioxane	0.276	0.328	0.280	0.317	0.341	0.318	0.336	0.314	0.026	3.143	0.081	0.50	63	pass	pass
Methyl Methacrylate	0.323	0.351	0.320	0.339	0.367	0.412	0.429	0.363	0.043	3.143	0.134	0.50	73	pass	pass
Bromodichloromethane	0.514	0.560	0.500	0.538	0.556	0.562	0.592	0.546	0.031	3.143	0.098	0.50	109	pass	pass
cis-1,3-Dichloropropene	0.391	0.424	0.395	0.417	0.419	0.458	0.474	0.425	0.031	3.143	0.096	0.50	85	pass	pass
4-Methyl-2-Pentanone	0.527	0.542	0.541	0.555	0.553	0.611	0.591	0.560	0.030	3.143	0.094	0.50	112	pass	pass

Analytical Method:
TO-15
Instrument type: HP6890/5973

GC/MS Volatiles in Air MDL Study

Instrument ID	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i
Datafile	db00511.d	db00512.d	db00513.d	db00514.d	db00515.d	db00516.d	db00517.d
Injection Date	2/24/2015 11:09	2/24/2015 11:55	2/24/2015 12:41	2/24/2015 13:27	2/24/2015 14:14	2/24/2015 15:01	2/24/2015 15:48
Lab Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5
Client Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5

Compound Name	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Mean Concentration (ppbv)**	**Standard Deviation**	**Student T value used**	**Sample MDL (ppbv)**	**Sample Spike Level (ppbv)**	**Average %Rec.**	**10x Rule?**	**4x Rule?**
Toluene	0.663	0.690	0.621	0.631	0.620	0.632	0.634	0.642	0.026	3.143	0.081	0.50	128	pass	pass
Octane	0.342	0.365	0.320	0.346	0.332	0.364	0.362	0.347	0.017	3.143	0.055	0.50	69	pass	pass
trans-1,3-Dichloropropene	0.440	0.460	0.417	0.435	0.425	0.430	0.454	0.437	0.015	3.143	0.048	0.50	87	fail	pass
1,3-Dichloropropene (total)	0.831	0.884	0.812	0.852	0.844	0.888	0.929	0.863	0.040	3.143	0.125	0.50	173	pass	pass
Ethyl Methacrylate	0.321	0.337	0.284	0.313	0.321	0.314	0.328	0.317	0.017	3.143	0.052	0.50	63	pass	pass
1,1,2-Trichloroethane	0.627	0.621	0.543	0.554	0.556	0.556	0.582	0.577	0.034	3.143	0.108	0.50	115	pass	pass
Tetrachloroethene	0.629	0.616	0.572	0.578	0.566	0.570	0.587	0.588	0.025	3.143	0.077	0.50	118	pass	pass
2-Hexanone	0.375	0.398	0.336	0.372	0.389	0.367	0.374	0.373	0.020	3.143	0.061	0.50	75	pass	pass
Dibromochloromethane	0.529	0.550	0.498	0.500	0.499	0.503	0.509	0.513	0.020	3.143	0.062	0.50	103	pass	pass
1,2-Dibromoethane	0.521	0.545	0.474	0.508	0.480	0.490	0.490	0.501	0.025	3.143	0.079	0.50	100	pass	pass
Chlorobenzene	0.637	0.616	0.570	0.599	0.580	0.579	0.603	0.598	0.024	3.143	0.074	0.50	120	pass	pass
1,1,1,2-Tetrachloroethane	0.572	0.589	0.522	0.540	0.502	0.520	0.527	0.539	0.031	3.143	0.097	0.50	108	pass	pass
Ethylbenzene	0.388	0.407	0.368	0.390	0.379	0.379	0.396	0.387	0.013	3.143	0.040	0.50	77	fail	pass
m/p-Xylene	0.327	0.360	0.308	0.330	0.326	0.334	0.346	0.333	0.016	3.143	0.052	0.50	67	pass	pass
o-Xylene	0.305	0.330	0.289	0.309	0.317	0.307	0.318	0.311	0.013	3.143	0.040	0.50	62	fail	pass
Xylene (total)	0.632	0.691	0.597	0.640	0.643	0.641	0.665	0.644	0.029	3.143	0.091	0.50	129	pass	pass
Styrene	0.297	0.332	0.288	0.300	0.311	0.312	0.326	0.309	0.016	3.143	0.050	0.50	62	fail	pass
Bromoform	0.503	0.504	0.468	0.471	0.470	0.473	0.483	0.482	0.016	3.143	0.049	0.50	96	fail	pass
Cumene	0.291	0.319	0.289	0.294	0.300	0.307	0.315	0.302	0.012	3.143	0.037	0.50	60	fail	pass
Bromobenzene	0.455	0.501	0.437	0.463	0.449	0.461	0.458	0.461	0.020	3.143	0.062	0.50	92	pass	pass
1,1,2,2-Tetrachloroethane	0.555	0.590	0.538	0.554	0.551	0.547	0.567	0.557	0.017	3.143	0.053	0.50	111	pass	pass
1,2,3-Trichloropropane	0.502	0.544	0.505	0.504	0.497	0.485	0.499	0.505	0.018	3.143	0.058	0.50	101	pass	pass
n-Propylbenzene	0.289	0.360	0.298	0.306	0.311	0.312	0.338	0.316	0.025	3.143	0.077	0.50	63	pass	pass
2-Chlorotoluene	0.375	0.439	0.388	0.409	0.407	0.409	0.411	0.405	0.020	3.143	0.063	0.50	81	pass	pass
4-Ethyltoluene	0.322	0.370	0.325	0.330	0.351	0.342	0.351	0.342	0.017	3.143	0.054	0.50	68	pass	pass
1,3,5-Trimethylbenzene	0.351	0.387	0.334	0.361	0.365	0.371	0.380	0.364	0.018	3.143	0.056	0.50	73	pass	pass
Alpha Methyl Styrene	0.237	0.270	0.235	0.257	0.251	0.246	0.258	0.251	0.012	3.143	0.039	0.50	50	fail	pass
tert-Butylbenzene	0.316	0.358	0.316	0.323	0.338	0.331	0.347	0.333	0.016	3.143	0.050	0.50	67	pass	pass
1,2,4-Trimethylbenzene	0.353	0.412	0.368	0.380	0.401	0.398	0.404	0.388	0.022	3.143	0.068	0.50	78	pass	pass

Analytical Method:
TO-15
Instrument type: HP6890/5973

GC/MS Volatiles in Air MDL Study

Instrument ID	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i	HP10145.i
Datafile	db00511.d	db00512.d	db00513.d	db00514.d	db00515.d	db00516.d	db00517.d
Injection Date	2/24/2015 11:09	2/24/2015 11:55	2/24/2015 12:41	2/24/2015 13:27	2/24/2015 14:14	2/24/2015 15:01	2/24/2015 15:48
Lab Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5
Client Sample ID	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5	MDL0.5

Compound Name	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Concentration (ppbv)**	**Mean Concentration (ppbv)**	**Standard Deviation**	**Student T value used**	**Sample MDL (ppbv)**	**Sample Spike Level (ppbv)**	**Average %Rec.**	**10x Rule?**	**4x Rule?**
sec-Butylbenzene	0.317	0.344	0.303	0.319	0.337	0.325	0.342	0.327	0.015	3.143	0.047	0.50	65	fail	pass
1,3-Dichlorobenzene	0.450	0.491	0.451	0.457	0.478	0.483	0.484	0.471	0.017	3.143	0.054	0.50	94	pass	pass
1,4-Dichlorobenzene	0.425	0.467	0.403	0.431	0.462	0.446	0.452	0.441	0.023	3.143	0.071	0.50	88	pass	pass
p-Isopropyltoluene	0.315	0.365	0.311	0.332	0.352	0.349	0.362	0.341	0.022	3.143	0.069	0.50	68	pass	pass
Benzyl Chloride	0.342	0.369	0.325	0.337	0.374	0.351	0.364	0.352	0.018	3.143	0.057	0.50	70	pass	pass
1,2-Dichlorobenzene	0.391	0.435	0.380	0.401	0.442	0.409	0.427	0.412	0.023	3.143	0.073	0.50	82	pass	pass
n-Butylbenzene	0.292	0.342	0.289	0.312	0.359	0.329	0.341	0.323	0.027	3.143	0.084	0.50	65	pass	pass
Hexachloroethane	0.391	0.395	0.380	0.383	0.380	0.383	0.380	0.385	0.006	3.143	0.019	0.50	77	fail	pass
1,2-Dibromo-3-chloropropane	0.353	0.419	0.382	0.377	0.486	0.437	0.430	0.412	0.045	3.143	0.141	0.50	82	pass	pass
1,2,4-Trichlorobenzene	0.185	0.262	0.228	0.210	0.411	0.318	0.262	0.268	0.076	4.143	0.316	0.50	54	pass	pass
Hexachlorobutadiene	0.521	0.603	0.549	0.542	0.621	0.596	0.534	0.567	0.039	5.143	0.201	0.50	113	pass	pass
Naphthalene	0.164	0.222	0.208	0.194	0.382	0.284	0.249	0.243	0.072	6.143	0.444	0.50	49	pass	pass

QC Summary

Volatile Organics in Air by GC/MS

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Quality Control Reference List
Volatiles in Air

CLIENT: CenterPoint Properties
SDG: SSX26

Fraction: Volatile Organics in Air by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
TO 15 VOA Ext. List	C1528830AA	VBLKC06	10/16/2015 12:23:00
		LCSC06	10/16/2015 13:09:00
		LCSDC06	10/16/2015 13:54:00
TO 15 VOA Ext. List	C1528830AB	VBLKC07	10/16/2015 17:03:00
		8089423	10/17/2015 07:01:00
TO 15 VOA Ext. List	C1528830AC	VBLKC15	10/19/2015 15:59:00
		8089423	10/19/2015 21:47:00

Fraction: Volatile Organics in Air by GC/MS

C1528830AA / VBLKC06 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Dichlorodifluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chlorodifluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chloromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Freon 114	10/16/15	N.D.	ppb(v)	0.20	1.0
Vinyl Chloride	10/16/15	N.D.	ppb(v)	0.20	1.0
1,3-Butadiene	10/16/15	N.D.	ppb(v)	0.40	2.0
Bromomethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Dichlorofluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Trichlorofluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Pentane	10/16/15	N.D.	ppb(v)	0.50	1.0
1,1-Dichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
Freon 113	10/16/15	N.D.	ppb(v)	0.50	2.0
Acetone	10/16/15	N.D.	ppb(v)	0.50	2.0
Carbon Disulfide	10/16/15	N.D.	ppb(v)	0.50	1.0
3-Chloropropene	10/16/15	N.D.	ppb(v)	0.20	1.0
Methylene Chloride	10/16/15	N.D.	ppb(v)	0.20	1.0
trans-1,2-Dichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
Methyl t-Butyl Ether	10/16/15	N.D.	ppb(v)	0.20	1.0
Hexane	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1-Dichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
cis-1,2-Dichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
2-Butanone	10/16/15	N.D.	ppb(v)	0.50	2.0
Chloroform	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,1-Trichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Carbon Tetrachloride	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Benzene	10/16/15	N.D.	ppb(v)	0.20	1.0
Isooctane	10/16/15	N.D.	ppb(v)	0.20	1.0
Heptane	10/16/15	N.D.	ppb(v)	0.50	1.0
Trichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dichloropropane	10/16/15	N.D.	ppb(v)	0.20	1.0
Dibromomethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Bromodichloromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
cis-1,3-Dichloropropene	10/16/15	N.D.	ppb(v)	0.20	1.0
4-Methyl-2-pentanone	10/16/15	N.D.	ppb(v)	0.50	2.0
Toluene	10/16/15	N.D.	ppb(v)	0.20	1.0
Octane	10/16/15	N.D.	ppb(v)	0.50	1.0
trans-1,3-Dichloropropene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,2-Trichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Tetrachloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
2-Hexanone	10/16/15	N.D.	ppb(v)	0.50	2.0
Dibromochloromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dibromoethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0

Fraction: Volatile Organics in Air by GC/MS

C1528830AA / VBLKC06 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
1,1,1,2-Tetrachloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Ethylbenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
m/p-Xylene	10/16/15	N.D.	ppb(v)	0.20	1.0
o-Xylene	10/16/15	N.D.	ppb(v)	0.20	1.0
Styrene	10/16/15	N.D.	ppb(v)	0.20	1.0
Bromoform	10/16/15	N.D.	ppb(v)	0.20	1.0
Cumene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,2,2-Tetrachloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2,3-Trichloropropane	10/16/15	N.D.	ppb(v)	0.20	1.0
Bromobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
4-Ethyltoluene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,3,5-Trimethylbenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2,4-Trimethylbenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,3-Dichlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,4-Dichlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dichlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
Hexachloroethane	10/16/15	N.D.	ppb(v)	0.50	2.0

C1528830AB / VBLKC07 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Dichlorodifluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chlorodifluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chloromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Freon 114	10/16/15	N.D.	ppb(v)	0.20	1.0
1,3-Butadiene	10/16/15	N.D.	ppb(v)	0.40	2.0
Bromomethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Dichlorofluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Trichlorofluoromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Pentane	10/16/15	N.D.	ppb(v)	0.50	1.0
1,1-Dichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
Freon 113	10/16/15	N.D.	ppb(v)	0.50	2.0
Acetone	10/16/15	N.D.	ppb(v)	0.50	2.0
3-Chloropropene	10/16/15	N.D.	ppb(v)	0.20	1.0
Methylene Chloride	10/16/15	N.D.	ppb(v)	0.20	1.0
trans-1,2-Dichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
Methyl t-Butyl Ether	10/16/15	N.D.	ppb(v)	0.20	1.0
Hexane	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1-Dichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
2-Butanone	10/16/15	N.D.	ppb(v)	0.50	2.0
Chloroform	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,1-Trichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Carbon Tetrachloride	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Benzene	10/16/15	N.D.	ppb(v)	0.20	1.0

Fraction: Volatile Organics in Air by GC/MS

C1528830AB / VBLKC07 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Isooctane	10/16/15	N.D.	ppb(v)	0.20	1.0
Heptane	10/16/15	N.D.	ppb(v)	0.50	1.0
Trichloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dichloropropane	10/16/15	N.D.	ppb(v)	0.20	1.0
Dibromomethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Bromodichloromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
cis-1,3-Dichloropropene	10/16/15	N.D.	ppb(v)	0.20	1.0
4-Methyl-2-pentanone	10/16/15	N.D.	ppb(v)	0.50	2.0
Toluene	10/16/15	N.D.	ppb(v)	0.20	1.0
Octane	10/16/15	N.D.	ppb(v)	0.50	1.0
trans-1,3-Dichloropropene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,2-Trichloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Tetrachloroethene	10/16/15	N.D.	ppb(v)	0.20	1.0
2-Hexanone	10/16/15	N.D.	ppb(v)	0.50	2.0
Dibromochloromethane	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dibromoethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Chlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,1,2-Tetrachloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
Ethylbenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
m/p-Xylene	10/16/15	N.D.	ppb(v)	0.20	1.0
o-Xylene	10/16/15	N.D.	ppb(v)	0.20	1.0
Styrene	10/16/15	N.D.	ppb(v)	0.20	1.0
Bromoform	10/16/15	N.D.	ppb(v)	0.20	1.0
Cumene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,1,2,2-Tetrachloroethane	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2,3-Trichloropropane	10/16/15	N.D.	ppb(v)	0.20	1.0
Bromobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
4-Ethyltoluene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,3,5-Trimethylbenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2,4-Trimethylbenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,3-Dichlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,4-Dichlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
1,2-Dichlorobenzene	10/16/15	N.D.	ppb(v)	0.20	1.0
Hexachloroethane	10/16/15	N.D.	ppb(v)	0.50	2.0

C1528830AC / VBLKC15 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Vinyl Chloride	10/19/15	N.D.	ppb(v)	0.20	1.0
Carbon Disulfide	10/19/15	N.D.	ppb(v)	0.50	1.0
cis-1,2-Dichloroethene	10/19/15	N.D.	ppb(v)	0.20	1.0

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FORM 01(TIC)
VOLATILE ORGANICS IN AIR
TENTATIVELY IDENTIFIED COMPOUNDS

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKC07
Canister ID:	N/A	Lab File ID:	cj00353.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	250 cc	Analyzed Date:	10/16/2015
Injection Volume:	250 cc	Analyzed Time:	17:03
Instrument ID:	09464	Dilution Factor:	1

Number TICs Found: Concentration Units: ppb(v)

CAS NUMBER	COMPOUND	RT	EST. CONC.	Q
	No Tentatively Identified Compounds Found			

Abbreviations:
B = The compound was found in blank with a result greater than the limit being reported.
J = The result is between the MDL and LOQ.

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

LCS: LCSC06 LCSD: LCSDC06	Batch: **C1528830AB** (Sample number(s): 8089423) Batch: **C1528830AC** (Sample number(s): 8089423)							
Analyte	**Spike Added ppb(v)**	**LCS Conc ppb(v)**	**LCSD Conc ppb(v)**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	10.1	8.71	9.74	86	96	61-149	11	25
Chlorodifluoromethane	10.7	8.60	9.76	80	91	70-130	13	25
Chloromethane	10.3	9.19	11.13	89	108	54-118	19	25
Freon 114	10.3	7.42	8.69	72	84	63-123	16	25
Vinyl Chloride	10.1	8.26	10.06	82	100	70-130	20	25
1,3-Butadiene	10.2	8.55	10.04	84	98	57-138	16	25
Bromomethane	9.80	8.06	9.61	82	98	70-130	17	25
Chloroethane	9.70	7.74	9.27	80	96	63-119	18	25
Dichlorofluoromethane	10.5	8.32	9.60	79	91	70-130	14	25
Trichlorofluoromethane	10.1	8.80	9.81	87	97	70-130	11	25
Pentane	10.5	8.95	10.32	85	98	70-130	14	25
1,1-Dichloroethene	10	8.40	9.72	84	97	61-128	15	25
Freon 113	9.70	7.64	8.77	79	90	63-114	14	25
Acetone	10.7	7.44	8.65	70	81	61-134	15	25
Carbon Disulfide	10	7.80	8.89	78	89	55-121	13	25
3-Chloropropene	11	8.29	9.27	75	84	70-130	11	25
Methylene Chloride	11	8.29	9.34	75	85	70-130	12	25
trans-1,2-Dichloroethene	10	8.19	9.31	82	93	66-121	13	25
Methyl t-Butyl Ether	10.2	7.76	9.17	76	90	52-129	17	25
Hexane	10.2	8.41	9.45	82	93	63-117	12	25
1,1-Dichloroethane	10.1	7.87	8.65	78	86	67-124	9	25
cis-1,2-Dichloroethene	10.5	8.36	9.37	80	89	65-121	11	25
2-Butanone	10.4	8.12	9.57	78	92	60-135	16	25
Chloroform	10.1	7.88	8.69	78	86	70-130	10	25
1,1,1-Trichloroethane	10.3	8.45	9.09	82	88	70-130	7	25
Carbon Tetrachloride	10.4	9.16	9.64	88	93	70-130	5	25
1,2-Dichloroethane	10.4	7.85	9.27	75	89	70-130	17	25
Benzene	10.6	7.83	9.41	74	89	70-130	18	25
Isooctane	10.5	8.69	10.08	83	96	70-130	15	25
Heptane	10.5	8.48	10.2	81	97	56-123	18	25
Trichloroethene	10.3	7.82	9.09	76	88	70-130	15	25
1,2-Dichloropropane	10.3	7.60	9.28	74	90	70-130	20	25
Dibromomethane	10.5	7.58	8.78	72	84	70-130	15	25
Bromodichloromethane	10.3	8.03	9.41	78	91	62-129	16	25
cis-1,3-Dichloropropene	9.50	6.47	8.00	68	84	64-136	21	25
4-Methyl-2-pentanone	10.2	8.34	10.02	82	98	53-140	18	25
Toluene	10.6	8.13	10.07	77	95	70-130	21	25
Octane	10.3	8.82	10.64	86	103	70-130	19	25
trans-1,3-Dichloropropene	10.1	6.98	8.84	69	88	61-126	24	25
1,1,2-Trichloroethane	10.6	7.99	9.84	75	93	59-131	21	25
Tetrachloroethene	10.7	7.32	8.81	68 *	82	70-130	19	25

Volatiles in Air

Fraction: Volatile Organics in Air by GC/MS

LCS: LCSC06 LCSD: LCSDC06	Batch: **C1528830AB** (Sample number(s): 8089423) Batch: **C1528830AC** (Sample number(s): 8089423)							
Analyte	**Spike Added ppb(v)**	**LCS Conc ppb(v)**	**LCSD Conc ppb(v)**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
2-Hexanone	10.9	8.76	11.01	80	101	47-150	23	25
Dibromochloromethane	9.80	7.84	9.39	80	96	65-127	18	25
1,2-Dibromoethane	10	7.18	8.95	72	89	65-126	22	25
Chlorobenzene	10.6	7.84	9.84	74	93	70-130	23	25
1,1,1,2-Tetrachloroethane	10.6	7.87	9.50	74	90	70-130	19	25
Ethylbenzene	10.6	8.28	9.92	78	94	70-130	18	25
m/p-Xylene	9.80	7.38	9.11	75	93	70-130	21	25
o-Xylene	10.7	8.00	9.84	75	92	70-130	21	25
Styrene	10.4	7.82	9.70	75	93	64-130	21	25
Bromoform	10	7.51	9.15	75	91	64-141	20	25
Cumene	10.4	7.98	9.93	77	96	70-130	22	25
1,1,2,2-Tetrachloroethane	10.7	7.81	9.66	73	90	58-133	21	25
1,2,3-Trichloropropane	10.2	7.59	9.15	74	90	70-130	19	25
Bromobenzene	10.6	7.71	9.38	73	88	70-130	20	25
4-Ethyltoluene	10.1	8.05	9.78	80	97	59-126	19	25
1,3,5-Trimethylbenzene	10.3	7.88	9.77	77	95	61-132	21	25
1,2,4-Trimethylbenzene	10.2	7.99	9.55	78	94	60-128	18	25
1,3-Dichlorobenzene	10.5	7.71	9.28	73	88	63-125	19	25
1,4-Dichlorobenzene	10.2	7.35	8.81	72	86	63-127	18	25
1,2-Dichlorobenzene	10.1	7.14	8.95	71	89	62-132	23	25
Hexachloroethane	10.9	7.79	9.27	71	85	70-130	17	25

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FORM 05
VOLATILE ORGANICS IN AIR
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

SDG No.:

Lab File ID: cj00320.d

BFB Injection Date: 10/15/2015

Instrument ID: 09464

BFB Injection Time: 21:05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	13.3
75	30.0% - 66.0% of mass 95	49.3
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.8
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	89.1
175	4.0% - 9.0% of mass 174	6.5 (7.3)
176	93.0% - 101.0% of mass 174	86.1 (96.7)
177	5.0% - 9.0% of mass 176	5.7 (6.6)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD002	cj00325.d	10/16/2015	01:09
VSTD005	cj00326.d	10/16/2015	01:51
VSTD010	cj00327.d	10/16/2015	02:34
VSTD025	cj00328.d	10/16/2015	03:17
VSTD070	cj00329.d	10/16/2015	04:03
mdlv0.5	cj00335.d	10/16/2015	08:37
mdlv0.2	cj00336.d	10/16/2015	09:19
VSTD001	cj00337.d	10/16/2015	10:21
VBLKC06	cj00339.d	10/16/2015	12:23
LCSC06	cj00340.d	10/16/2015	13:09
LCSDC06	cj00341.d	10/16/2015	13:54

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FORM 05
VOLATILE ORGANICS IN AIR
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

SDG No.:

Lab File ID: cj00320.d

BFB Injection Date: 10/15/2015

Instrument ID: 09464

BFB Injection Time: 21:05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	13.3
75	30.0% - 66.0% of mass 95	49.3
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.8
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	89.1
175	4.0% - 9.0% of mass 174	6.5 (7.3)
176	93.0% - 101.0% of mass 174	86.1 (96.7)
177	5.0% - 9.0% of mass 176	5.7 (6.6)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD002	cj00325.d	10/16/2015	01:09
VSTD005	cj00326.d	10/16/2015	01:51
VSTD010	cj00327.d	10/16/2015	02:34
VSTD025	cj00328.d	10/16/2015	03:17
VSTD070	cj00329.d	10/16/2015	04:03
mdlv0.5	cj00335.d	10/16/2015	08:37
mdlv0.2	cj00336.d	10/16/2015	09:19
VSTD001	cj00337.d	10/16/2015	10:21
VBLKC06	cj00339.d	10/16/2015	12:23
LCSC06	cj00340.d	10/16/2015	13:09
LCSDC06	cj00341.d	10/16/2015	13:54

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FORM 05
VOLATILE ORGANICS IN AIR
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

SDG No.:

Lab File ID: cj00350.d

BFB Injection Date: 10/16/2015

Instrument ID: 09464

BFB Injection Time: 14:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	11.8
75	30.0% - 66.0% of mass 95	46.7
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.5
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	91.2
175	4.0% - 9.0% of mass 174	7.0 (7.6)
176	93.0% - 101.0% of mass 174	88.4 (96.9)
177	5.0% - 9.0% of mass 176	6.1 (6.9)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	cj00351.d	10/16/2015	15:29
VBLKC07	cj00353.d	10/16/2015	17:03
8080655	cj00354.d	10/16/2015	17:53
8080656	cj00355.d	10/16/2015	18:37
8082701	cj00356.d	10/16/2015	19:20
8082701	cj00357.d	10/16/2015	20:13
8086674	cj00360.d	10/16/2015	23:12
8087710	cj00363.d	10/17/2015	01:33
8087711	cj00364.d	10/17/2015	02:21
8087713	cj00366.d	10/17/2015	03:56
8087714	cj00367.d	10/17/2015	04:43
8087715	cj00368.d	10/17/2015	05:30
8087716	cj00369.d	10/17/2015	06:17
8089423	cj00370.d	10/17/2015	07:01
8085446	cj00371.d	10/17/2015	07:44
8085447	cj00372.d	10/17/2015	08:31
8085448	cj00373.d	10/17/2015	09:18
8084057	cj00374.d	10/17/2015	10:02

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FORM 05
VOLATILE ORGANICS IN AIR
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

SDG No.:

Lab File ID: cj00380.d

BFB Injection Date: 10/19/2015

Instrument ID: 09464

BFB Injection Time: 11:17

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	12.3
75	30.0% - 66.0% of mass 95	47.5
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.4
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	103.5
175	4.0% - 9.0% of mass 174	7.8 (7.5)
176	93.0% - 101.0% of mass 174	100.3 (96.9)
177	5.0% - 9.0% of mass 176	6.4 (6.4)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD010	cj00385.d	10/19/2015	15:16
VBLKC15	cj00386.d	10/19/2015	15:59
8084058	cj00387.d	10/19/2015	17:21
8086675	cj00388.d	10/19/2015	18:07
8087194	cj00389.d	10/19/2015	18:53
8087712	cj00390.d	10/19/2015	19:35
8087713DL	cj00391.d	10/19/2015	20:18
8087714DL	cj00392.d	10/19/2015	21:00
8089423DL	cj00393.d	10/19/2015	21:47
8079039DL2	cj00394.d	10/19/2015	22:33
8079040DL2	cj00395.d	10/19/2015	23:20
8079041DL2	cj00396.d	10/20/2015	00:07
8081439DL	cj00397.d	10/20/2015	00:50
8081440DL	cj00398.d	10/20/2015	01:33
8081442DL	cj00399.d	10/20/2015	02:16
8087194DL	cj00400.d	10/20/2015	03:00
cc1042	cj00401.d	10/20/2015	03:44
cc880	cj00402.d	10/20/2015	04:29

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FORM 08
VOLATILE ORGANICS IN AIR
INSTRUMENT STANDARD AREA AND RETENTION TIME SUMMARY

SDG No.:

Lab Sample ID: VSTD010 Analyzed Date: 10/16/2015

Lab File ID: cj00327.d Analyzed Time: 02:34

Instrument ID: 09464

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	758229	7.20	2563691	9.20	2306014	15.52
UPPER LIMIT	1061521	7.53	3589167	9.53	3228420	15.85
LOWER LIMIT	454937	6.87	1538215	8.87	1383608	15.19
LAB SAMPLE ID						
mdlv0.5	744063	7.22	2205333	9.21	1988373	15.53
mdlv0.2	633154	7.22	1834763	9.21	1529399	15.53
VBLKC06	608341	7.23	1761339	9.21	1753512	15.54
LCSC06	674186	7.21	2236255	9.20	2080241	15.52
LCSDC06	672950	7.21	2106045	9.20	1893441	15.52

* = Outside of the QC Limits.

AREA: Upper limit: +40% of the internal standard area.
Lower Limit: -40% of the internal standard area.
R.T.: Upper limit: +0.33 of the internal standard R.T.
Lower limit: -0.33 of the internal standard R.T.

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FORM 08
VOLATILE ORGANICS IN AIR
INSTRUMENT STANDARD AREA AND RETENTION TIME SUMMARY

SDG No.:

Lab Sample ID: VSTD010 Analyzed Date: 10/16/2015

Lab File ID: cj00351.d Analyzed Time: 15:29

Instrument ID: 09464

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	800124	7.20	2623343	9.19	2389136	15.52
UPPER LIMIT	1120174	7.53	3672680	9.52	3344790	15.85
LOWER LIMIT	480074	6.87	1574006	8.86	1433482	15.19
LAB SAMPLE ID						
VBLKC07	653208	7.22	2074918	9.21	1982784	15.53
8080655	576261	7.21	1613652	9.20	1754187	15.52
8080656	958332	7.21	3348441	9.20	2965442	15.52
8082701	1232136 *	7.20	4199648 *	9.20	3602280 *	15.52
8082701	1306764 *	7.20	3984650 *	9.20	3248337	15.52
8086674	773120	7.20	2286639	9.20	2297578	15.52
8087710	1004683	7.21	2997422	9.20	2574442	15.52
8087711	725697	7.22	1982929	9.20	1943039	15.52
8087713	787095	7.21	2492904	9.20	2080283	15.52
8087714	760839	7.21	2069655	9.20	1705114	15.52
8087715	747606	7.21	2409308	9.20	1766076	15.52
8087716	762341	7.21	2224884	9.20	1993347	15.52
8089423	686530	7.21	2000594	9.20	1908047	15.53
8085446	795794	7.21	2330301	9.20	2144828	15.53
8085447	769497	7.21	2418321	9.20	2306205	15.53
8085448	648291	7.20	2543908	9.20	2435939	15.52
8084057	821033	7.21	2437089	9.21	2183830	15.53

* = Outside of the QC Limits.

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Lower Limit: -40% of the internal standard area.
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Lower limit: -0.33 of the internal standard R.T.

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FORM 08
VOLATILE ORGANICS IN AIR
INSTRUMENT STANDARD AREA AND RETENTION TIME SUMMARY

SDG No.:

Lab Sample ID: VSTD010 Analyzed Date: 10/19/2015

Lab File ID: cj00385.d Analyzed Time: 15:16

Instrument ID: 09464

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	612057	7.21	1919381	9.20	1703163	15.52
UPPER LIMIT	856880	7.54	2687133	9.53	2384428	15.85
LOWER LIMIT	367234	6.88	1151629	8.87	1021898	15.19
LAB SAMPLE ID						
VBLKC15	638502	7.21	1684047	9.21	1459692	15.52
8084058	555119	7.21	1606359	9.20	1524330	15.53
8086675	602120	7.21	2141154	9.20	2263357	15.52
8087194	749523	7.21	2056844	9.20	1910455	15.52
8087712	640354	7.21	1857405	9.21	1678349	15.53
8087713DL	596360	7.21	1700506	9.20	1706233	15.53
8087714DL	547638	7.21	1679722	9.20	1692963	15.52
8089423DL	488336	7.21	1457141	9.20	1519121	15.52
8079039DL2	573339	7.20	1613857	9.20	1549997	15.52
8079040DL2	585334	7.21	1890829	9.20	1923284	15.52
8079041DL2	565993	7.21	1790379	9.20	1748710	15.52
8081439DL	535174	7.21	1438930	9.20	1317278	15.53
8081440DL	579386	7.21	1757457	9.21	1712659	15.53
8081442DL	562776	7.21	1605574	9.20	1646983	15.52
8087194DL	549060	7.21	1690052	9.21	1744992	15.53
cc1042	527722	7.22	1480759	9.21	1515633	15.53
cc880	532312	7.21	1660547	9.21	1663176	15.53

* = Outside of the QC Limits.

AREA: Upper limit: +40% of the internal standard area.
Lower Limit: -40% of the internal standard area.
R.T.: Upper limit: +0.33 of the internal standard R.T.
Lower limit: -0.33 of the internal standard R.T.

Sample Data

Volatile Organics in Air by GC/MS

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air 8089423

Data file: /chem/HP09464.i/15oct16.b/cj00370.d Injection date and time: **17-OCT-2015 07:01**
Data file Sample Info. Line: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE; Instrument ID: **HP09464.i** Batch: **C1528830AB**
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Blank Data file reference: **/chem/HP09464.i/15oct16.b/cj00353.d**

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 21-OCT-2015 16:54
Mid Level Daily Calibration Standard Reference: **/chem/HP09464.i/15oct16.b/cj00351.d**

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.5 psia Canister Pressure before dilution (Ya): 13.2 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 50 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(-0.006)	1007	130	686530 (-14)	10.00		480075 - 1120173
51) 1,4-Difluorobenzene	9.197(-0.006)	1334	114	2000594 (-24)	10.00		1574006 - 3672680
71) Chlorobenzene-d5	15.530(-0.012)	2375	117	1908047 (-20)	10.00		1433482 - 3344790

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
2) Dichlorodifluoromethane	(1)			Not Detected					0.2	1
3) Chlorodifluoromethane	(1)	1.908(-0.001)	51	25545	0.396	3.96		J	0.2	1
4) Freon 114	(1)			Not Detected					0.2	1
5) Chloromethane	(1)			Not Detected					0.2	1
6) Vinyl Chloride	(1)	2.206(-0.000)	62	13939396	325.716	3257.16		E	0.2	1
7) 1,3-Butadiene	(1)	2.261(-0.000)	54	32272	1.225	12.25		J	0.4	2
8) Bromomethane	(1)			Not Detected					0.2	1
9) Chloroethane	(1)			Not Detected					0.2	1
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)	3.131(-0.000)	43	1159997	31.334	313.34			0.2	1
17) 1,1-Dichloroethene	(1)	3.691(-0.001)	61	47762	0.673	6.73		J	0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.812(-0.004)	43	251701	8.915	89.15			0.5	2
21) Carbon Disulfide	(1)	3.965(-0.001)	76	4237343	29.042	290.42		E	0.5	1
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)			Not Detected					0.2	1
28) trans-1,2-Dichloroethene	(1)	4.914(-0.001)	61	362045	6.021	60.21			0.2	1
29) Methyl t-Butyl Ether	(1)	5.017(-0.004)	73	85799	1.104	11.04			0.2	1
30) Hexane	(1)	5.504(-0.001)	57	358401	8.140	81.40			0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)	6.775(-0.000)	61	4932353	89.142	891.42		E	0.2	1
37) 2-Butanone	(1)	6.897(-0.003)	72	23428	1.708	17.08		J	0.5	2
42) Chloroform	(1)	7.408(0.000)	83	63452	0.488	4.88		J	0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)	8.394(0.000)	78	3302345	26.967	269.67			0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)	8.655(-0.000)	57	579883	5.033	50.33			0.2	1
50) Heptane	(2)	9.069(-0.001)	43	120169	3.785	37.85			0.2	1
52) Trichloroethene	(2)	9.665(-0.000)	130	218099	2.602	26.02			0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
58) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
60) 4-Methyl-2-Pentanone	(2)	12.074(-0.000)	43	27747	0.870	8.70		J	0.5	2
61) Toluene	(3)	12.348(0.000)	91	2166073	14.539	145.39			0.2	1
62) Octane	(3)	12.816(0.000)	43	176973	4.508	45.08			0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)	13.564(0.001)	166	73809M	0.582	5.82		J	0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1

E = Compound concentration above calibration range. M = Compound was manually integrated.

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP09464.i/15oct16.b/cj00370.d Injection date and time: **17-OCT-2015 07:01**
Data file Sample Info. Line: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE; Instrument ID: **HP09464.i** Batch: **C1528830AB**
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Blank Data file reference: **/chem/HP09464.i/15oct16.b/cj00353.d**

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 21-OCT-2015 16:54
Mid Level Daily Calibration Standard Reference: **/chem/HP09464.i/15oct16.b/cj00351.d**

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 26.5 psia Canister Pressure before dilution (Ya): 13.2 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 50 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
70) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
74) Ethylbenzene	(3)	15.949(0.000)	91	4178459	25.386	253.86			0.2	1
75) m/p-Xylene	(3)	16.266(0.000)	91	6596764	48.462	484.62			0.2	1
76) o-Xylene	(3)	17.239(0.000)	91	4760171	33.225	332.25			0.2	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.2	1
80) Cumene	(3)	18.243(0.000)	105	99917	0.543	5.43		J	0.2	1
81) Bromobenzene	(3)			Not Detected					0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
86) 4-Ethyltoluene	(3)			Not Detected					0.2	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.2	1

Total number of targets = 62

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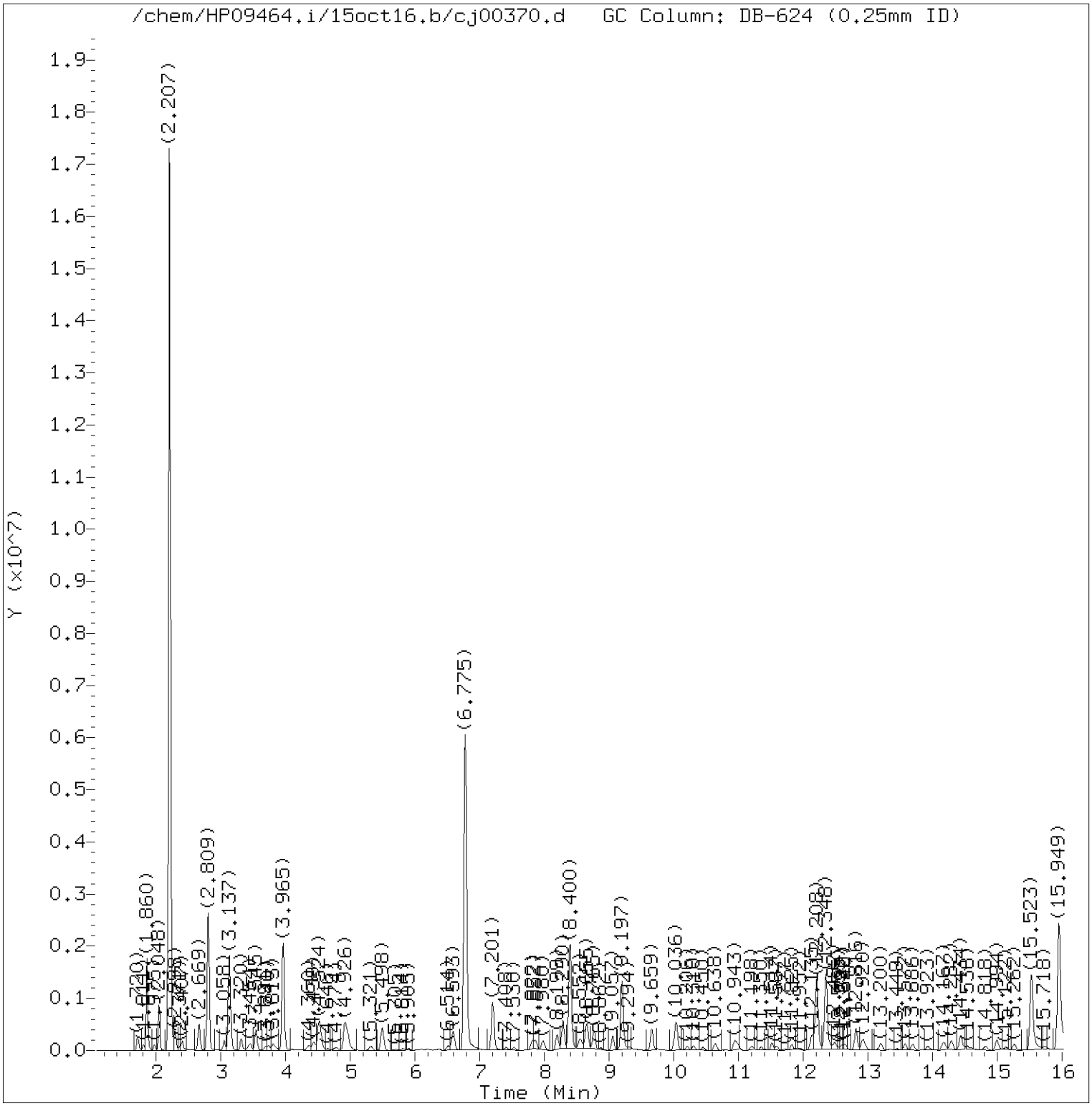
Secondary review performed and digitally signed by Michele J. Smith on 10/30/2015 at 15:42. Parallax ID: mjs00758



Total Ion Chromatogram (TIC)

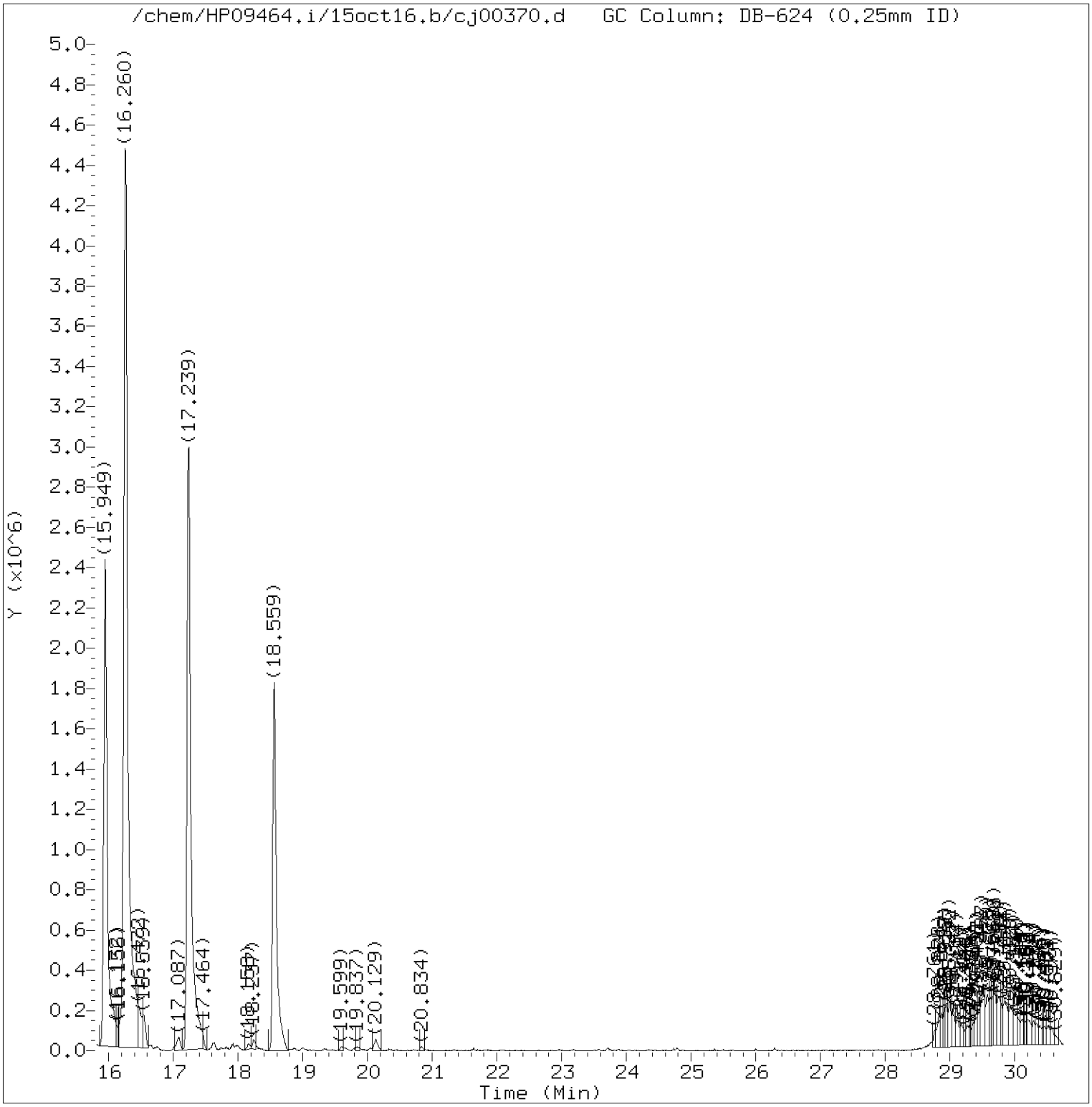
Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Digitally signed by Jeffrey B. Smith
on 10/29/2015 at 11:42.
Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

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on 10/29/2015 at 11:42.
Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
3) Chlorodifluoromethane	(1)	1.908	51	25545	0.396
6) Vinyl Chloride	(1)	2.207	62	13939396	325.716
7) 1,3-Butadiene	(1)	2.261	54	32272	1.225
13) Pentane	(1)	3.131	43	1159997	31.334
17) 1,1-Dichloroethene	(1)	3.691	61	47762	0.673
19) Acetone	(1)	3.813	43	251701	8.915
21) Carbon Disulfide	(1)	3.965	76	4237343	29.042
28) trans-1,2-Dichloroethene	(1)	4.914	61	362045	6.021
29) Methyl t-Butyl Ether	(1)	5.017	73	85799	1.104
30) Hexane	(1)	5.504	57	358401	8.140
35) cis-1,2-Dichloroethene	(1)	6.775	61	4932353	89.142
37) 2-Butanone	(1)	6.897	72	23428	1.708
40)*Bromochloromethane	(1)	7.207	130	686530	10.000
42) Chloroform	(1)	7.408	83	63452	0.488
46) Benzene	(2)	8.393	78	3302345	26.967
48) Isooctane	(2)	8.655	57	579883	5.033
50) Heptane	(2)	9.069	43	120169	3.785
51)*1,4-Difluorobenzene	(2)	9.197	114	2000594	10.000
52) Trichloroethene	(2)	9.665	130	218099	2.602
60) 4-Methyl-2-Pentanone	(2)	12.074	43	27747	0.870
61) Toluene	(3)	12.348	91	2166073	14.539
62) Octane	(3)	12.816	43	176973	4.508
67) Tetrachloroethene	(3)	13.565	166	73809M	0.582
71)*Chlorobenzene-d5	(3)	15.530	117	1908047	10.000
74) Ethylbenzene	(3)	15.949	91	4178459	25.386
75) m/p-Xylene	(3)	16.266	91	6596764	48.462
76) o-Xylene	(3)	17.239	91	4760171	33.225
80) Cumene	(3)	18.243	105	99917	0.543

M = Compound was manually integrated.
* = Compound is an internal standard.

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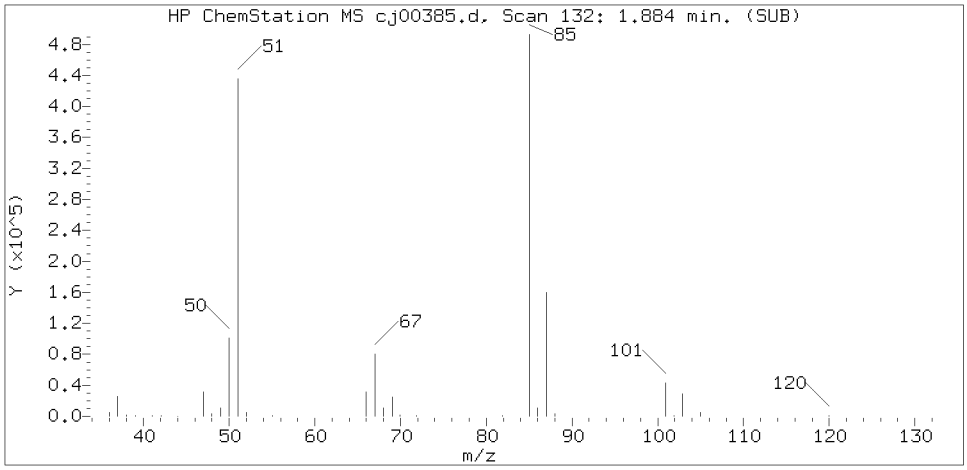
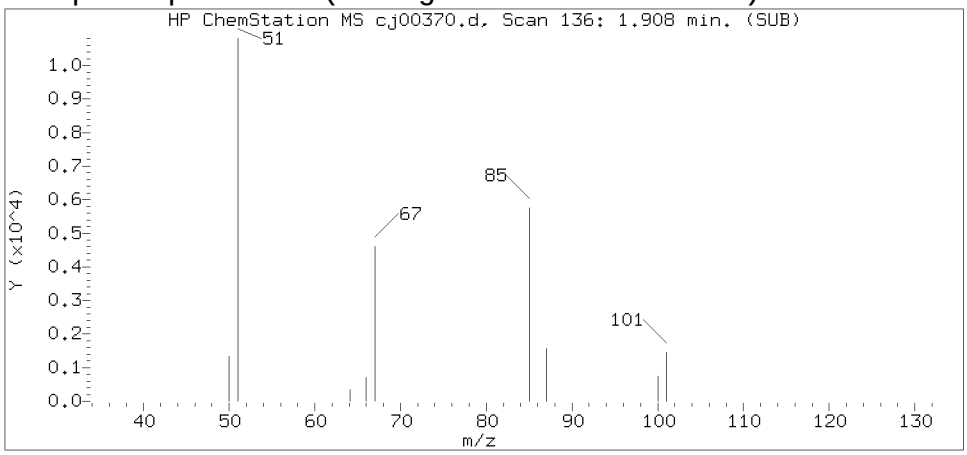
Target 3.5 esignature user ID: jbs01304

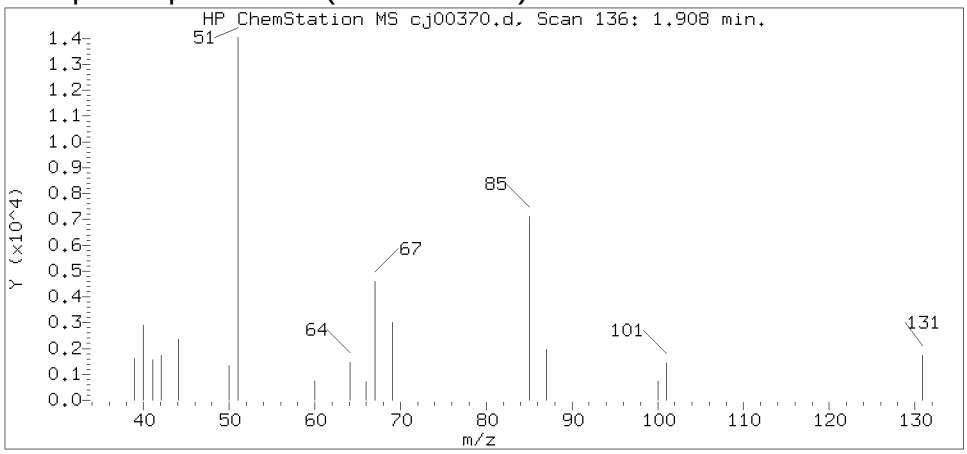
Reference Standard Spectrum for Chlorodifluoromethane

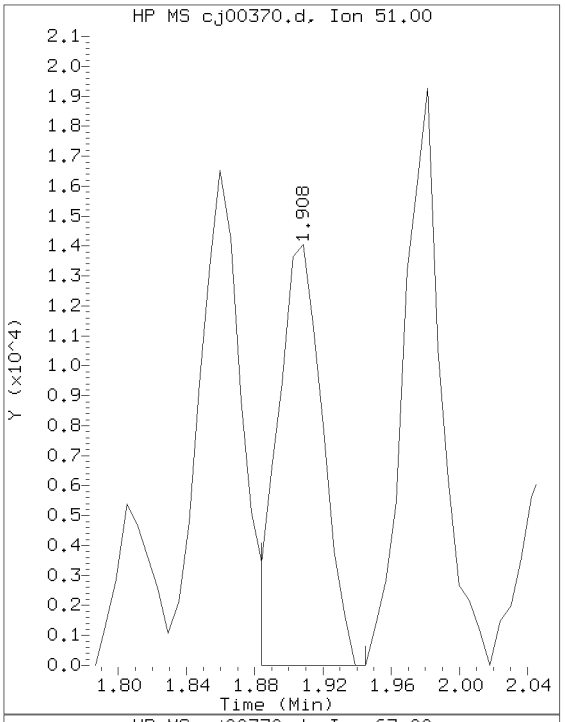


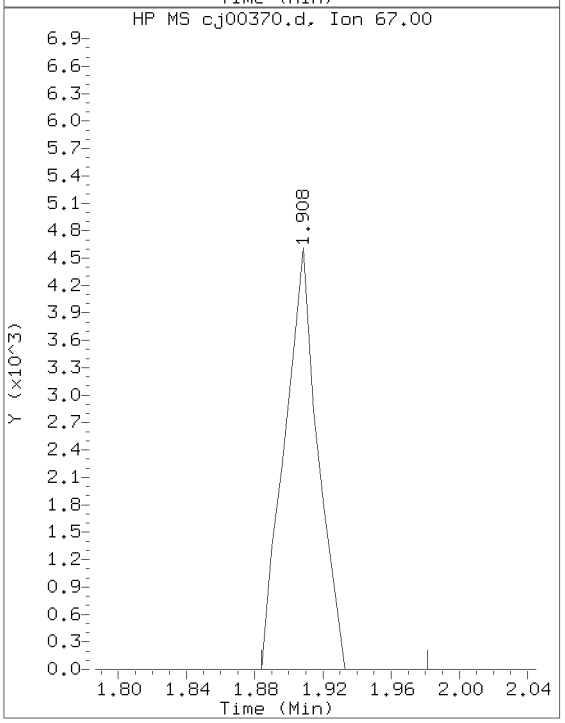
Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)







Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 3
Compound Name	: Chlorodifluoromethane
Scan Number	: 136
Retention Time (minutes)	: 1.908
Relative Retention Time	:-0.00148
Quant Ion	: 51.00
Area (flag)	: 25545
Concentration (ppb(v))	: 0.3956

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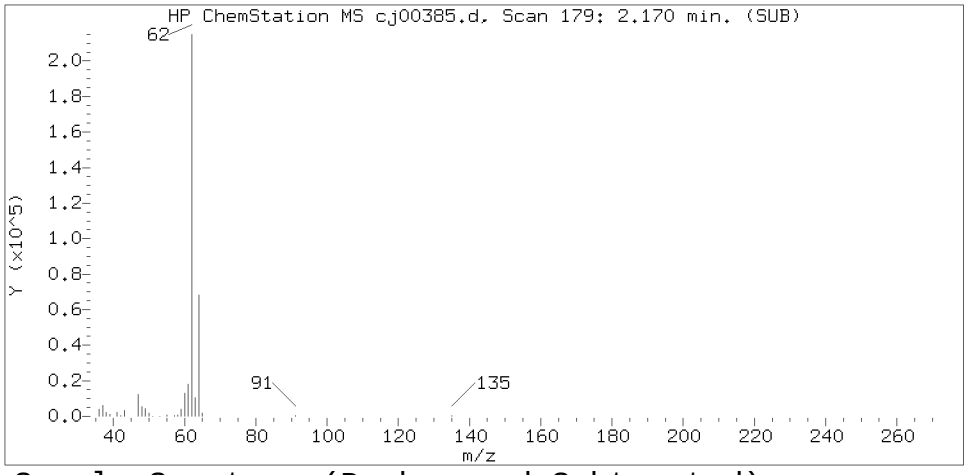
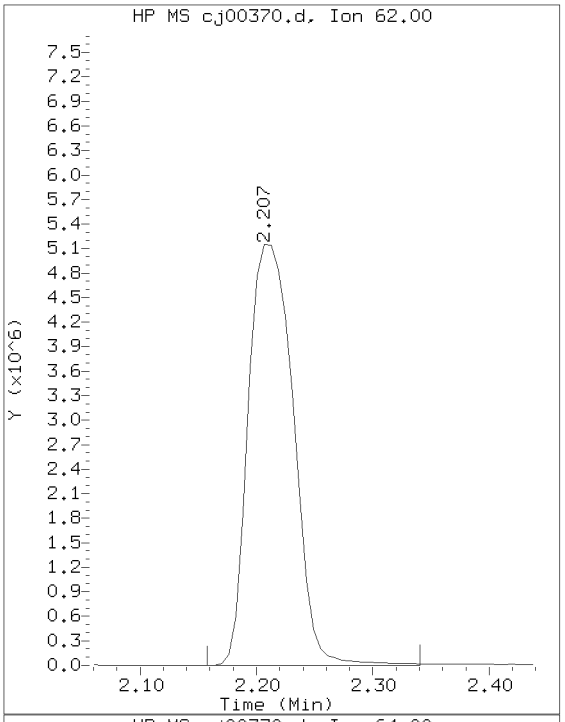
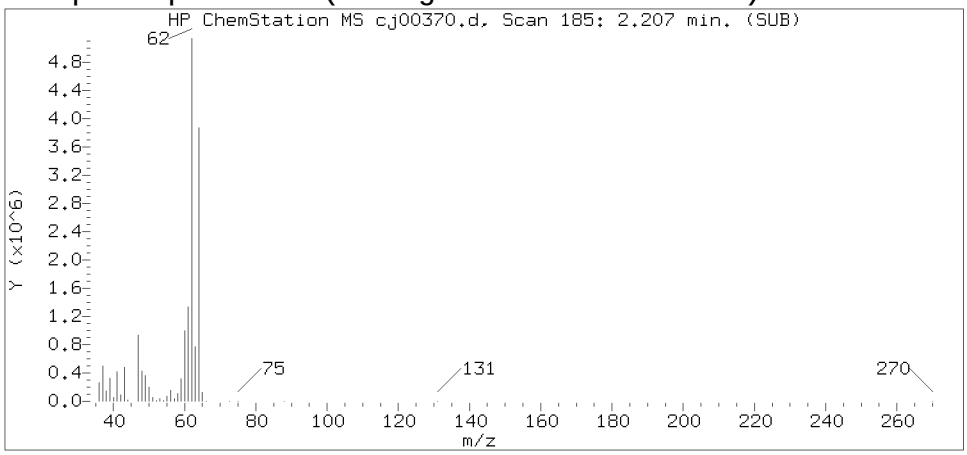
Target 3.5 esignature user ID: jbs01304

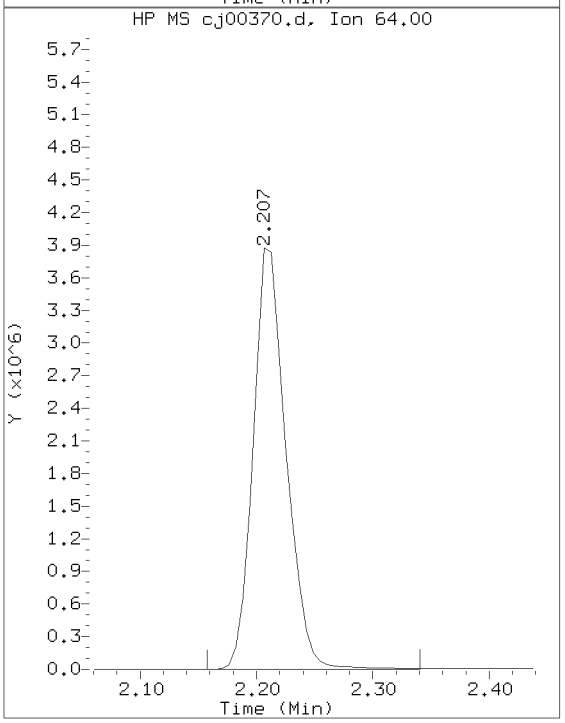
Reference Standard Spectrum for Vinyl Chloride



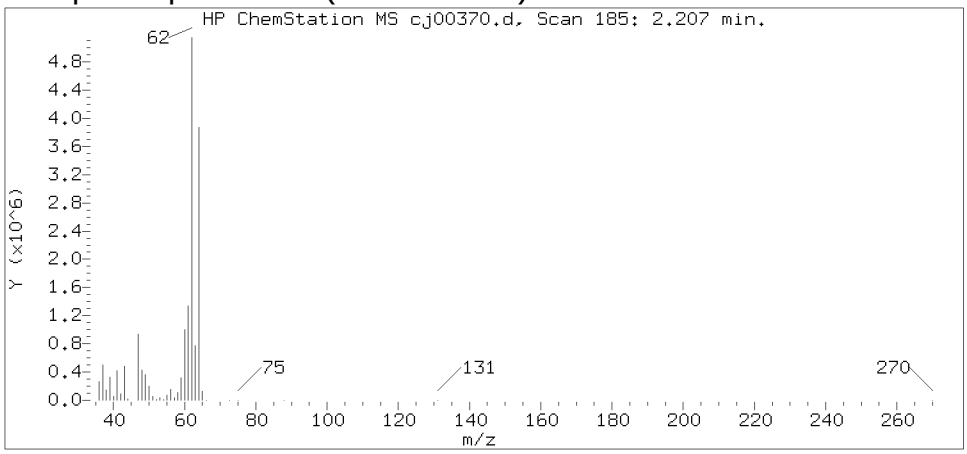


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 6
Compound Name	: Vinyl Chloride
Scan Number	: 185
Retention Time (minutes)	: 2.207
Relative Retention Time	:-0.00060
Quant Ion	: 62.00
Area (flag)	: 13939396
Concentration (ppb(v))	: 325.7162

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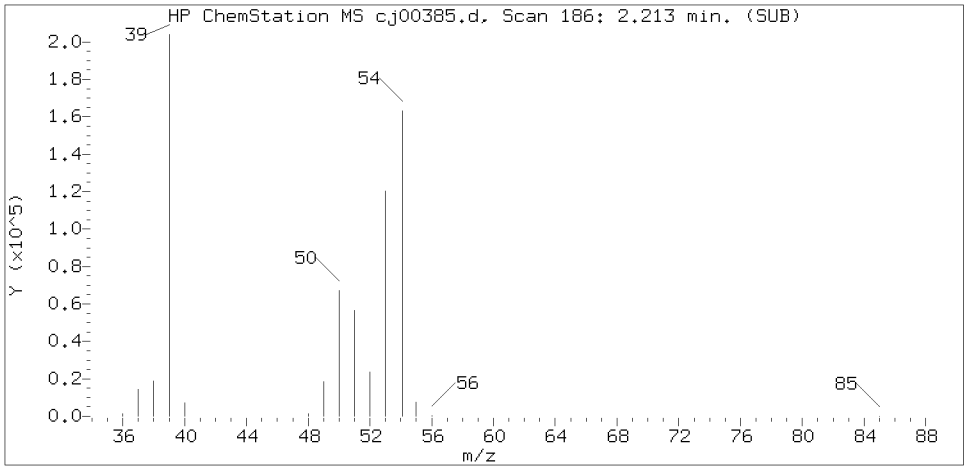
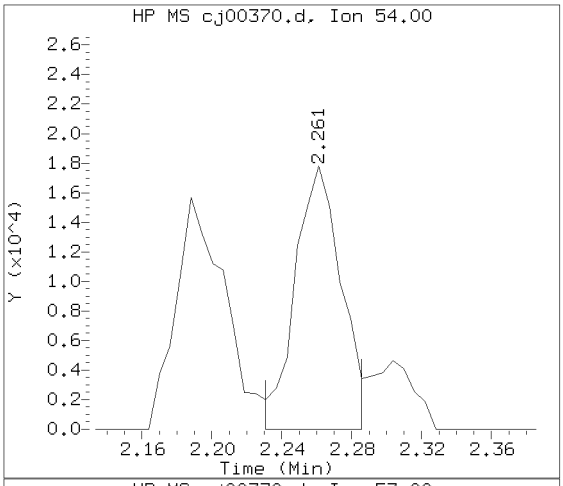
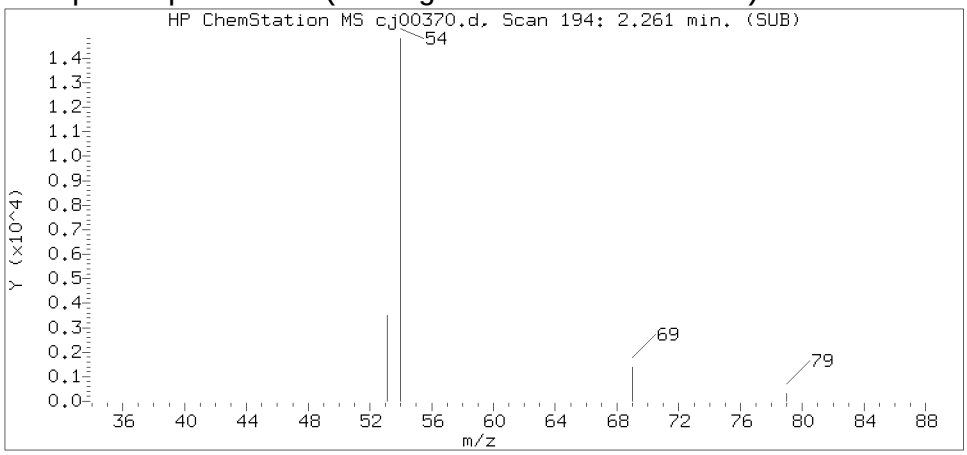
Target 3.5 esignature user ID: jbs01304

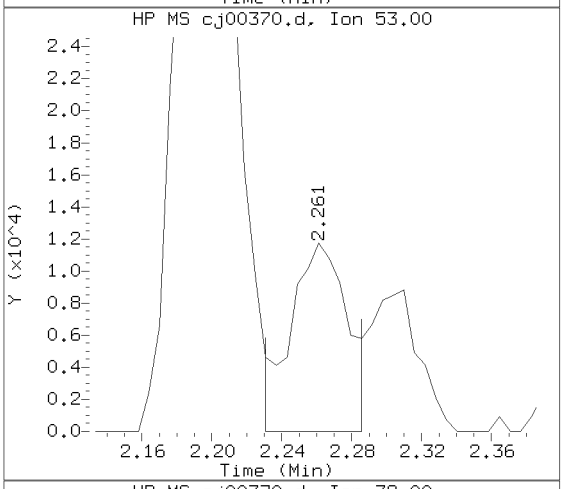
Reference Standard Spectrum for 1,3-Butadiene



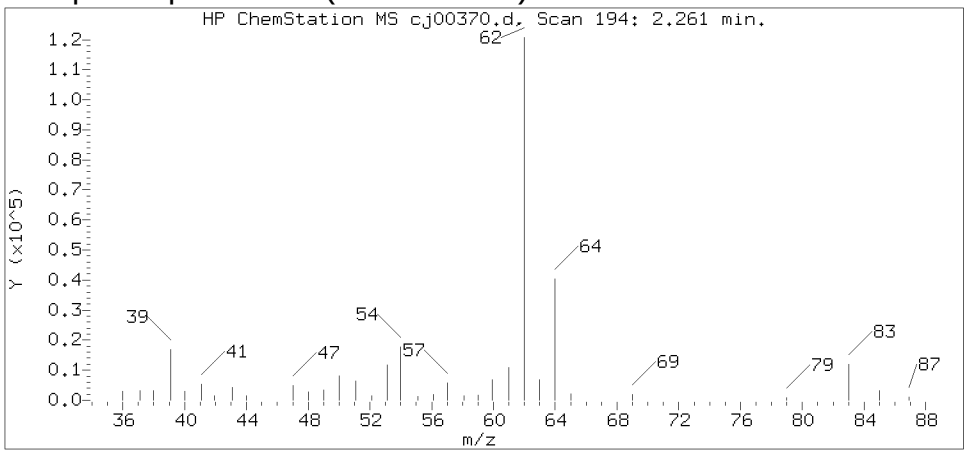


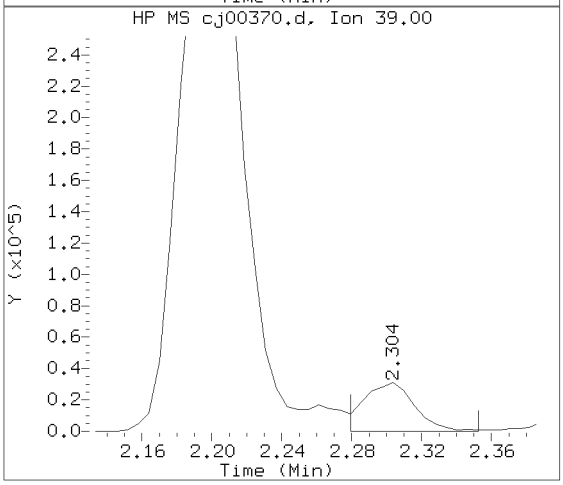
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 7
Compound Name : 1,3-Butadiene
Scan Number : 194
Retention Time (minutes): 2.261
Relative Retention Time :-0.00060
Quant Ion : 54.00
Area (flag) : 32272
Concentration (ppb(v)) : 1.2251

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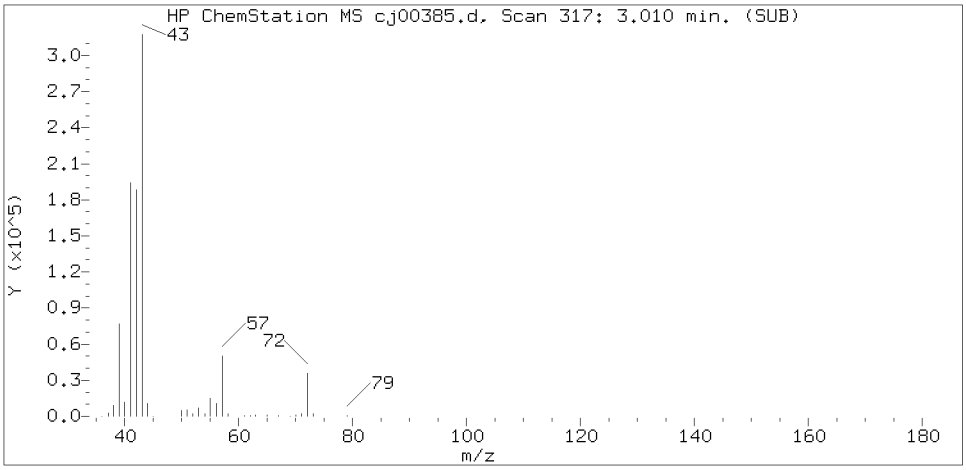
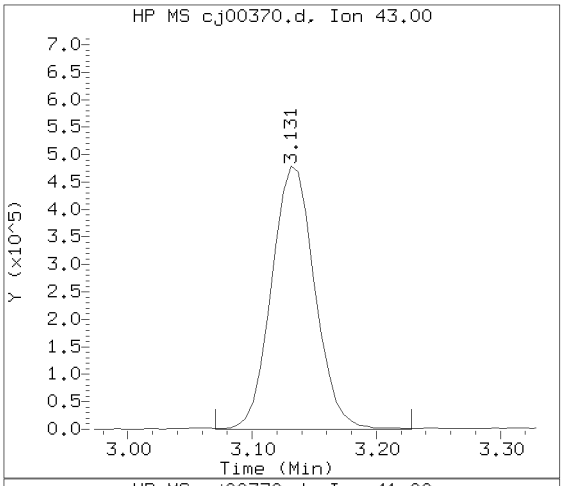
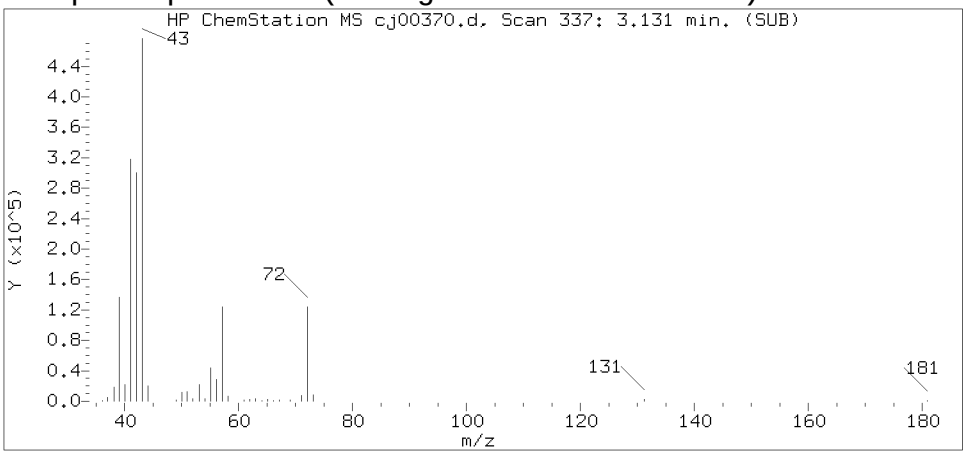
Target 3.5 esignature user ID: jbs01304

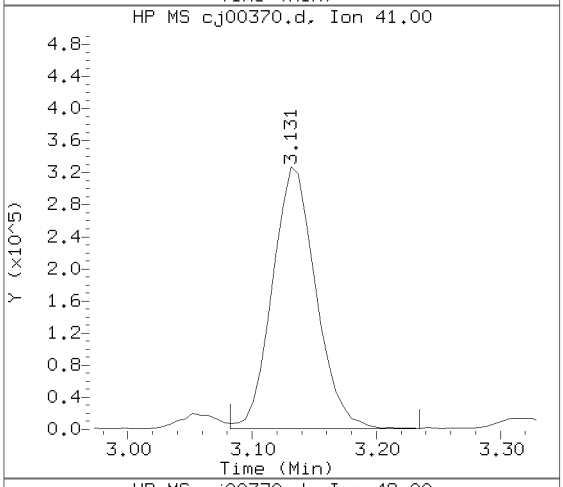
Reference Standard Spectrum for Pentane



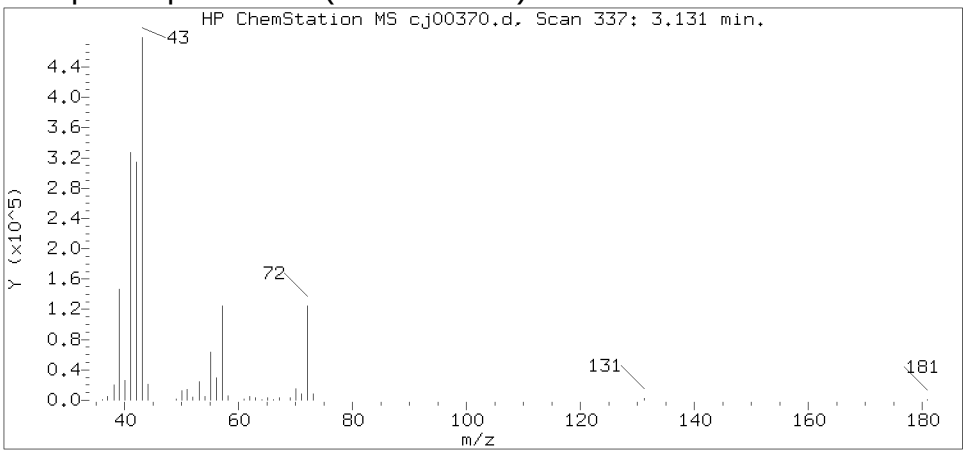


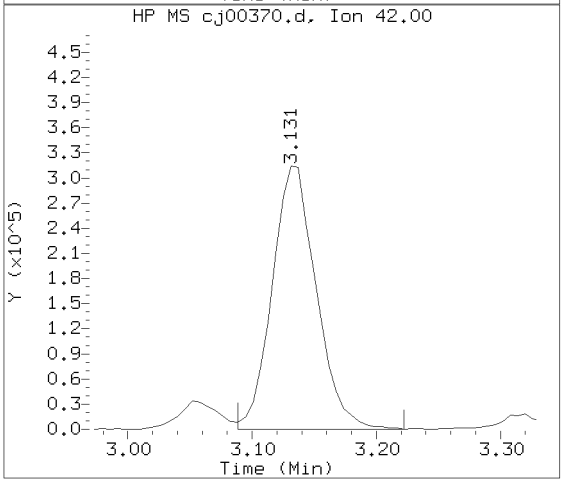
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 13
Compound Name : Pentane
Scan Number : 337
Retention Time (minutes): 3.131
Relative Retention Time :-0.00049
Quant Ion : 43.00
Area (flag) : 1159997
Concentration (ppb(v)) : 31.3344

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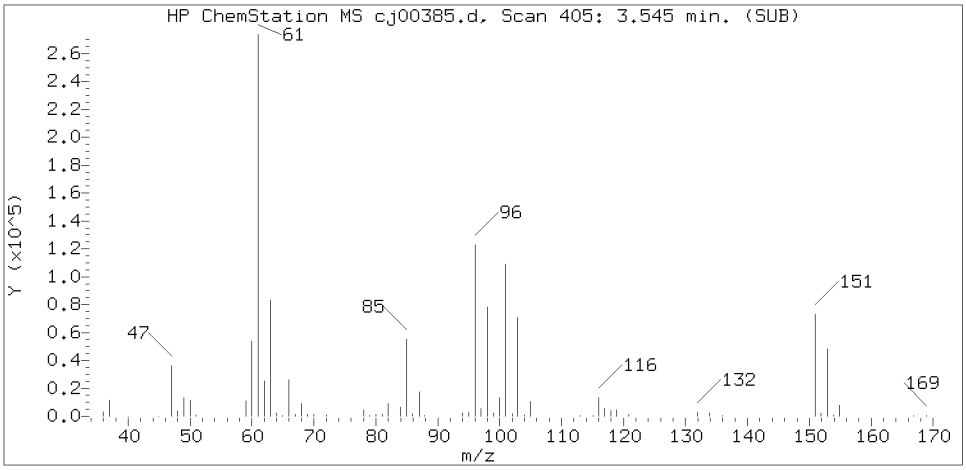
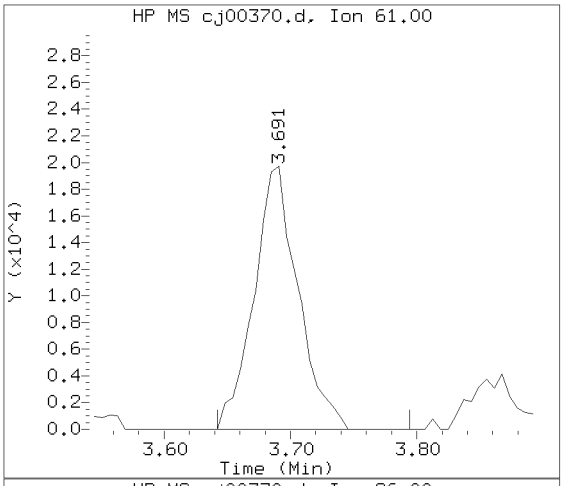
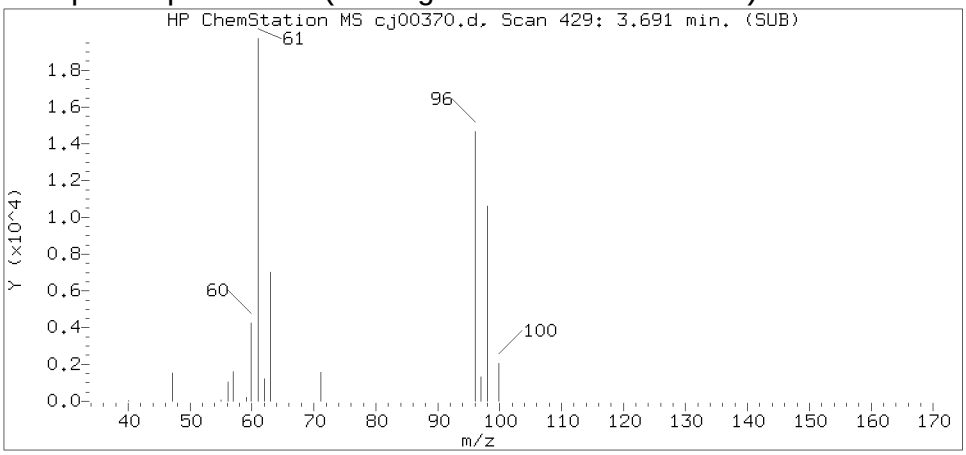
Target 3.5 esignature user ID: jbs01304

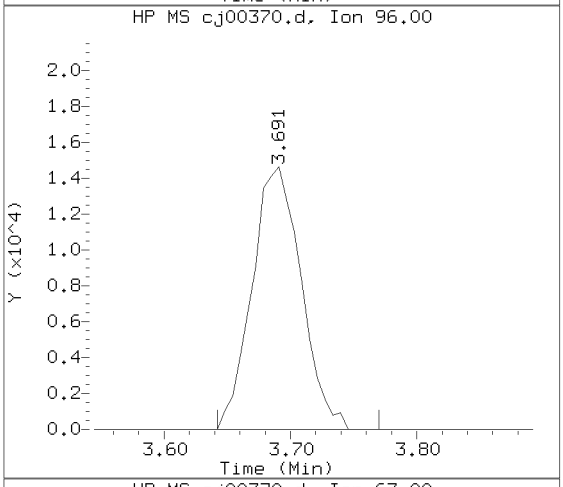
Reference Standard Spectrum for 1,1-Dichloroethene



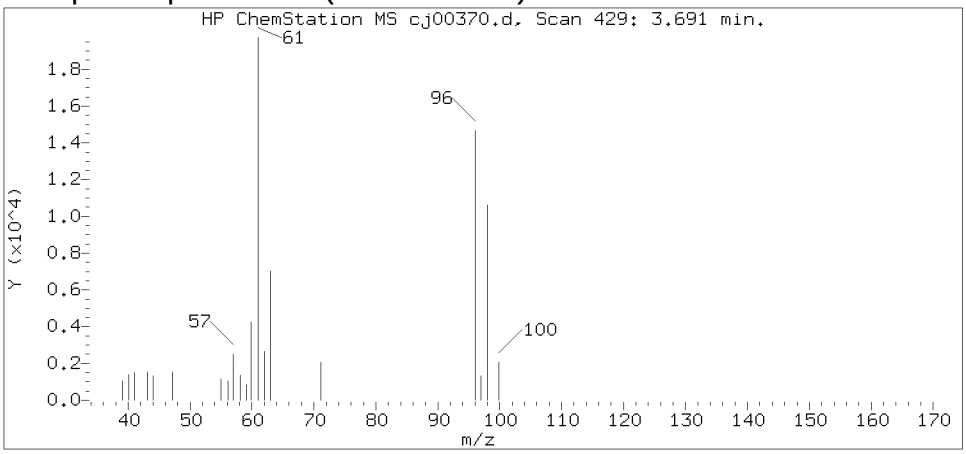


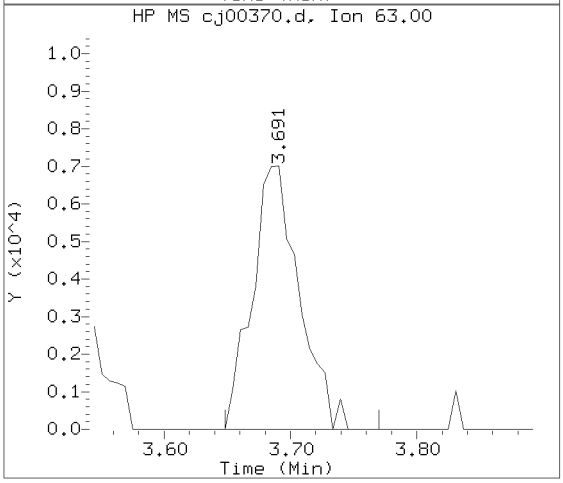
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 17
Compound Name : 1,1-Dichloroethene
Scan Number : 429
Retention Time (minutes): 3.691
Relative Retention Time :-0.00127
Quant Ion : 61.00
Area (flag) : 47762
Concentration (ppb(v)) : 0.6729

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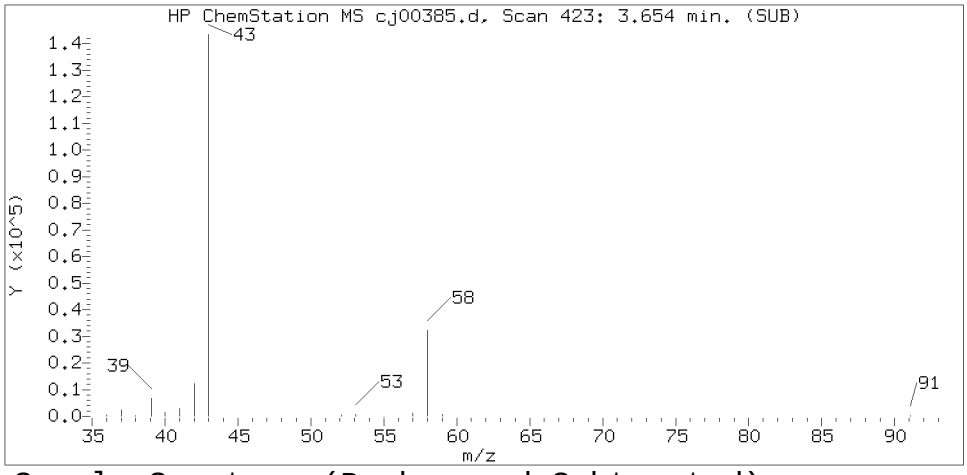
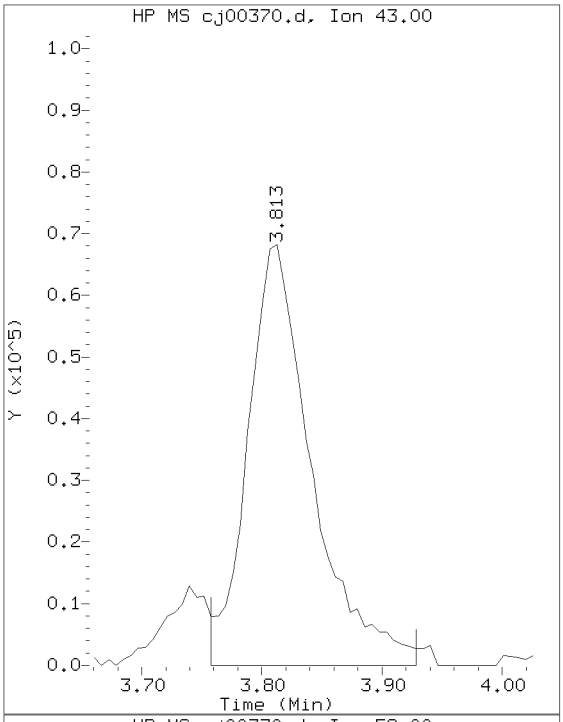
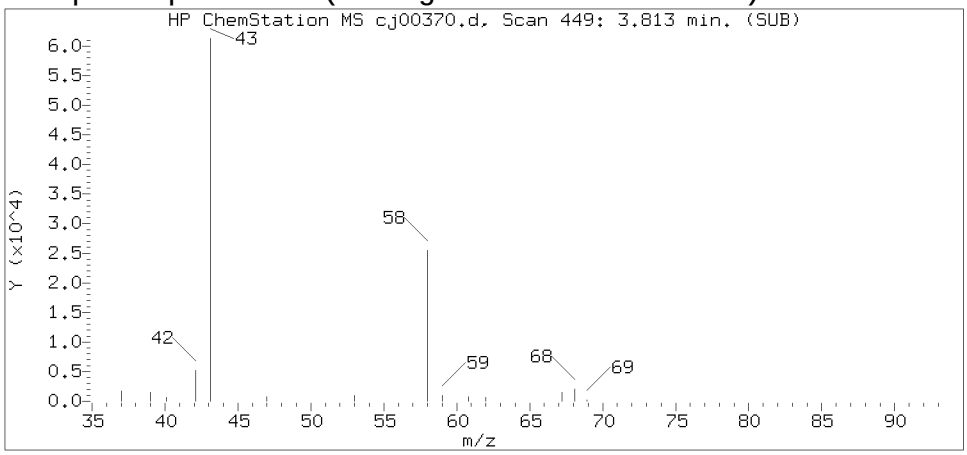
Target 3.5 esignature user ID: jbs01304

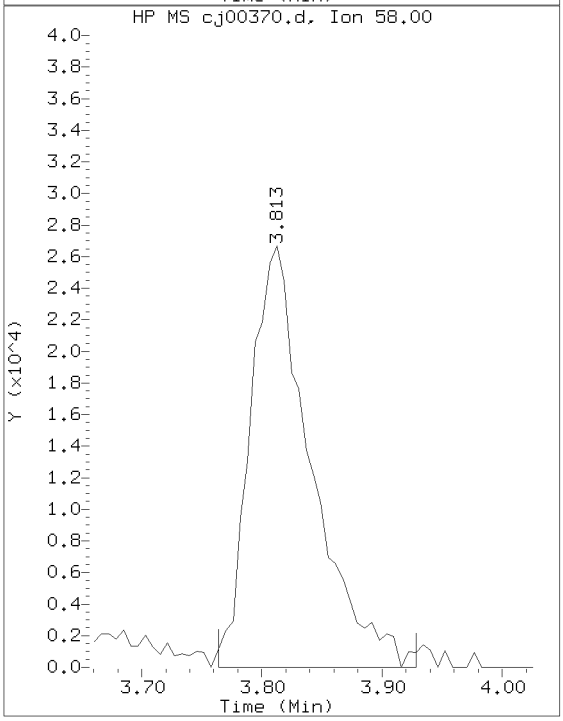
Reference Standard Spectrum for Acetone



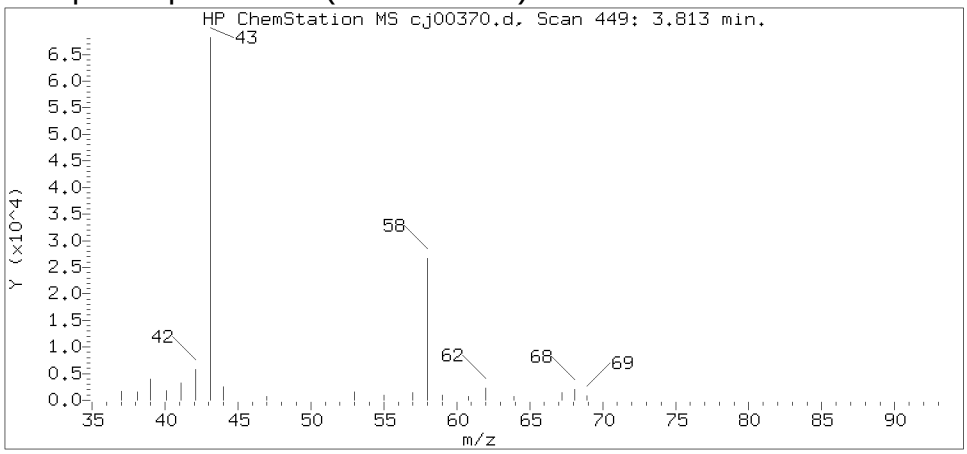


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 19
Compound Name : Acetone
Scan Number : 449
Retention Time (minutes): 3.813
Relative Retention Time :-0.00463
Quant Ion : 43.00
Area (flag) : 251701
Concentration (ppb(v)) : 8.9147

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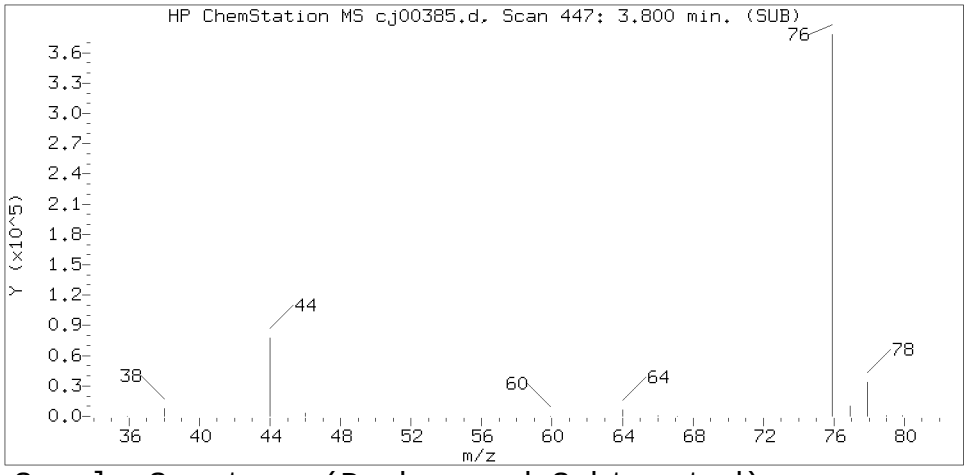
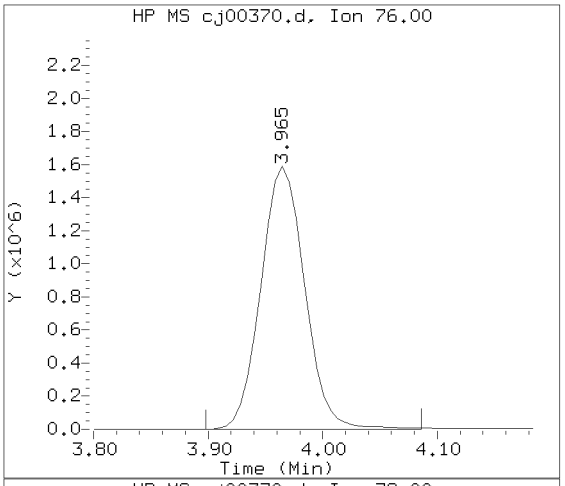
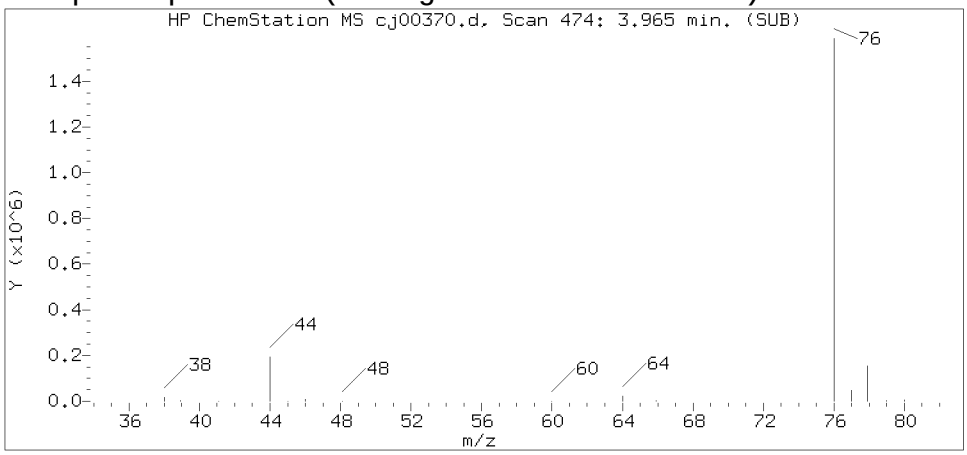
Target 3.5 esignature user ID: jbs01304

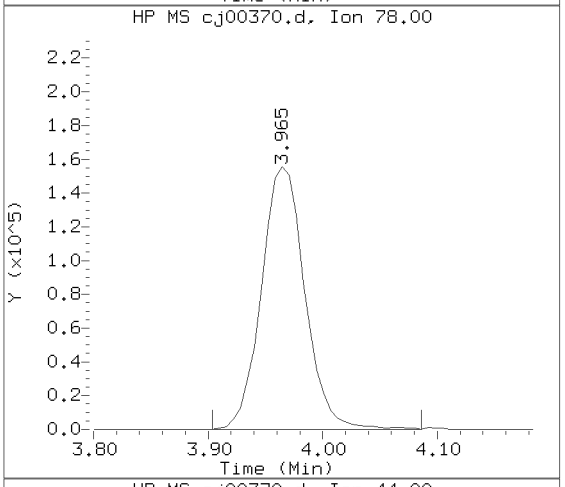
Reference Standard Spectrum for Carbon Disulfide



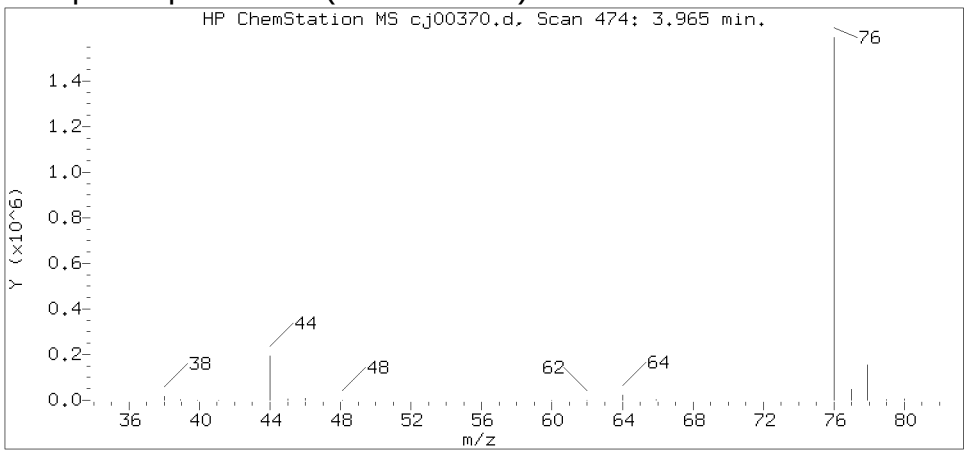


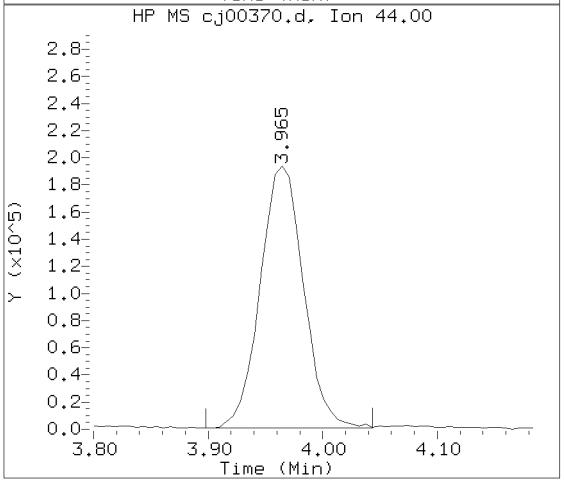
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 21
Compound Name : Carbon Disulfide
Scan Number : 474
Retention Time (minutes): 3.965
Relative Retention Time :-0.00124
Quant Ion : 76.00
Area (flag) : 4237343
Concentration (ppb(v)) : 29.0417

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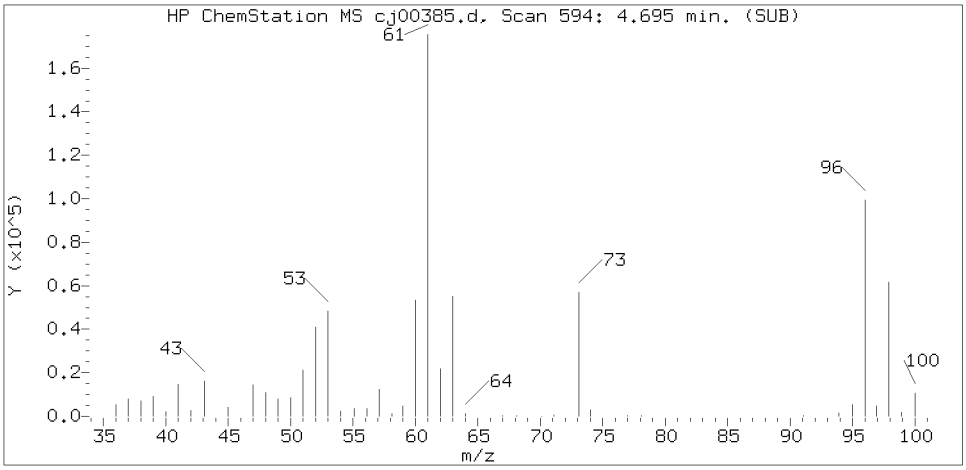
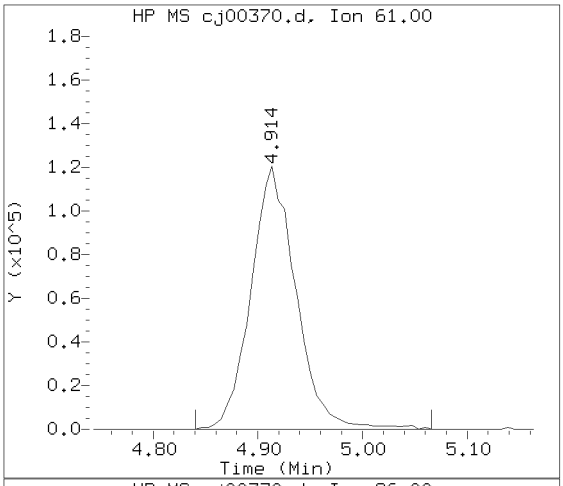
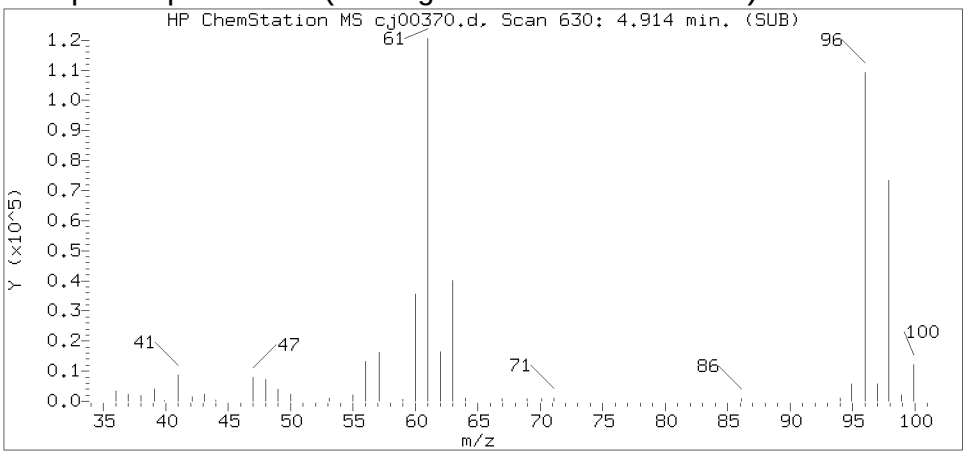
Target 3.5 esignature user ID: jbs01304

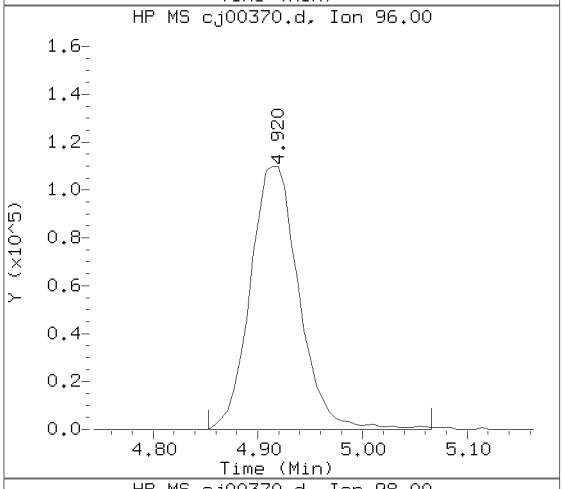
Reference Standard Spectrum for trans-1,2-Dichloroethene



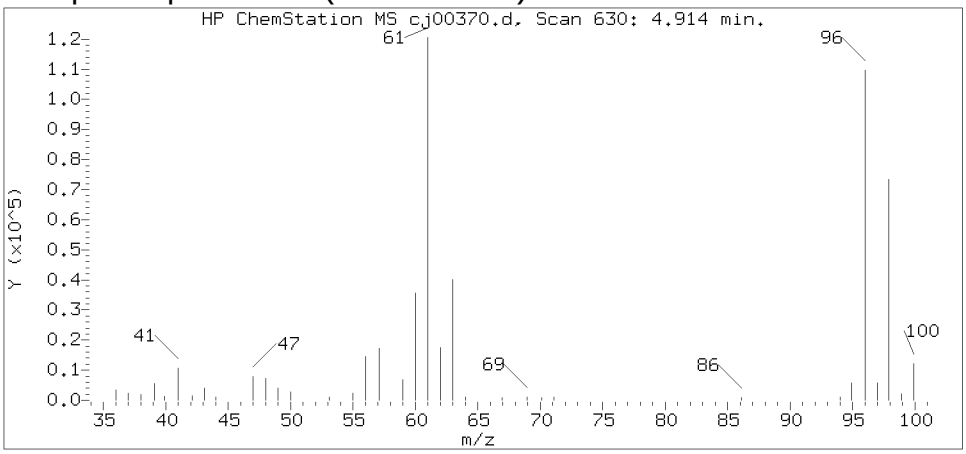


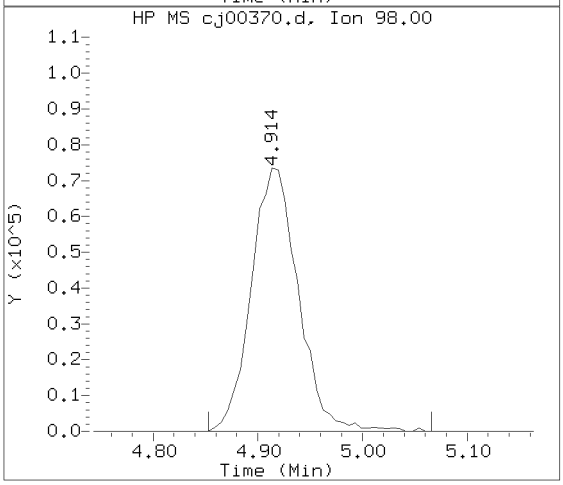
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 28
Compound Name : trans-1,2-Dichloroethene
Scan Number : 630
Retention Time (minutes): 4.914
Relative Retention Time :-0.00112
Quant Ion : 61.00
Area (flag) : 362045
Concentration (ppb(v)) : 6.0213

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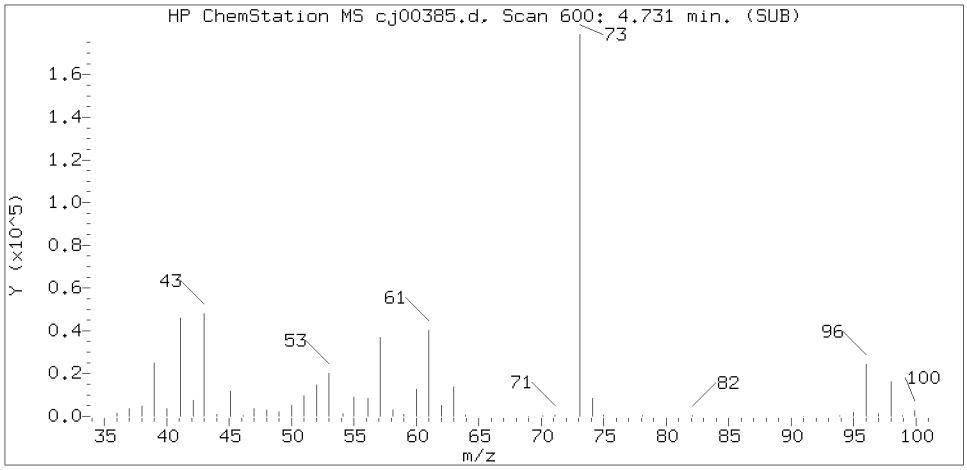
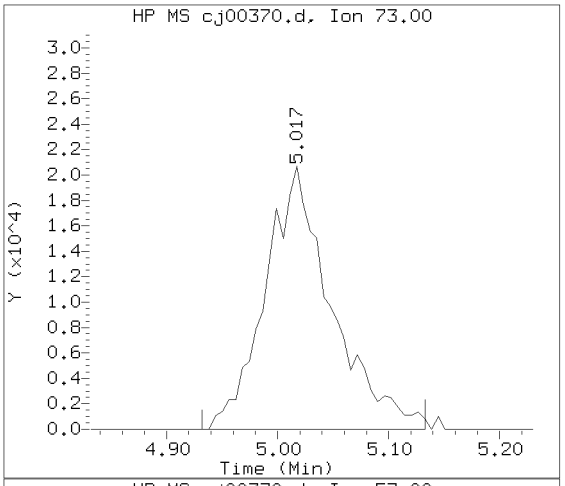
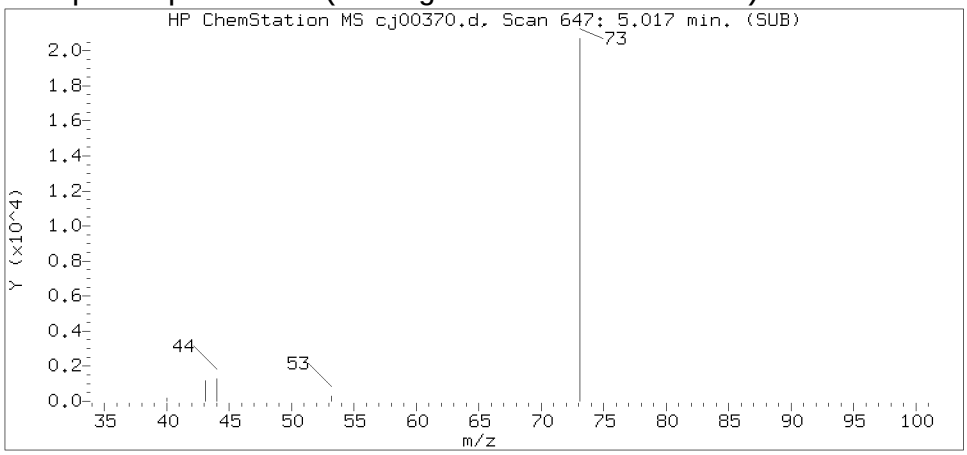
Target 3.5 esignature user ID: jbs01304

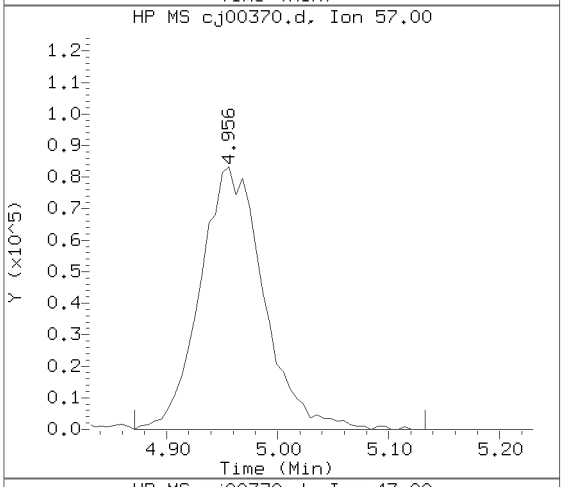
Reference Standard Spectrum for Methyl t-Butyl Ether



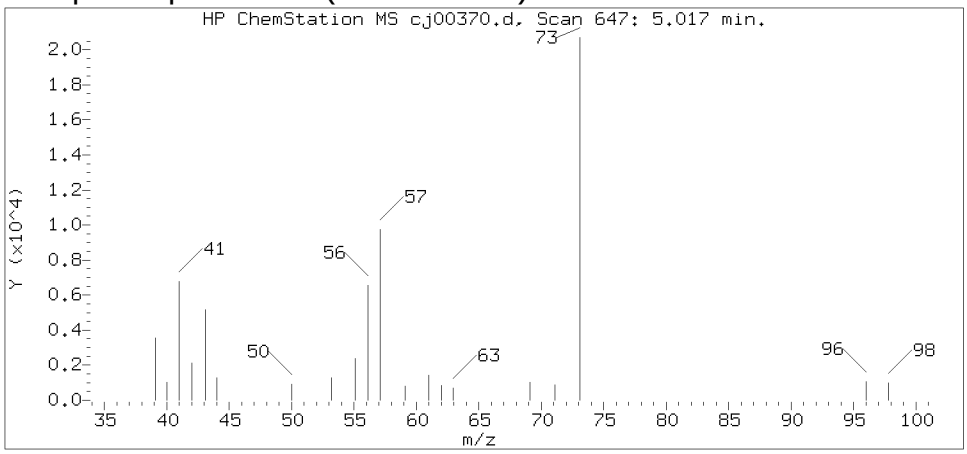


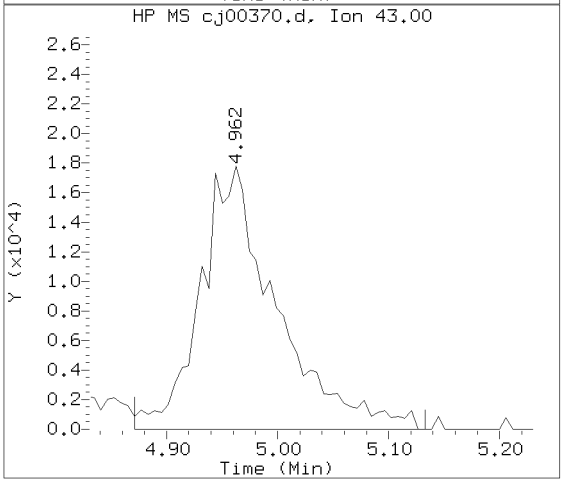
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 29
Compound Name : Methyl t-Butyl Ether
Scan Number : 647
Retention Time (minutes): 5.017
Relative Retention Time :-0.00449
Quant Ion : 73.00
Area (flag) : 85799
Concentration (ppb(v)) : 1.1038

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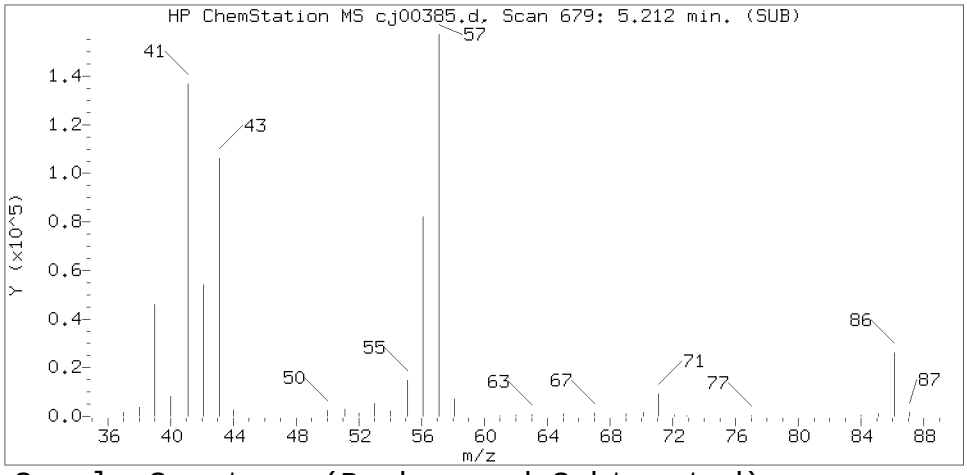
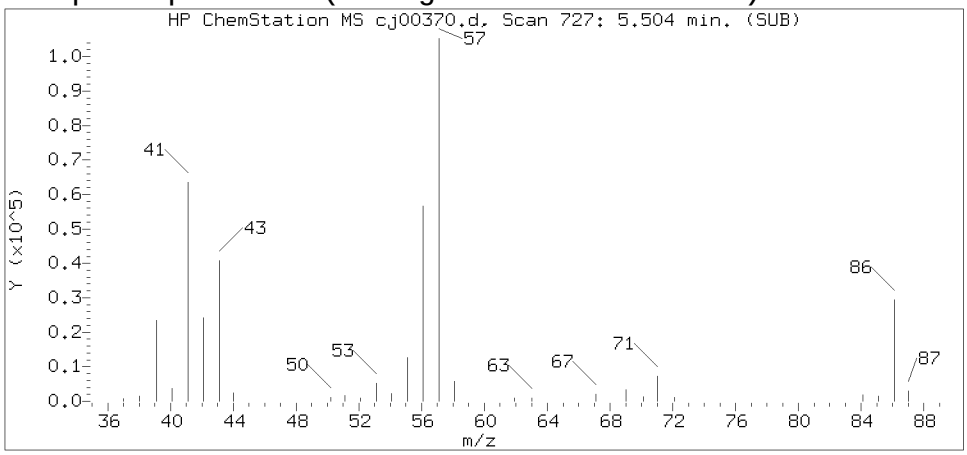
Target 3.5 esignature user ID: jbs01304

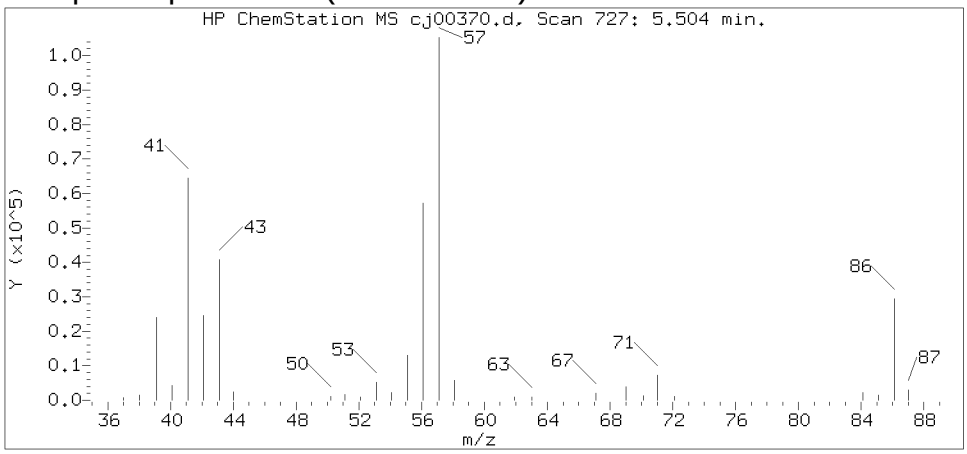
Reference Standard Spectrum for Hexane

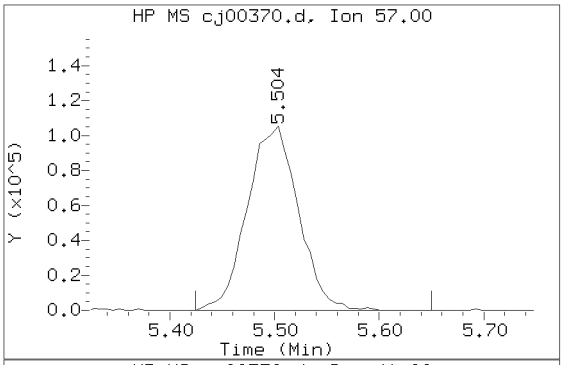


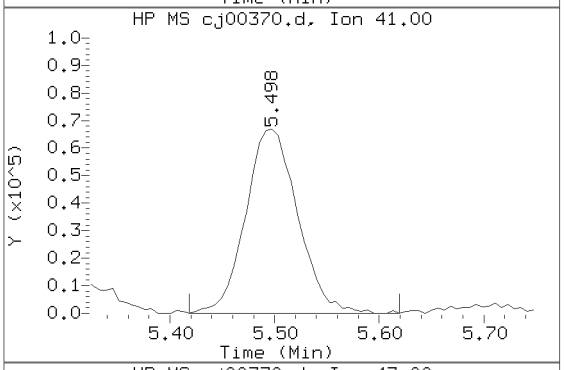
Sample Spectrum (Background Subtracted)

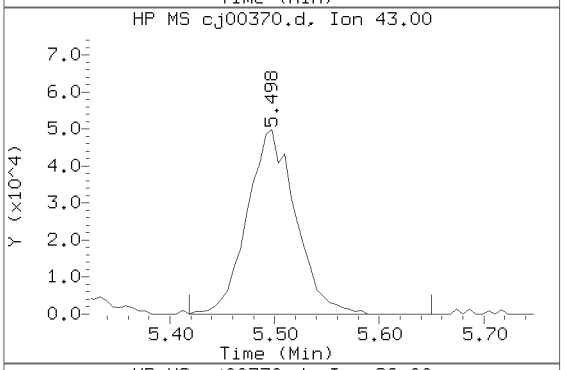


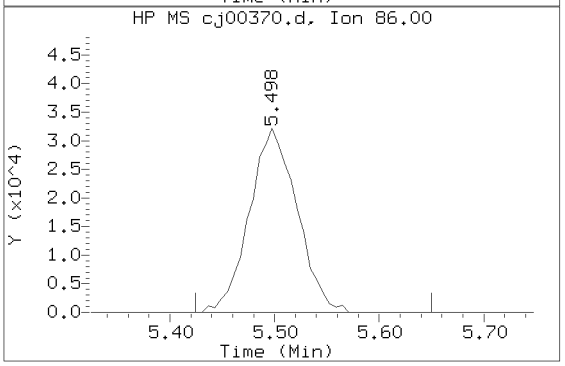
Sample Spectrum (Unaltered)











Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 30
Compound Name	: Hexane
Scan Number	: 727
Retention Time (minutes)	: 5.504
Relative Retention Time	:-0.00190
Quant Ion	: 57.00
Area (flag)	: 358401
Concentration (ppb(v))	: 8.1403

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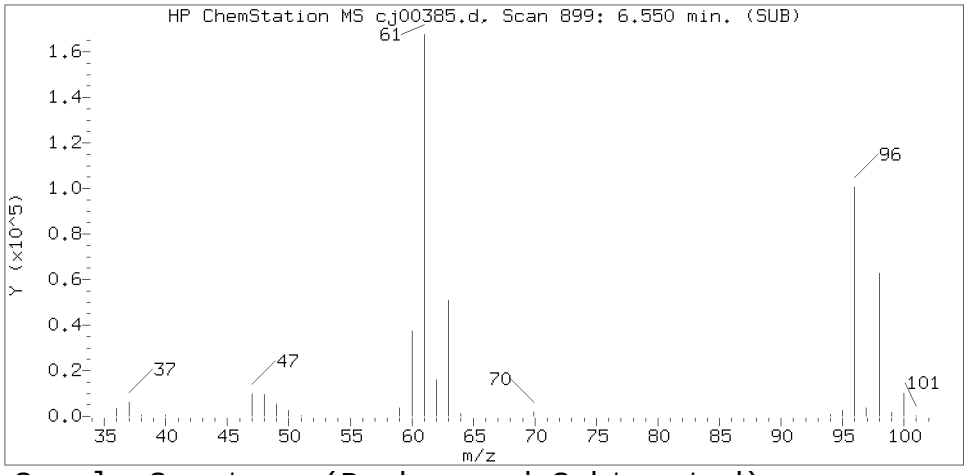
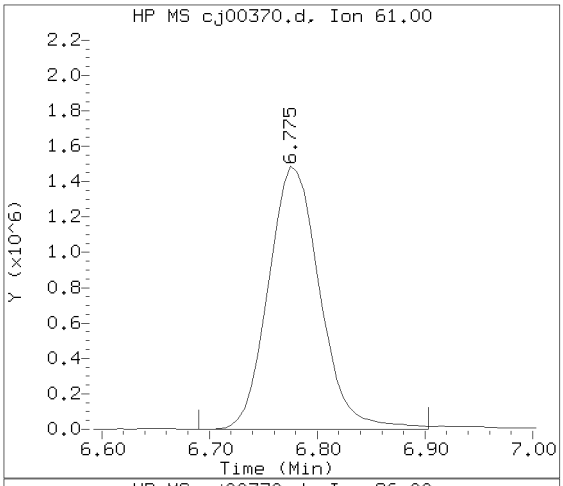
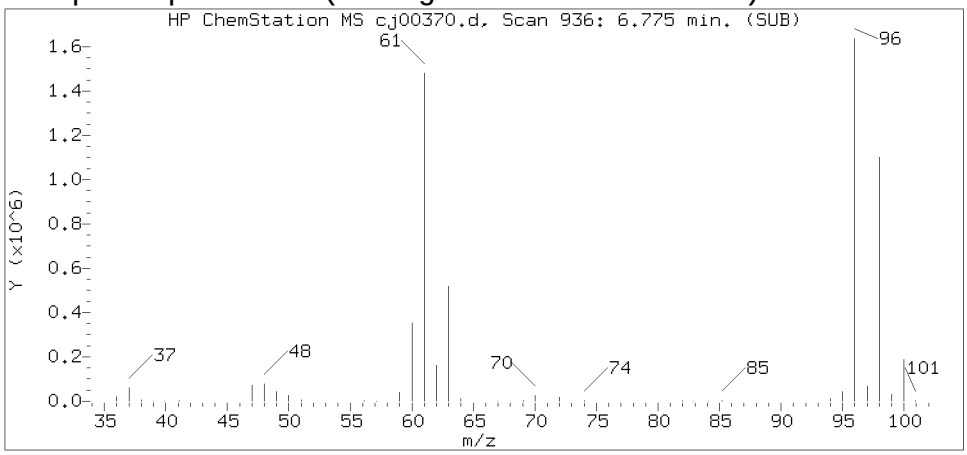
Target 3.5 esignature user ID: jbs01304

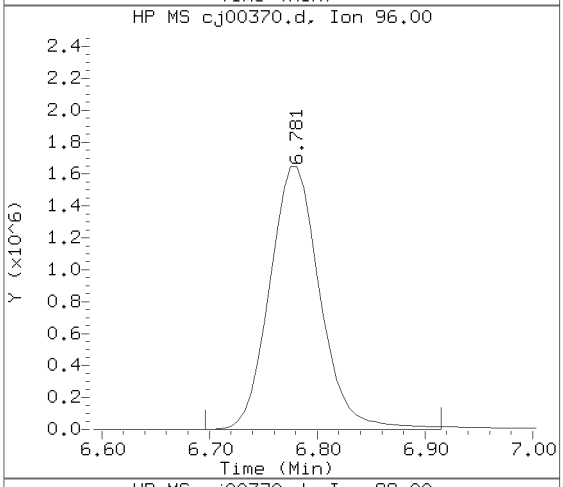
Reference Standard Spectrum for cis-1,2-Dichloroethene



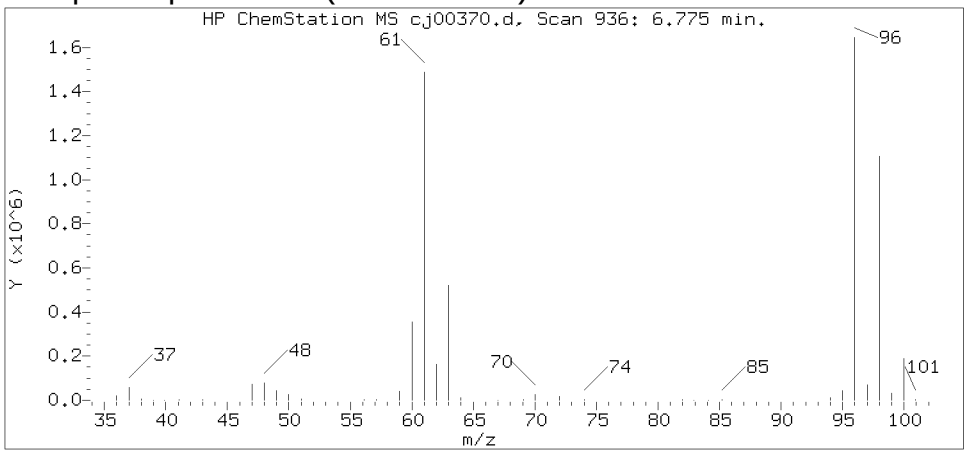


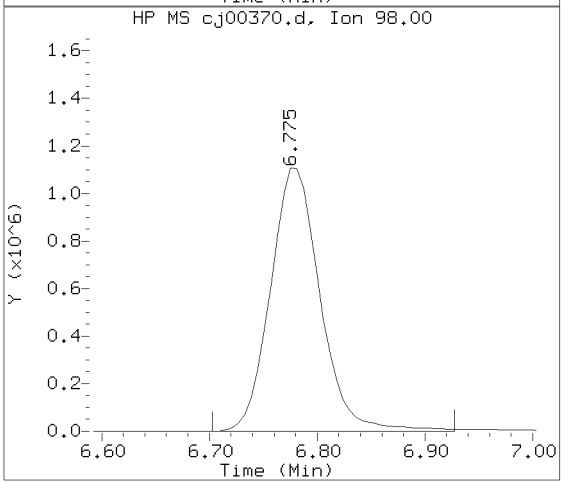
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 936
Retention Time (minutes): 6.775
Relative Retention Time :-0.00005
Quant Ion : 61.00
Area (flag) : 4932353
Concentration (ppb(v)) : 89.1423

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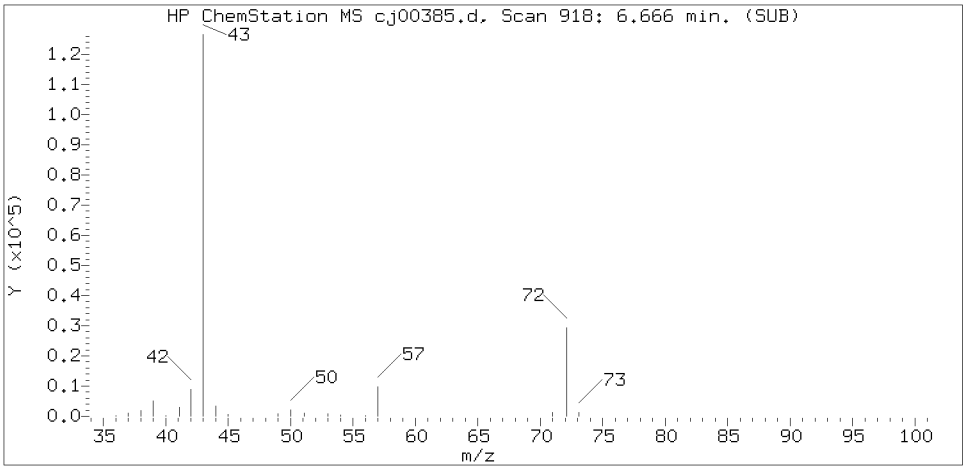
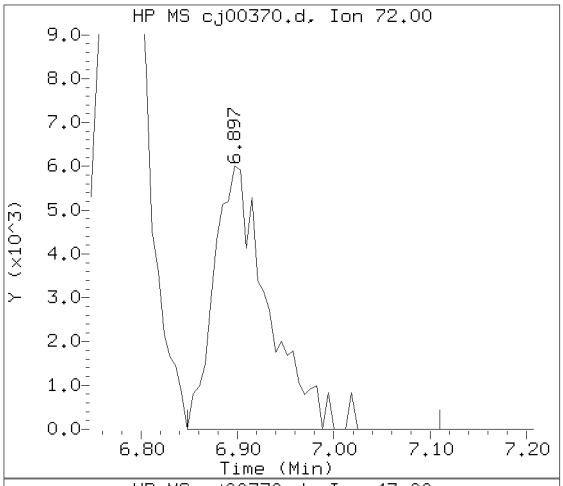
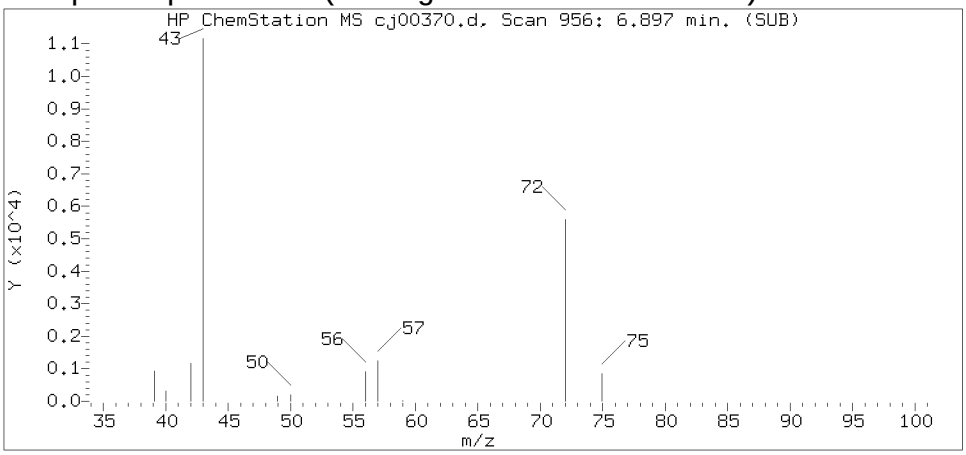
Target 3.5 esignature user ID: jbs01304

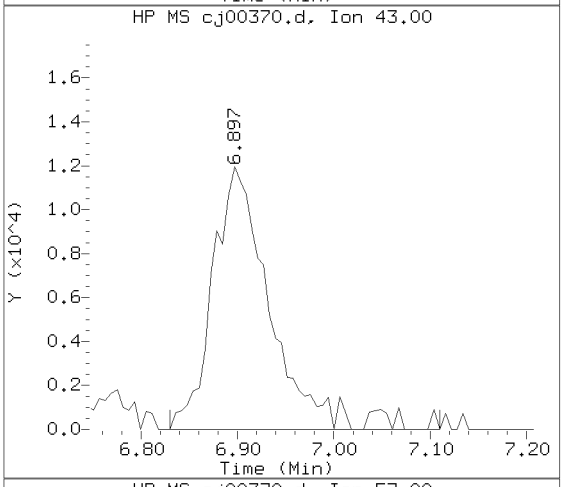
Reference Standard Spectrum for 2-Butanone



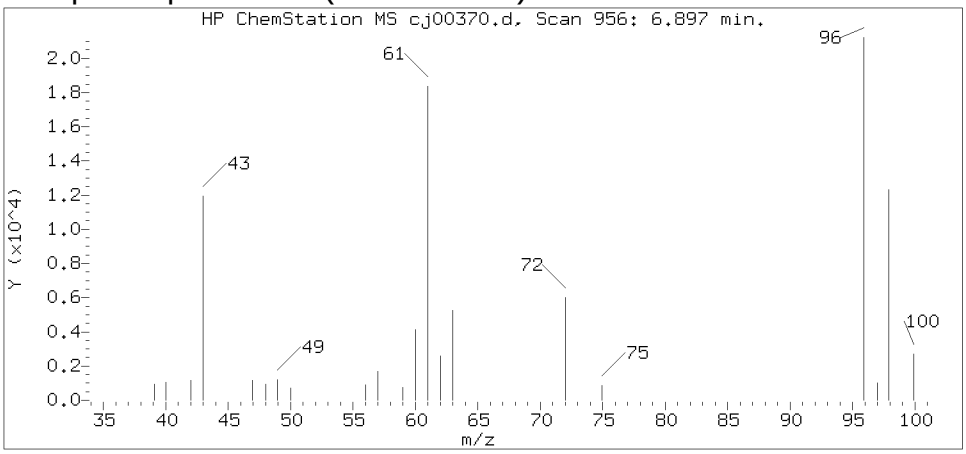


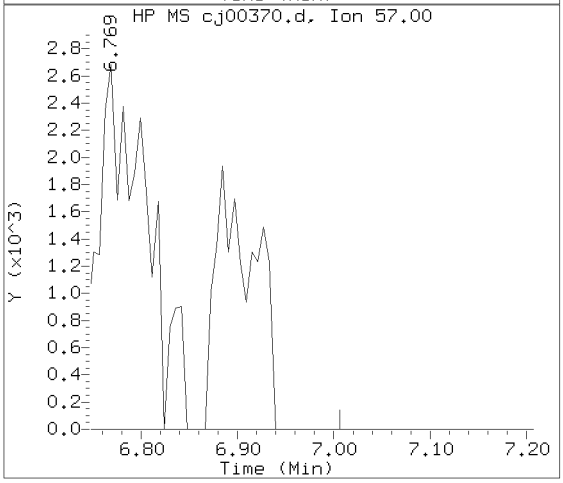
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 37
Compound Name : 2-Butanone
Scan Number : 956
Retention Time (minutes): 6.897
Relative Retention Time :-0.00342
Quant Ion : 72.00
Area (flag) : 23428
Concentration (ppb(v)) : 1.7083

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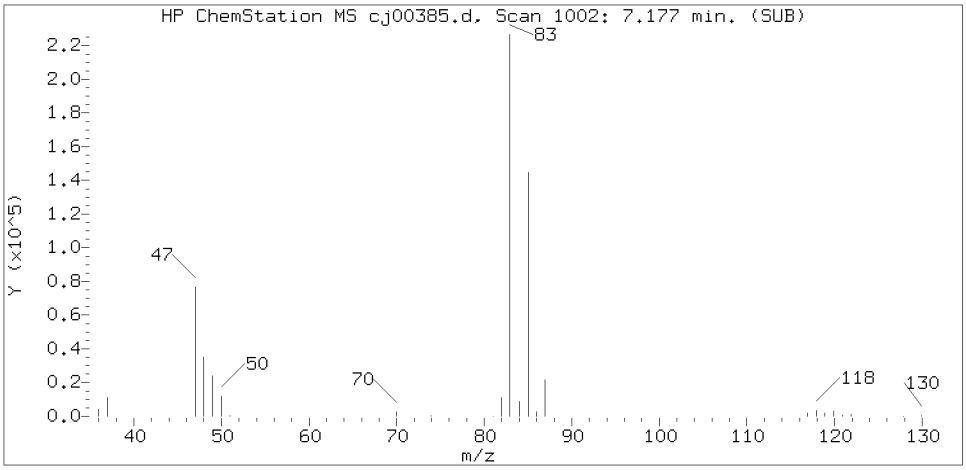
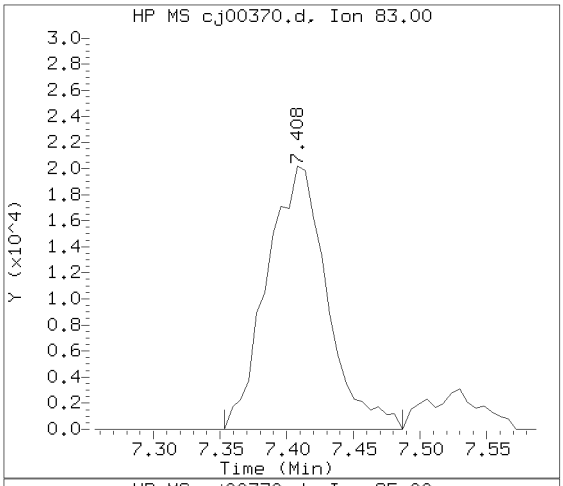
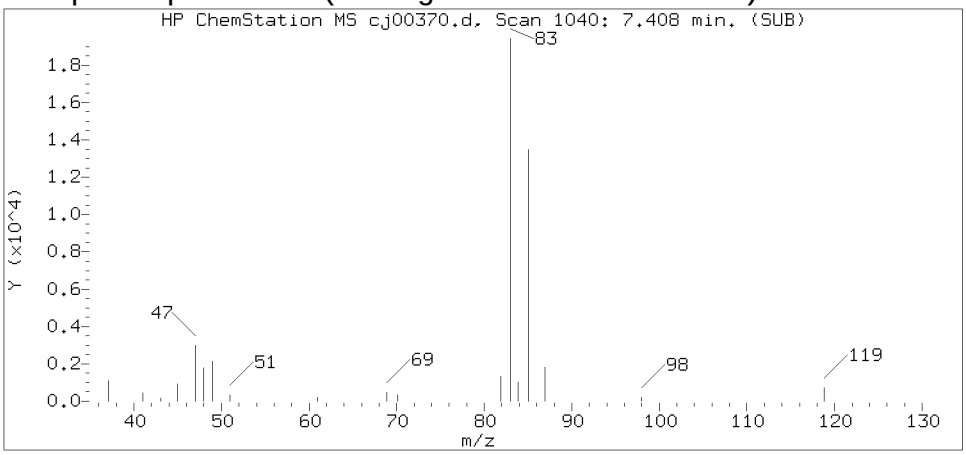
Target 3.5 esignature user ID: jbs01304

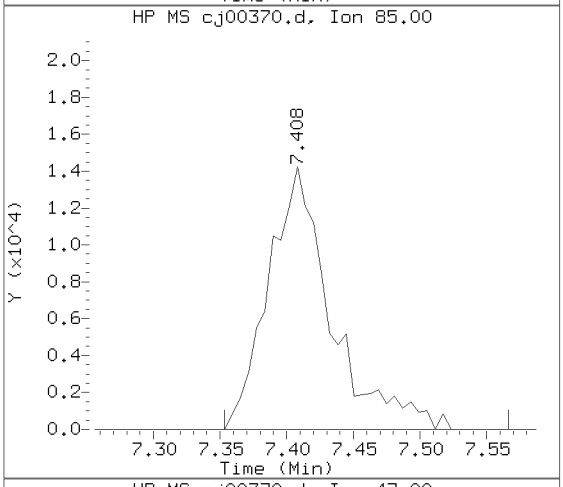
Reference Standard Spectrum for Chloroform



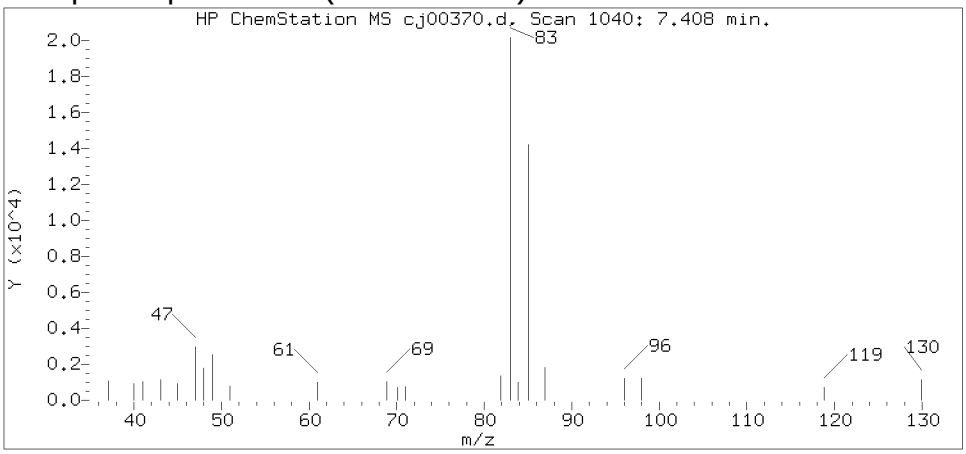


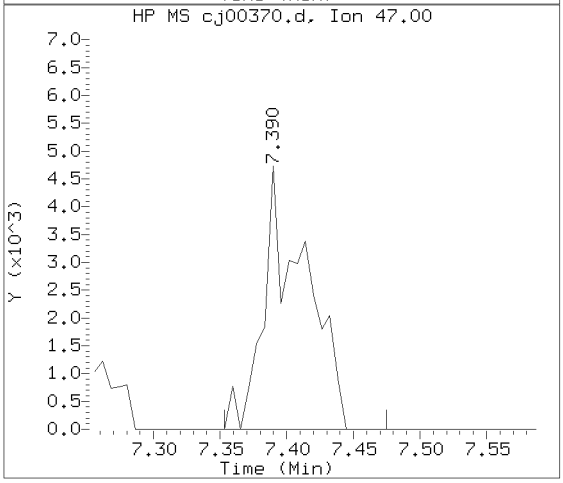
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 42
Compound Name	: Chloroform
Scan Number	: 1040
Retention Time (minutes)	: 7.408
Relative Retention Time	: 0.00003
Quant Ion	: 83.00
Area (flag)	: 63452
Concentration (ppb(v))	: 0.4877

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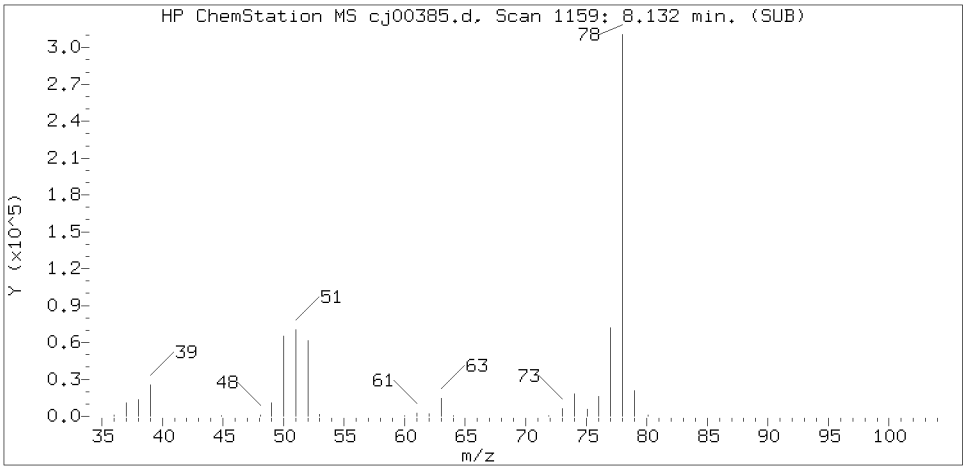
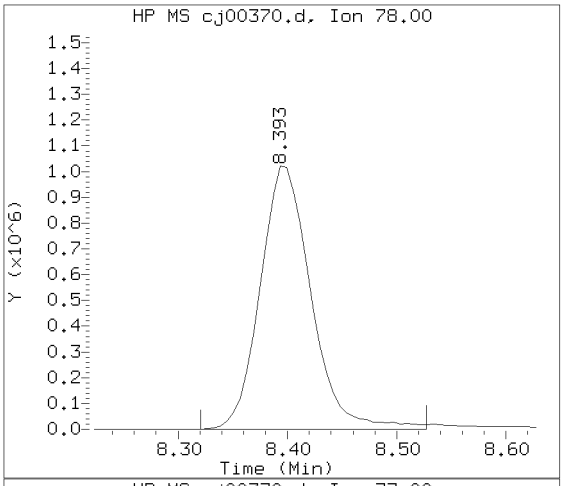
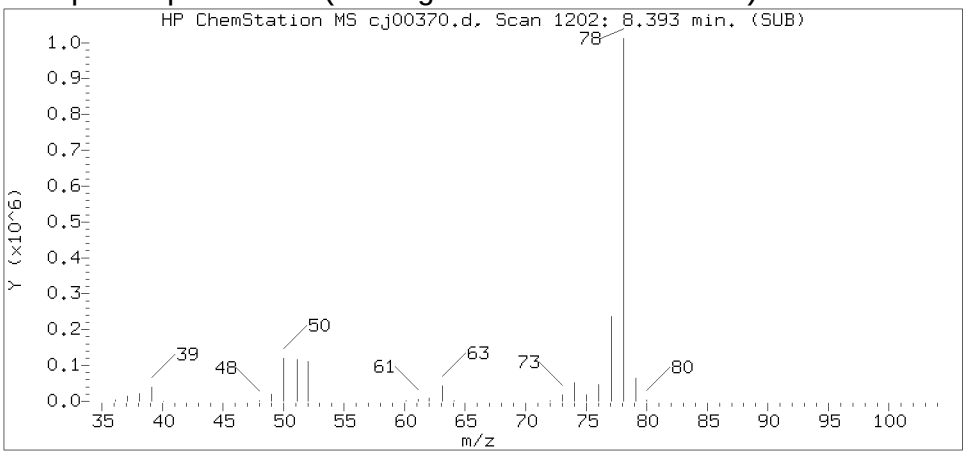
Target 3.5 esignature user ID: jbs01304

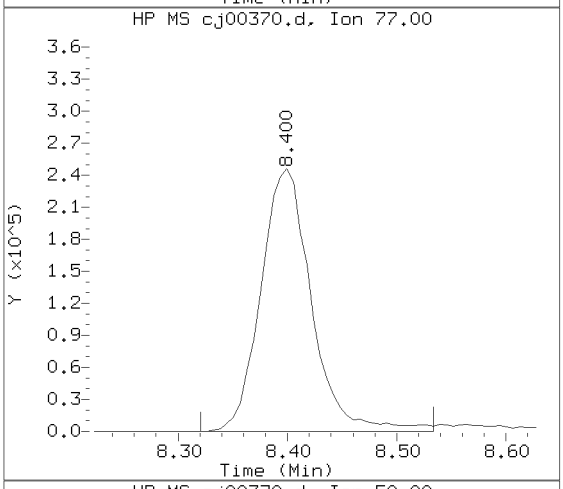
Reference Standard Spectrum for Benzene



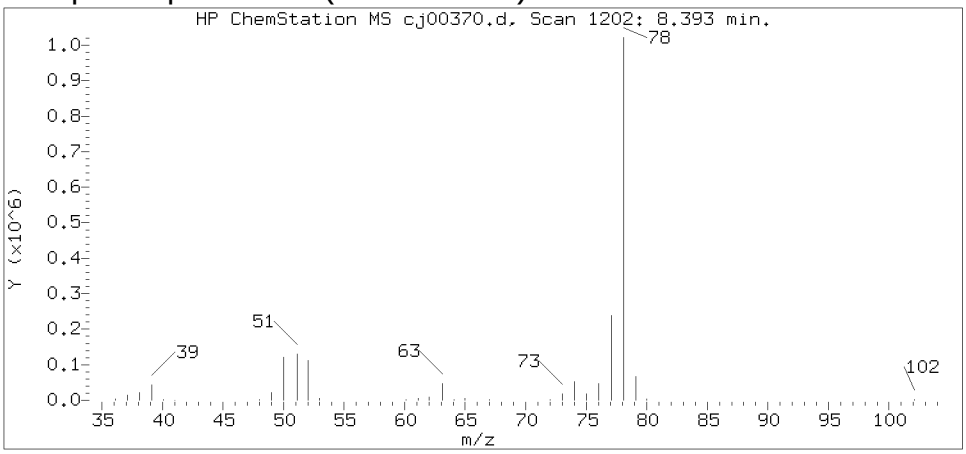


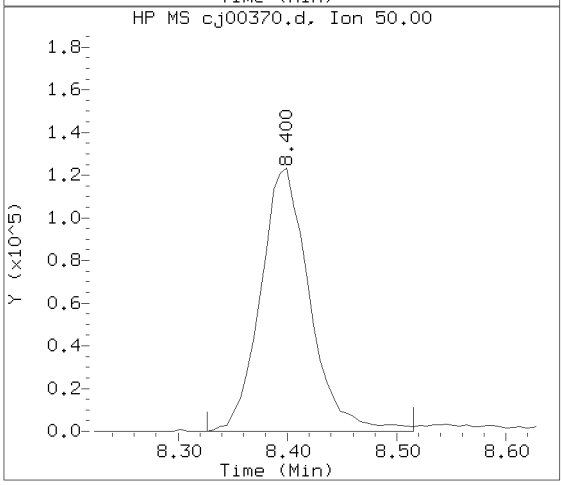
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 46
Compound Name	: Benzene
Scan Number	: 1202
Retention Time (minutes)	: 8.393
Relative Retention Time	: 0.00060
Quant Ion	: 78.00
Area (flag)	: 3302345
Concentration (ppb(v))	: 26.9671

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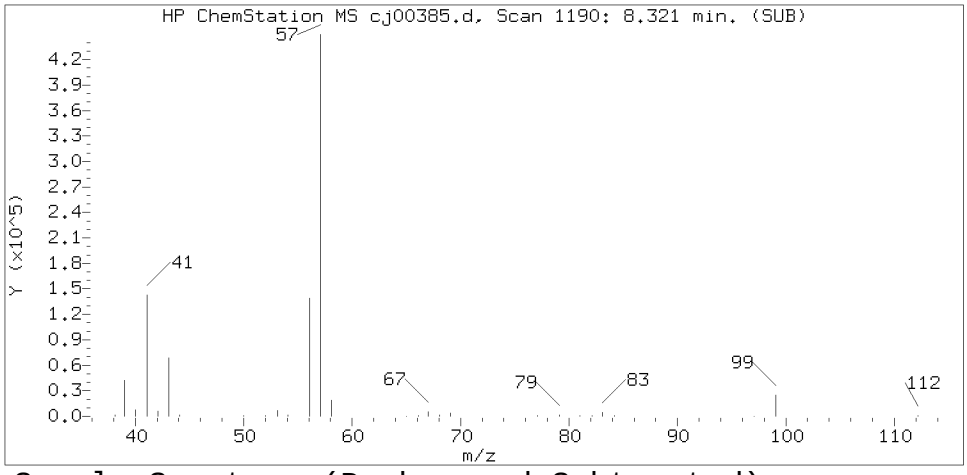
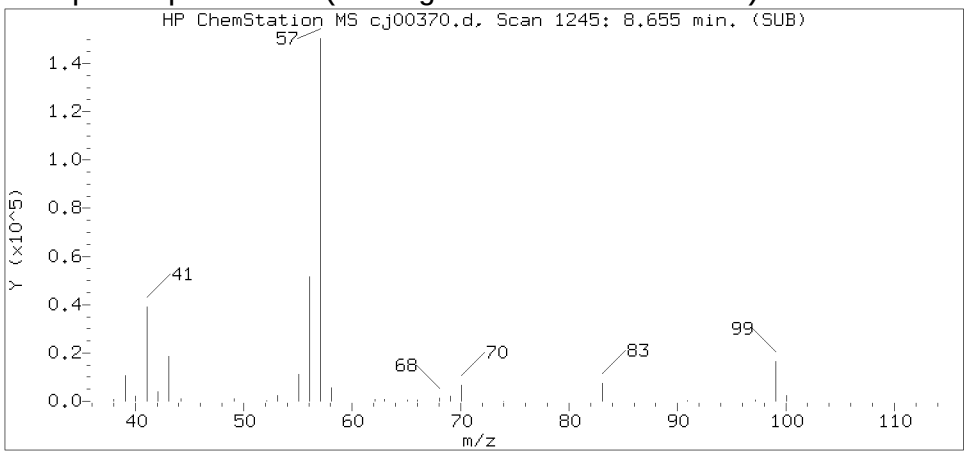
Target 3.5 esignature user ID: jbs01304

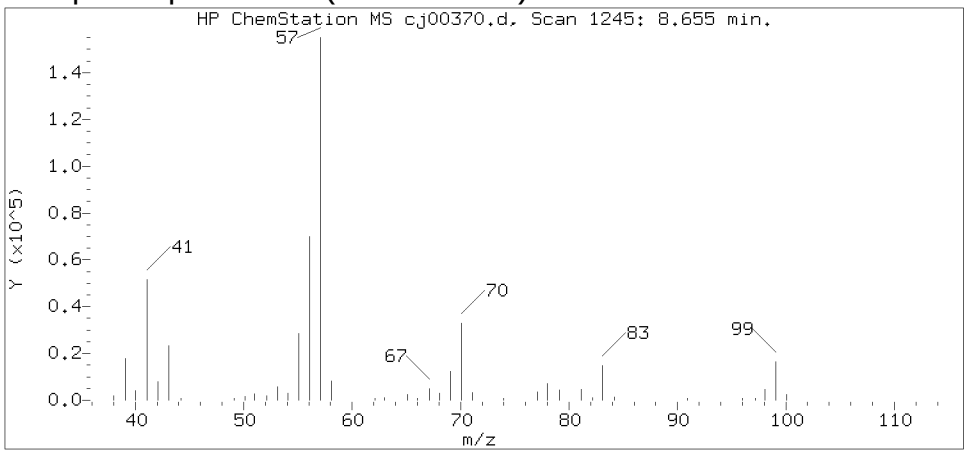
Reference Standard Spectrum for Isooctane

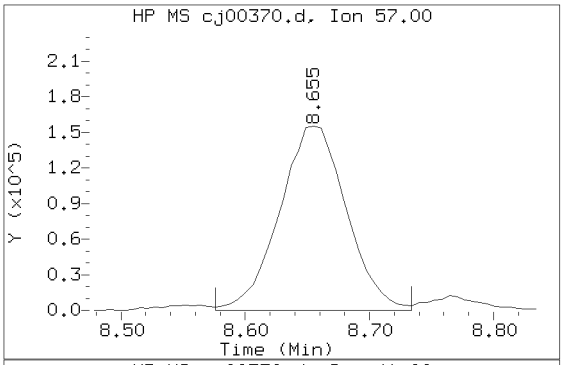


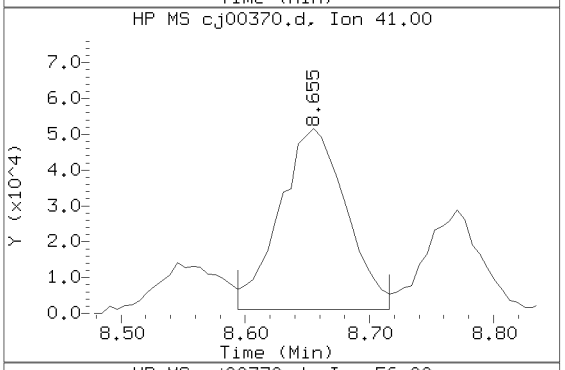
Sample Spectrum (Background Subtracted)

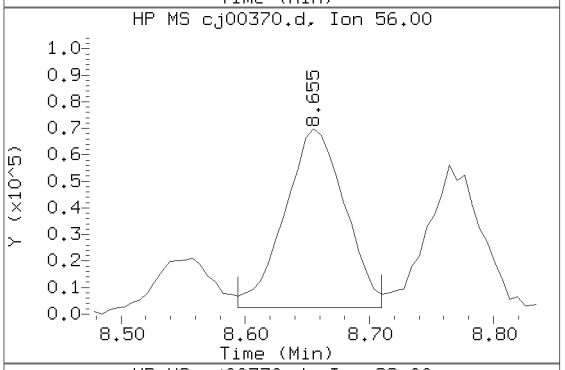


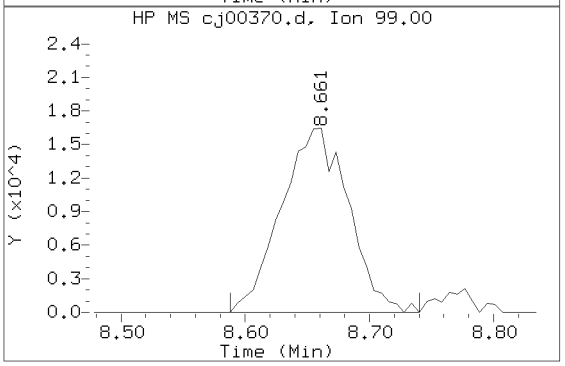
Sample Spectrum (Unaltered)











Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 48
Compound Name	: Isooctane
Scan Number	: 1245
Retention Time (minutes)	: 8.655
Relative Retention Time	:-0.00070
Quant Ion	: 57.00
Area (flag)	: 579883
Concentration (ppb(v))	: 5.0329

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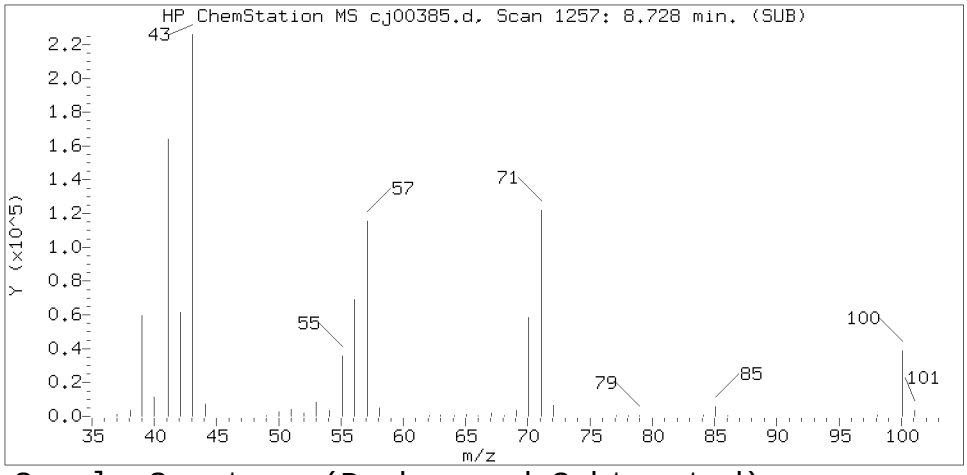
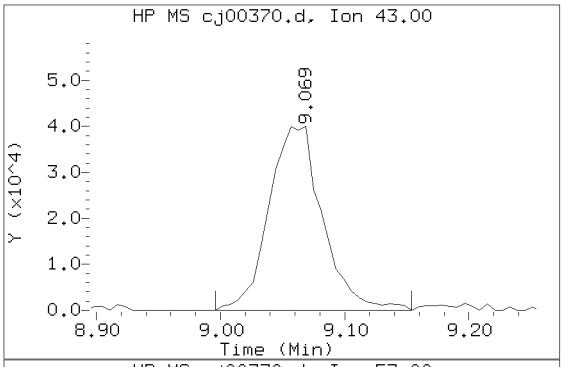
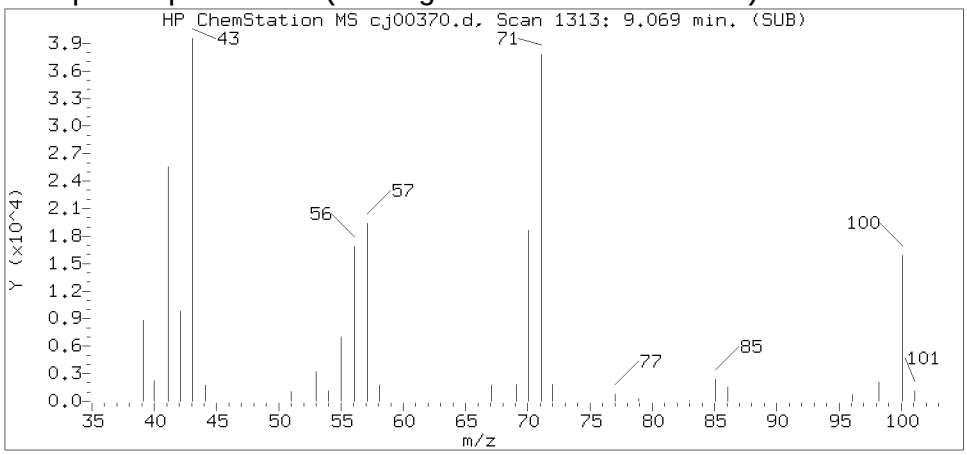
Target 3.5 esignature user ID: jbs01304

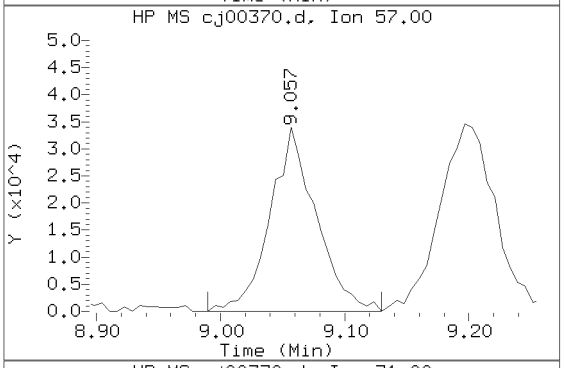
Reference Standard Spectrum for Heptane

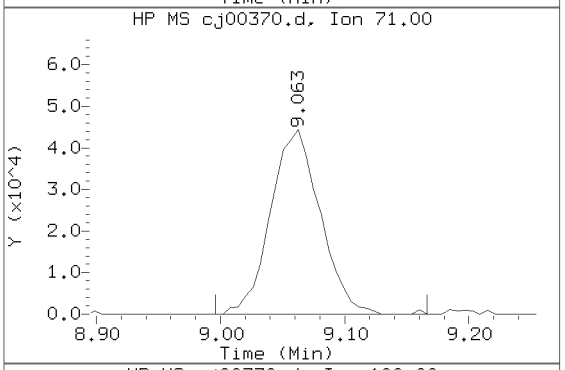




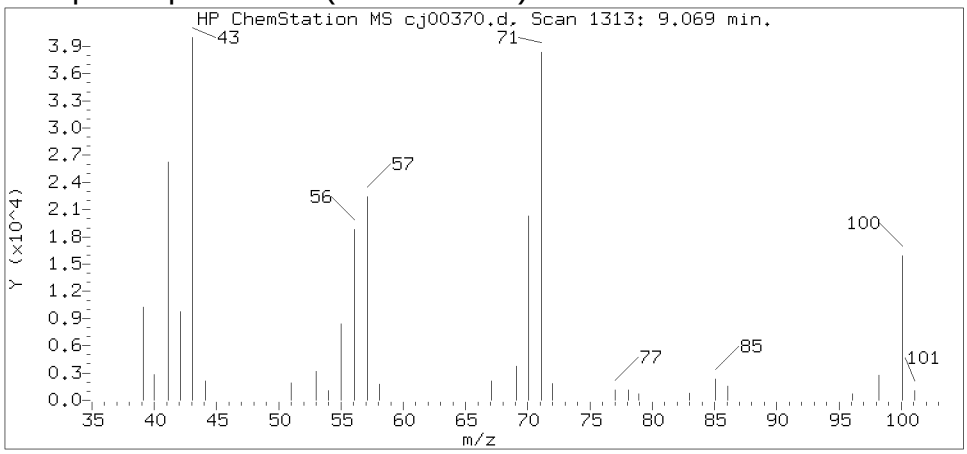
Sample Spectrum (Background Subtracted)

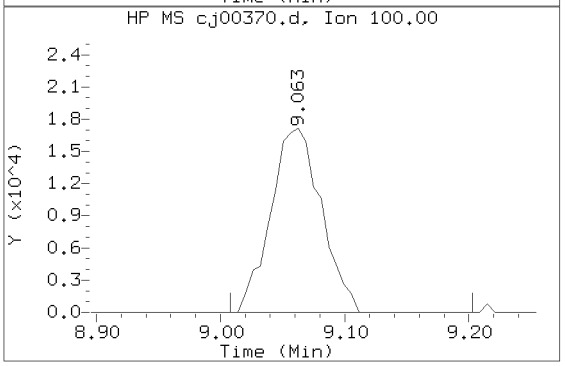






Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 50
Compound Name : Heptane
Scan Number : 1313
Retention Time (minutes): 9.069
Relative Retention Time :-0.00200
Quant Ion : 43.00
Area (flag) : 120169
Concentration (ppb(v)) : 3.7852

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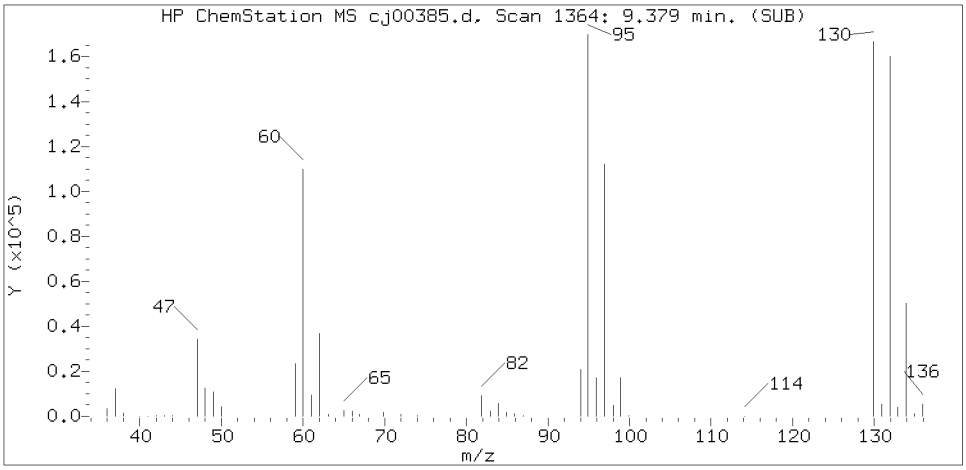
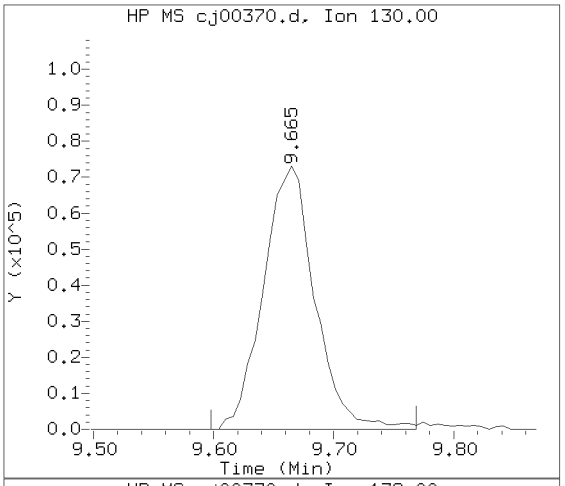
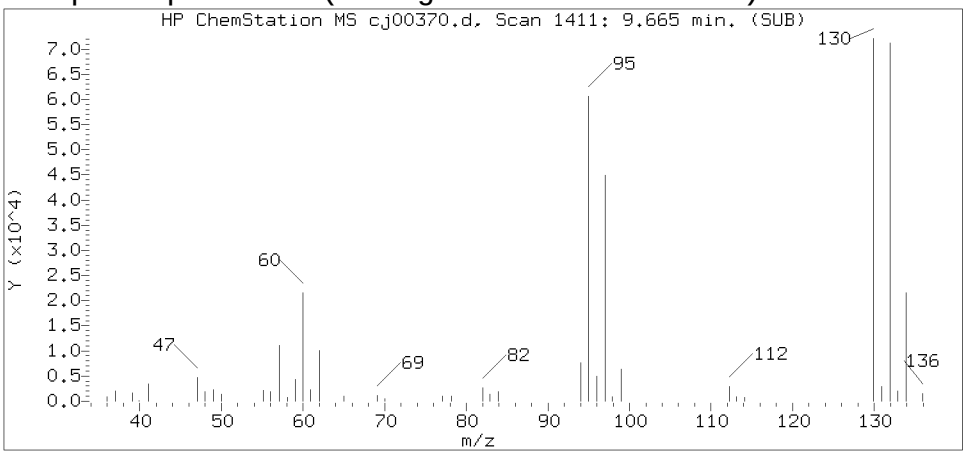
Target 3.5 esignature user ID: jbs01304

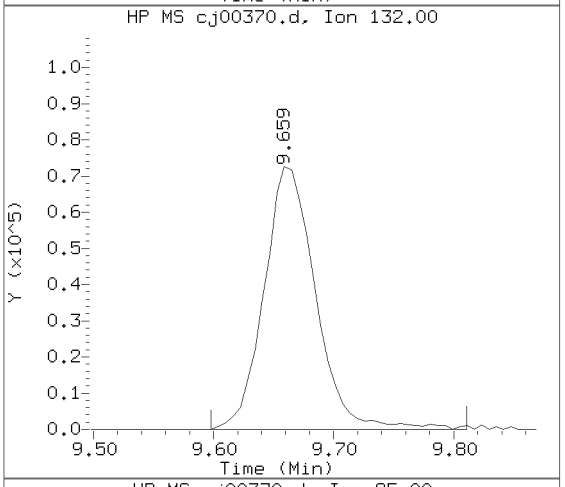
Reference Standard Spectrum for Trichloroethene



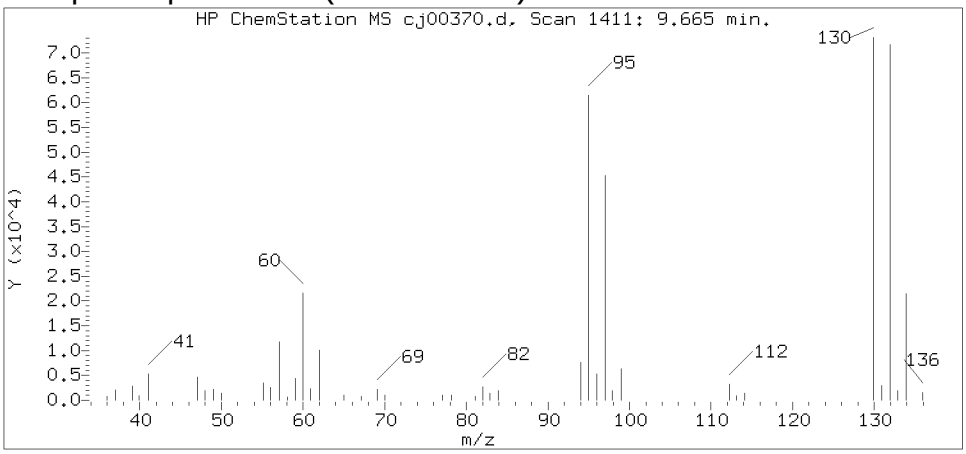


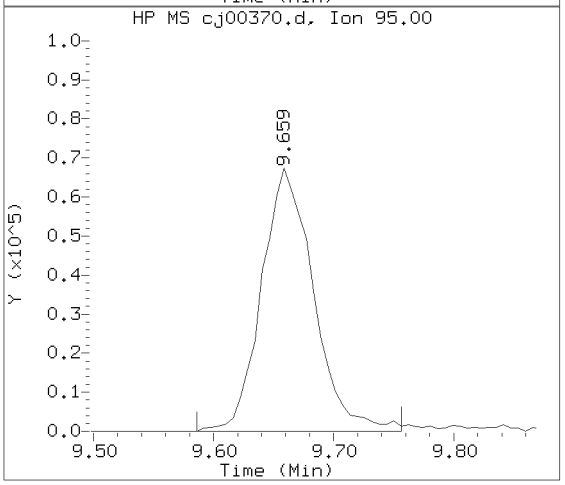
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 52
Compound Name	: Trichloroethene
Scan Number	: 1411
Retention Time (minutes)	: 9.665
Relative Retention Time	:-0.00063
Quant Ion	: 130.00
Area (flag)	: 218099
Concentration (ppb(v))	: 2.6017

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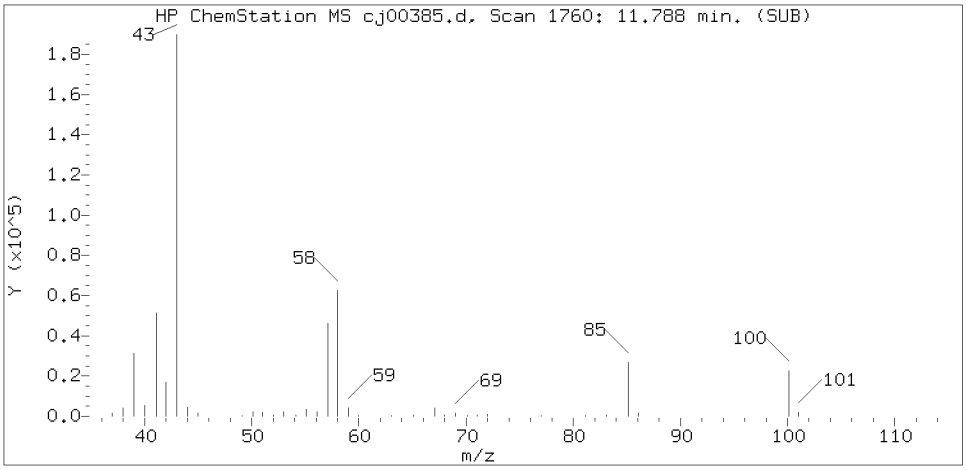
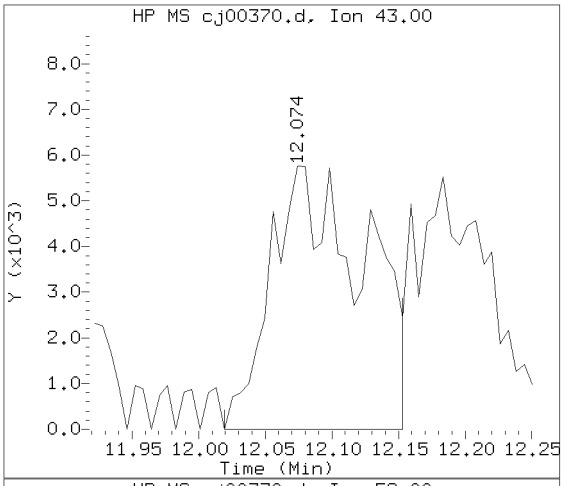
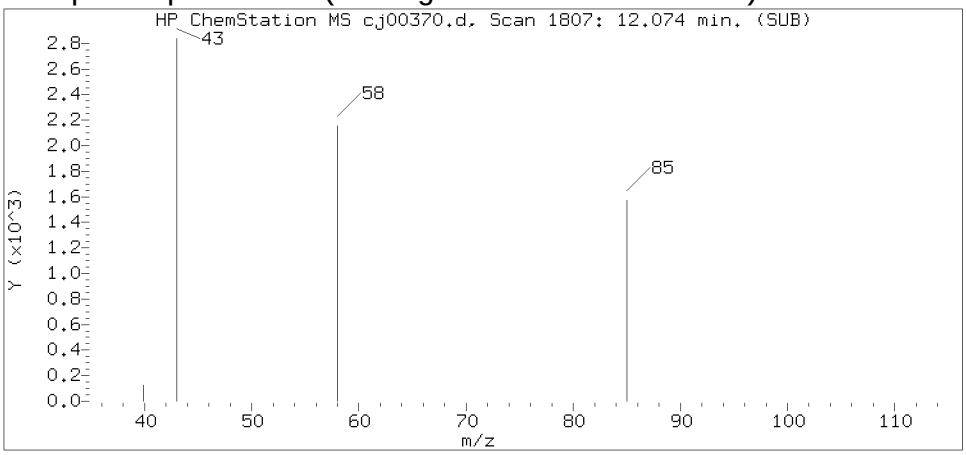
Target 3.5 esignature user ID: jbs01304

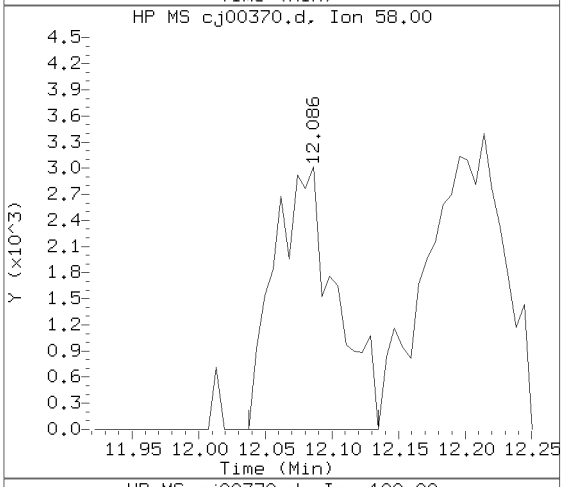
Reference Standard Spectrum for 4-Methyl-2-Pentanone



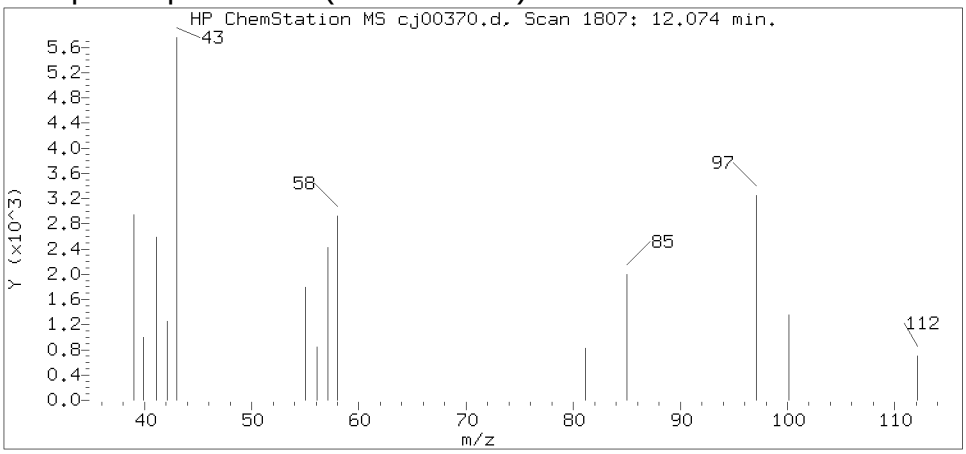


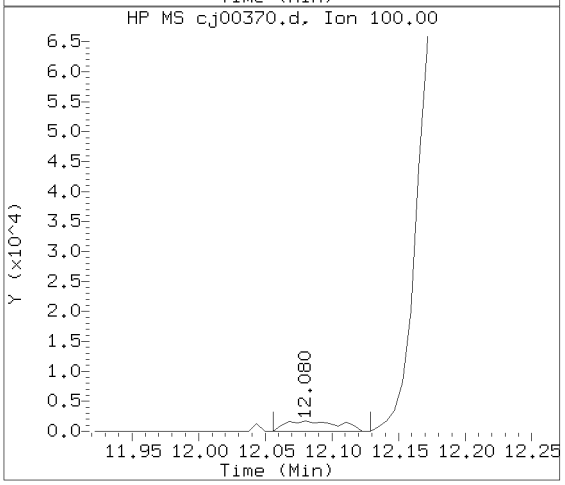
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 60
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1807
Retention Time (minutes): 12.074
Relative Retention Time :-0.00045
Quant Ion : 43.00
Area (flag) : 27747
Concentration (ppb(v)) : 0.8704

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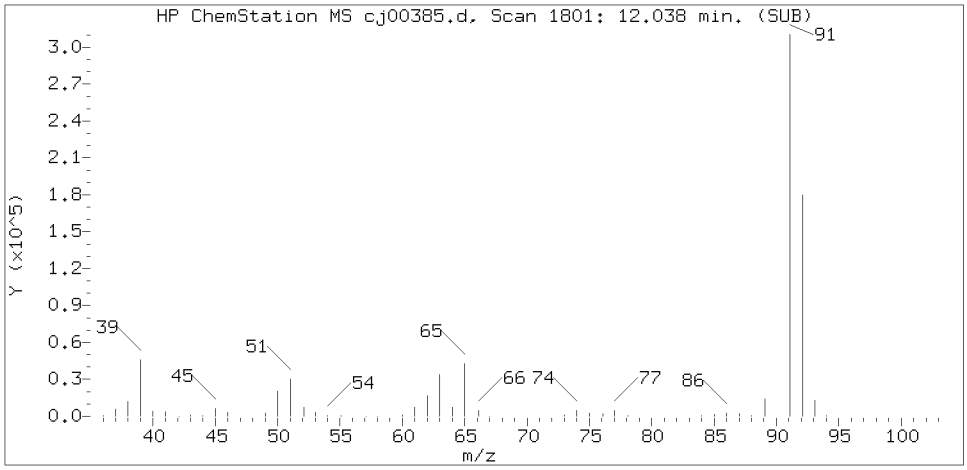
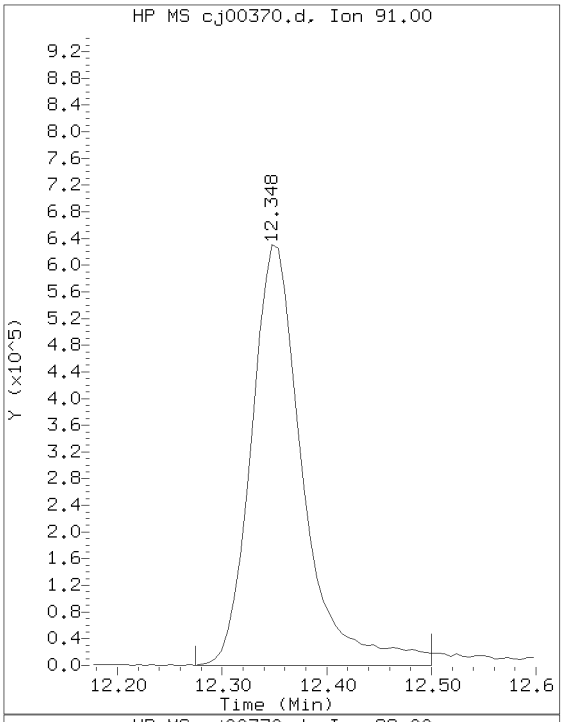
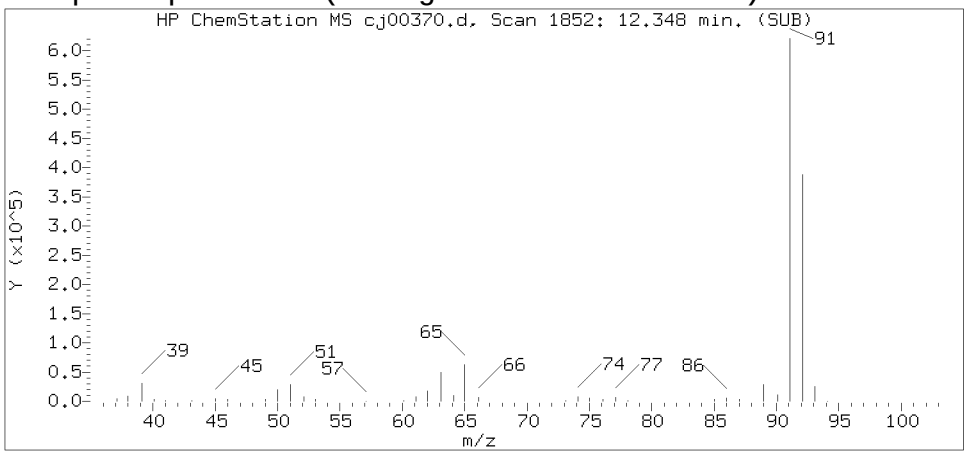
Target 3.5 esignature user ID: jbs01304

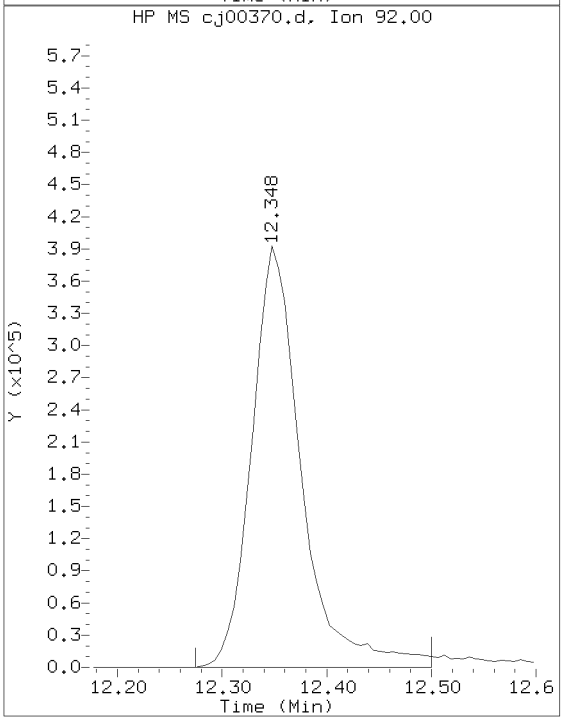
Reference Standard Spectrum for Toluene



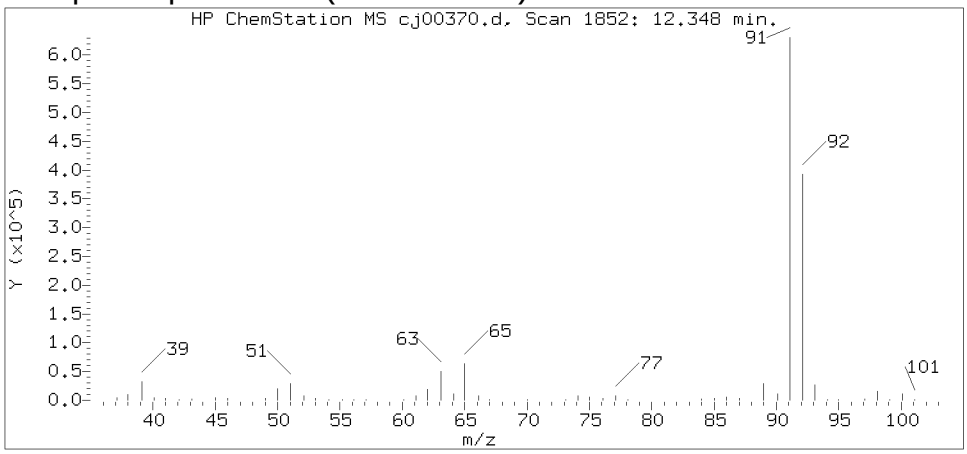


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 61
Compound Name	: Toluene
Scan Number	: 1852
Retention Time (minutes)	: 12.348
Relative Retention Time	: 0.00023
Quant Ion	: 91.00
Area (flag)	: 2166073
Concentration (ppb(v))	: 14.5391

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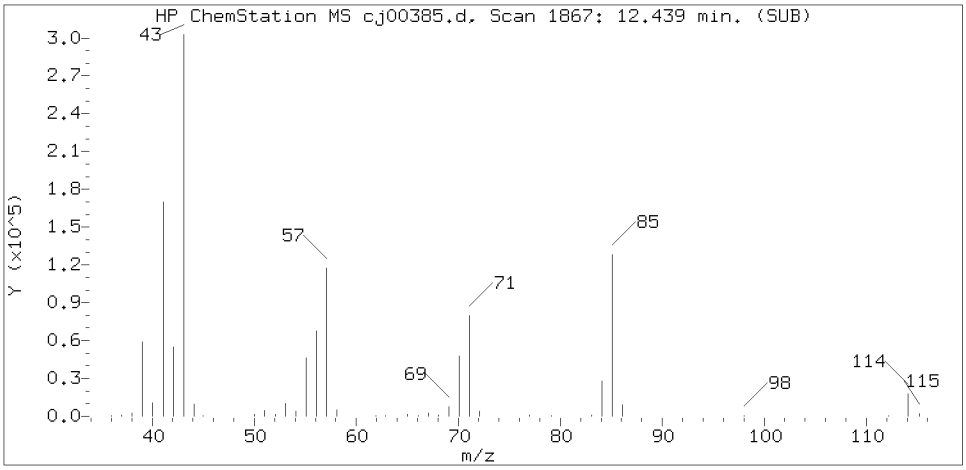
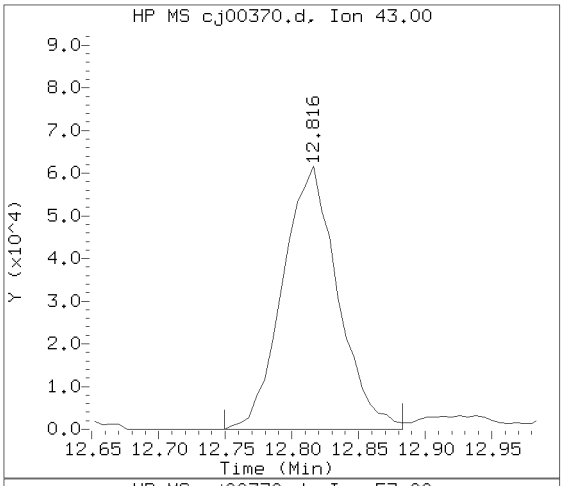
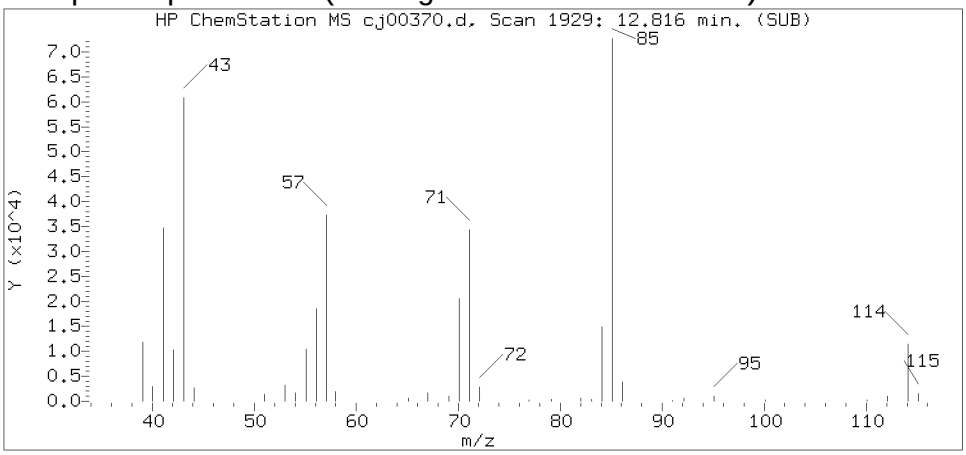
Target 3.5 esignature user ID: jbs01304

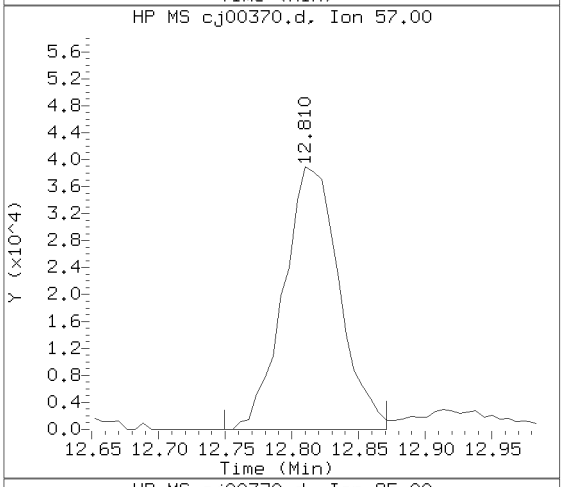
Reference Standard Spectrum for Octane



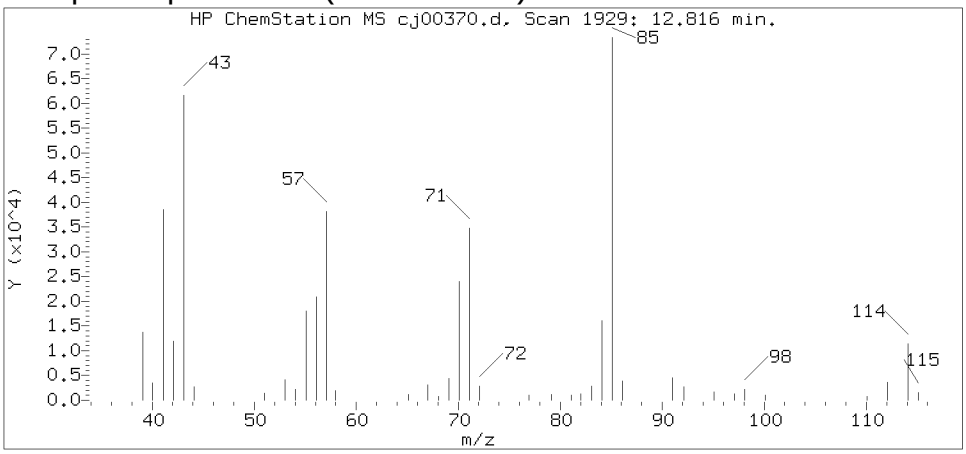


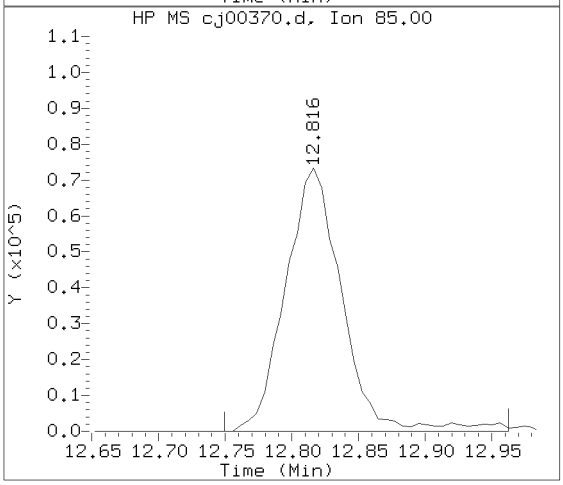
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 62
Compound Name	: Octane
Scan Number	: 1929
Retention Time (minutes)	: 12.816
Relative Retention Time	: 0.00025
Quant Ion	: 43.00
Area (flag)	: 176973
Concentration (ppb(v))	: 4.5077

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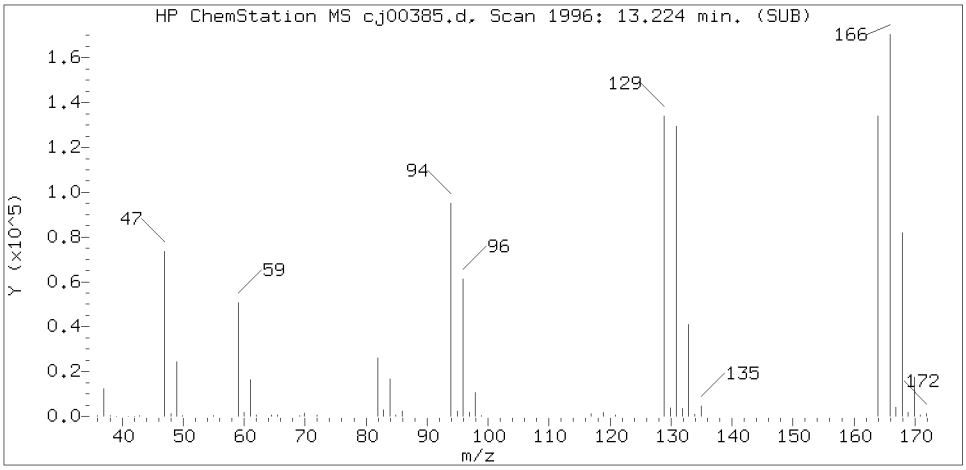
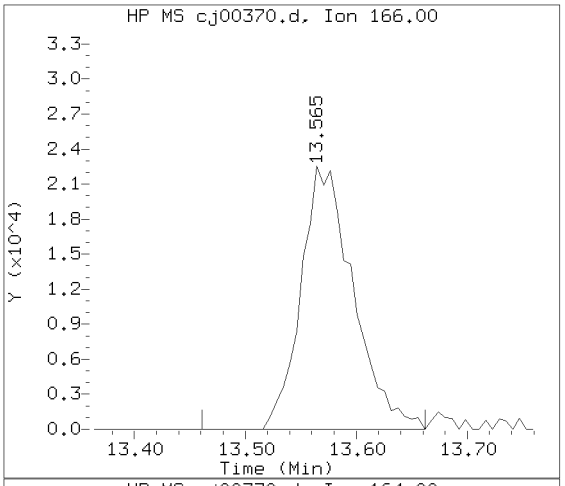
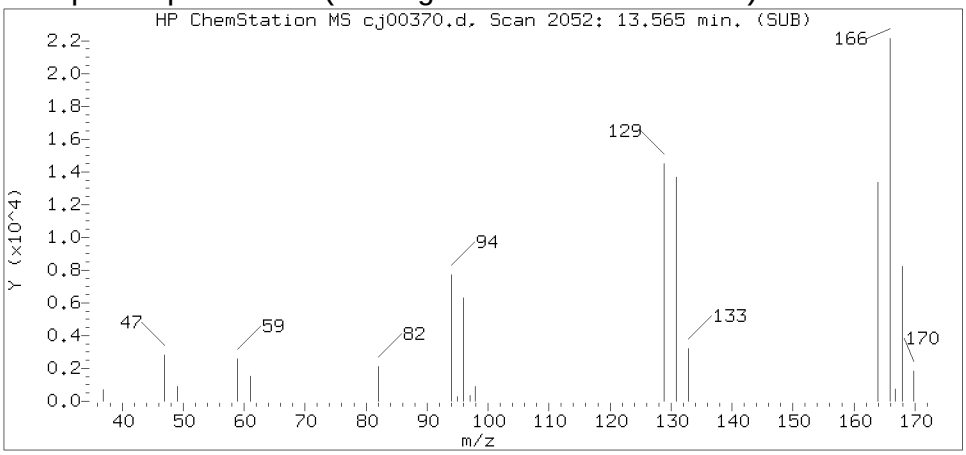
Target 3.5 esignature user ID: jbs01304

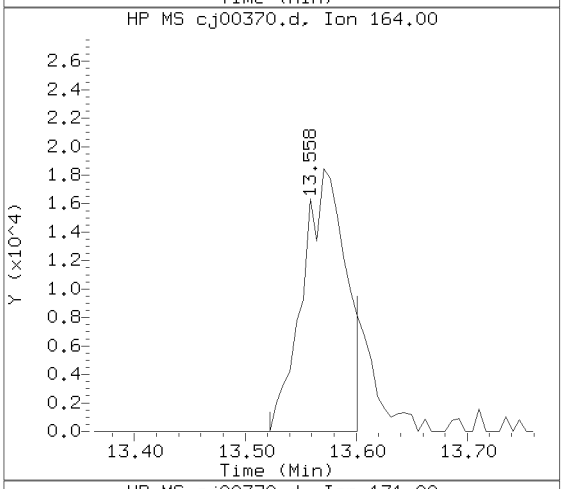
Reference Standard Spectrum for Tetrachloroethene



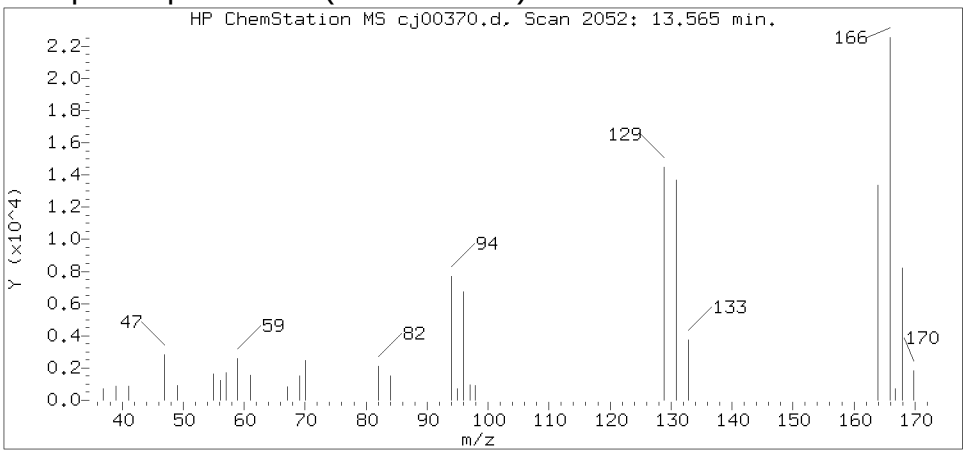


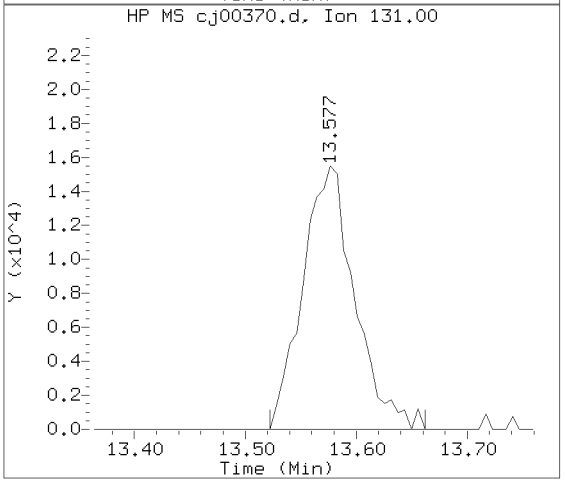
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 67
Compound Name	: Tetrachloroethene
Scan Number	: 2052
Retention Time (minutes)	: 13.565
Relative Retention Time	: 0.00108
Quant Ion	: 166.00
Area (flag)	: 73809M
Concentration (ppb(v))	: 0.5819

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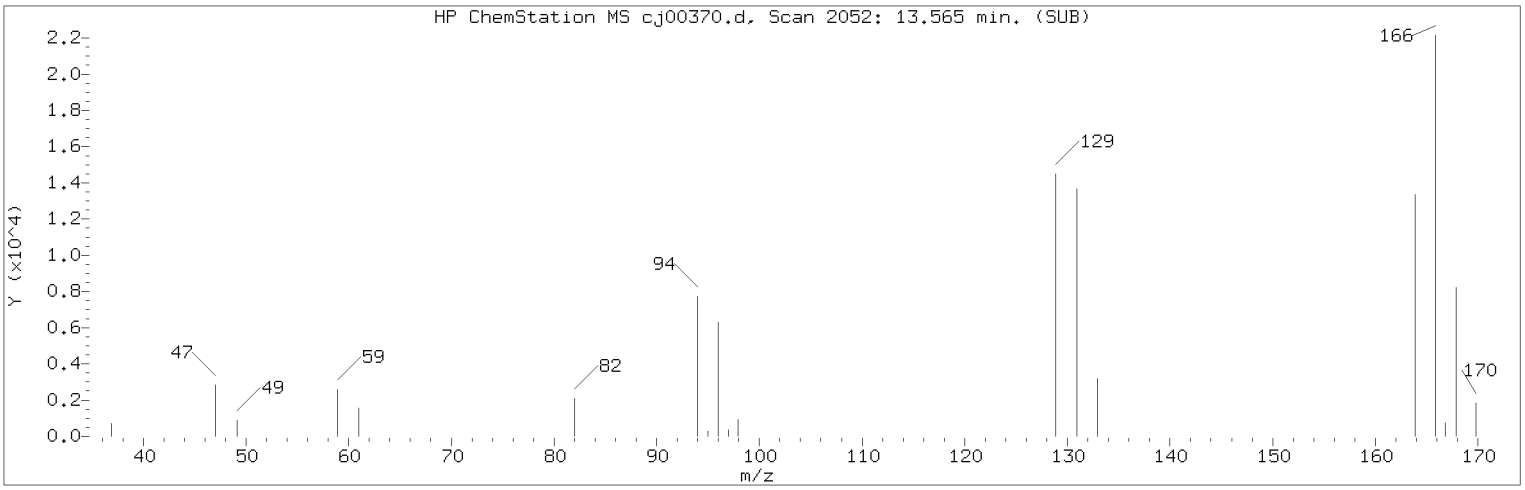
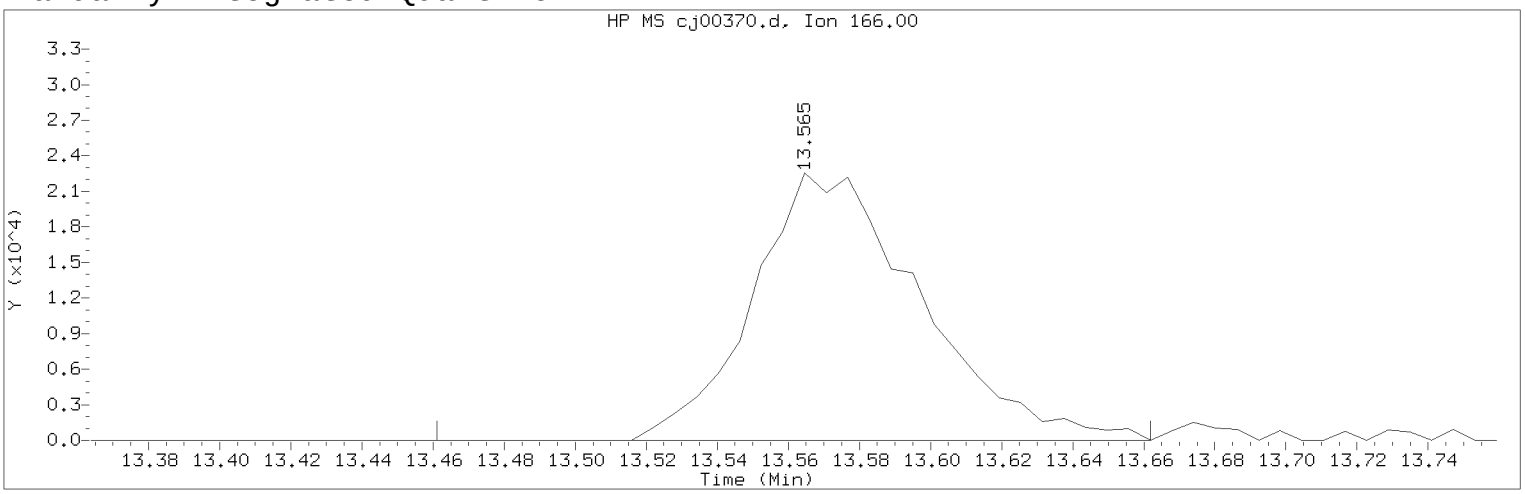
Target 3.5 esignature user ID: jbs01304

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

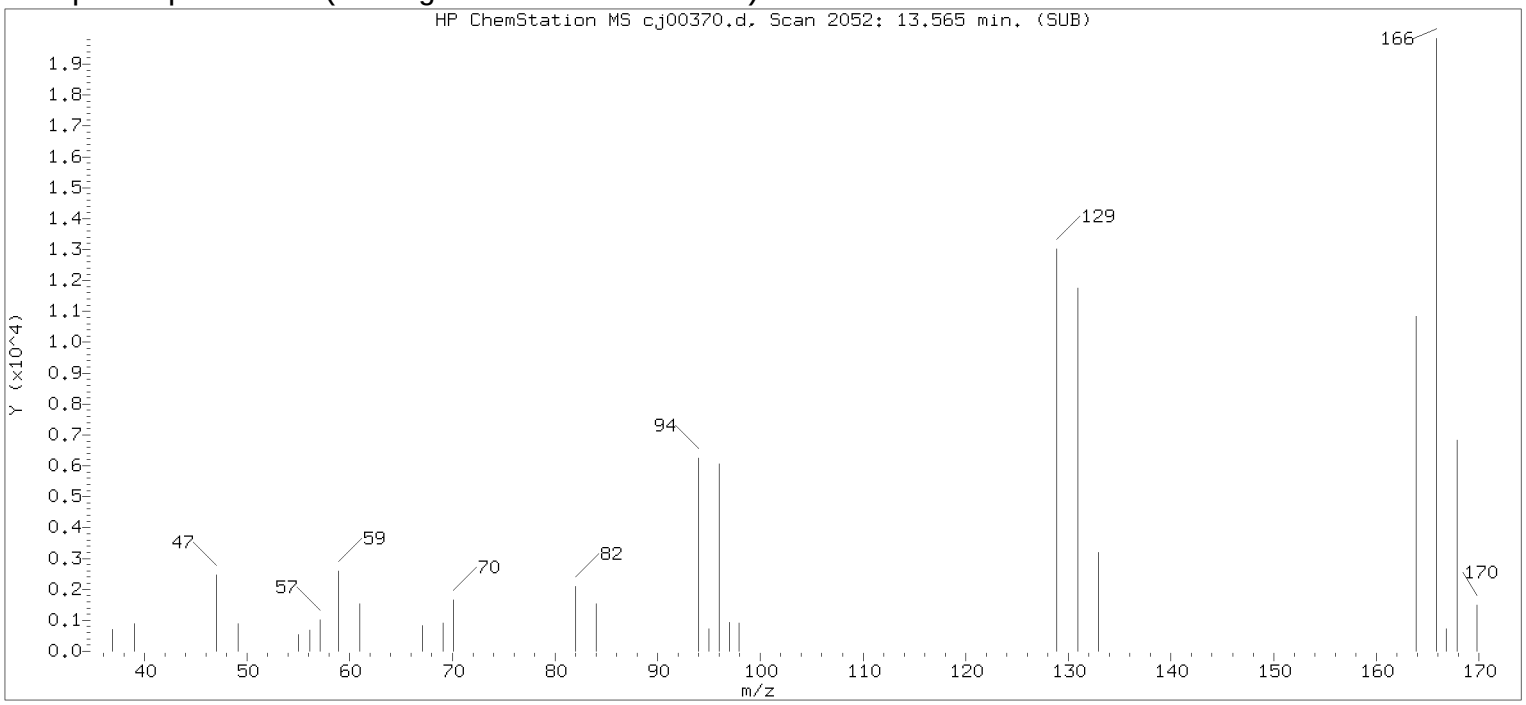
Compound Number : 67
Compound Name : Tetrachloroethene
Scan Number : 2052
Retention Time (minutes): 13.565
Quant Ion : 166.00
Area (flag) : 73809M
Concentration (ppb(v)) : 0.5819
Integration start scan : 2034 Integration stop scan: 2067
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

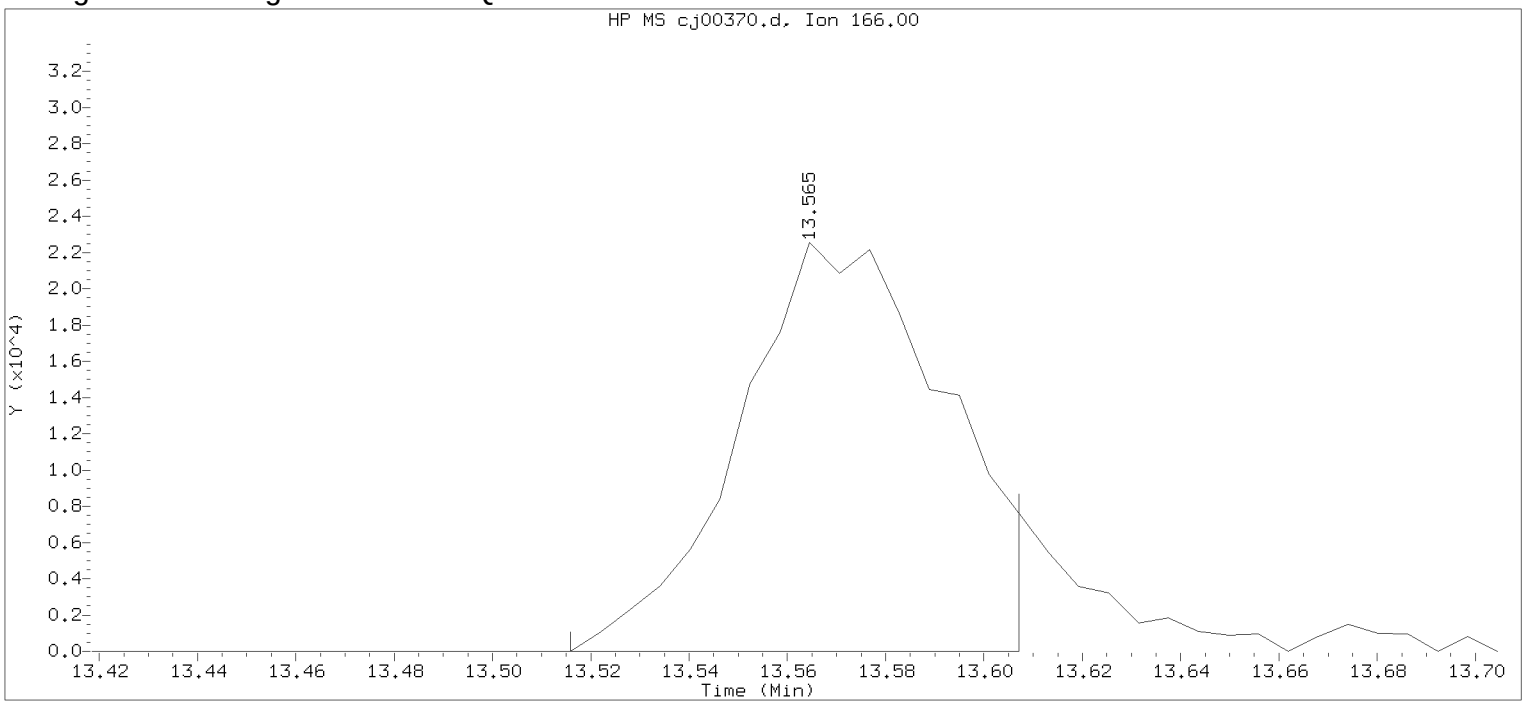
Analyst responsible for change: Digitally signed by Jeffrey B. Smith
on 10/29/2015 at 11:42.
Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Michele J. Smith on 10/30/2015 at 15:42.
Parallax ID: mjs00758

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 22-Oct-2015 21:39 jeb07445

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number : 67
Compound Name : Tetrachloroethene
Scan Number : 2052
Retention Time (minutes): 13.565
Quant Ion : 166.00
Area : 65648
Concentration (ppb(v)) : 0.5176
Integration start scan : 2043 Integration stop scan: 2058
Y at integration start : 0 Y at integration end: 0

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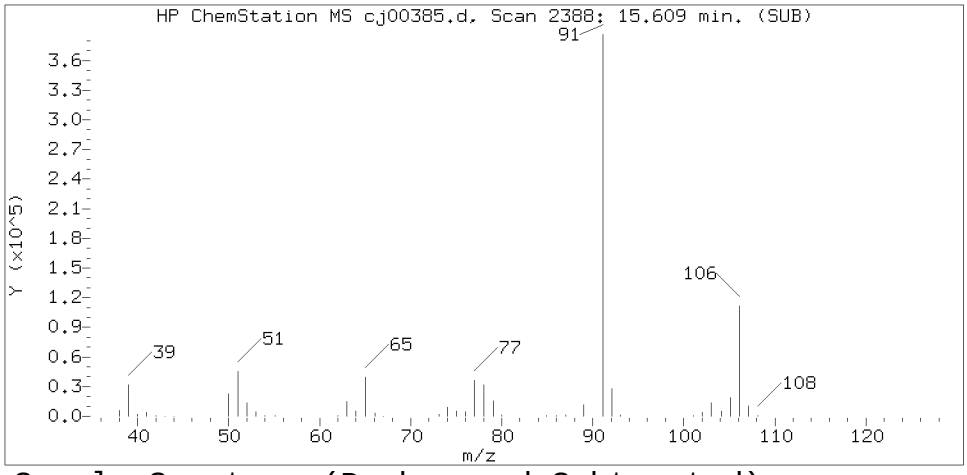
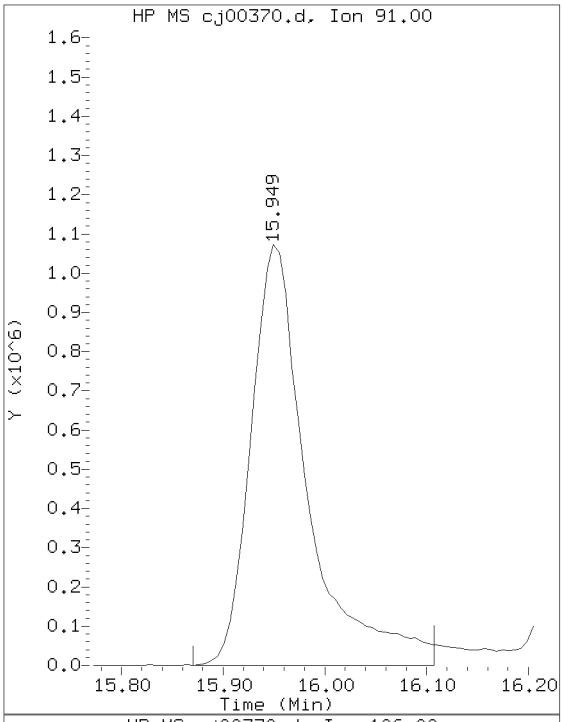
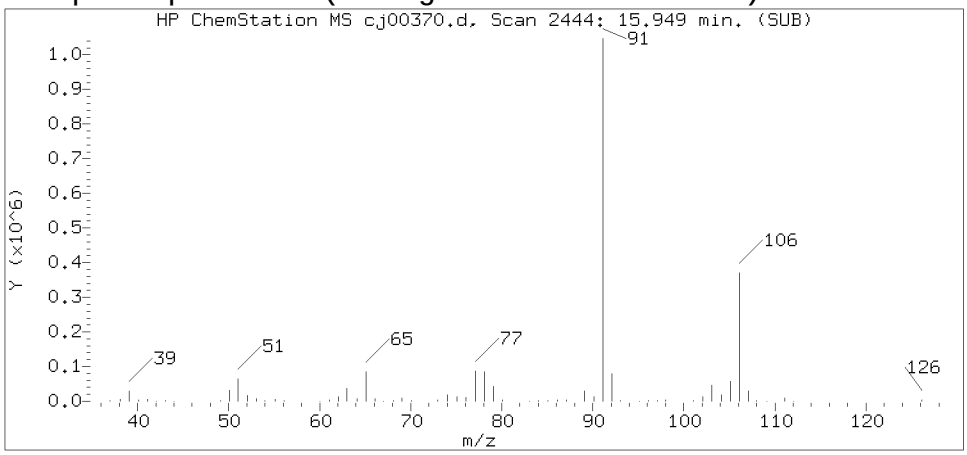
Target 3.5 esignature user SDX26jbs01364

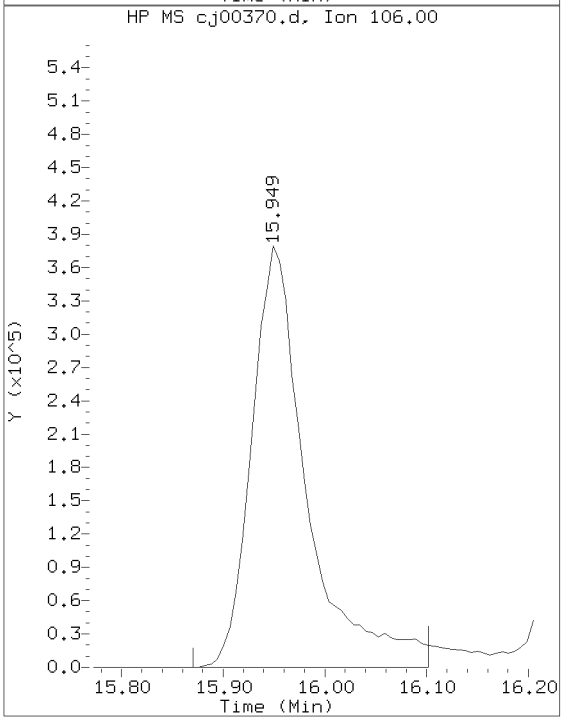
Reference Standard Spectrum for Ethylbenzene



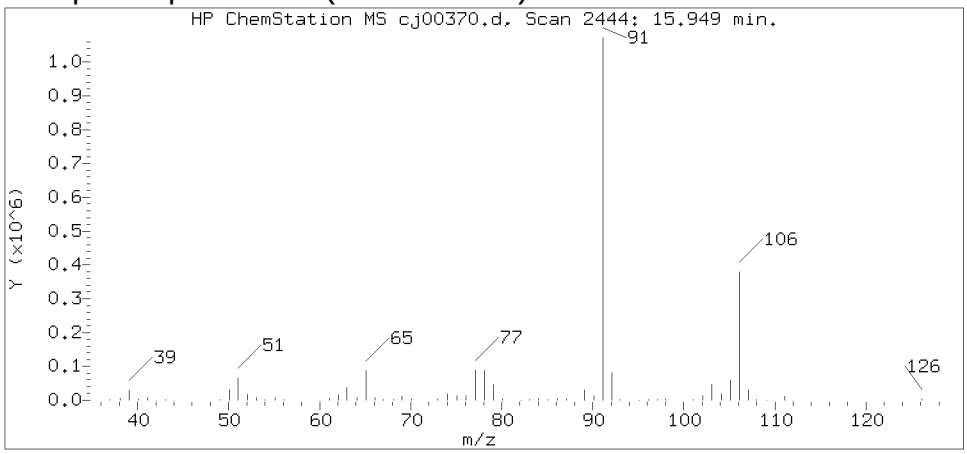


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 74
Compound Name	: Ethylbenzene
Scan Number	: 2444
Retention Time (minutes)	: 15.949
Relative Retention Time	: 0.00081
Quant Ion	: 91.00
Area (flag)	: 4178459
Concentration (ppb(v))	: 25.3856

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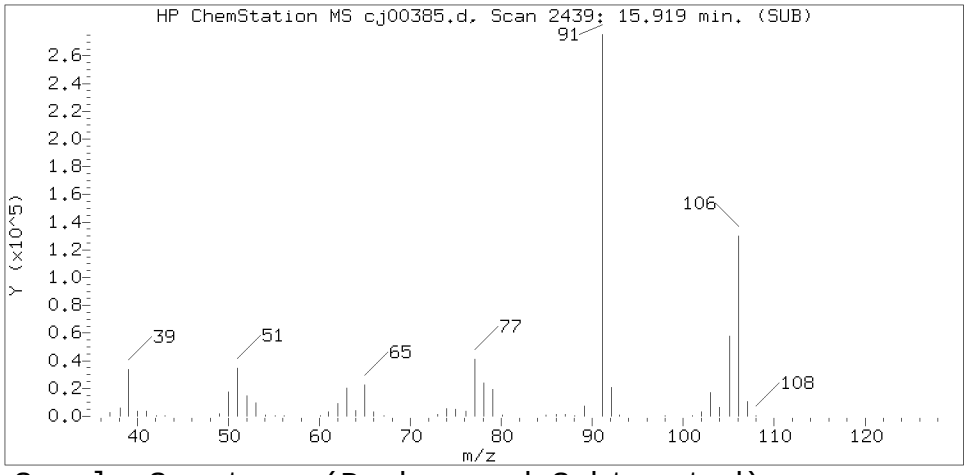
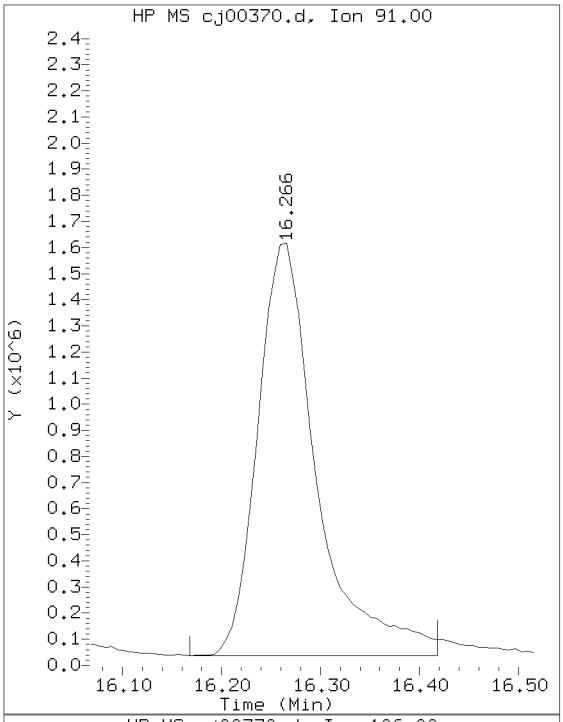
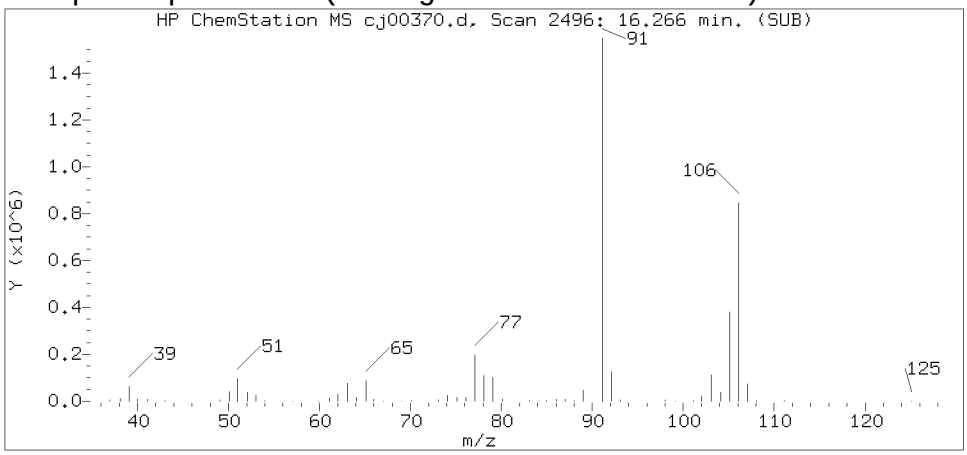
Target 3.5 esignature user ID: jbs01304

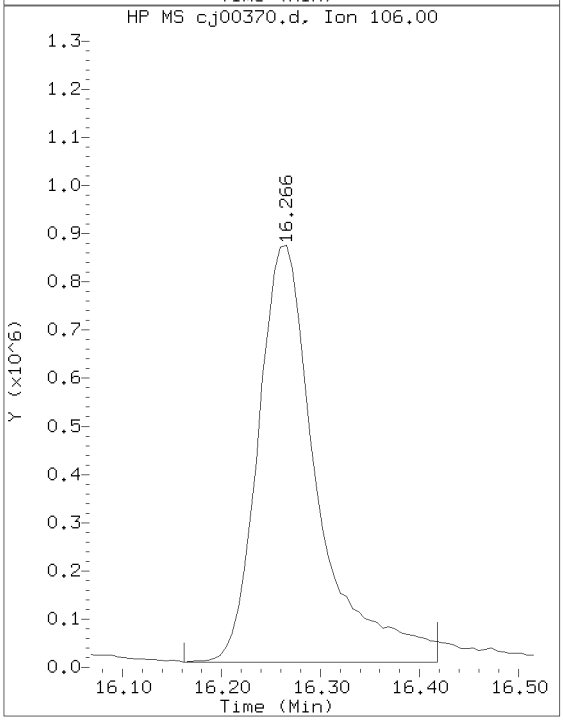
Reference Standard Spectrum for m/p-Xylene



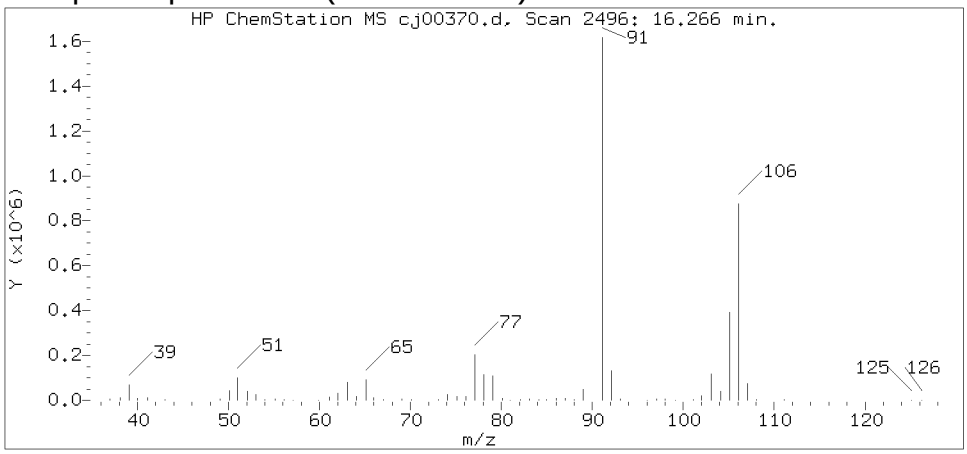


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 75
Compound Name	: m/p-Xylene
Scan Number	: 2496
Retention Time (minutes)	: 16.266
Relative Retention Time	: 0.00043
Quant Ion	: 91.00
Area (flag)	: 6596764
Concentration (ppb(v))	: 48.4621

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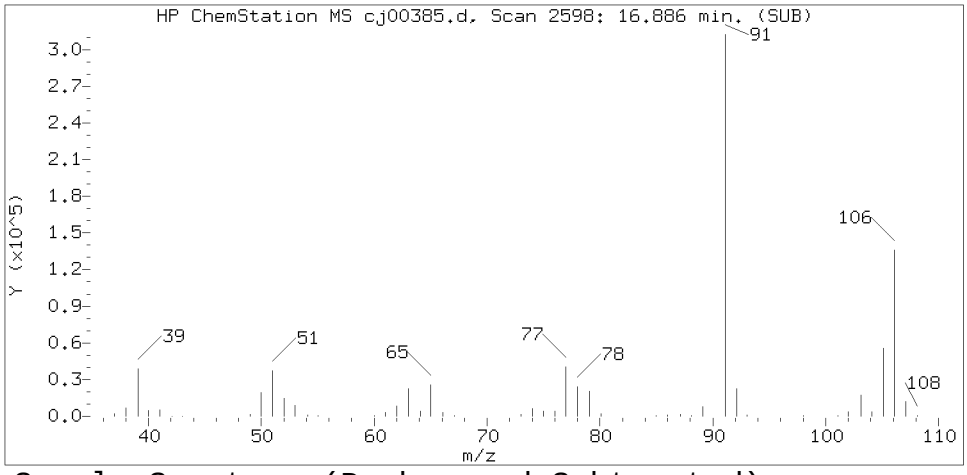
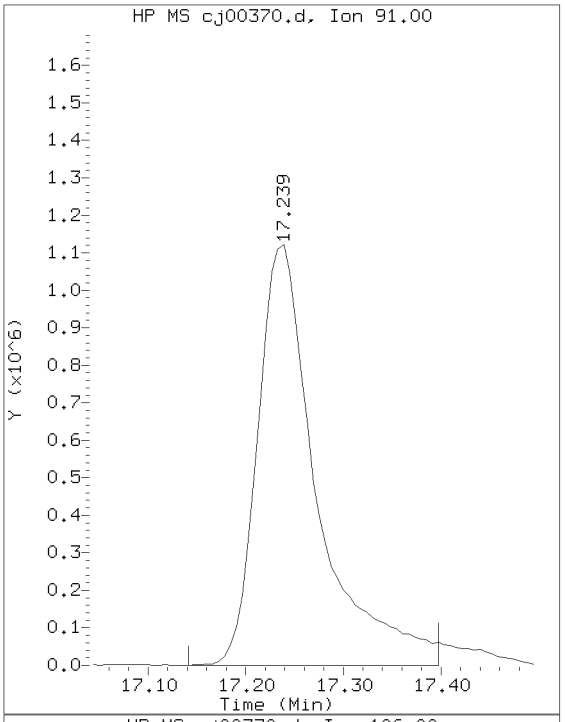
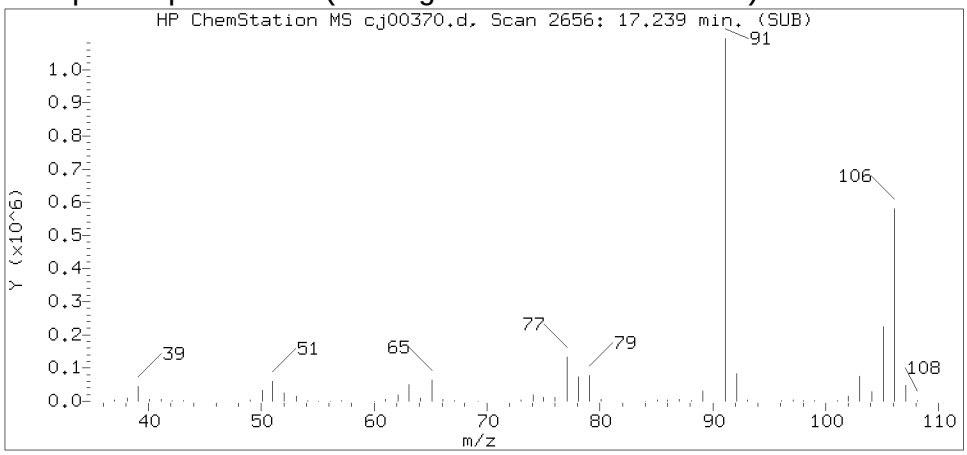
Target 3.5 esignature user ID: jbs01304

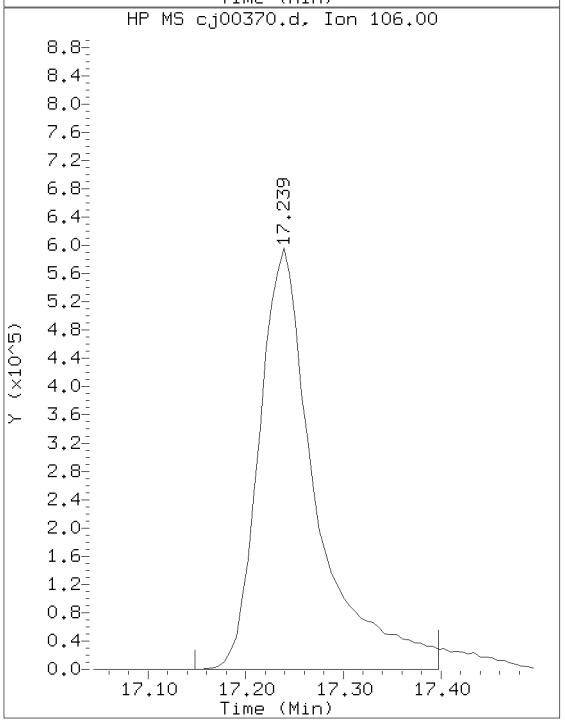
Reference Standard Spectrum for o-Xylene



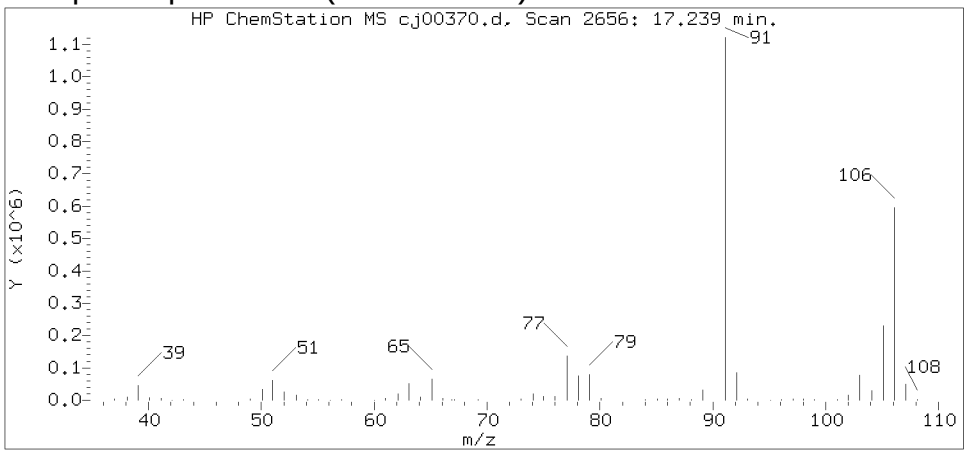


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 76
Compound Name	: o-Xylene
Scan Number	: 2656
Retention Time (minutes)	: 17.239
Relative Retention Time	: 0.00048
Quant Ion	: 91.00
Area (flag)	: 4760171
Concentration (ppb(v))	: 33.2249

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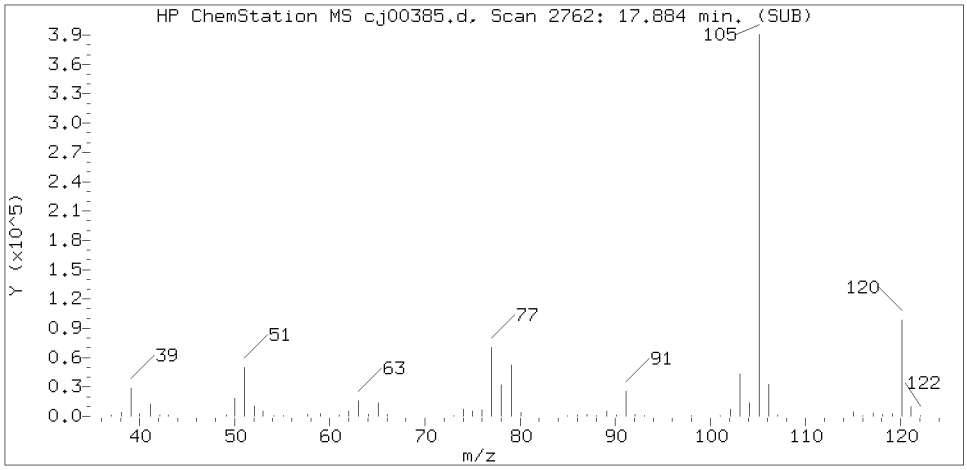
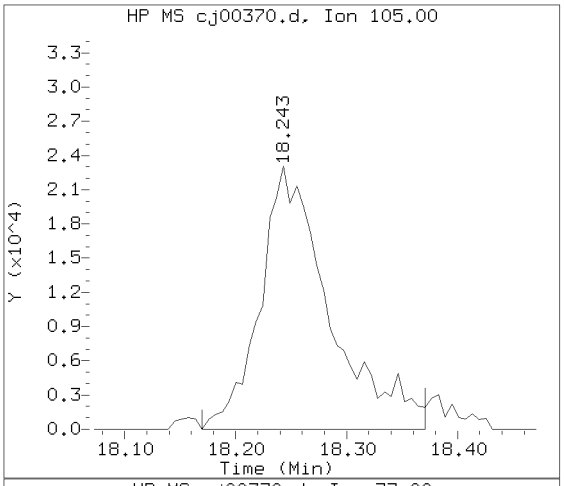
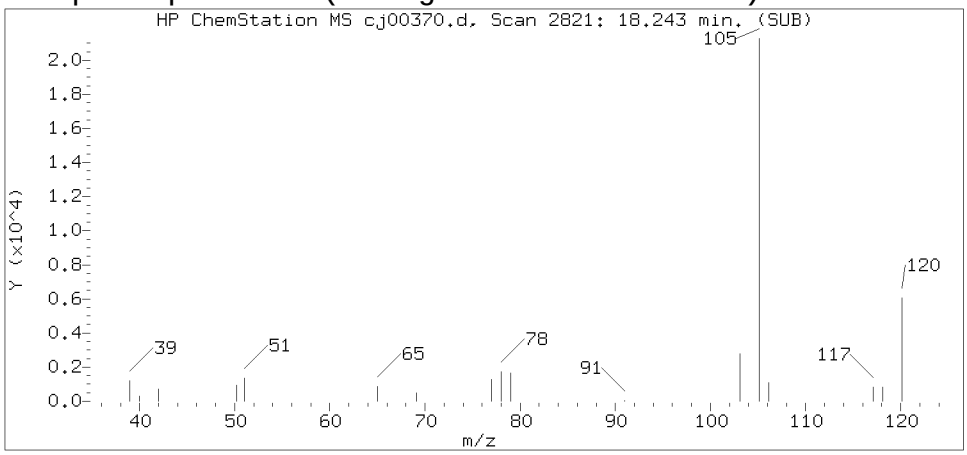
Target 3.5 esignature user ID: jbs01304

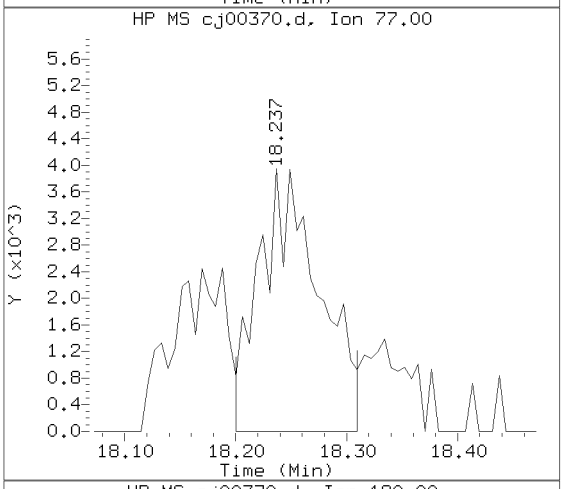
Reference Standard Spectrum for Cumene



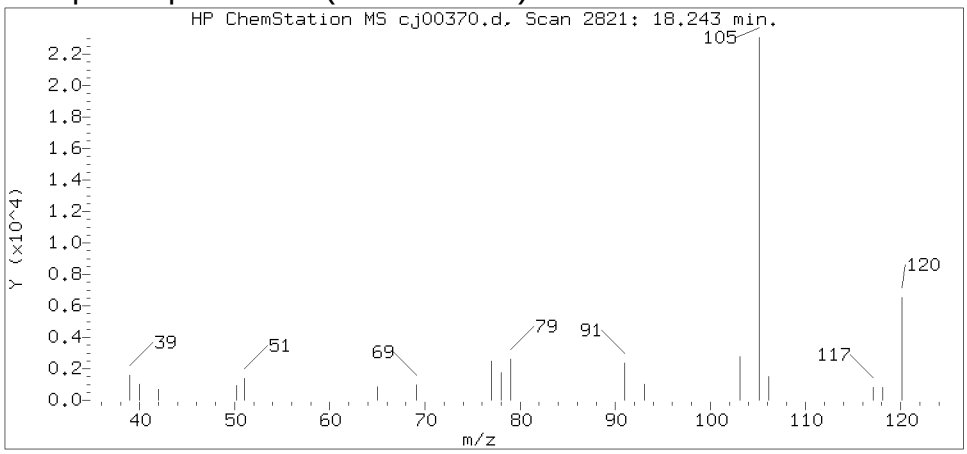


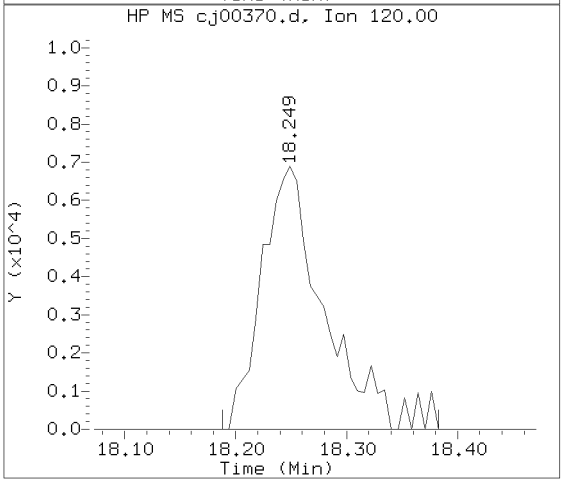
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Compound Number	: 80
Compound Name	: Cumene
Scan Number	: 2821
Retention Time (minutes)	: 18.243
Relative Retention Time	: 0.00092
Quant Ion	: 105.00
Area (flag)	: 99917
Concentration (ppb(v))	: 0.5430

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Target 3.5 esignature user ID: jbs01304

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FORM 01(TIC)
VOLATILE ORGANICS IN AIR
TENTATIVELY IDENTIFIED COMPOUNDS

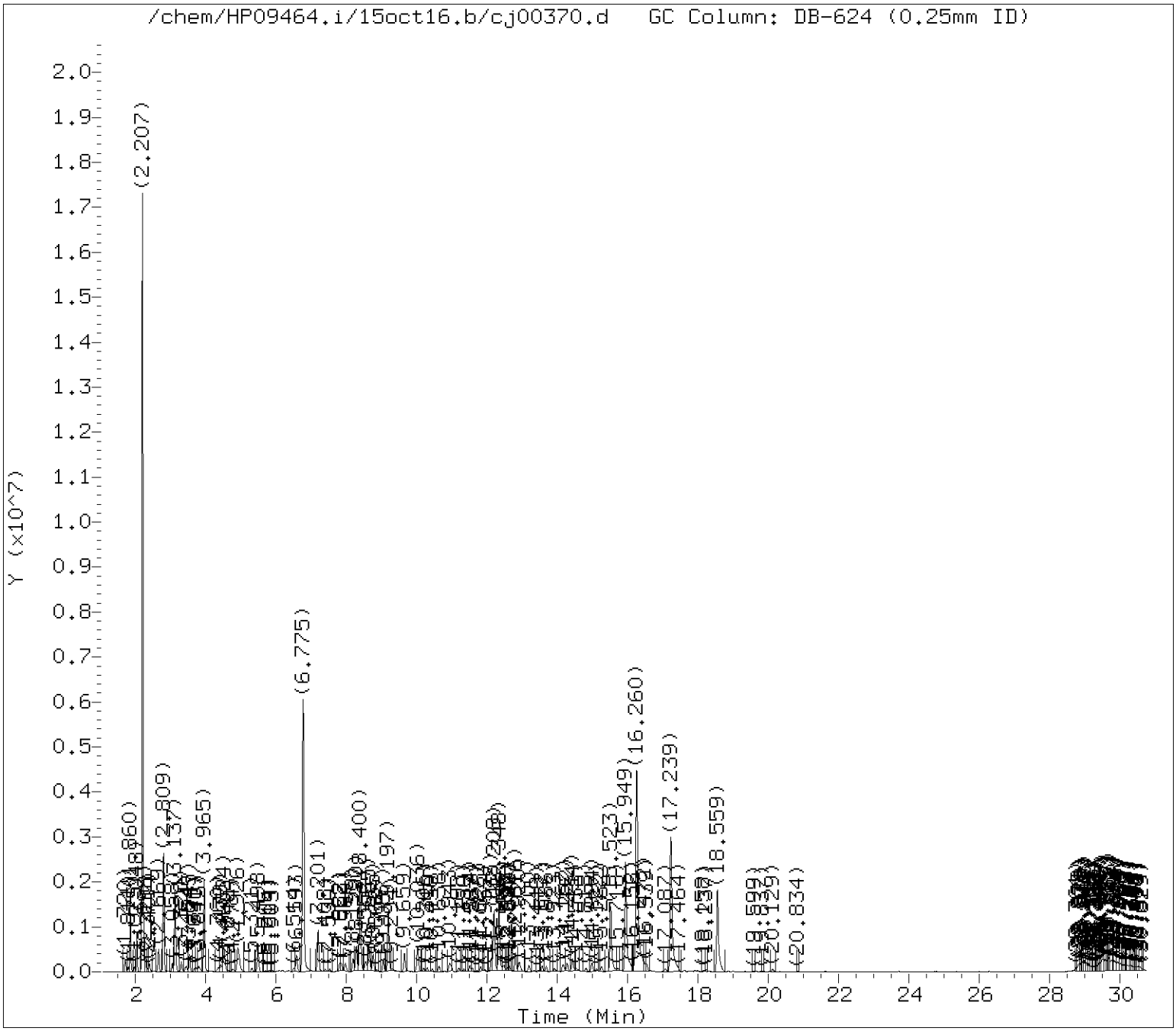
SDG No.:

Sample Media:	CANISTER	Lab Sample ID:	8089423
Canister ID:	994	Lab File ID:	cj00370.d
Pressure Received:	26.5 psia	Date Collected:	10/14/2015
Final Pressure:	13.2 psia	Date Received:	10/15/2015
Nominal Volume:	250 cc	Analyzed Date:	10/17/2015
Injection Volume:	50 cc	Analyzed Time:	07:01
Instrument ID:	09464	Dilution Factor:	10

Number TICs Found: 13 Concentration Units: ppb(v)

CAS NUMBER	COMPOUND	RT	EST. CONC.	Q
75-28-5	Isobutane	2.05	55	J
78-78-4	Butane, 2-methyl-	2.81	220	J
	Unknown	3.54	38	J
107-83-5	Pentane, 2-methyl-	4.52	80	J
96-37-7	Cyclopentane, methyl-	6.59	44	J
589-34-4	Hexane, 3-methyl-	8.20	30	J
	Unknown Cycloalkane	8.55	19	J
	Unknown Cycloalkane	8.76	29	J
	Unknown Alkane	10.94	20	J
	Unknown Cycloalkane	12.13	20	J
	Unknown	12.92	16	J
	Unknown Cycloalkane	14.43	17	J
460-00-4	p-Bromofluorobenzene	18.56	140	J
TOTVOATIC	Total Tics		720	J

Abbreviations:
B = The compound was found in blank with a result greater than the limit being reported.
J = The result is between the MDL and LOQ.



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

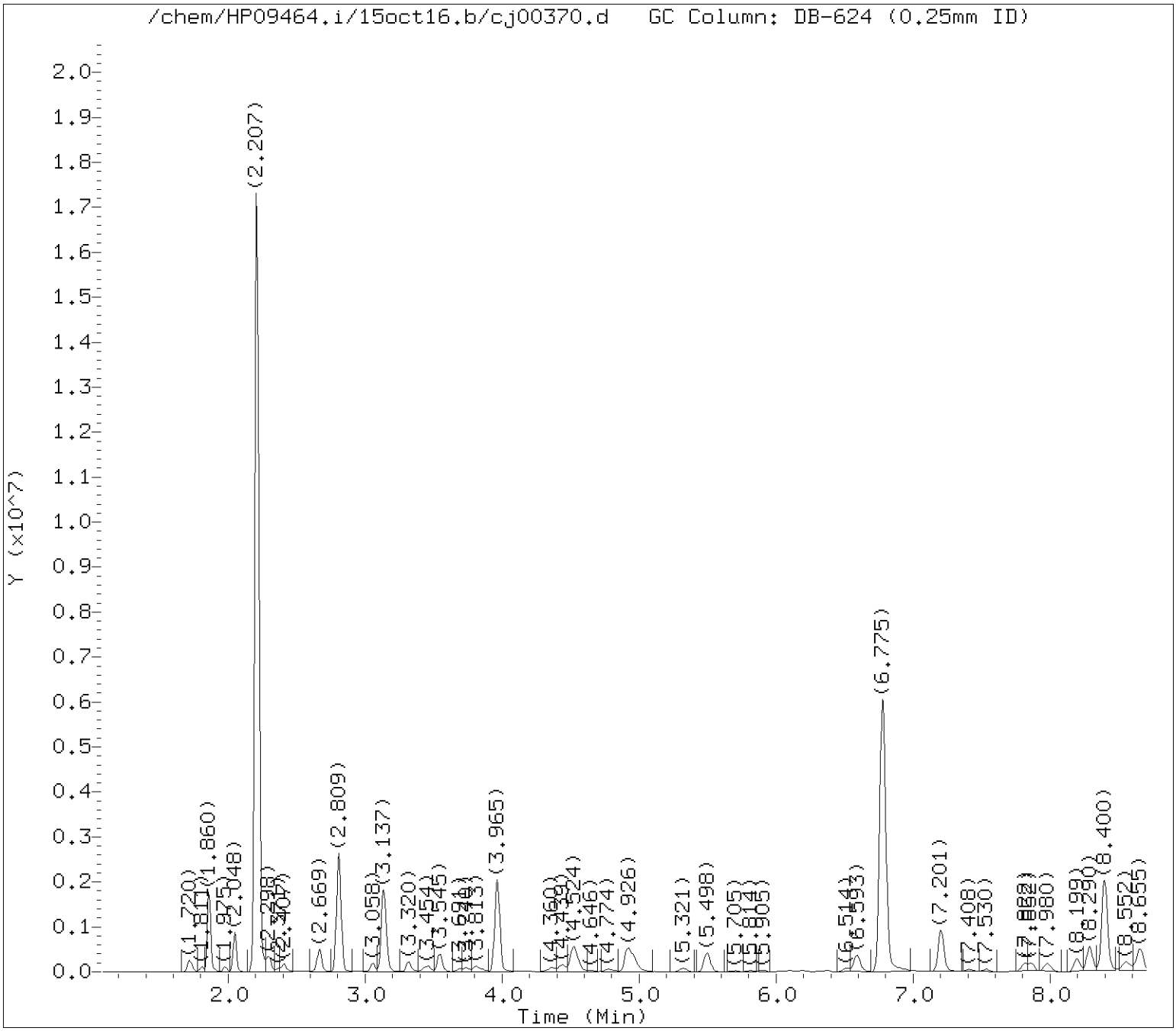
Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Chromatogram Start Time (min.): 1.087
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

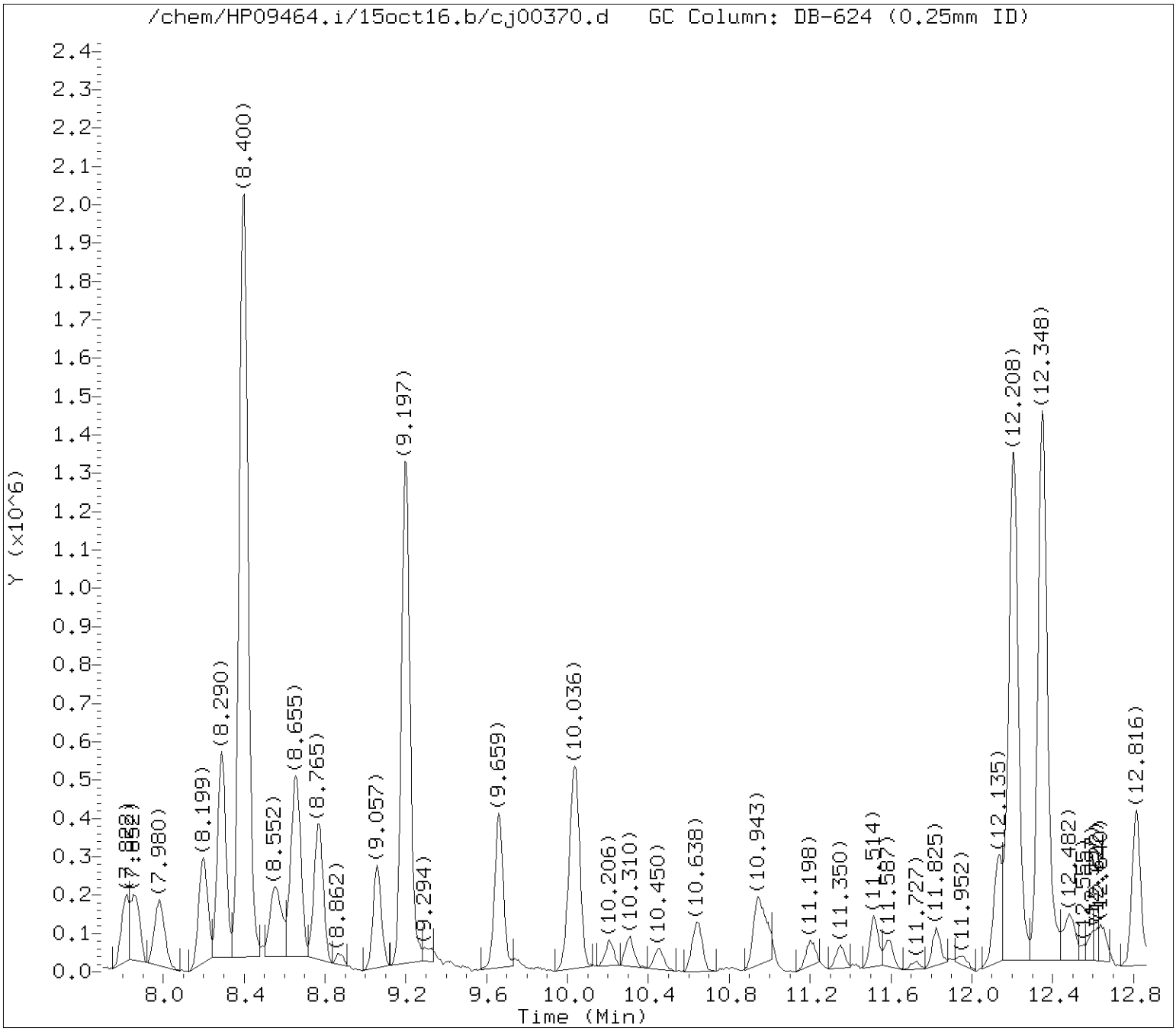
Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Internal Standard referenced: Bromochloromethane at 7.207 minutes
Chromatogram Start Time (min.): 1.087
Chromatogram End Time (min.): 8.202

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

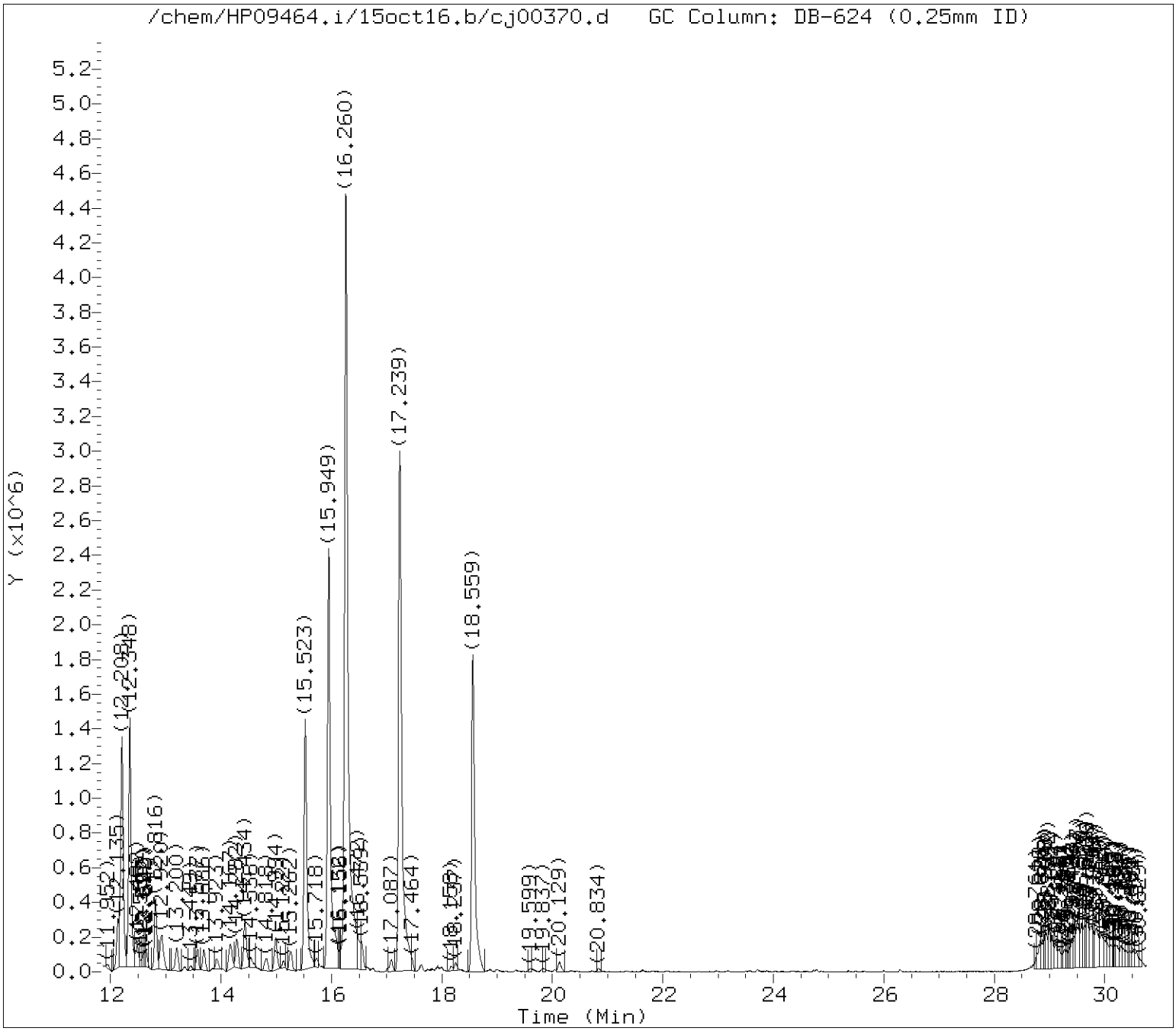
Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Internal Standard referenced: 1,4-Difluorobenzene at 9.197 minutes
Chromatogram Start Time (min.): 8.202
Chromatogram End Time (min.): 12.363

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00370.d Instrument ID: HP09464.i
Injection date and time: 17-OCT-2015 07:01 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 16:54
Date, time and analyst ID of latest file update: 29-Oct-2015 11:36 jbs01304

Sample Name: 06-R- Lab Sample ID: 8089423

Internal Standard referenced: Chlorobenzene-d5 at 15.530 minutes
Chromatogram Start Time (min.): 12.363
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.

Data file : /chem/HP09464.i/15oct16.b/cj00370.d
Lab Smp Id: 8089423 Client Smp ID: 06-R-
Inj Date : 17-OCT-2015 07:01
Operator : jeb07445 Inst ID: HP09464.i
Smp Info : 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;
Misc Info : cj00353;292.sub;250;13.2261;26.4522;994;
Comment :
Method : /chem/HP09464.i/15oct16.b/to-15.m
Meth Date : 29-Oct-2015 11:25 jbs01304 Quant Type: ISTD
Cal Date : 16-OCT-2015 04:03 Cal File: cj00329.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 292.sub
Target Version: 3.50
Processing Host: d30cs01

Concentration Formula: Amt * DF * (Xa/Ya)*(IVn/IVa) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Xa	26.45220	canister pressure absolute after dilutio
Ya	13.22610	canister pressure absolute before diluti
IVn	250.00000	nominal injection volume
IVa	50.00000	actual injection volume

Cpnd Variable Local Compound Variable

ISTD	RT	AREA	AMOUNT
* 40 Bromochloromethane	7.207	2858078	10.000
* 51 1,4-Difluorobenzene	9.197	3963348	10.000
* 71 Chlorobenzene-d5	15.530	5503783	10.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ppb(v))	FINAL(ppb(v))	QUAL	LIBRARY	LIB ENTRY	CPND #
Isobutane			CAS #: 75-28-5				
2.048	1573603	5.50580608	55.05806084	64	NIST11.l	237	40

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

	CONCENTRATIONS				QUANT		
RT	AREA	ON-COL(ppb(v))	FINAL(ppb(v))	QUAL	LIBRARY	LIB ENTRY	CPND #
Butane, 2-methyl-					CAS #: 78-78-4		
2.809	6276981	21.9622423	219.6224225	68	NIST11.l	714	40
Unknown					CAS #:		
3.545	1078066	3.77199527	37.71995272	0		0	40(L)
Pentane, 2-methyl-					CAS #: 107-83-5		
4.524	2287676	8.00424336	80.04243358	78	NIST11.l	1823	40
Cyclopentane, methyl-					CAS #: 96-37-7		
6.593	1254183	4.38820305	43.88203046	80	NIST11.l	1494	40
Hexane, 3-methyl-					CAS #: 589-34-4		
8.199	850366	2.97530599	29.75305985	91	NIST11.l	3977	40
Unknown Cycloalkane					CAS #:		
8.552	752782	1.89935834	18.99358342	0		0	51
Unknown Cycloalkane					CAS #:		
8.765	1139604	2.87535739	28.75357390	0		0	51
Unknown Alkane					CAS #:		
10.943	779475	1.96670792	19.66707922	0		0	51
Unknown Cycloalkane					CAS #:		
12.135	808612	2.04022389	20.40223895	0		0	51
Unknown					CAS #:		
12.920	905073	1.64445686	16.44456860	0		0	71
Unknown Cycloalkane					CAS #:		
14.434	944614	1.71629885	17.16298854	0		0	71
p-Bromofluorobenzene					CAS #: 460-00-4		
18.559	7430645	13.5009755	135.0097548	93	NIST11.l	41259	71(L)

QC Flag Legend

L - Operator selected an alternate library search match.

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

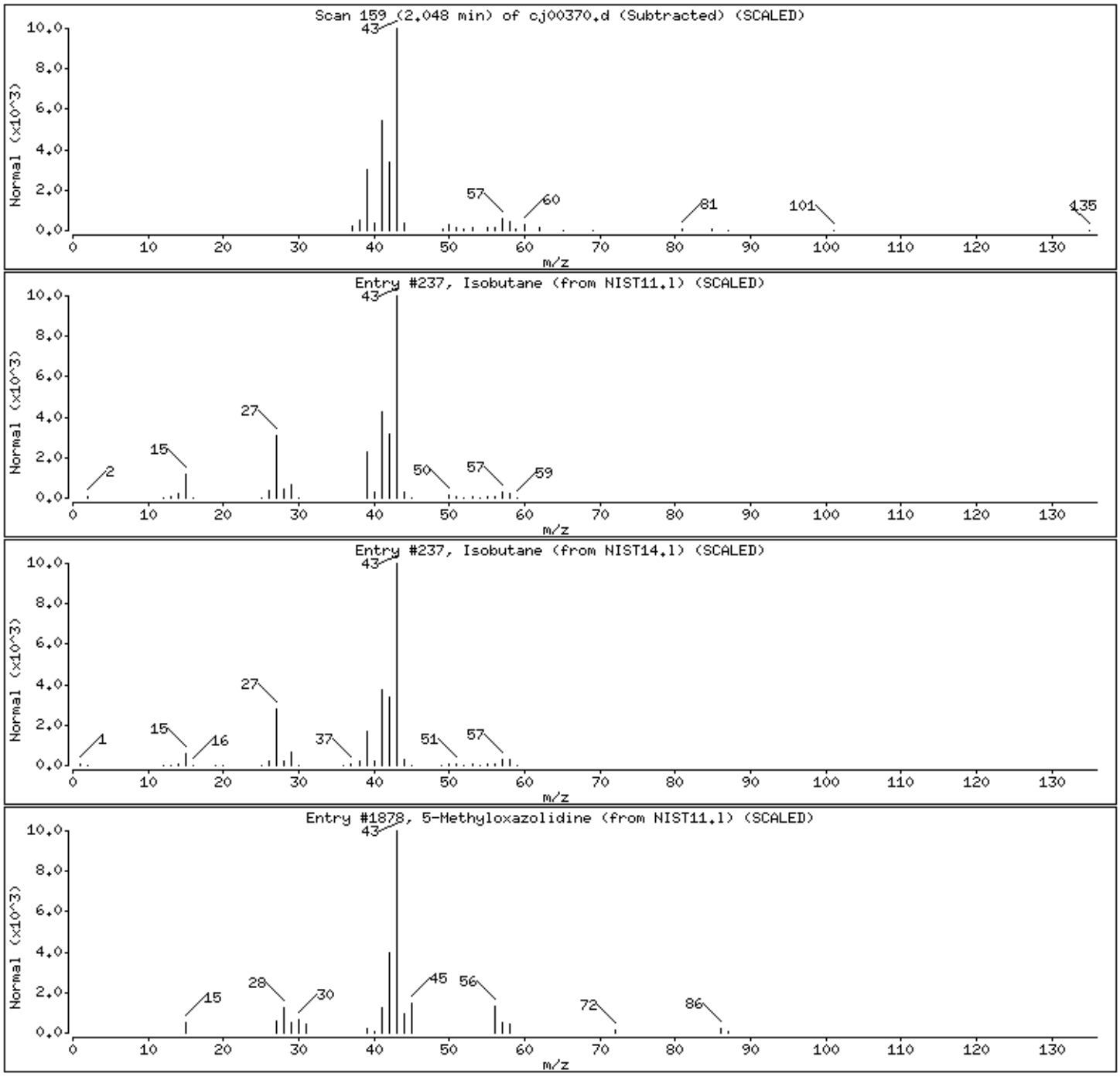
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Isobutane	75-28-5	NIST11.l	237	64	C4H10	58
Isobutane	75-28-5	NIST14.l	237	64	C4H10	58
5-Methyloxazolidine	58328-22-6	NIST11.l	1878	33	C4H9NO	87



Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

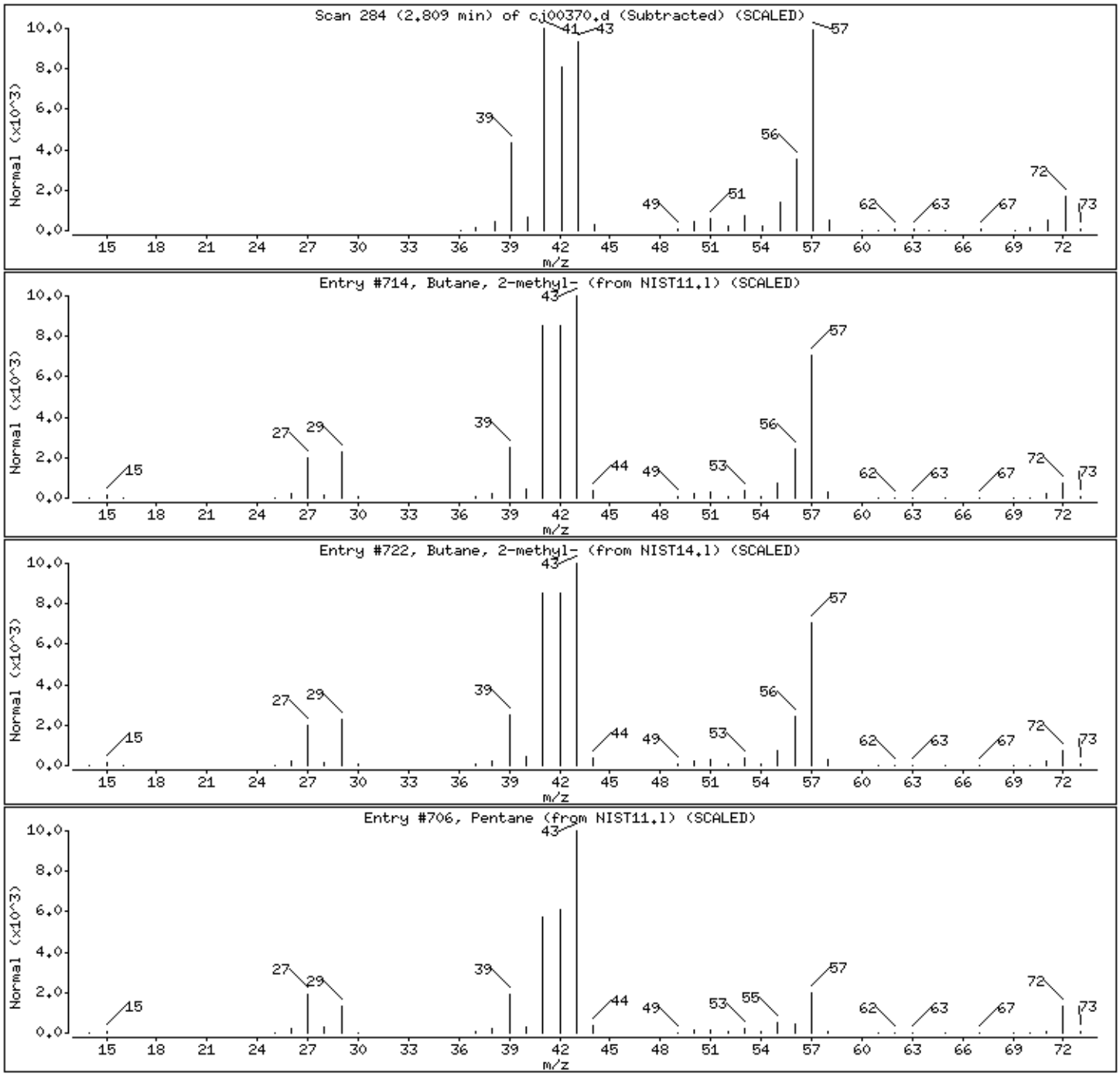
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Butane, 2-methyl-	78-78-4	NIST11.l	714	68	C5H12	72
Butane, 2-methyl-	78-78-4	NIST14.l	722	68	C5H12	72
Pentane	109-66-0	NIST11.l	706	37	C5H12	72



Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

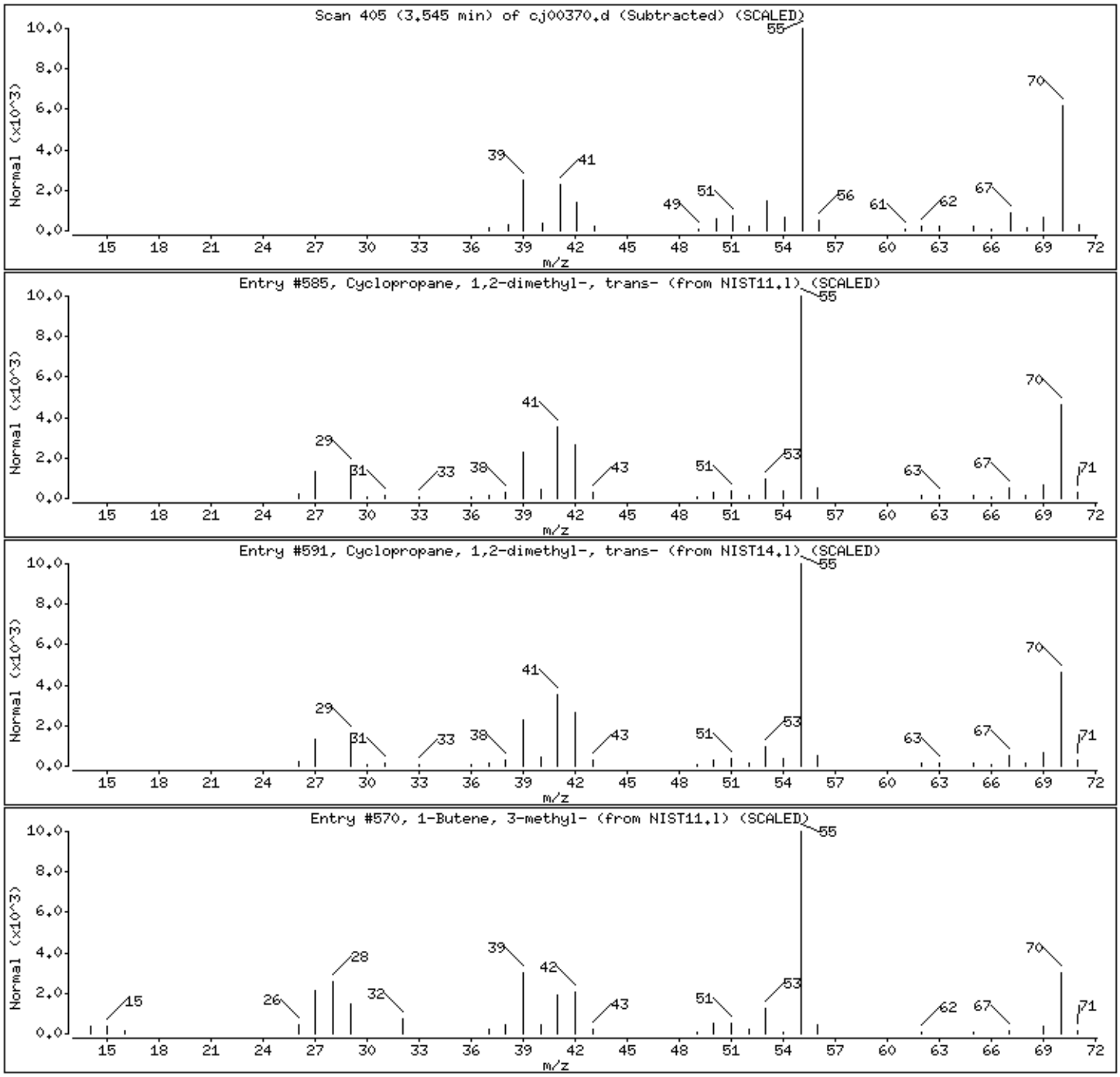
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopropane, 1,2-dimethyl-, trans-	2402-06-4	NIST11.l	585	90	C5H10	70
Cyclopropane, 1,2-dimethyl-, trans-	2402-06-4	NIST14.l	591	90	C5H10	70
1-Butene, 3-methyl-	563-45-1	NIST11.l	570	86	C5H10	70



Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

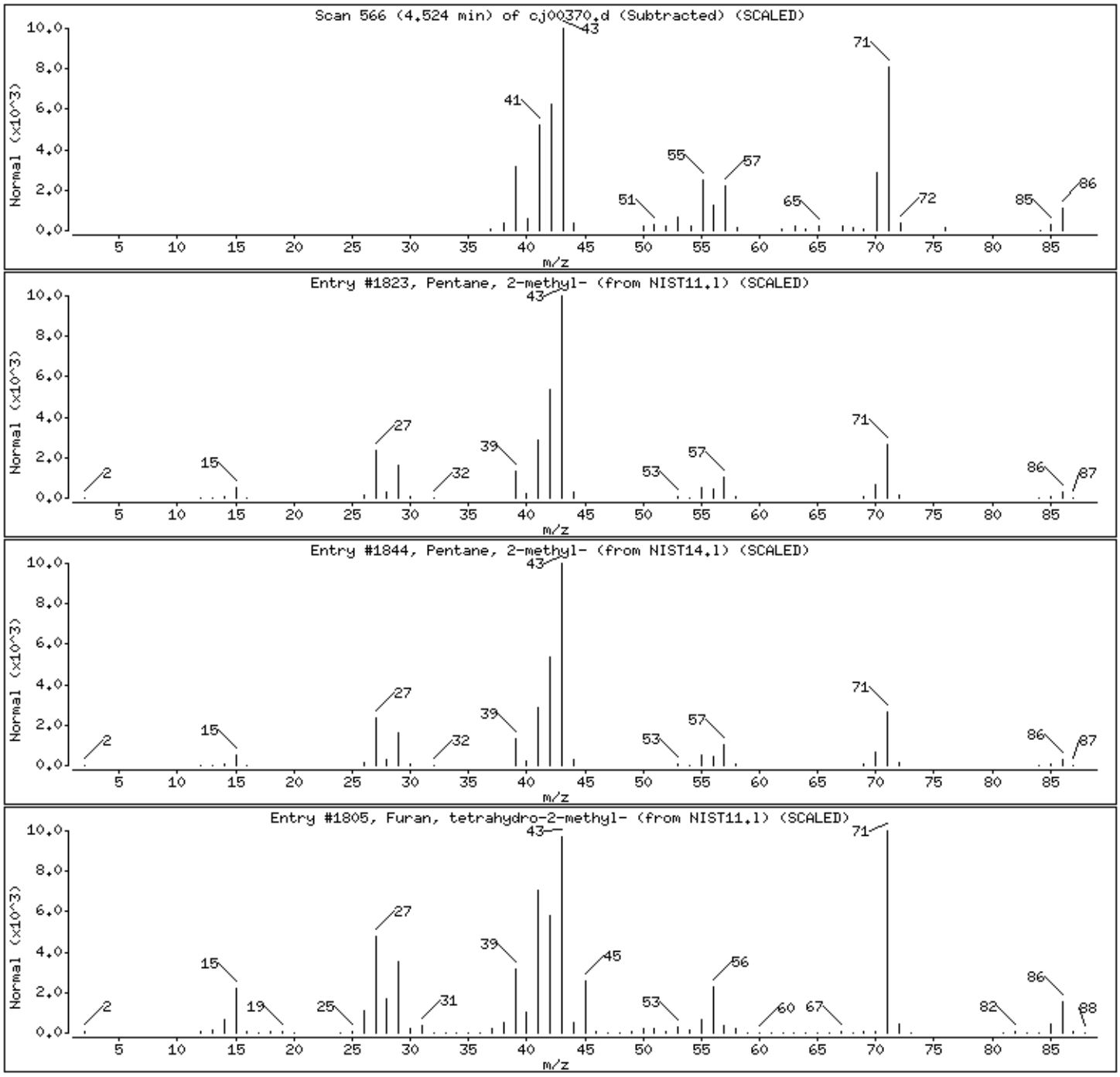
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Pentane, 2-methyl-	107-83-5	NIST11.l	1823	78	C6H14	86
Pentane, 2-methyl-	107-83-5	NIST14.l	1844	78	C6H14	86
Furan, tetrahydro-2-methyl-	96-47-9	NIST11.l	1805	58	C5H10O	86



Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

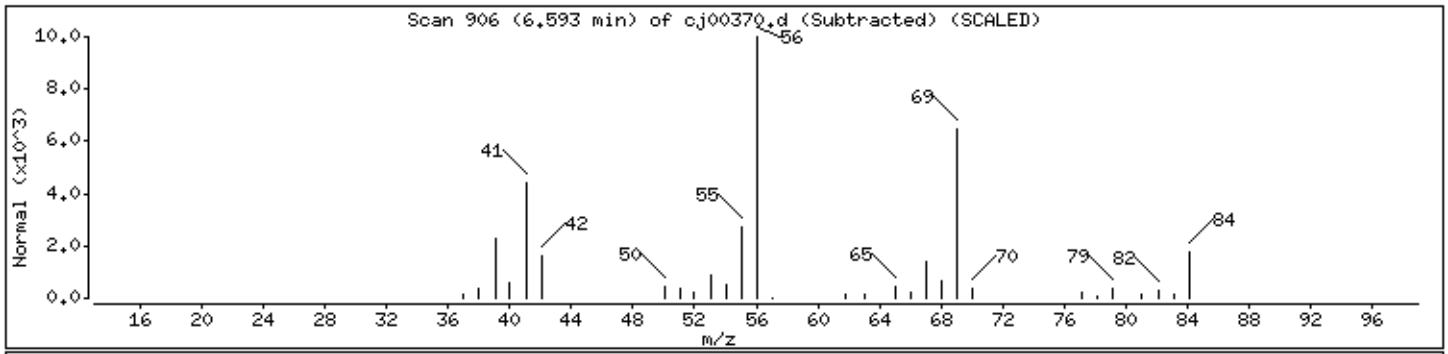
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

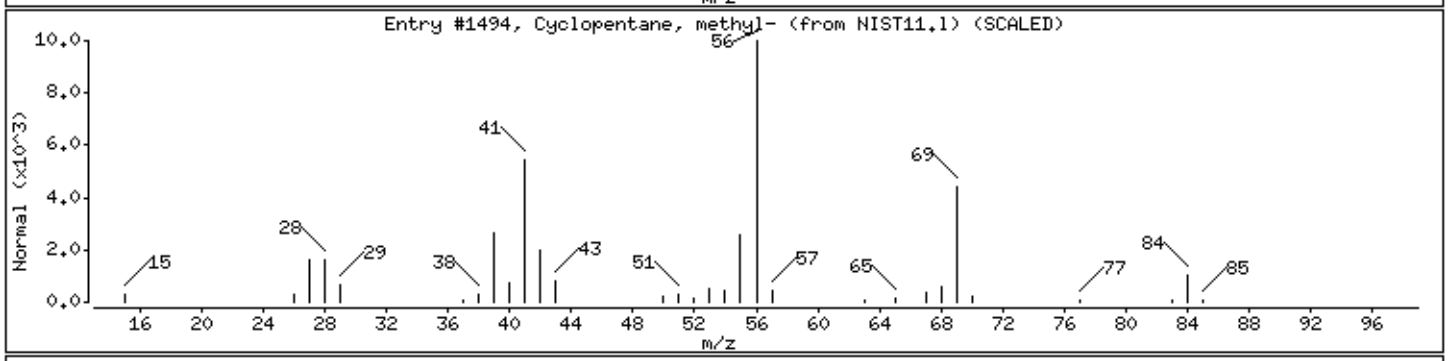
Operator: jeb07445

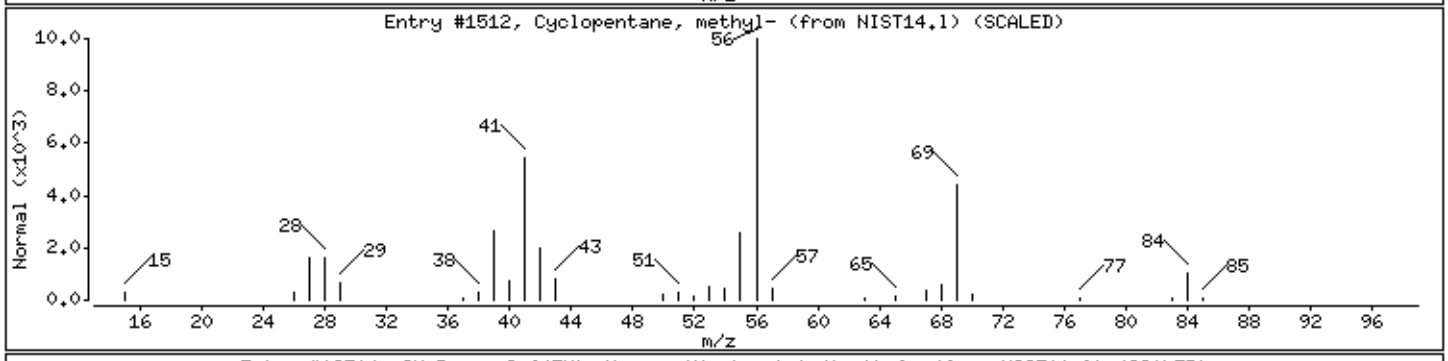
Column phase: DB-624

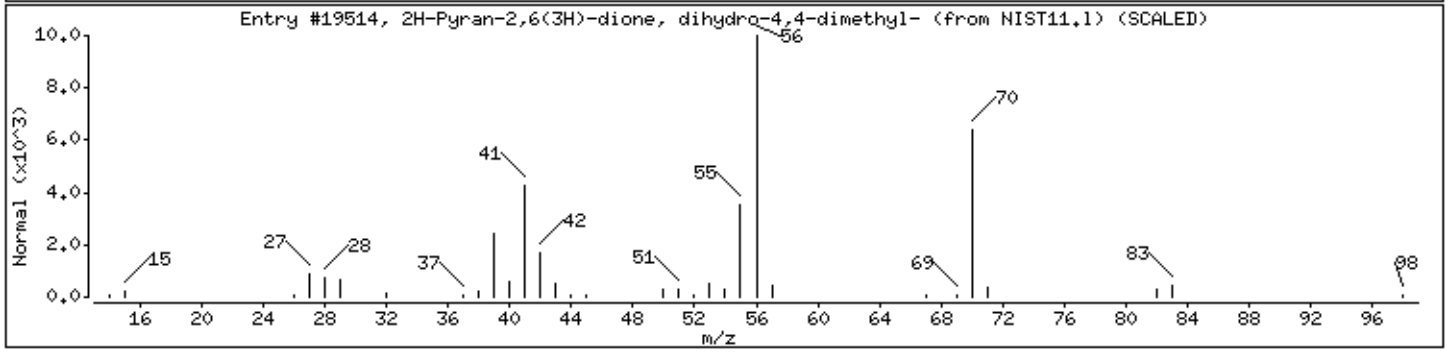
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Cyclopentane, methyl-	96-37-7	NIST11.l	1494	80	C6H12	84
Cyclopentane, methyl-	96-37-7	NIST14.l	1512	80	C6H12	84
2H-Pyran-2,6(3H)-dione, dihydro-4,4-dime	4160-82-1	NIST11.l	19514	40	C7H10O3	142









Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

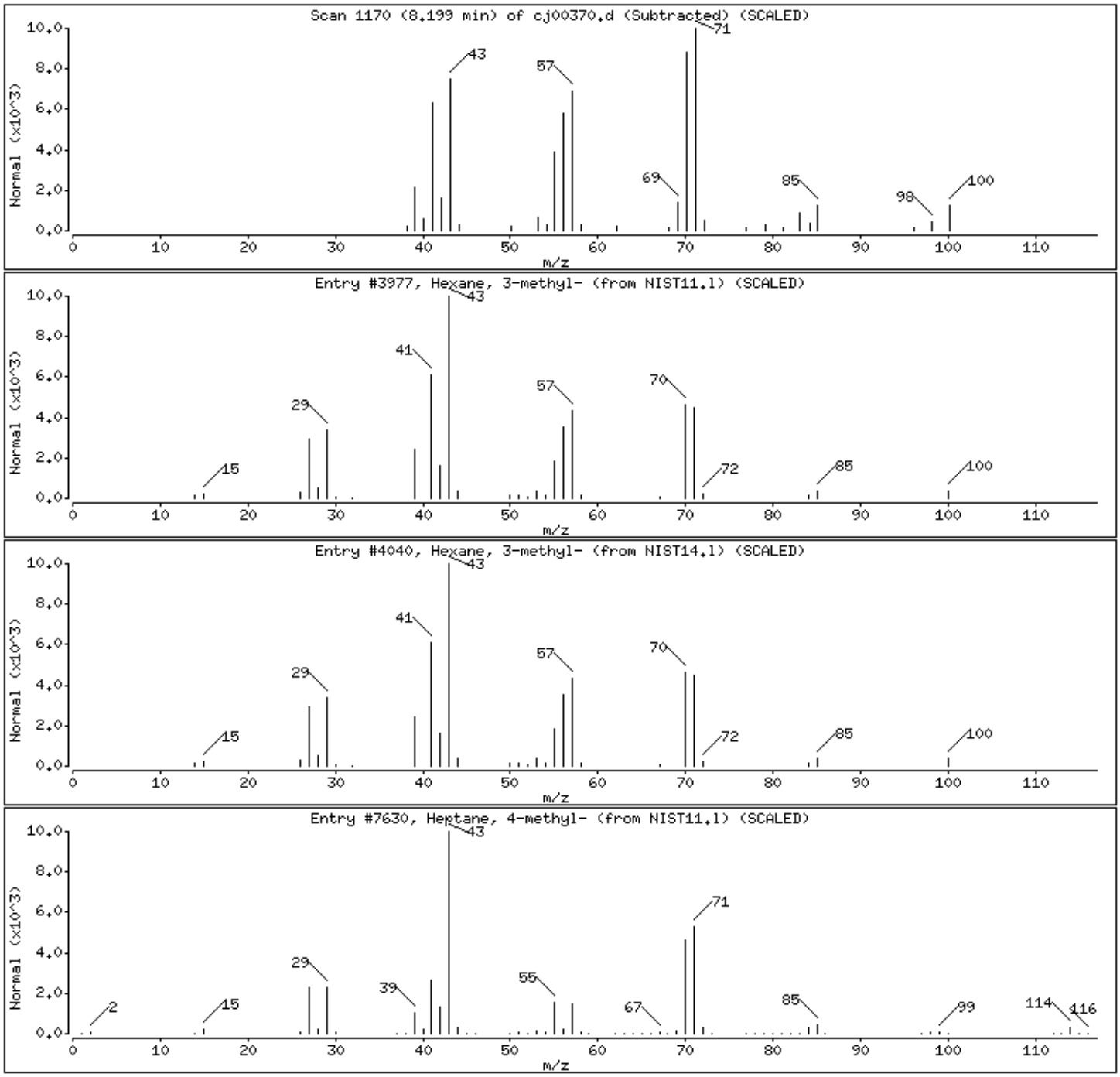
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexane, 3-methyl-	589-34-4	NIST11.l	3977	91	C7H16	100
Hexane, 3-methyl-	589-34-4	NIST14.l	4040	91	C7H16	100
Heptane, 4-methyl-	589-53-7	NIST11.l	7630	59	C8H18	114



Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

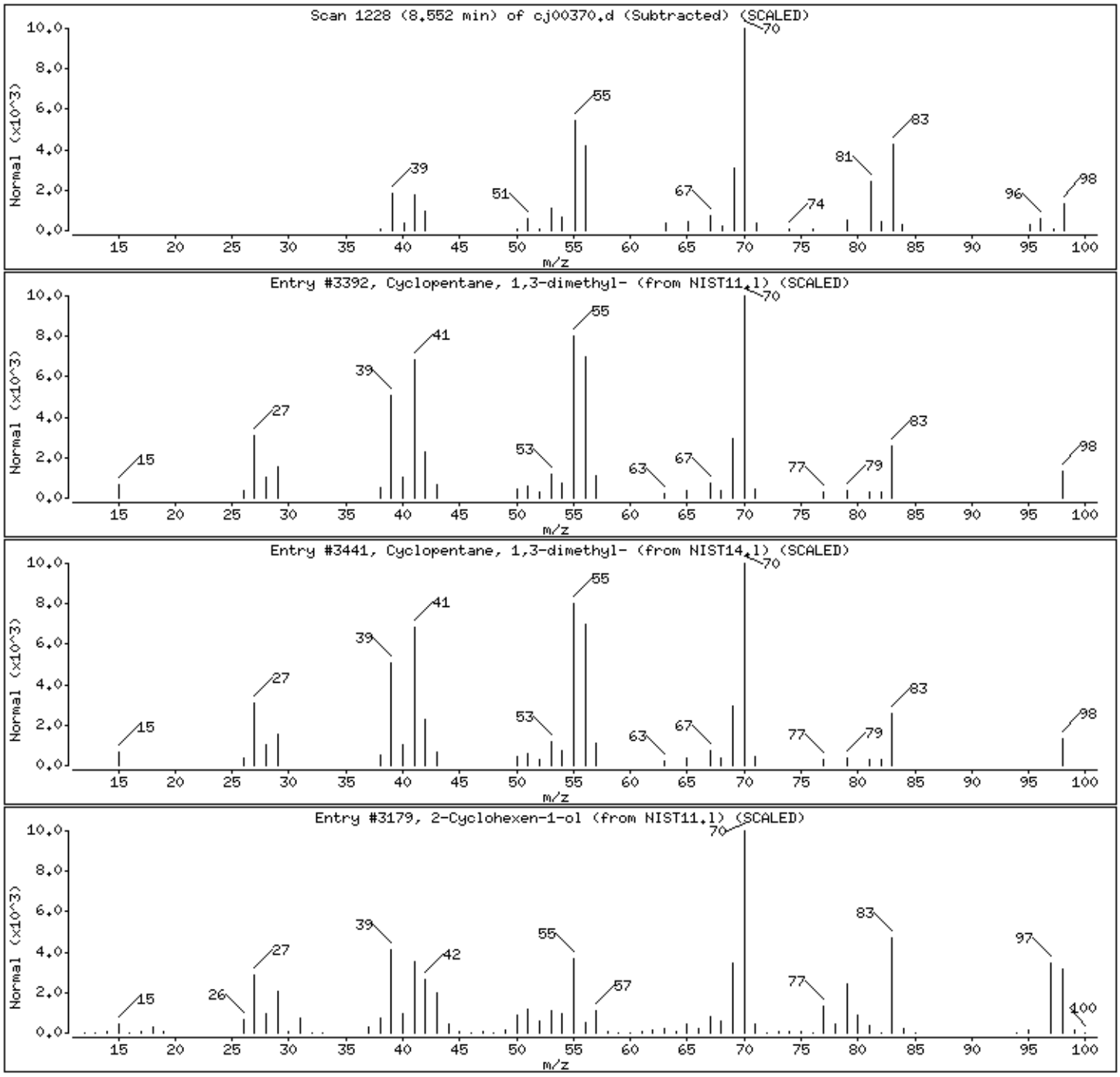
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,3-dimethyl-	2453-00-1	NIST11.l	3392	50	C7H14	98
Cyclopentane, 1,3-dimethyl-	2453-00-1	NIST14.l	3441	50	C7H14	98
2-Cyclohexen-1-ol	822-67-3	NIST11.l	3179	40	C6H10O	98



Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

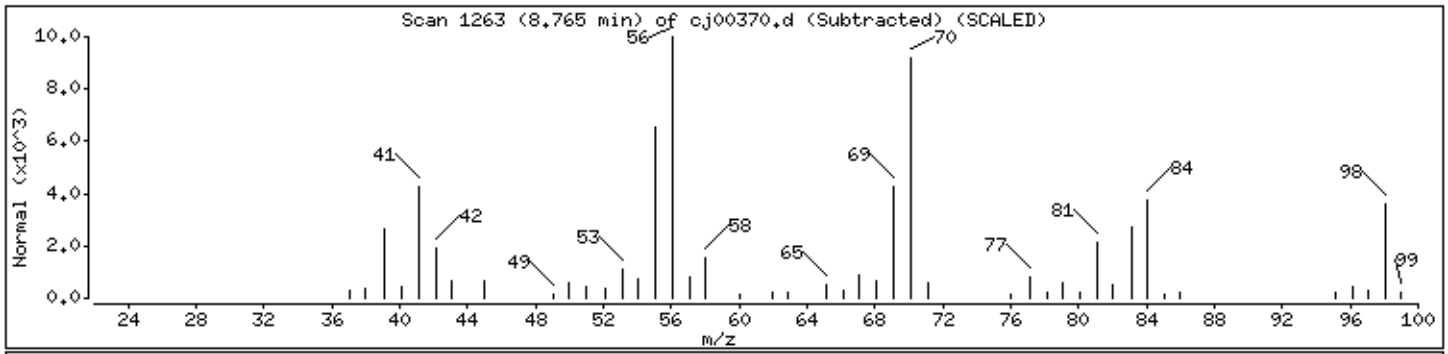
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

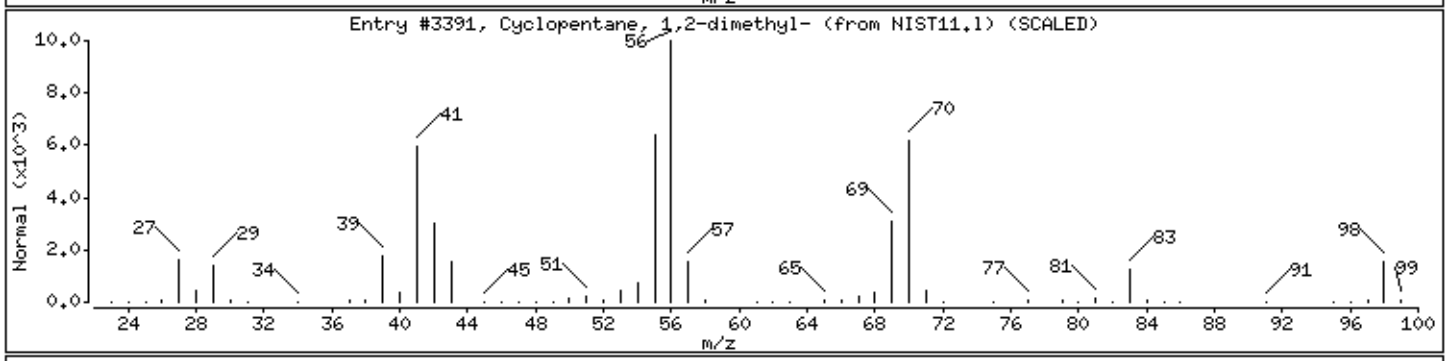
Operator: jeb07445

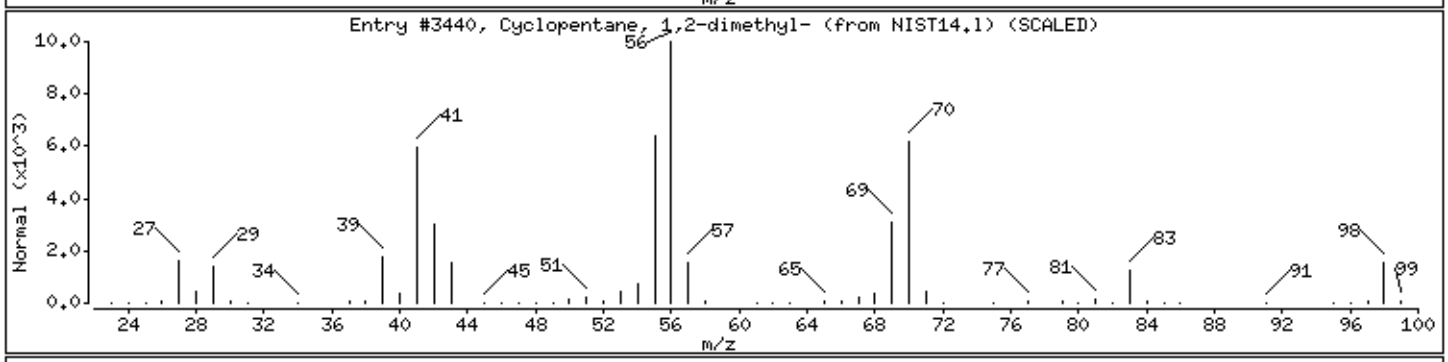
Column phase: DB-624

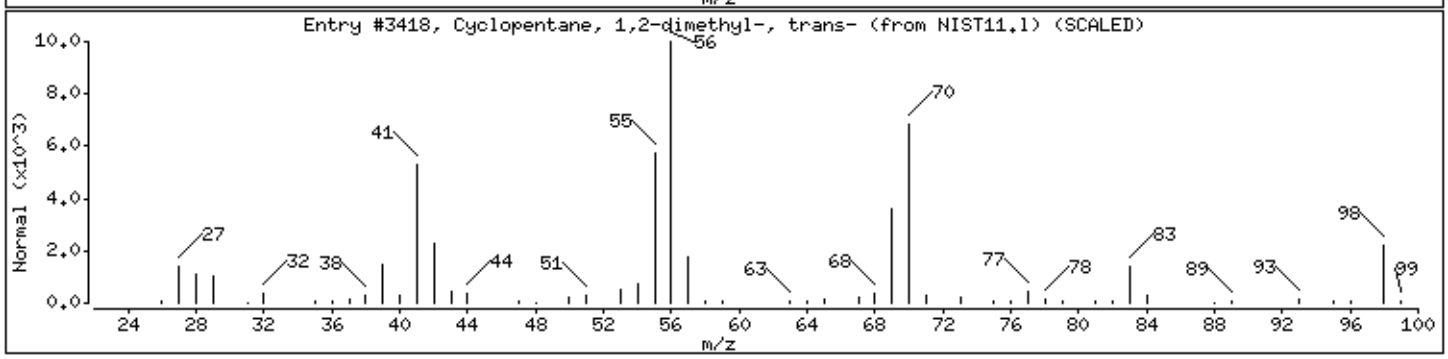
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2-dimethyl-	2452-99-5	NIST11.l	3391	87	C7H14	98
Cyclopentane, 1,2-dimethyl-	2452-99-5	NIST14.l	3440	87	C7H14	98
Cyclopentane, 1,2-dimethyl-, trans-	822-50-4	NIST11.l	3418	86	C7H14	98









Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

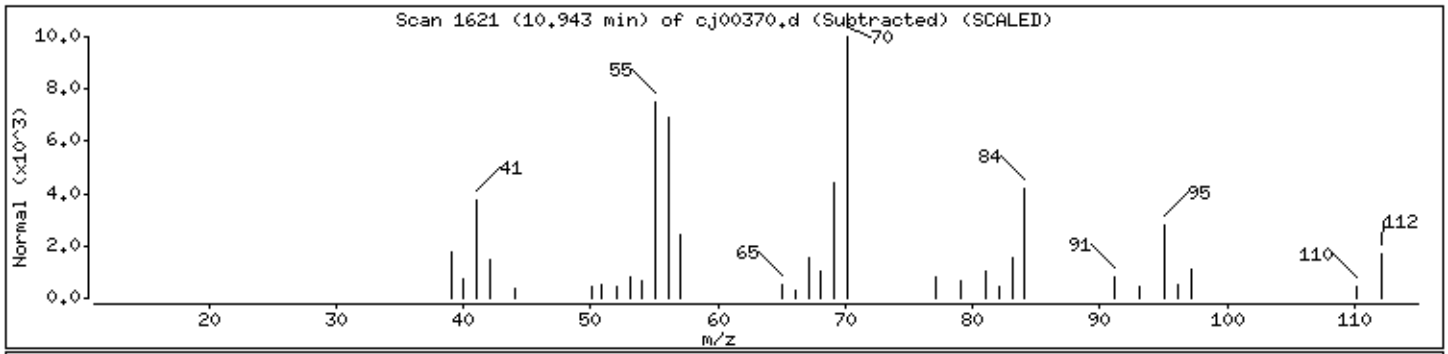
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

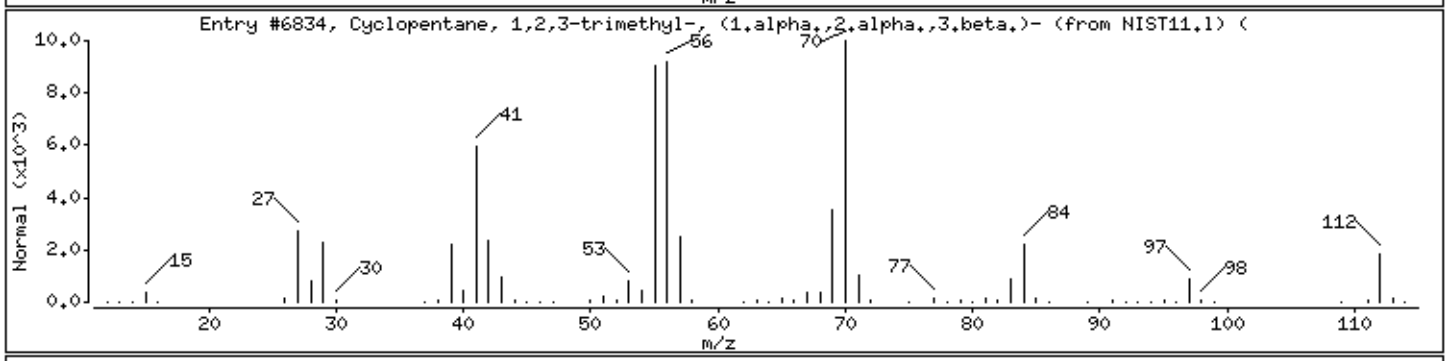
Operator: jeb07445

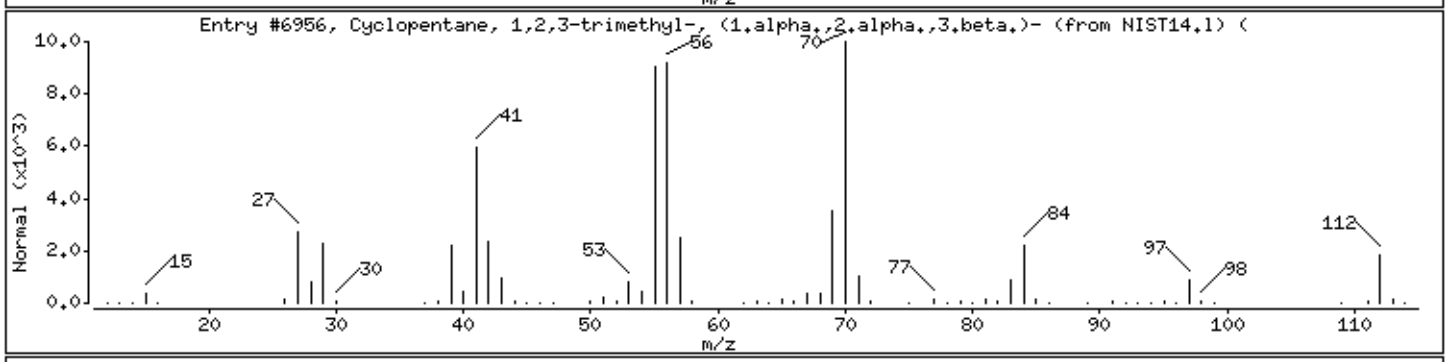
Column phase: DB-624

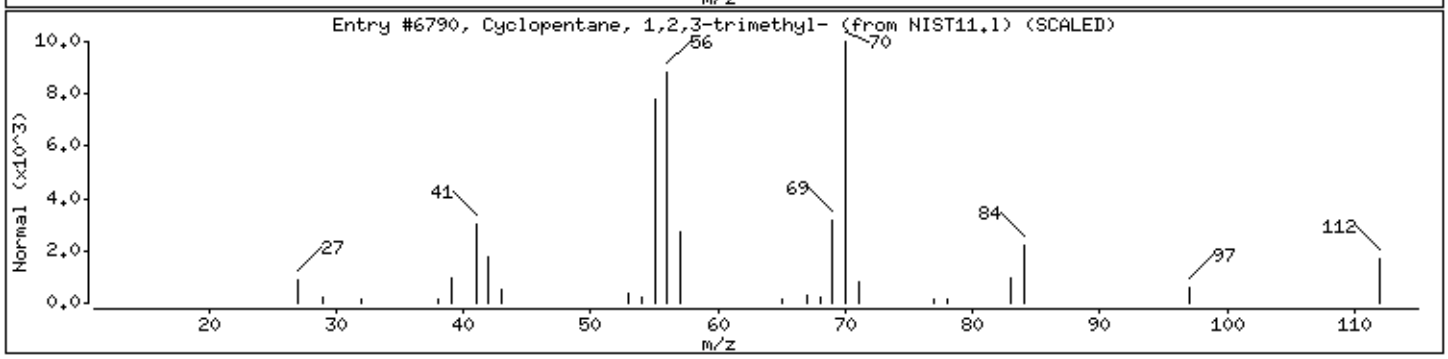
Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Cyclopentane, 1,2,3-trimethyl-, (1.alpha	15890-40-1	NIST11.l	6834	64	C8H16	112
Cyclopentane, 1,2,3-trimethyl-, (1.alpha	15890-40-1	NIST14.l	6956	64	C8H16	112
Cyclopentane, 1,2,3-trimethyl-	2815-57-8	NIST11.l	6790	58	C8H16	112









Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

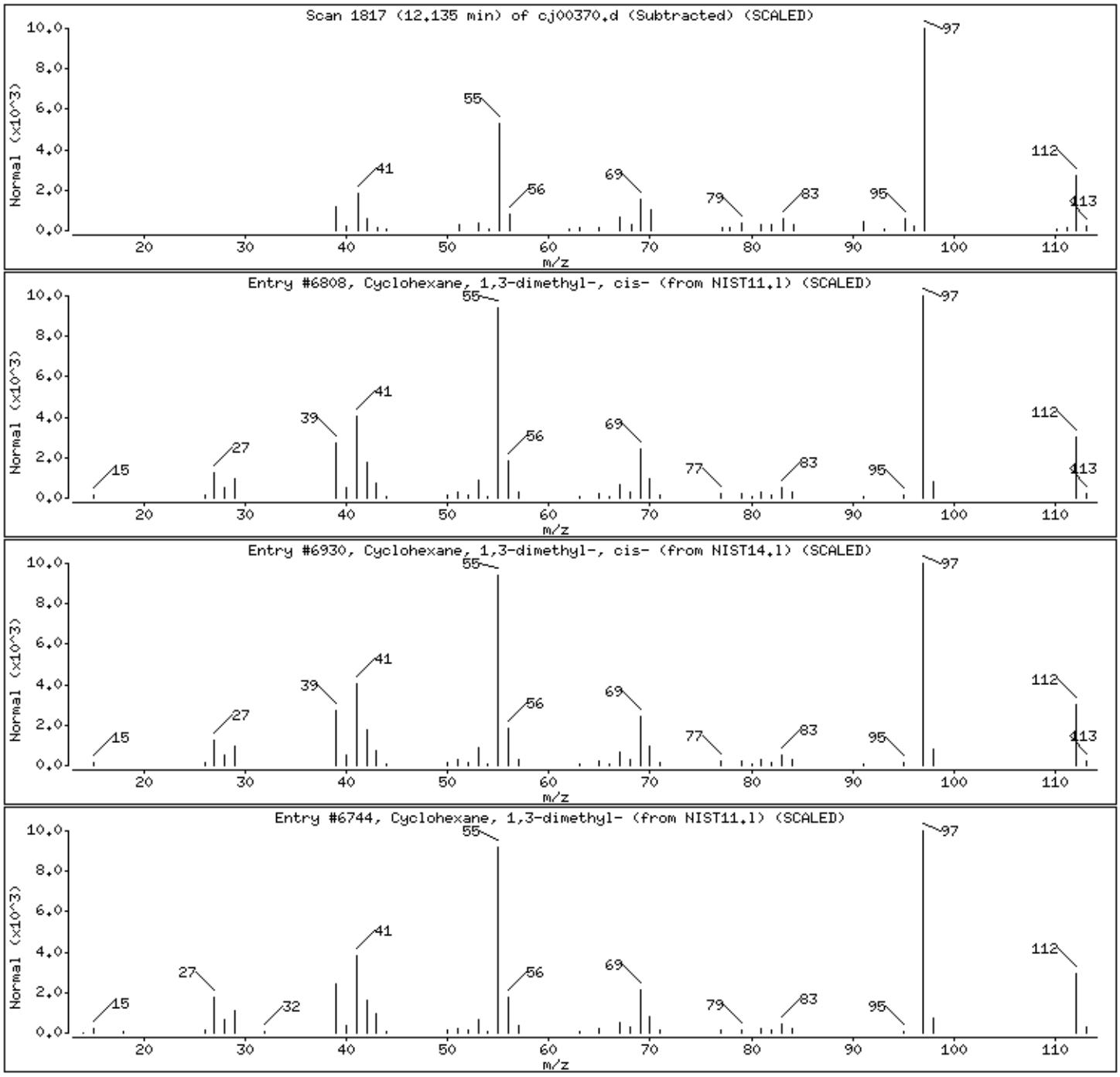
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	NIST11.l	6808	90	C8H16	112
Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	NIST14.l	6930	90	C8H16	112
Cyclohexane, 1,3-dimethyl-	591-21-9	NIST11.l	6744	80	C8H16	112



Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

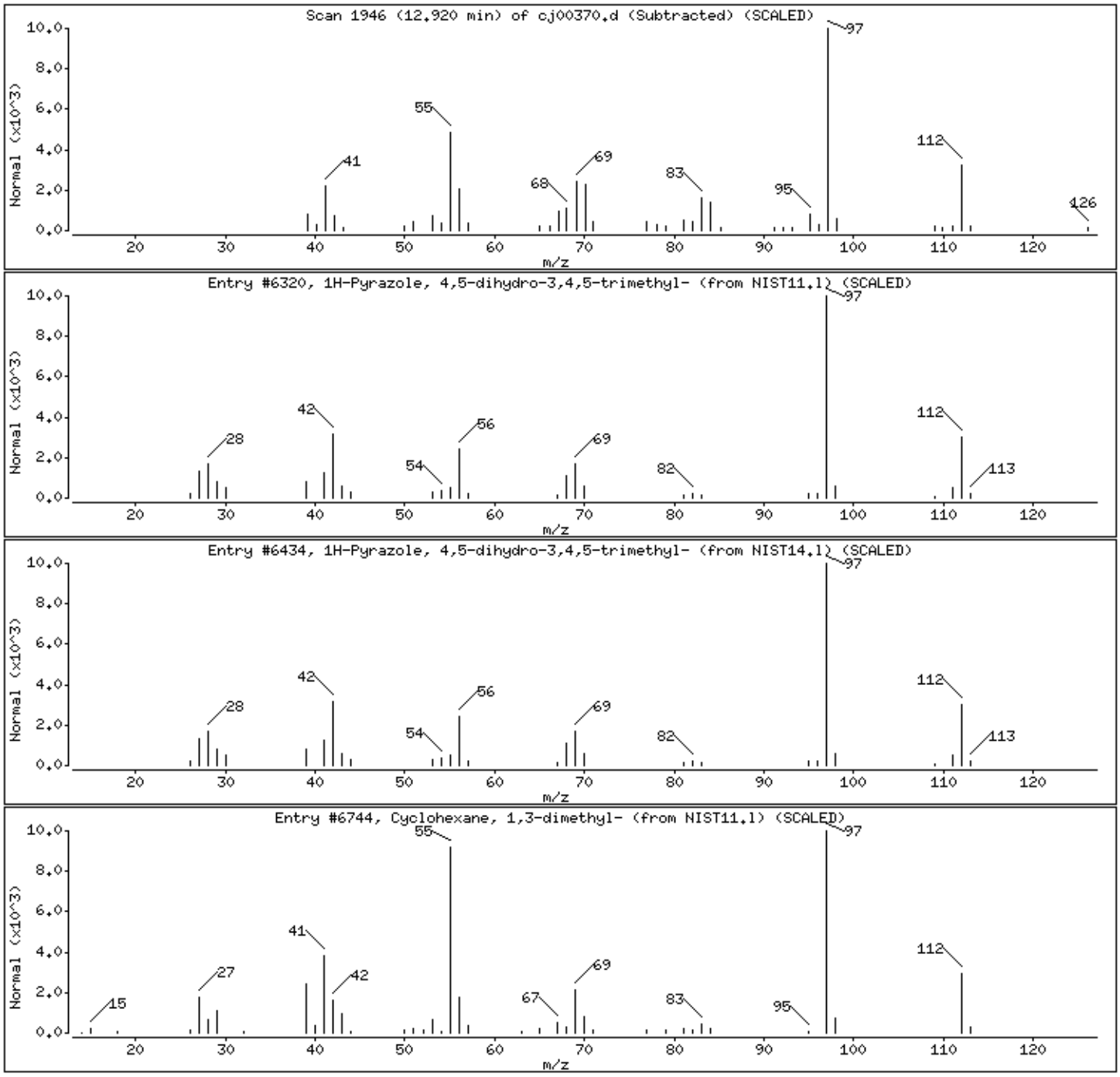
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Pyrazole, 4,5-dihydro-3,4,5-trimethyl	22591-95-3	NIST11.l	6320	64	C6H12N2	112
1H-Pyrazole, 4,5-dihydro-3,4,5-trimethyl	22591-95-3	NIST14.l	6434	64	C6H12N2	112
Cyclohexane, 1,3-dimethyl-	591-21-9	NIST11.l	6744	59	C8H16	112



Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

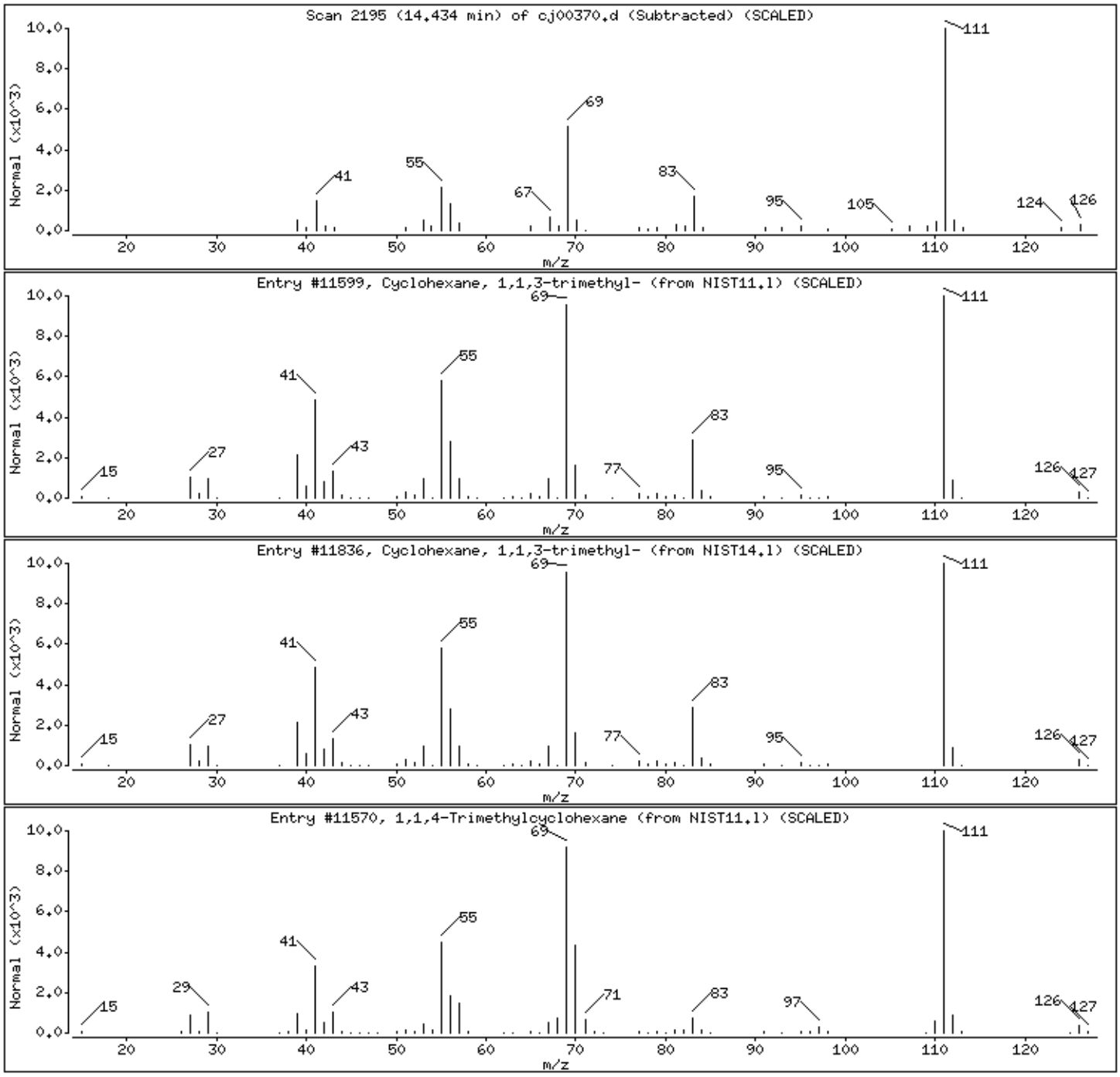
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NIST11.l	11599	80	C9H18	126
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NIST14.l	11836	80	C9H18	126
1,1,4-Trimethylcyclohexane	7094-27-1	NIST11.l	11570	47	C9H18	126



Data File: /chem/HP09464.i/15oct16.b/cj00370.d

Date : 17-OCT-2015 07:01

Client ID: 06-R-

Instrument: HP09464.i

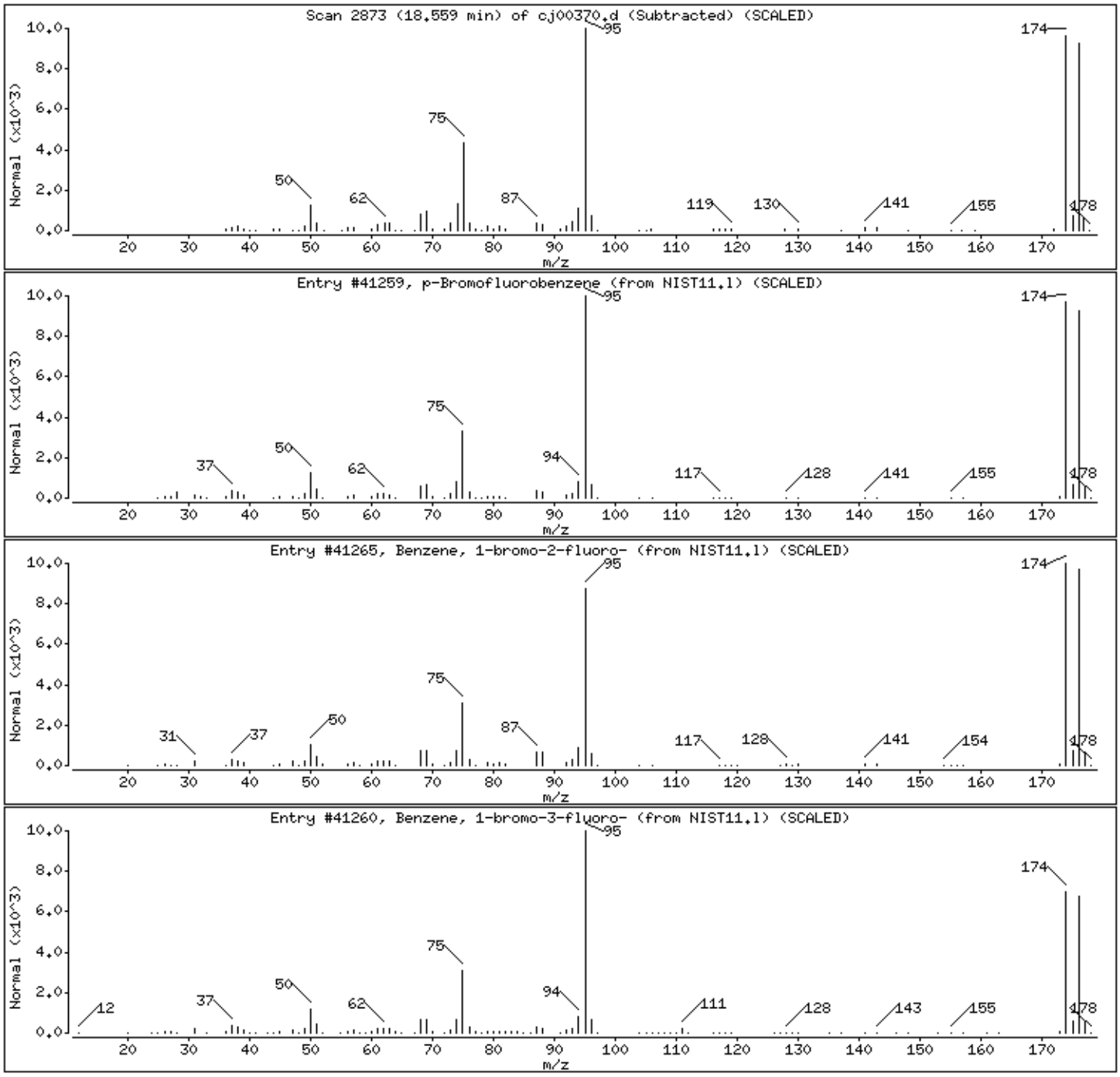
Sample Info: 8089423;50;C1528830AB;06-R-;0;0;SAMPLE;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
p-Bromofluorobenzene	460-00-4	NIST11.l	41259	93	C6H4BrF	174
Benzene, 1-bromo-2-fluoro-	1072-85-1	NIST11.l	41265	94	C6H4BrF	174
Benzene, 1-bromo-3-fluoro-	1073-06-9	NIST11.l	41260	94	C6H4BrF	174



Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:37.
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP09464.i/15oct19.b/cj00393.d Injection date and time: **19-OCT-2015 21:47**
Data file Sample Info. Line: 8089423DL;500;C1528830AC;06-R-DL;0;0;SAMPLE; Instrument ID: **HP09464.i** Batch: **C1528830AC**
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Blank Data file reference: **/chem/HP09464.i/15oct19.b/cj00386.d**

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 21-OCT-2015 17:37
Mid Level Daily Calibration Standard Reference: **/chem/HP09464.i/15oct19.b/cj00385.d**

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 100
Canister Pressure after dilution (Xa): 26.5 psia Canister Pressure before dilution (Ya): 13.2 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(0.000)	1007	130	488336 (-20)	10.00		367235 - 856879
51) 1,4-Difluorobenzene	9.196(0.006)	1334	114	1457141 (-24)	10.00		1151629 - 2687133
71) Chlorobenzene-d5	15.523(0.000)	2374	117	1519121 (-11)	10.00		1021898 - 2384428

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
2) Dichlorodifluoromethane	(1)			Not Detected					0.2	1
3) Chlorodifluoromethane	(1)			Not Detected					0.2	1
4) Freon 114	(1)			Not Detected					0.2	1
5) Chloromethane	(1)			Not Detected					0.2	1
6) Vinyl Chloride	(1)	2.219(-0.000)	62	1875294	61.604	6160.35			0.2	1
7) 1,3-Butadiene	(1)			Not Detected					0.4	2
8) Bromomethane	(1)			Not Detected					0.2	1
9) Chloroethane	(1)			Not Detected					0.2	1
11) Dichlorofluoromethane	(1)			Not Detected					0.2	1
12) Trichlorofluoromethane	(1)			Not Detected					0.2	1
13) Pentane	(1)	3.143(-0.000)	43	67685	2.570	257.04			0.2	1
17) 1,1-Dichloroethene	(1)			Not Detected					0.2	1
18) Freon 113	(1)			Not Detected					0.5	2
19) Acetone	(1)	3.782(-0.000)	43	108541	5.404	540.45			0.5	2
21) Carbon Disulfide	(1)	3.971(-0.000)	76	385367	3.713	371.32			0.5	1
24) 3-Chloropropene	(1)			Not Detected					0.2	1
25) Methylene Chloride	(1)	4.427(-0.000)	84	31130	0.994	99.39		J	0.2	1
28) trans-1,2-Dichloroethene	(1)	4.920(-0.000)	61	21140	0.494	49.43		J	0.2	1
29) Methyl t-Butyl Ether	(1)			Not Detected					0.2	1
30) Hexane	(1)	5.504(-0.000)	57	15117	0.483	48.27		J	0.2	1
31) 1,1-Dichloroethane	(1)			Not Detected					0.2	1
35) cis-1,2-Dichloroethene	(1)	6.787(-0.001)	61	318056	8.081	808.12			0.2	1
37) 2-Butanone	(1)			Not Detected					0.5	2
42) Chloroform	(1)			Not Detected					0.2	1
43) 1,1,1-Trichloroethane	(1)			Not Detected					0.2	1
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)	8.393(-0.000)	78	238709	2.676	267.63			0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)	8.655(-0.000)	57	27342	0.326	32.58		J	0.2	1
50) Heptane	(2)	9.050(0.000)	43	5851	0.253	25.30		J	0.2	1
52) Trichloroethene	(2)	9.671(-0.002)	130	17065	0.279	27.95		J	0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
58) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)	12.348(-0.000)	91	297366	2.507	250.70			0.2	1
62) Octane	(3)	12.822(-0.000)	43	8840	0.283	28.28		J	0.2	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)	13.577(-0.000)	166	84862M	0.840	84.03		J	0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33. Target 3.5 esignature user ID: jeb07445

Analysis Summary for GC/MS Volatiles in Air

Data file: /chem/HP09464.i/15oct19.b/cj00393.d Injection date and time: **19-OCT-2015 21:47**
Data file Sample Info. Line: 8089423DL;500;C1528830AC;06-R-DL;0;0;SAMPLE; Instrument ID: **HP09464.i** Batch: **C1528830AC**
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Blank Data file reference: **/chem/HP09464.i/15oct19.b/cj00386.d**

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: **292**
Calibration date and time (Last Method Edit): 21-OCT-2015 17:37
Mid Level Daily Calibration Standard Reference: **/chem/HP09464.i/15oct19.b/cj00385.d**

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount * DF * (Xa/Ya)*(IVn/IVa) Dilution Factor (DF): 100
Canister Pressure after dilution (Xa): 26.5 psia Canister Pressure before dilution (Ya): 13.2 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 500 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
70) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
74) Ethylbenzene	(3)	15.955(-0.000)	91	308850	2.357	235.68			0.2	1
75) m/p-Xylene	(3)	16.260(0.000)	91	556932	5.139	513.89			0.2	1
76) o-Xylene	(3)	17.239(-0.000)	91	348809	3.058	305.79			0.2	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.2	1
80) Cumene	(3)			Not Detected					0.2	1
81) Bromobenzene	(3)			Not Detected					0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
86) 4-Ethyltoluene	(3)			Not Detected					0.2	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.2	1

Total number of targets = 62

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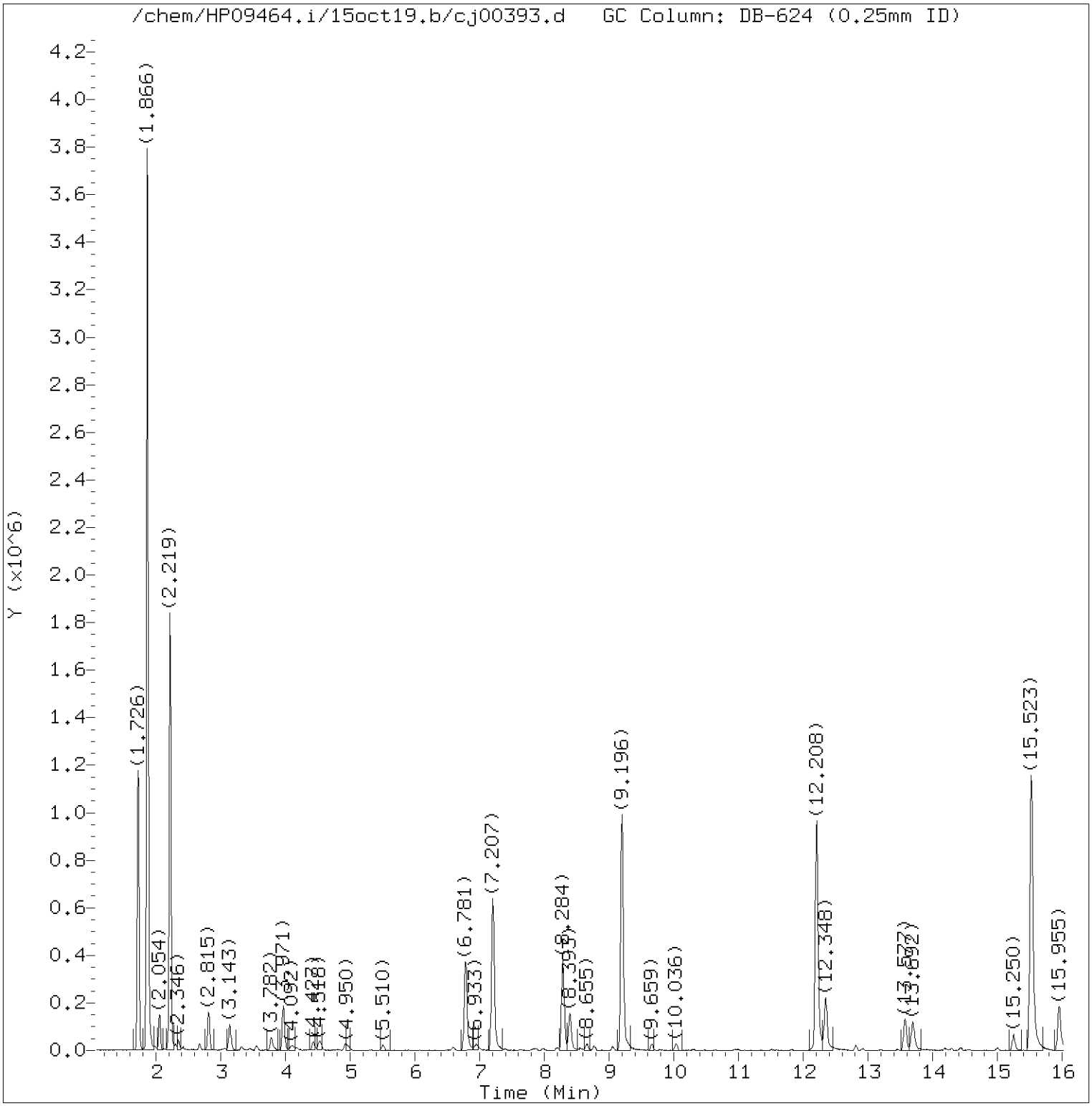
Secondary review performed and digitally signed by Mark A. Ratcliff on 10/27/2015 at 09:59. Parallax ID: mar00486



Total Ion Chromatogram (TIC)

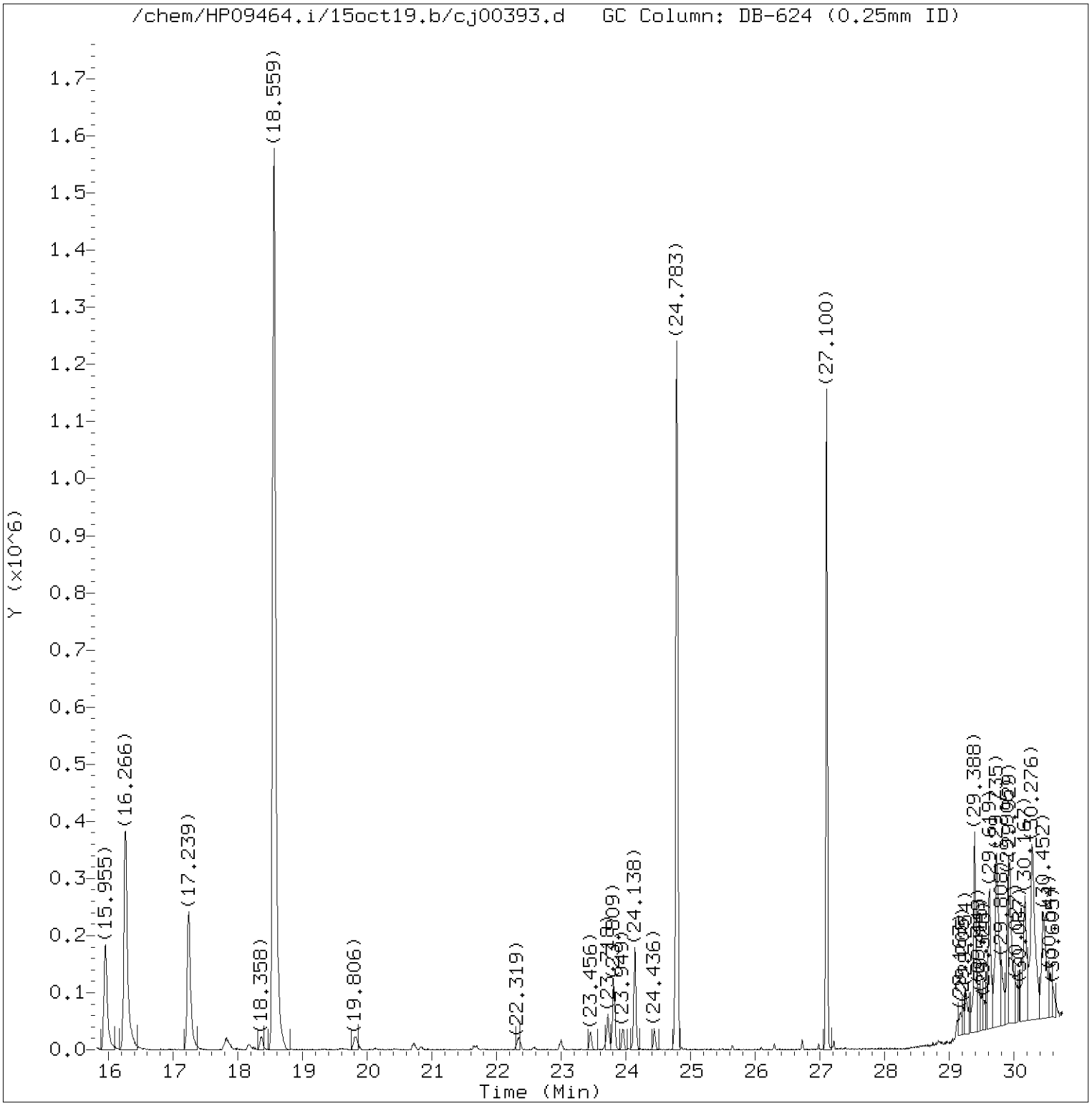
Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Digitally signed by Jacob E. Bailey
on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

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on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
6) Vinyl Chloride	(1)	2.219	62	1875294	61.604
13) Pentane	(1)	3.143	43	67685	2.570
19) Acetone	(1)	3.782	43	108541	5.404
21) Carbon Disulfide	(1)	3.971	76	385367	3.713
25) Methylene Chloride	(1)	4.427	84	31130	0.994
28) trans-1,2-Dichloroethene	(1)	4.920	61	21140	0.494
30) Hexane	(1)	5.504	57	15117	0.483
35) cis-1,2-Dichloroethene	(1)	6.787	61	318056	8.081
40)*Bromochloromethane	(1)	7.207	130	488336	10.000
46) Benzene	(2)	8.393	78	238709	2.676
48) Isooctane	(2)	8.655	57	27342	0.326
50) Heptane	(2)	9.050	43	5851	0.253
51)*1,4-Difluorobenzene	(2)	9.196	114	1457141	10.000
52) Trichloroethene	(2)	9.671	130	17065	0.279
61) Toluene	(3)	12.348	91	297366	2.507
62) Octane	(3)	12.822	43	8840	0.283
67) Tetrachloroethene	(3)	13.577	166	84862M	0.840
71)*Chlorobenzene-d5	(3)	15.523	117	1519121	10.000
74) Ethylbenzene	(3)	15.955	91	308850	2.357
75) m/p-Xylene	(3)	16.259	91	556932	5.139
76) o-Xylene	(3)	17.239	91	348809	3.058

M = Compound was manually integrated.
* = Compound is an internal standard.

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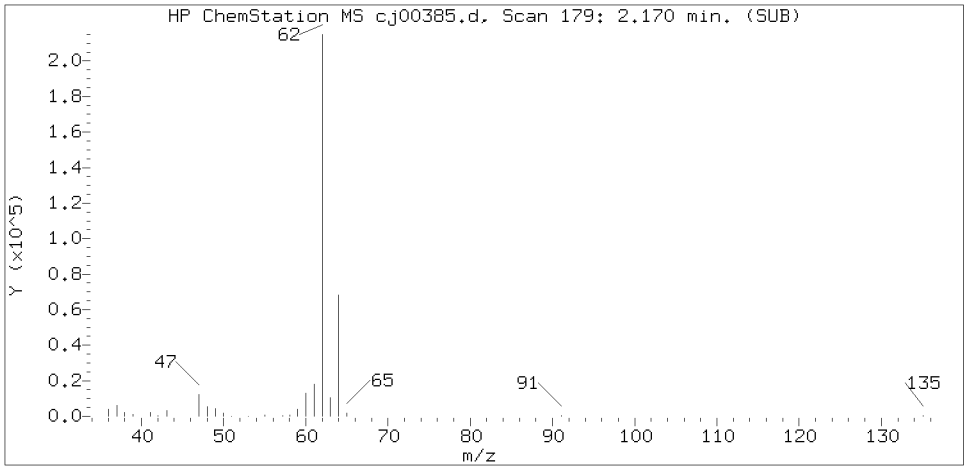
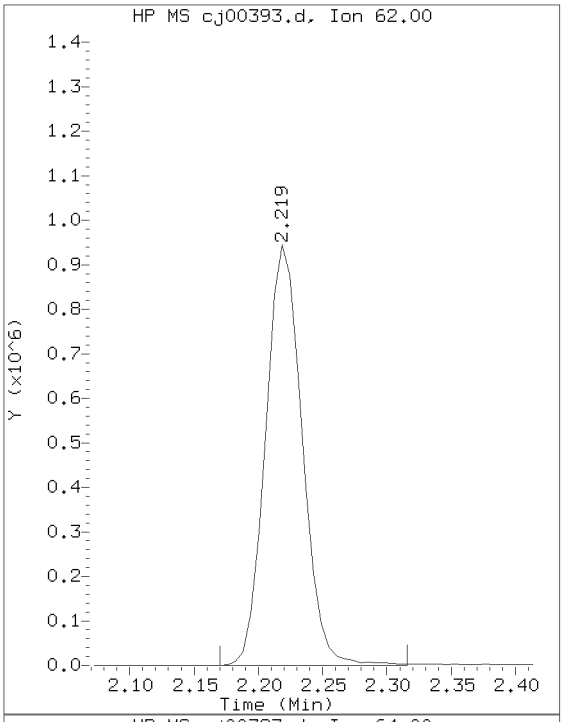
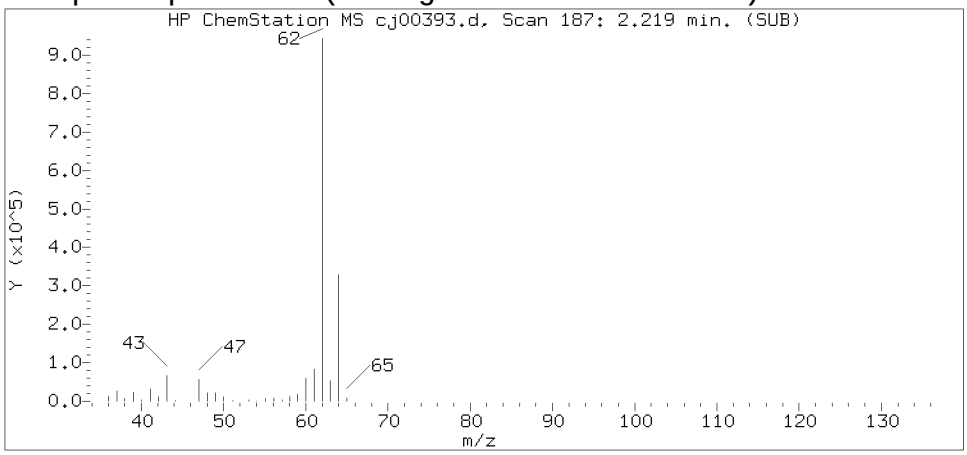
on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

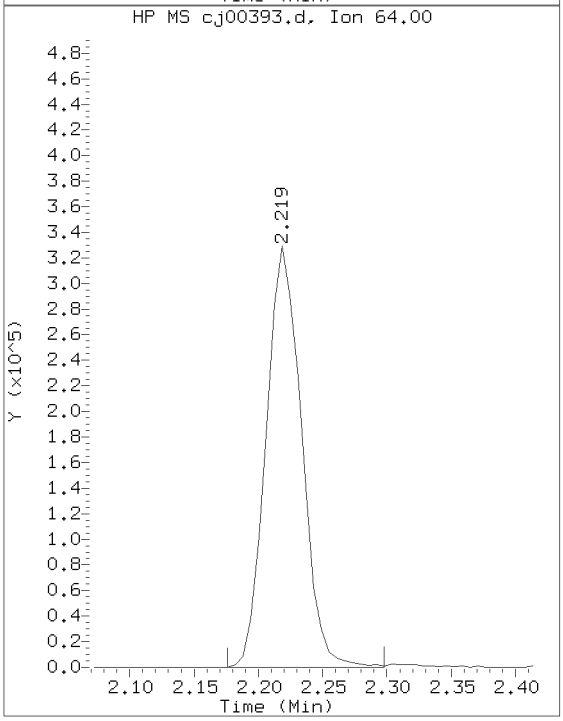
Reference Standard Spectrum for Vinyl Chloride



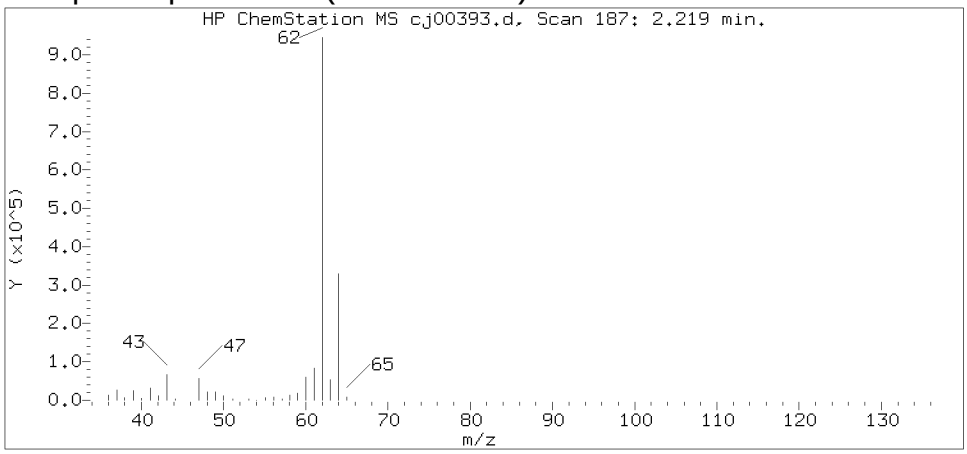


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 187
Retention Time (minutes): 2.219
Relative Retention Time :-0.00001
Quant Ion : 62.00
Area (flag) : 1875294
Concentration (ppb(v)) : 61.6035

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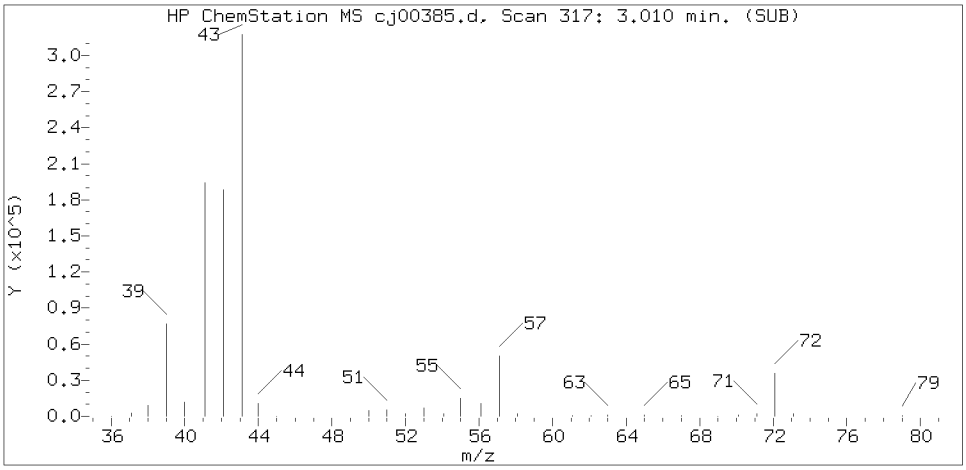
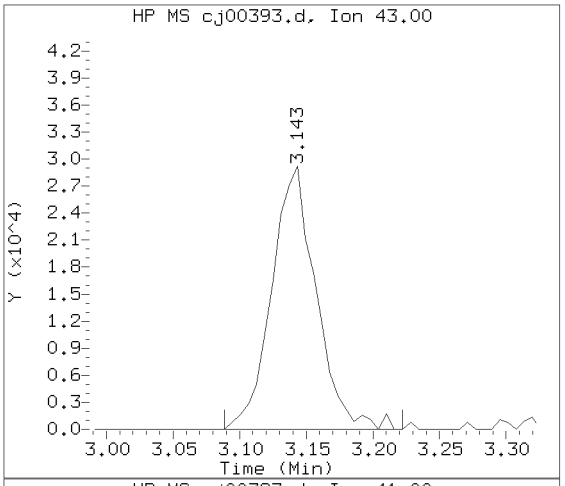
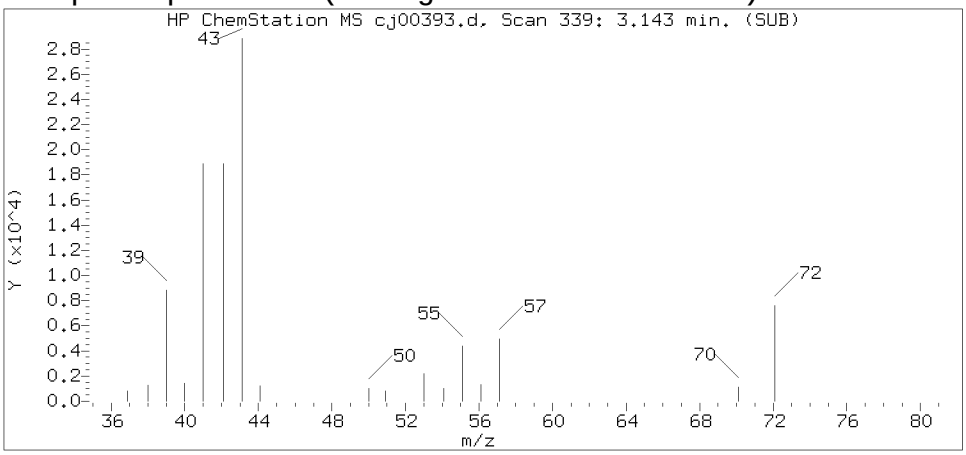
Target 3.5 esignature user ID: jeb07445

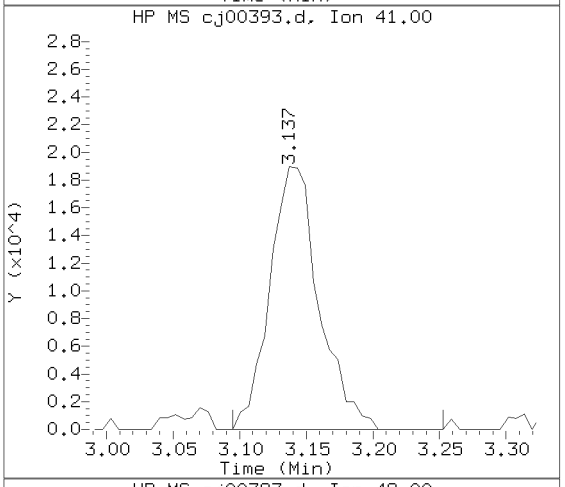
Reference Standard Spectrum for Pentane



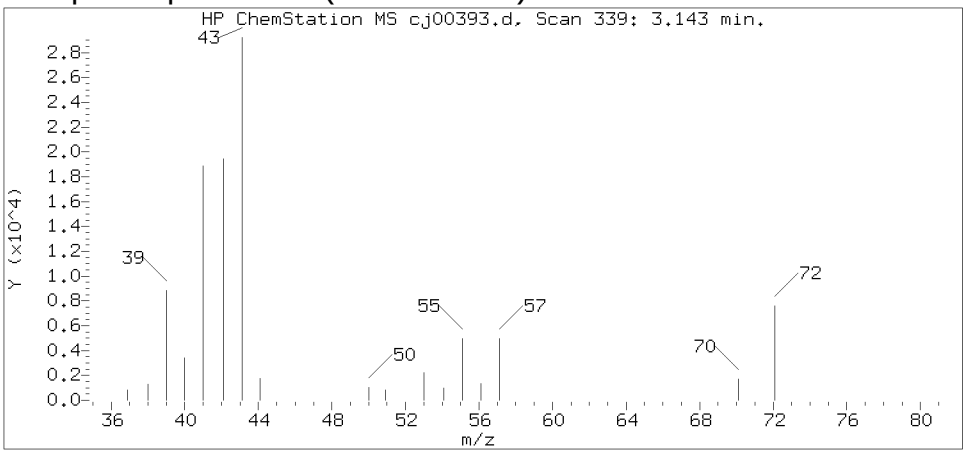


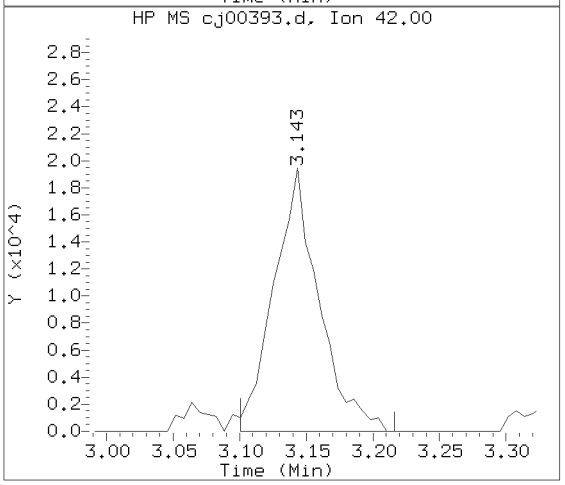
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

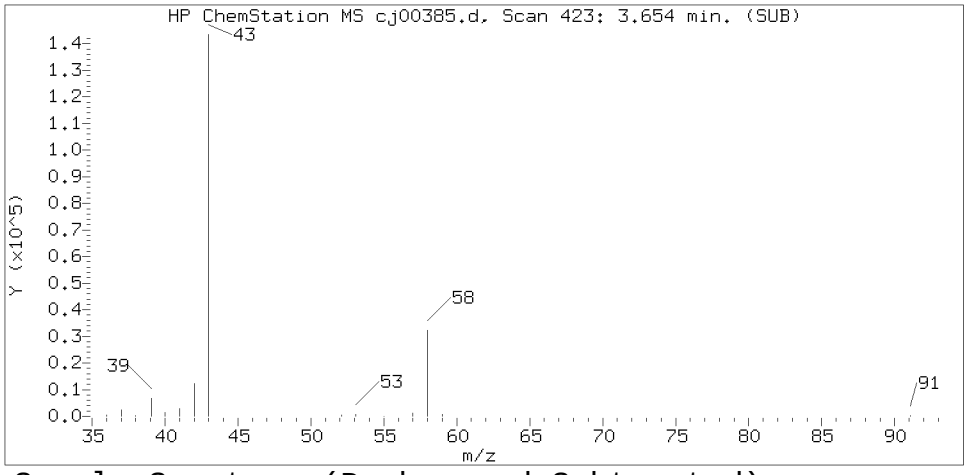
Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

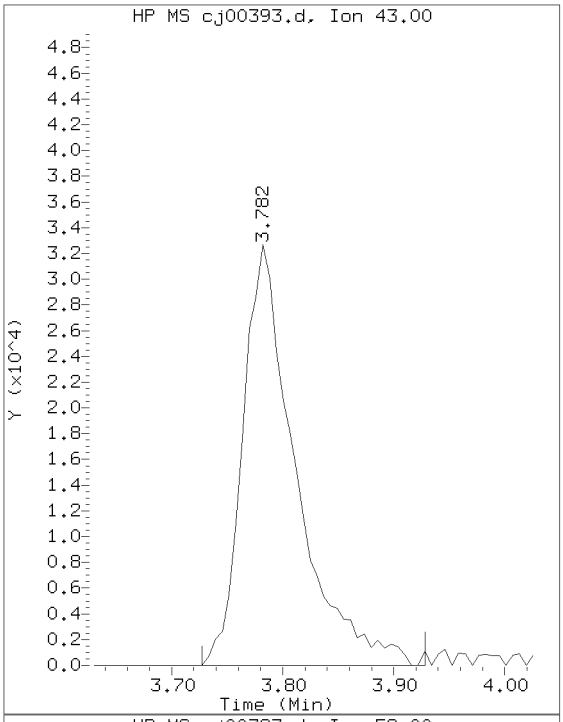
Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 13
Compound Name : Pentane
Scan Number : 339
Retention Time (minutes): 3.143
Relative Retention Time :-0.00085
Quant Ion : 43.00
Area (flag) : 67685
Concentration (ppb(v)) : 2.5704

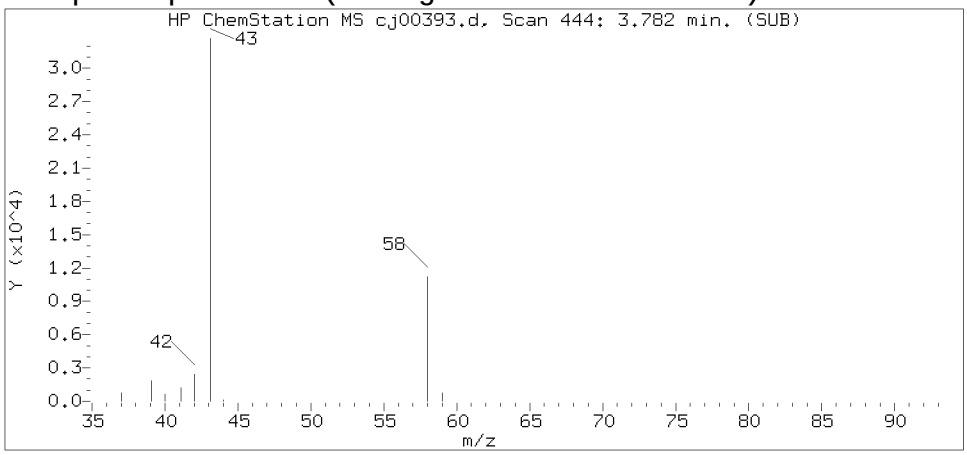
Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

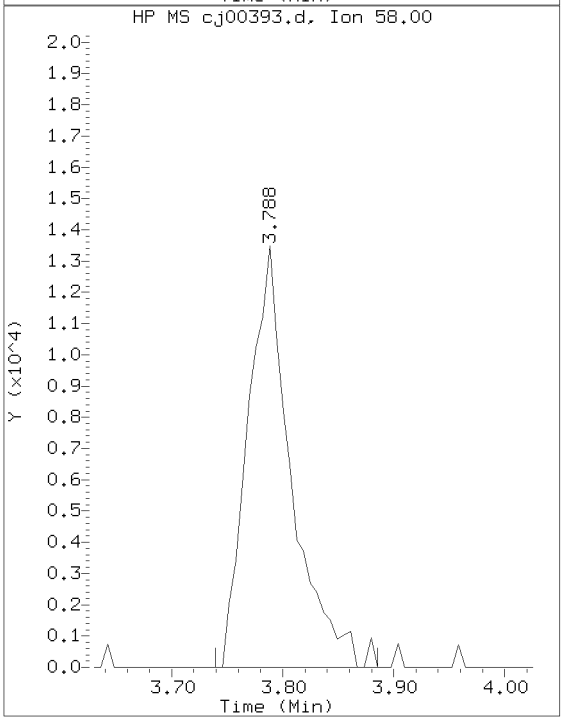
Reference Standard Spectrum for Acetone



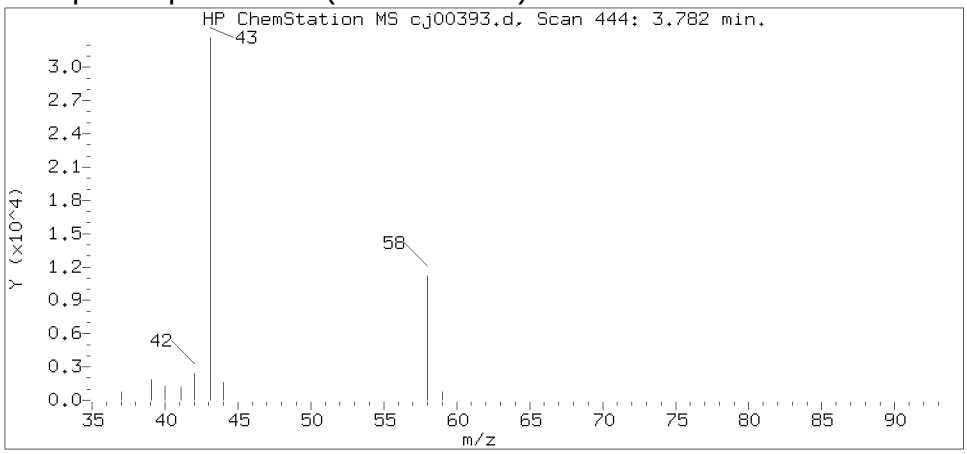


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 19
Compound Name : Acetone
Scan Number : 444
Retention Time (minutes): 3.782
Relative Retention Time :-0.00001
Quant Ion : 43.00
Area (flag) : 108541
Concentration (ppb(v)) : 5.4045

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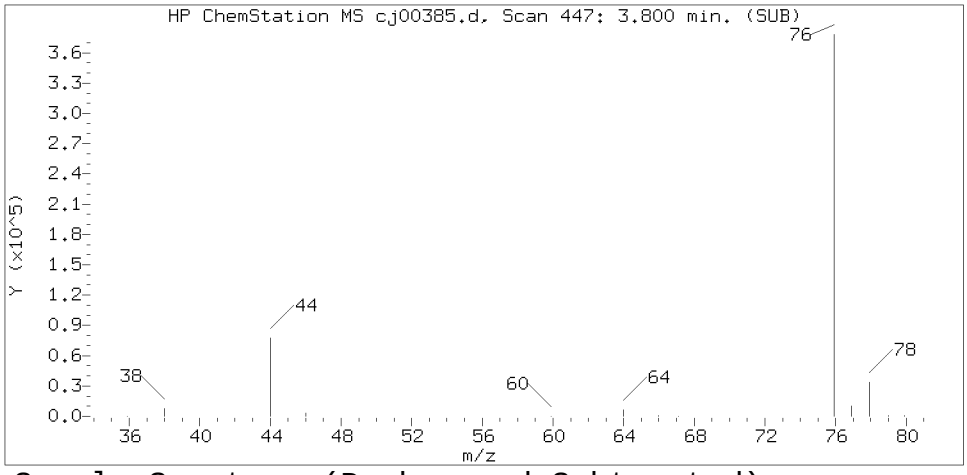
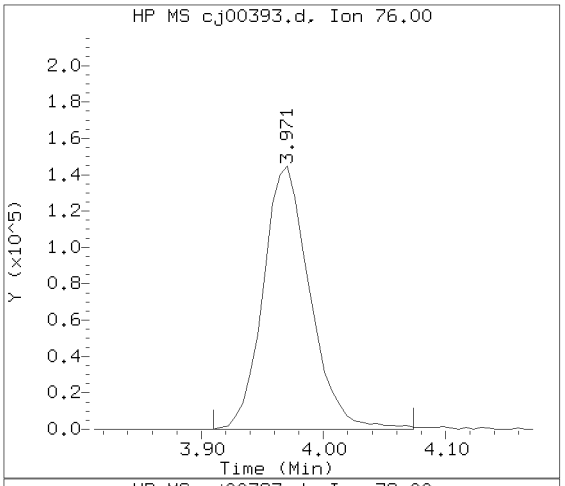
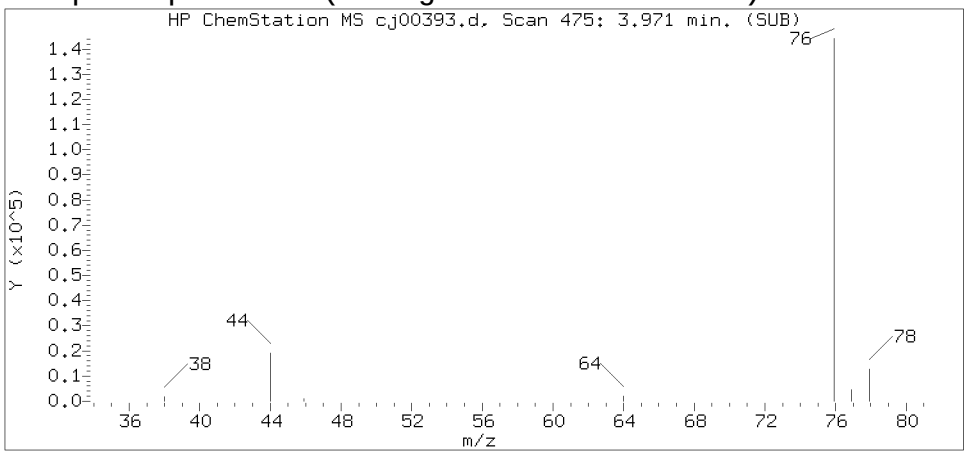
Target 3.5 esignature user ID: jeb07445

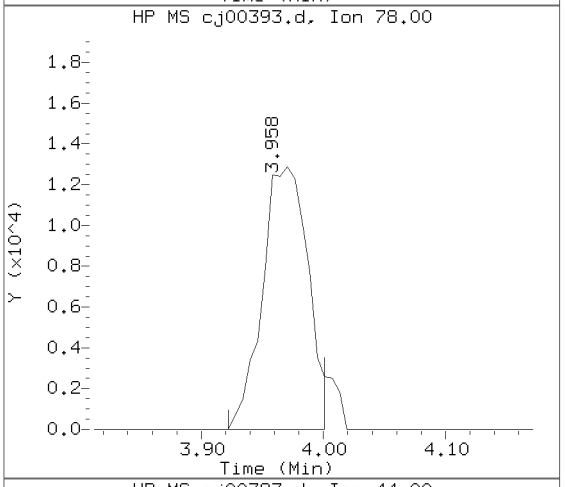
Reference Standard Spectrum for Carbon Disulfide



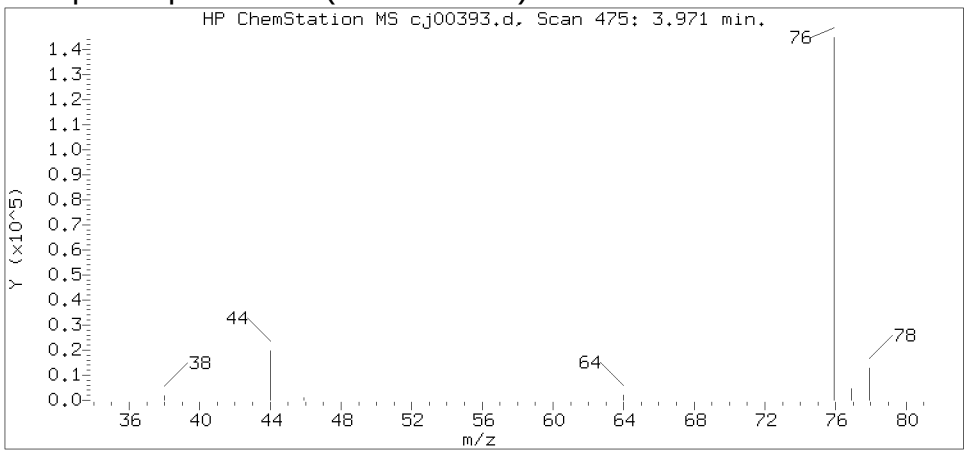


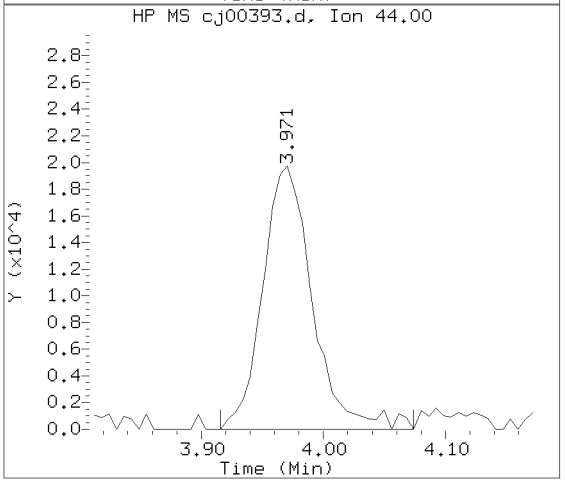
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 21
Compound Name : Carbon Disulfide
Scan Number : 475
Retention Time (minutes): 3.971
Relative Retention Time :-0.00085
Quant Ion : 76.00
Area (flag) : 385367
Concentration (ppb(v)) : 3.7132

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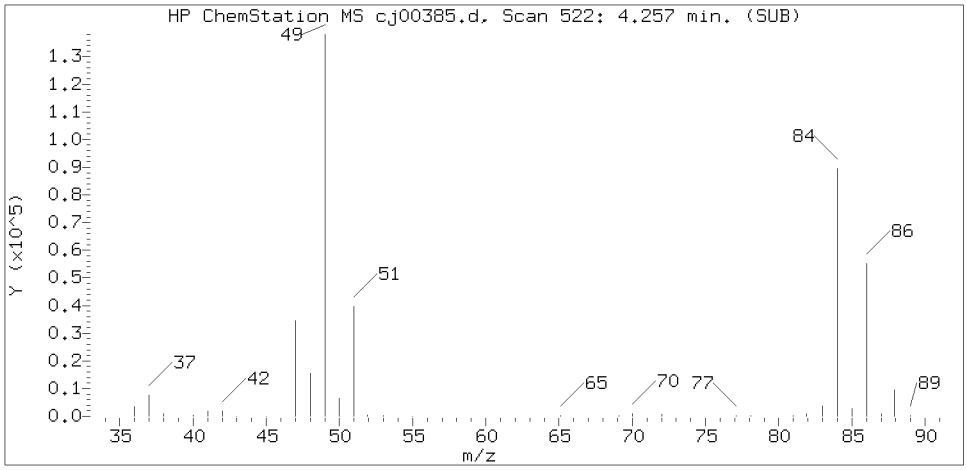
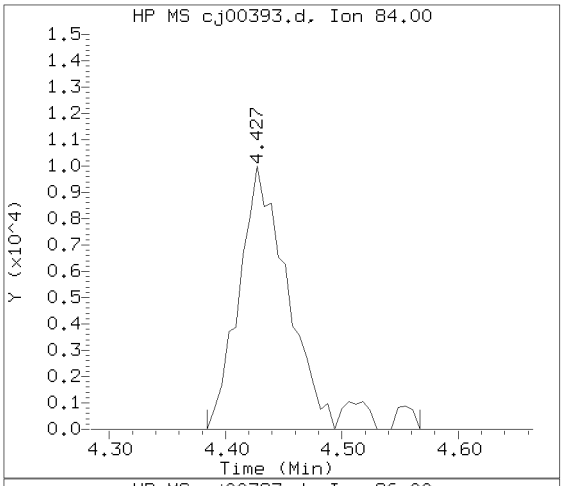
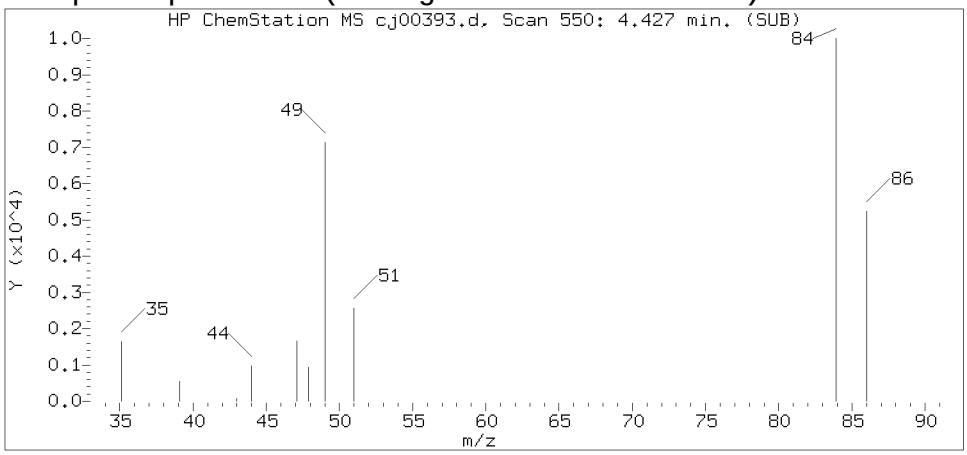
Target 3.5 esignature user ID: jeb07445

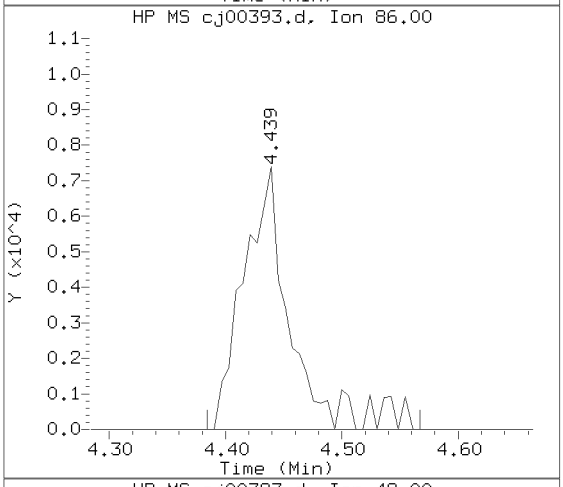
Reference Standard Spectrum for Methylene Chloride



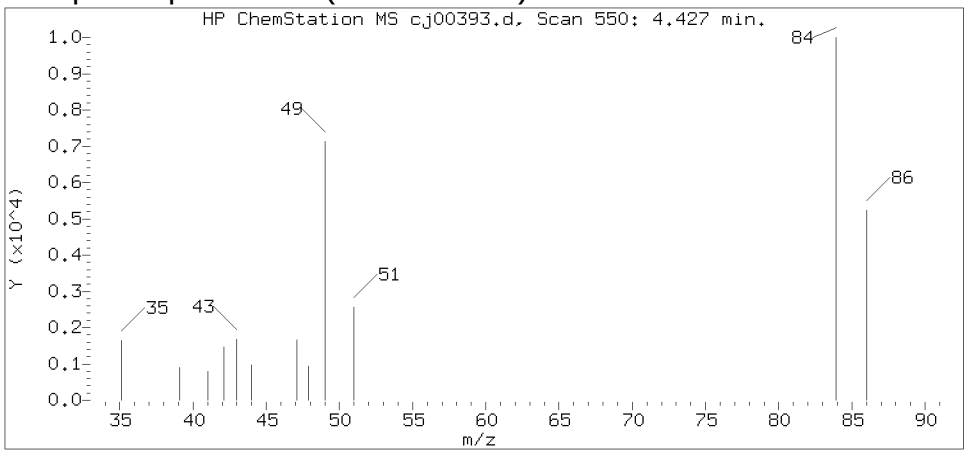


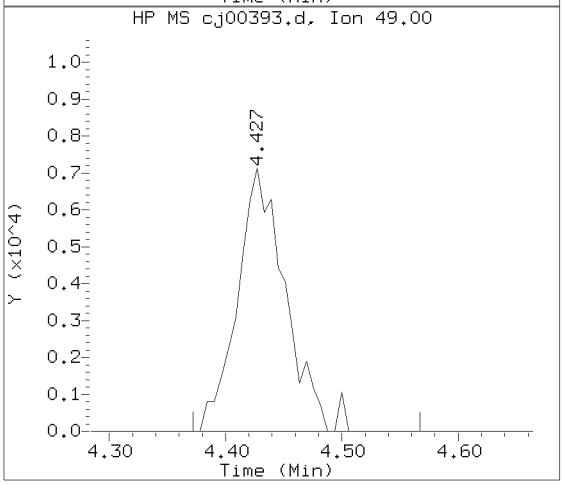
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 25
Compound Name : Methylene Chloride
Scan Number : 550
Retention Time (minutes): 4.427
Relative Retention Time :-0.00085
Quant Ion : 84.00
Area (flag) : 31130
Concentration (ppb(v)) : 0.9939

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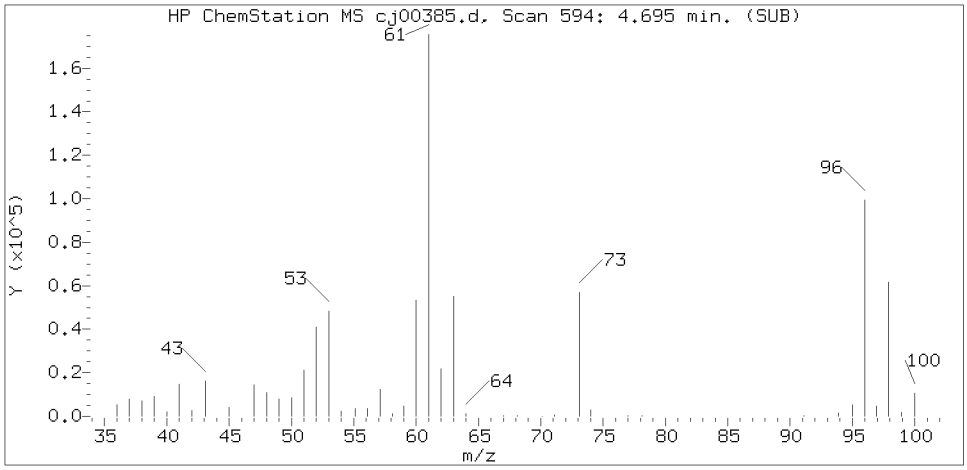
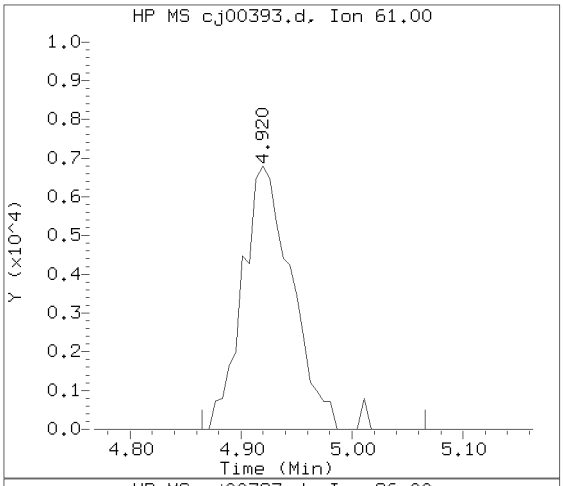
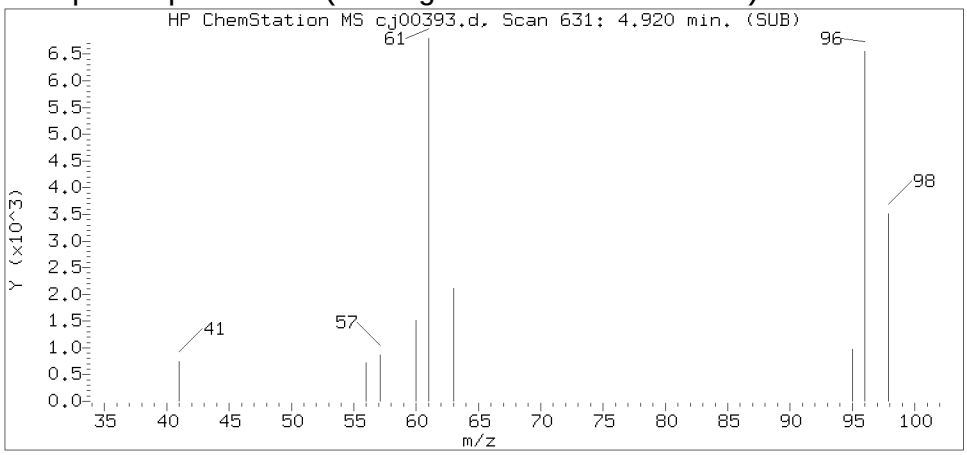
Target 3.5 esignature user ID: jeb07445

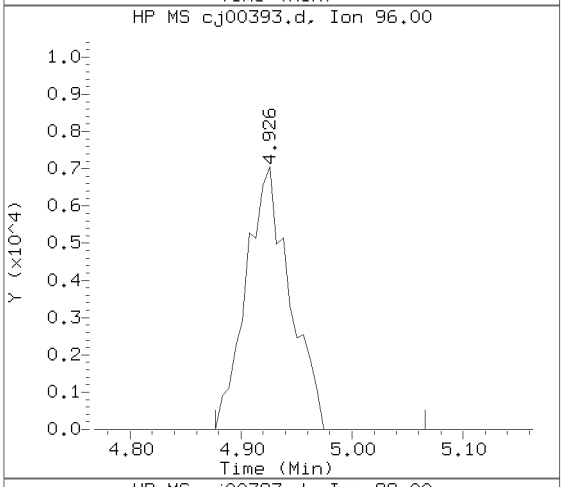
Reference Standard Spectrum for trans-1,2-Dichloroethene



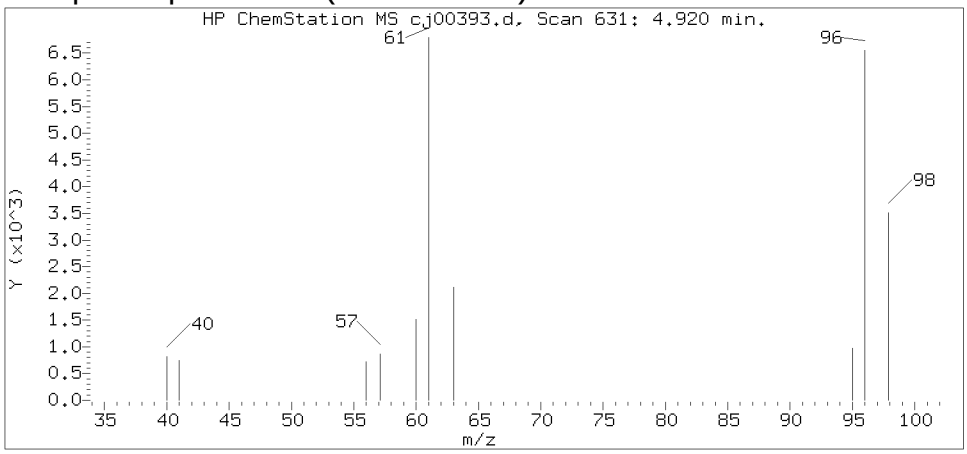


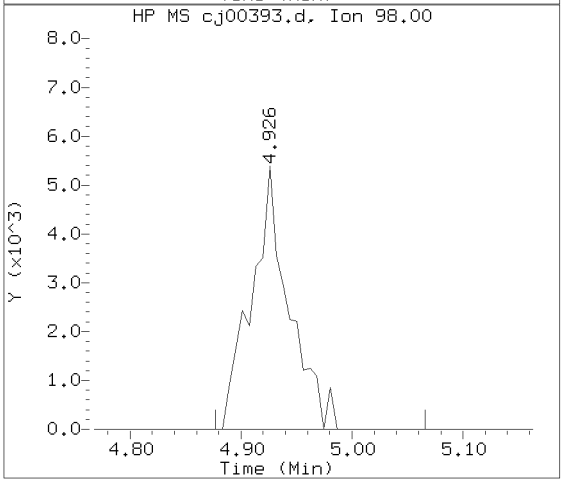
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 28
Compound Name : trans-1,2-Dichloroethene
Scan Number : 631
Retention Time (minutes): 4.920
Relative Retention Time :-0.00085
Quant Ion : 61.00
Area (flag) : 21140
Concentration (ppb(v)) : 0.4943

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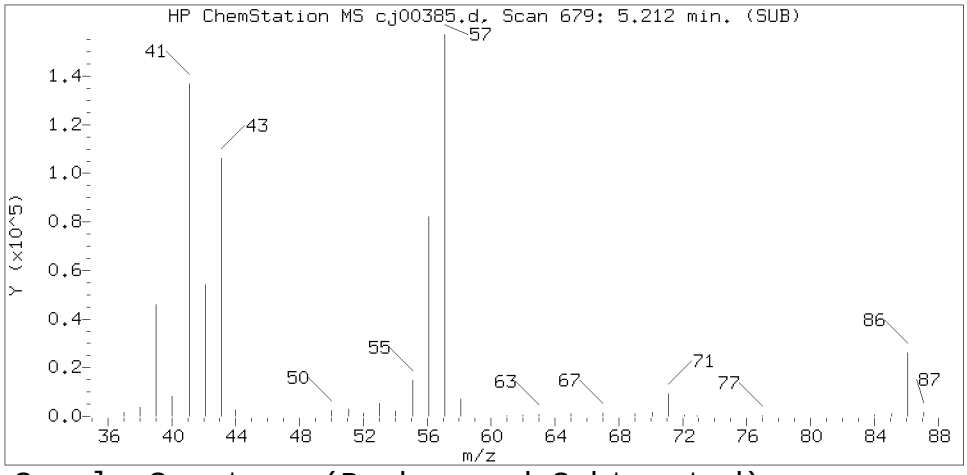
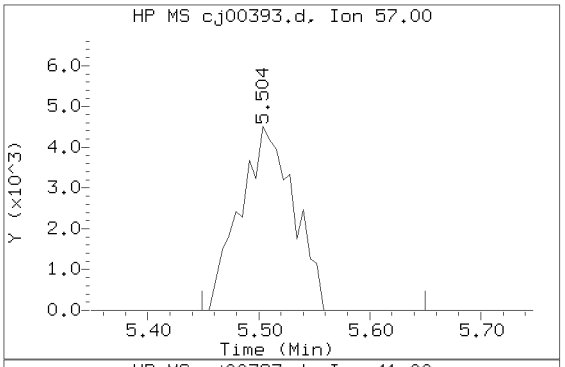
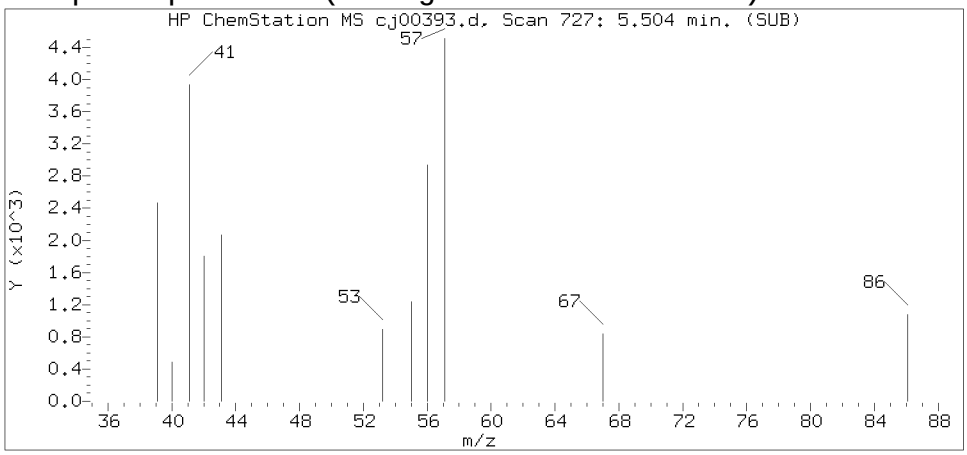
Target 3.5 esignature user ID: jeb07445

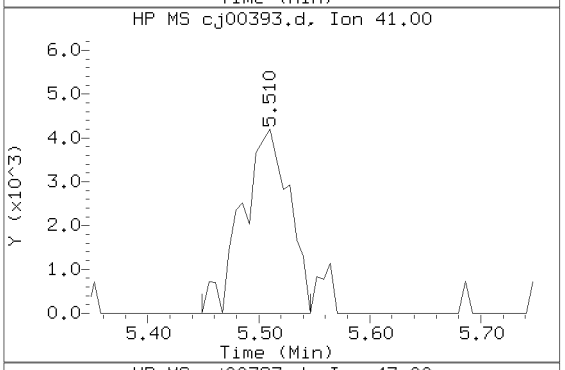
Reference Standard Spectrum for Hexane

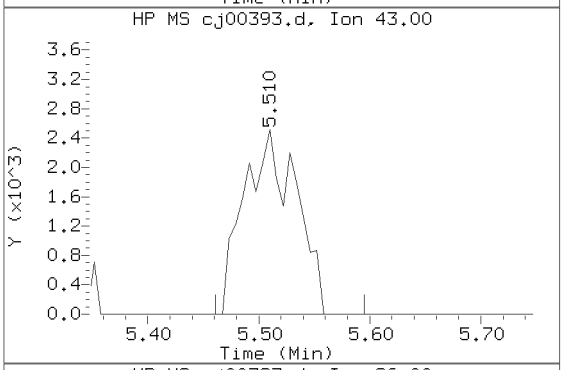




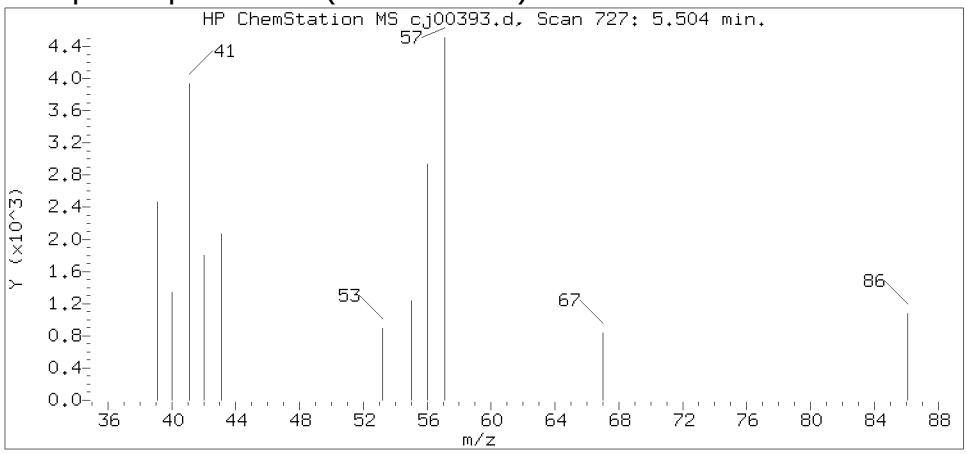
Sample Spectrum (Background Subtracted)

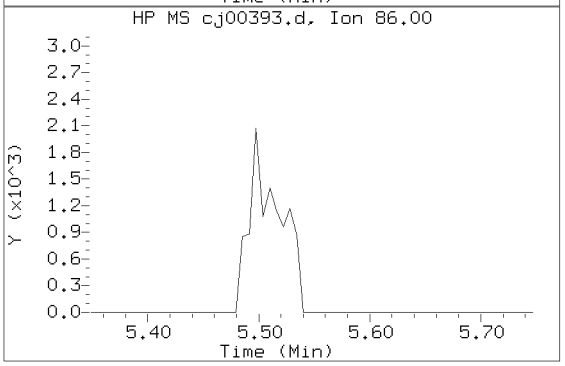






Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 30
Compound Name : Hexane
Scan Number : 727
Retention Time (minutes): 5.504
Relative Retention Time :-0.00000
Quant Ion : 57.00
Area (flag) : 15117
Concentration (ppb(v)) : 0.4827

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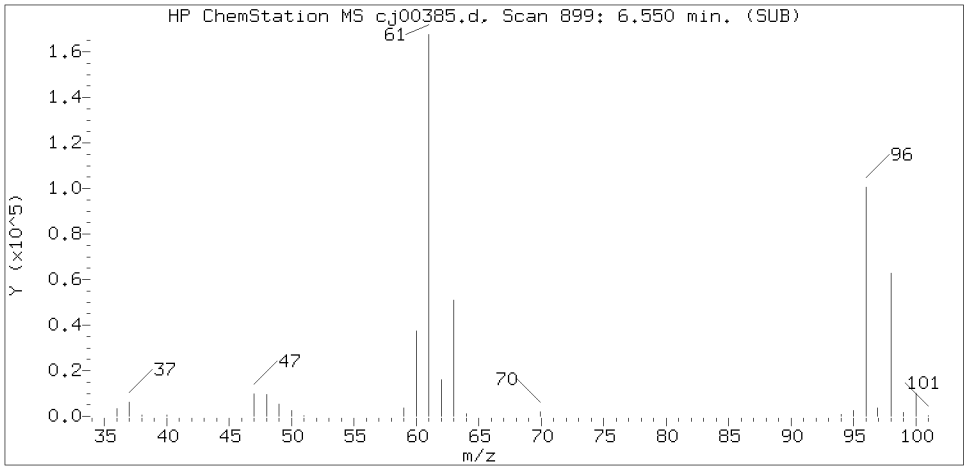
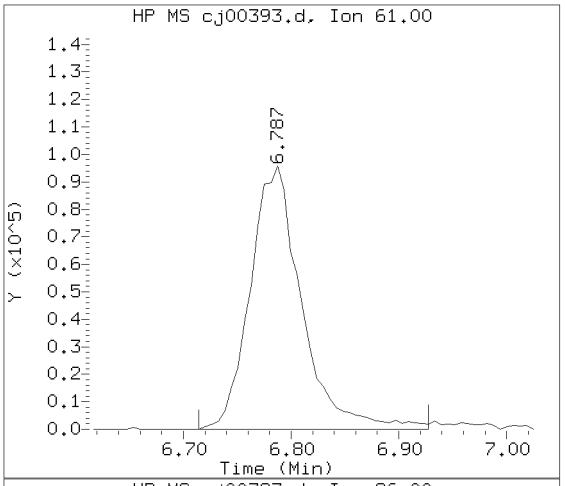
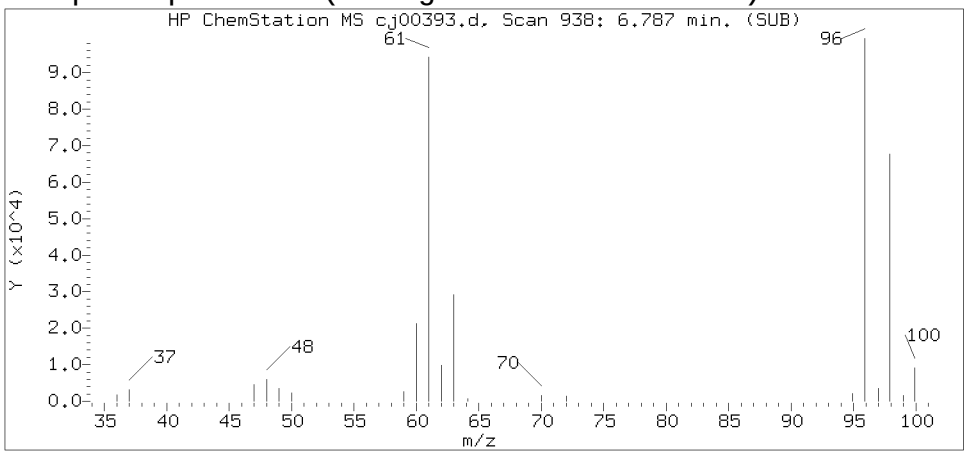
Target 3.5 esignature user ID: jeb07445

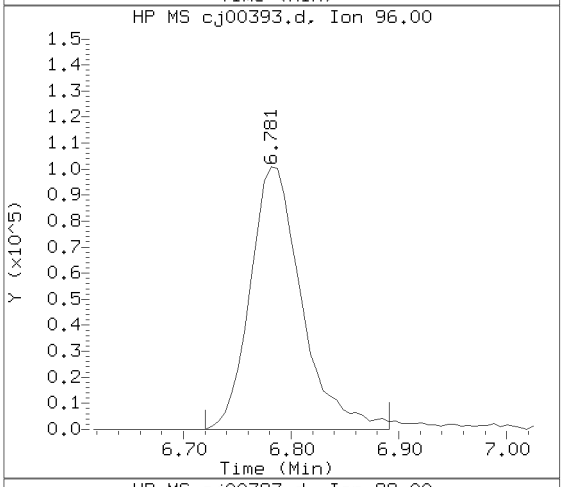
Reference Standard Spectrum for cis-1,2-Dichloroethene



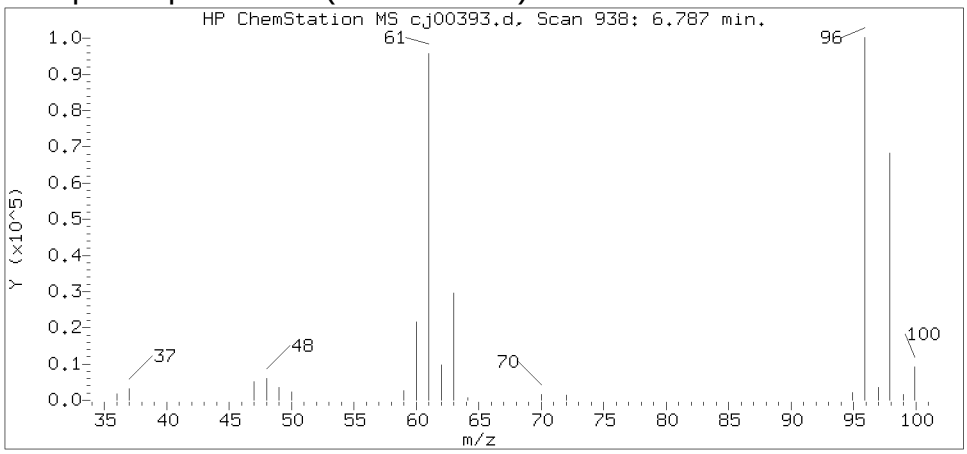


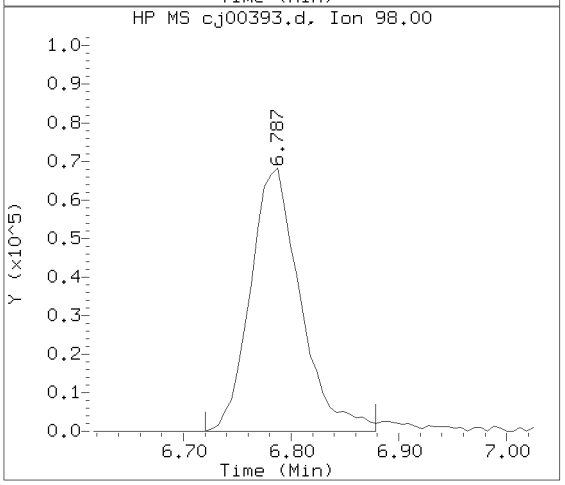
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 35
Compound Name : cis-1,2-Dichloroethene
Scan Number : 938
Retention Time (minutes): 6.787
Relative Retention Time :-0.00169
Quant Ion : 61.00
Area (flag) : 318056
Concentration (ppb(v)) : 8.0812

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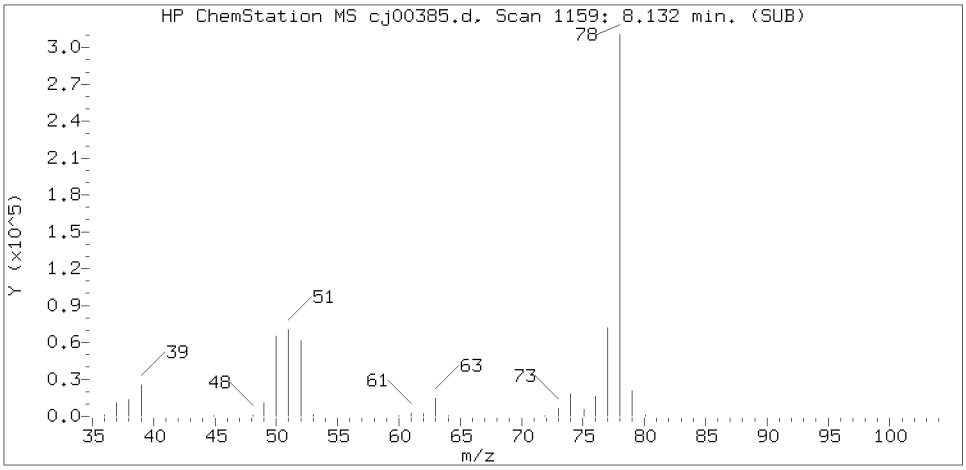
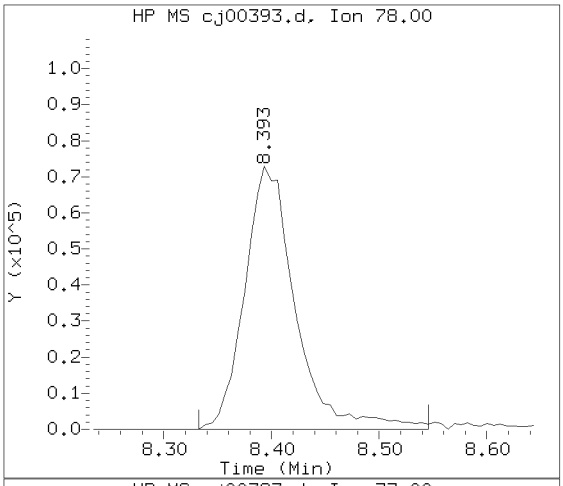
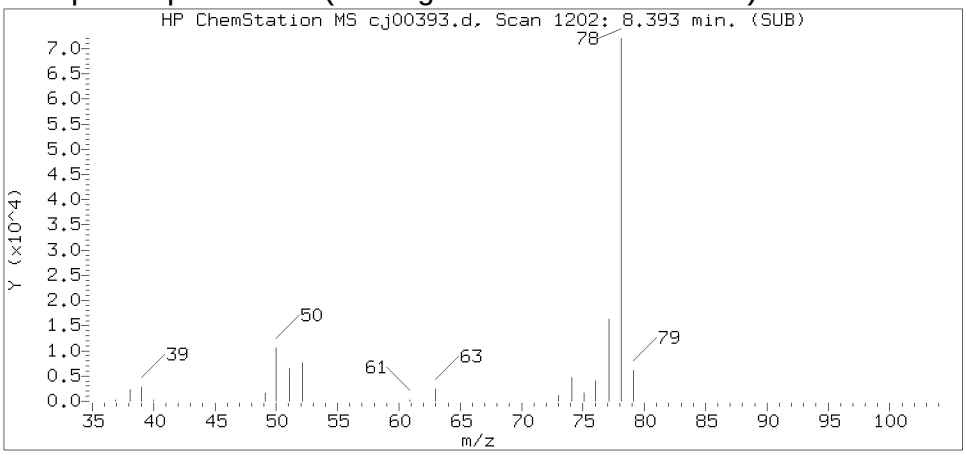
Target 3.5 esignature user ID: jeb07445

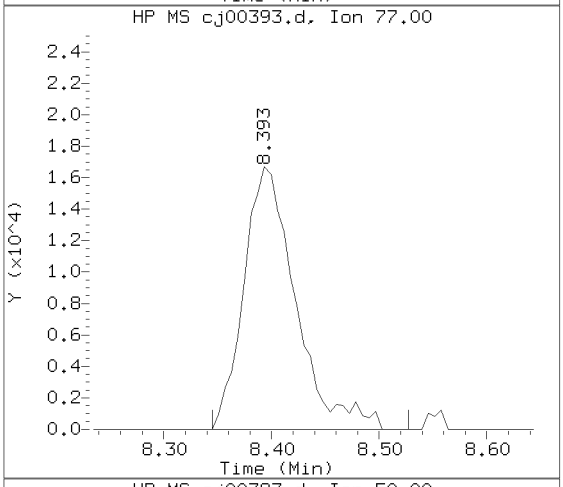
Reference Standard Spectrum for Benzene



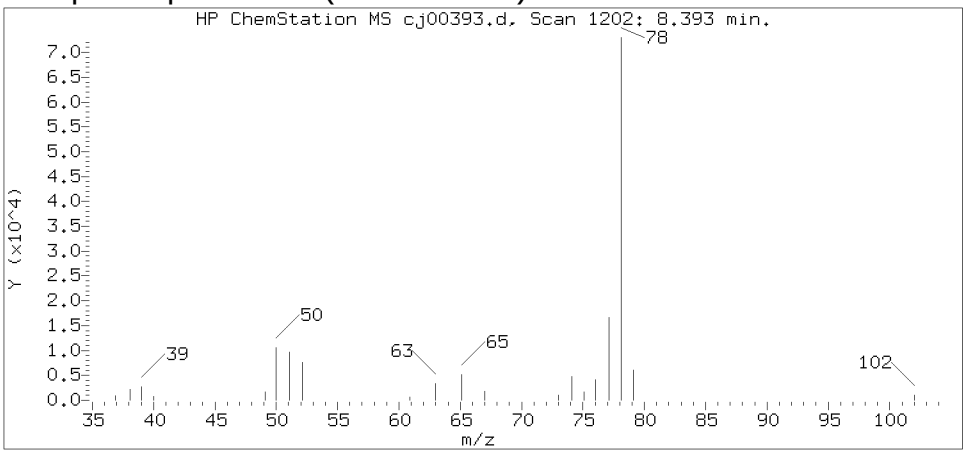


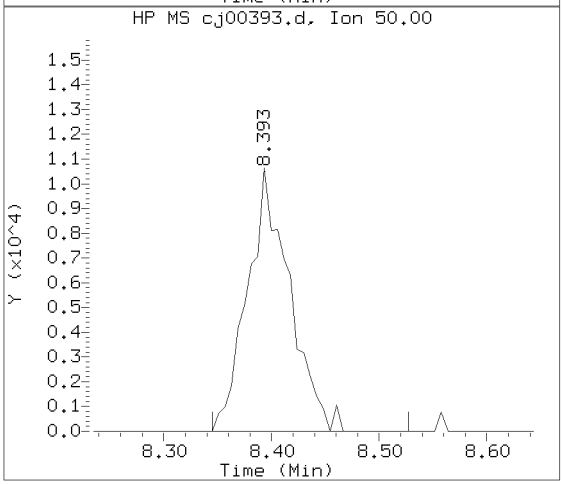
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 46
Compound Name : Benzene
Scan Number : 1202
Retention Time (minutes): 8.393
Relative Retention Time :-0.00060
Quant Ion : 78.00
Area (flag) : 238709
Concentration (ppb(v)) : 2.6763

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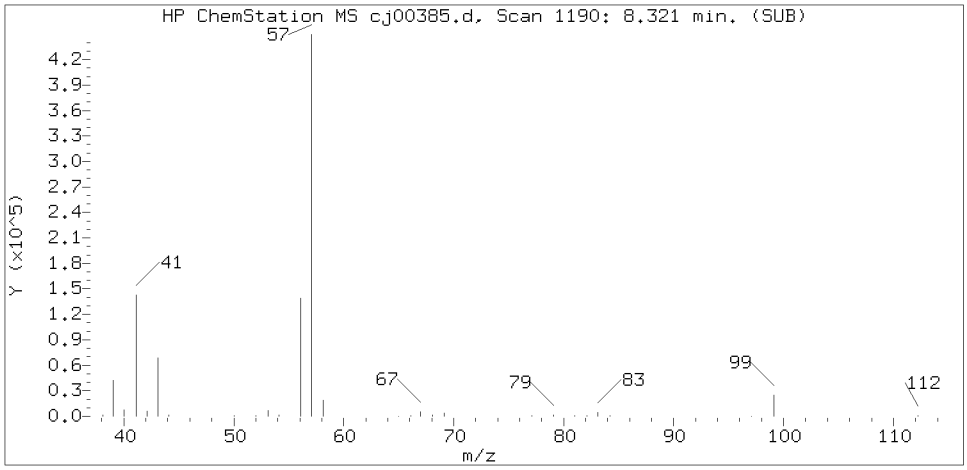
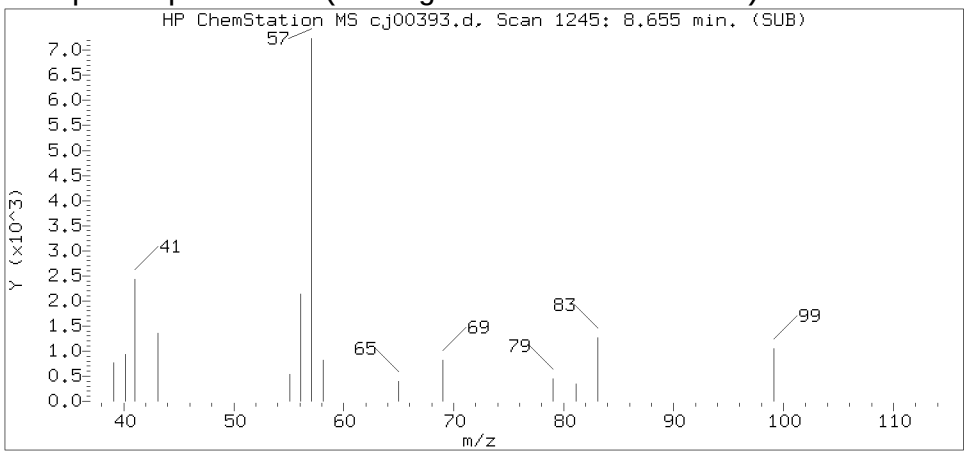
Target 3.5 esignature user ID: jeb07445

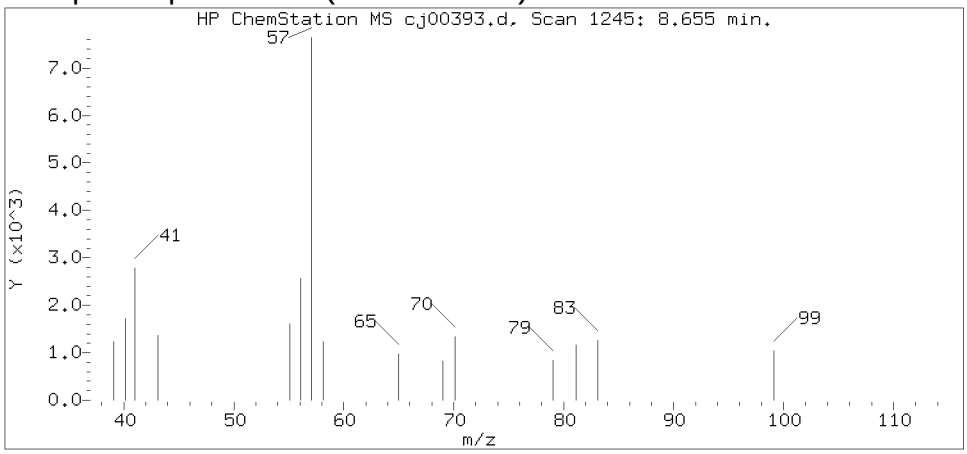
Reference Standard Spectrum for Isooctane

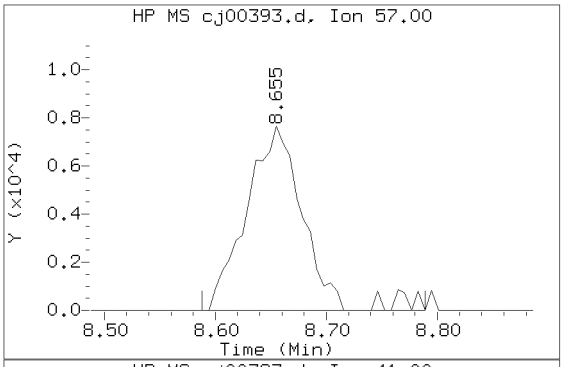


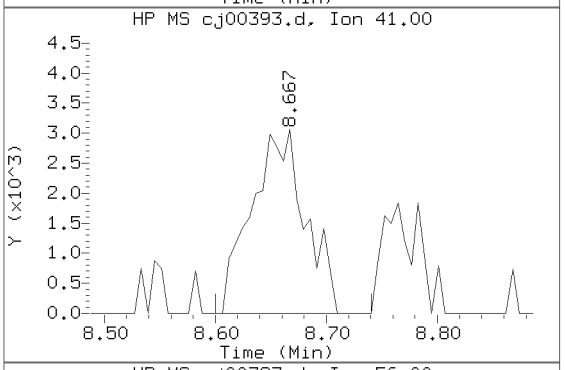
Sample Spectrum (Background Subtracted)

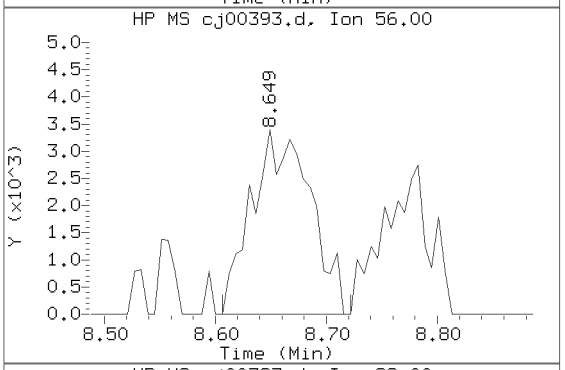


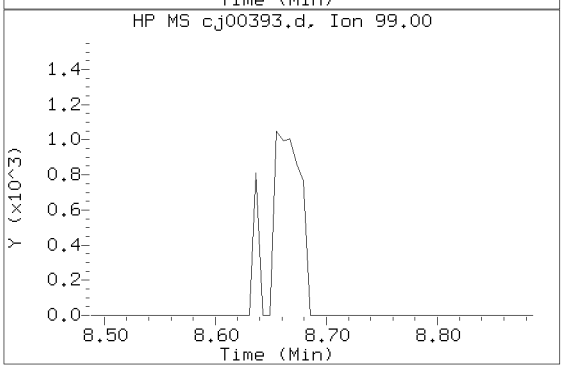
Sample Spectrum (Unaltered)











Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

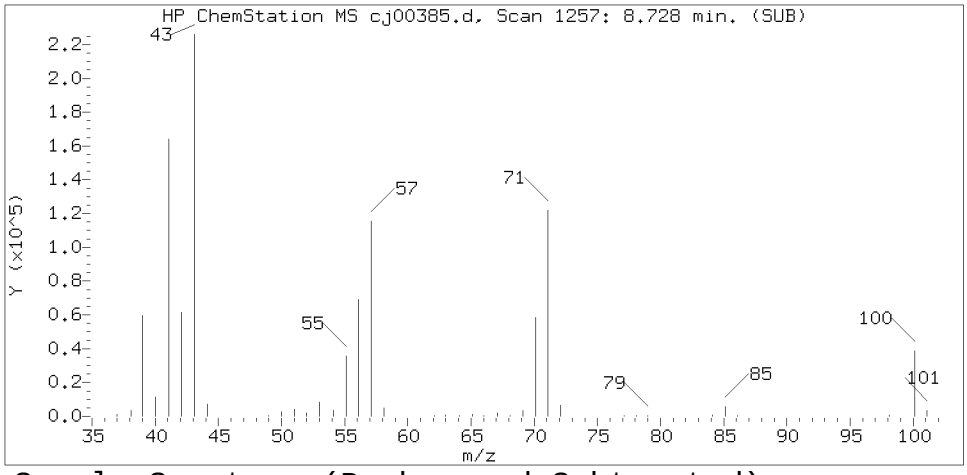
Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

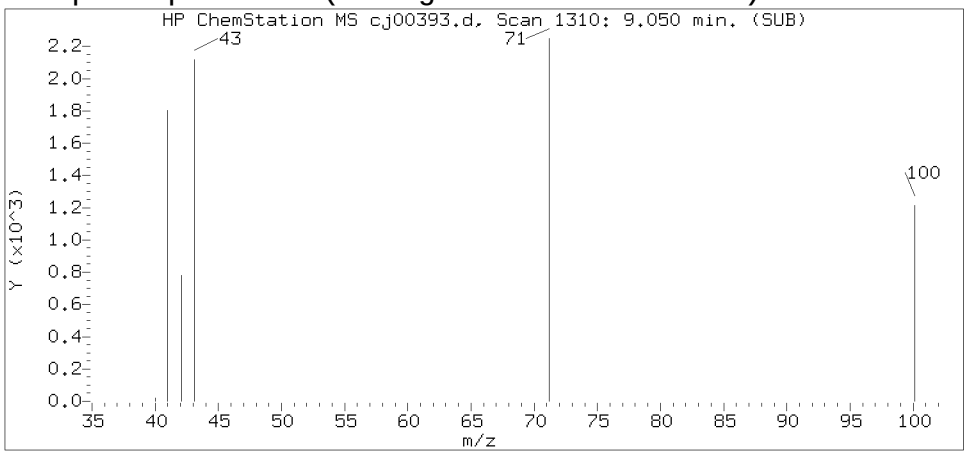
Compound Number : 48
Compound Name : Isooctane
Scan Number : 1245
Retention Time (minutes): 8.655
Relative Retention Time :-0.00062
Quant Ion : 57.00
Area (flag) : 27342
Concentration (ppb(v)) : 0.3258

Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

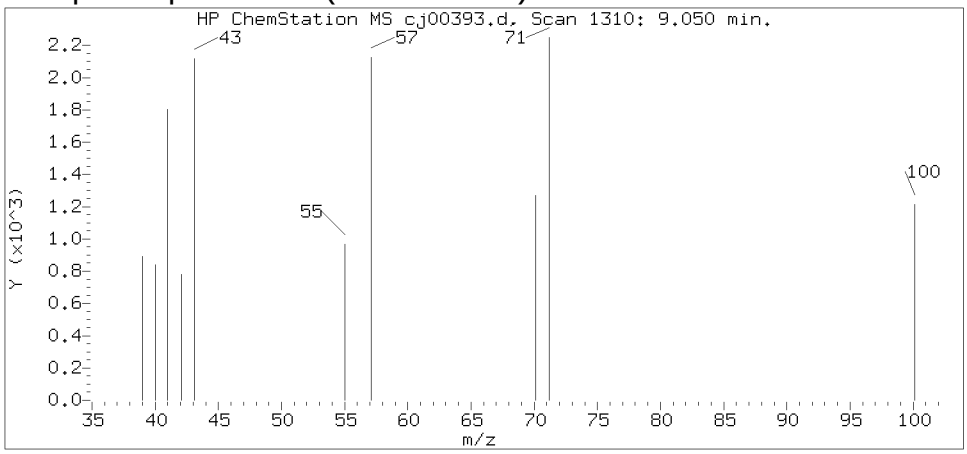
Reference Standard Spectrum for Heptane

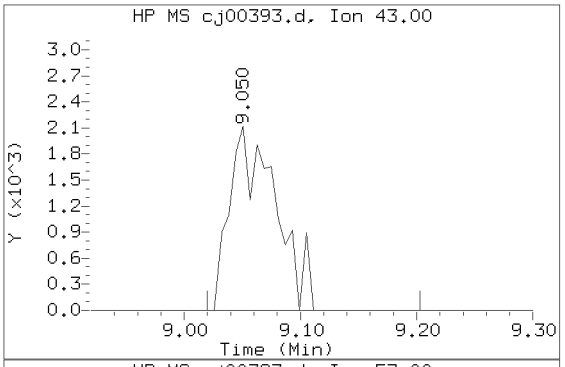


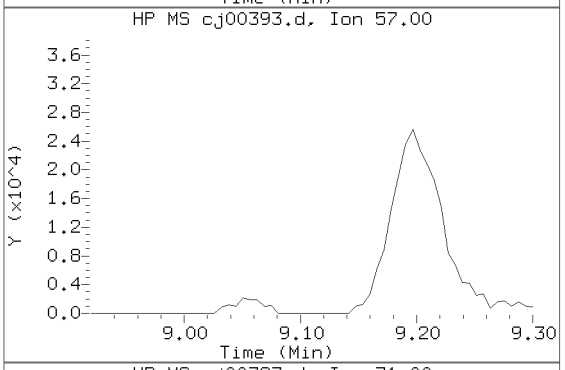
Sample Spectrum (Background Subtracted)

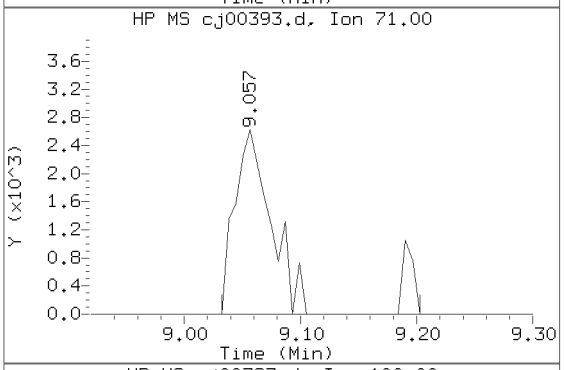


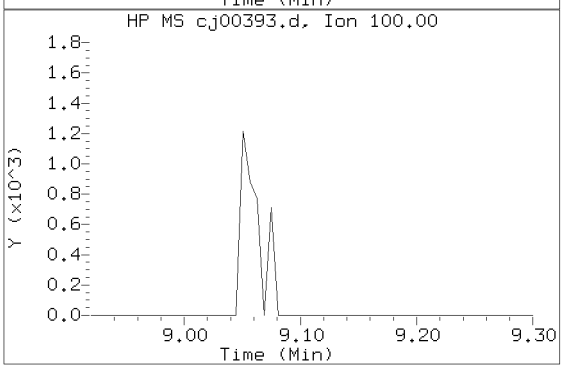
Sample Spectrum (Unaltered)











Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number	: 50
Compound Name	: Heptane
Scan Number	: 1310
Retention Time (minutes)	: 9.050
Relative Retention Time	: 0.00001
Quant Ion	: 43.00
Area (flag)	: 5851
Concentration (ppb(v))	: 0.2530

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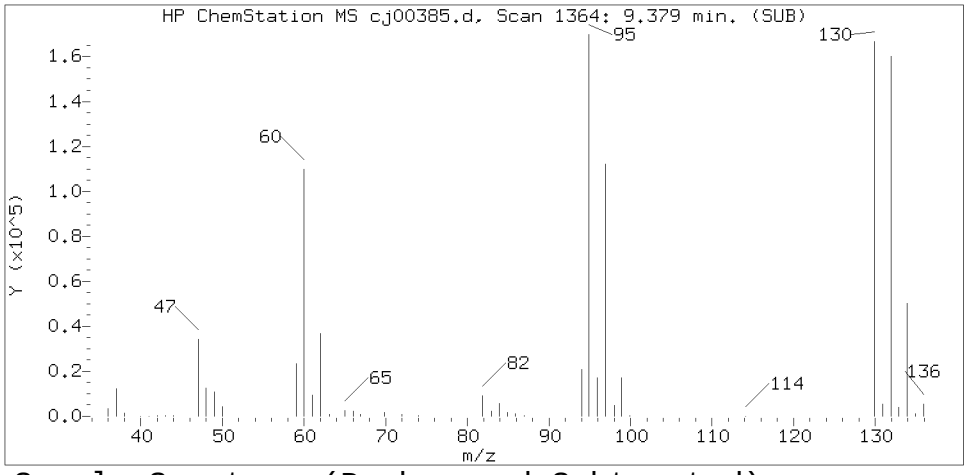
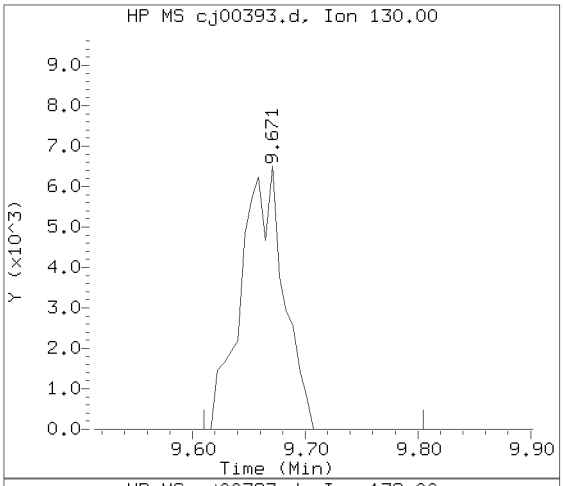
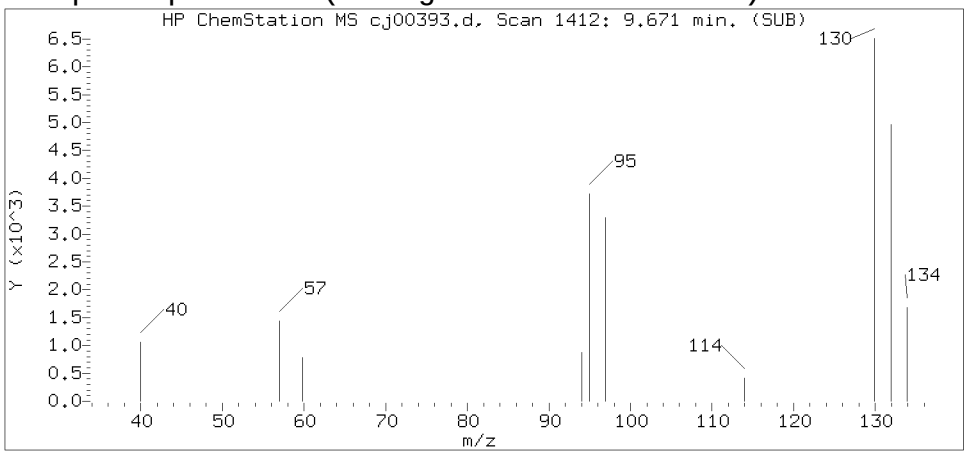
Target 3.5 esignature user ID: jeb07445

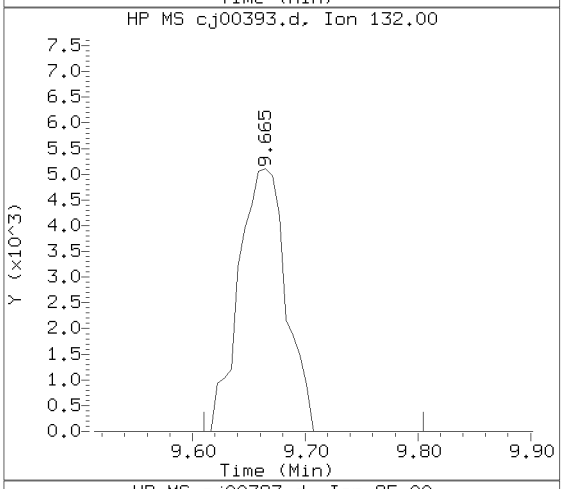
Reference Standard Spectrum for Trichloroethene



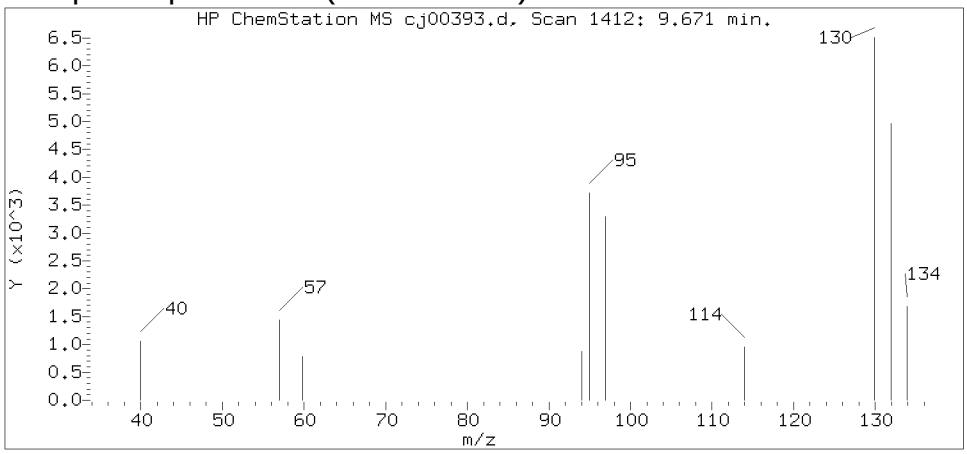


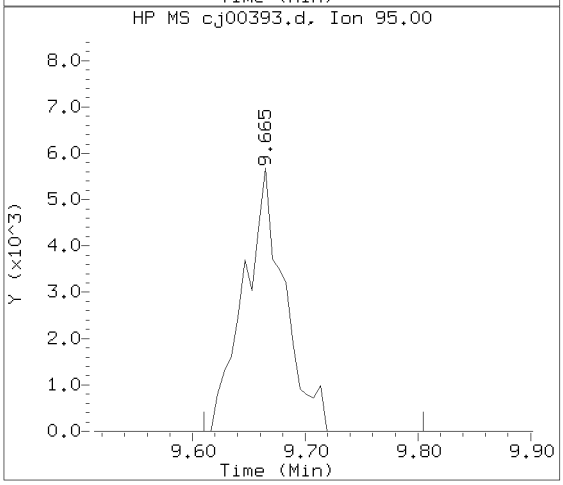
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 52
Compound Name : Trichloroethene
Scan Number : 1412
Retention Time (minutes): 9.671
Relative Retention Time :-0.00202
Quant Ion : 130.00
Area (flag) : 17065
Concentration (ppb(v)) : 0.2795

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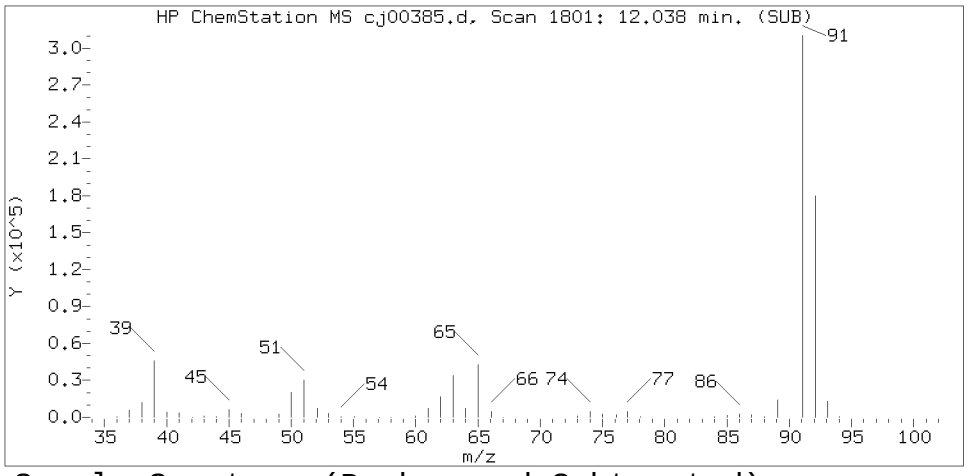
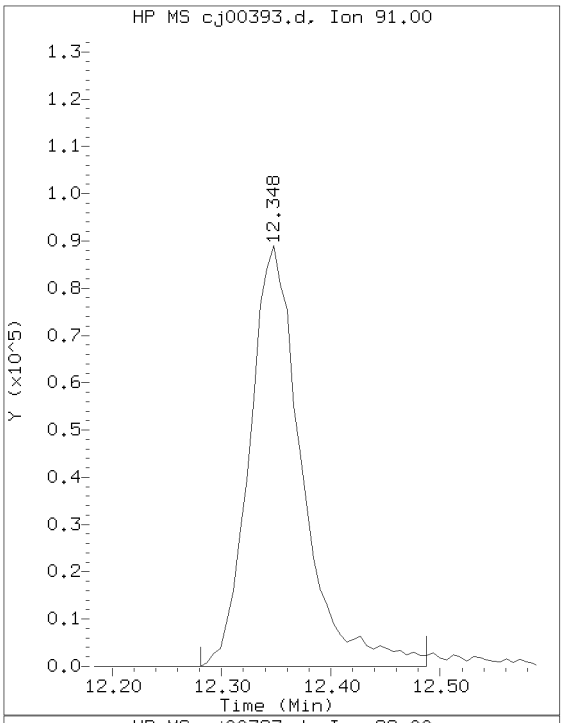
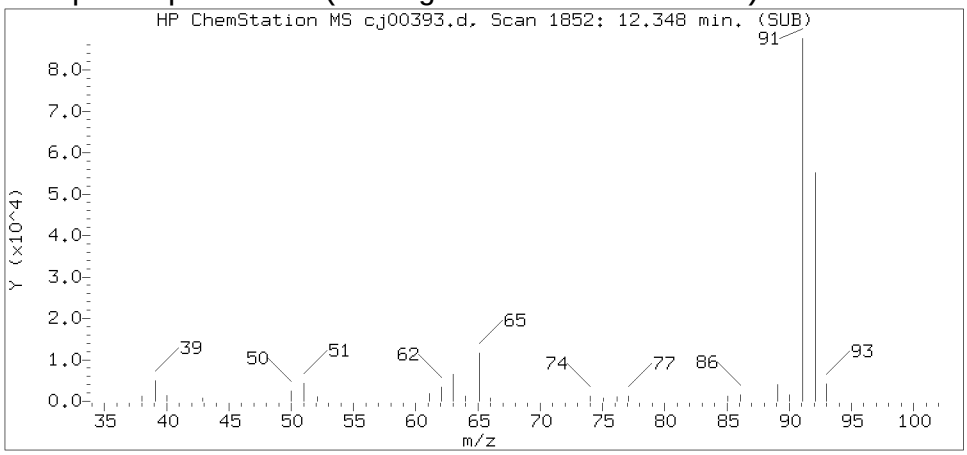
Target 3.5 esignature user ID: jeb07445

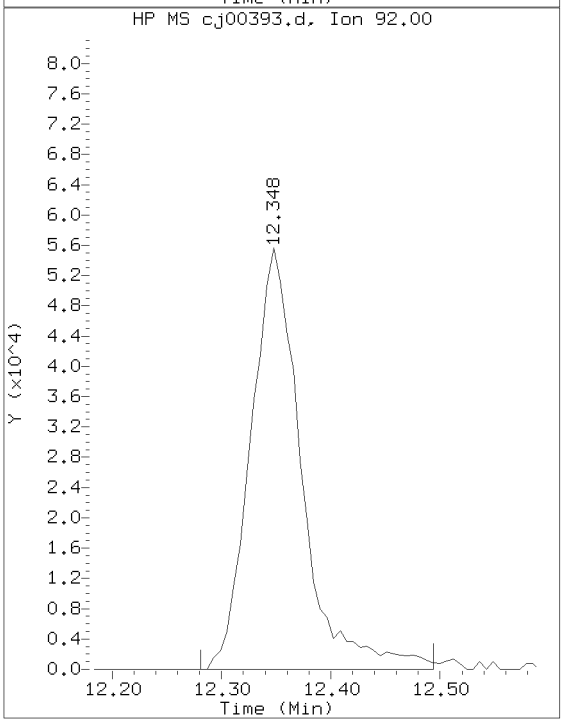
Reference Standard Spectrum for Toluene



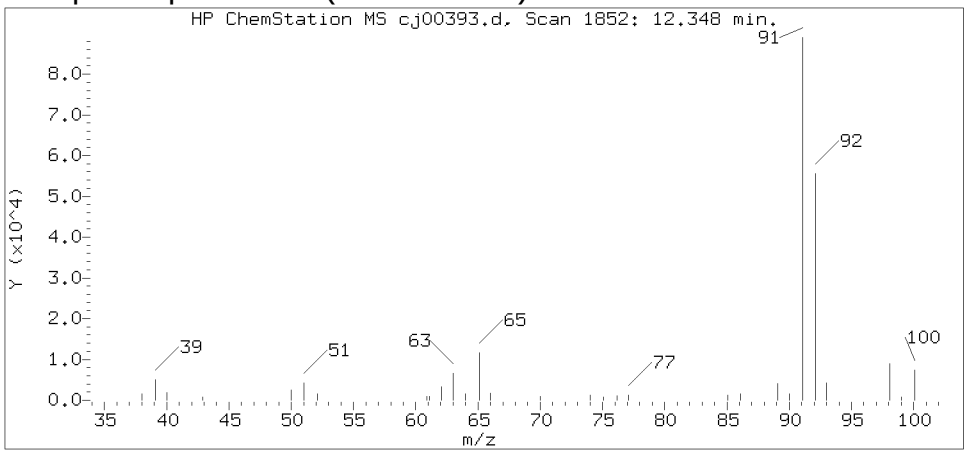


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 61
Compound Name : Toluene
Scan Number : 1852
Retention Time (minutes): 12.348
Relative Retention Time :-0.00000
Quant Ion : 91.00
Area (flag) : 297366
Concentration (ppb(v)) : 2.5070

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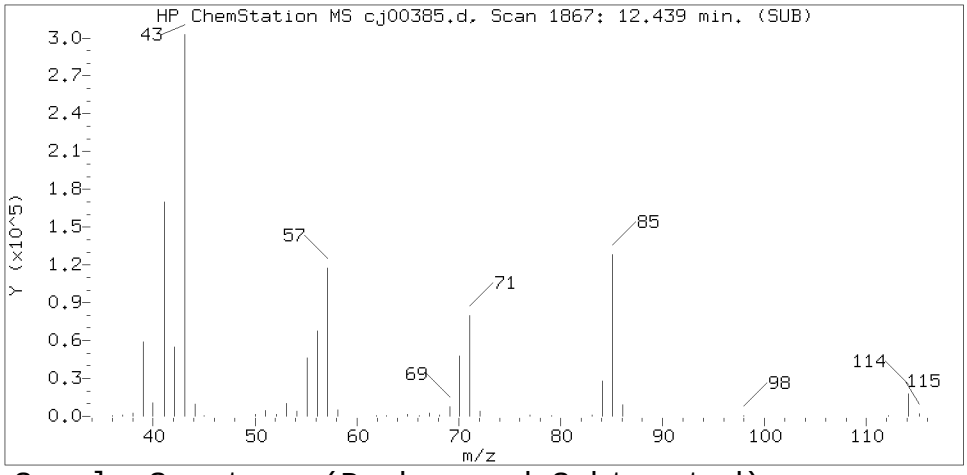
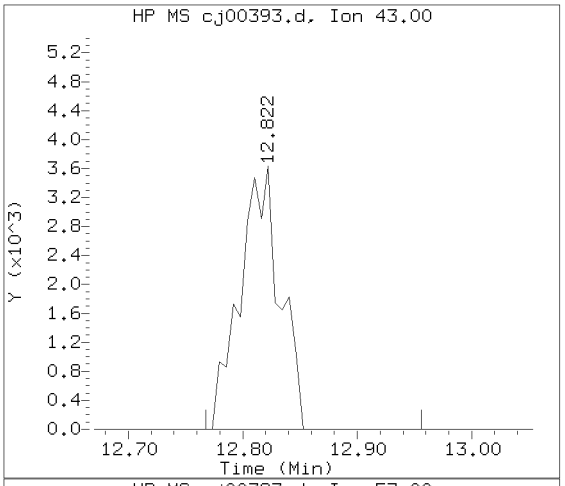
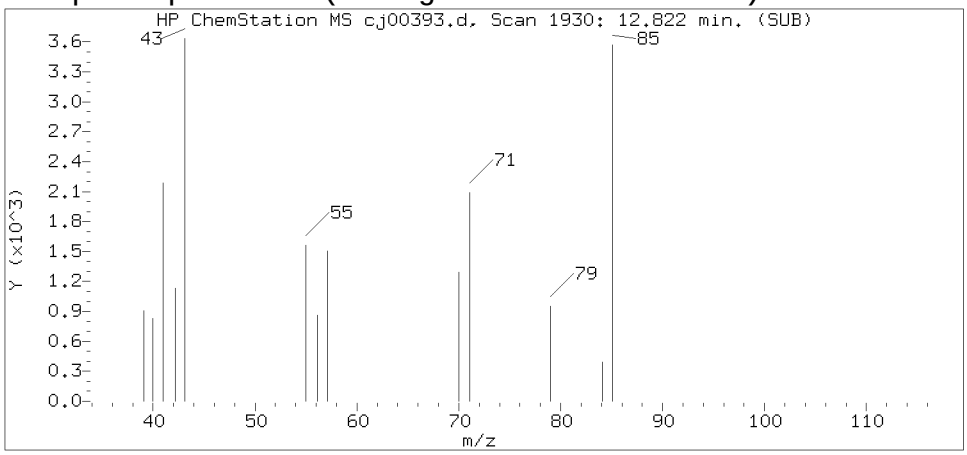
Target 3.5 esignature user ID: jeb07445

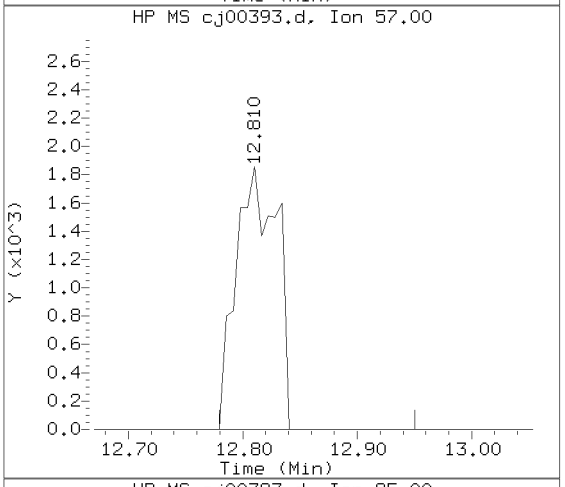
Reference Standard Spectrum for Octane



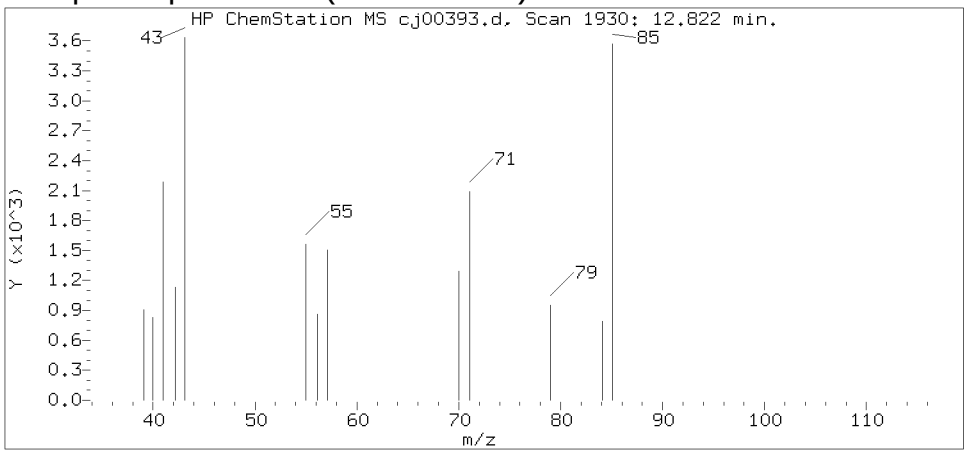


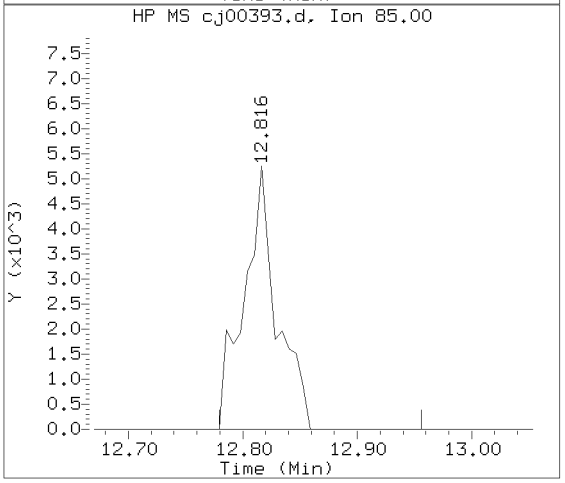
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 62
Compound Name : Octane
Scan Number : 1930
Retention Time (minutes): 12.822
Relative Retention Time :-0.00079
Quant Ion : 43.00
Area (flag) : 8840
Concentration (ppb(v)) : 0.2828

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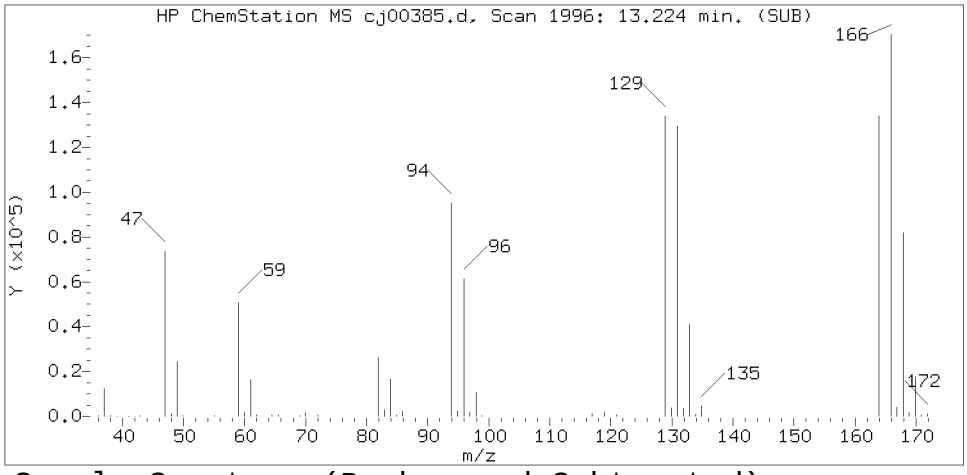
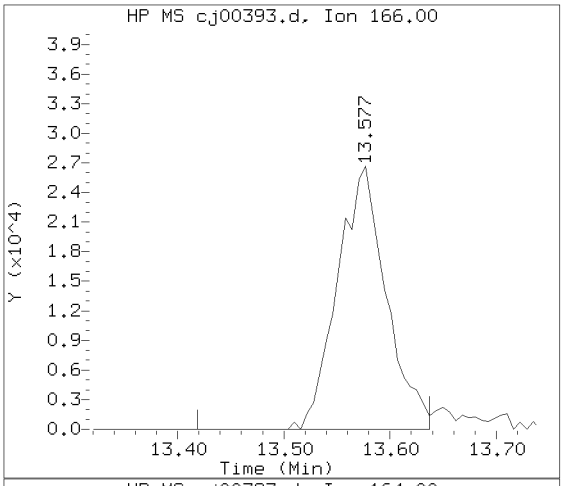
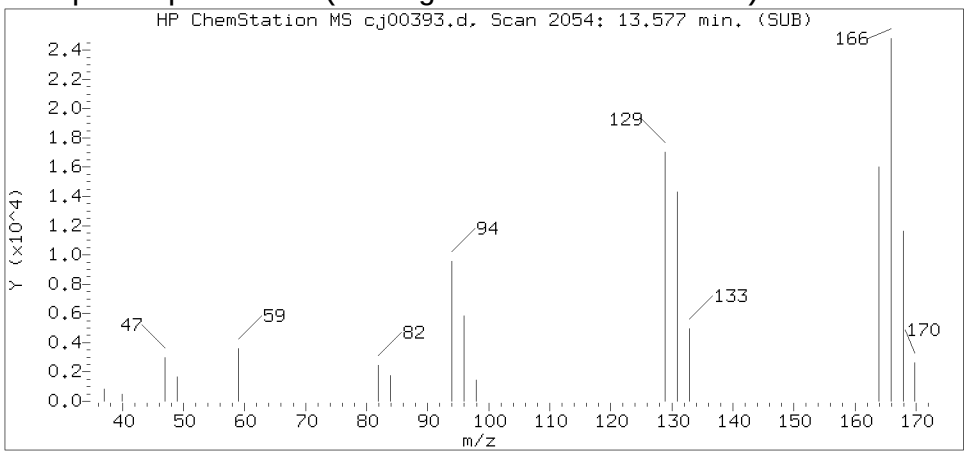
Target 3.5 esignature user ID: jeb07445

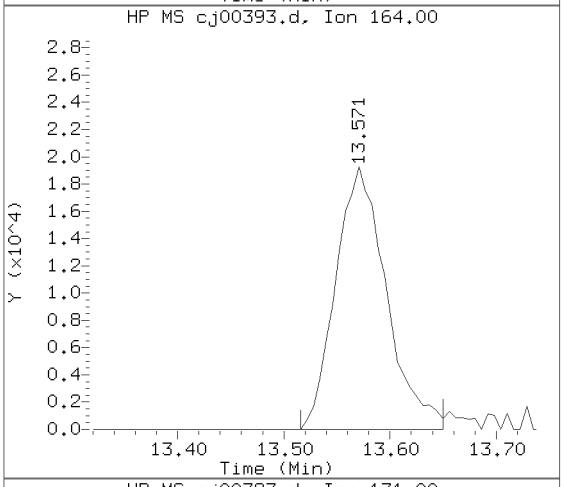
Reference Standard Spectrum for Tetrachloroethene



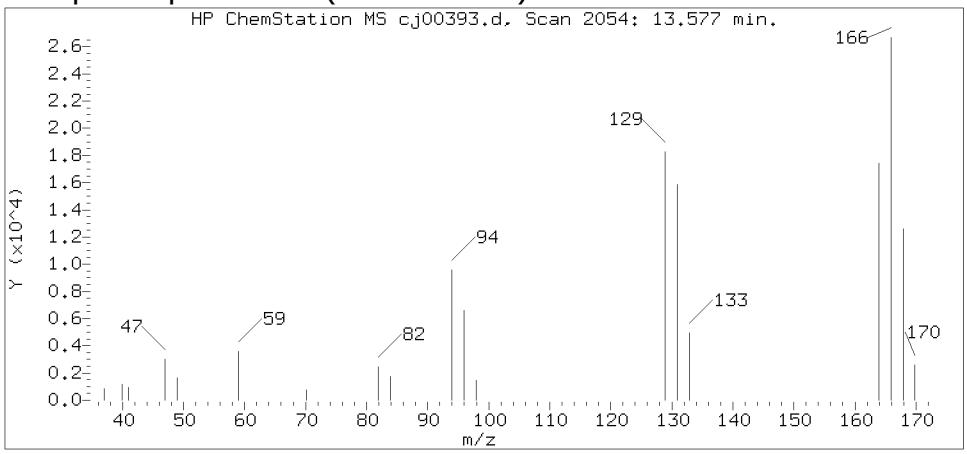


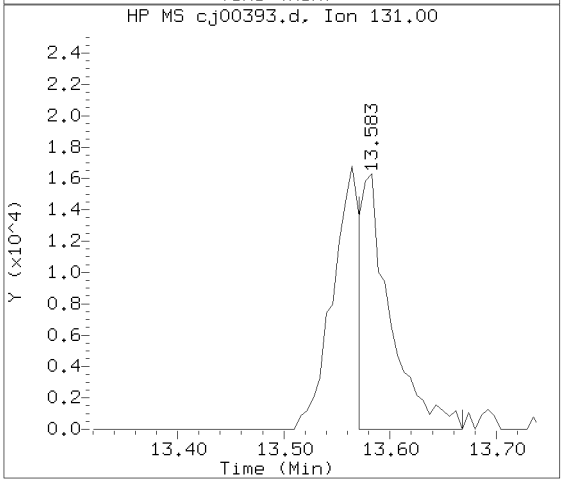
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

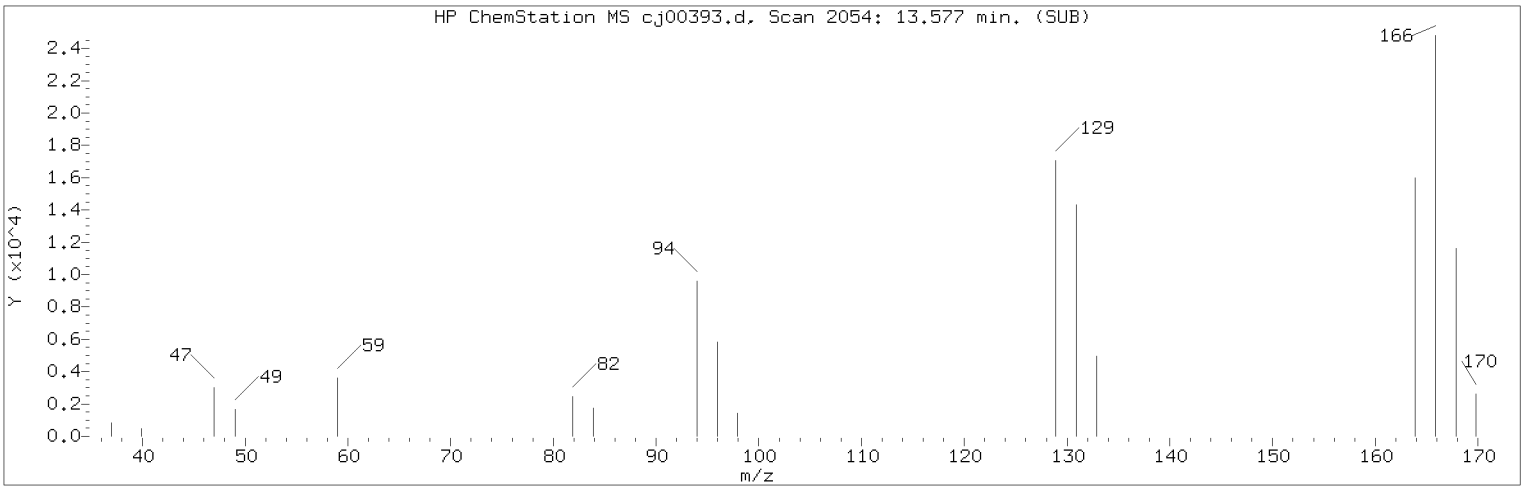
Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

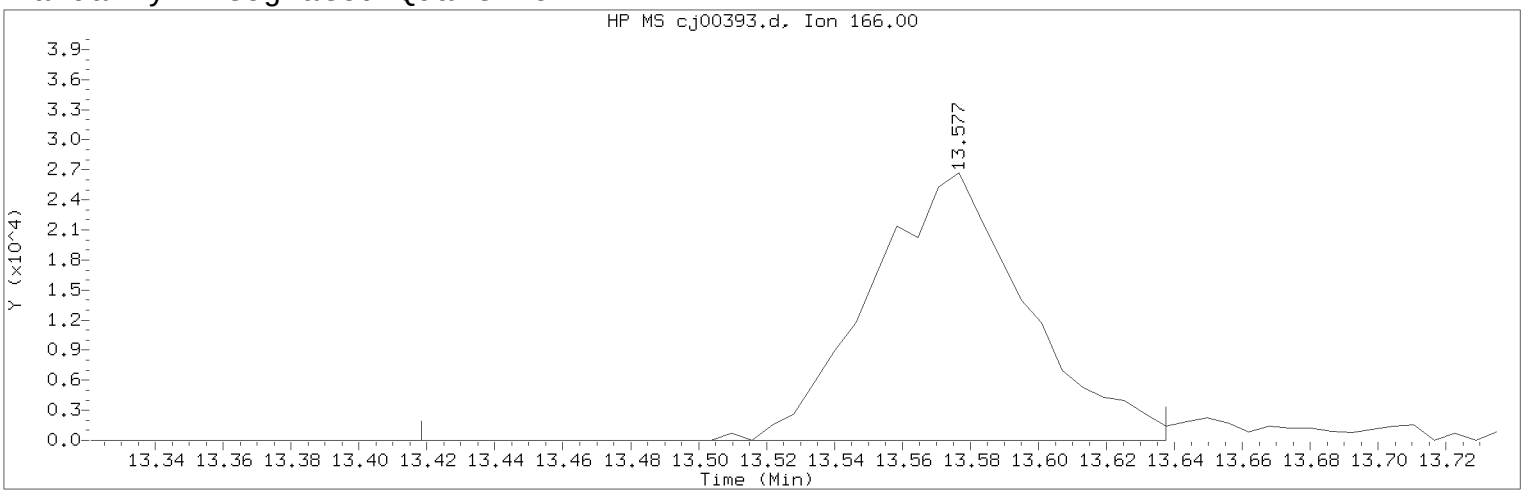
Compound Number : 67
Compound Name : Tetrachloroethene
Scan Number : 2054
Retention Time (minutes): 13.577
Relative Retention Time :-0.00000
Quant Ion : 166.00
Area (flag) : 84862M
Concentration (ppb(v)) : 0.8403

Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

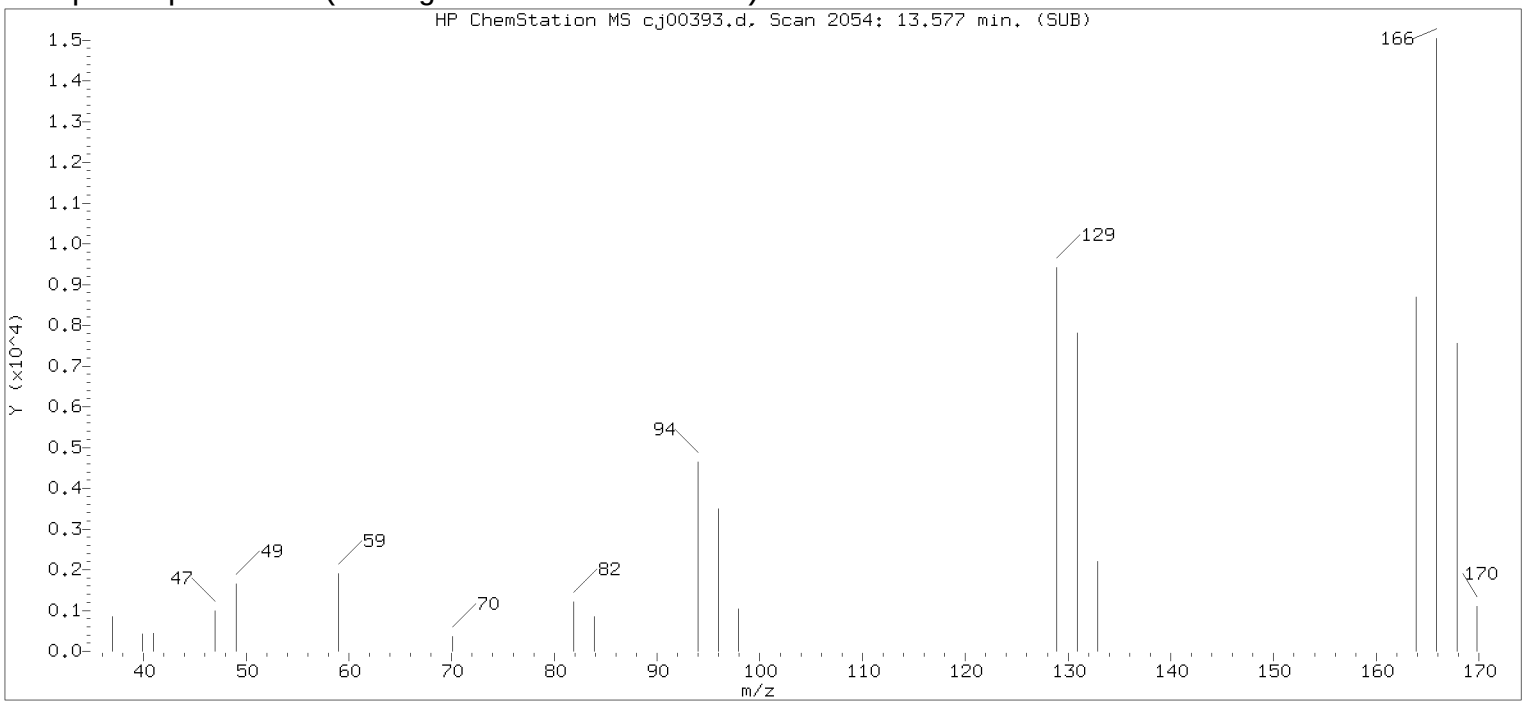
Compound Number : 67
Compound Name : Tetrachloroethene
Scan Number : 2054
Retention Time (minutes): 13.577
Quant Ion : 166.00
Area (flag) : 84862M
Concentration (ppb(v)) : 0.8403
Integration start scan : 2027 Integration stop scan: 2063
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

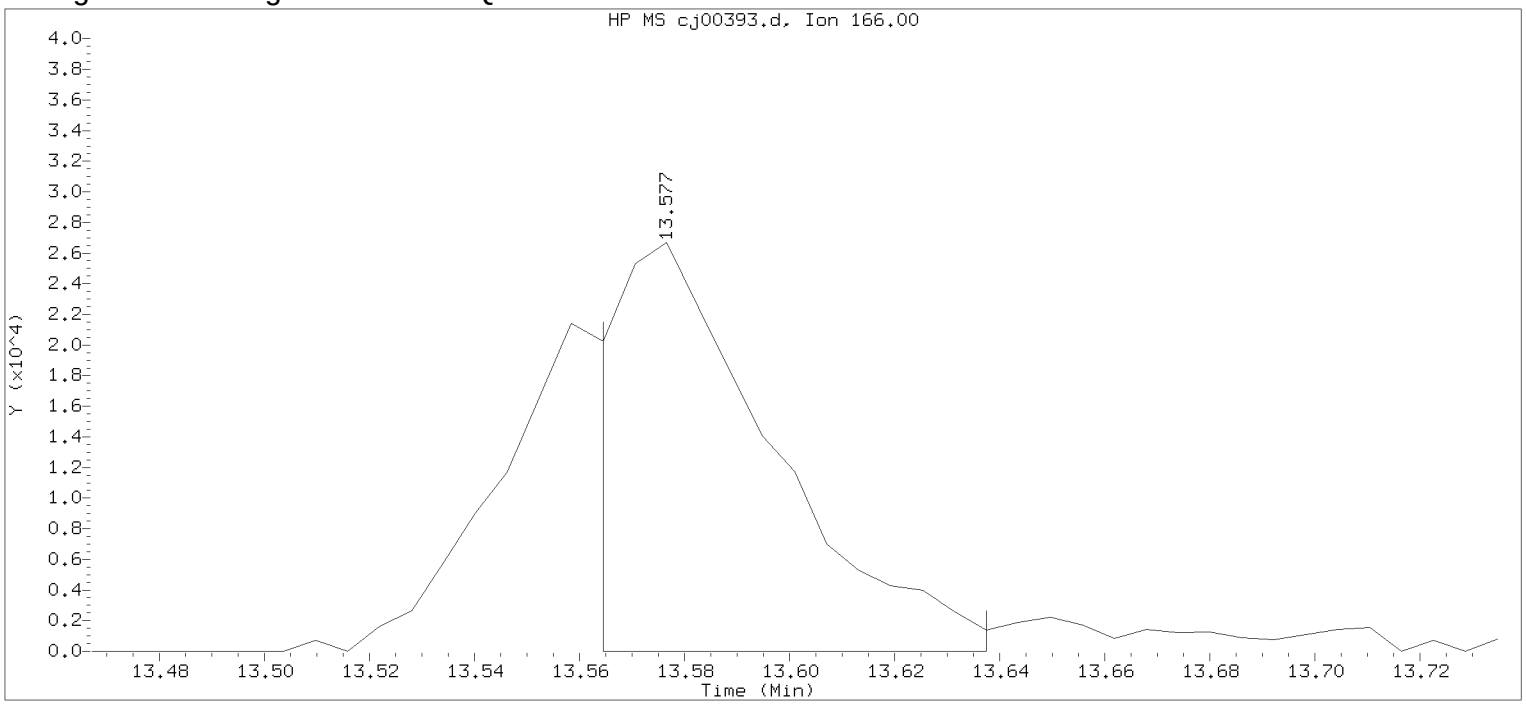
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Mark A. Ratcliff on 10/27/2015 at 09:59.
Parallax ID: mar00486

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

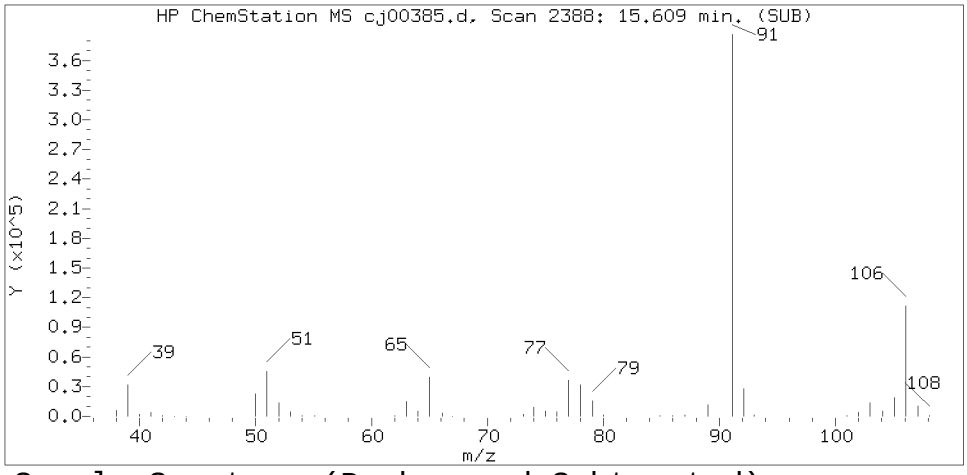
Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 19-OCT-2015 16:04
Date, time and analyst ID of latest file update: 19-Oct-2015 22:27 Automation

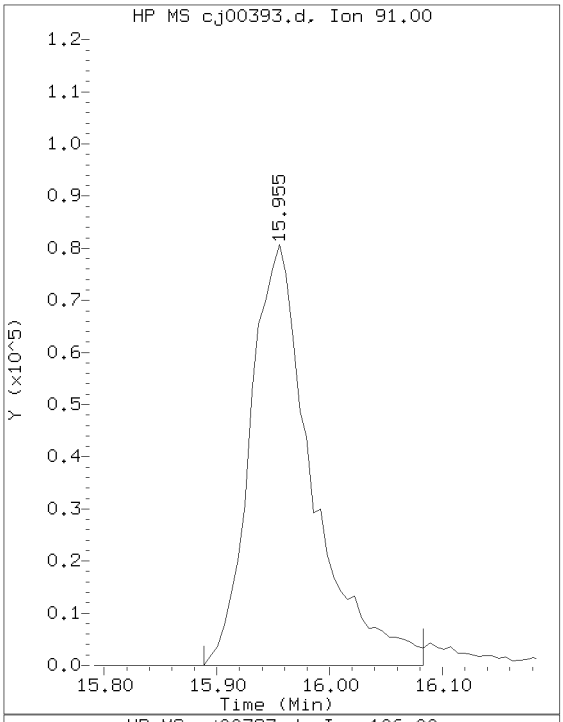
Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 67
Compound Name : Tetrachloroethene
Scan Number : 2054
Retention Time (minutes): 13.577
Quant Ion : 166.00
Area : 55589
Concentration (ppb(v)) : 0.5505
Integration start scan : 2051 Integration stop scan: 2063
Y at integration start : 0 Y at integration end: 0

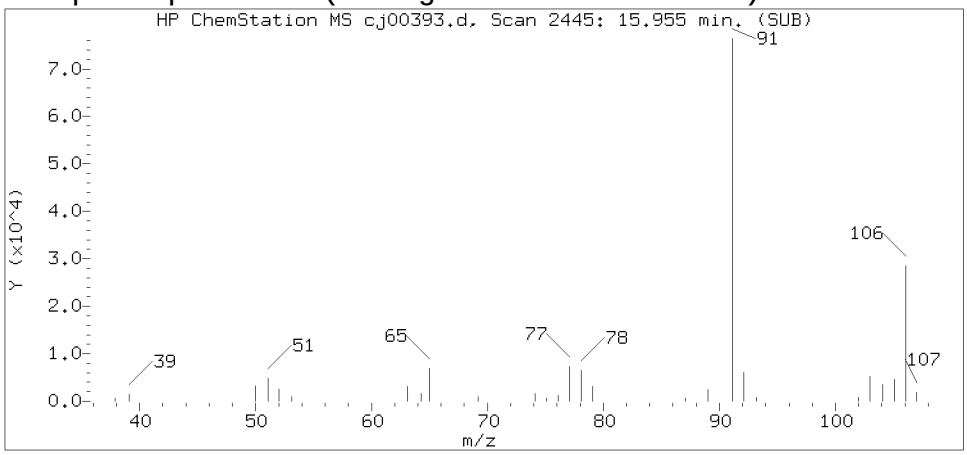
Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user SDX26jeb07445

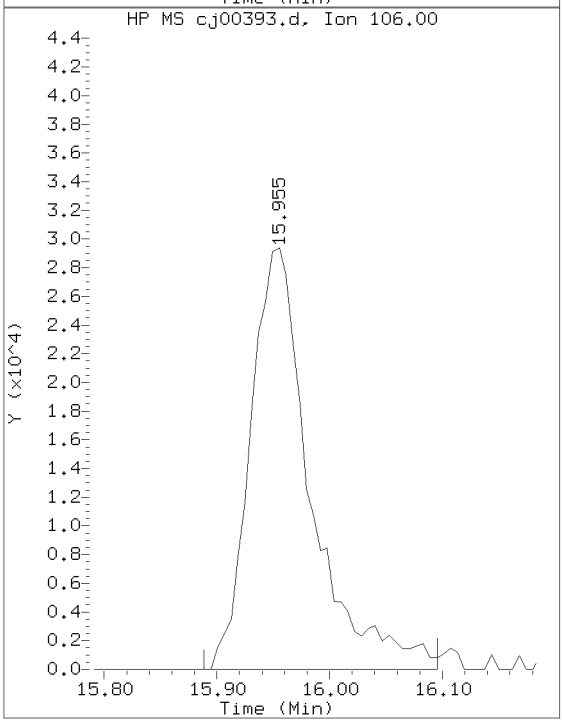
Reference Standard Spectrum for Ethylbenzene



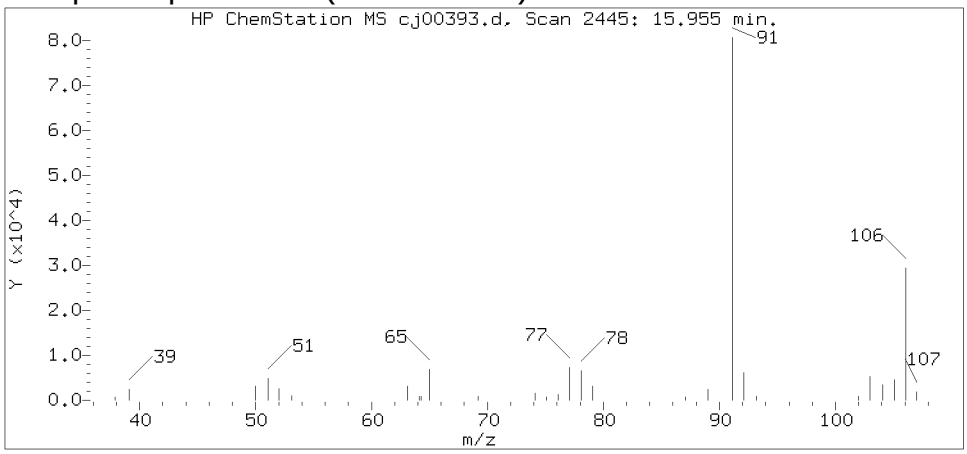


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

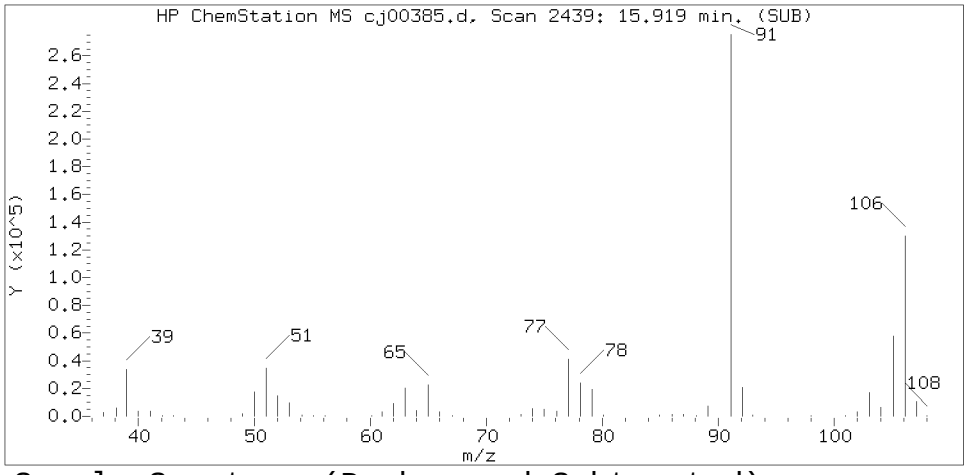
Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

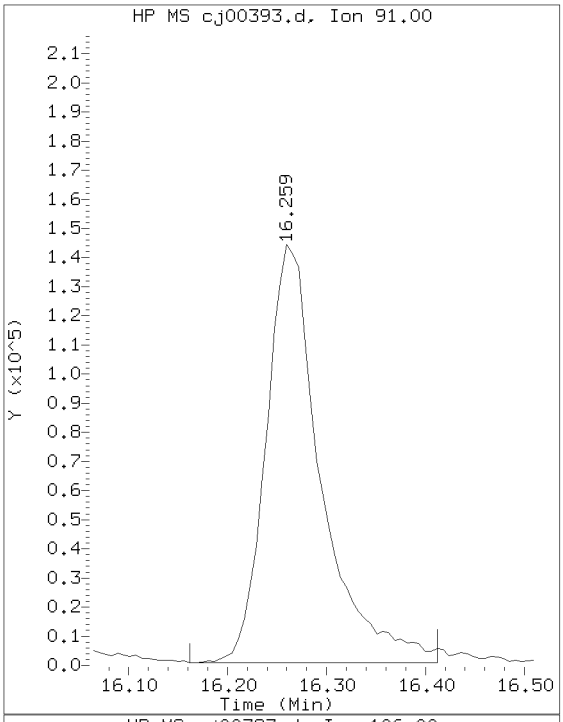
Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 74
Compound Name : Ethylbenzene
Scan Number : 2445
Retention Time (minutes): 15.955
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 308850
Concentration (ppb(v)) : 2.3568

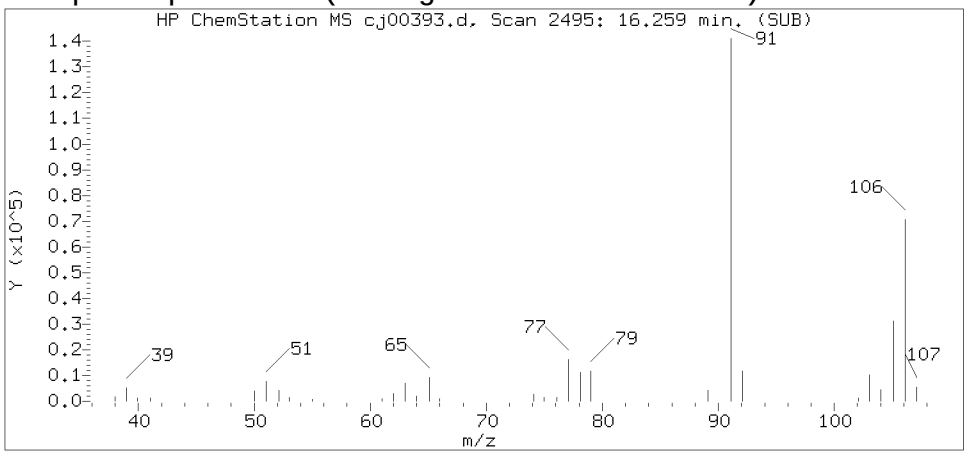
Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

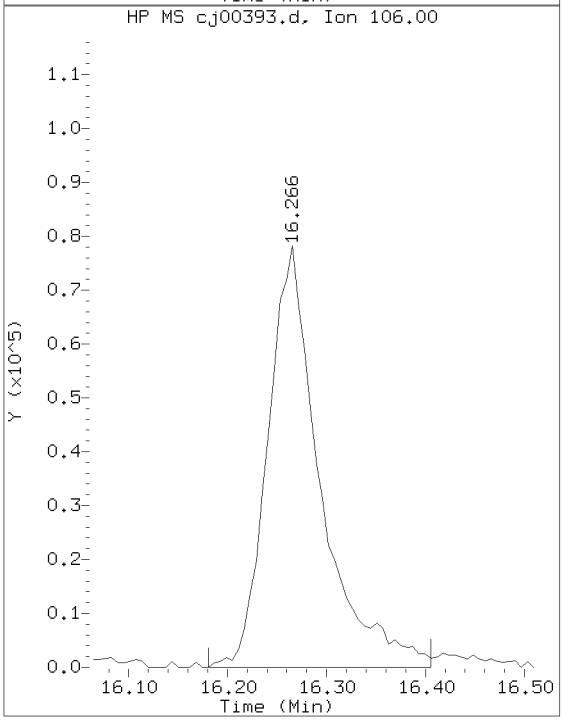
Reference Standard Spectrum for m/p-Xylene



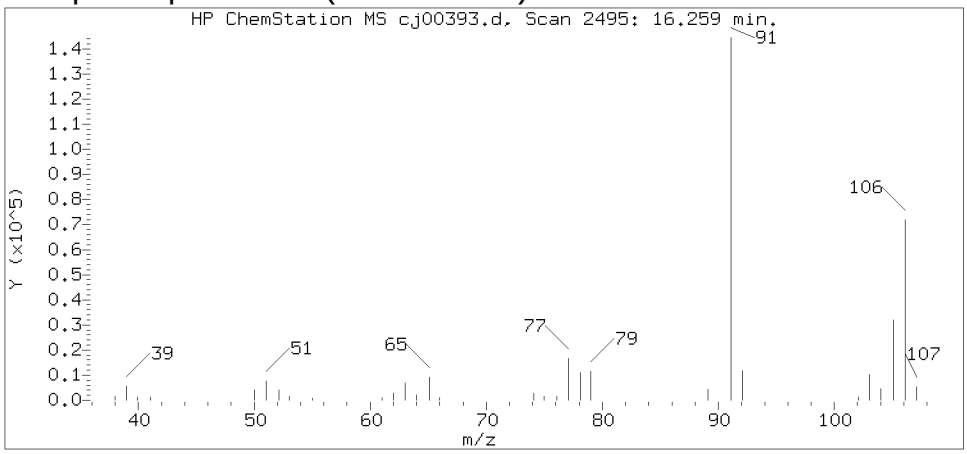


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

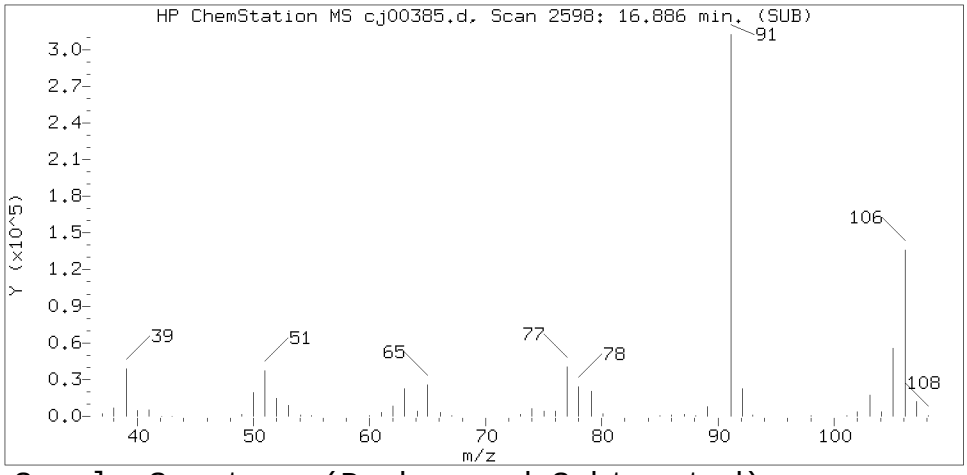
Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

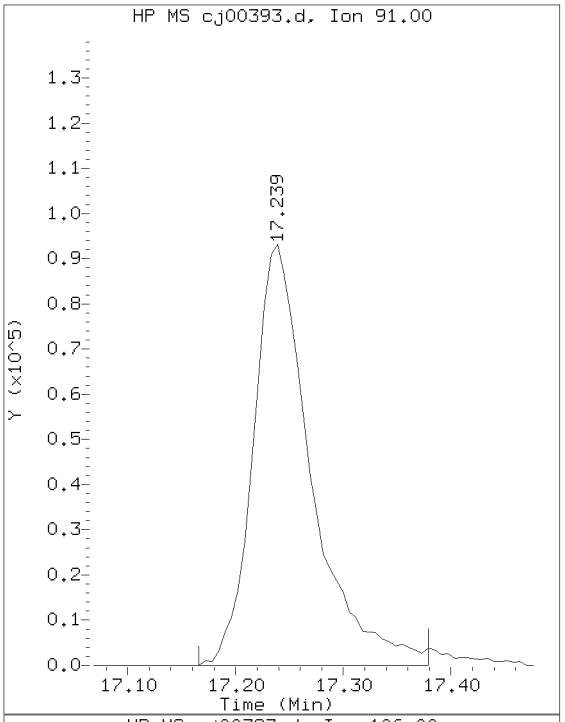
Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number	: 75
Compound Name	: m/p-Xylene
Scan Number	: 2495
Retention Time (minutes)	: 16.259
Relative Retention Time	: 0.00039
Quant Ion	: 91.00
Area (flag)	: 556932
Concentration (ppb(v))	: 5.1389

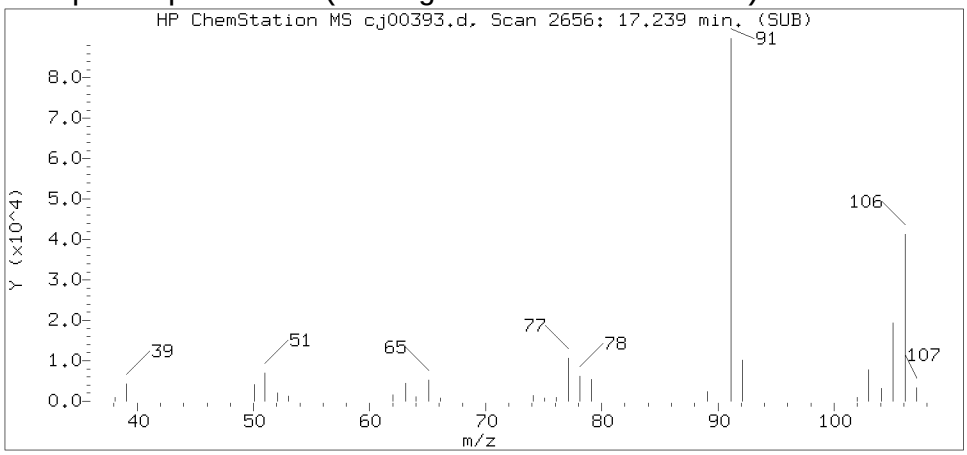
Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

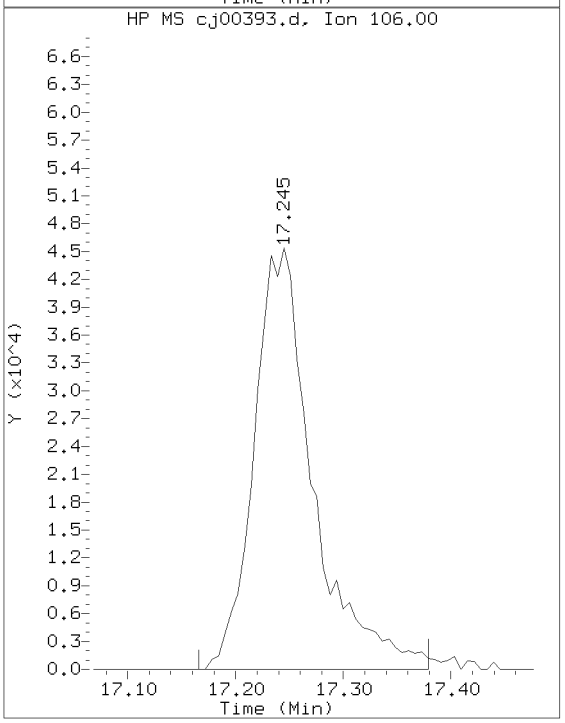
Reference Standard Spectrum for o-Xylene



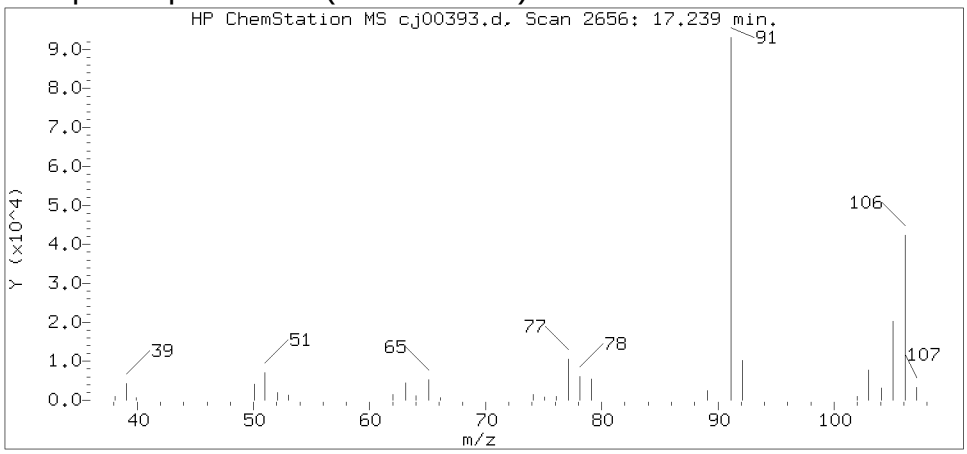


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem/HP09464.i/15oct19.b/cj00393.d Instrument ID: HP09464.i
Injection date and time: 19-OCT-2015 21:47 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: 292
Calibration date and time: 21-OCT-2015 17:37
Date, time and analyst ID of latest file update: 22-Oct-2015 21:32 jeb07445

Sample Name: 06-R-DL Lab Sample ID: 8089423DL

Compound Number : 76
Compound Name : o-Xylene
Scan Number : 2656
Retention Time (minutes): 17.239
Relative Retention Time :-0.00039
Quant Ion : 91.00
Area (flag) : 348809
Concentration (ppb(v)) : 3.0579

Digitally signed by Jacob E. Bailey on 10/22/2015 at 21:33.
Target 3.5 esignature user ID: jeb07445

Standards Data

Volatile Organics in Air by GC/MS

Theoretical Standard Concentrations for EPA Method TO-14/15.

Compound Name	Cas No	VSTD001	VSTD002	VSTD005	VSTD010	VSTD025	VSTD70
Bromochloromethane	74-97-5	10.00	10.00	10.00	10.00	10.00	10.00
Propene	115-07-1	1.06	2.12	5.30	10.60	26.50	74.2
Dichlorodifluoromethane	75-71-8	1.02	2.04	5.10	10.20	25.50	
Chlorodifluoromethane	75-45-6	1.05	2.10	5.25	10.50	26.25	
Freon 114	76-14-2	0.96	1.92	4.80	9.60	24.00	
Chloromethane	74-87-3	1.00	2.00	5.00	10.00	25.00	
Vinyl Chloride	75-01-4	1.00	2.00	5.00	10.00	25.00	70.0
1,3-Butadiene	106-99-0	1.03	2.06	5.15	10.30	25.75	
Bromomethane	74-83-9	1.00	2.00	5.00	10.00	25.00	
Chloroethane	75-00-3	0.96	1.92	4.80	9.60	24.00	
Bromoethene	593-60-2	1.04	2.08	5.20	10.40	26.00	
Dichlorofluoromethane	75-43-4	1.06	2.12	5.30	10.60	26.50	
Trichlorofluoromethane	75-69-4	1.05	2.10	5.25	10.50	26.25	
Pentane	109-66-0	1.05	2.10	5.25	10.50	26.25	73.5
Ethanol	9003-99-0	1.05	2.10	5.25	10.50	26.25	
Acrolein	107-02-8	1.09	2.18	5.45	10.90	27.25	
1,1-Dichloroethene	75-35-4	1.05	2.10	5.25	10.50	26.25	73.5
Freon 113	76-13-1	1.07	2.14	5.35	10.70	26.75	
Acetone	67-64-1	1.05	2.10	5.25	10.50	26.25	73.5
Methyl Iodide	74-88-4	1.05	2.10	5.25	10.50	26.25	
Carbon Disulfide	75-15-0	1.00	2.00	5.00	10.00	25.00	
Acetonitrile	75-05-8	1.10	2.20	5.50	11.00	27.50	
3-Chloropropene	107-05-1	1.10	2.20	5.50	11.00	27.50	
Methylene Chloride	75-09-2	1.10	2.20	5.50	11.00	27.50	77.0
tert-Butyl Alcohol	75-65-0	1.12	2.24	5.60	11.20	28.00	78.4
Acrylonitrile	107-13-1	1.05	2.10	5.25	10.50	26.25	
trans-1,2-Dichloroethene	156-60-5	0.98	1.96	4.90	9.80	24.50	68.6
Methyl t-Butyl Ether	1634-04-4	1.04	2.08	5.20	10.40	26.00	
Hexane	110-54-3	1.01	2.02	5.05	10.10	25.25	70.7
1,1-Dichloroethane	75-34-3	1.03	2.06	5.15	10.30	25.75	72.1
Vinyl Acetate	108-05-4	1.10	2.20	5.50	11.00	27.50	
Di-Isopropyl Ether	108-20-3	1.03	2.06	5.15	10.30	25.75	
Ethyl Tert-Butyl Ether	637-92-3	1.02	2.04	5.10	10.20	25.50	
cis-1,2-Dichloroethene	156-59-2	1.03	2.06	5.15	10.30	25.75	72.1
2-Butanone	78-93-3	1.05	2.10	5.25	10.50	26.25	73.5
Ethyl Acetate	141-78-6	1.03	2.06	5.15	10.30	25.75	
Methyl Acrylate	96-33-3	1.03	2.06	5.15	10.30	25.75	
Tetrahydrofuran	77392-70-2	1.05	2.10	5.25	10.50	26.25	
Chloroform	67-66-3	1.03	2.06	5.15	10.30	25.75	
1,1,1-Trichloroethane	71-55-6	1.03	2.06	5.15	10.30	25.75	72.1
Cyclohexane	68411-77-8	1.02	2.04	5.10	10.20	25.50	
Carbon Tetrachloride	56-23-5	1.05	2.10	5.25	10.50	26.25	73.5
1,4-Difluorobenzene	540-36-3	10.00	10.00	10.00	10.00	10.00	10.00
1,2-Dichloroethane	107-06-2	1.04	2.08	5.20	10.40	26.00	72.8
Benzene	71-43-2	1.05	2.10	5.25	10.50	26.25	73.5
Isooctane	540-84-1	1.07	2.14	5.35	10.70	26.75	74.9
Tert Amyl Methyl Ether	64257-84-7	1.03	2.06	5.15	10.30	25.75	
Heptane	142-82-5	1.04	2.08	5.20	10.40	26.00	72.8

Theoretical Standard Concentrations for EPA Method TO-14/15.

Trichloroethene	79-01-6	1.01	2.02	5.05	10.10	25.25	70.7
Ethyl Acrylate	140-88-5	1.07	2.14	5.35	10.70	26.75	
1,2-Dichloropropane	78-87-5	1.03	2.06	5.15	10.30	25.75	
Methyl Methacrylate	80-62-6	1.02	2.04	5.10	10.20	25.50	
Dibromomethane	74-95-3	1.03	2.06	5.15	10.30	25.75	
1,4-Dioxane	123-91-1	1.01	2.02	5.05	10.10	25.25	
Bromodichloromethane	75-27-4	1.01	2.02	5.05	10.10	25.25	
cis-1,3-Dichloropropene	10061-01-5	1.10	2.20	5.50	11.00	27.50	
4-Methyl-2-Pentanone	108-10-1	1.01	2.02	5.05	10.10	25.25	
Chlorobenzene d5	3114-55-4	10.00	10.00	10.00	10.00	10.00	10.00
Toluene	108-88-3	1.03	2.06	5.15	10.30	25.75	72.1
Octane	111-65-9	1.04	2.08	5.20	10.40	26.00	
trans-1,3-Dichloropropene	10061-02-6	1.01	2.02	5.05	10.10	25.25	
Ethyl Methacrylate	97-63-2	1.03	2.06	5.15	10.30	25.75	
1,1,2-Trichloroethane	79-00-5	1.03	2.06	5.15	10.30	25.75	72.1
Tetrachloroethene	127-18-4	0.98	1.96	4.90	9.80	24.50	68.6
2-Hexanone	591-78-6	1.09	2.18	5.45	10.90	27.25	
Dibromochloromethane	124-48-1	1.02	2.04	5.10	10.20	25.50	
1,2-Dibromoethane	106-93-4	1.02	2.04	5.10	10.20	25.50	
Chlorobenzene	108-90-7	1.05	2.10	5.25	10.50	26.25	
1,1,1,2-Tetrachloroethane	630-20-6	1.05	2.10	5.25	10.50	26.25	
Ethylbenzene	100-41-4	1.04	2.08	5.20	10.40	26.00	72.8
m/p-Xylene	1330-20-7	0.96	1.92	4.80	9.60	24.00	67.2
o-Xylene	95-47-6	1.02	2.04	5.10	10.20	25.50	71.4
Styrene	100-42-5	1.00	2.00	5.00	10.00	25.00	
Bromoform	75-25-2	0.98	1.96	4.90	9.80	24.50	
Cumene	98-82-8	1.02	2.04	5.10	10.20	25.50	
1,1,2,2-Tetrachloroethane	79-34-5	1.02	2.04	5.10	10.20	25.50	
1,2,3-Trichloropropane	96-18-4	1.04	2.08	5.20	10.40	26.00	
n-Propylbenzene	74296-31-4	0.99	1.98	4.95	9.90	24.75	
2-Chlorotoluene	95-49-8	1.03	2.06	5.15	10.30	25.75	
Bromobenzene	108-86-1	1.05	2.10	5.25	10.50	26.25	
4-Ethyltoluene	622-96-8	1.01	2.02	5.05	10.10	25.25	
1,3,5-Trimethylbenzene	108-67-8	1.00	2.00	5.00	10.00	25.00	
Alpha Methyl Styrene	611-15-1	1.03	2.06	5.15	10.30	25.75	
tert-Butylbenzene	98-06-6	1.01	2.02	5.05	10.10	25.25	
1,2,4-Trimethylbenzene	95-63-6	1.01	2.02	5.05	10.10	25.25	
sec-Butylbenzene	68411-44-9	1.01	2.02	5.05	10.10	25.25	
1,3-Dichlorobenzene	541-73-1	1.04	2.08	5.20	10.40	26.00	
1,4-Dichlorobenzene	106-46-7	1.00	2.00	5.00	10.00	25.00	
p-Isopropyltoluene	99-87-6	1.03	2.06	5.15	10.30	25.75	
Benzyl chloride	100-44-7	1.04	2.08	5.20	10.40	26.00	
1,2-Dichlorobenzene	95-50-1	1.01	2.02	5.05	10.10	25.25	
n-Butylbenzene	74296-32-5	1.05	2.10	5.25	10.50	26.25	
Hexachloroethane	67-72-1	1.05	2.10	5.25	10.50	26.25	
1,2-Dibromo-3-Chloropropane	96-12-8	1.05	2.10	5.25	10.50	26.25	
1,2,4-Trichlorobenzene	120-82-1	0.98	1.96	4.90	9.80	24.50	
Hexachlorobutadiene	87-68-3	1.00	2.00	5.00	10.00	25.00	
Naphthalene	91-20-3	1.08	2.16	5.40	10.80	27.00	

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FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:
RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d
RRF 70 = cj00329.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Propene	0.209	0.269	0.229	0.229	0.270	0.219	0.238	11	AVG
Dichlorodifluoromethane	2.834	3.648	2.882	2.680	2.670	****	2.943	14	AVG
Chlorodifluoromethane	0.860	1.210	0.915	0.828	0.890	****	0.940	16	AVG
Freon 114	2.418	3.375	2.609	2.365	2.475	****	2.648	16	AVG
Chloromethane	0.114	0.179	0.136	0.134	0.149	0.127	0.140	16	AVG
Vinyl Chloride	0.530	0.783	0.610	0.579	0.684	0.555	0.623	15	AVG
1,3-Butadiene	0.256	0.480	0.388	0.364	0.430	****	0.384	22	AVG
Bromomethane	0.765	1.132	0.881	0.822	0.939	****	0.908	16	AVG
Chloroethane	0.317	0.428	0.342	0.311	0.364	****	0.352	13	AVG
Bromoethene	0.712	1.057	0.842	0.812	0.951	0.802	0.863	14	AVG
Dichlorofluoromethane	1.461	2.137	1.620	1.469	1.532	****	1.644	17	AVG
Trichlorofluoromethane	2.923	4.109	3.165	2.824	2.842	****	3.172	17	AVG
Pentane	0.444	0.668	0.532	0.504	0.588	0.500	0.539	15	AVG
Ethanol	****	0.136	0.122	0.125	0.126	0.126	0.127	4	AVG
Freon123a	1.019	1.514	1.131	1.090	1.036	****	1.158	18	AVG
Acrolein	0.130	0.107	0.109	0.130	0.118	****	0.119	9	AVG
1,1-Dichloroethene	0.826	1.376	1.046	0.990	1.066	0.899	1.034	18	AVG
Freon 113	1.124	1.627	1.229	1.140	1.169	****	1.258	17	AVG
Acetone	0.578	0.405	0.394	0.417	0.310	0.364	0.411	22	AVG
Methyl Iodide	2.406	3.367	2.677	2.489	2.623	****	2.713	14	AVG
Carbon Disulfide	1.994	2.568	2.068	1.908	2.088	****	2.125	12	AVG
Isopropanol	0.749	0.453	0.407	0.413	0.455	0.441	0.486	27	AVG
Acetonitrile *	0.205	0.060	0.073	0.086	0.061	0.076	0.094	59	AVG *

* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.
\# Average RRF for all compounds must be greater than 0.010.

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:
RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d
RRF 70 = cj00329.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
3-Chloropropene	0.251	0.348	0.292	0.273	0.300	****	0.293	12	AVG
Methylene Chloride	0.584	0.859	0.652	0.589	0.596	0.568	0.641	17	AVG
tert-Butyl Alcohol	0.675	0.741	0.690	0.717	0.789	0.774	0.731	6	AVG
Acrylonitrile	****	0.232	0.199	0.237	0.184	0.253	0.221	13	AVG
trans-1,2-Dichloroethene	0.791	1.181	0.867	0.826	0.822	0.768	0.876	18	AVG
Methyl t-Butyl Ether	1.121	1.155	1.119	1.178	1.014	1.205	1.132	6	AVG
Hexane	0.426	0.803	0.647	0.645	0.665	0.661	0.641	19	AVG
1,1-Dichloroethane	0.969	1.443	1.094	1.067	0.984	0.929	1.081	17	AVG
Vinyl Acetate	0.094	0.076	0.109	0.133	0.108	0.156	0.113	25	AVG
Di-Isopropyl Ether	0.485	0.653	0.651	0.730	0.638	0.715	0.645	13	AVG
Ethyl Tert-Butyl Ether	0.726	0.797	0.893	0.999	0.923	1.061	0.900	14	AVG
cis-1,2-Dichloroethene	0.684	1.029	0.812	0.812	0.771	0.727	0.806	15	AVG
2-Butanone	0.234	0.176	0.193	0.209	0.171	0.215	0.200	12	AVG
Ethyl Acetate	0.094	0.070	0.088	0.103	0.081	0.109	0.091	16	AVG
Methyl Acrylate	0.598	0.433	0.479	0.551	0.425	0.551	0.506	14	AVG
Tetrahydrofuran	0.232	0.195	0.215	0.235	0.194	0.232	0.217	9	AVG
Chloroform	1.827	2.599	1.921	1.886	1.677	1.461	1.895	20	AVG
1,1,1-Trichloroethane	1.958	2.938	2.229	2.176	1.935	1.685	2.153	20	AVG
Cyclohexane	0.488	0.880	0.718	0.726	0.717	0.683	0.702	18	AVG
Carbon Tetrachloride	2.367	3.428	2.594	2.437	2.056	1.725	2.435	24	AVG
Benzene	0.544	0.811	0.584	0.601	0.620	0.512	0.612	17	AVG
1,2-Dichloroethane	0.351	0.477	0.343	0.347	0.332	0.279	0.355	18	AVG
Isooctane	0.344	0.708	0.568	0.625	0.666	0.543	0.576	22	AVG

* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.
\# Average RRF for all compounds must be greater than 0.010.

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:
RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d
RRF 70 = cj00329.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.289	0.334	0.316	0.345	0.352	0.372	0.335	9	AVG
Heptane	0.092	0.193	0.154	0.171	0.184	0.158	0.159	23	AVG
Trichloroethene	0.361	0.570	0.393	0.403	0.422	0.366	0.419	18	AVG
Ethyl Acrylate	0.189	0.164	0.159	0.178	0.168	0.173	0.172	6	AVG
1,2-Dichloropropane	0.158	0.206	0.164	0.178	0.162	0.150	0.170	12	AVG
Dibromomethane	0.448	0.530	0.383	0.389	0.398	0.356	0.417	15	AVG
1,4-Dioxane	0.143	0.116	0.112	0.119	0.135	****	0.125	11	AVG
Methyl Methacrylate	0.139	0.126	0.122	0.137	0.124	0.131	0.130	5	AVG
Bromodichloromethane	0.610	0.838	0.609	0.614	0.608	0.467	0.624	19	AVG
cis-1,3-Dichloropropene	0.270	0.362	0.317	0.362	0.359	0.322	0.332	11	AVG
4-Methyl-2-Pentanone	0.173	0.151	0.148	0.161	0.172	0.150	0.159	7	AVG
Toluene	0.730	0.857	0.763	0.892	0.778	0.665	0.781	11	AVG
Octane	0.108	0.202	0.215	0.249	0.255	0.205	0.206	26	AVG
trans-1,3-Dichloropropene	0.430	0.439	0.397	0.442	0.399	0.358	0.411	8	AVG
Ethyl Methacrylate	0.201	0.199	0.214	0.238	0.246	0.215	0.219	9	AVG
1,1,2-Trichloroethane	0.334	0.380	0.326	0.348	0.321	0.288	0.333	9	AVG
Tetrachloroethene	0.516	0.754	0.612	0.647	0.806	0.654	0.665	16	AVG
2-Hexanone	****	0.159	0.183	0.197	0.197	0.166	0.181	10	AVG
Dibromochloromethane	0.614	0.821	0.638	0.646	0.624	0.507	0.642	16	AVG
1,2-Dibromoethane	0.603	0.629	0.547	0.602	0.550	0.486	0.570	9	AVG
Chlorobenzene	0.790	0.861	0.763	0.804	0.771	0.669	0.776	8	AVG
1,1,1,2-Tetrachloroethane	0.476	0.561	0.477	0.498	0.461	0.431	0.484	9	AVG
Ethylbenzene	0.807	0.809	0.845	0.999	0.921	0.795	0.863	9	AVG

* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.
\# Average RRF for all compounds must be greater than 0.010.

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:
RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d
RRF 70 = cj00329.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
m/p-Xylene	0.666	0.654	0.675	0.792	0.754	0.739	0.713	8	AVG
o-Xylene	0.789	0.711	0.707	0.829	0.738	0.732	0.751	6	AVG
Styrene	0.680	0.641	0.629	0.741	0.683	0.664	0.673	6	AVG
Bromoform	0.854	0.907	0.812	0.866	0.811	0.724	0.829	8	AVG
Cumene	0.860	0.867	0.913	1.103	1.064	0.980	0.964	11	AVG
Bromobenzene	0.578	0.559	0.506	0.561	0.517	0.530	0.542	5	AVG
1,1,2,2-Tetrachloroethane	0.749	0.685	0.637	0.666	0.546	0.521	0.634	14	AVG
1,2,3-Trichloropropane	0.289	0.250	0.235	0.250	0.210	0.222	0.243	11	AVG
n-Propylbenzene	0.298	0.302	0.299	0.359	0.346	****	0.321	9	AVG
2-Chlorotoluene	0.331	0.363	0.345	0.388	0.354	****	0.356	6	AVG
4-Ethyltoluene	1.035	1.011	1.053	1.235	1.113	1.006	1.075	8	AVG
1,3,5-Trimethylbenzene	0.888	0.883	0.870	1.029	0.972	0.914	0.926	7	AVG
Alpha Methyl Styrene	0.495	0.469	0.513	0.572	0.578	****	0.525	9	AVG
tert-Butylbenzene	0.842	0.821	0.862	0.986	1.014	0.964	0.915	9	AVG
1,2,4-Trimethylbenzene	0.949	0.909	0.950	1.030	1.009	0.922	0.961	5	AVG
sec-Butylbenzene	1.195	1.159	1.182	1.384	1.432	****	1.270	10	AVG
1,3-Dichlorobenzene	1.047	0.995	0.931	0.960	0.919	0.866	0.953	7	AVG
1,4-Dichlorobenzene	1.102	1.002	0.975	1.032	0.984	0.915	1.002	6	AVG
p-Isopropyltoluene	1.101	1.073	1.087	1.288	1.295	1.101	1.158	9	AVG
Benzyl Chloride	1.085	0.841	0.916	0.980	0.923	0.944	0.948	9	AVG
1,2-Dichlorobenzene	0.994	0.897	0.876	0.932	0.885	0.834	0.903	6	AVG
n-Butylbenzene	1.007	0.857	0.859	0.996	1.054	0.885	0.943	9	AVG
Hexachloroethane	0.522	0.545	0.471	0.501	0.406	0.425	0.478	11	AVG

* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.
\# Average RRF for all compounds must be greater than 0.010.

FORM 06
VOLATILE ORGANICS IN AIR
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464 Calibration Start Date: 10/16/2015 Calibration End Date: 10/16/2015

Calibration Start Time: 01:09 Calibration End Time: 10:21

LAB FILE IDs:
RRF 1 = cj00337.d RRF 2 = cj00325.d RRF 5 = cj00326.d RRF 10 = cj00327.d RRF 25 = cj00328.d
RRF 70 = cj00329.d

COMPOUND	RFF 1	RFF 2	RFF 5	RFF 10	RFF 25	RFF 70	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.673	0.446	0.437	0.473	0.424	****	0.491	21	AVG
1,2,4-Trichlorobenzene	0.537	0.549	0.493	0.588	0.400	0.426	0.499	15	AVG
Hexachlorobutadiene	0.472	0.593	0.526	0.673	0.463	****	0.546	16	AVG
Naphthalene	1.197	1.059	1.012	1.150	0.742	****	1.032	17	AVG

Average % RSD: 14

* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.
\# Average RRF for all compounds must be greater than 0.010.

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 09464 LCS File ID: cj00340.d LCSD File ID: cj00341.d

Batch: C1528830AA LCS Injected: 10/16/2015 LCSD Injected: 10/16/2015

Method: EPA TO-15 LCS Client ID: LCSC06 LCSD Client ID: LCSDC06

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Propene	10.20	8.38	10.46	82	103	41-129	22	25	YES
Dichlorodifluoromethane	10.10	8.71	9.74	86	96	61-149	11	25	YES
Chlorodifluoromethane	10.70	8.60	9.76	80	91	70-130	13	25	YES
Freon 114	10.30	7.42	8.69	72	84	63-123	16	25	YES
Chloromethane	10.30	9.19	11.13	89	108	54-118	19	25	YES
Vinyl Chloride	10.10	8.26	10.06	82	100	70-130	20	25	YES
1,3-Butadiene	10.20	8.55	10.04	84	98	57-138	16	25	YES
Bromomethane	9.80	8.06	9.61	82	98	70-130	17	25	YES
Chloroethane	9.70	7.74	9.27	80	96	63-119	18	25	YES
Bromoethene	10.60	8.89	10.34	84	98	70-130	15	25	YES
Dichlorofluoromethane	10.50	8.32	9.60	79	91	70-130	14	25	YES
Trichlorofluoromethane	10.10	8.80	9.81	87	97	70-130	11	25	YES
Pentane	10.50	8.95	10.32	85	98	70-130	14	25	YES
Ethanol	5.80	3.73	4.27	64	74	10-175	14	25	YES
Acrolein	7.50	4.40	5.03	59	67	43-141	13	25	YES
1,1-Dichloroethene	10.00	8.40	9.72	84	97	61-128	15	25	YES
Freon 113	9.70	7.64	8.77	79	90	63-114	14	25	YES
Acetone	10.70	7.44	8.65	70	81	61-134	15	25	YES
Methyl Iodide	10.50	7.38	8.25	70	79	70-130	11	25	YES
Carbon Disulfide	10.00	7.80	8.89	78	89	55-121	13	25	YES
Isopropanol	9.60	6.68	8.05	70	84	55-152	19	25	YES
Acetonitrile	9.90	5.21	6.08	53 *	61 *	70-130	15	25	NO (2)
3-Chloropropene	11.00	8.29	9.27	75	84	70-130	11	25	YES
Methylene Chloride	11.00	8.29	9.34	75	85	70-130	12	25	YES
tert-Butyl Alcohol	11.00	8.64	9.98	79	91	70-130	14	25	YES
Acrylonitrile	10.50	6.70	7.78	64 *	74	70-130	15	25	NO (2)
trans-1,2-Dichloroethene	10.00	8.19	9.31	82	93	66-121	13	25	YES
Methyl t-Butyl Ether	10.20	7.76	9.17	76	90	52-129	17	25	YES
Hexane	10.20	8.41	9.45	82	93	63-117	12	25	YES
1,1-Dichloroethane	10.10	7.87	8.65	78	86	67-124	9	25	YES
Vinyl Acetate	7.60	4.92	6.43	65	85	45-162	26 *	25	NO
Di-Isopropyl Ether	10.40	8.22	9.71	79	93	70-130	17	25	YES
Ethyl Tert-Butyl Ether	10.10	8.25	9.61	82	95	70-130	15	25	YES
cis-1,2-Dichloroethene	10.50	8.36	9.37	80	89	65-121	11	25	YES
2-Butanone	10.40	8.12	9.57	78	92	60-135	16	25	YES
Ethyl Acetate	11.00	10.53	12.66	96	115	51-131	18	25	YES

COMMENTS:

(1) ME 10/21/15
(2) Advisory 10/21/15

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 09464 LCS File ID: cj00340.d LCSD File ID: cj00341.d

Batch: C1528830AA LCS Injected: 10/16/2015 LCSD Injected: 10/16/2015

Method: EPA TO-15 LCS Client ID: LCSC06 LCSD Client ID: LCSDC06

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Methyl Acrylate	10.40	7.60	8.82	73	85	70-130	15	25	YES
Tetrahydrofuran	10.00	7.83	9.08	78	91	53-134	15	25	YES
Chloroform	10.10	7.88	8.69	78	86	70-130	10	25	YES
1,1,1-Trichloroethane	10.30	8.45	9.09	82	88	70-130	7	25	YES
Cyclohexane	10.30	9.01	10.02	88	97	63-123	11	25	YES
Carbon Tetrachloride	10.40	9.16	9.64	88	93	70-130	5	25	YES
Benzene	10.60	7.83	9.41	74	89	70-130	18	25	YES
1,2-Dichloroethane	10.40	7.85	9.27	75	89	70-130	17	25	YES
Isooctane	10.50	8.69	10.08	83	96	70-130	15	25	YES
Tert-Amyl Methyl Ether	10.70	8.63	10.65	81	100	70-130	21	25	YES
Heptane	10.50	8.48	10.20	81	97	56-123	18	25	YES
Trichloroethene	10.30	7.82	9.09	76	88	70-130	15	25	YES
Ethyl Acrylate	10.80	8.60	10.25	80	95	70-130	17	25	YES
1,2-Dichloropropane	10.30	7.60	9.28	74	90	70-130	20	25	YES
Dibromomethane	10.50	7.58	8.78	72	84	70-130	15	25	YES
1,4-Dioxane	10.30	8.09	10.31	79	100	43-149	24	25	YES
Methyl Methacrylate	10.10	7.91	9.40	78	93	59-146	17	25	YES
Bromodichloromethane	10.30	8.03	9.41	78	91	62-129	16	25	YES
cis-1,3-Dichloropropene	9.50	6.47	8.00	68	84	64-136	21	25	YES
4-Methyl-2-Pentanone	10.20	8.34	10.02	82	98	53-140	18	25	YES
Toluene	10.60	8.13	10.07	77	95	70-130	21	25	YES
Octane	10.30	8.82	10.64	86	103	70-130	19	25	YES
trans-1,3-Dichloropropene	10.10	6.98	8.84	69	88	61-126	24	25	YES
Ethyl Methacrylate	10.10	8.40	10.85	83	107	70-130	25 *	25	NO
1,1,2-Trichloroethane	10.60	7.99	9.84	75	93	59-131	21	25	YES
Tetrachloroethene	10.70	7.32	8.81	68 *	82	70-130	19	25	NO (1)
2-Hexanone	10.90	8.76	11.01	80	101	47-150	23	25	YES
Dibromochloromethane	9.80	7.84	9.39	80	96	65-127	18	25	YES
1,2-Dibromoethane	10.00	7.18	8.95	72	89	65-126	22	25	YES
Chlorobenzene	10.60	7.84	9.84	74	93	70-130	23	25	YES
1,1,1,2-Tetrachloroethane	10.60	7.87	9.50	74	90	70-130	19	25	YES
Ethylbenzene	10.60	8.28	9.92	78	94	70-130	18	25	YES
m/p-Xylene	9.80	7.38	9.11	75	93	70-130	21	25	YES
o-Xylene	10.70	8.00	9.84	75	92	70-130	21	25	YES
Xylene (total)	20.50	15.38	18.95	75	92	70-130	21	25	YES
Styrene	10.40	7.82	9.70	75	93	64-130	21	25	YES

COMMENTS:

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FORM 03
VOLATILE ORGANICS IN AIR
LABORATORY CONTROL SAMPLE RECOVERY

SDG No.:

Instrument ID: 09464 LCS File ID: cj00340.d LCSD File ID: cj00341.d

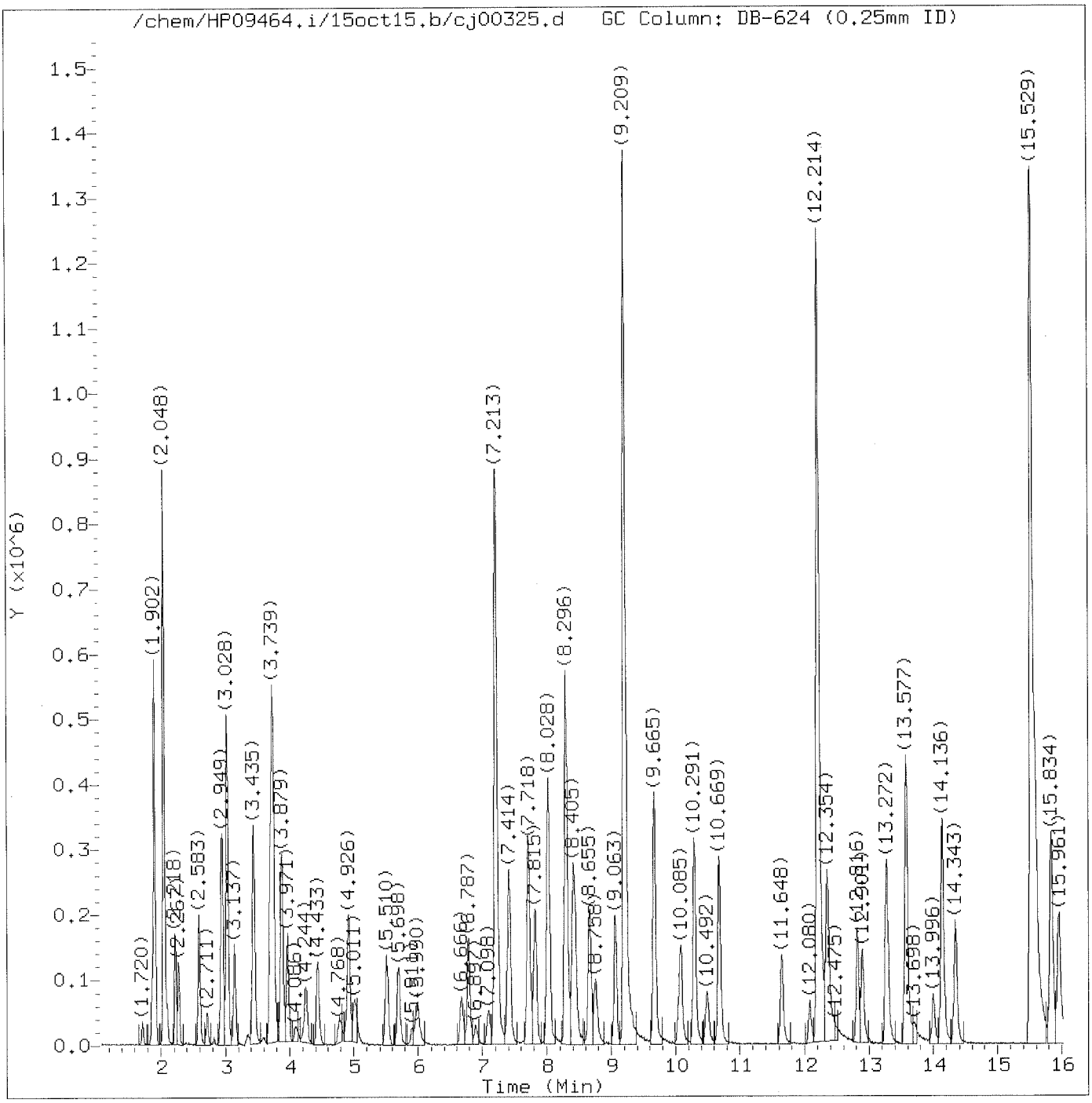
Batch: C1528830AA LCS Injected: 10/16/2015 LCSD Injected: 10/16/2015

Method: EPA TO-15 LCS Client ID: LCSC06 LCSD Client ID: LCSDC06

Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb(v))	LCSD CONC. (ppb(v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Bromoform	10.00	7.51	9.15	75	91	64-141	20	25	YES
Cumene	10.40	7.98	9.93	77	96	70-130	22	25	YES
Bromobenzene	10.60	7.71	9.38	73	88	70-130	20	25	YES
1,1,2,2-Tetrachloroethane	10.70	7.81	9.66	73	90	58-133	21	25	YES
1,2,3-Trichloropropane	10.20	7.59	9.15	74	90	70-130	19	25	YES
n-Propylbenzene	10.00	7.65	9.30	76	93	70-130	20	25	YES
2-Chlorotoluene	10.30	7.84	9.62	76	93	70-130	20	25	YES
4-Ethyltoluene	10.10	8.05	9.78	80	97	59-126	19	25	YES
1,3,5-Trimethylbenzene	10.30	7.88	9.77	77	95	61-132	21	25	YES
Alpha Methyl Styrene	9.90	7.48	8.73	76	88	70-130	15	25	YES
tert-Butylbenzene	10.20	7.39	8.74	72	86	70-130	17	25	YES
1,2,4-Trimethylbenzene	10.20	7.99	9.55	78	94	60-128	18	25	YES
sec-Butylbenzene	10.10	7.36	8.89	73	88	70-130	19	25	YES
1,3-Dichlorobenzene	10.50	7.71	9.28	73	88	63-125	19	25	YES
1,4-Dichlorobenzene	10.20	7.35	8.81	72	86	63-127	18	25	YES
p-Isopropyltoluene	10.10	7.70	9.34	76	92	70-130	19	25	YES
Benzyl Chloride	8.50	5.94	7.43	70	87	50-160	22	25	YES
1,2-Dichlorobenzene	10.10	7.14	8.95	71	89	62-132	23	25	YES
n-Butylbenzene	10.20	7.16	8.70	70	85	70-130	19	25	YES
Hexachloroethane	10.90	7.79	9.27	71	85	70-130	17	25	YES
1,2-Dibromo-3-chloropropane	9.60	5.45	7.02	57 *	73	70-130	25 *	25	NO
1,2,4-Trichlorobenzene	9.60	4.11	6.91	43	72	37-119	51 *	25	NO
Hexachlorobutadiene	9.90	4.45	7.26	45	73	43-120	48 *	25	NO
Naphthalene	10.40	4.27	7.02	41	68	35-153	49 *	25	NO

COMMENTS:



Total Ion Chromatogram (TIC)

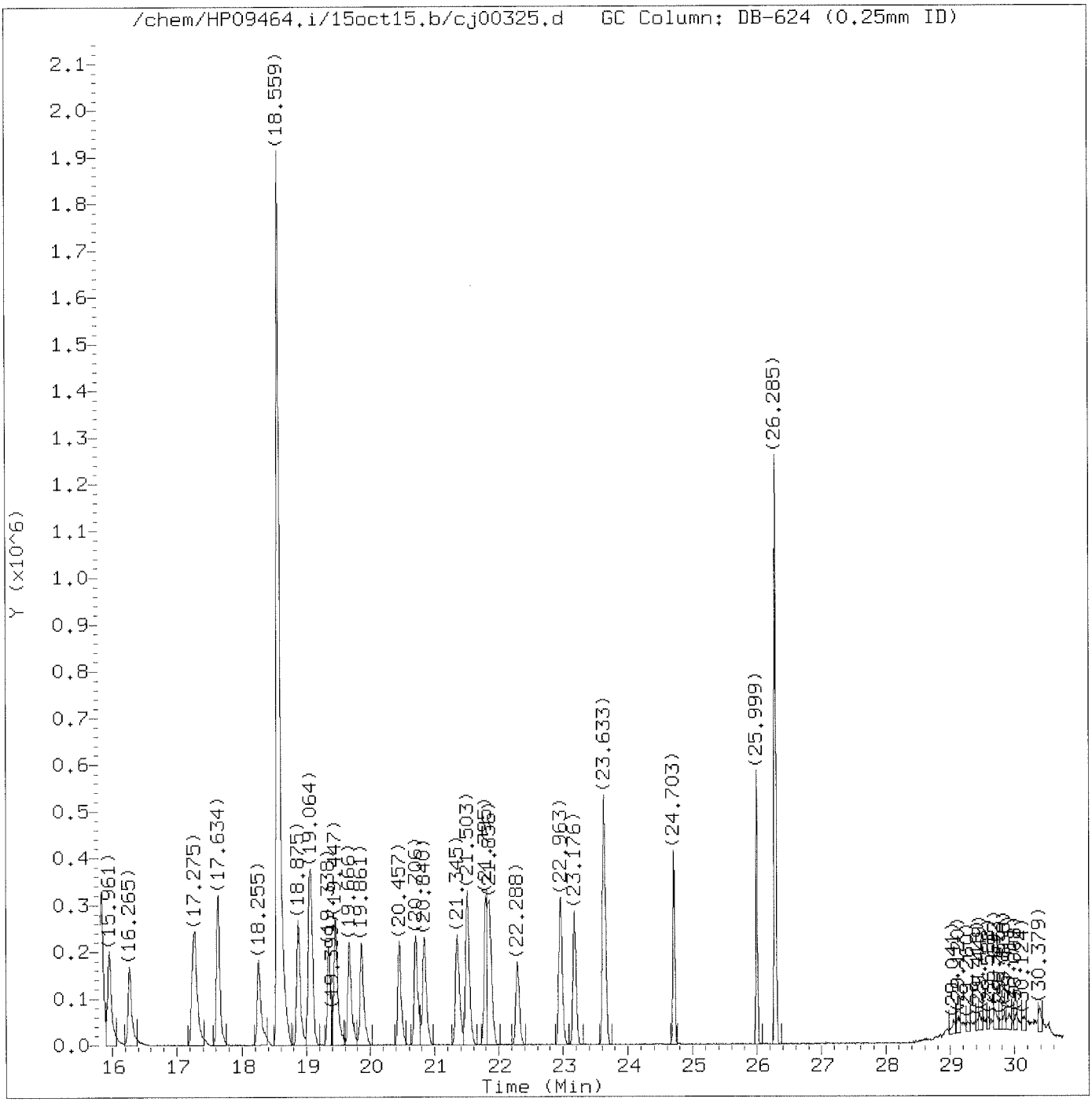
Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 0i:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	38690	2.398
2) Dichlorodifluoromethane	(1)	1.902	85	505249	2.529
3) Chlorodifluoromethane	(1)	1.914	51	172458	2.701
4) Freon 114	(1)	2.048	85	439879	2.447
5) Chloromethane	(1)	2.097	52	24292	2.562
6) Vinyl Chloride	(1)	2.218	62	106378	2.514
7) 1,3-Butadiene	(1)	2.267	54	67133	2.577
8) Bromomethane	(1)	2.590	94	153671	2.493
9) Chloroethane	(1)	2.717	64	55725	2.330
10) Bromoethene	(1)	2.936	106	149278	2.549
11) Dichlorofluoromethane	(1)	2.955	67	307496	2.755
12) Trichlorofluoromethane	(1)	3.028	101	585789	2.720
13) Pentane	(1)	3.143	43	95173	2.600
14) Ethanol	(1)	3.344	45	19413	2.250
15) Freon123a	(1)	3.435	67	226131	2.876
16) Acrolein	(1)	3.587	56	15839	1.965
17) 1,1-Dichloroethene	(1)	3.697	61	196185	2.795
18) Freon 113	(1)	3.733	103	236403	2.768
19) Acetone	(1)	3.825	43	57772	2.069
20) Methyl Iodide	(1)	3.885	142	480062	2.607
21) Carbon Disulfide	(1)	3.971	76	348636	2.416
22) Isopropanol	(1)	4.092	45	71398	2.163
23) Acetonitrile	(1)	4.208	40	8949M	1.409
24) 3-Chloropropene	(1)	4.250	76	51968	2.612
25) Methylene Chloride	(1)	4.433	84	128251	2.945
26) tert-Butyl Alcohol	(1)	4.786	59	112635	2.270
27) Acrylonitrile	(1)	4.883	53	33018	2.201
28) trans-1,2-Dichloroethene	(1)	4.926	61	157209	2.644
29) Methyl t-Butyl Ether	(1)	5.023	73	163144	2.123
30) Hexane	(1)	5.510	57	110055	2.528
31) 1,1-Dichloroethane	(1)	5.704	63	201859	2.751
32) Vinyl Acetate	(1)	5.905	86	11414	1.494
33) Di-Isopropyl Ether	(1)	5.996	45	91307	2.084
36) 1,2-Dichloroethene (total)	(1)		61	301108	5.274
34) Ethyl Tert-Butyl Ether	(1)	6.666	59	110447	1.808
35) cis-1,2-Dichloroethene	(1)	6.781	61	143899	2.630
37) 2-Butanone	(1)	6.897	72	25161	1.855
38) Ethyl Acetate	(1)	7.085	70	9800	1.590

M = Compound was manually integrated.

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on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.110	55	60621	1.764
40)*Bromochloromethane	(1)	7.213	130	678891	10.000
41) Tetrahydrofuran	(1)	7.383	42	27844	1.889
42) Chloroform	(1)	7.408	83	363473	2.825
43) 1,1,1-Trichloroethane	(1)	7.718	97	410868	2.810
44) Cyclohexane	(1)	7.821	56	121920	2.558
45) Carbon Tetrachloride	(1)	8.022	117	488738	2.957
46) Benzene	(2)	8.405	78	353029	2.783
47) 1,2-Dichloroethane	(2)	8.442	62	205820	2.798
48) Isooctane	(2)	8.661	57	314232	2.633
49) Tert-Amyl Methyl Ether	(2)	8.764	73	142725	2.058
50) Heptane	(2)	9.056	43	83172	2.529
51)*1,4-Difluorobenzene	(2)	9.209	114	2072547	10.000
52) Trichloroethene	(2)	9.659	130	238618	2.748
53) Ethyl Acrylate	(2)	10.036	55	72618	2.039
54) 1,2-Dichloropropane	(2)	10.085	63	87935	2.500
55) Dibromomethane	(2)	10.291	174	226200	2.615
56) 1,4-Dioxane	(2)	10.492	88	48731	1.882
57) Methyl Methacrylate	(2)	10.492	69	53399	1.985
58) Bromodichloromethane	(2)	10.675	83	350932	2.712
59) cis-1,3-Dichloropropene	(2)	11.648	75	164967	2.397
60) 4-Methyl-2-Pentanone	(2)	12.080	43	63098	1.911
61) Toluene	(3)	12.354	91	331965	2.261
64) 1,3-Dichloropropene (total)	(3)		75	331597	4.555
62) Octane	(3)	12.816	43	79136	2.045
63) trans-1,3-Dichloropropene	(3)	12.895	75	166630	2.158
65) Ethyl Methacrylate	(3)	13.278	69	77108	1.873
66) 1,1,2-Trichloroethane	(3)	13.278	97	147255	2.352
67) Tetrachloroethene	(3)	13.577	166	278035	2.224
68) 2-Hexanone	(3)	13.996	43	65128	1.917
69) Dibromochloromethane	(3)	14.136	127	315059	2.611
70) 1,2-Dibromoethane	(3)	14.343	107	241211	2.252
71)*Chlorobenzene-d5	(3)	15.529	117	1880680	10.000
72) Chlorobenzene	(3)	15.590	112	340112	2.329
73) 1,1,1,2-Tetrachloroethane	(3)	15.846	131	221503	2.434
74) Ethylbenzene	(3)	15.955	91	316457	1.951
75) m/p-Xylene	(3)	16.272	91	236263	1.761
77) Xylene (total)	(3)		91	508882	3.691

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.245	91	272619	1.931
78) Styrene	(3)	17.281	104	241026	1.904
79) Bromoform	(3)	17.634	173	334259	2.144
80) Cumene	(3)	18.255	105	332753	1.835
81) Bromobenzene	(3)	18.869	156	220779	2.167
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	262714	2.203
83) 1,2,3-Trichloropropane	(3)	19.076	110	97932	2.146
84) n-Propylbenzene	(3)	19.338	120	112296	1.863
85) 2-Chlorotoluene	(3)	19.447	126	140480	2.098
86) 4-Ethyltoluene	(3)	19.678	105	384102	1.899
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	332226	1.908
88) Alpha Methyl Styrene	(3)	20.451	118	181751	1.839
89) tert-Butylbenzene	(3)	20.706	119	312002	1.813
90) 1,2,4-Trimethylbenzene	(3)	20.840	105	345467	1.911
91) sec-Butylbenzene	(3)	21.345	105	440336	1.843
92) 1,3-Dichlorobenzene	(3)	21.503	146	389331	2.171
93) 1,4-Dichlorobenzene	(3)	21.802	146	377046	2.002
94) p-Isopropyltoluene	(3)	21.856	119	415653	1.909
95) Benzyl Chloride	(3)	22.288	91	329092	2.022
96) 1,2-Dichlorobenzene	(3)	22.957	146	340610	2.006
97) n-Butylbenzene	(3)	23.176	91	338637	1.909
98) Hexachloroethane	(3)	23.633	117	215080	2.392
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	175982	1.907
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	202430	2.158
101) Hexachlorobutadiene	(3)	26.285	225	223168	2.175
102) Naphthalene	(3)	26.297	128	430091	2.216

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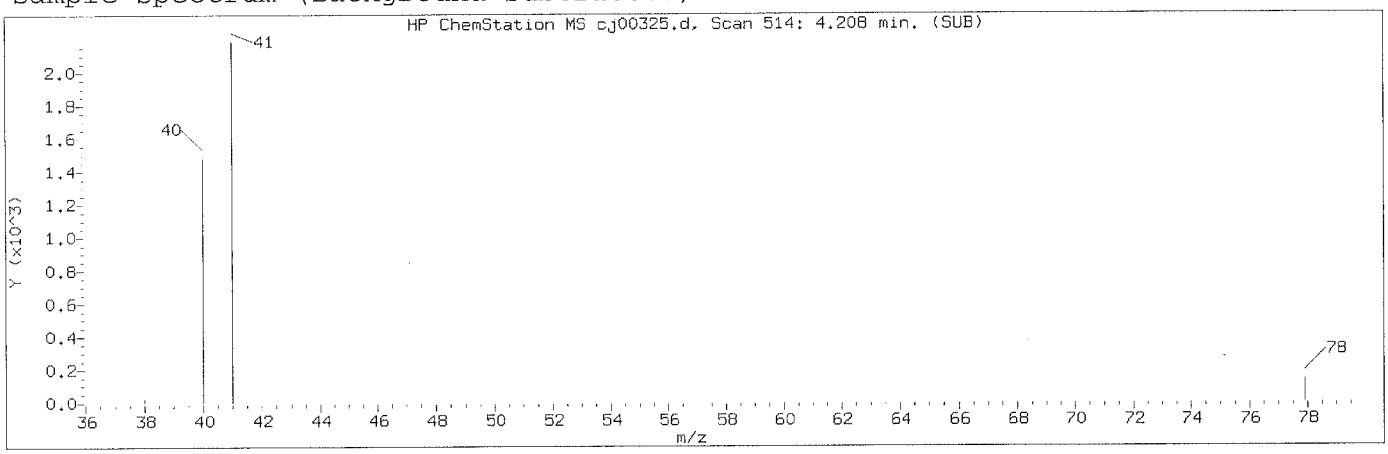
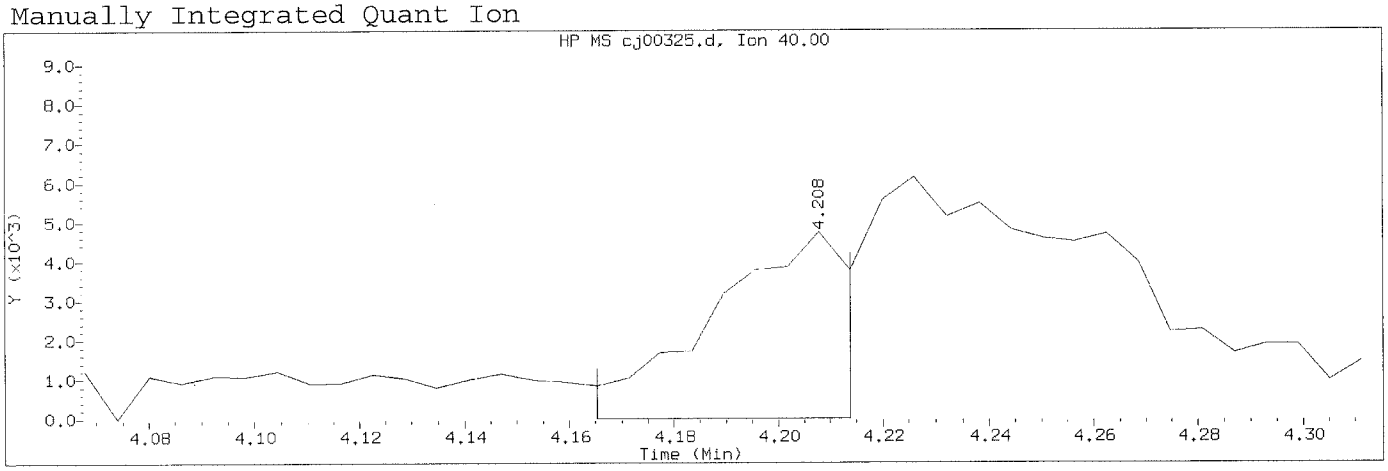
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD002 Lab Sample ID: VSTD002

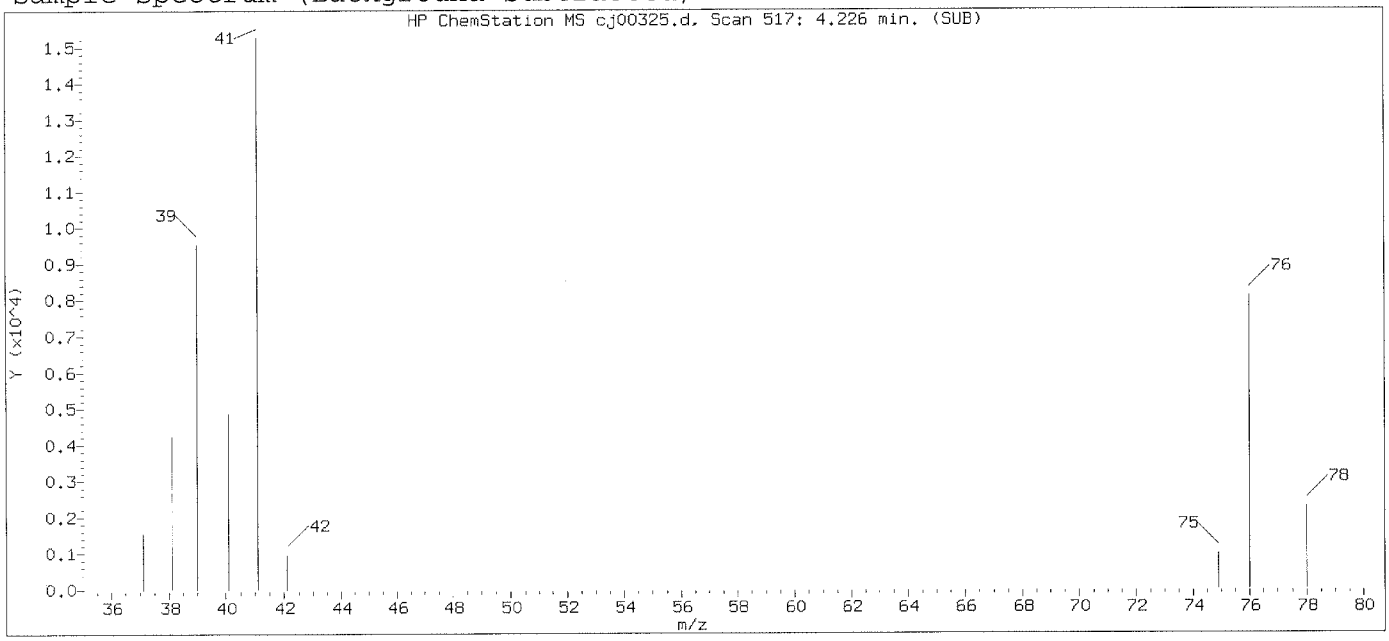
Compound Number	: 23		
Compound Name	: Acetonitrile		
Scan Number	: 514		
Retention Time (minutes)	: 4.208		
Quant Ion	: 40.00		
Area (flag)	: 8949M		
Concentration (ppb(v))	: 1.4085		
Integration start scan	: 506	Integration stop scan:	514
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

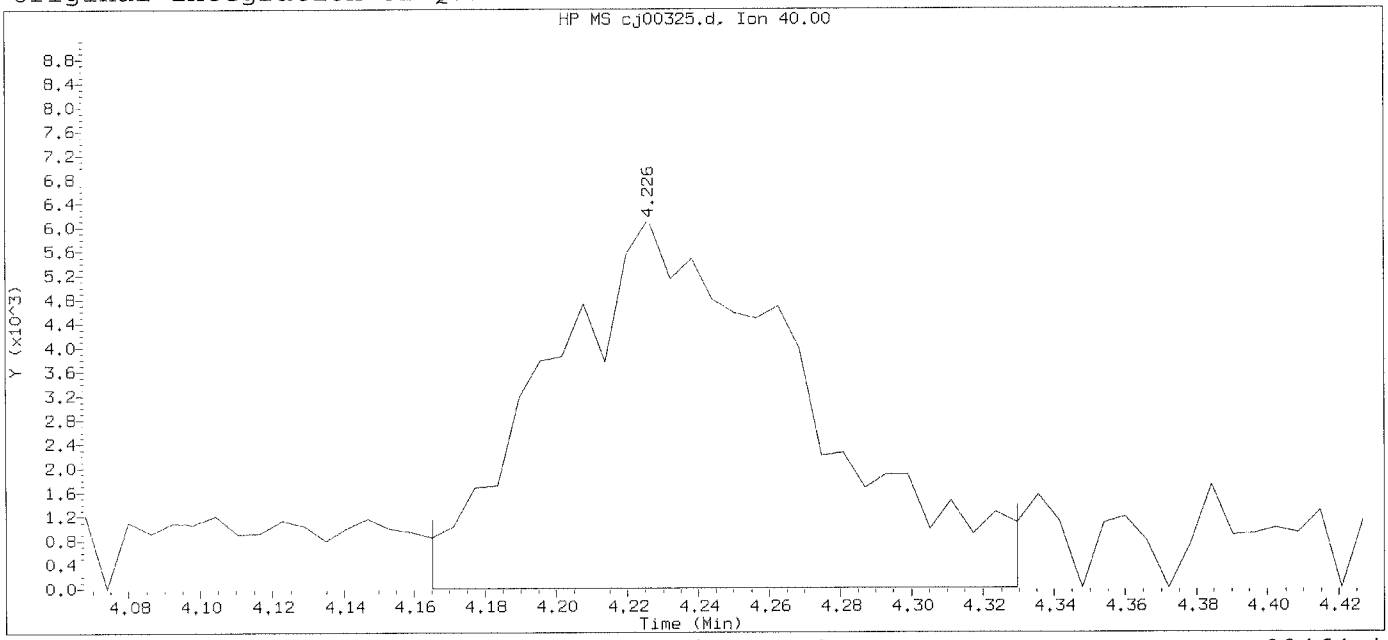
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgo1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00325.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 01:49 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number	: 23		
Compound Name	: Acetonitrile		
Scan Number	: 517		
Retention Time (minutes)	: 4.226		
Quant Ion	: 40.00		
Area	: 30607		
Concentration (ppb(v))	: 3.0300		
Integration start scan	: 506	Integration stop scan:	533
Y at integration start	: 0	Y at integration end:	0

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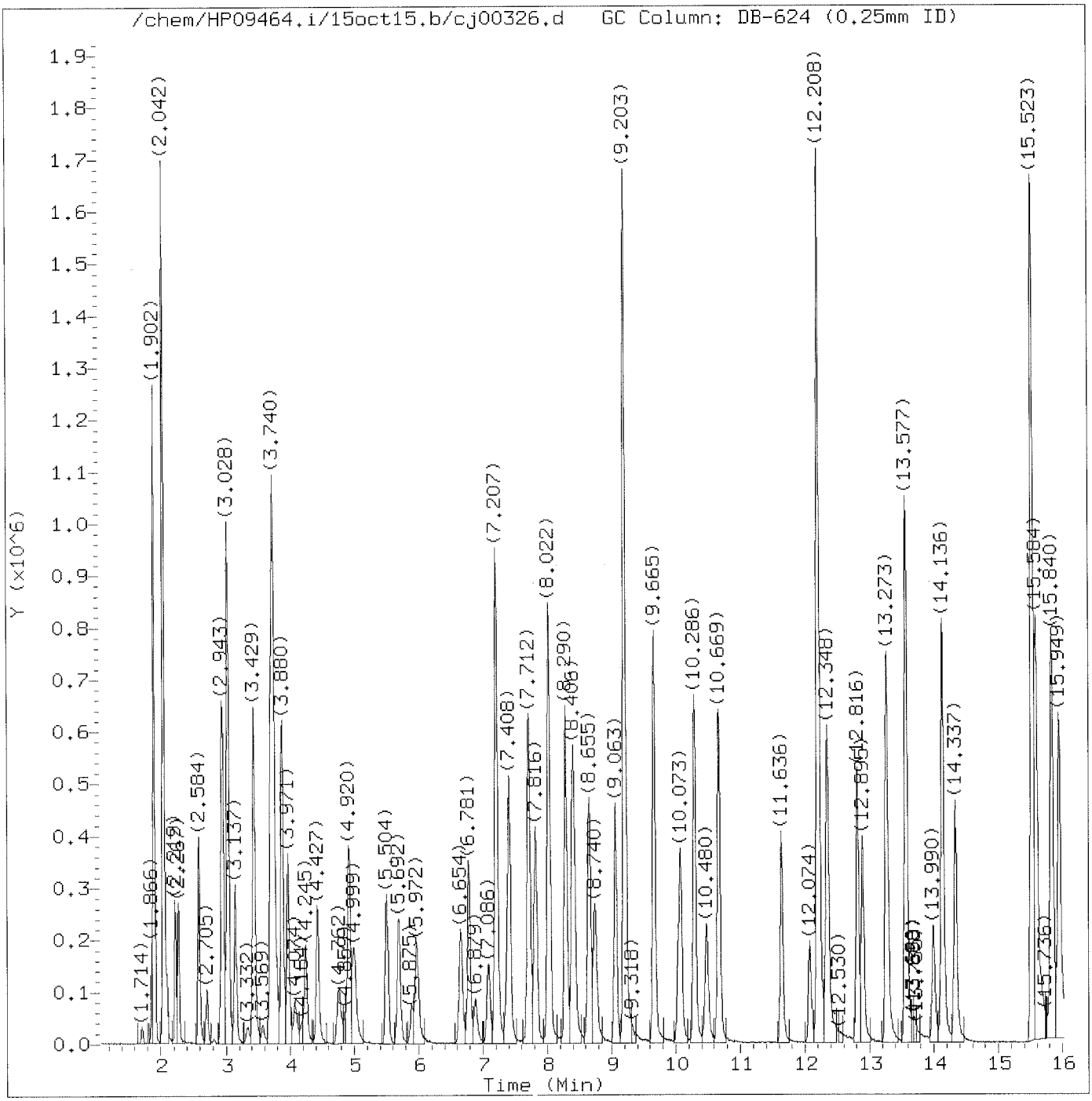
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:51 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

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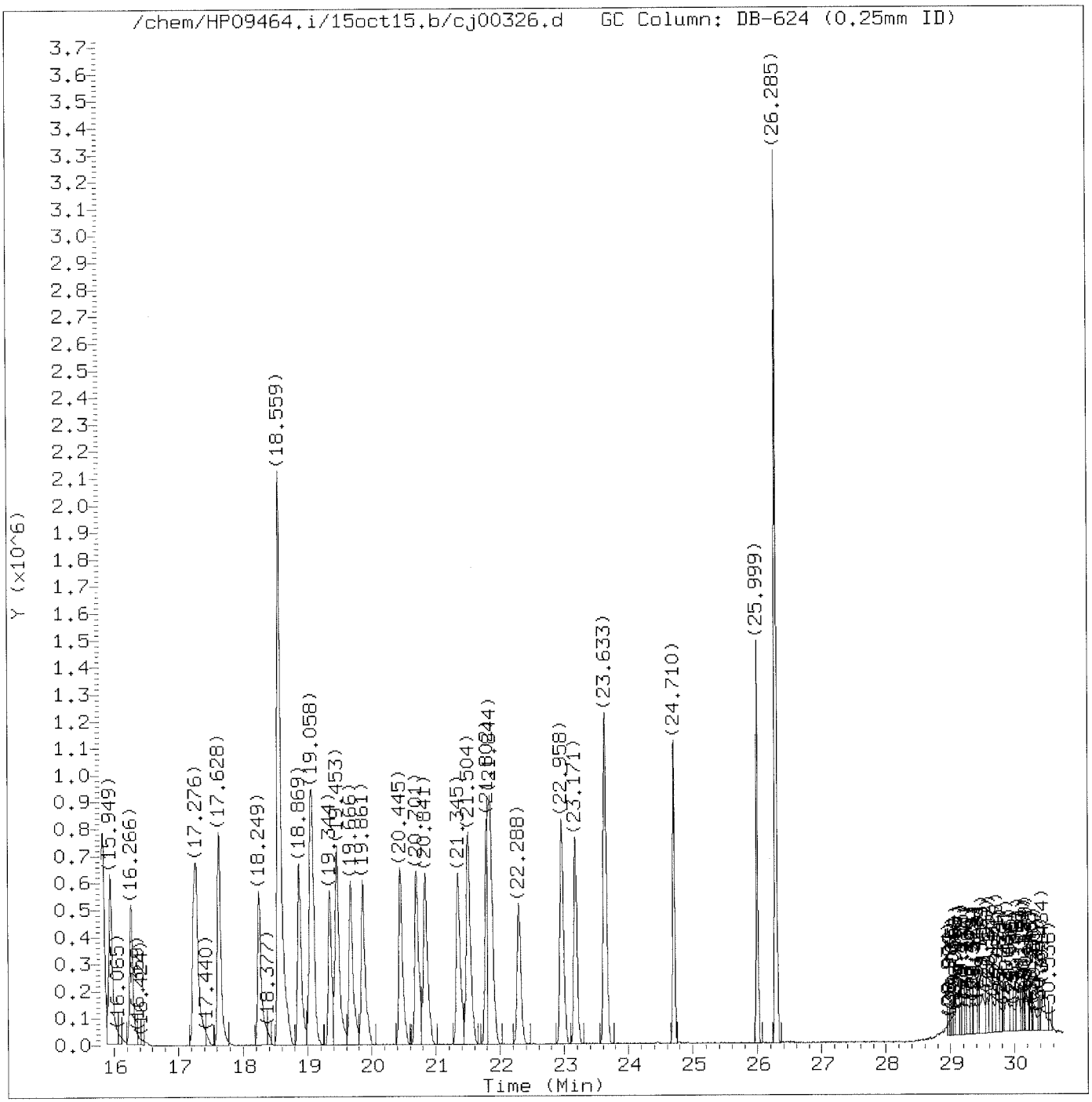
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:51 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d
Injection date and time: 16-OCT-2015 01:51
Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 17:40
Sublist used: all
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005
Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	86160	5.107
2) Dichlorodifluoromethane	(1)	1.902	85	1043620	4.995
3) Chlorodifluoromethane	(1)	1.915	51	341106	5.108
4) Freon 114	(1)	2.042	85	889126	4.729
5) Chloromethane	(1)	2.091	52	48233	4.863
6) Vinyl Chloride	(1)	2.219	62	216592	4.894
7) 1,3-Butadiene	(1)	2.267	54	142001	5.212
8) Bromomethane	(1)	2.584	94	312811	4.853
9) Chloroethane	(1)	2.711	64	116708	4.666
10) Bromoethene	(1)	2.930	106	310780	5.075
11) Dichlorofluoromethane	(1)	2.949	67	609612	5.223
12) Trichlorofluoromethane	(1)	3.022	101	1179737	5.237
13) Pentane	(1)	3.137	43	198149	5.175
14) Ethanol	(1)	3.314	45	45513	5.045
15) Freon123a	(1)	3.429	67	441855	5.374
16) Acrolein	(1)	3.569	56	42066	4.989
17) 1,1-Dichloroethene	(1)	3.697	61	390038	5.313
18) Freon 113	(1)	3.740	103	466828	5.227
19) Acetone	(1)	3.807	43	146921	5.032
20) Methyl Iodide	(1)	3.880	142	997892	5.181
21) Carbon Disulfide	(1)	3.971	76	734290	4.866
22) Isopropanol	(1)	4.074	45	167564	4.854
23) Acetonitrile	(1)	4.178	40	28527M	4.293
24) 3-Chloropropene	(1)	4.238	76	114167	5.486
25) Methylene Chloride	(1)	4.427	84	254796	5.595
26) tert-Butyl Alcohol	(1)	4.768	59	274330	5.285
27) Acrylonitrile	(1)	4.859	53	74203	4.730
28) trans-1,2-Dichloroethene	(1)	4.926	61	301654	4.851
29) Methyl t-Butyl Ether	(1)	4.993	73	413252	5.141
30) Hexane	(1)	5.504	57	231975	5.095
31) 1,1-Dichloroethane	(1)	5.686	63	399964	5.211
32) Vinyl Acetate	(1)	5.893	86	42383	5.304
33) Di-Isopropyl Ether	(1)	5.966	45	238083	5.197
36) 1,2-Dichloroethene (total)	(1)		61	598740	10.043
34) Ethyl Tert-Butyl Ether	(1)	6.654	59	323184	5.059
35) cis-1,2-Dichloroethene	(1)	6.781	61	297086	5.192
37) 2-Butanone	(1)	6.879	72	71806	5.063
38) Ethyl Acetate	(1)	7.079	70	32033	4.969

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:51 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.098	55	175146	4.873
40)*Bromochloromethane	(1)	7.207	130	710013	10.000
41) Tetrahydrofuran	(1)	7.365	42	80212	5.202
42) Chloroform	(1)	7.414	83	702277	5.219
43) 1,1,1-Trichloroethane	(1)	7.712	97	814910	5.330
44) Cyclohexane	(1)	7.816	56	260144	5.218
45) Carbon Tetrachloride	(1)	8.022	117	966822	5.593
46) Benzene	(2)	8.400	78	741151	5.010
47) 1,2-Dichloroethane	(2)	8.430	62	431040	5.024
48) Isooctane	(2)	8.655	57	735120	5.281
49) Tert-Amyl Methyl Ether	(2)	8.746	73	393242	4.862
50) Heptane	(2)	9.063	43	193820	5.053
51)*1,4-Difluorobenzene	(2)	9.203	114	2416994	10.000
52) Trichloroethene	(2)	9.665	130	479301	4.733
53) Ethyl Acrylate	(2)	10.030	55	205364	4.945
54) 1,2-Dichloropropane	(2)	10.073	63	204223	4.978
55) Dibromomethane	(2)	10.286	174	476863	4.728
56) 1,4-Dioxane	(2)	10.456	88	136187	4.509
57) Methyl Methacrylate	(2)	10.492	69	150636	4.801
58) Bromodichloromethane	(2)	10.669	83	743553	4.927
59) cis-1,3-Dichloropropene	(2)	11.636	75	421832	5.256
60) 4-Methyl-2-Pentanone	(2)	12.074	43	180958	4.699
61) Toluene	(3)	12.348	91	836866	5.033
64) 1,3-Dichloropropene (total)	(3)		75	848900	10.140
62) Octane	(3)	12.816	43	238001	5.432
63) trans-1,3-Dichloropropene	(3)	12.889	75	427068	4.885
65) Ethyl Methacrylate	(3)	13.260	69	235151	5.044
66) 1,1,2-Trichloroethane	(3)	13.273	97	357876	5.048
67) Tetrachloroethene	(3)	13.577	166	638759	4.512
68) 2-Hexanone	(3)	13.990	43	212864	5.534
69) Dibromochloromethane	(3)	14.136	127	692872	5.071
70) 1,2-Dibromoethane	(3)	14.337	107	593557	4.894
71)*Chlorobenzene-d5	(3)	15.523	117	2129391	10.000
72) Chlorobenzene	(3)	15.590	112	853148	5.160
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	532695	5.170
74) Ethylbenzene	(3)	15.949	91	936142	5.096
75) m/p-Xylene	(3)	16.266	91	690266	4.544
77) Xylene (total)	(3)		91	1457676	9.343

* = Compound is an internal standard.

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on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00326.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:51 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76)	o-Xylene	(3)	17.239	91	767410	4.800
78)	Styrene	(3)	17.282	104	669466	4.671
79)	Bromoform	(3)	17.628	173	847361	4.800
80)	Cumene	(3)	18.249	105	991314	4.827
81)	Bromobenzene	(3)	18.869	156	565124	4.900
82)	1,1,2,2-Tetrachloroethane	(3)	19.046	83	692213	5.126
83)	1,2,3-Trichloropropane	(3)	19.076	110	259706	5.026
84)	n-Propylbenzene	(3)	19.338	120	315035	4.615
85)	2-Chlorotoluene	(3)	19.460	126	378093	4.987
86)	4-Ethyltoluene	(3)	19.666	105	1132641	4.946
87)	1,3,5-Trimethylbenzene	(3)	19.861	105	926274	4.698
88)	Alpha Methyl Styrene	(3)	20.451	118	562454	5.027
89)	tert-Butylbenzene	(3)	20.701	119	926700	4.757
90)	1,2,4-Trimethylbenzene	(3)	20.834	105	1021283	4.989
91)	sec-Butylbenzene	(3)	21.345	105	1271329	4.700
92)	1,3-Dichlorobenzene	(3)	21.504	146	1031398	5.081
93)	1,4-Dichlorobenzene	(3)	21.796	146	1037837	4.866
94)	p-Isopropyltoluene	(3)	21.856	119	1191899	4.835
95)	Benzyl Chloride	(3)	22.294	91	1014471	5.505
96)	1,2-Dichlorobenzene	(3)	22.958	146	942207	4.901
97)	n-Butylbenzene	(3)	23.171	91	959848	4.779
98)	Hexachloroethane	(3)	23.633	117	526107	5.167
99)	1,2-Dibromo-3-chloropropane	(3)	24.710	157	488890	4.680
100)	1,2,4-Trichlorobenzene	(3)	25.999	180	514515	4.844
101)	Hexachlorobutadiene	(3)	26.279	225	560207	4.822
102)	Naphthalene	(3)	26.291	128	1163777	5.296

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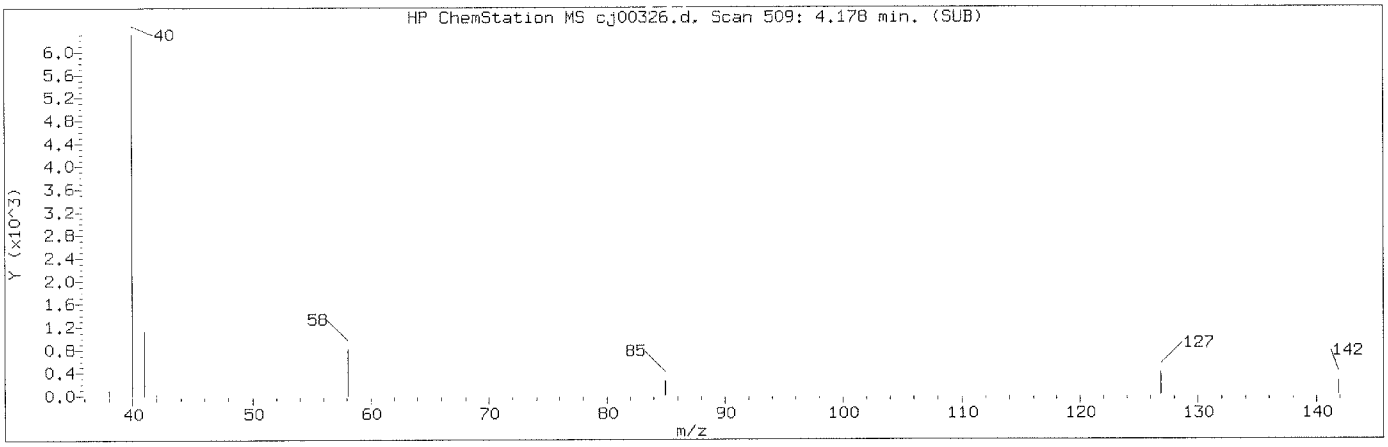
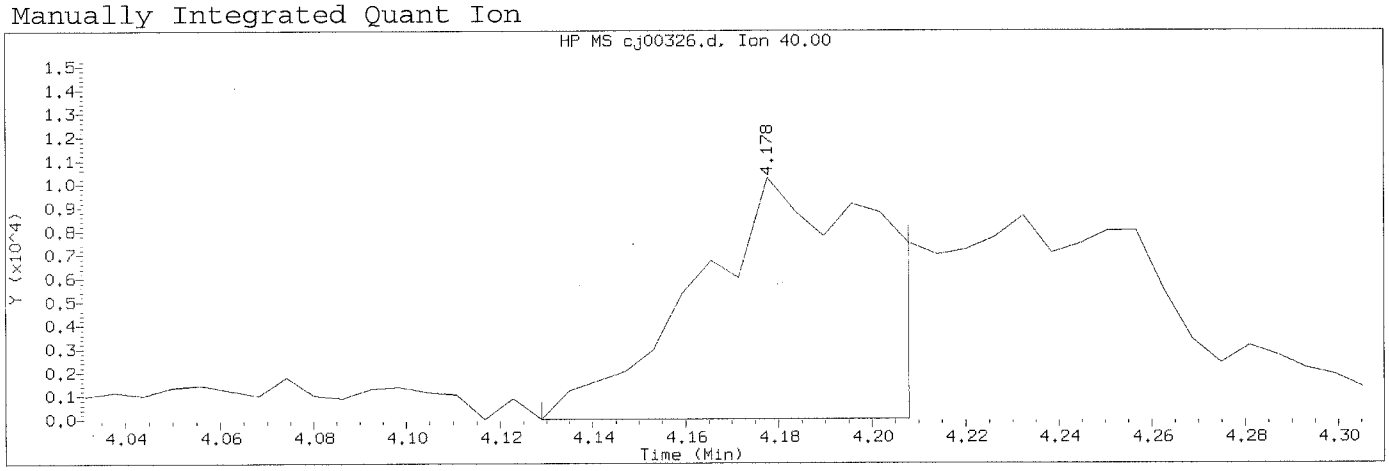
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00326.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:51 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD005 Lab Sample ID: VSTD005

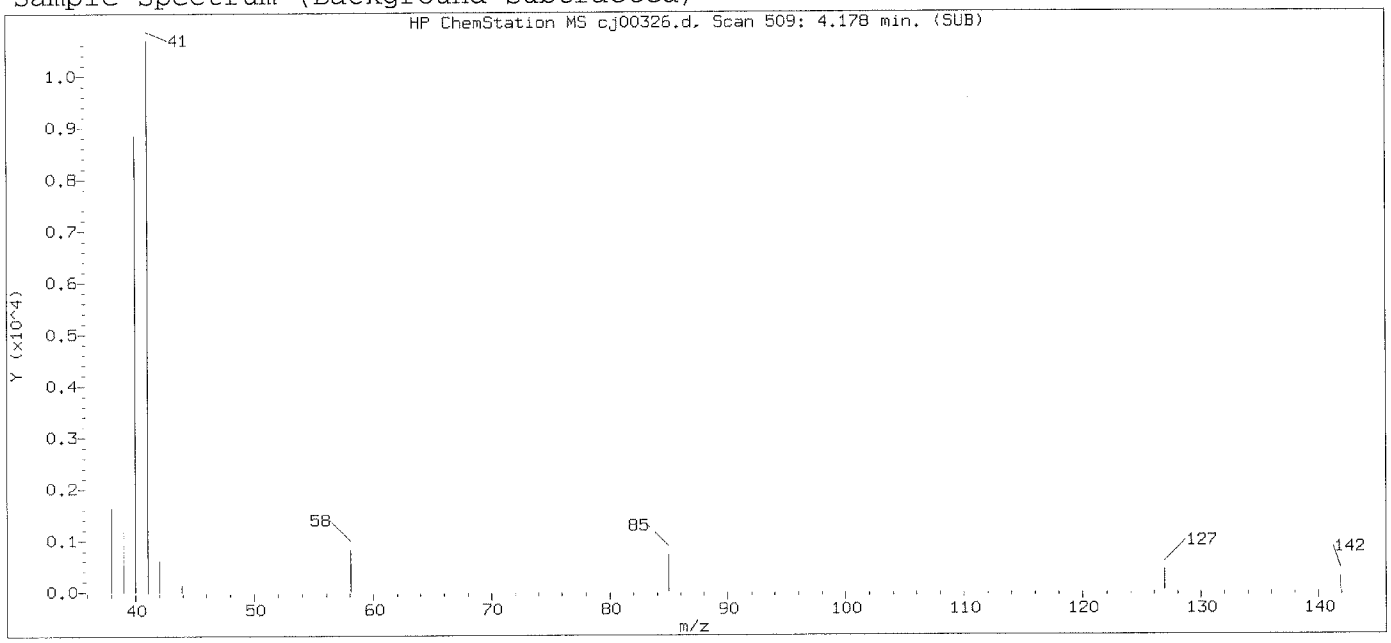
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 509
Retention Time (minutes): 4.178
Quant Ion : 40.00
Area (flag) : 28527M
Concentration (ppb(v)) : 4.2931
Integration start scan : 500 Integration stop scan: 513
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

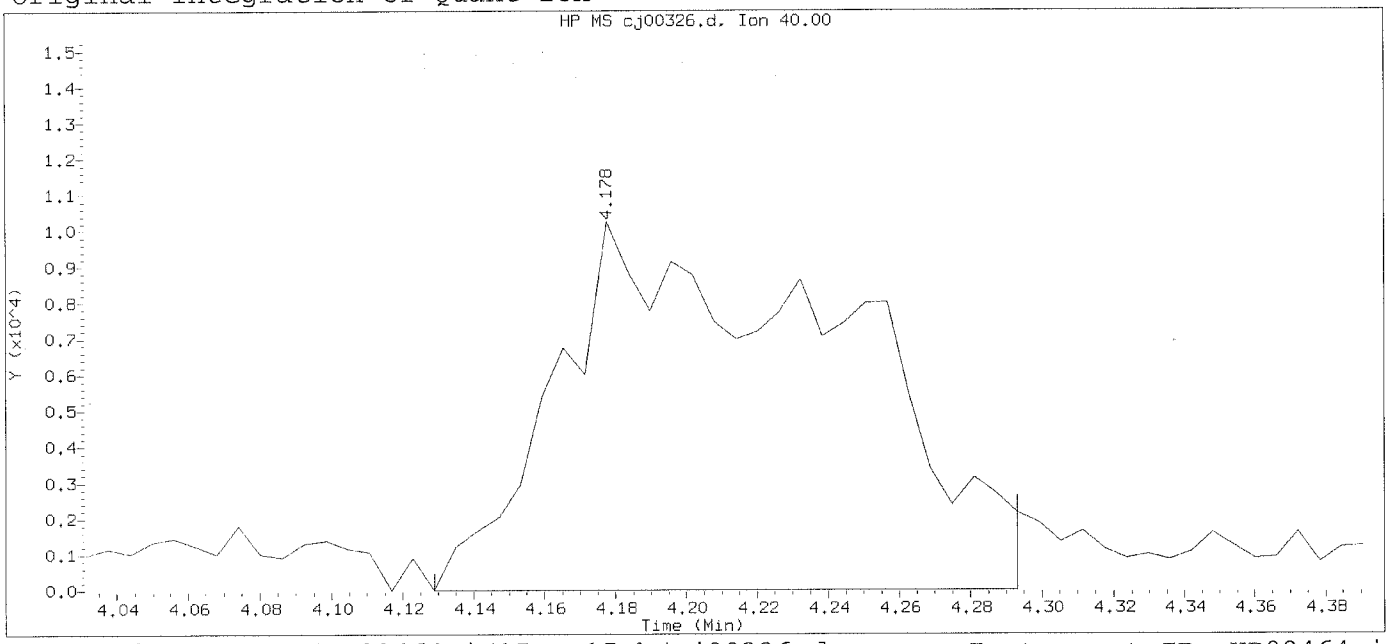
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



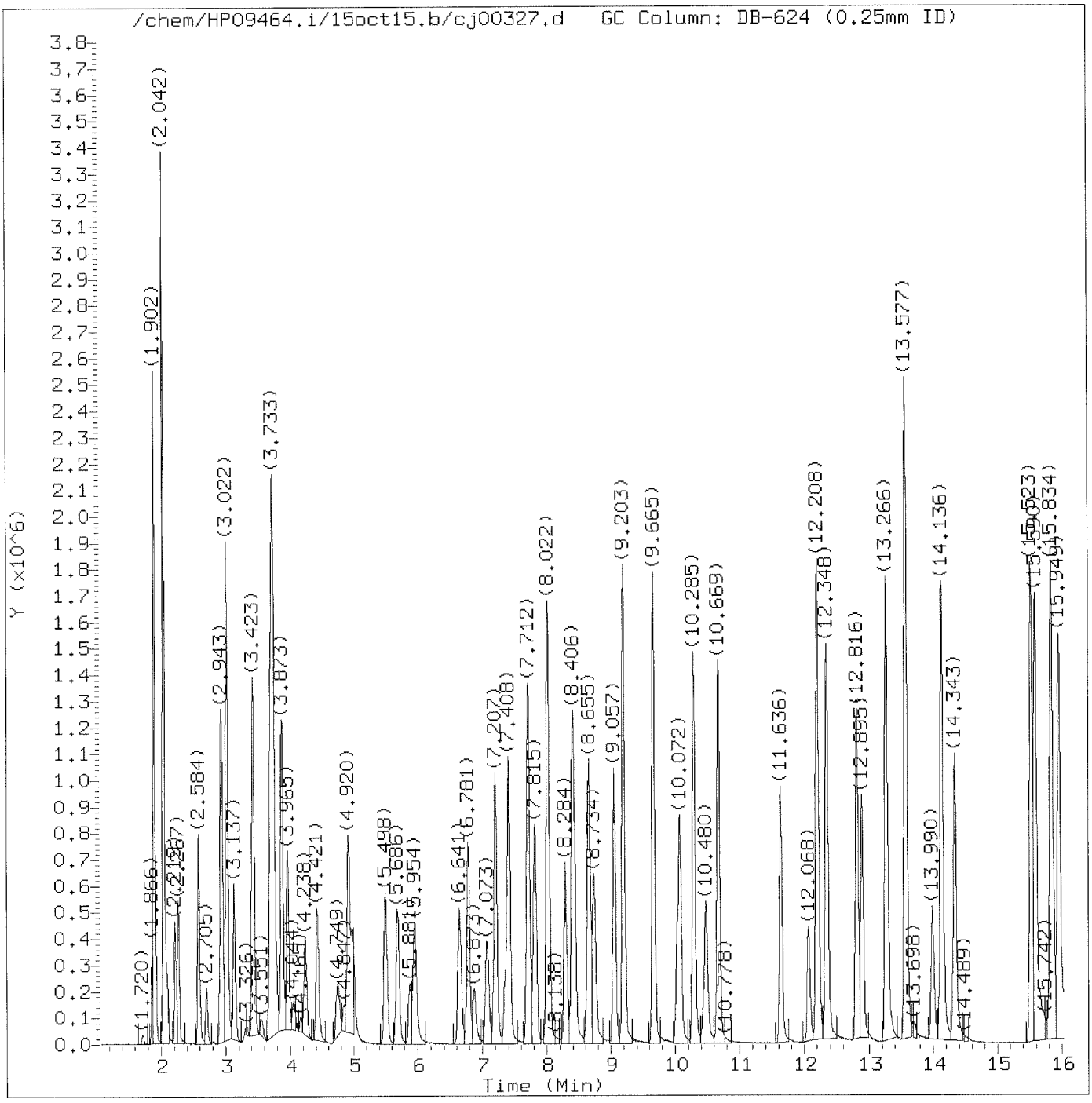
Data File: /chem/HP09464.i/15oct15.b/cj00326.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 01:51 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 02:31 Automation

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number	: 23		
Compound Name	: Acetonitrile		
Scan Number	: 509		
Retention Time (minutes)	: 4.178		
Quant Ion	: 40.00		
Area	: 57423		
Concentration (ppb(v))	: 5.4355		
Integration start scan	: 500	Integration stop scan:	527
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

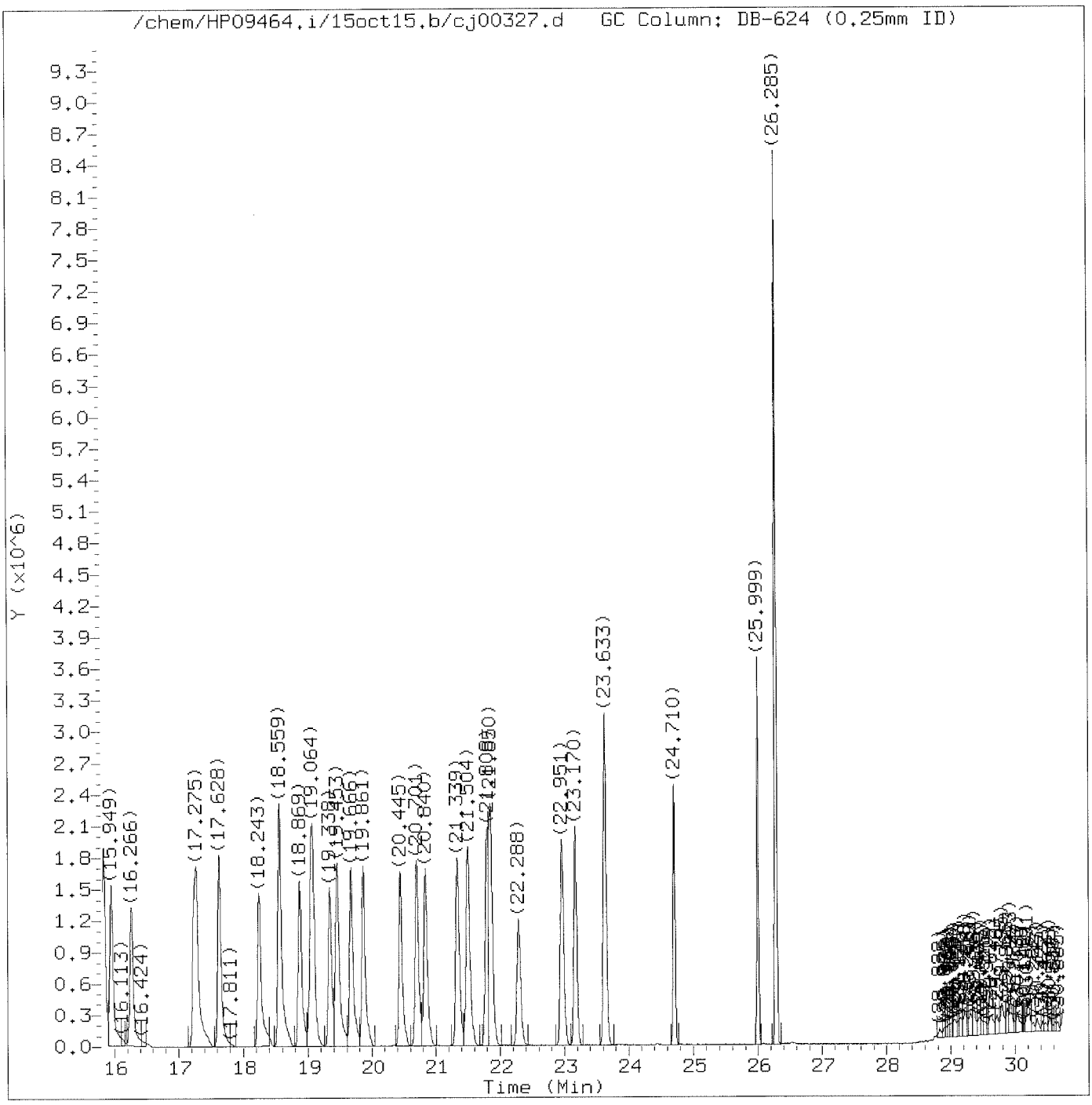
Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	184361	10.233
2) Dichlorodifluoromethane	(1)	1.902	85	2072764	9.289
3) Chlorodifluoromethane	(1)	1.908	51	658847	9.239
4) Freon 114	(1)	2.042	85	1721206	8.572
5) Chloromethane	(1)	2.091	52	101633	9.596
6) Vinyl Chloride	(1)	2.219	62	438992	9.288
7) 1,3-Butadiene	(1)	2.267	54	284259	9.770
8) Bromomethane	(1)	2.584	94	623277	9.055
9) Chloroethane	(1)	2.705	64	226158	8.466
10) Bromoethene	(1)	2.930	106	640204	9.789
11) Dichlorofluoromethane	(1)	2.949	67	1180714	9.473
12) Trichlorofluoromethane	(1)	3.022	101	2248347	9.347
13) Pentane	(1)	3.137	43	401573	9.822
14) Ethanol	(1)	3.301	45	99313	10.308
15) Freon123a	(1)	3.429	67	908974	10.352
16) Acrolein	(1)	3.557	56	107269	11.913
17) 1,1-Dichloroethene	(1)	3.685	61	787873M	10.050
18) Freon 113	(1)	3.733	103	924755	9.696
19) Acetone	(1)	3.788	43	331660	10.636
20) Methyl Iodide	(1)	3.873	142	1981725	9.635
21) Carbon Disulfide	(1)	3.965	76	1446365	8.976
22) Isopropanol	(1)	4.068	45	363086	9.849
23) Acetonitrile	(1)	4.178	40	71716M	10.106
24) 3-Chloropropene	(1)	4.238	76	227971	10.259
25) Methylene Chloride	(1)	4.427	84	491128	10.099
26) tert-Butyl Alcohol	(1)	4.749	59	608854	10.985
27) Acrylonitrile	(1)	4.847	53	188688	11.262
28) trans-1,2-Dichloroethene	(1)	4.920	61	613646	9.241
29) Methyl t-Butyl Ether	(1)	4.987	73	929220	10.824
30) Hexane	(1)	5.504	57	494039	10.160
31) 1,1-Dichloroethane	(1)	5.686	63	833357	10.168
32) Vinyl Acetate	(1)	5.881	86	110958	13.004
33) Di-Isopropyl Ether	(1)	5.954	45	570014	11.651
36) 1,2-Dichloroethene (total)	(1)		61	1247915	19.620
34) Ethyl Tert-Butyl Ether	(1)	6.641	59	772810	11.327
35) cis-1,2-Dichloroethene	(1)	6.781	61	634269	10.379
37) 2-Butanone	(1)	6.873	72	166471	10.990
38) Ethyl Acetate	(1)	7.055	70	80550	11.700

M = Compound was manually integrated.

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on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d
Injection date and time: 16-OCT-2015 02:34
Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 17:40
Sublist used: all
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010
Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.079	55	435644	11.351
40)*Bromochloromethane	(1)	7.201	130	758229	10.000
41) Tetrahydrofuran	(1)	7.347	42	186736	11.341
42) Chloroform	(1)	7.408	83	1473310	10.252
43) 1,1,1-Trichloroethane	(1)	7.706	97	1699448	10.408
44) Cyclohexane	(1)	7.809	56	561457	10.546
45) Carbon Tetrachloride	(1)	8.022	117	1940382	10.512
46) Benzene	(2)	8.400	78	1617781	10.309
47) 1,2-Dichloroethane	(2)	8.430	62	924878	10.163
48) Isooctane	(2)	8.655	57	1715341	11.618
49) Tert-Amyl Methyl Ether	(2)	8.740	73	909700	10.604
50) Heptane	(2)	9.063	43	455834	11.205
51)*1,4-Difluorobenzene	(2)	9.203	114	2563691	10.000
52) Trichloroethene	(2)	9.665	130	1043790	9.717
53) Ethyl Acrylate	(2)	10.024	55	487812	11.075
54) 1,2-Dichloropropane	(2)	10.072	63	469903	10.799
55) Dibromomethane	(2)	10.291	174	1026461	9.594
56) 1,4-Dioxane	(2)	10.450	88	307679	9.604
57) Methyl Methacrylate	(2)	10.480	69	357556	10.743
58) Bromodichloromethane	(2)	10.669	83	1623627	10.143
59) cis-1,3-Dichloropropene	(2)	11.642	75	1021429	11.998
60) 4-Methyl-2-Pentanone	(2)	12.068	43	417479	10.220
61) Toluene	(3)	12.348	91	2118528	11.766
64) 1,3-Dichloropropene (total)	(3)		75	2050003	22.861
62) Octane	(3)	12.816	43	598327	12.610
63) trans-1,3-Dichloropropene	(3)	12.895	75	1028574	10.863
65) Ethyl Methacrylate	(3)	13.266	69	566259	11.216
66) 1,1,2-Trichloroethane	(3)	13.272	97	826213	10.761
67) Tetrachloroethene	(3)	13.577	166	1461934	9.537
68) 2-Hexanone	(3)	13.990	43	495671	11.899
69) Dibromochloromethane	(3)	14.136	127	1519932	10.271
70) 1,2-Dibromoethane	(3)	14.343	107	1416602	10.785
71)*Chlorobenzene-d5	(3)	15.523	117	2306014	10.000
72) Chlorobenzene	(3)	15.590	112	1946315	10.870
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	1205094	10.800
74) Ethylbenzene	(3)	15.949	91	2396506	12.047
75) m/p-Xylene	(3)	16.259	91	1754118	10.662
77) Xylene (total)	(3)		91	3703692	21.922

* = Compound is an internal standard.

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on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

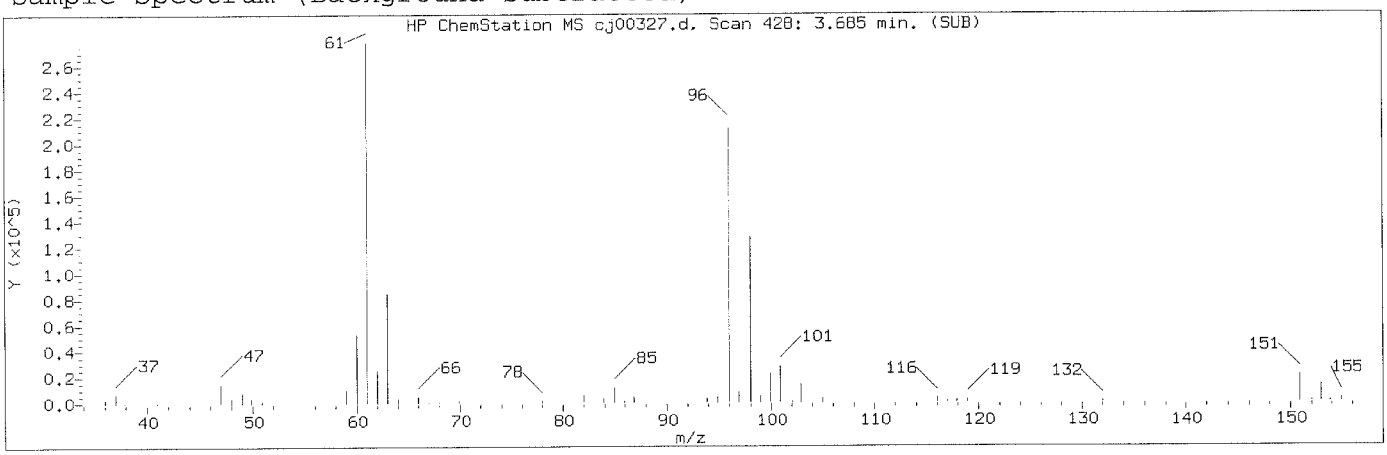
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

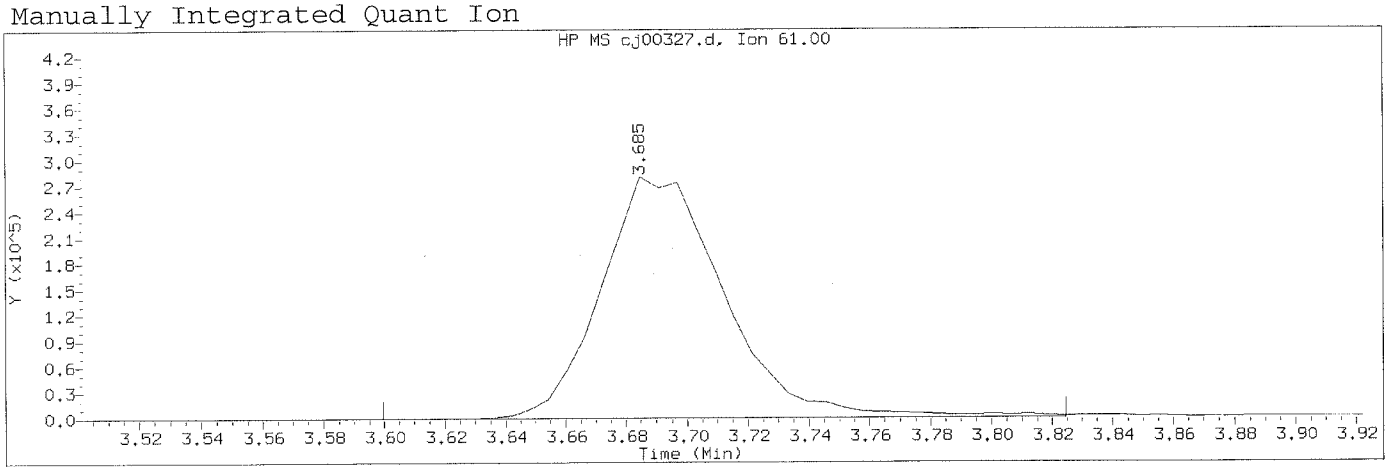
	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76)	o-Xylene	(3)	17.239	91	1949574	11.259
78)	Styrene	(3)	17.282	104	1709822	11.015
79)	Bromoform	(3)	17.628	173	1956353	10.234
80)	Cumene	(3)	18.243	105	2594042	11.665
81)	Bromobenzene	(3)	18.869	156	1357386	10.867
82)	1,1,2,2-Tetrachloroethane	(3)	19.046	83	1566404	10.712
83)	1,2,3-Trichloropropane	(3)	19.082	110	599717	10.718
84)	n-Propylbenzene	(3)	19.338	120	819223	11.082
85)	2-Chlorotoluene	(3)	19.459	126	921014	11.219
86)	4-Ethyltoluene	(3)	19.666	105	2875396	11.595
87)	1,3,5-Trimethylbenzene	(3)	19.861	105	2371779	11.108
88)	Alpha Methyl Styrene	(3)	20.445	118	1358626	11.212
89)	tert-Butylbenzene	(3)	20.701	119	2296566	10.885
90)	1,2,4-Trimethylbenzene	(3)	20.834	105	2398271	10.817
91)	sec-Butylbenzene	(3)	21.339	105	3222726	11.001
92)	1,3-Dichlorobenzene	(3)	21.504	146	2303039	10.476
93)	1,4-Dichlorobenzene	(3)	21.802	146	2379236	10.301
94)	p-Isopropyltoluene	(3)	21.856	119	3059833	11.462
95)	Benzyl Chloride	(3)	22.294	91	2351281	11.781
96)	1,2-Dichlorobenzene	(3)	22.951	146	2169597	10.422
97)	n-Butylbenzene	(3)	23.170	91	2412296	11.092
98)	Hexachloroethane	(3)	23.627	117	1212567	10.996
99)	1,2-Dibromo-3-chloropropane	(3)	24.710	157	1146439	10.133
100)	1,2,4-Trichlorobenzene	(3)	25.999	180	1329381	11.556
101)	Hexachlorobutadiene	(3)	26.279	225	1552083	12.335
102)	Naphthalene	(3)	26.297	128	2864299	12.036

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

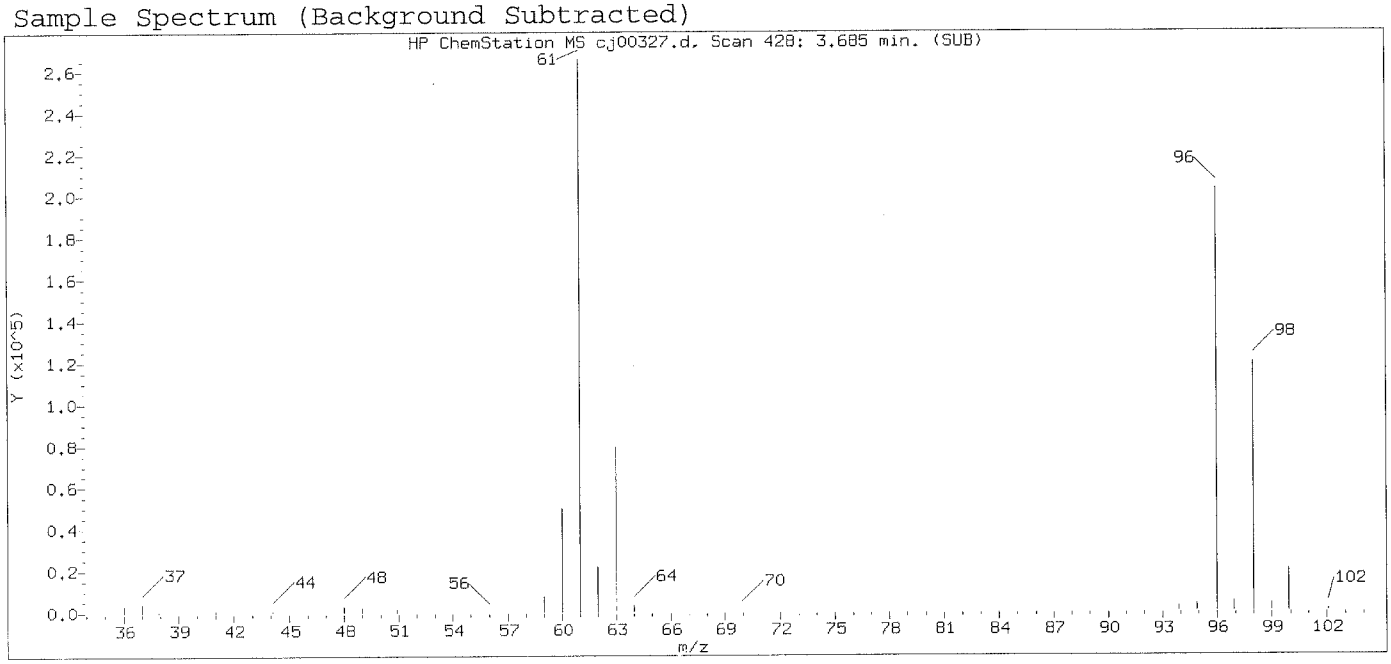
Compound Number : 17
Compound Name : 1,1-Dichloroethene
Scan Number : 428
Retention Time (minutes): 3.685
Quant Ion : 61.00
Area (flag) : 787873M
Concentration (ppb(v)) : 10.0498
Integration start scan : 413 Integration stop scan: 450
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

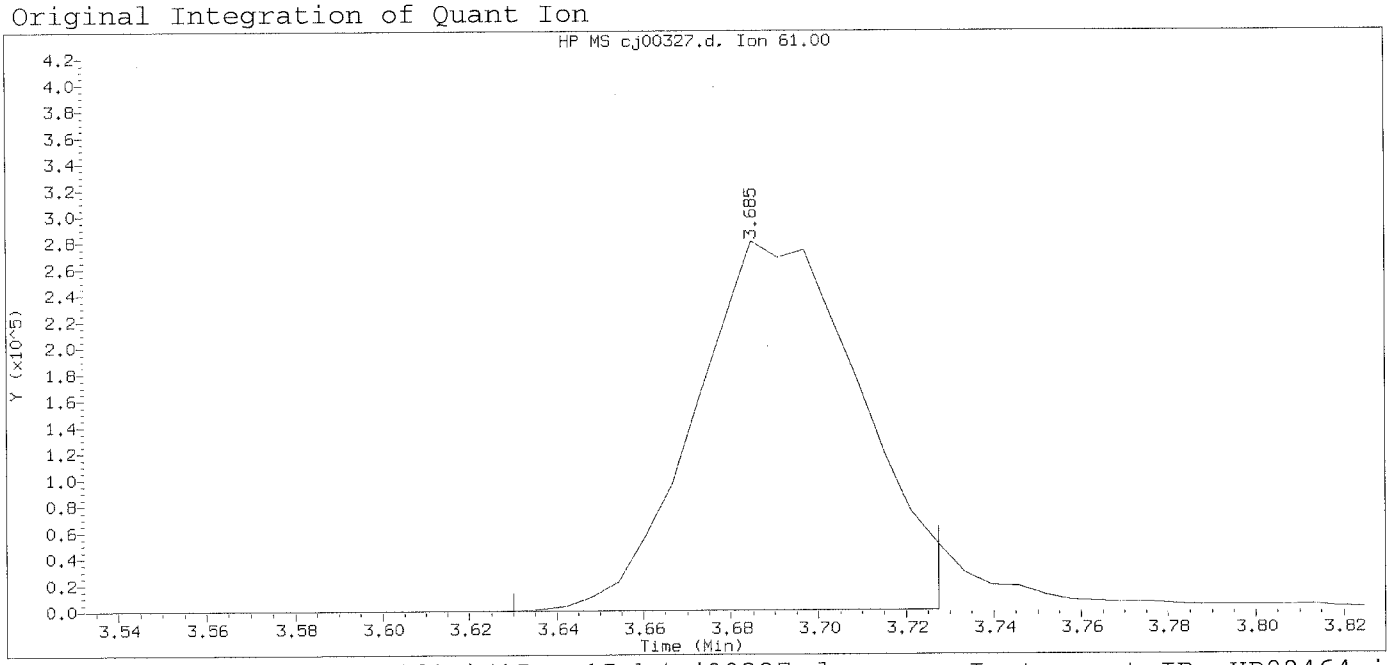
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mp1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

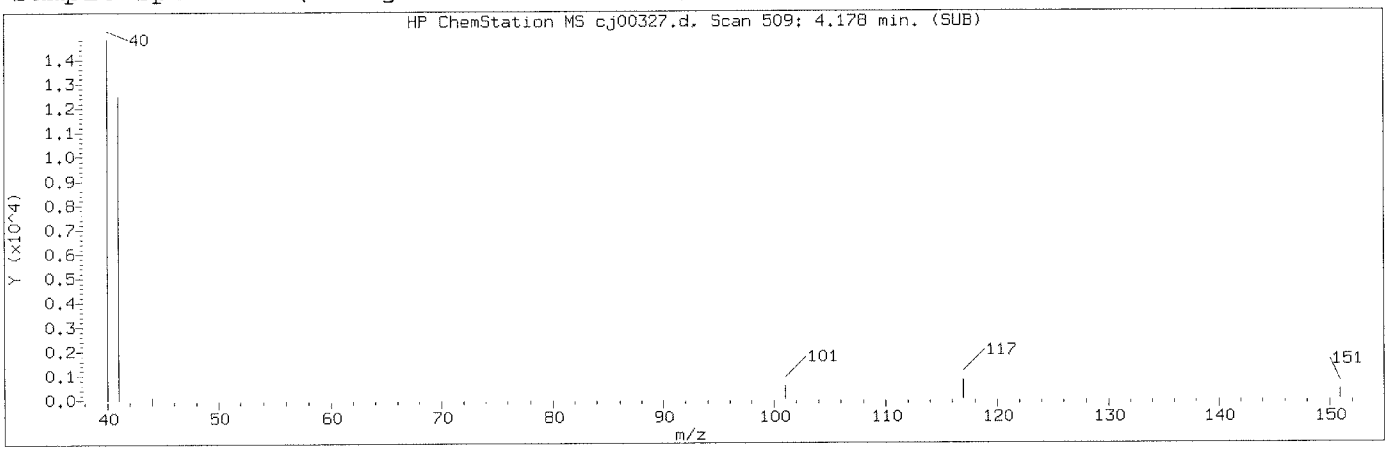
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 03:14 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

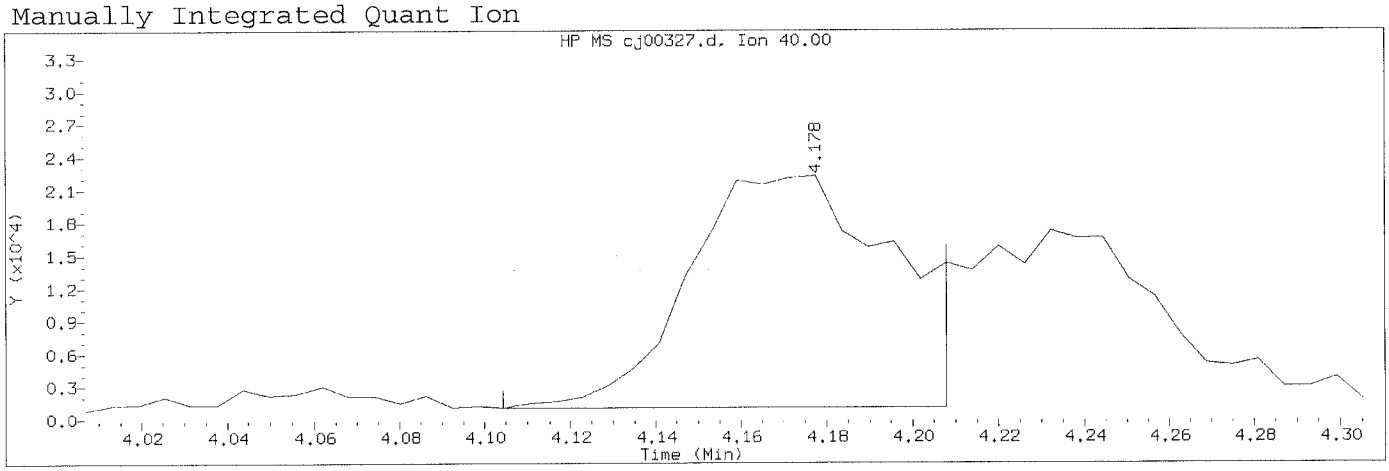
Compound Number	: 17		
Compound Name	: 1,1-Dichloroethene		
Scan Number	: 428		
Retention Time (minutes)	: 3.685		
Quant Ion	: 61.00		
Area	: 731532		
Concentration (ppb(v))	: 8.0209		
Integration start scan	: 418	Integration stop scan:	434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD010 Lab Sample ID: VSTD010

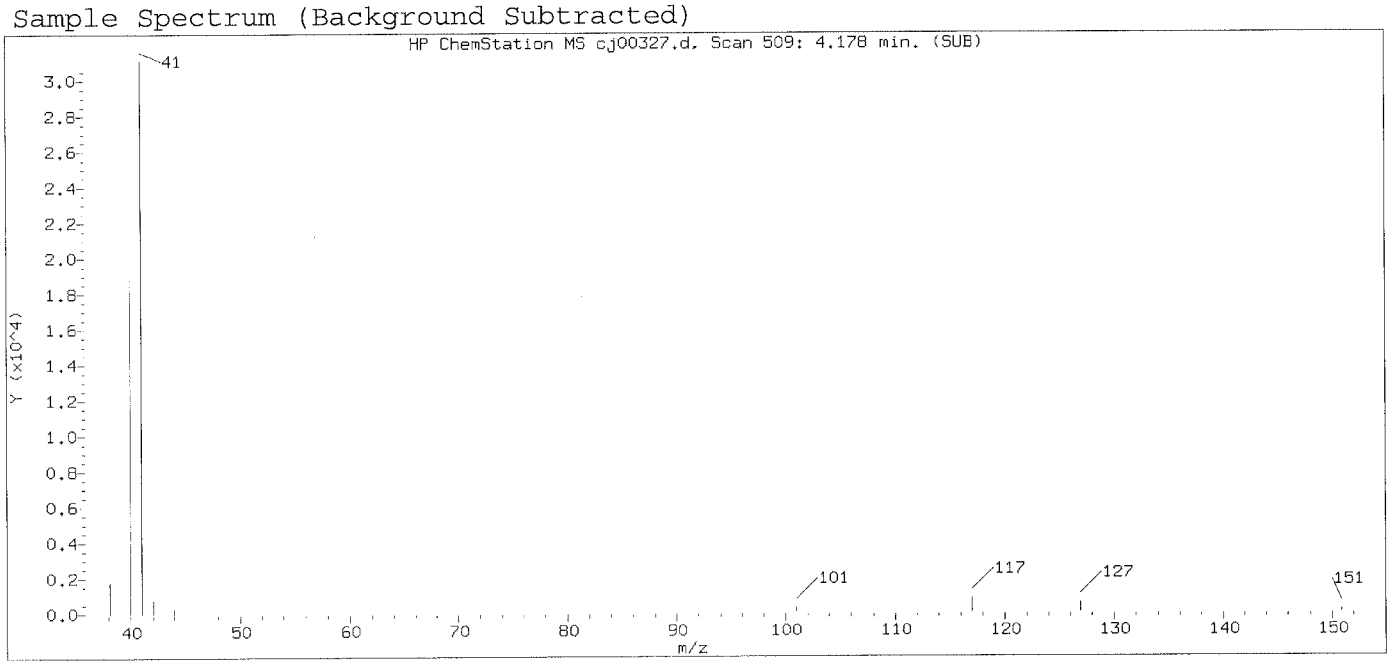
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 509
Retention Time (minutes): 4.178
Quant Ion : 40.00
Area (flag) : 71716M
Concentration (ppb(v)) : 10.1065
Integration start scan : 496 Integration stop scan: 513
Y at integration start : 1035 Y at integration end: 1035

Reason for manual integration: improper integration

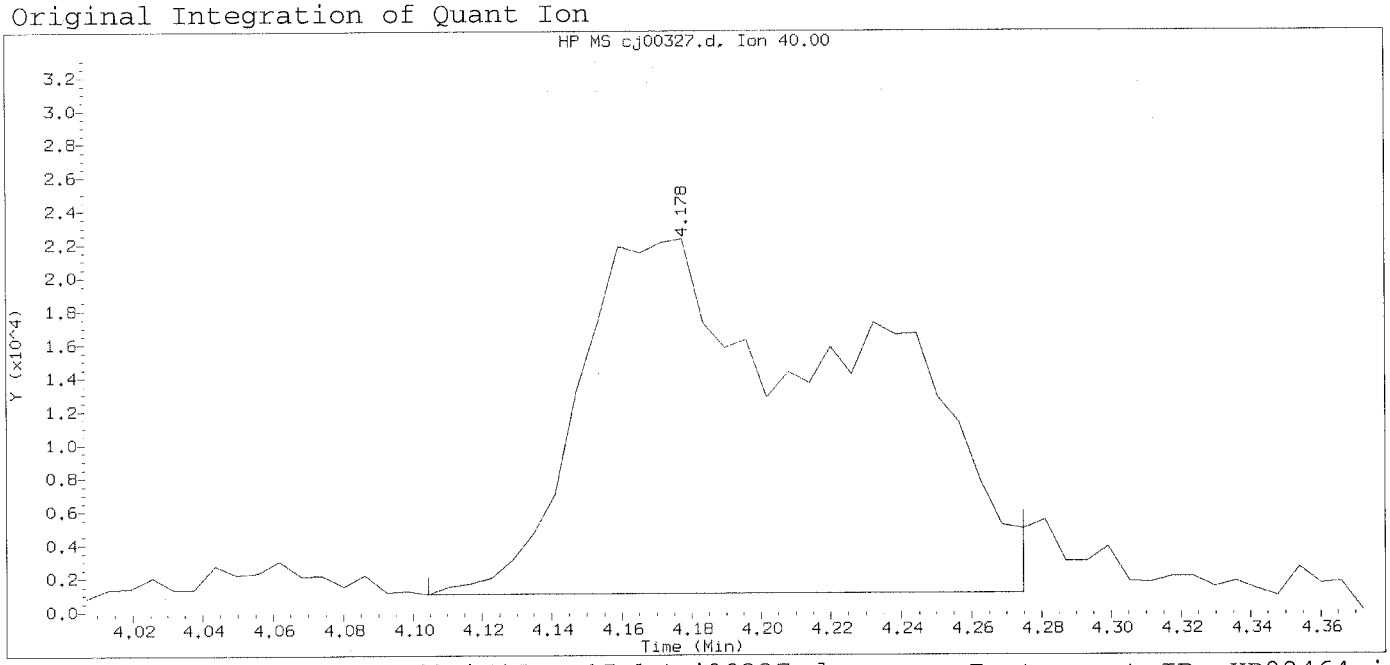
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: MSD1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



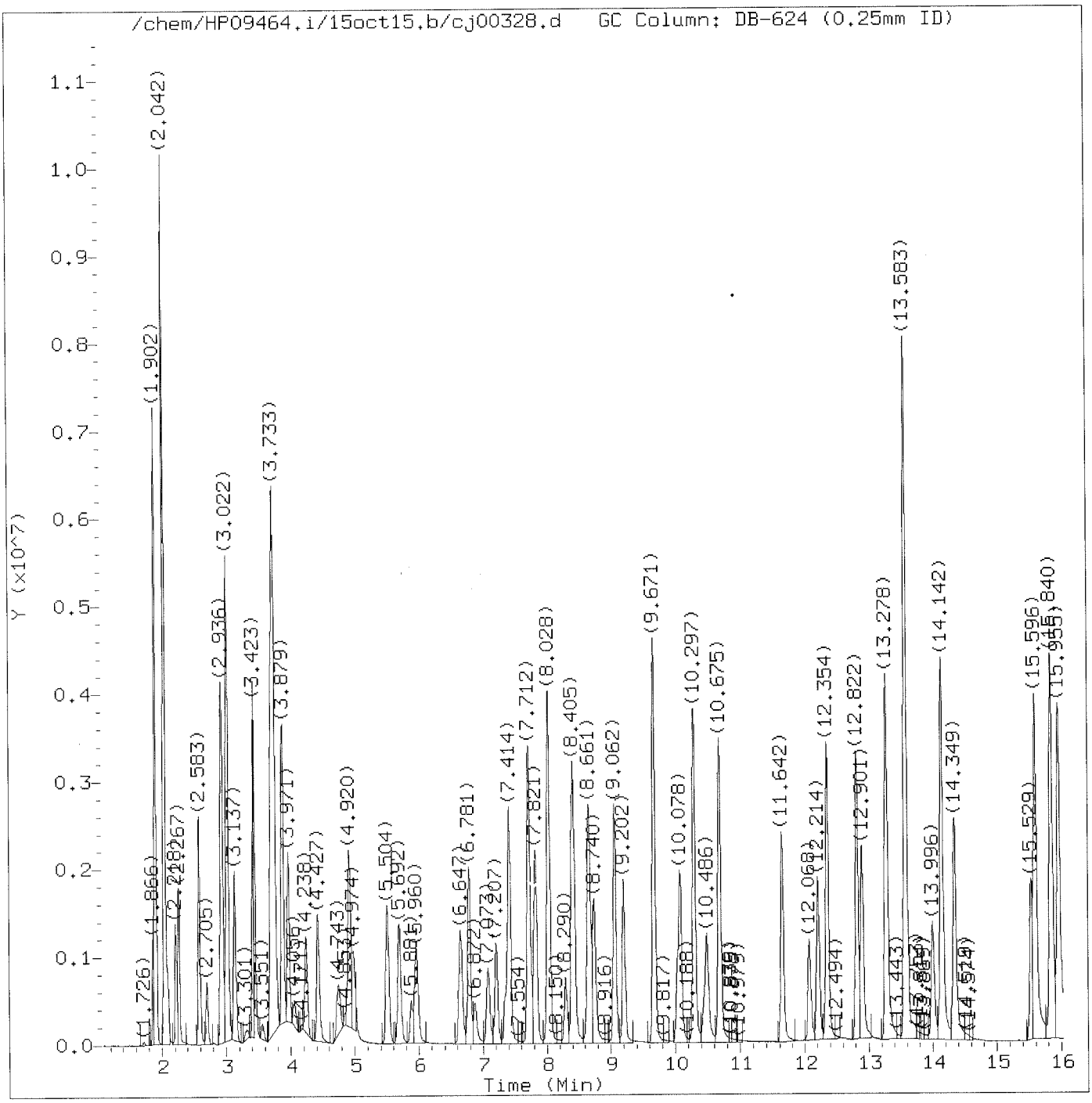
Data File: /chem/HP09464.i/15oct15.b/cj00327.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 02:34 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 03:14 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 509
Retention Time (minutes): 4.178
Quant Ion : 40.00
Area : 116362
Concentration (ppb(v)) : 10.3140
Integration start scan : 496 Integration stop scan: 524
Y at integration start : 1035 Y at integration end: 1035

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

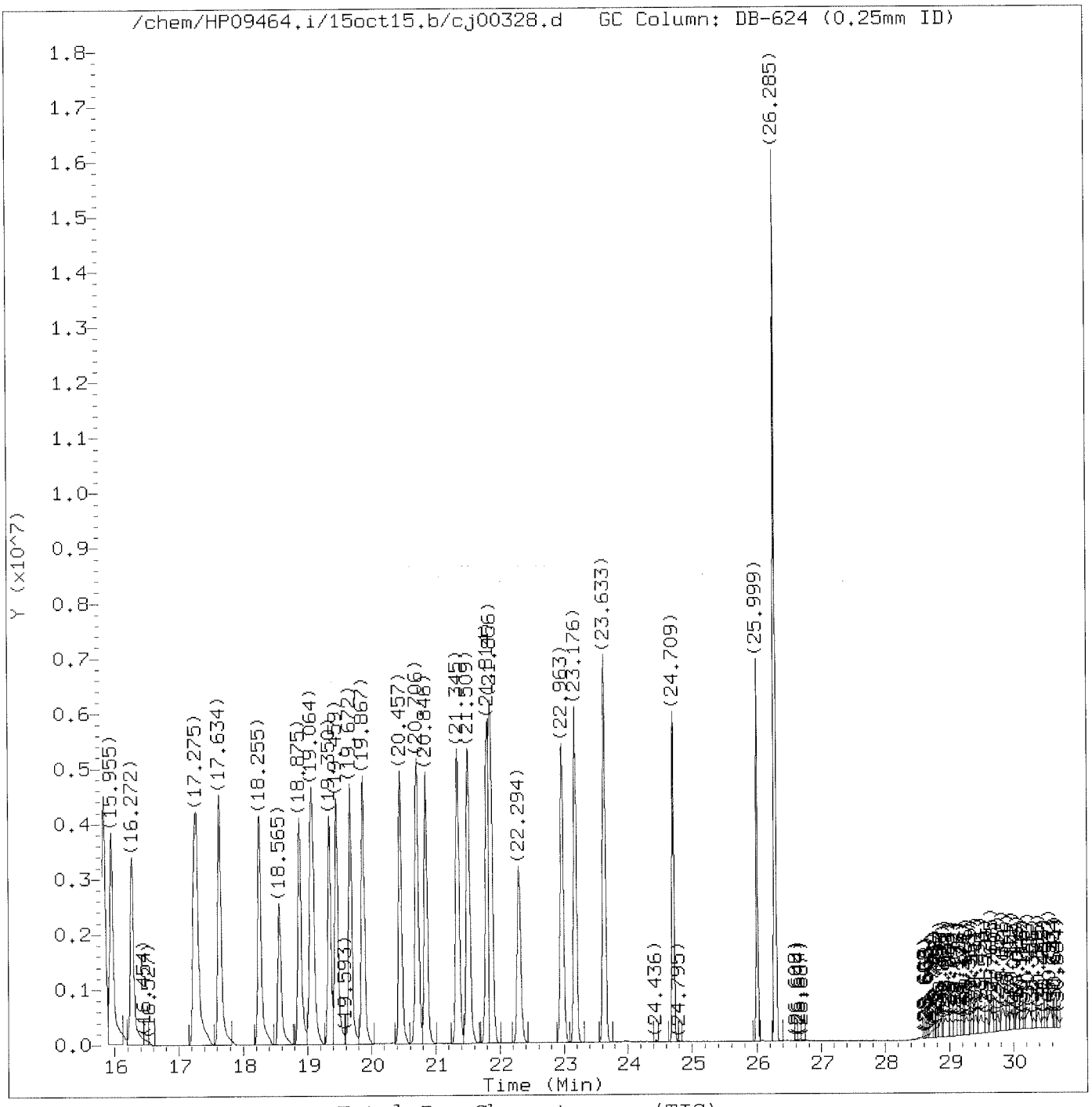
Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 03:17 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 03:17 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d
Injection date and time: 16-OCT-2015 03:17
Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 17:40
Sublist used: all
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025
Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	615882	30.113
2) Dichlorodifluoromethane	(1)	1.902	85	5860227	23.137
3) Chlorodifluoromethane	(1)	1.914	51	2010336	24.835
4) Freon 114	(1)	2.042	85	5111808	22.427
5) Chloromethane	(1)	2.091	52	319678	26.589
6) Vinyl Chloride	(1)	2.218	62	1470881	27.414
7) 1,3-Butadiene	(1)	2.267	54	952876	28.851
8) Bromomethane	(1)	2.583	94	2021277	25.869
9) Chloroethane	(1)	2.705	64	751880	24.795
10) Bromoethene	(1)	2.924	106	2127914	28.662
11) Dichlorofluoromethane	(1)	2.949	67	3495307	24.704
12) Trichlorofluoromethane	(1)	3.022	101	6420810	23.514
13) Pentane	(1)	3.137	43	1329480	28.645
14) Ethanol	(1)	3.289	45	285529	26.107
15) Freon123a	(1)	3.429	67	2451963	24.600
16) Acrolein	(1)	3.557	56	277088	27.108
17) 1,1-Dichloroethene	(1)	3.691	61	2409304	27.073
18) Freon 113	(1)	3.739	103	2691618	24.861
19) Acetone	(1)	3.782	43	700488	19.789
20) Methyl Iodide	(1)	3.879	142	5926483	25.384
21) Carbon Disulfide	(1)	3.971	76	4493868	24.567
22) Isopropanol	(1)	4.062	45	1134476	27.109
23) Acetonitrile	(1)	4.177	40	144974	17.998
24) 3-Chloropropene	(1)	4.244	76	710996	28.185
25) Methylene Chloride	(1)	4.427	84	1411006	25.560
26) tert-Butyl Alcohol	(1)	4.743	59	1901716	30.225
27) Acrylonitrile	(1)	4.853	53	415037	21.822
28) trans-1,2-Dichloroethene	(1)	4.920	61	1732805	22.987
29) Methyl t-Butyl Ether	(1)	4.987	73	2268831	23.282
30) Hexane	(1)	5.504	57	1446219	26.200
31) 1,1-Dichloroethane	(1)	5.692	63	2179790	23.429
32) Vinyl Acetate	(1)	5.887	86	255323	26.360
33) Di-Isopropyl Ether	(1)	5.960	45	1414655	25.472
36) 1,2-Dichloroethene (total)	(1)		61	3440511	47.604
34) Ethyl Tert-Butyl Ether	(1)	6.647	59	2025425	26.153
35) cis-1,2-Dichloroethene	(1)	6.781	61	1707706	24.618
37) 2-Butanone	(1)	6.872	72	386608	22.485
38) Ethyl Acetate	(1)	7.061	70	180002	23.032

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 03:17 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.085	55	942185	21.626
40)*Bromochloromethane	(1)	7.207	130	860713	10.000
41) Tetrahydrofuran	(1)	7.347	42	439259	23.501
42) Chloroform	(1)	7.414	83	3717542	22.789
43) 1,1,1-Trichloroethane	(1)	7.712	97	4289373	23.142
44) Cyclohexane	(1)	7.815	56	1574701	26.056
45) Carbon Tetrachloride	(1)	8.028	117	4645586	22.170
46) Benzene	(2)	8.399	78	4290174	26.589
47) 1,2-Dichloroethane	(2)	8.436	62	2276094	24.324
48) Isooctane	(2)	8.661	57	4698448	30.949
49) Tert-Amyl Methyl Ether	(2)	8.740	73	2388138	27.074
50) Heptane	(2)	9.069	43	1264056	30.218
51)*1,4-Difluorobenzene	(2)	9.202	114	2636016	10.000
52) Trichloroethene	(2)	9.671	130	2806778	25.411
53) Ethyl Acrylate	(2)	10.036	55	1186459	26.197
54) 1,2-Dichloropropane	(2)	10.078	63	1101033	24.608
55) Dibromomethane	(2)	10.297	174	2703754	24.578
56) 1,4-Dioxane	(2)	10.450	88	896593	27.218
57) Methyl Methacrylate	(2)	10.486	69	831765	24.306
58) Bromodichloromethane	(2)	10.675	83	4044556	24.574
59) cis-1,3-Dichloropropene	(2)	11.642	75	2601141	29.716
60) 4-Methyl-2-Pentanone	(2)	12.074	43	1148049	27.332
61) Toluene	(3)	12.354	91	4998838	25.651
64) 1,3-Dichloropropene (total)	(3)		75	5113709	54.234
62) Octane	(3)	12.822	43	1652265	32.174
63) trans-1,3-Dichloropropene	(3)	12.901	75	2512568	24.518
65) Ethyl Methacrylate	(3)	13.266	69	1579843	28.912
66) 1,1,2-Trichloroethane	(3)	13.278	97	2063039	24.828
67) Tetrachloroethene	(3)	13.583	166	4925618	29.687
68) 2-Hexanone	(3)	13.996	43	1343108	29.790
69) Dibromochloromethane	(3)	14.142	127	3970479	24.791
70) 1,2-Dibromoethane	(3)	14.349	107	3503076	24.641
71)*Chlorobenzene-d5	(3)	15.529	117	2495822	10.000
72) Chlorobenzene	(3)	15.596	112	5053547	26.077
73) 1,1,1,2-Tetrachloroethane	(3)	15.840	131	3022086	25.024
74) Ethylbenzene	(3)	15.955	91	5973486	27.744
75) m/p-Xylene	(3)	16.265	91	4518528M	25.377
77) Xylene (total)	(3)		91	9216435	50.445

M = Compound was manually integrated.
* = Compound is an internal standard.

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00328.d
Injection date and time: 16-OCT-2015 03:17
Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 17:40
Sublist used: all
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025
Lab Sample ID: VSTD025

	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76)	o-Xylene	(3)	17.245	91	4697907	25.068
78)	Styrene	(3)	17.288	104	4262252	25.371
79)	Bromoform	(3)	17.634	173	4957672	23.963
80)	Cumene	(3)	18.255	105	6771138	28.132
81)	Bromobenzene	(3)	18.875	156	3386461	25.050
82)	1,1,2,2-Tetrachloroethane	(3)	19.052	83	3477587	21.973
83)	1,2,3-Trichloropropane	(3)	19.088	110	1365631	22.550
84)	n-Propylbenzene	(3)	19.344	120	2134267	26.676
85)	2-Chlorotoluene	(3)	19.459	126	2275620	25.611
86)	4-Ethyltoluene	(3)	19.672	105	7013666	26.132
87)	1,3,5-Trimethylbenzene	(3)	19.867	105	6065111	26.245
88)	Alpha Methyl Styrene	(3)	20.457	118	3716197	28.336
89)	tert-Butylbenzene	(3)	20.706	119	6389883	27.984
90)	1,2,4-Trimethylbenzene	(3)	20.846	105	6358664	26.500
91)	sec-Butylbenzene	(3)	21.345	105	9025261	28.465
92)	1,3-Dichlorobenzene	(3)	21.509	146	5966329	25.075
93)	1,4-Dichlorobenzene	(3)	21.802	146	6138326	24.556
94)	p-Isopropyltoluene	(3)	21.862	119	8324678	28.812
95)	Benzyl Chloride	(3)	22.300	91	5990540	27.733
96)	1,2-Dichlorobenzene	(3)	22.963	146	5574450	24.741
97)	n-Butylbenzene	(3)	23.176	91	6903454	29.328
98)	Hexachloroethane	(3)	23.633	117	2658878	22.279
99)	1,2-Dibromo-3-chloropropane	(3)	24.709	157	2778120	22.688
100)	1,2,4-Trichlorobenzene	(3)	25.999	180	2444541	19.634
101)	Hexachlorobutadiene	(3)	26.279	225	2891518	21.233
102)	Naphthalene	(3)	26.297	128	4998065	19.404

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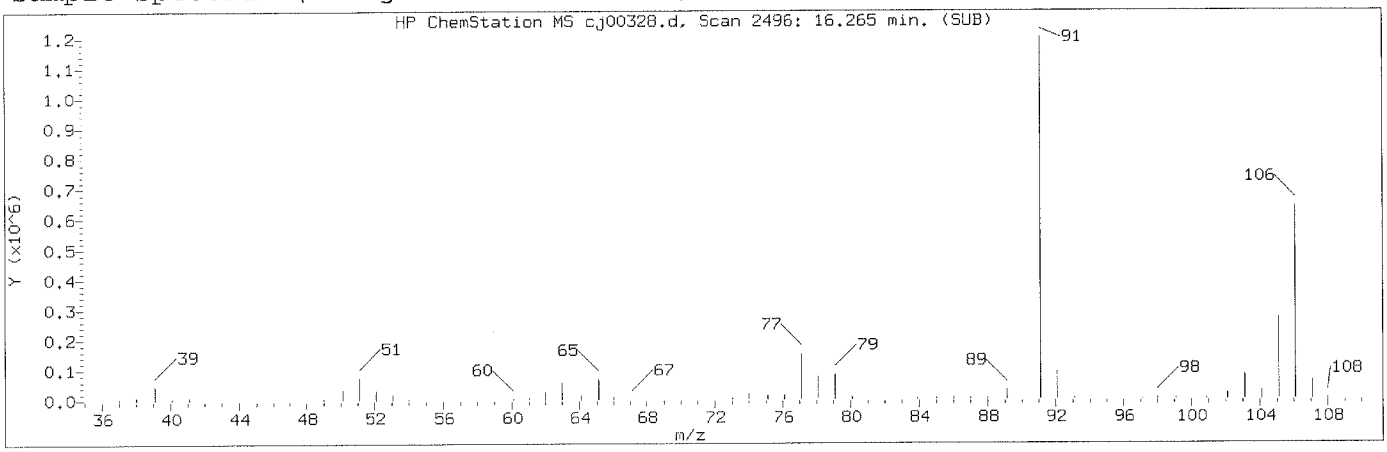
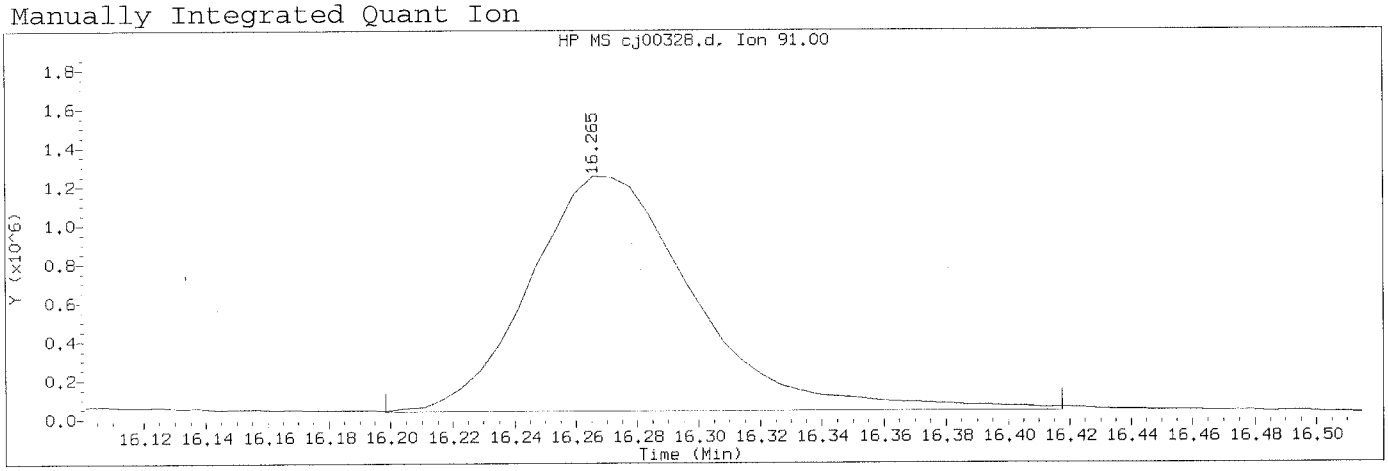
Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00328.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 03:17 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD025 Lab Sample ID: VSTD025

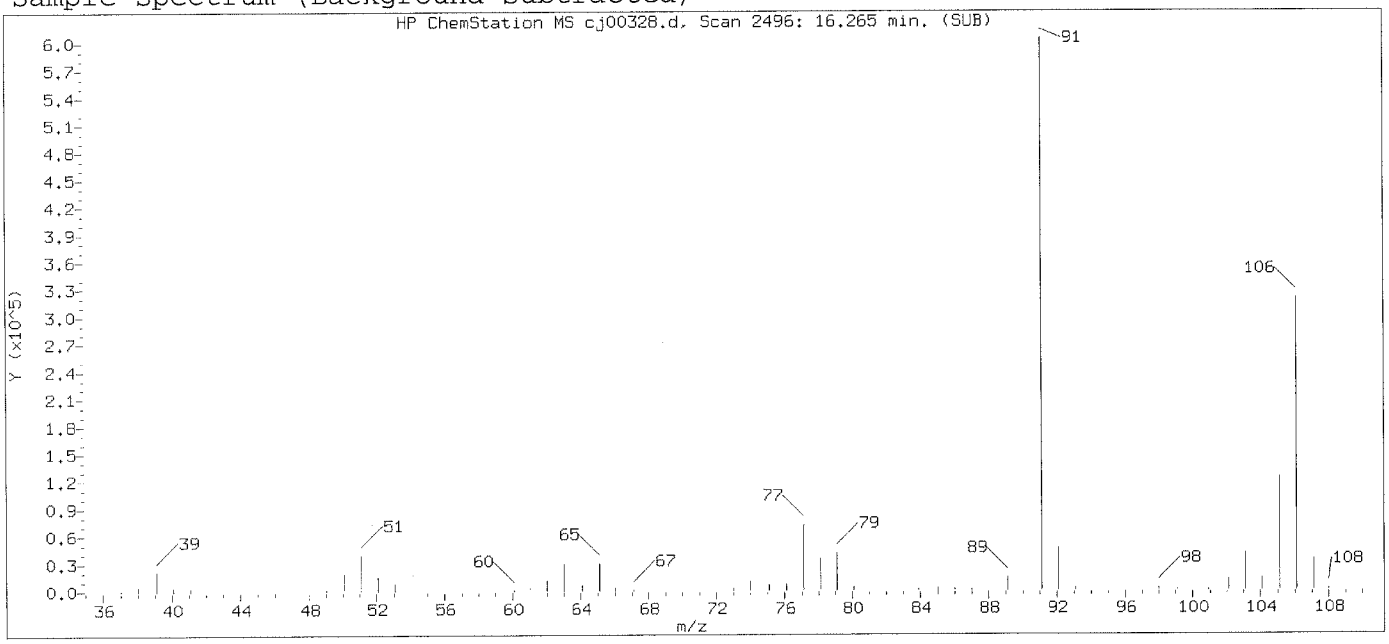
Compound Number : 75
Compound Name : m/p-Xylene
Scan Number : 2496
Retention Time (minutes): 16.265
Quant Ion : 91.00
Area (flag) : 4518528M
Concentration (ppb(v)) : 25.3772
Integration start scan : 2484 Integration stop scan: 2520
Y at integration start : 37539 Y at integration end: 37539

Reason for manual integration: improper integration

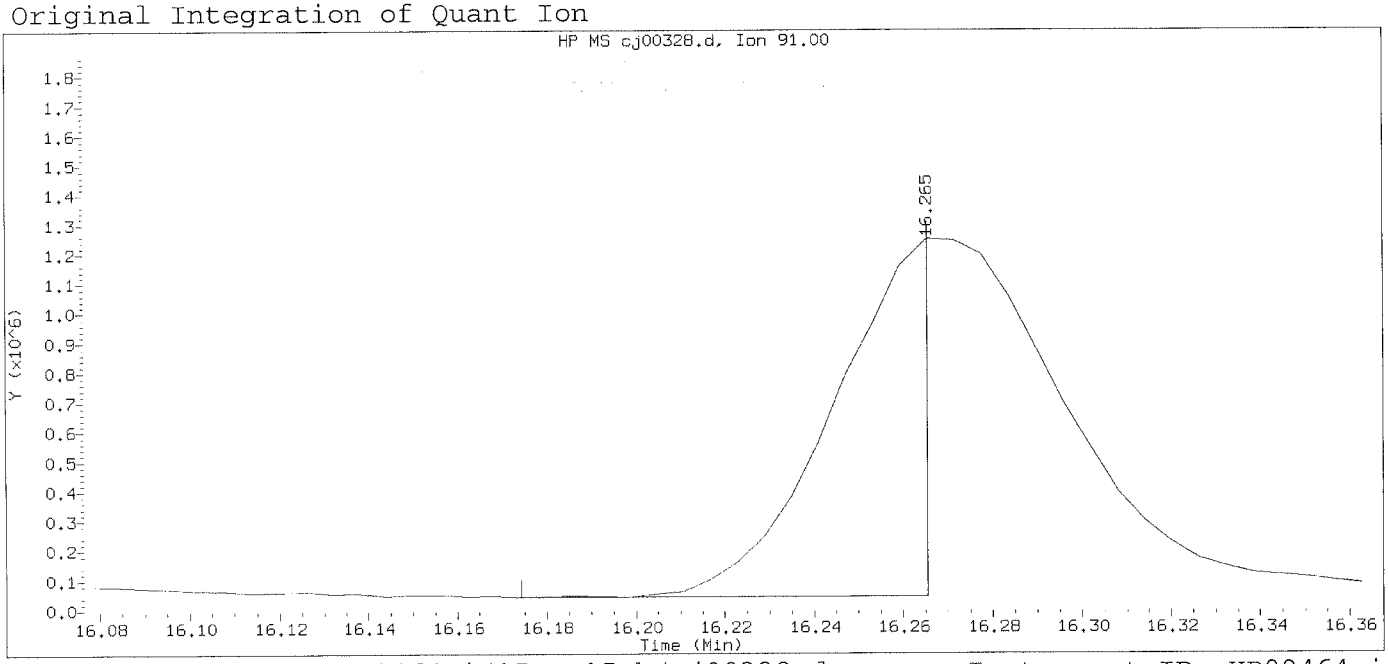
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mp1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00328.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 03:17 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 03:58 Automation

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number	: 75		
Compound Name	: m/p-Xylene		
Scan Number	: 2496		
Retention Time (minutes)	: 16.265		
Quant Ion	: 91.00		
Area	: 1699236		
Concentration (ppb(v))	: 8.3539		
Integration start scan	: 2480	Integration stop scan:	2495
Y at integration start	: 43496	Y at integration end:	43496

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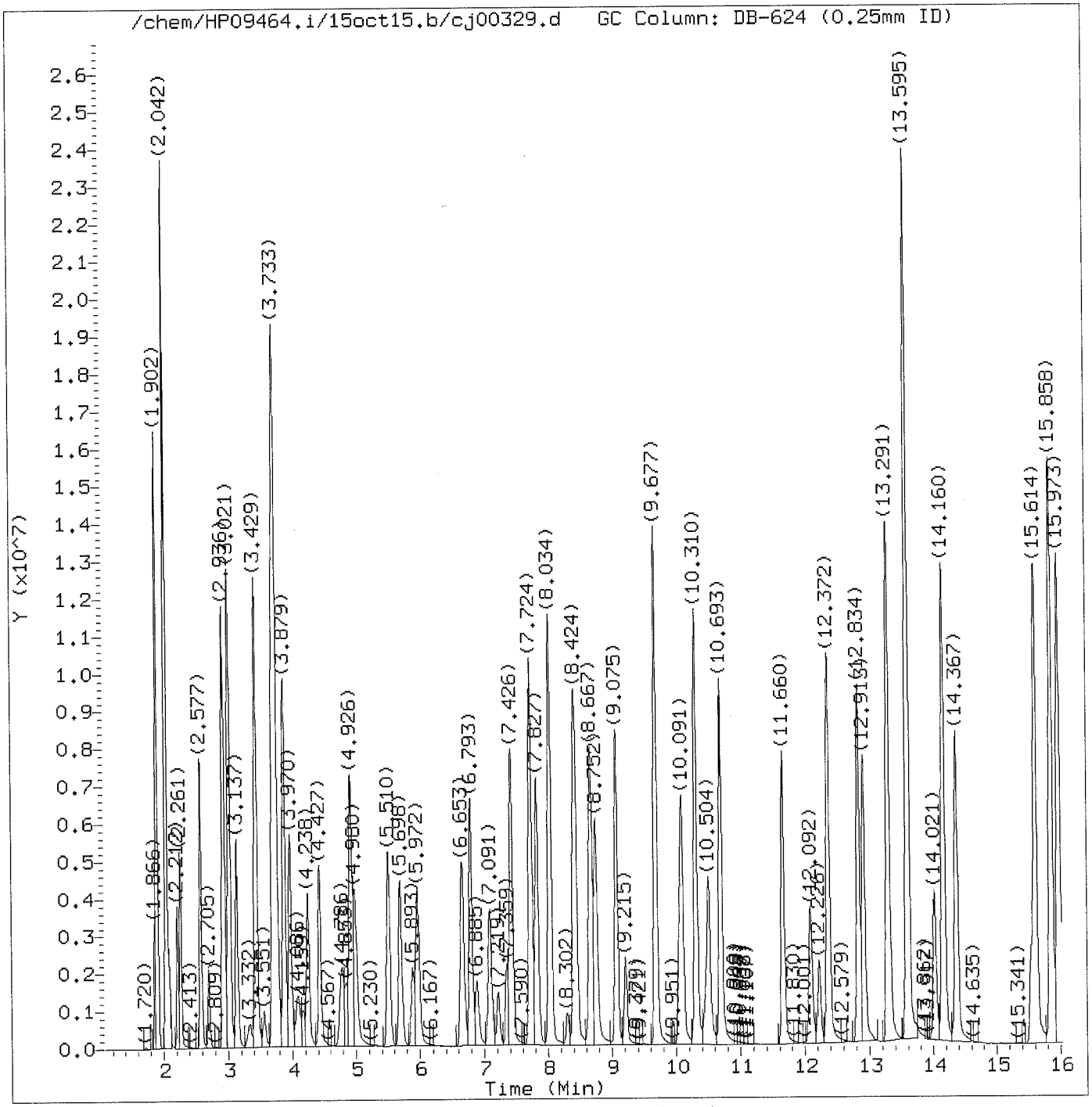
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d
Injection date and time: 16-OCT-2015 04:03

Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 21-OCT-2015 17:25

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 17:25 jeb07445

Sample Name: VSTD070

Lab Sample ID: VSTD070

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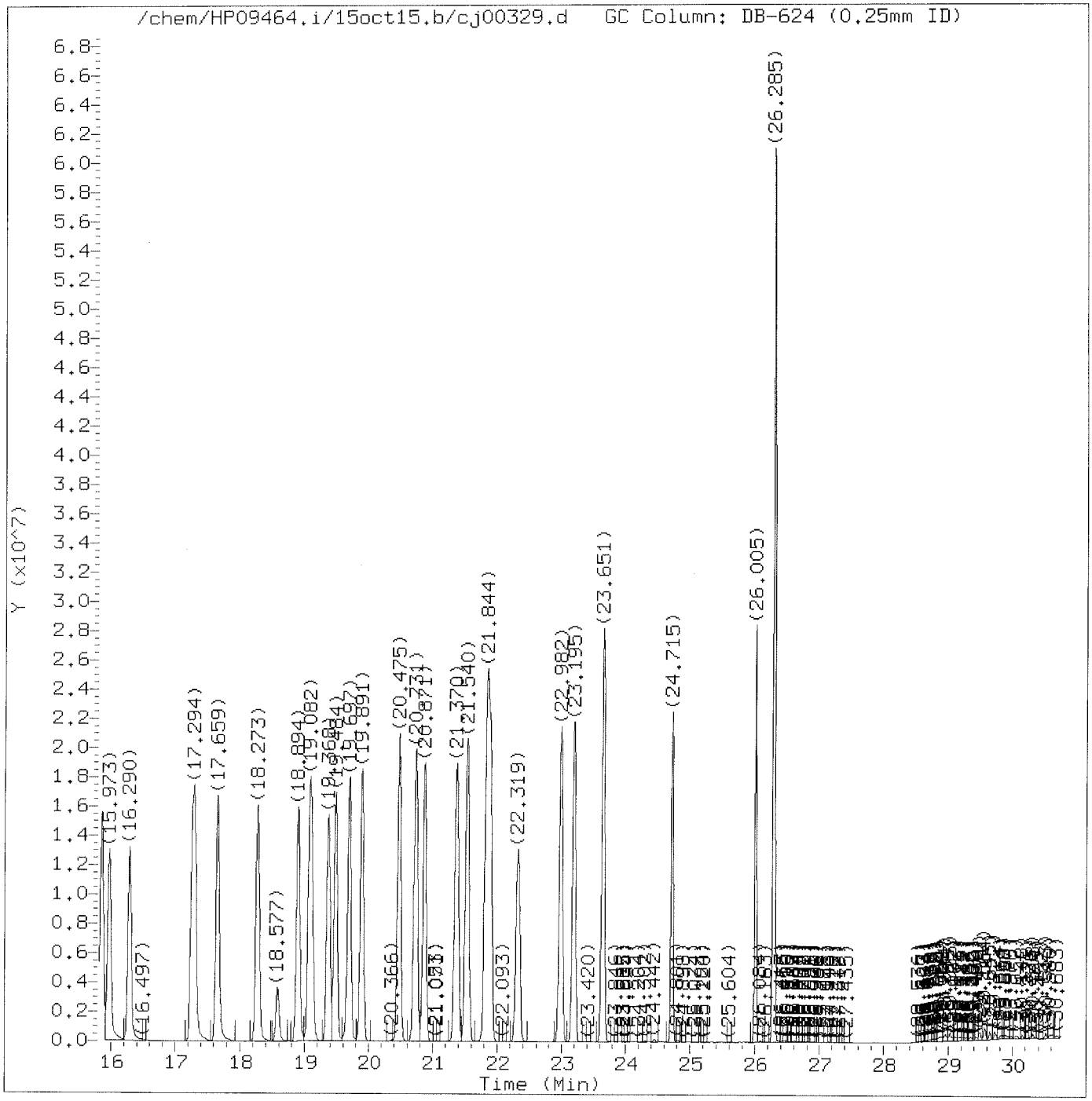
on 10/21/2015 at 17:26.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 04:03 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 21-OCT-2015 16:42
Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 04:03 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 21-OCT-2015 16:42
Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.859	41	1758753	68.541
2) Dichlorodifluoromethane	(1)	1.902	85	11309966	35.591
3) Chlorodifluoromethane	(1)	1.908	51	5279471	51.985
4) Freon 114	(1)	2.042	85	10786086	37.718
5) Chloromethane	(1)	2.085	52	958666	63.555
6) Vinyl Chloride	(1)	2.212	62	4191695	62.270
7) 1,3-Butadiene	(1)	2.261	54	2791412	67.367
8) Bromomethane	(1)	2.577	94	6023979	61.450
9) Chloroethane	(1)	2.705	64	2337636	61.444
10) Bromoethene	(1)	2.924	106	6300971	67.647
11) Dichlorofluoromethane	(1)	2.942	67	9297256	52.374
12) Trichlorofluoromethane	(1)	3.021	101	14780364	43.144
13) Pentane	(1)	3.137	43	3965116	68.094
14) Ethanol	(1)	3.307	45	999693	72.856
15) Freon123a	(1)	3.429	67	7646726	61.148
16) Acrolein	(1)	3.551	56	1195720	93.239
17) 1,1-Dichloroethene	(1)	3.691	61	7133718	63.893
18) Freon 113	(1)	3.739	103	8432135	62.078
19) Acetone	(1)	3.776	43	2888953	65.051
20) Methyl Iodide	(1)	3.879	142	16278204	55.573
21) Carbon Disulfide	(1)	3.970	76	12558200	54.720
22) Isopropanol	(1)	4.086	45	3864559	73.606
23) Acetonitrile	(1)	4.171	40	632948	62.630
24) 3-Chloropropene	(1)	4.238	76	2449241	77.388
25) Methylene Chloride	(1)	4.427	84	4725971	68.236
26) tert-Butyl Alcohol	(1)	4.792	59	6554822	83.037
27) Acrylonitrile	(1)	4.859	53	2012010	84.319
28) trans-1,2-Dichloroethene	(1)	4.920	61	5689263	60.156
29) Methyl t-Butyl Ether	(1)	4.986	73	9473645	77.487
30) Hexane	(1)	5.504	57	5050096	72.922
31) 1,1-Dichloroethane	(1)	5.698	63	7234848	61.980
32) Vinyl Acetate	(1)	5.893	86	1294887	106.557
33) Di-Isopropyl Ether	(1)	5.972	45	5563788	79.849
36) 1,2-Dichloroethene (total)	(1)		61	11352163	125.223
34) Ethyl Tert-Butyl Ether	(1)	6.653	59	8178465	84.171
35) cis-1,2-Dichloroethene	(1)	6.793	61	5662900	65.067
37) 2-Butanone	(1)	6.891	72	1710089	79.273
38) Ethyl Acetate	(1)	7.073	70	845320	86.213

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on 10/21/2015 at 16:42.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 04:03 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 21-OCT-2015 16:42
Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.097	55	4291296	78.507
40)*Bromochloromethane	(1)	7.219	130	1079862	10.000
41) Tetrahydrofuran	(1)	7.359	42	1837542	78.358
42) Chloroform	(1)	7.426	83	11372937	55.569
43) 1,1,1-Trichloroethane	(1)	7.724	97	13116996	56.408
44) Cyclohexane	(1)	7.827	56	5262768	69.409
45) Carbon Tetrachloride	(1)	8.034	117	13690084	52.075
46) Benzene	(2)	8.412	78	13283513	61.497
47) 1,2-Dichloroethane	(2)	8.448	62	7179259	57.312
48) Isooctane	(2)	8.667	57	14347809	70.599
49) Tert-Amyl Methyl Ether	(2)	8.752	73	9462058	80.131
50) Heptane	(2)	9.075	43	4052734	72.372
51)*1,4-Difluorobenzene	(2)	9.215	114	3528811	10.000
52) Trichloroethene	(2)	9.677	130	9119706	61.676
53) Ethyl Acrylate	(2)	10.048	55	4581298	75.563
54) 1,2-Dichloropropane	(2)	10.091	63	3821129	63.796
55) Dibromomethane	(2)	10.310	174	9069804	61.588
56) 1,4-Dioxane	(2)	10.462	88	3010738	68.275
57) Methyl Methacrylate	(2)	10.504	69	3307327	72.195
58) Bromodichloromethane	(2)	10.693	83	11641173	52.836
59) cis-1,3-Dichloropropene	(2)	11.660	75	8760317	74.759
60) 4-Methyl-2-Pentanone	(2)	12.092	43	3751773	66.722
61) Toluene	(3)	12.372	91	16279554	61.406
64) 1,3-Dichloropropene (total)	(3)		75	17343254	136.325
62) Octane	(3)	12.834	43	5076427	72.662
63) trans-1,3-Dichloropropene	(3)	12.913	75	8582937	61.566
65) Ethyl Methacrylate	(3)	13.284	69	5255033	70.692
66) 1,1,2-Trichloroethane	(3)	13.297	97	7058837	62.444
67) Tetrachloroethene	(3)	13.601	166	15235052	67.497
68) 2-Hexanone	(3)	14.021	43	4307091	70.223
69) Dibromochloromethane	(3)	14.160	127	12280376	56.363
70) 1,2-Dibromoethane	(3)	14.367	107	11791480	60.970
71)*Chlorobenzene-d5	(3)	15.541	117	3395332	10.000
72) Chlorobenzene	(3)	15.614	112	16701772	63.351
73) 1,1,1,2-Tetrachloroethane	(3)	15.858	131	10759278	65.487
74) Ethylbenzene	(3)	15.973	91	19644374	67.068
75) m/p-Xylene	(3)	16.290	91	16850765	69.566
77) Xylene (total)	(3)		91	34607054	139.213

* = Compound is an internal standard.

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on 10/21/2015 at 16:42.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00329.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 04:03 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 21-OCT-2015 16:42
Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.263	91	17756289	69.647
78) Styrene	(3)	17.306	104	15787705	69.080
79) Bromoform	(3)	17.659	173	16873013	59.949
80) Cumene	(3)	18.273	105	23752820	72.542
81) Bromobenzene	(3)	18.900	156	13216839	71.864
82) 1,1,2,2-Tetrachloroethane	(3)	19.070	83	12634883	58.683
83) 1,2,3-Trichloropropane	(3)	19.106	110	5481874	66.538
84) n-Propylbenzene	(3)	19.368	120	10121080	92.990
85) 2-Chlorotoluene	(3)	19.484	126	9817926	81.222
86) 4-Ethyltoluene	(3)	19.697	105	24143941	66.124
87) 1,3,5-Trimethylbenzene	(3)	19.891	105	21721560	69.093
88) Alpha Methyl Styrene	(3)	20.475	118	15874116	88.975
89) tert-Butylbenzene	(3)	20.731	119	23140721	74.494
90) 1,2,4-Trimethylbenzene	(3)	20.871	105	22125576	67.780
91) sec-Butylbenzene	(3)	21.370	105	28848520	66.881
92) 1,3-Dichlorobenzene	(3)	21.534	146	21411349	66.148
93) 1,4-Dichlorobenzene	(3)	21.826	146	21746028	63.947
94) p-Isopropyltoluene	(3)	21.887	119	26957049	68.582
95) Benzyl Chloride	(3)	22.319	91	23336642M	72.479
96) 1,2-Dichlorobenzene	(3)	22.982	146	20015481	65.300
97) n-Butylbenzene	(3)	23.195	91	22095429	68.999
98) Hexachloroethane	(3)	23.651	117	10599975	65.288
99) 1,2-Dibromo-3-chloropropane	(3)	24.722	157	10531811	63.224
100) 1,2,4-Trichlorobenzene	(3)	26.005	180	9923880	58.591
101) Hexachlorobutadiene	(3)	26.285	225	10459476	56.459
102) Naphthalene	(3)	26.303	128	13298157	37.951

M = Compound was manually integrated.

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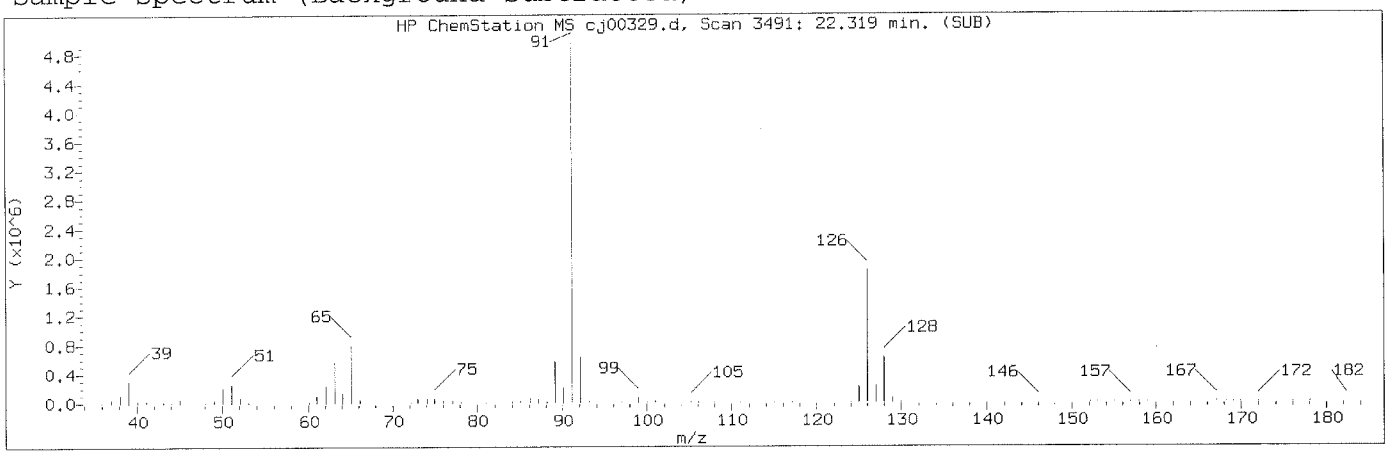
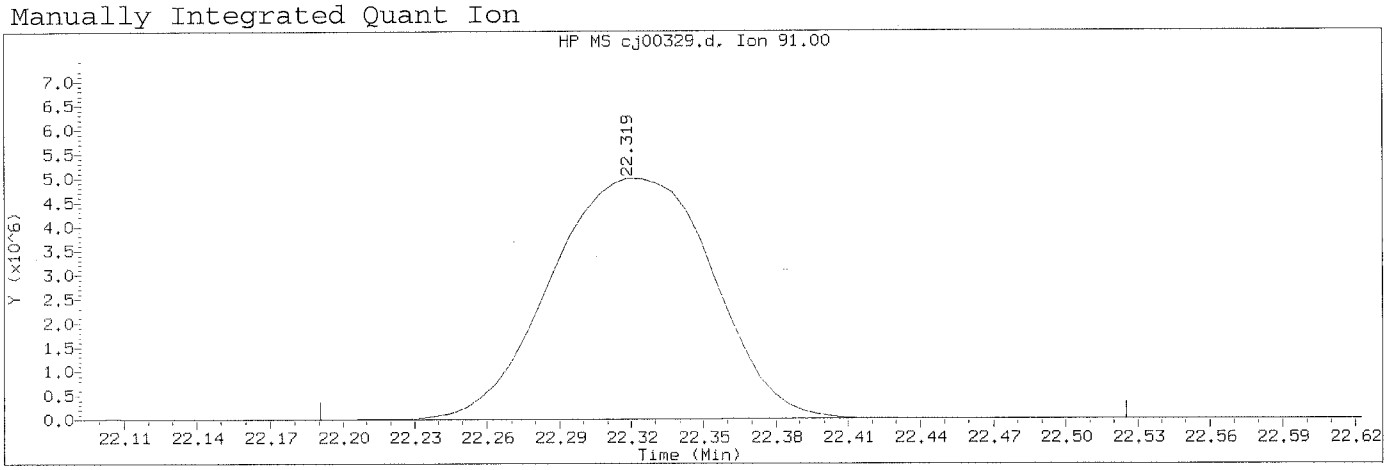
on 10/21/2015 at 16:42.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00329.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 04:03 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 21-OCT-2015 16:42
Date, time and analyst ID of latest file update: 21-Oct-2015 16:42 jeb07445

Sample Name: VSTD070 Lab Sample ID: VSTD070

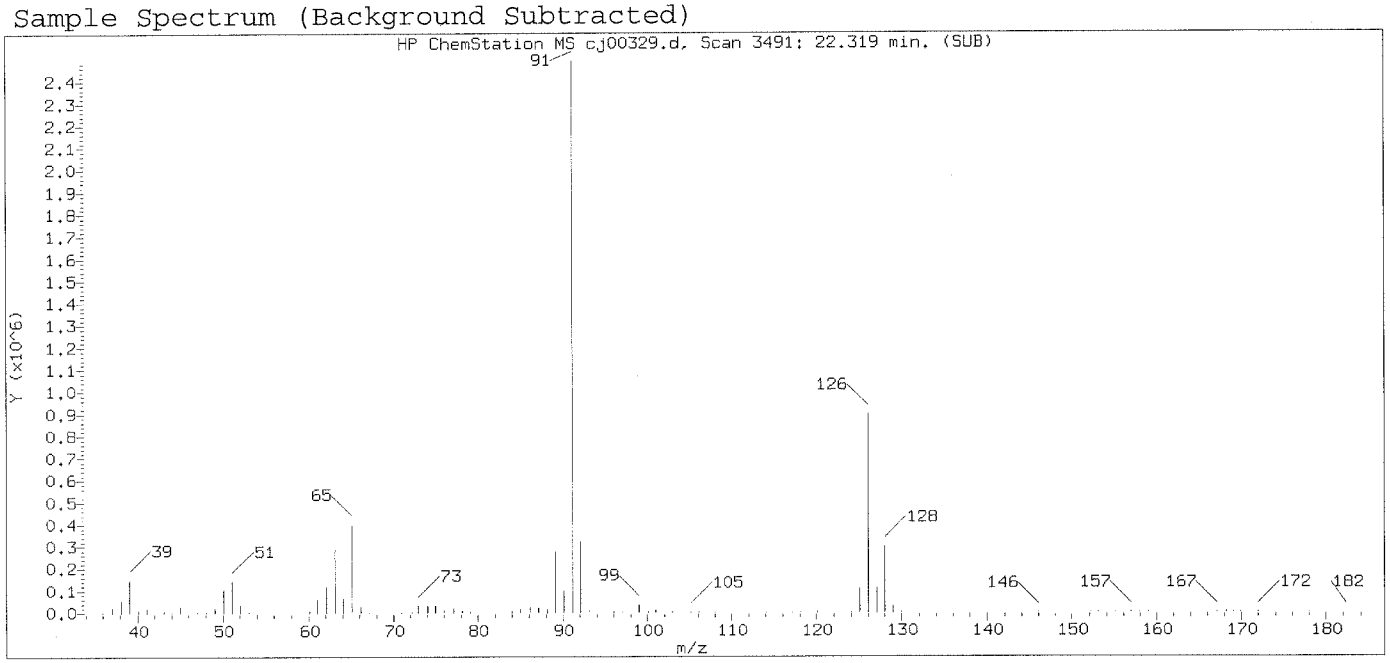
Compound Number : 95
Compound Name : Benzyl Chloride
Scan Number : 3491
Retention Time (minutes): 22.319
Quant Ion : 91.00
Area (flag) : 23336642M
Concentration (ppb(v)) : 72.4795
Integration start scan : 3469 Integration stop scan: 3524
Y at integration start : 5649 Y at integration end: 6392

Reason for manual integration: improper integration

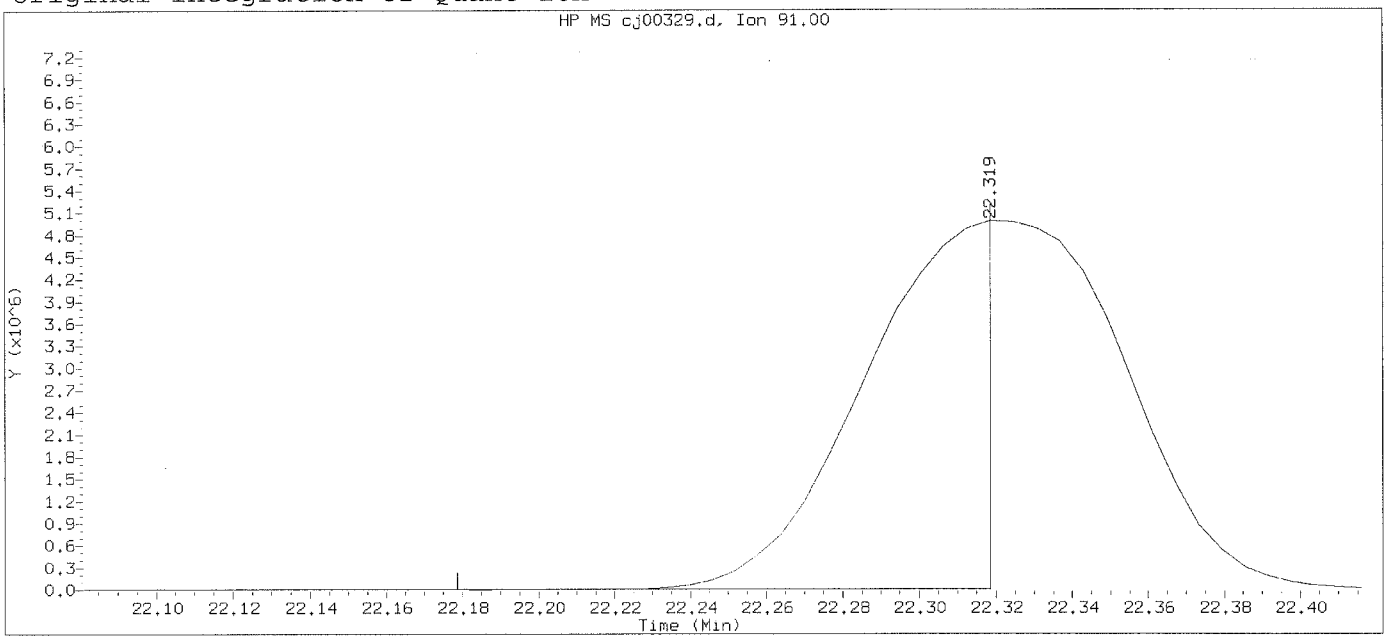
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/21/2015 at 16:42.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: Cmy JM 10/22/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



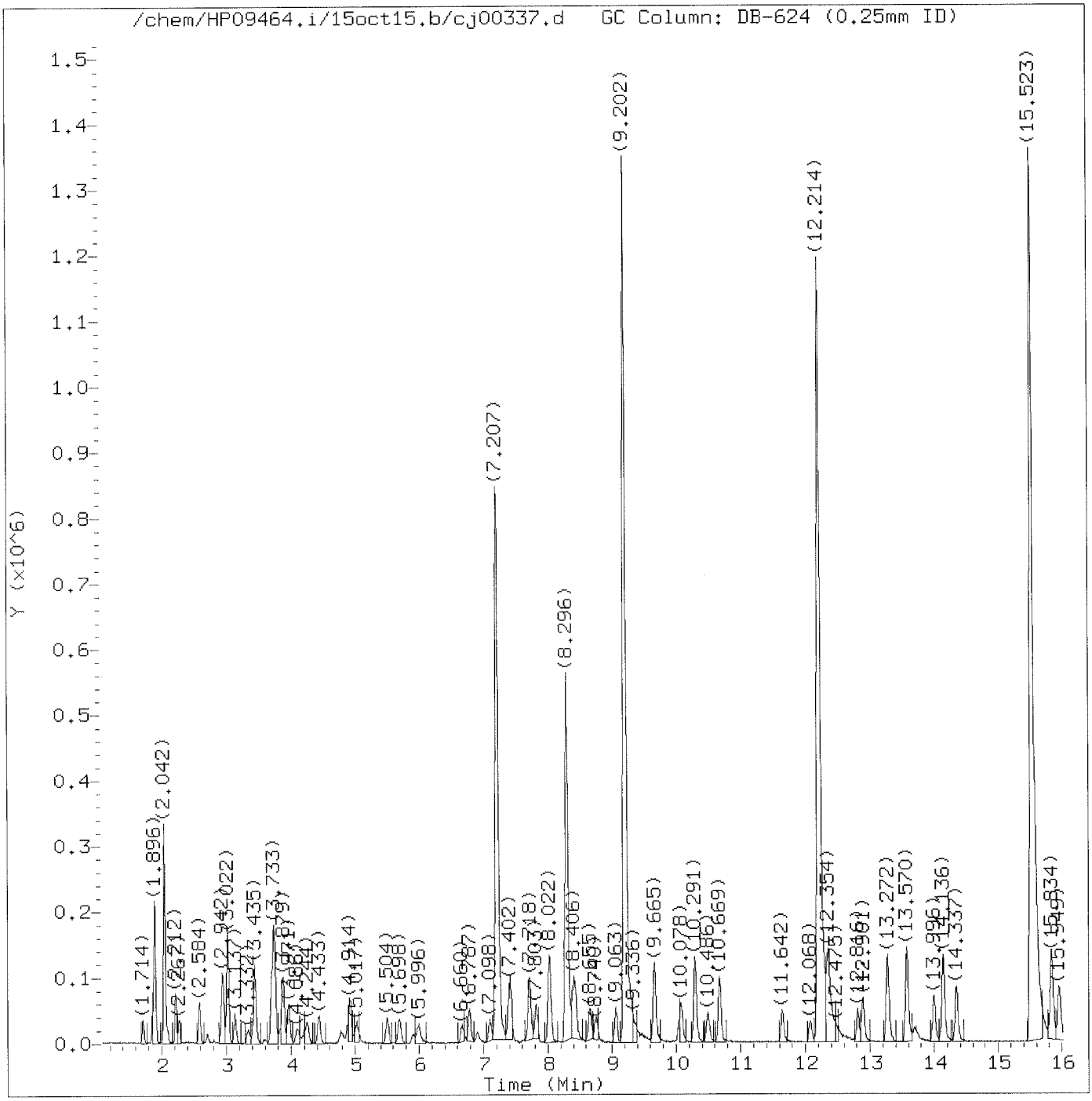
Data File: /chem/HP09464.i/15oct15.b/cj00329.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 04:03 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 04:43 Automation

Sample Name: VSTD070 Lab Sample ID: VSTD070

Compound Number	: 95
Compound Name	: Benzyl Chloride
Scan Number	: 3491
Retention Time (minutes)	: 22.319
Quant Ion	: 91.00
Area	: 11054687
Concentration (ppb(v))	: 33.0743
Integration start scan	: 3467 Integration stop scan: 3490
Y at integration start	: 4375 Y at integration end: 4375

Digitally signed by Jacob E. Bailey on 10/21/2015 at 16:42.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d
Injection date and time: 16-OCT-2015 10:21

Instrument ID: HP09464.i
Analyst ID: jeb07445

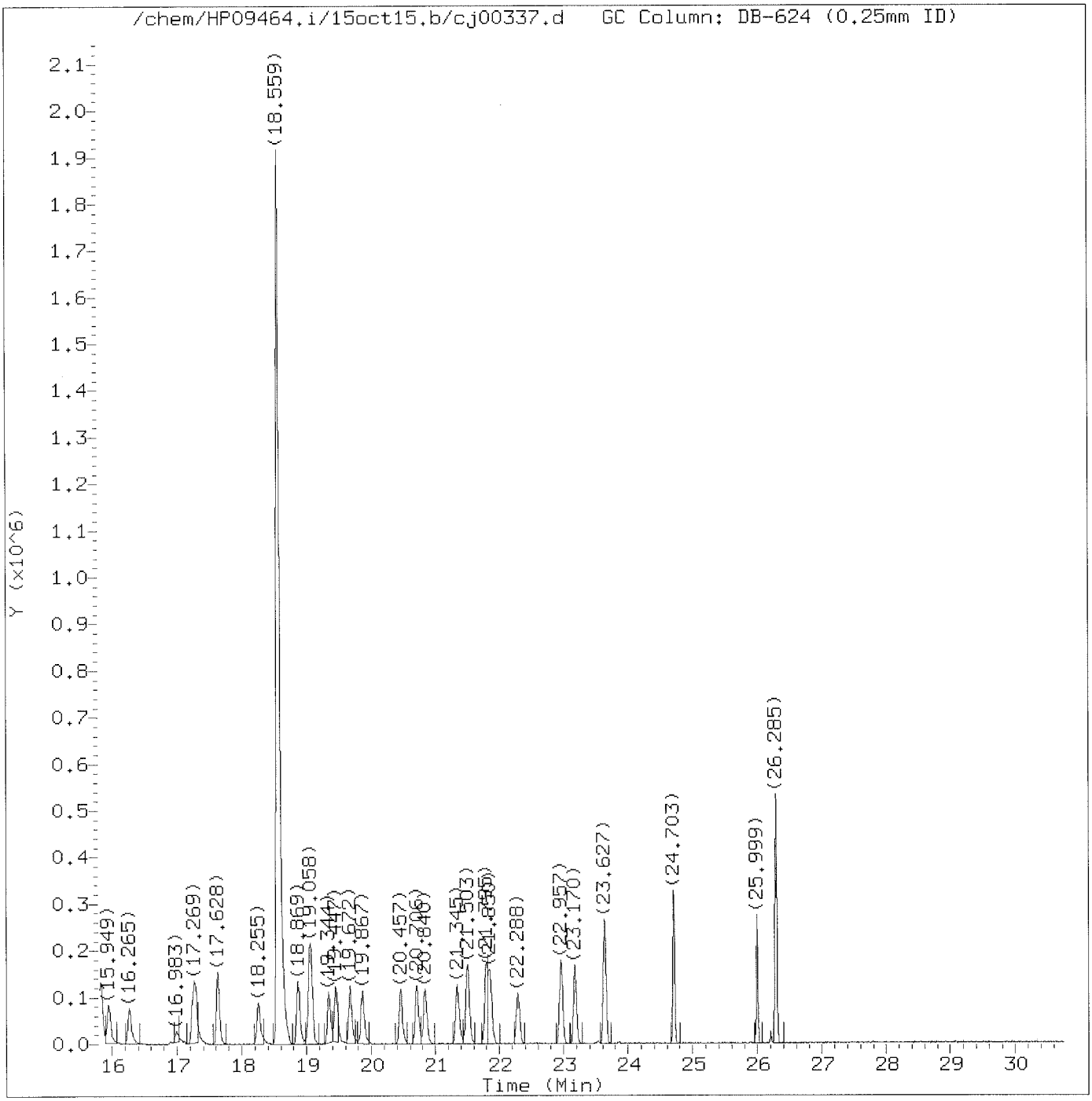
Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 10:21 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d
Injection date and time: 16-OCT-2015 10:21
Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 17:40
Sublist used: all
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001
Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.860	41	14303	0.932
2) Dichlorodifluoromethane	(1)	1.896	85	186562	0.982
3) Chlorodifluoromethane	(1)	1.908	51	58304	0.960
4) Freon 114	(1)	2.042	85	149838	0.877
5) Chloromethane	(1)	2.091	52	7353	0.815
6) Vinyl Chloride	(1)	2.212	62	34184	0.850
7) 1,3-Butadiene	(1)	2.267	54	17040	0.688
8) Bromomethane	(1)	2.584	94	49364	0.842
9) Chloroethane	(1)	2.711	64	19639	0.864
10) Bromoethene	(1)	2.924	106	47815	0.859
11) Dichlorofluoromethane	(1)	2.949	67	99991	0.942
12) Trichlorofluoromethane	(1)	3.022	101	198096	0.967
13) Pentane	(1)	3.131	43	30083	0.864
14) Ethanol	(1)	3.332	45	45154	5.505
15) Freon123a	(1)	3.435	67	72353	0.968
16) Acrolein	(1)	3.587	56	9156	1.194
17) 1,1-Dichloroethene	(1)	3.703	61	56014	0.839
18) Freon 113	(1)	3.739	103	77651	0.956
19) Acetone	(1)	3.825	43	39148	1.475
20) Methyl Iodide	(1)	3.873	142	163075	0.931
21) Carbon Disulfide	(1)	3.964	76	128727	0.938
22) Isopropanol	(1)	4.086	45	56080	1.787
23) Acetonitrile	(1)	4.196	40	14570M	2.412
24) 3-Chloropropene	(1)	4.256	76	17851	0.944
25) Methylene Chloride	(1)	4.433	84	41445	1.001
26) tert-Butyl Alcohol	(1)	4.780	59	48809	1.034
27) Acrylonitrile	(1)	4.877	53	30265	2.122
28) trans-1,2-Dichloroethene	(1)	4.932	61	50024	0.885
29) Methyl t-Butyl Ether	(1)	5.029	73	75268	1.030
30) Hexane	(1)	5.510	57	27796	0.671
31) 1,1-Dichloroethane	(1)	5.698	63	64410	0.923
32) Vinyl Acetate	(1)	5.917	86	6647	0.915
33) Di-Isopropyl Ether	(1)	5.984	45	32230	0.774
36) 1,2-Dichloroethene (total)	(1)		61	95522	1.759
34) Ethyl Tert-Butyl Ether	(1)	6.672	59	47796	0.823
35) cis-1,2-Dichloroethene	(1)	6.787	61	45498	0.875
37) 2-Butanone	(1)	6.903	72	15847	1.229
38) Ethyl Acetate	(1)	7.091	70	6262	1.068

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 10:21 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.098	55	39727	1.216
40)*Bromochloromethane	(1)	7.213	130	645499	10.000
41) Tetrahydrofuran	(1)	7.383	42	15724	1.122
42) Chloroform	(1)	7.414	83	121499	0.993
43) 1,1,1-Trichloroethane	(1)	7.718	97	130171	0.936
44) Cyclohexane	(1)	7.815	56	32140	0.709
45) Carbon Tetrachloride	(1)	8.016	117	160429	1.021
46) Benzene	(2)	8.406	78	117684	0.934
47) 1,2-Dichloroethane	(2)	8.436	62	75179	1.029
48) Isooctane	(2)	8.667	57	75802	0.639
49) Tert-Amyl Methyl Ether	(2)	8.764	73	61354	0.890
50) Heptane	(2)	9.075	43	19665	0.602
51)*1,4-Difluorobenzene	(2)	9.202	114	2059102	10.000
52) Trichloroethene	(2)	9.665	130	75103	0.870
53) Ethyl Acrylate	(2)	10.042	55	41618	1.176
54) 1,2-Dichloropropane	(2)	10.078	63	33515	0.959
55) Dibromomethane	(2)	10.291	174	94914	1.105
56) 1,4-Dioxane	(2)	10.474	88	29805	1.158
57) Methyl Methacrylate	(2)	10.498	69	29127	1.090
58) Bromodichloromethane	(2)	10.669	83	126915	0.987
59) cis-1,3-Dichloropropene	(2)	11.642	75	61122	0.894
60) 4-Methyl-2-Pentanone	(2)	12.074	43	35979	1.097
61) Toluene	(3)	12.354	91	140865	0.963
64) 1,3-Dichloropropene (total)	(3)		75	142456	1.951
62) Octane	(3)	12.810	43	21011	0.545
63) trans-1,3-Dichloropropene	(3)	12.889	75	81334	1.058
65) Ethyl Methacrylate	(3)	13.272	69	38832	0.947
66) 1,1,2-Trichloroethane	(3)	13.272	97	64431	1.033
67) Tetrachloroethene	(3)	13.570	166	94657	0.760
68) 2-Hexanone	(3)	13.996	43	72023	2.129
69) Dibromochloromethane	(3)	14.136	127	117390	0.977
70) 1,2-Dibromoethane	(3)	14.337	107	115258	1.080
71)*Chlorobenzene-d5	(3)	15.523	117	1873092	10.000
72) Chlorobenzene	(3)	15.590	112	155386	1.068
73) 1,1,1,2-Tetrachloroethane	(3)	15.840	131	93589	1.033
74) Ethylbenzene	(3)	15.961	91	157206	0.973
75) m/p-Xylene	(3)	16.278	91	119683	0.896
77) Xylene (total)	(3)		91	270348	1.967

* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00337.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 10:21 Analyst ID: jeb07445

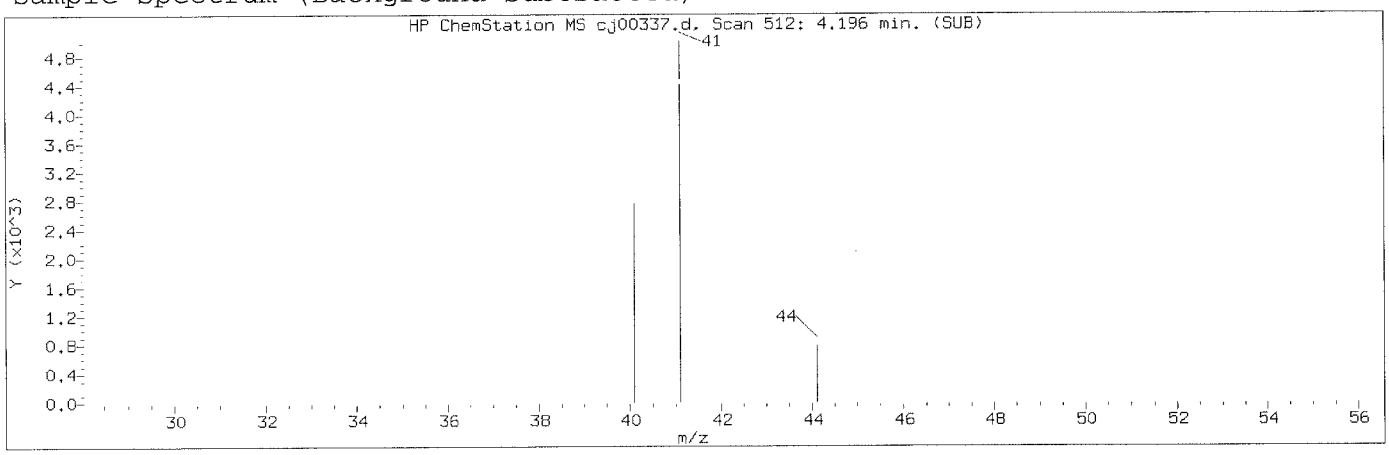
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

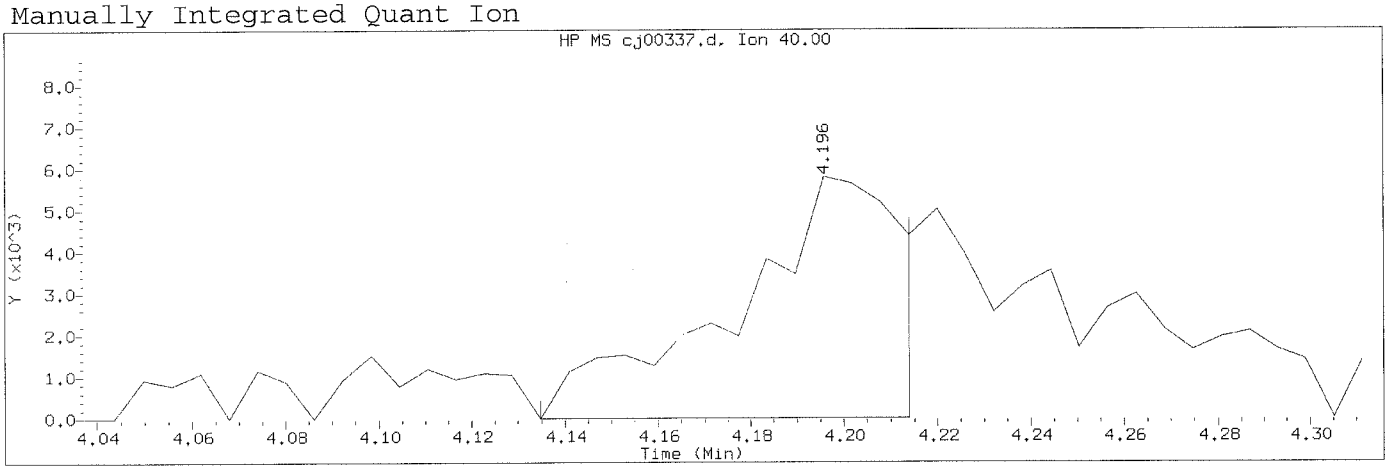
	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76)	o-Xylene	(3)	17.239	91	150665	1.071
78)	Styrene	(3)	17.281	104	127416	1.011
79)	Bromoform	(3)	17.622	173	156754	1.010
80)	Cumene	(3)	18.249	105	164215	0.909
81)	Bromobenzene	(3)	18.863	156	113752	1.121
82)	1,1,2,2-Tetrachloroethane	(3)	19.040	83	143115	1.205
83)	1,2,3-Trichloropropane	(3)	19.082	110	56240	1.237
84)	n-Propylbenzene	(3)	19.344	120	55260	0.920
85)	2-Chlorotoluene	(3)	19.459	126	63828	0.957
86)	4-Ethyltoluene	(3)	19.672	105	195744	0.972
87)	1,3,5-Trimethylbenzene	(3)	19.867	105	166298	0.959
88)	Alpha Methyl Styrene	(3)	20.457	118	95507	0.970
89)	tert-Butylbenzene	(3)	20.700	119	159359	0.930
90)	1,2,4-Trimethylbenzene	(3)	20.846	105	179526	0.997
91)	sec-Butylbenzene	(3)	21.345	105	226031	0.950
92)	1,3-Dichlorobenzene	(3)	21.510	146	204017	1.143
93)	1,4-Dichlorobenzene	(3)	21.795	146	206359	1.100
94)	p-Isopropyltoluene	(3)	21.856	119	212506	0.980
95)	Benzyl Chloride	(3)	22.288	91	211280	1.303
96)	1,2-Dichlorobenzene	(3)	22.957	146	188016	1.112
97)	n-Butylbenzene	(3)	23.176	91	198137	1.122
98)	Hexachloroethane	(3)	23.627	117	102761	1.147
99)	1,2-Dibromo-3-chloropropane	(3)	24.709	157	132289	1.440
100)	1,2,4-Trichlorobenzene	(3)	25.999	180	98520	1.054
101)	Hexachlorobutadiene	(3)	26.279	225	88445	0.865
102)	Naphthalene	(3)	26.297	128	242239	1.253

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00337.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 10:21 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 17:40
Date, time and analyst ID of latest file update: 16-Oct-2015 17:40 jeb07445

Sample Name: VSTD001 Lab Sample ID: VSTD001

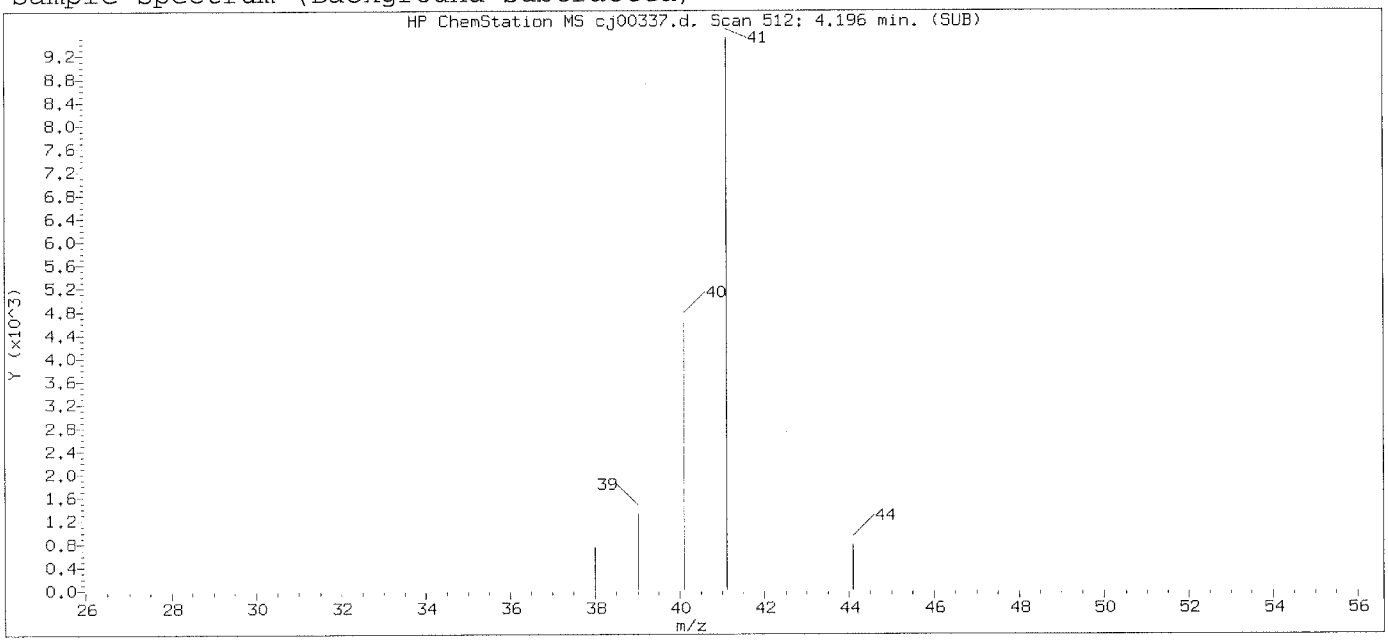
Compound Number : 23
Compound Name : Acetonitrile
Scan Number : 512
Retention Time (minutes): 4.196
Quant Ion : 40.00
Area (flag) : 14570M
Concentration (ppb(v)) : 2.4118
Integration start scan : 501 Integration stop scan: 514
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

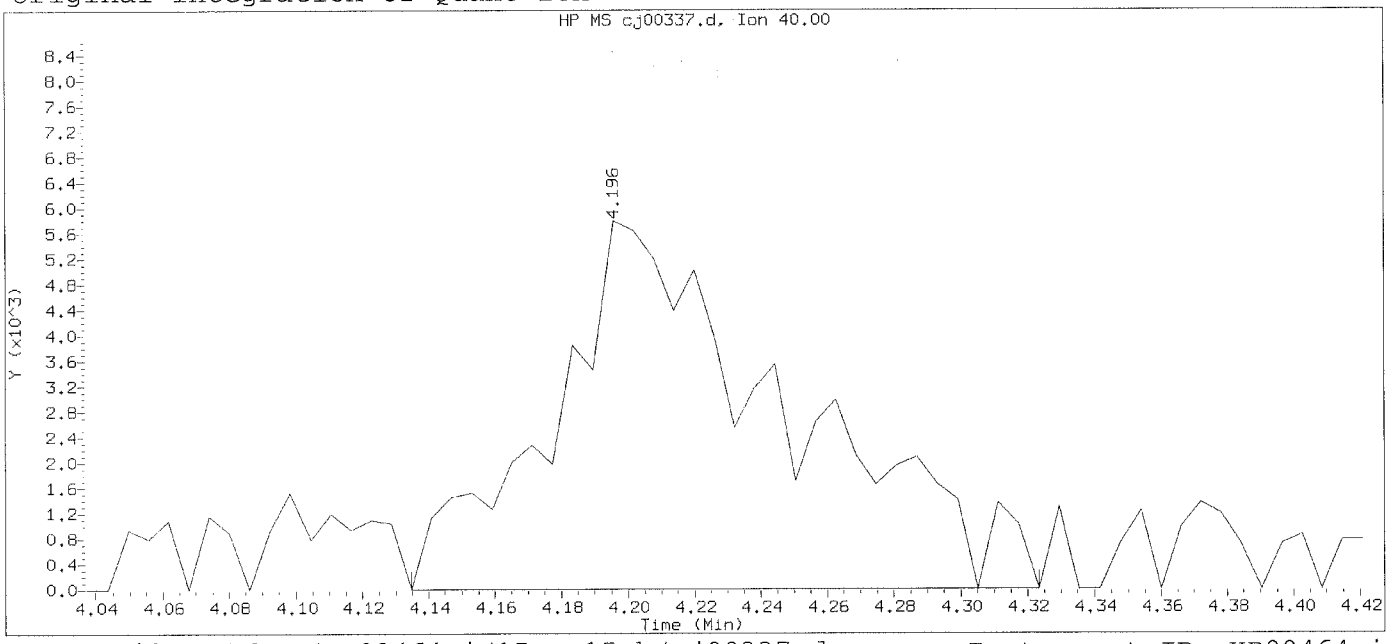
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mp1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



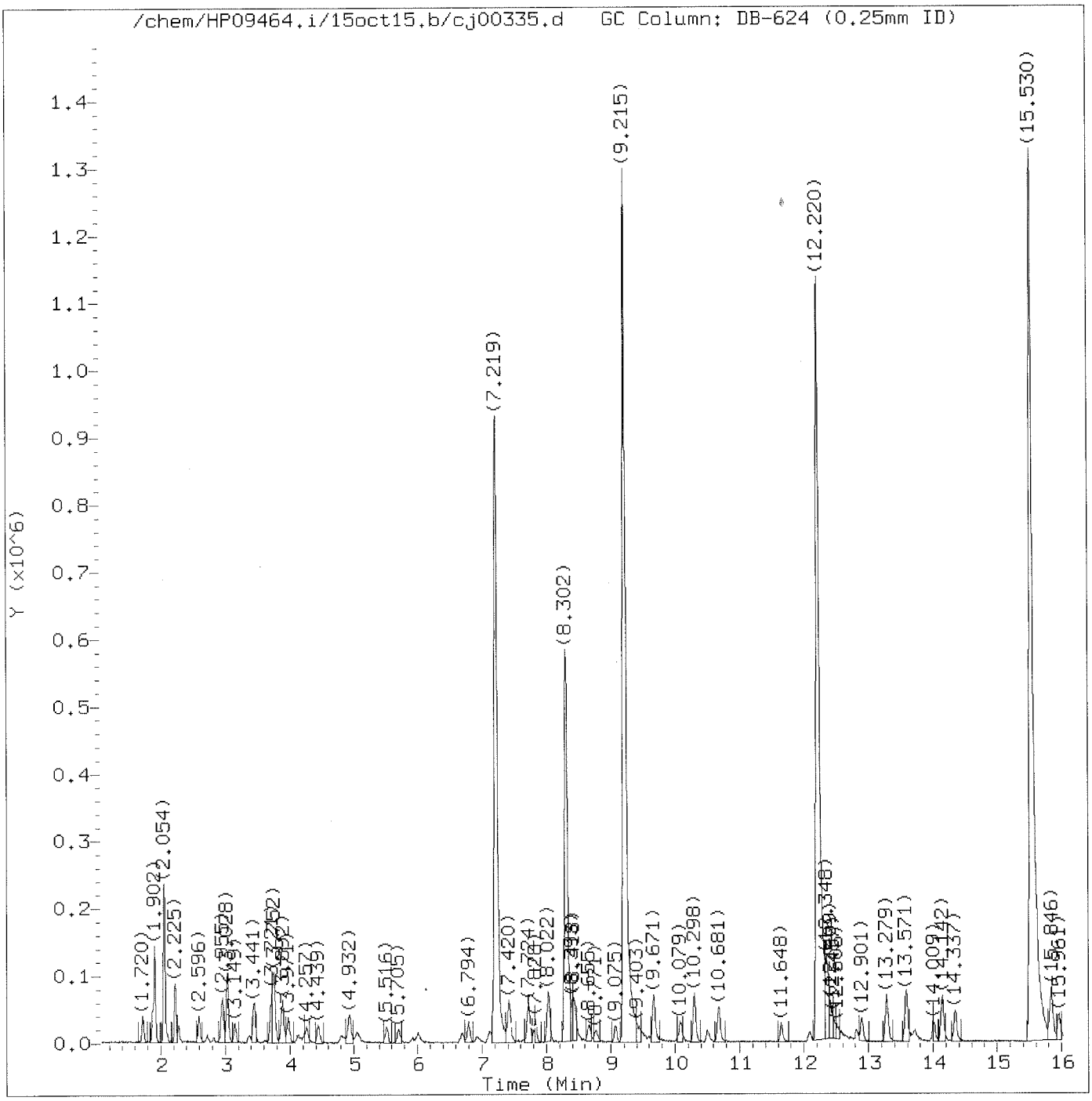
Data File: /chem/HP09464.i/15oct15.b/cj00337.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 10:21 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 10:05
Date, time and analyst ID of latest file update: 16-Oct-2015 11:01 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 23		
Compound Name	: Acetonitrile		
Scan Number	: 512		
Retention Time (minutes)	: 4.196		
Quant Ion	: 40.00		
Area	: 28717		
Concentration (ppb(v))	: 2.9562		
Integration start scan	: 501	Integration stop scan:	532
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:41.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

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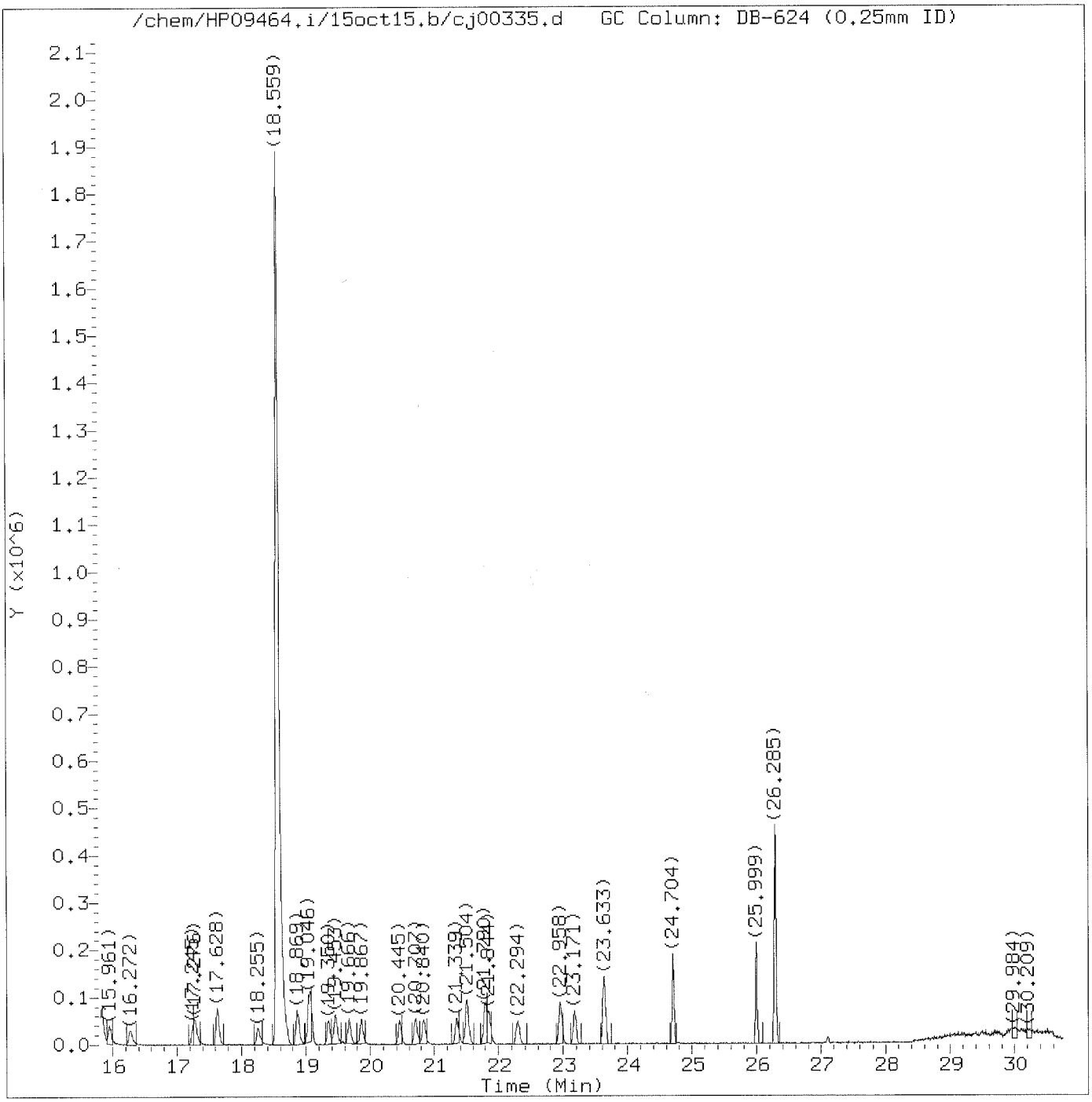
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	8444	0.478
2) Dichlorodifluoromethane	(1)	1.902	85	120373	0.550
3) Chlorodifluoromethane	(1)	1.915	51	39377	0.563
4) Freon 114	(1)	2.048	85	94620	0.480
5) Chloromethane	(1)	2.097	52	4811	0.463
6) Vinyl Chloride	(1)	2.225	62	25375	0.547
7) 1,3-Butadiene	(1)	2.280	54	13983	0.490
8) Bromomethane	(1)	2.584	94	32181	0.476
9) Chloroethane	(1)	2.718	64	13051	0.498
10) Bromoethene	(1)	2.937	106	33086	0.516
11) Dichlorofluoromethane	(1)	2.955	67	66943	0.547
12) Trichlorofluoromethane	(1)	3.028	101	118130	0.500
13) Pentane	(1)	3.143	43	20601	0.513
14) Ethanol	(1)	3.356	45	22181	2.346
15) Freon123a	(1)	3.435	67	47240	0.548
16) Acrolein	(1)	3.600	56	5528	0.626
17) 1,1-Dichloroethene	(1)	3.703	61	39882	0.518
18) Freon 113	(1)	3.752	103	49181	0.525
19) Acetone	(1)	3.861	43	23723	0.775
20) Methyl Iodide	(1)	3.892	142	101625	0.504
21) Carbon Disulfide	(1)	3.977	76	82945	0.525
22) Isopropanol	(1)	4.129	45	30222	0.835
23) Acetonitrile	(1)	4.232	40	13291	1.909
24) 3-Chloropropene	(1)	4.263	76	9616	0.441
25) Methylene Chloride	(1)	4.439	84	25526	0.535
26) tert-Butyl Alcohol	(1)	4.835	59	36685M	0.674
27) Acrylonitrile	(1)	4.902	53	13854	0.843
28) trans-1,2-Dichloroethene	(1)	4.938	61	30716	0.471
29) Methyl t-Butyl Ether	(1)	5.048	73	41252	0.490
30) Hexane	(1)	5.510	57	18026	0.378
31) 1,1-Dichloroethane	(1)	5.717	63	35716	0.444
32) Vinyl Acetate	(1)	5.930	86	2293M	0.274
33) Di-Isopropyl Ether	(1)	5.997	45	8567	0.178
36) 1,2-Dichloroethene (total)	(1)		61	47497	0.751
34) Ethyl Tert-Butyl Ether	(1)	6.690	59	22331	0.334
35) cis-1,2-Dichloroethene	(1)	6.794	61	16781	0.280
37) 2-Butanone	(1)	6.921	72	8478	0.570
38) Ethyl Acetate	(1)	7.110	70	3781	0.560

M = Compound was manually integrated.

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on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.128	55	20454	0.543
40)*Bromochloromethane	(1)	7.219	130	744063	10.000
41) Tetrahydrofuran	(1)	7.414	42	9056	0.560
42) Chloroform	(1)	7.420	83	66557	0.472
43) 1,1,1-Trichloroethane	(1)	7.718	97	72333	0.451
44) Cyclohexane	(1)	7.828	56	19178	0.367
45) Carbon Tetrachloride	(1)	8.022	117	88838	0.490
46) Benzene	(2)	8.418	78	71052	0.526
47) 1,2-Dichloroethane	(2)	8.454	62	42360	0.541
48) Isooctane	(2)	8.679	57	39830	0.314
49) Tert-Amyl Methyl Ether	(2)	8.759	73	28645	0.388
50) Heptane	(2)	9.063	43	10053	0.287
51)*1,4-Difluorobenzene	(2)	9.215	114	2205333	10.000
52) Trichloroethene	(2)	9.671	130	41398	0.448
53) Ethyl Acrylate	(2)	10.042	55	21258	0.561
54) 1,2-Dichloropropane	(2)	10.091	63	18614	0.497
55) Dibromomethane	(2)	10.292	174	51806	0.563
56) 1,4-Dioxane	(2)	10.498	88	7095	0.257
57) Methyl Methacrylate	(2)	10.498	69	11887	0.415
58) Bromodichloromethane	(2)	10.675	83	63857	0.464
59) cis-1,3-Dichloropropene	(2)	11.648	75	33812	0.462
60) 4-Methyl-2-Pentanone	(2)	12.086	43	16744	0.476
61) Toluene	(3)	12.360	91	81660	0.526
64) 1,3-Dichloropropene (total)	(3)		75	77078	0.992
62) Octane	(3)	12.810	43	7967	0.195
63) trans-1,3-Dichloropropene	(3)	12.901	75	43266	0.530
65) Ethyl Methacrylate	(3)	13.273	69	17845	0.410
66) 1,1,2-Trichloroethane	(3)	13.279	97	38127	0.576
67) Tetrachloroethene	(3)	13.571	166	44307	0.335
68) 2-Hexanone	(3)	14.009	43	34068	0.948
69) Dibromochloromethane	(3)	14.142	127	66117	0.518
70) 1,2-Dibromoethane	(3)	14.343	107	67033	0.592
71)*Chlorobenzene-d5	(3)	15.530	117	1988373	10.000
72) Chlorobenzene	(3)	15.590	112	75032	0.486
73) 1,1,1,2-Tetrachloroethane	(3)	15.846	131	50647	0.526
74) Ethylbenzene	(3)	15.961	91	83272	0.485
75) m/p-Xylene	(3)	16.272	91	63822	0.450
77) Xylene (total)	(3)		91	125938	0.866

* = Compound is an internal standard.

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Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.245	91	62116	0.416
78) Styrene	(3)	17.282	104	54915	0.410
79) Bromoform	(3)	17.622	173	81829	0.496
80) Cumene	(3)	18.255	105	71956	0.375
81) Bromobenzene	(3)	18.869	156	63452	0.589
82) 1,1,2,2-Tetrachloroethane	(3)	19.040	83	78991	0.626
83) 1,2,3-Trichloropropane	(3)	19.070	110	29794	0.618
84) n-Propylbenzene	(3)	19.344	120	27790	0.436
85) 2-Chlorotoluene	(3)	19.466	126	36902	0.521
86) 4-Ethyltoluene	(3)	19.666	105	91627	0.429
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	80796	0.439
88) Alpha Methyl Styrene	(3)	20.457	118	40446	0.387
89) tert-Butylbenzene	(3)	20.713	119	77437	0.426
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	85598	0.448
91) sec-Butylbenzene	(3)	21.345	105	106872	0.423
92) 1,3-Dichlorobenzene	(3)	21.510	146	109296	0.577
93) 1,4-Dichlorobenzene	(3)	21.802	146	109625	0.550
94) p-Isopropyltoluene	(3)	21.863	119	99457	0.432
95) Benzyl Chloride	(3)	22.294	91	104101	0.605
96) 1,2-Dichlorobenzene	(3)	22.958	146	100676	0.561
97) n-Butylbenzene	(3)	23.177	91	93925	0.501
98) Hexachloroethane	(3)	23.627	117	55416	0.583
99) 1,2-Dibromo-3-chloropropane	(3)	24.710	157	79063	0.810
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	86587	0.873
101) Hexachlorobutadiene	(3)	26.279	225	74351	0.685
102) Naphthalene	(3)	26.297	128	215915	1.052

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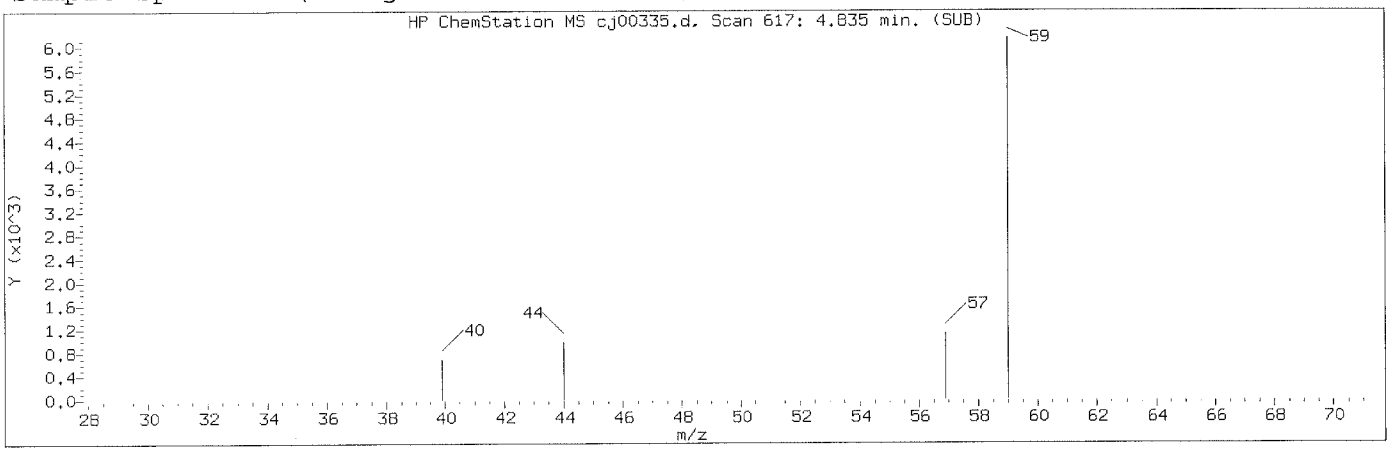
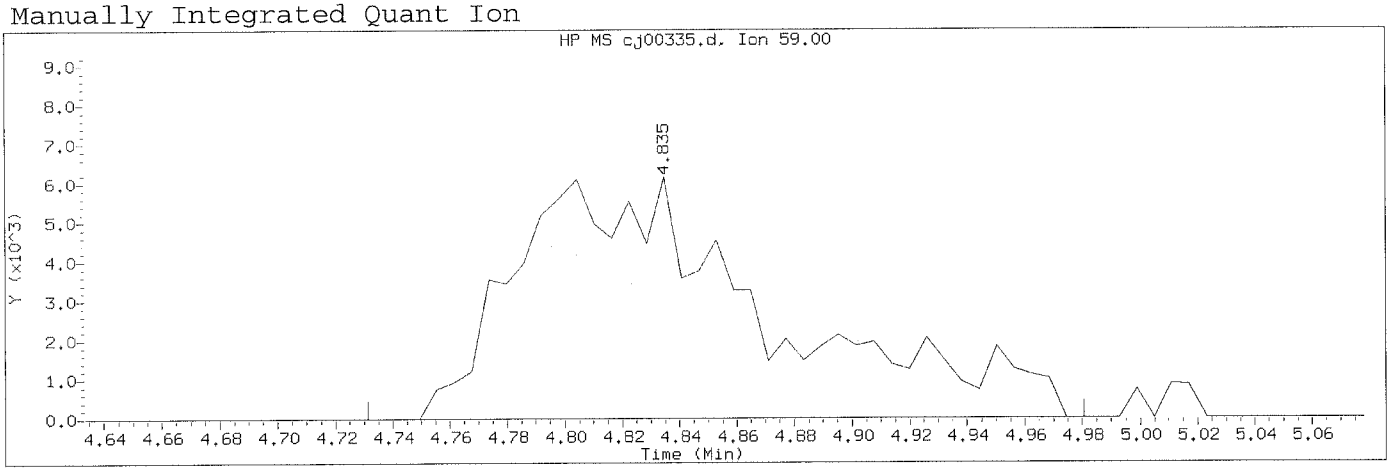
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

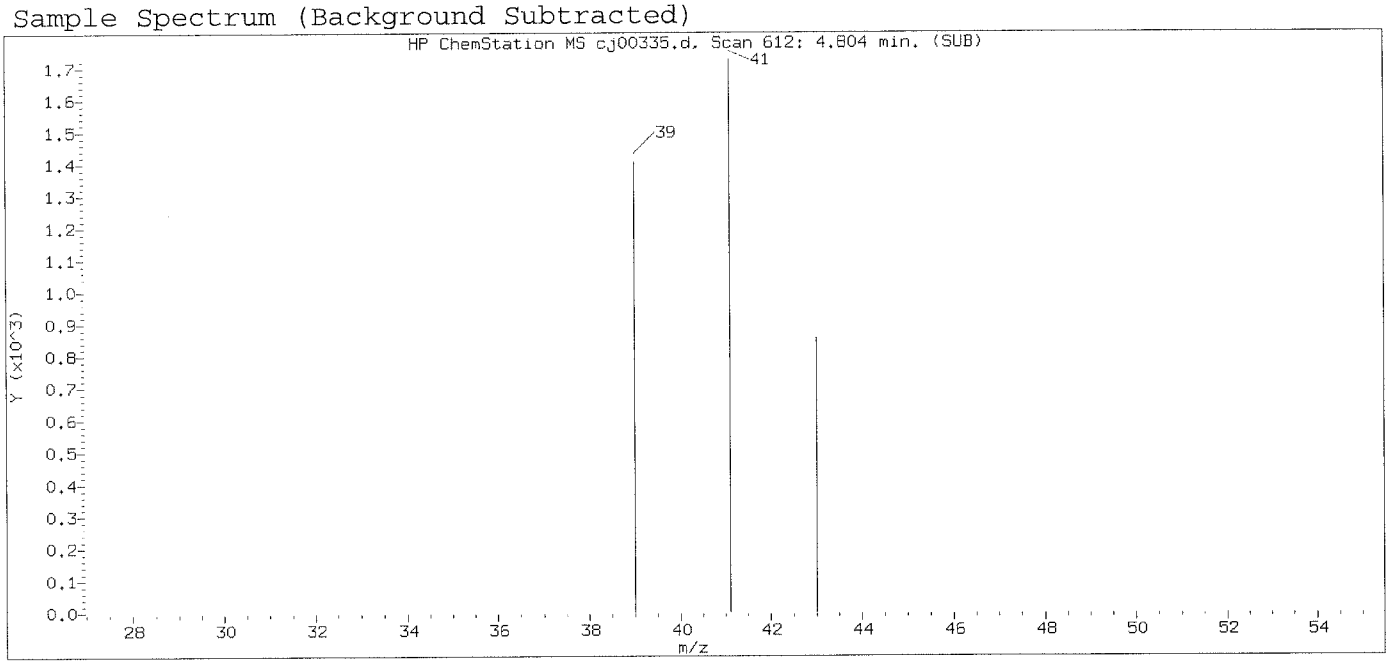
Compound Number	: 26		
Compound Name	: tert-Butyl Alcohol		
Scan Number	: 617		
Retention Time (minutes)	: 4.835		
Quant Ion	: 59.00		
Area (flag)	: 36685M		
Concentration (ppb(v))	: 0.6745		
Integration start scan	: 599	Integration stop scan:	640
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

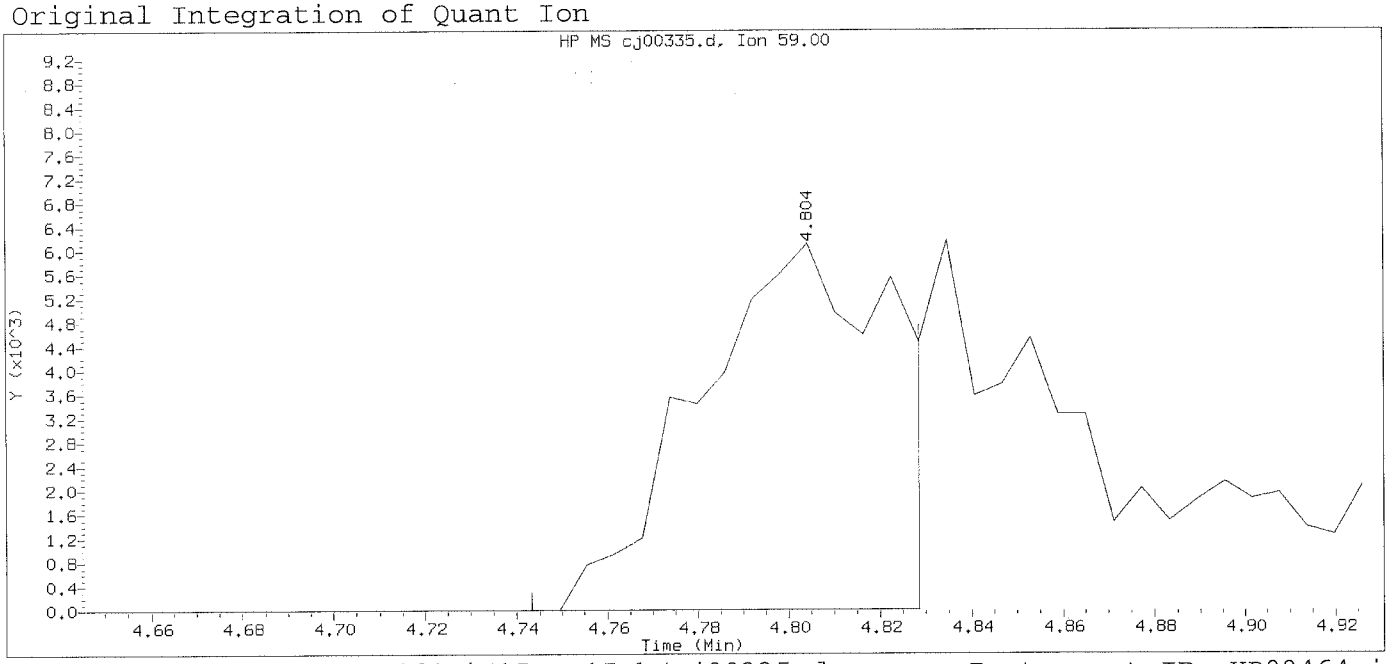
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 09:17 Automation

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compound Number	: 26		
Compound Name	: tert-Butyl Alcohol		
Scan Number	: 612		
Retention Time (minutes)	: 4.804		
Quant Ion	: 59.00		
Area	: 17534		
Concentration (ppb(v))	: 0.2809		
Integration start scan	: 601	Integration stop scan:	615
Y at integration start	: 0	Y at integration end:	0

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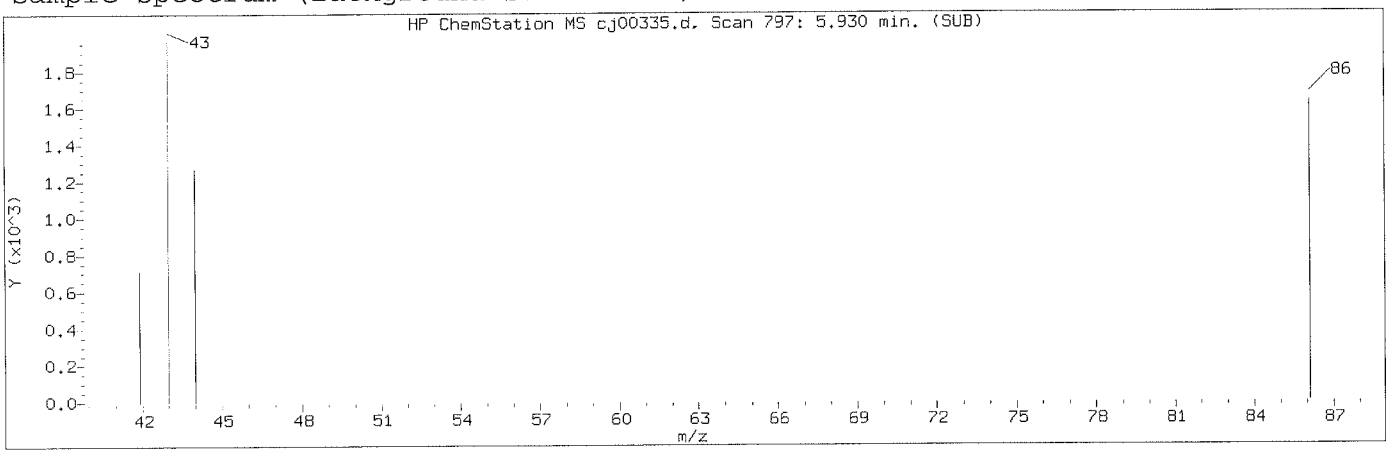
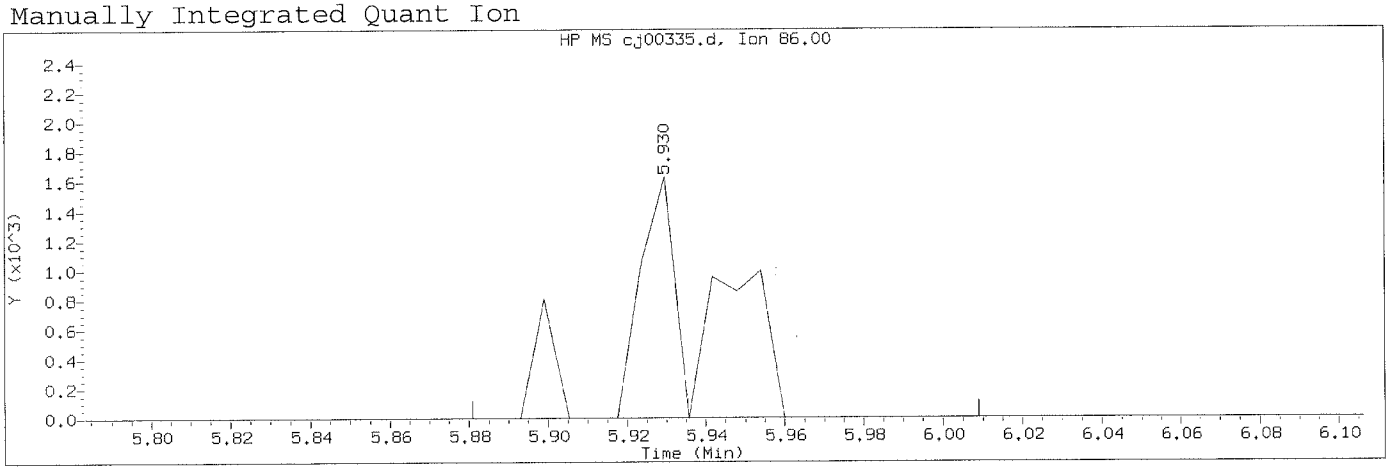
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:14 jeb07445

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

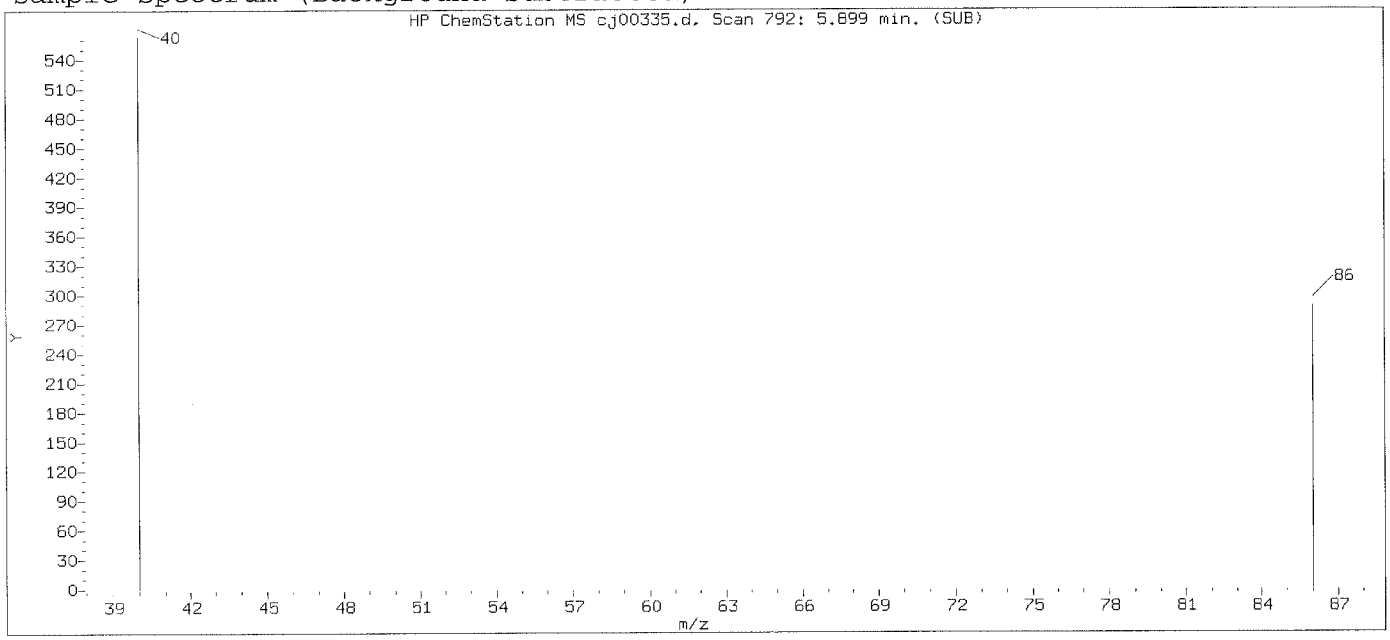
Compound Number : 32
Compound Name : Vinyl Acetate
Scan Number : 797
Retention Time (minutes): 5.930
Quant Ion : 86.00
Area (flag) : 2293M
Concentration (ppb(v)) : 0.2739
Integration start scan : 788 Integration stop scan: 809
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

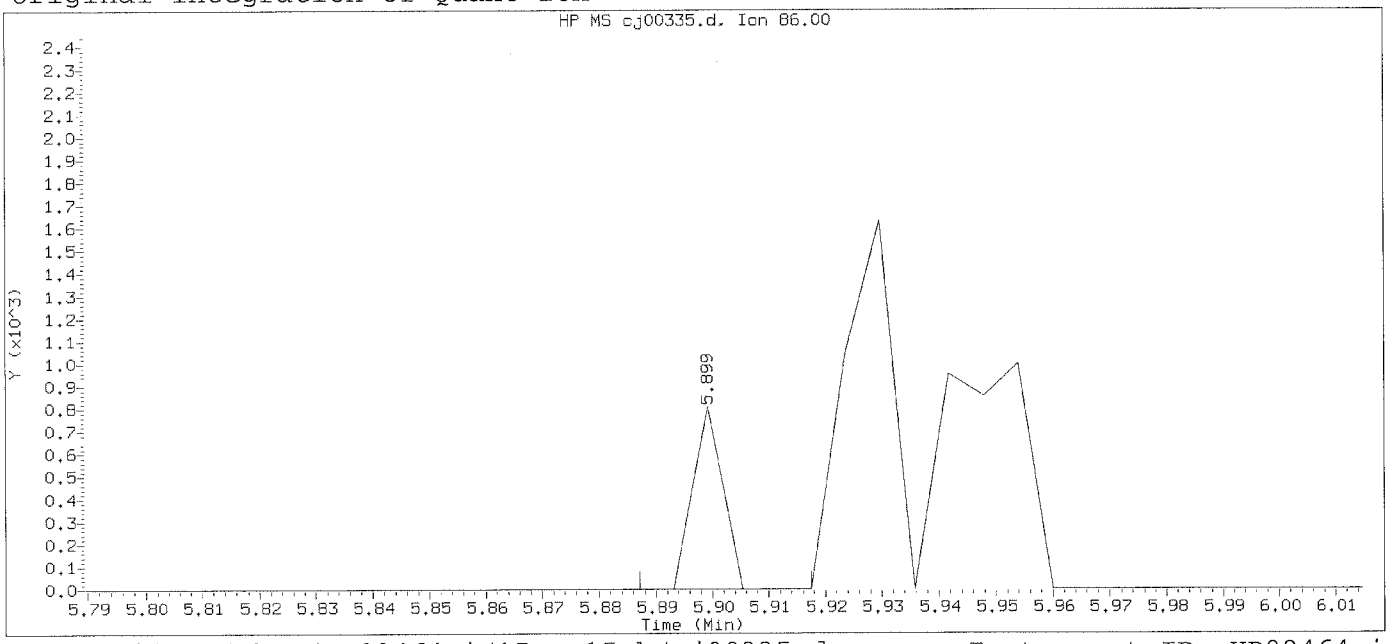
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mqb1758 10/21/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00335.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 08:37 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 09:17 Automation

Sample Name: mdlv0.5 Lab Sample ID: mdlv0.5

Compound Number	: 32		
Compound Name	: Vinyl Acetate		
Scan Number	: 792		
Retention Time (minutes)	: 5.899		
Quant Ion	: 86.00		
Area	: 295		
Concentration (ppb(v))	: 0.0260		
Integration start scan	: 789	Integration stop scan:	794
Y at integration start	: 0	Y at integration end:	0

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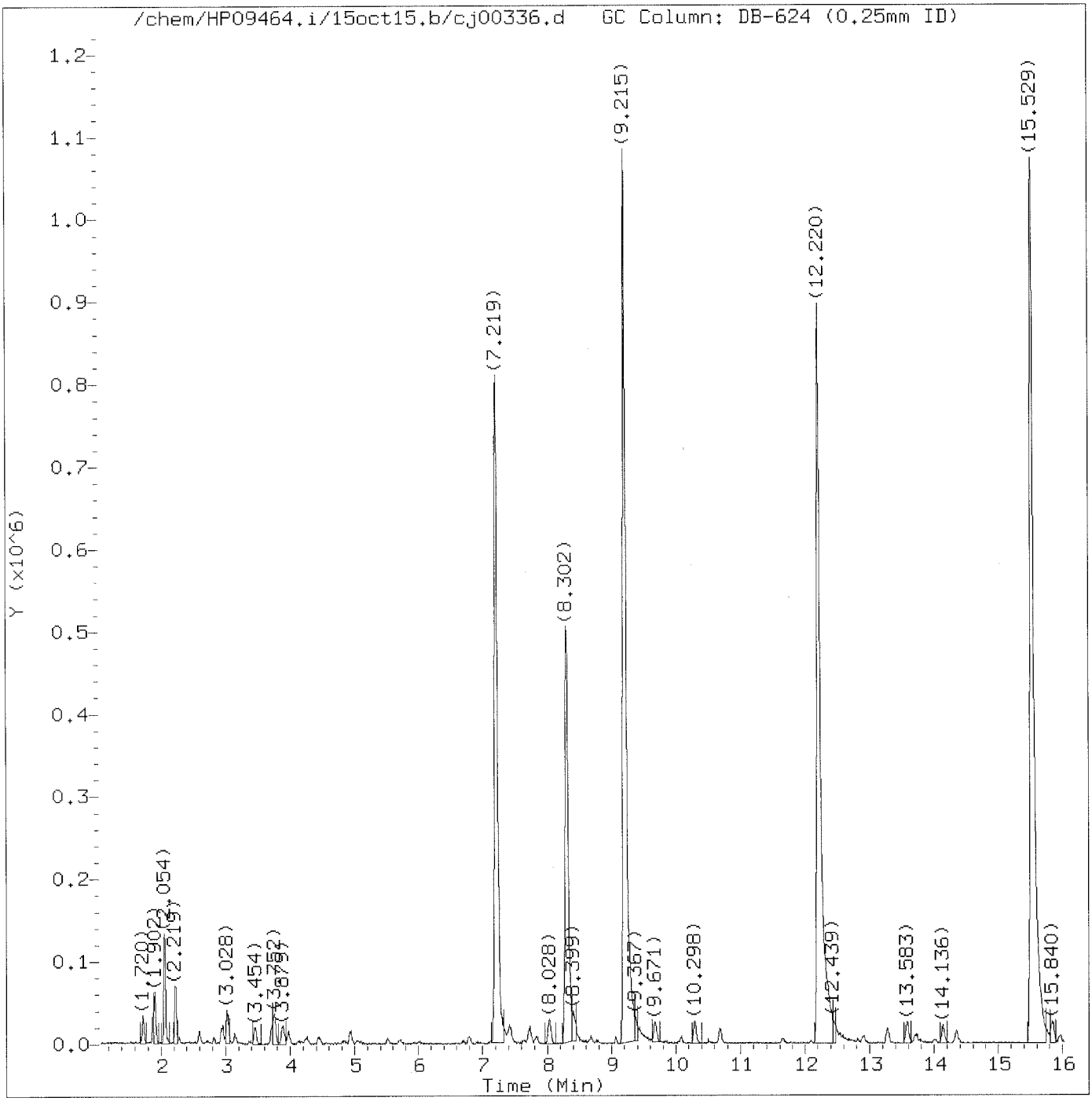
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

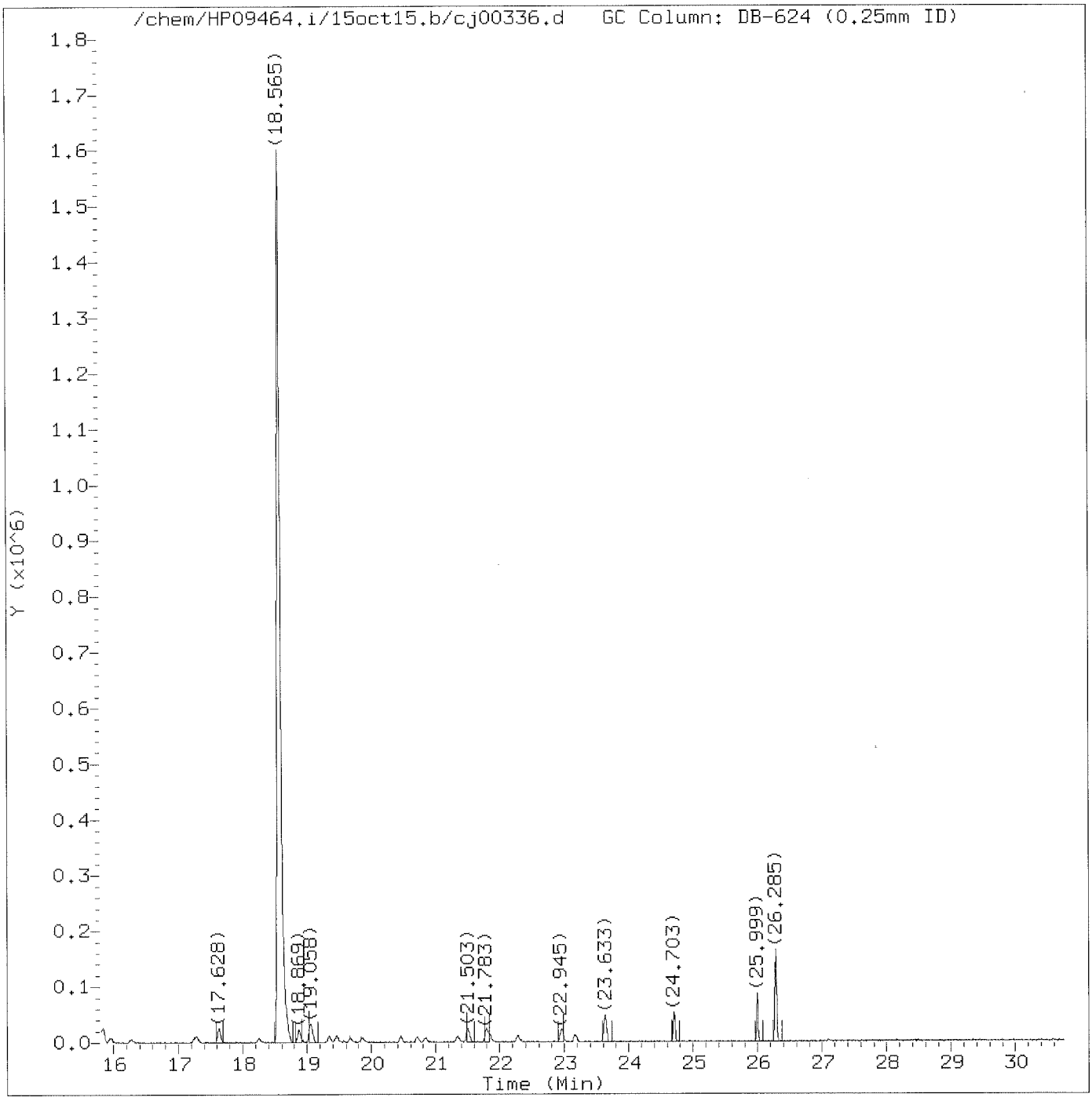
Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d
Injection date and time: 16-OCT-2015 09:19
Instrument ID: HP09464.i
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m
Calibration date and time: 16-OCT-2015 18:12
Sublist used: all
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2
Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	4369	0.290
2) Dichlorodifluoromethane	(1)	1.902	85	53765	0.289
3) Chlorodifluoromethane	(1)	1.914	51	13347	0.224
4) Freon 114	(1)	2.048	85	36561	0.218
5) Chloromethane	(1)	2.103	52	865M	0.098
6) Vinyl Chloride	(1)	2.225	62	8325	0.211
7) 1,3-Butadiene	(1)	2.273	54	3572M	0.147
8) Bromomethane	(1)	2.596	94	12883	0.224
9) Chloroethane	(1)	2.724	64	3865M	0.173
10) Bromoethene	(1)	2.936	106	12154	0.223
11) Dichlorofluoromethane	(1)	2.961	67	23249	0.223
12) Trichlorofluoromethane	(1)	3.028	101	46852	0.233
13) Pentane	(1)	3.137	43	7623	0.223
14) Ethanol	(1)	3.393	45	6839M	0.850
15) Freon123a	(1)	3.454	67	16125	0.220
17) 1,1-Dichloroethene	(1)	3.703	61	15168	0.232
18) Freon 113	(1)	3.752	103	17746	0.223
19) Acetone	(1)	3.867	43	6722	0.258
20) Methyl Iodide	(1)	3.879	142	35457	0.206
21) Carbon Disulfide	(1)	3.983	76	30793	0.229
22) Isopropanol	(1)	4.129	45	8496	0.276
23) Acetonitrile	(1)	4.244	40	7000	1.181
24) 3-Chloropropene	(1)	4.263	76	2477M	0.134
25) Methylene Chloride	(1)	4.451	84	10255	0.253
26) tert-Butyl Alcohol	(1)	4.828	59	9698	0.210
27) Acrylonitrile	(1)	4.926	53	2852M	0.204
28) trans-1,2-Dichloroethene	(1)	4.944	61	10951	0.197
29) Methyl t-Butyl Ether	(1)	5.054	73	11716	0.163
30) Hexane	(1)	5.516	57	5241	0.129
31) 1,1-Dichloroethane	(1)	5.711	63	12544	0.183
33) Di-Isopropyl Ether	(1)	6.033	45	3050M	0.075
36) 1,2-Dichloroethene (total)	(1)		61	17946	0.335
34) Ethyl Tert-Butyl Ether	(1)	6.702	59	6049	0.106
35) cis-1,2-Dichloroethene	(1)	6.781	61	6995	0.137
37) 2-Butanone	(1)	6.939	72	299M	0.024
39) Methyl Acrylate	(1)	7.146	55	3080M	0.096
40)*Bromochloromethane	(1)	7.219	130	633154	10.000
42) Chloroform	(1)	7.432	83	24622	0.205

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	7.438	42	302M	0.022
43) 1,1,1-Trichloroethane	(1)	7.724	97	27281	0.200
44) Cyclohexane	(1)	7.822	56	5774	0.130
45) Carbon Tetrachloride	(1)	8.034	117	33493	0.217
46) Benzene	(2)	8.412	78	22399	0.199
47) 1,2-Dichloroethane	(2)	8.448	62	14831	0.228
48) Isooctane	(2)	8.673	57	10776	0.102
49) Tert-Amyl Methyl Ether	(2)	8.777	73	6381	0.104
50) Heptane	(2)	9.063	43	1370M	0.047
51)*1,4-Difluorobenzene	(2)	9.215	114	1834763	10.000
52) Trichloroethene	(2)	9.659	130	17161	0.223
53) Ethyl Acrylate	(2)	10.054	55	4111	0.130
54) 1,2-Dichloropropane	(2)	10.091	63	3543M	0.114
55) Dibromomethane	(2)	10.298	174	18615	0.243
56) 1,4-Dioxane	(2)	10.504	88	1181M	0.052
57) Methyl Methacrylate	(2)	10.504	69	2039	0.086
58) Bromodichloromethane	(2)	10.669	83	23969	0.209
59) cis-1,3-Dichloropropene	(2)	11.654	75	10074	0.165
60) 4-Methyl-2-Pentanone	(2)	12.098	43	2414M	0.083
61) Toluene	(3)	12.360	91	27032	0.226
64) 1,3-Dichloropropene (total)	(3)		75	23161	0.374
62) Octane	(3)	12.816	43	609M	0.019
63) trans-1,3-Dichloropropene	(3)	12.901	75	13087	0.208
65) Ethyl Methacrylate	(3)	13.272	69	3862M	0.115
66) 1,1,2-Trichloroethane	(3)	13.291	97	12865	0.253
67) Tetrachloroethene	(3)	13.577	166	18128	0.178
68) 2-Hexanone	(3)	14.002	43	7417	0.268
69) Dibromochloromethane	(3)	14.142	127	21577	0.220
70) 1,2-Dibromoethane	(3)	14.349	107	21409	0.246
71)*Chlorobenzene-d5	(3)	15.529	117	1529399	10.000
72) Chlorobenzene	(3)	15.590	112	29334	0.247
73) 1,1,1,2-Tetrachloroethane	(3)	15.846	131	16203	0.219
74) Ethylbenzene	(3)	15.955	91	12002	0.091
75) m/p-Xylene	(3)	16.272	91	14663	0.134
77) Xylene (total)	(3)		91	29520	0.264
76) o-Xylene	(3)	17.245	91	14857	0.129
78) Styrene	(3)	17.288	104	12562	0.122
79) Bromoform	(3)	17.628	173	27806	0.219

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80)	Cumene	(3)	18.255	105	19376	0.131
81)	Bromobenzene	(3)	18.869	156	18212	0.220
82)	1,1,2,2-Tetrachloroethane	(3)	19.040	83	25407	0.262
83)	1,2,3-Trichloropropane	(3)	19.082	110	8893	0.240
84)	n-Propylbenzene	(3)	19.350	120	5652	0.115
85)	2-Chlorotoluene	(3)	19.459	126	7663	0.141
86)	4-Ethyltoluene	(3)	19.666	105	20299	0.123
87)	1,3,5-Trimethylbenzene	(3)	19.843	105	17606	0.124
88)	Alpha Methyl Styrene	(3)	20.445	118	10422	0.130
89)	tert-Butylbenzene	(3)	20.694	119	15586	0.111
90)	1,2,4-Trimethylbenzene	(3)	20.834	105	18371	0.125
91)	sec-Butylbenzene	(3)	21.345	105	26556	0.137
92)	1,3-Dichlorobenzene	(3)	21.503	146	35063	0.240
93)	1,4-Dichlorobenzene	(3)	21.796	146	32458	0.212
94)	p-Isopropyltoluene	(3)	21.850	119	21269	0.120
95)	Benzyl Chloride	(3)	22.288	91	29922	0.226
96)	1,2-Dichlorobenzene	(3)	22.964	146	31259	0.226
97)	n-Butylbenzene	(3)	23.176	91	21384	0.148
98)	Hexachloroethane	(3)	23.633	117	19439	0.266
99)	1,2-Dibromo-3-chloropropane	(3)	24.710	157	24106	0.321
100)	1,2,4-Trichlorobenzene	(3)	25.999	180	32868	0.431
101)	Hexachlorobutadiene	(3)	26.279	225	28778	0.345
102)	Naphthalene	(3)	26.297	128	71352	0.452

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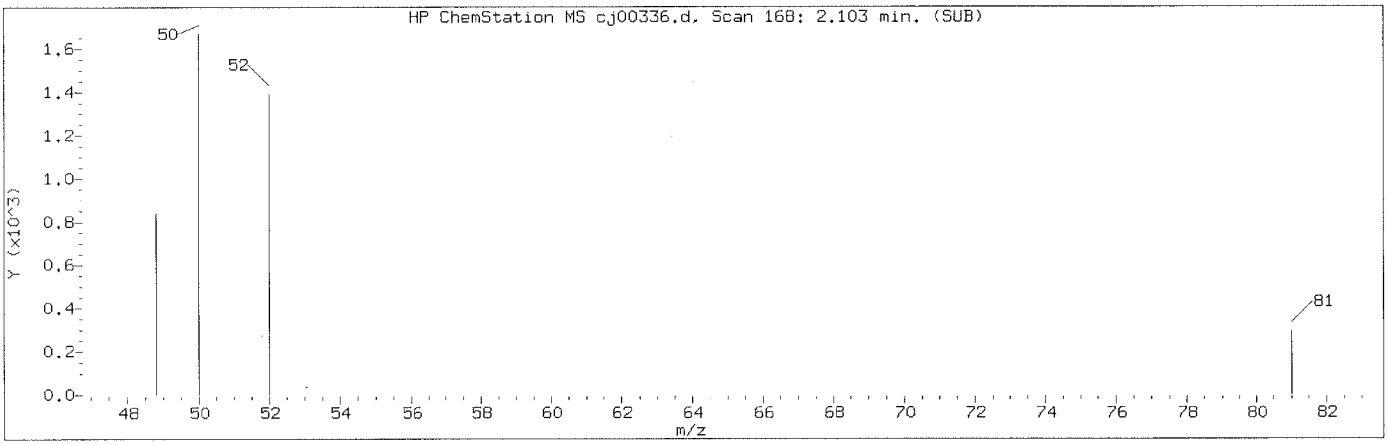
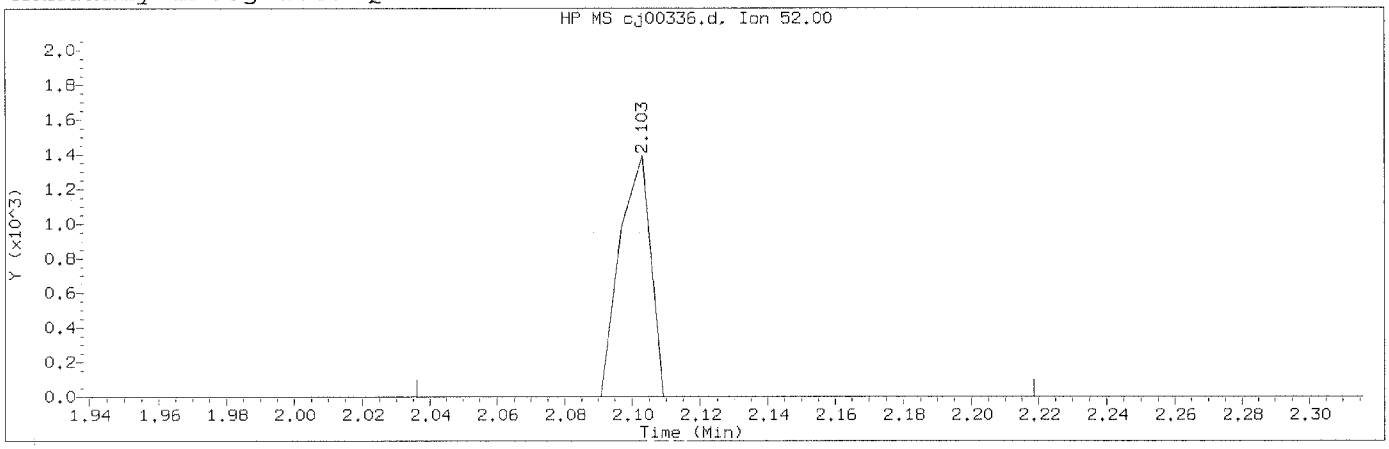
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

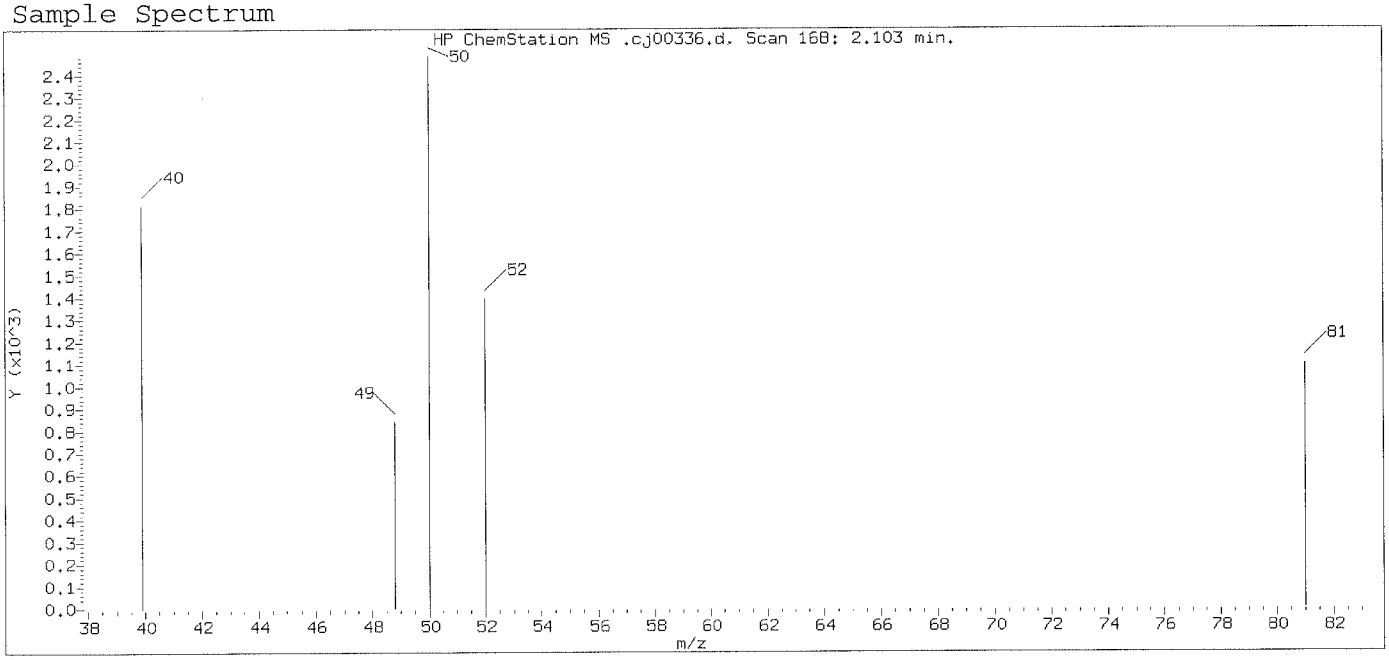
Compound Number : 5
Compound Name : Chloromethane
Scan Number : 168
Retention Time (minutes): 2.103
Quant Ion : 52.00
Area (flag) : 865M
Concentration (ppb(v)) : 0.0979
Integration start scan : 156 Integration stop scan: 186
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

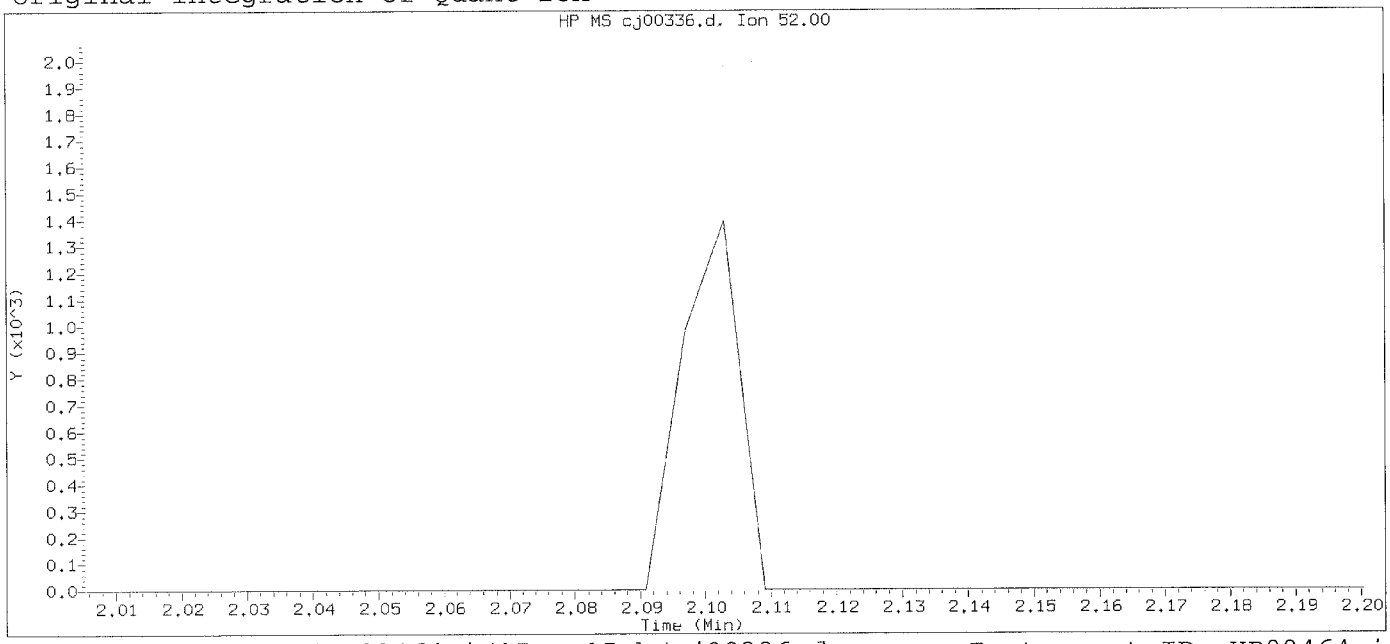
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: MP1758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

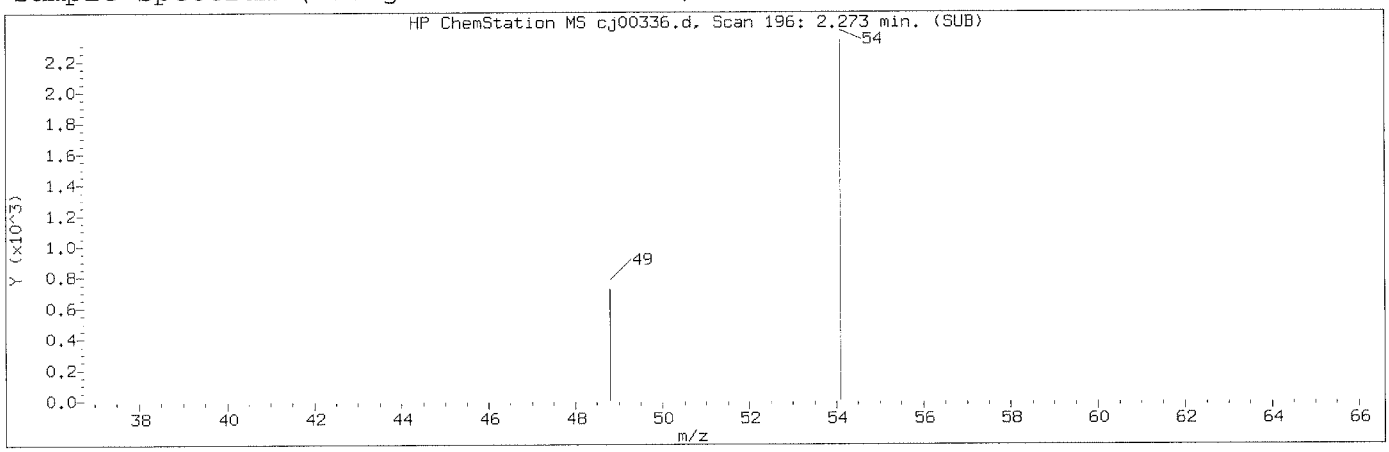
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

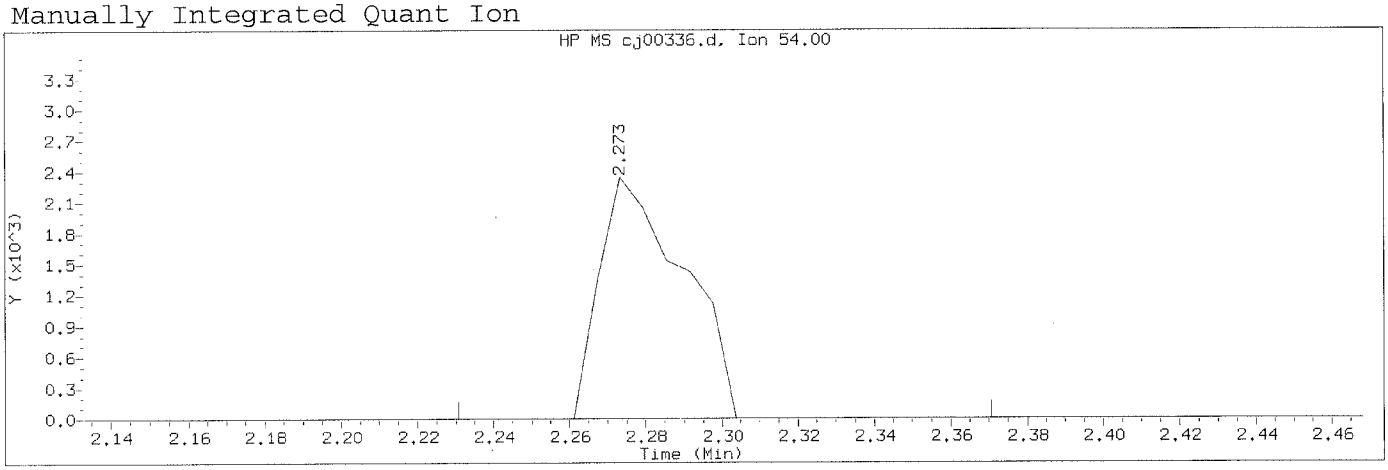
Compound Number : 5
Compound Name : Chloromethane
Expected RT (minutes) : 2.103
Quant Ion : 52.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

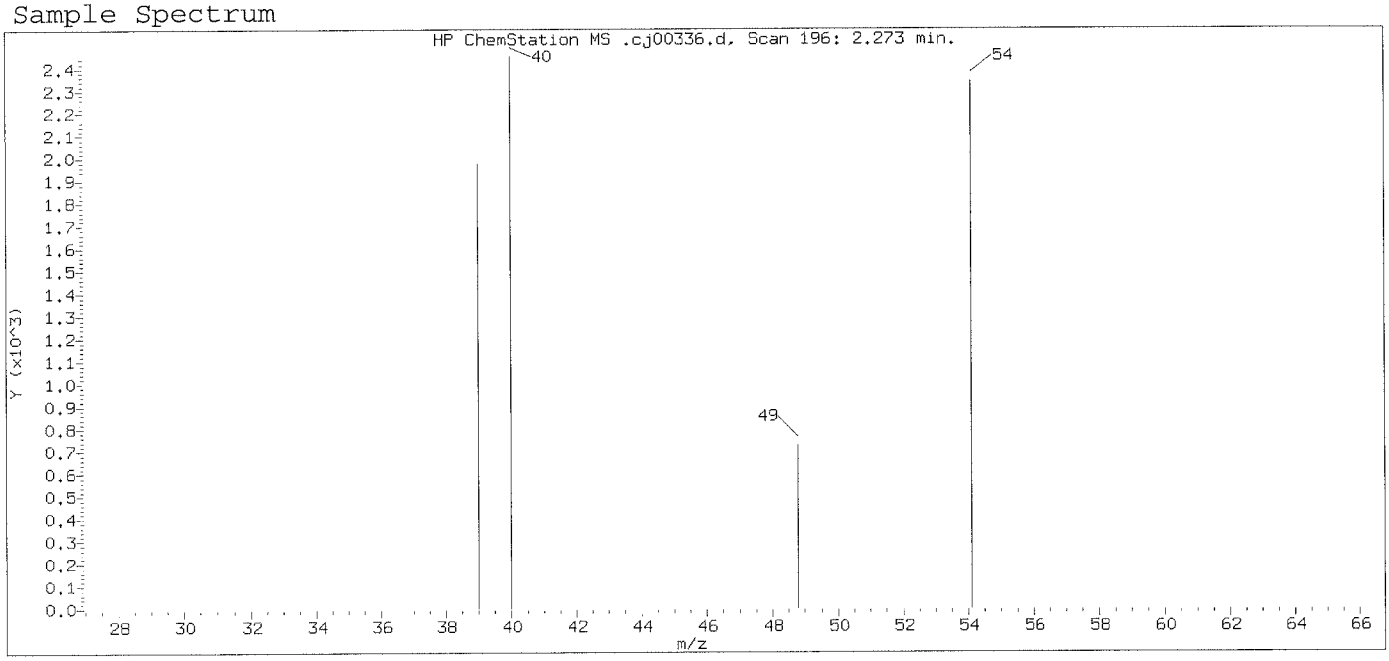
Compound Number	: 7		
Compound Name	: 1,3-Butadiene		
Scan Number	: 196		
Retention Time (minutes)	: 2.273		
Quant Ion	: 54.00		
Area (flag)	: 3572M		
Concentration (ppb(v))	: 0.1470		
Integration start scan	: 188	Integration stop scan:	211
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

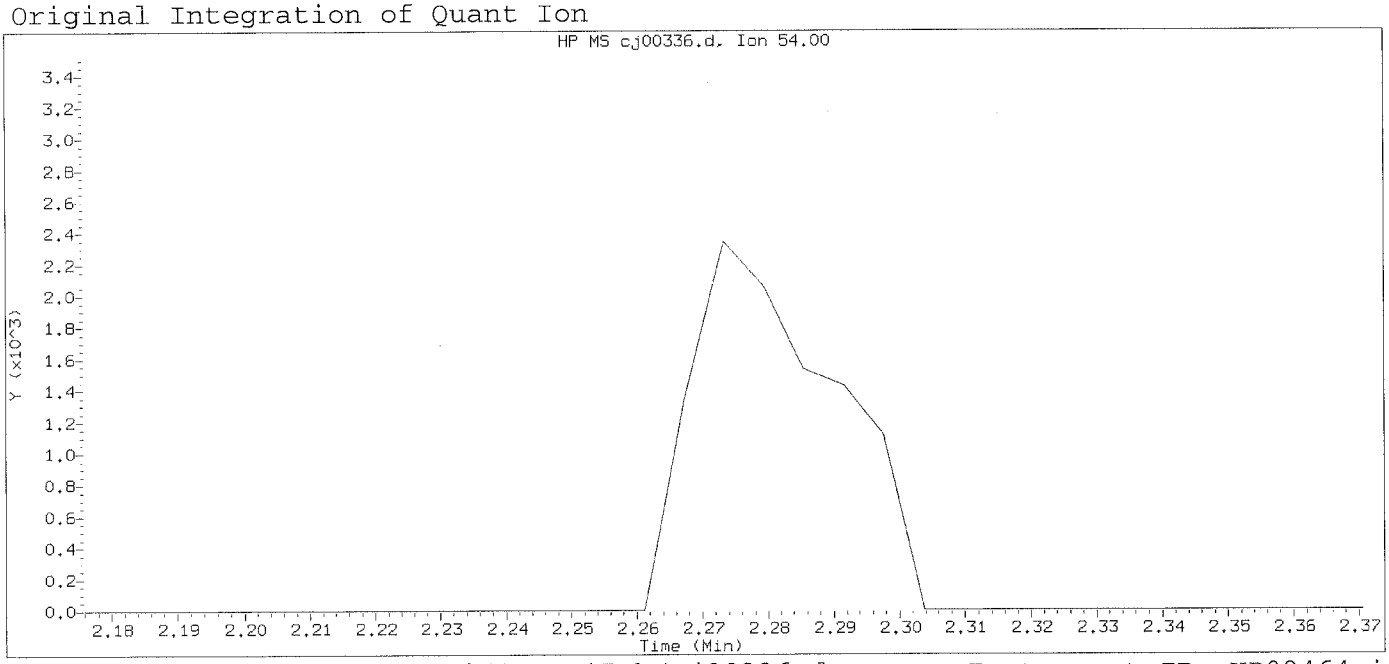
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp1758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

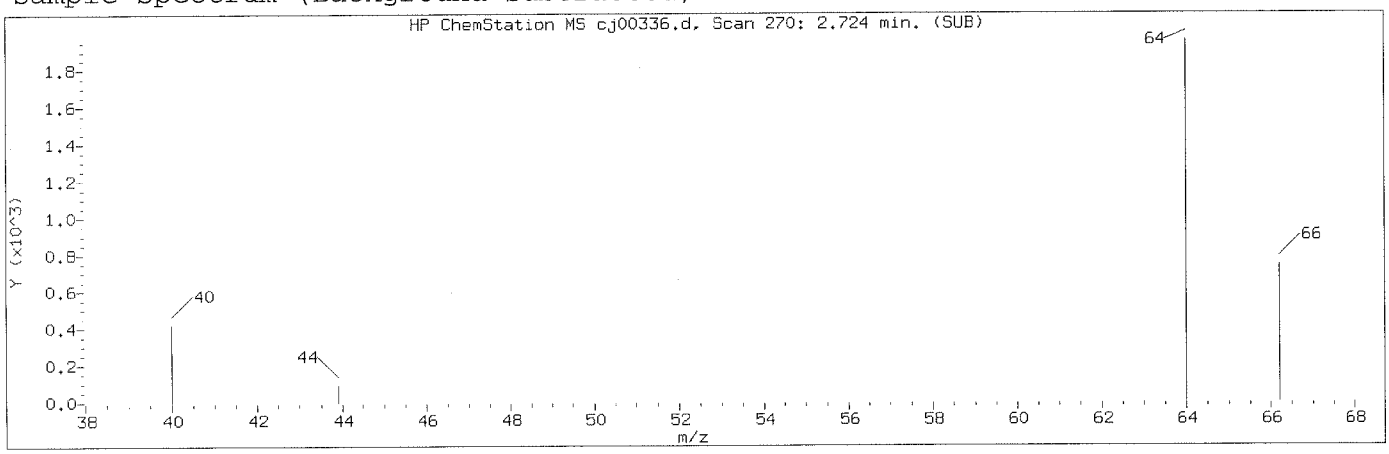
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

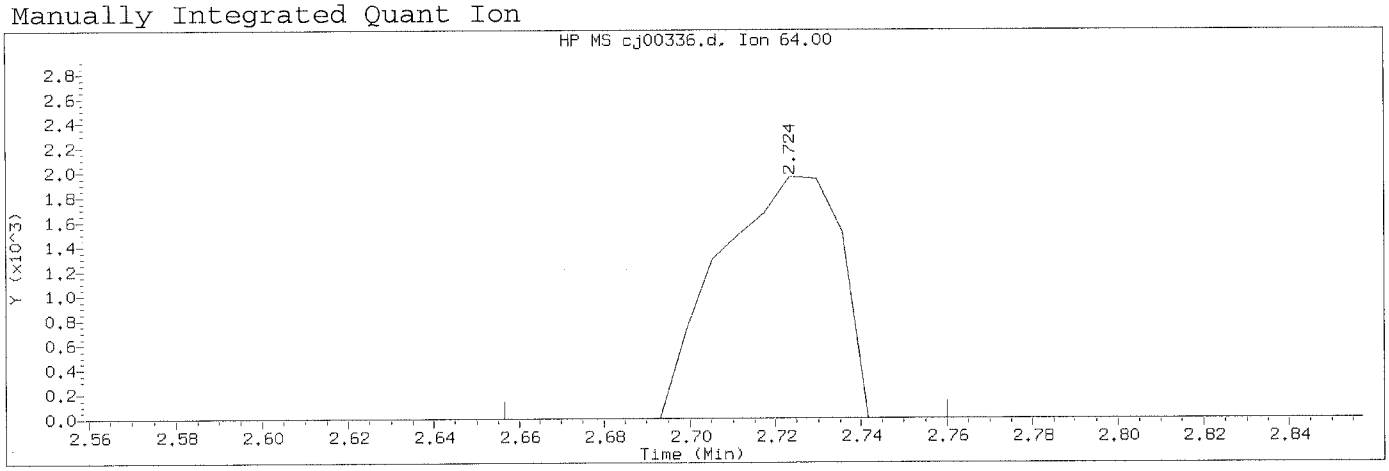
Compound Number : 7
Compound Name : 1,3-Butadiene
Expected RT (minutes) : 2.273
Quant Ion : 54.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

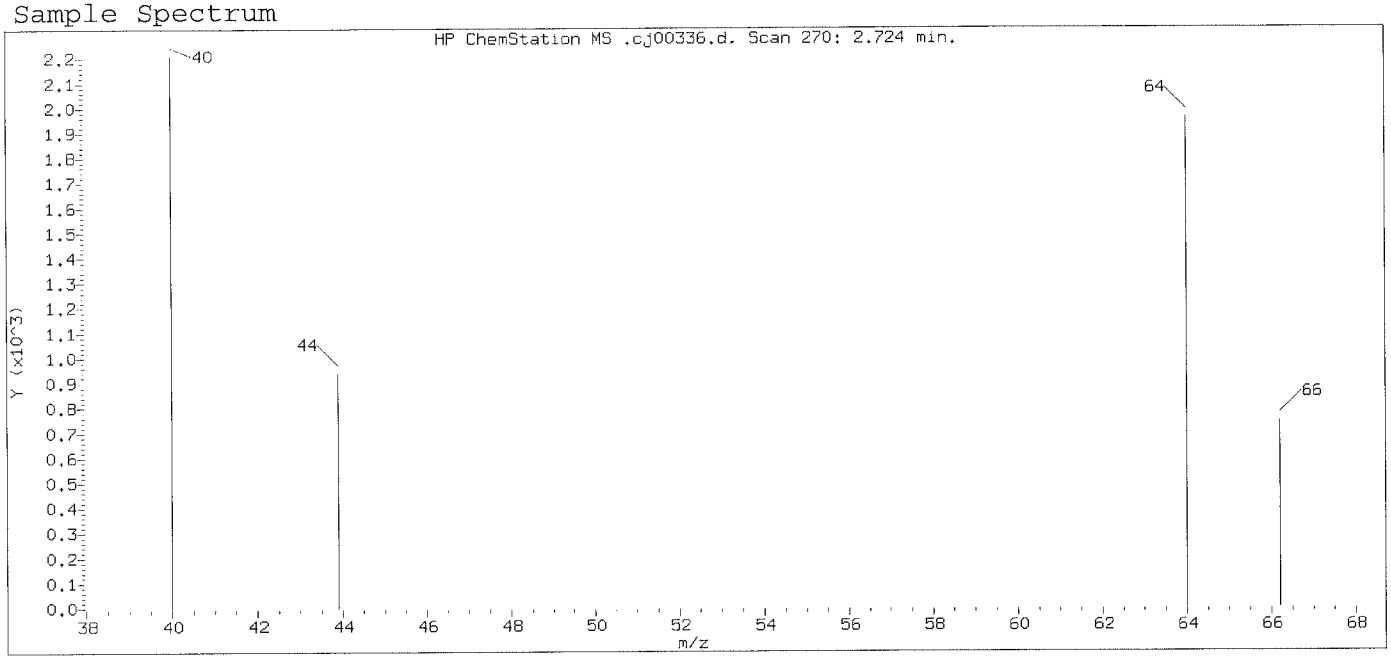
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 270
Retention Time (minutes): 2.724
Quant Ion : 64.00
Area (flag) : 3865M
Concentration (ppb(v)) : 0.1733
Integration start scan : 258 Integration stop scan: 275
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

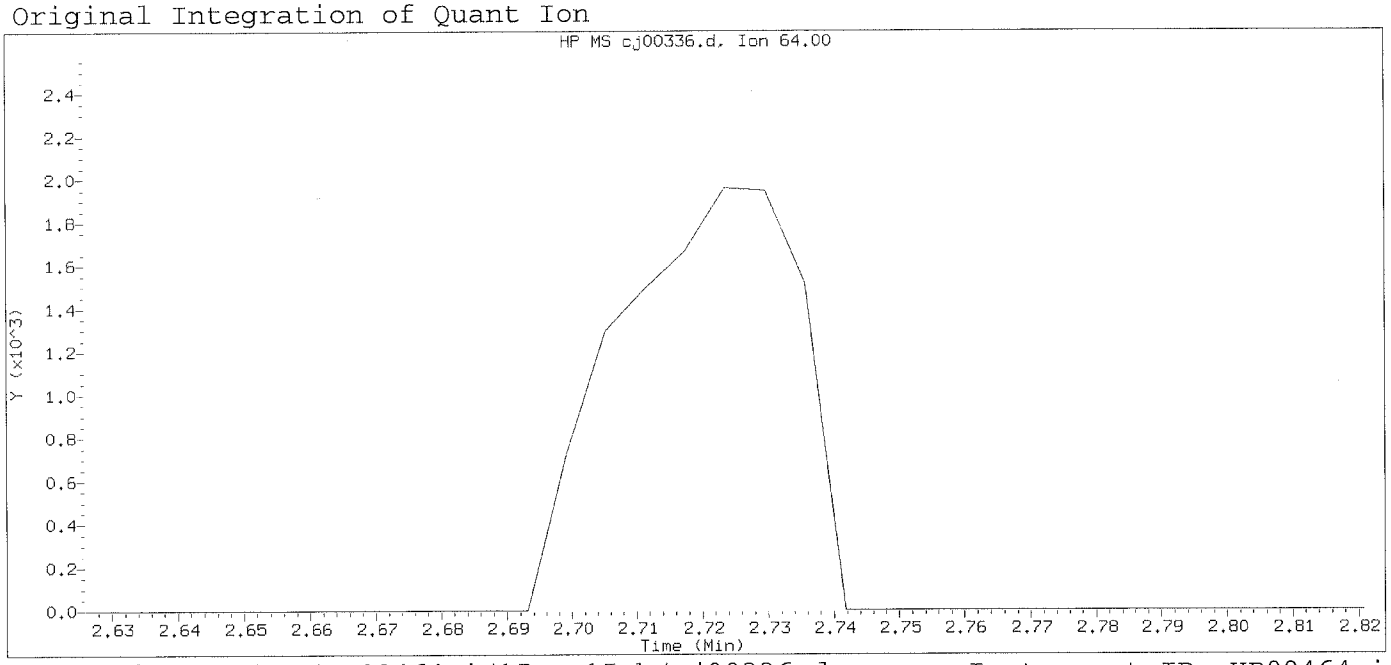
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgo1758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

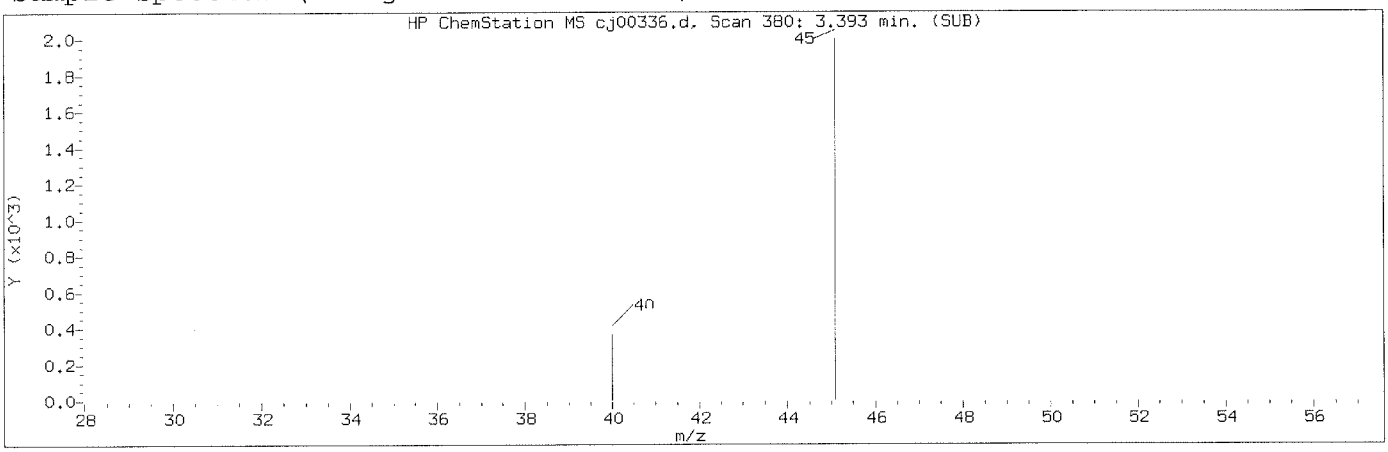
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

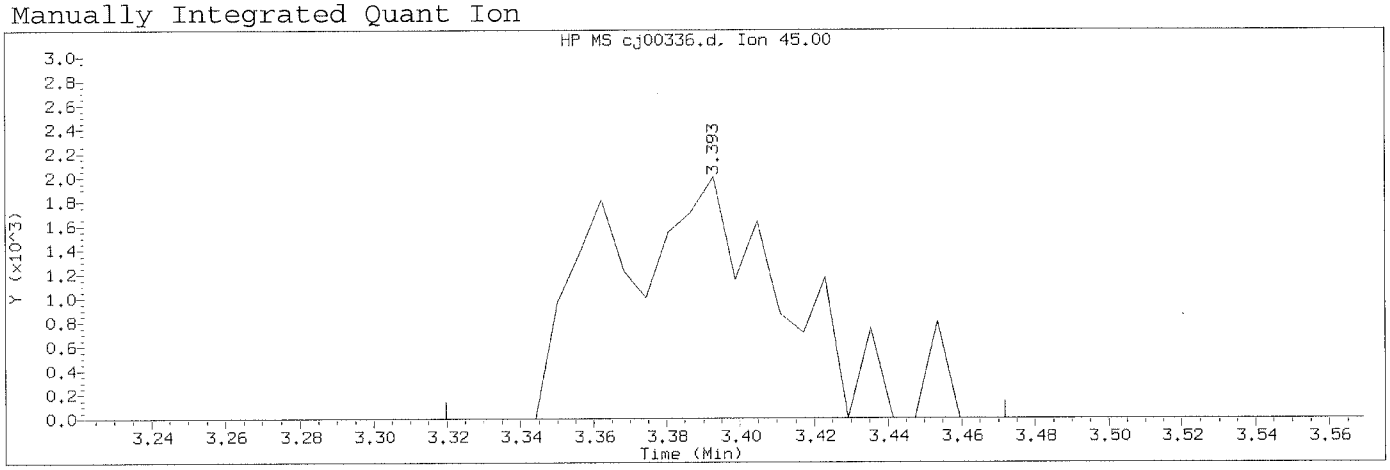
Compound Number : 9
Compound Name : Chloroethane
Expected RT (minutes) : 2.724
Quant Ion : 64.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

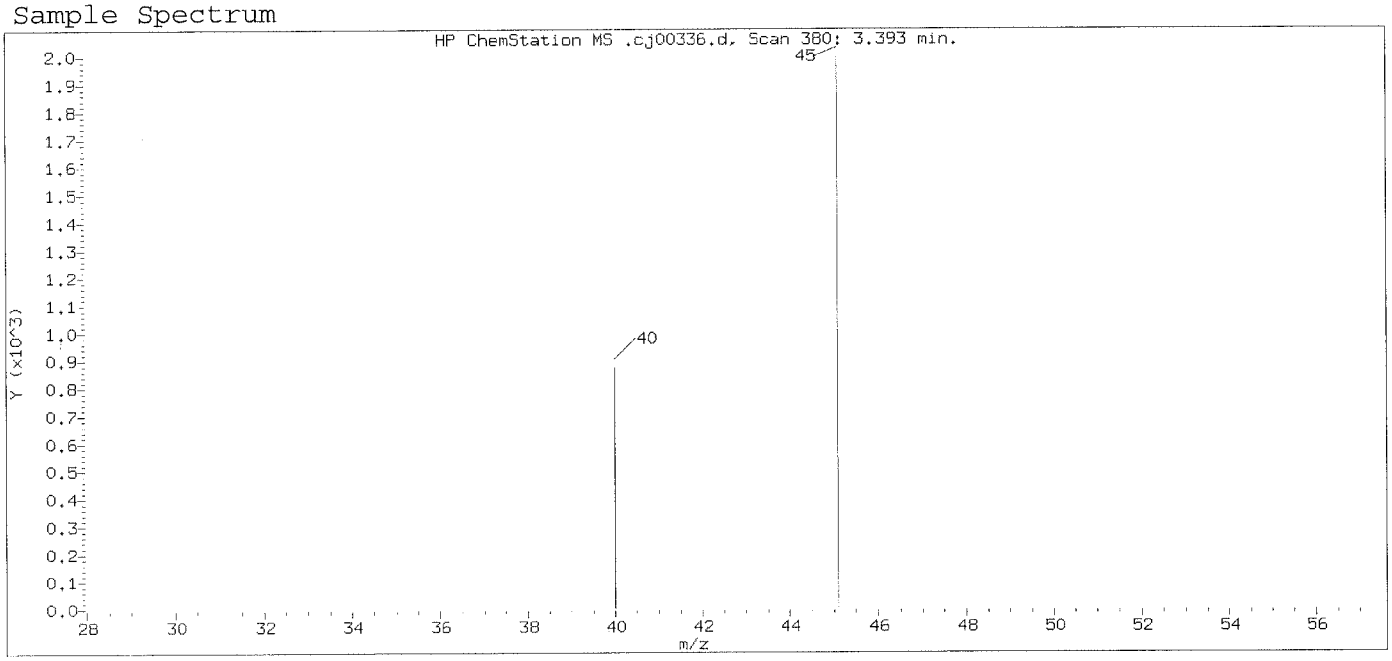
Compound Number	: 14		
Compound Name	: Ethanol		
Scan Number	: 380		
Retention Time (minutes)	: 3.393		
Quant Ion	: 45.00		
Area (flag)	: 6839M		
Concentration (ppb(v))	: 0.8501		
Integration start scan	: 367	Integration stop scan:	392
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

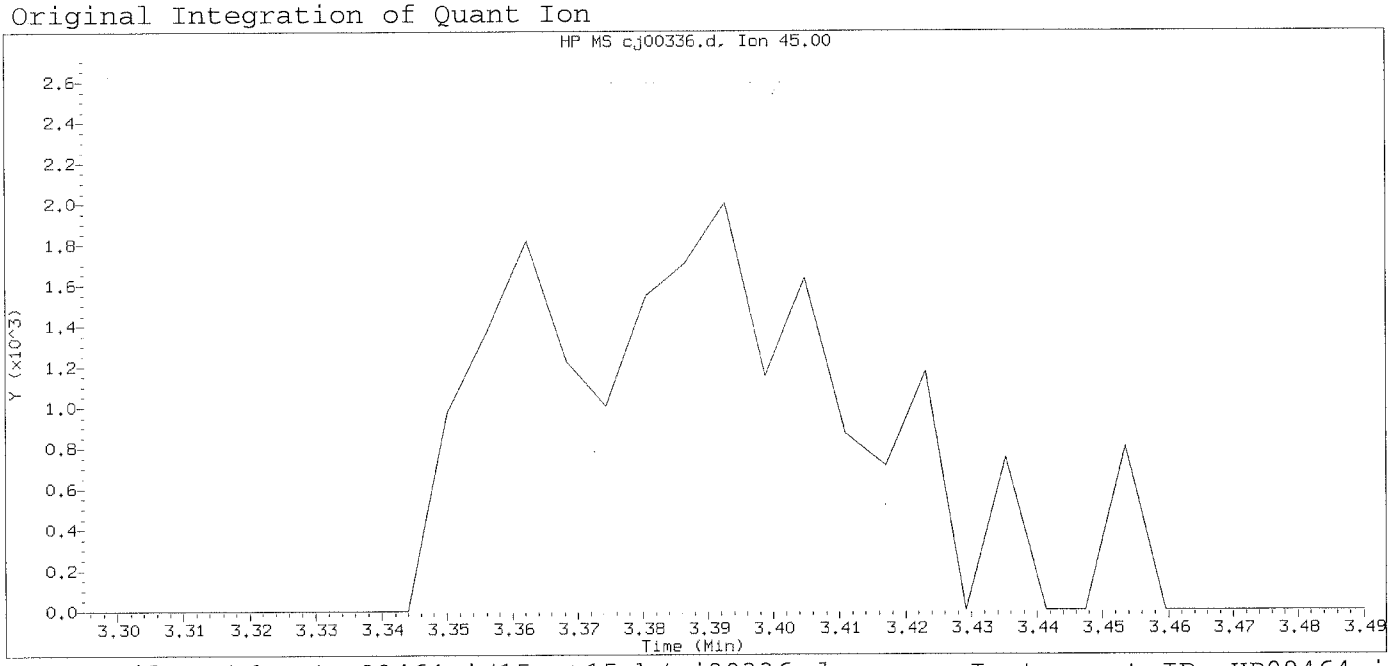
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mp1758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

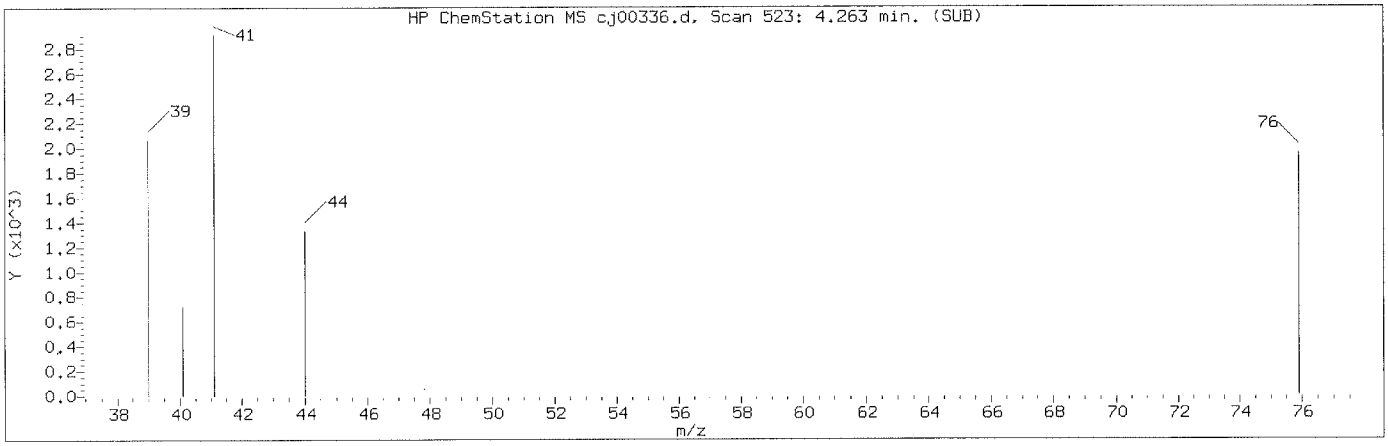
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

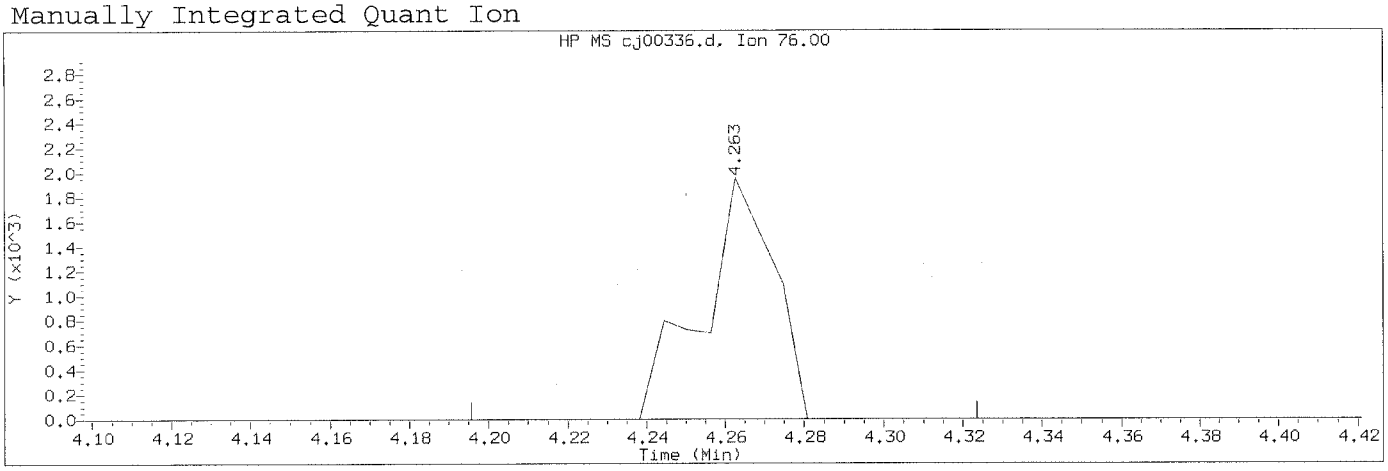
Compound Number : 14
Compound Name : Ethanol
Expected RT (minutes) : 3.393
Quant Ion : 45.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

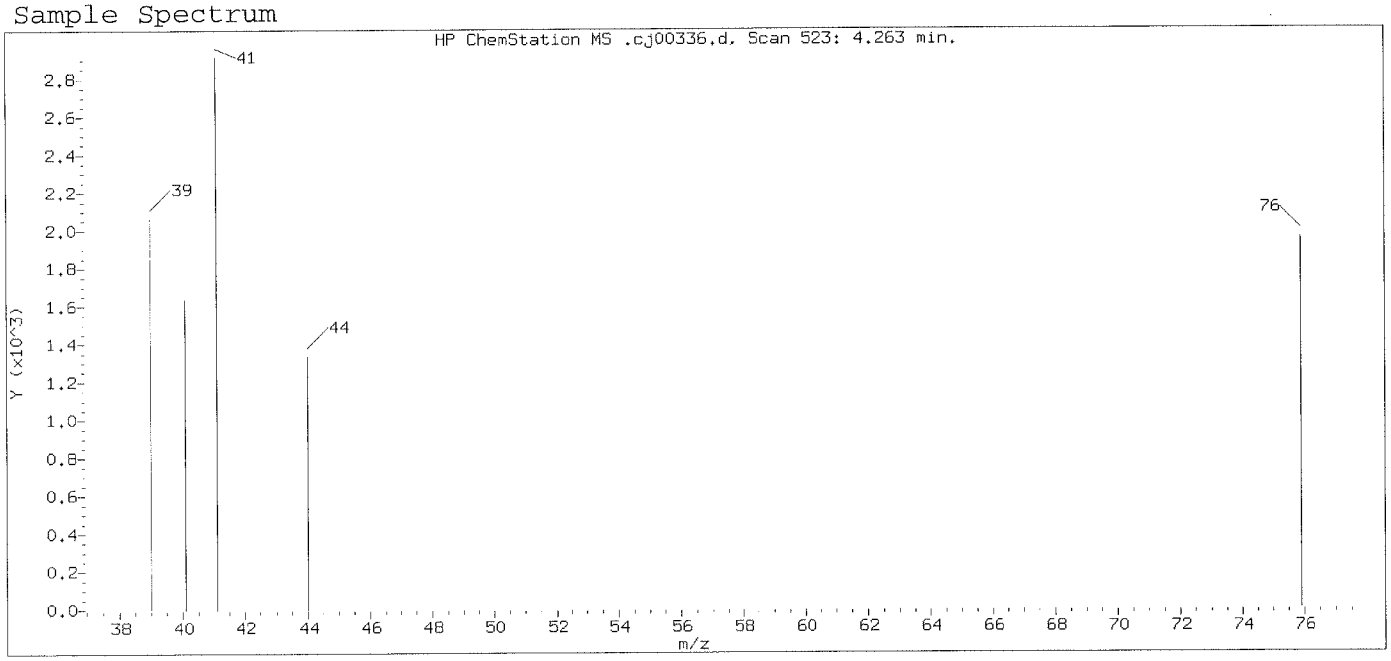
Compound Number : 24
Compound Name : 3-Chloropropene
Scan Number : 523
Retention Time (minutes): 4.263
Quant Ion : 76.00
Area (flag) : 2477M
Concentration (ppb(v)) : 0.1335
Integration start scan : 511 Integration stop scan: 532
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

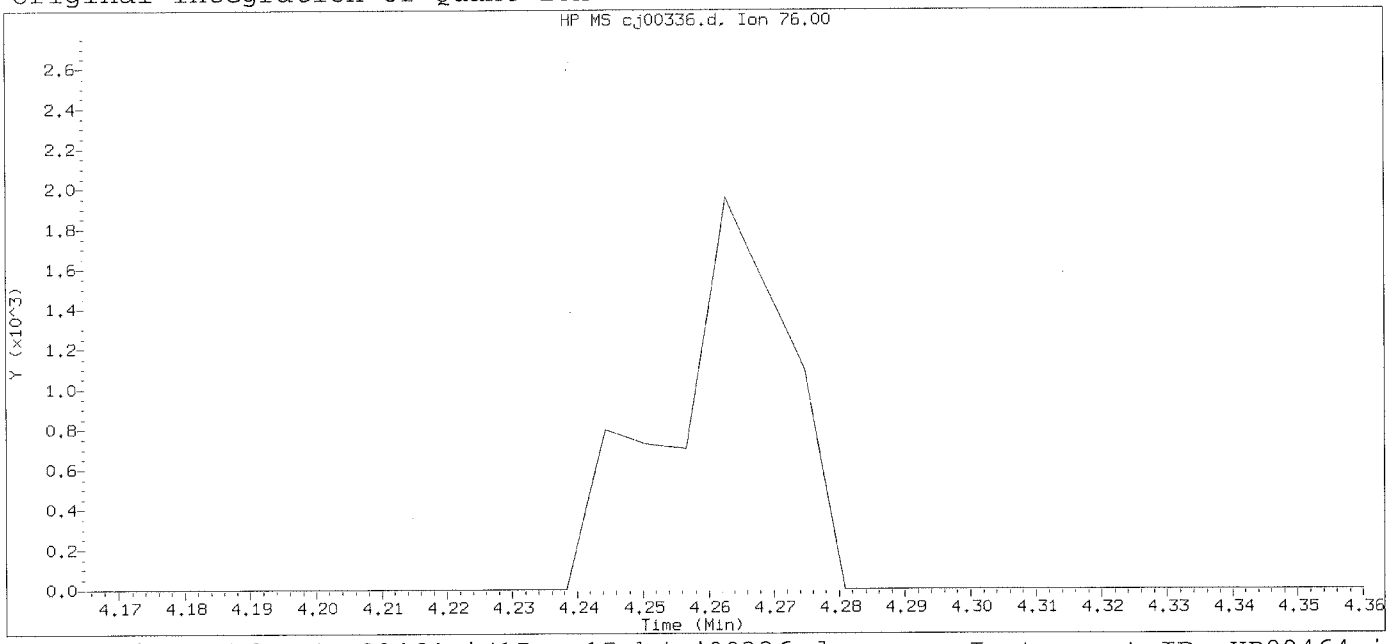
Analyst responsible for change: Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17. Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: MP01758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

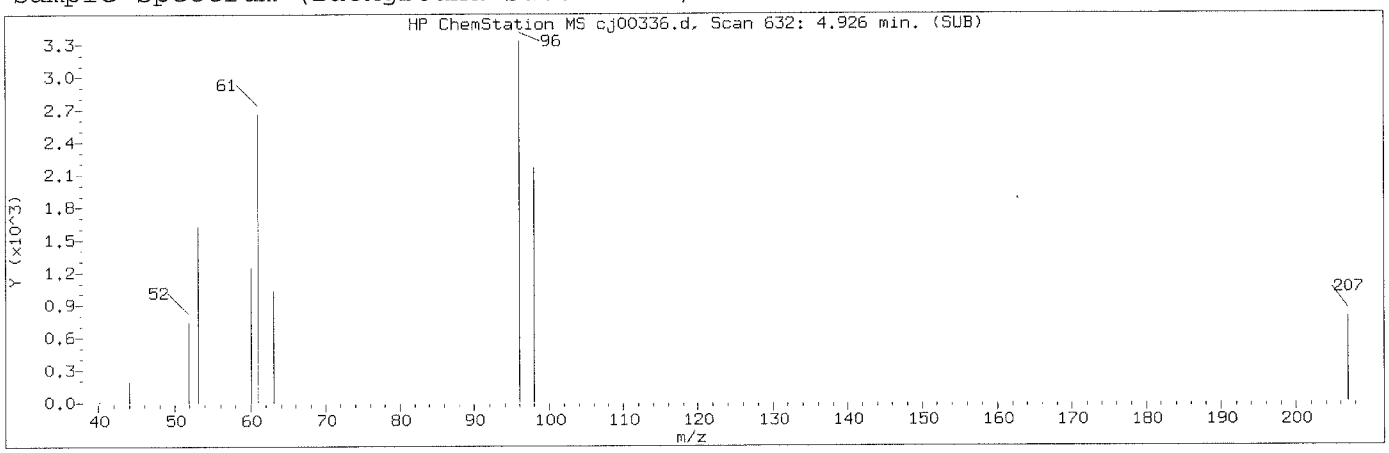
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

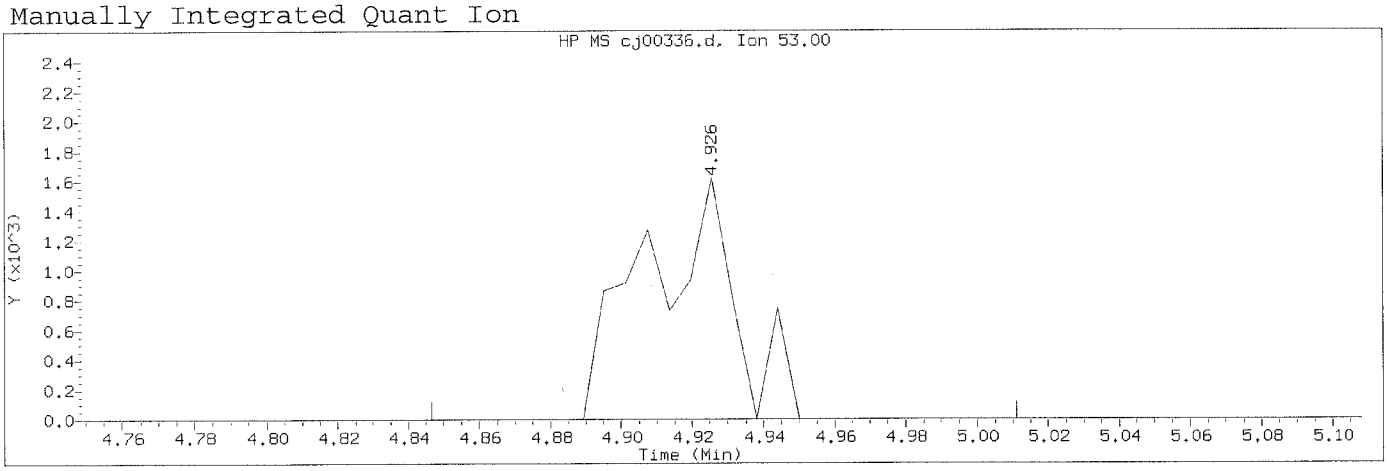
Compound Number : 24
Compound Name : 3-Chloropropene
Expected RT (minutes) : 4.263
Quant Ion : 76.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

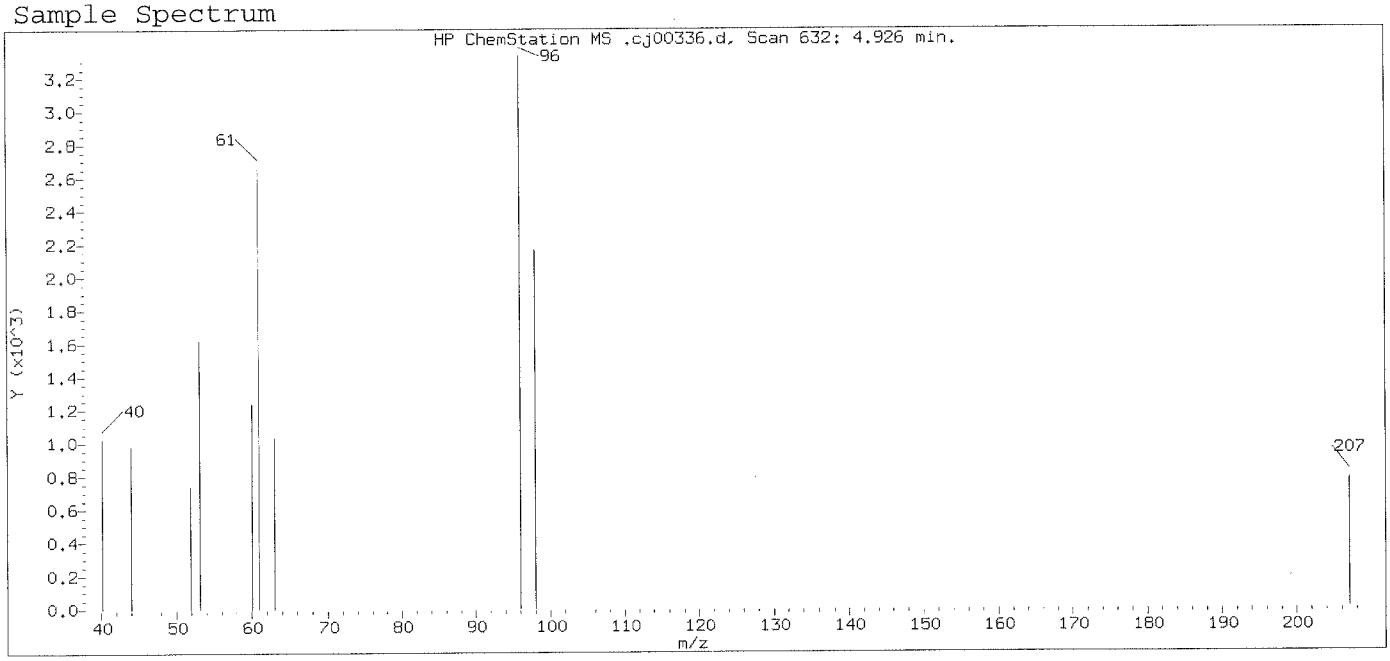
Compound Number : 27
Compound Name : Acrylonitrile
Scan Number : 632
Retention Time (minutes): 4.926
Quant Ion : 53.00
Area (flag) : 2852M
Concentration (ppb(v)) : 0.2039
Integration start scan : 618 Integration stop scan: 645
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

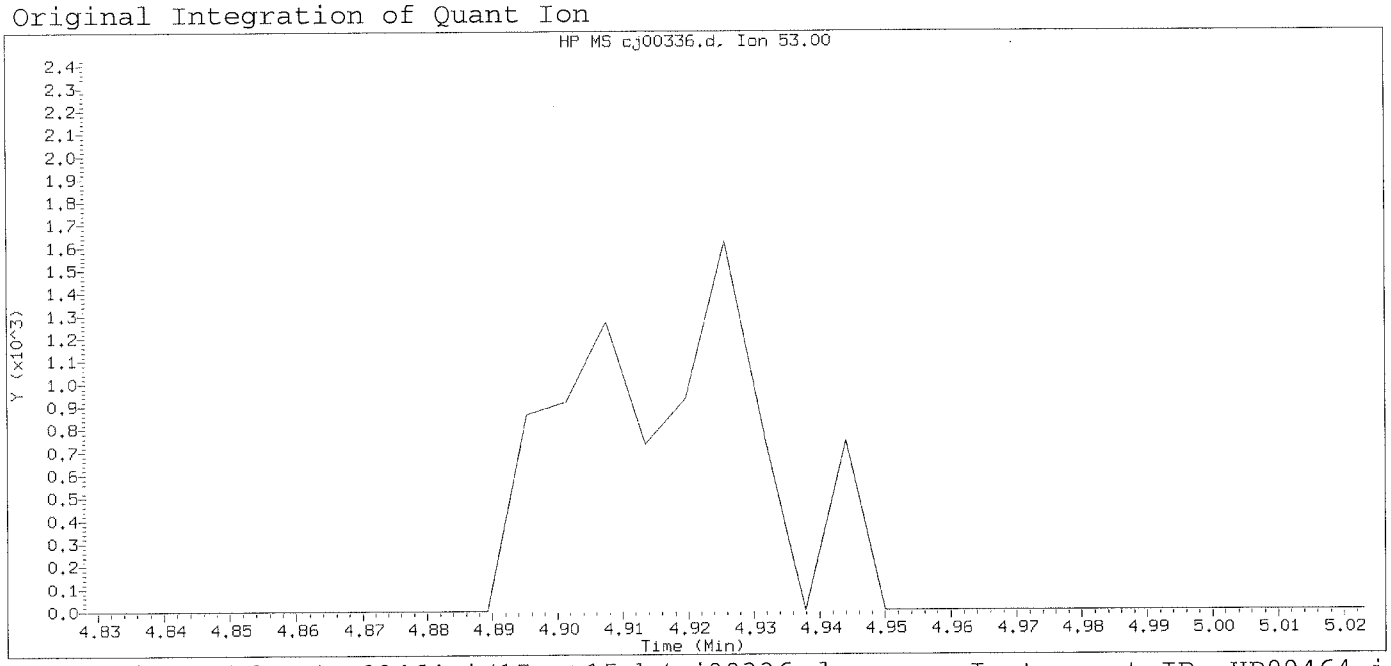
Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mpp1758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

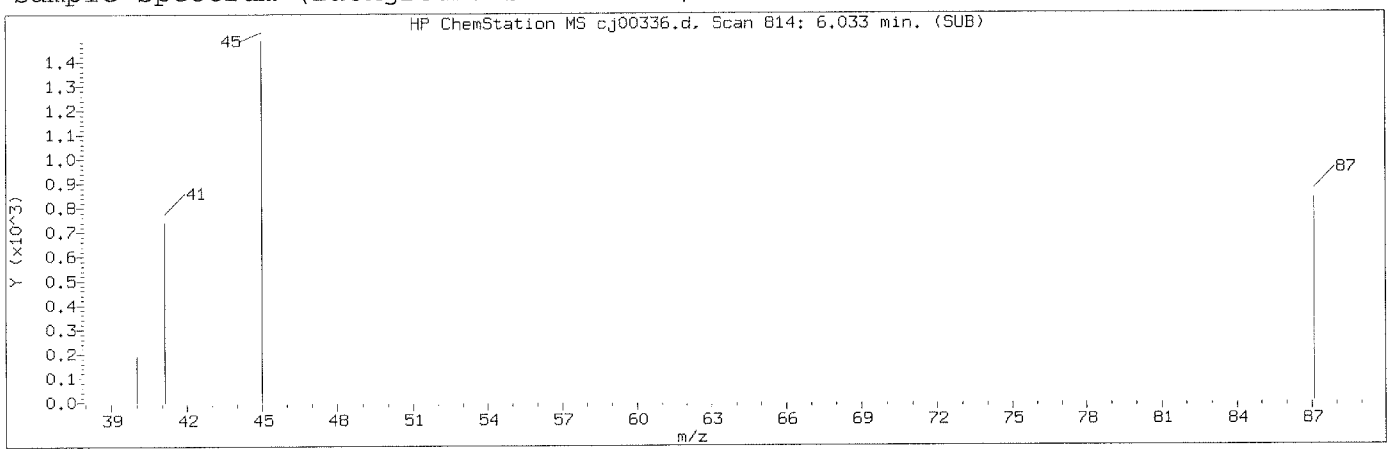
Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 15-OCT-2015 19:21
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

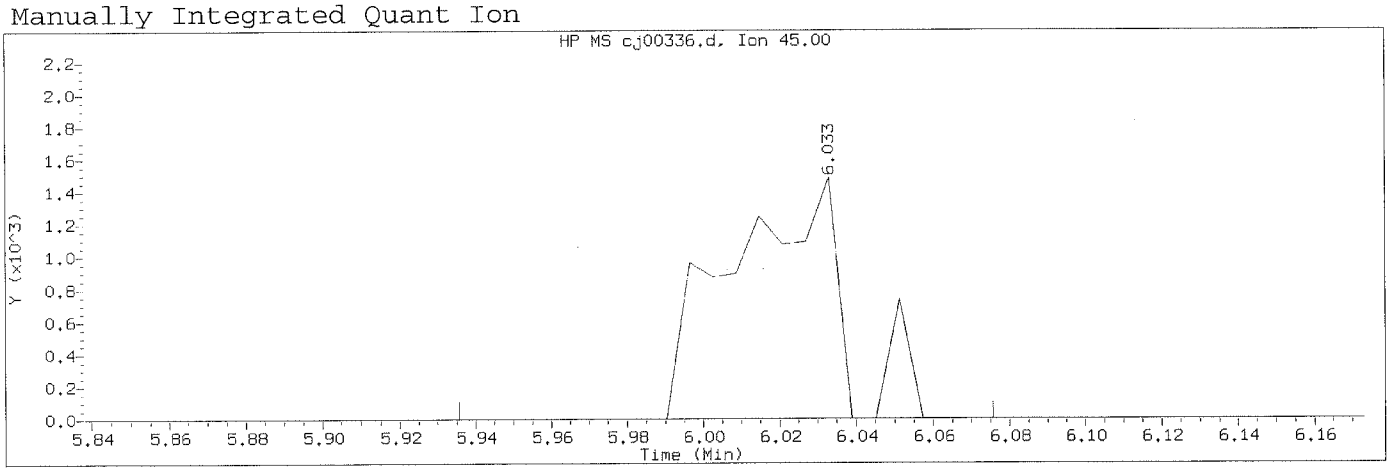
Compound Number : 27
Compound Name : Acrylonitrile
Expected RT (minutes) : 4.926
Quant Ion : 53.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d Instrument ID: HP09464.i
Injection date and time: 16-OCT-2015 09:19 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time: 16-OCT-2015 18:12
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2 Lab Sample ID: mdlv0.2

Compound Number : 33
Compound Name : Di-Isopropyl Ether
Scan Number : 814
Retention Time (minutes): 6.033
Quant Ion : 45.00
Area (flag) : 3050M
Concentration (ppb(v)) : 0.0747
Integration start scan : 797 Integration stop scan: 820
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

Analyst responsible for change: Digitally signed by Jacob E. Bailey
on 10/16/2015 at 18:17.
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp1758 10/21/15